

# Economic crisis, health systems and health in Europe

41

Observatory  
Studies Series

## Country experiences

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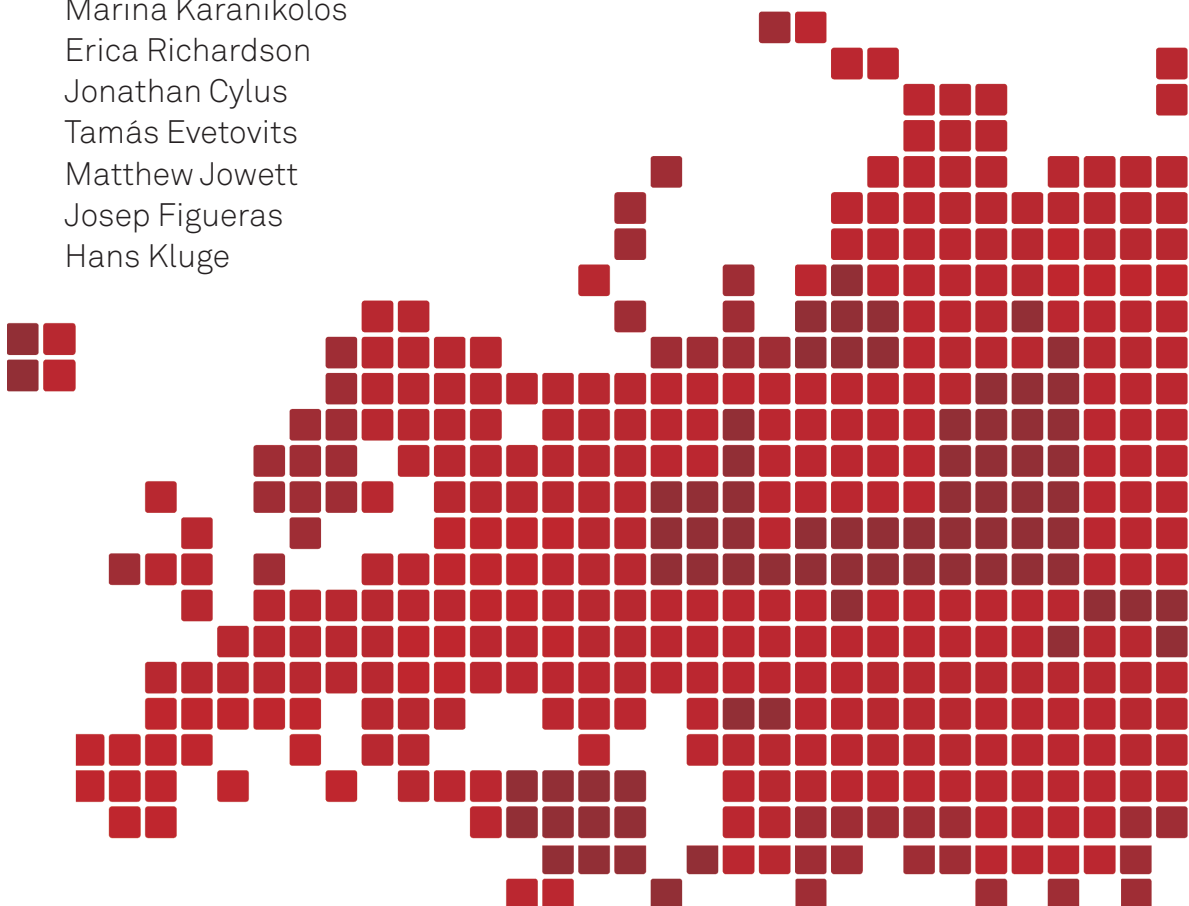
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## **Economic crisis, health systems and health in Europe**



The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health systems in Europe. It brings together a wide range of policy-makers, academics and practitioners to analyse trends in health reform, drawing on experience from across Europe to illuminate policy issues.

The Observatory is a partnership hosted by the WHO Regional Office for Europe; which includes the Governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Sweden, the United Kingdom, and the Veneto Region of Italy; the European Commission; the World Bank; UNCAM (French National Union of Health Insurance Funds); the London School of Economics and Political Science; and the London School of Hygiene & Tropical Medicine. The Observatory has a secretariat in Brussels and it has hubs in London (at LSE and LSHTM) and at the Technical University of Berlin.

This is one part of a study on the impact of the crisis on health and health systems in Europe prepared jointly by the WHO Regional Office for Europe and the European Observatory on Health Systems and Policies. It provides an overview of health system responses to the crisis by country and case studies of the impact of the crisis in selected countries.

For an analysis of the impact of the crisis across countries, see:

Thomson S, Figueras J, Evetovits T, Jowett M, Mladovsky P, Maresso A, Cylus J, Karanikolos M and Kluge H (2014). *Economic crisis, health systems and health in Europe: impact and implications for policy*. Maidenhead: Open University Press.

For a summary of the whole study, see:

Thomson S, Figueras J, Evetovits T, Jowett M, Mladovsky P, Maresso A, Cylus J, Karanikolos M and Kluge H (2014). *Economic crisis, health systems and health in Europe: impact and implications for policy*. Copenhagen: WHO Regional Office for Europe/European Observatory on Health Systems and Policies (Policy Summary 12).

The study is part of a wider initiative to monitor the effects of the crisis on health systems and health. Those interested in ongoing analysis will find updates through the *Health and Crisis Monitor* of the European Observatory on Health Systems and Policies in collaboration with the Andalusian School of Public Health ([www.hfcm.eu](http://www.hfcm.eu)), and the website of the Division of Health Systems and Public Health at the WHO Regional Office for Europe ([www.euro.who.int/en/health-topics/Health-systems](http://www.euro.who.int/en/health-topics/Health-systems)).

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Country experience

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## List of abbreviations

<b>ACS</b>	Health insurance voucher plan (France; <i>aide pour une complémentaire santé</i> )
<b>ADSE</b>	Directorate-General of Social Protection for Workers in Public Administration (Portugal; Direção-Geral de Protecção Social aos Funcionários e Agentes da Administração Pública)
<b>AP</b>	Economic and Financial Adjustment Programme (Portugal)
<b>CHESME</b>	University of Athens Centre for Health Services Management and Evaluation
<b>CMU</b>	Statutory universal health coverage (France; <i>couverture maladie universelle</i> )
<b>CMU-C</b>	Public complementary universal health coverage (France; <i>couverture maladie universelle complémentaire</i> )
<b>DBC</b>	Diagnosis and treatment combinations (Netherlands; <i>diagnose behandel combinaties</i> )
<b>DMP</b>	Disease management programme
<b>DRG</b>	Diagnostic-related group
<b>EHIF</b>	Estonian Health Insurance Fund (Eesti Haigekassa)
<b>ELSTAT</b>	Hellenic Statistical Authority
<b>EOPYY</b>	Greek National Health Services Organization
<b>EU</b>	European Union
<b>EU12</b>	Member States before 1995
<b>EU15</b>	Member States before May 2004
<b>EU27</b>	Member States at January 2007
<b>EU-SILC</b>	European Union Statistics on Income and Living Conditions
<b>FFS</b>	Fee for service
<b>GDP</b>	Gross domestic product
<b>GP</b>	General practitioner
<b>HSE</b>	Health Service Executive (Ireland)
<b>HTA</b>	Health technology assessment
<b>IMF</b>	International Monetary Fund

<b>INN</b>	International non-proprietary name
<b>KEN-DRG</b>	Greek diagnostic-related groups system
<b>MoU</b>	Memorandum of Understanding
<b>NHIF</b>	National Health Insurance Fund (Lithuania and Bulgaria)
<b>NHS</b>	National health service
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OOP</b>	Out of pocket
<b>PHI</b>	Private health insurance
<b>PPP</b>	Purchasing power parity
<b>RIZIV</b>	Belgium National Institute for Health and Disability Insurance (Dutch, Rijksinstituut voor ziekte- en invaliditeitsverzekering; French, L'institut national d'assurance maladie invalidité)
<b>SHI</b>	Statutory health insurance
<b>Troika</b>	European Commission, European Central Bank and the International Monetary Fund
<b>VAT</b>	Value added tax
<b>VHI</b>	Voluntary health insurance
<b>WHO</b>	World Health Organization

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## **Preface**

This book maps health policy responses to the financial and economic crisis in Europe by country so that policy-makers, researchers and others have access to information about national contexts of particular interest to them. In a separate book we draw on this information to analyse the impact of the crisis across countries.

This book has two parts. The case studies in Part I provide a detailed description and analysis of policy responses to the crisis in nine countries. The country profiles in Part II provide short overviews of policy responses to the crisis in 47 countries.

Six of the case study countries were selected because they were relatively heavily affected by the crisis and faced intense policy challenges (Estonia, Greece, Ireland, Latvia, Lithuania and Portugal). Greece, Ireland and Portugal sought international financial assistance, introduced significant cuts to public spending, including in the health sector, and have experienced sustained negative economic growth. Estonia, Latvia and Lithuania experienced sharp declines in gross domestic product at the start of the crisis and returned to growth relatively quickly, but continue to suffer from high levels of unemployment. The inclusion of case studies on Belgium, France and the Netherlands was made possible by funding from the National Health Insurance Fund of Korea. Although these countries were less heavily affected by the crisis than the other six, they have also operated in a climate of diminished public sector spending since 2008. Each case study was written by national experts and academic researchers using a standard template. All of the studies underwent external peer review to ensure analytical rigour and to strengthen their evidence base.

The country profiles are based on a survey of health policy experts carried out in two waves. The first wave covered health system responses from late 2008 to the end of March 2011. The second wave involved a triangulation process and gathered information from 2011 to the beginning of 2013. Experts were identified through a purposive snowball sampling approach, for which the starting point was an established network of international health systems experts. Across the two waves, no information was available for Andorra, Luxembourg, Monaco, San Marino and Turkmenistan.

Because it was not always clear whether a policy was a response to the crisis, as opposed to being part of an ongoing reform process, we asked survey respondents to divide policies into two groups based on whether they were defined by the relevant authorities in the country as (a) a response to the crisis or (b) either partially a response to the crisis (planned before the crisis but implemented with greater or less speed or intensity than planned) or possibly a response to the crisis (planned and implemented following the start of the crisis but not defined by the relevant authorities as a response to the crisis). We report both types of policy. In the country profiles, policies that were partially or possibly a response to the crisis are presented in italics.

The study's approach faced a number of largely unavoidable challenges, including difficulties in attributing health policies to the crisis; difficulties in measuring the impact of the crisis on health systems and health due to the absence of national analysis and evaluation, time lags in international data availability and time lags in effects; difficulties in disentangling the impact of the crisis itself from the impact of health system responses to the crisis; and difficulties in systematically providing information on each health system's readiness to face a crisis. For example, some countries may have introduced measures to improve efficiency or control health spending before the crisis began, limiting the scope for further reform. It was possible to address this last challenge in the case studies, but not in the country profiles.

Both books in this study are part of a wider initiative to monitor the effects of the crisis on health systems and health, to identify those policies most likely to sustain the performance of health systems facing fiscal pressure and to gain insight into the political economy of implementing reforms in a crisis.





Part I

# **Country case studies**



# Chapter 1

## **The impact of the crisis on the health system and health in Belgium**

*Irina Cleemput, Joeri Guillaume, Carine Van de Voorde and Anna Maresso*

### **Introduction**

The international economic crisis began in Belgium in 2008, as it did for other European countries, but its effects on public sector spending were not immediately or deeply felt for several reasons, including having a caretaker government in place between June 2010 and December 2011, a period in which major policy decisions could not be taken. However, in 2012, the new government had to implement a package of austerity measures to make €11.3 billion worth of public sector savings, of which €2.3 billion were in the health sector.

Prior to 2012, the health budget had been cushioned from any cuts by two factors: the existence of a long-standing and generous growth cap, which effectively guaranteed a 4.5% annual increase in the health budget every year; and the existence until 2012 of health budget surpluses that could be drawn from. In 2012, no growth cap was applied, and given the new economic climate, much smaller ones were applied in 2013 and 2014. Despite these favourable circumstances, the impact of the crisis from 2012 galvanized policy-makers into realizing that the status quo was no longer an option and that efficiency measures were needed in the health care sector. At the same time, attention was paid to maintaining and enhancing financial protection mechanisms for economically vulnerable groups.

## **1. The nature and magnitude of the financial and economic crisis**

### **1.1 The origins and immediate effects of the crisis**

Several hypotheses exist for the triggers of the financial and economic crisis in Europe. One hypothesis is that the main source was loose fiscal discipline: fiscal optimism led to economic overheating, which, in turn, led to wage and price increases, reducing competitiveness and finally inducing an imbalance in the balance of payments. Another hypothesis is that the economic crisis was triggered by the crisis in the banking sector: increasing private sector expenditure was financed by the banking sector, but the credits were used suboptimally. In a context of low interest rates, consumers and companies consumed and invested upfront, speculating on future growth. At the same time, the banks did not manage the credit risk in a prudent way (Constâncio, 2013). However, the banking crisis was also partly a result of the global crisis in financial markets.

### **1.2 Government responses to the crisis**

A number of European banks had substantial balance sheet exposures to the housing market in the United States. Faced with losses on several of their assets, banks rebalanced their portfolios by increasing their holdings of so-called safe government bonds. However, in the meantime, some banks risked failure, forcing their governments to step in and recapitalize these banks to protect citizens' savings; this at a time when public finances were already under huge pressure because of the recession-induced collapse in tax revenues (Constâncio, 2013). This also happened in Belgium. The Belgian Government made almost €21 billion of capital injections in the banking sector between 2008 and 2009 (De Leeuw, 2010). In addition, the government guarantees the saving deposits of Belgian citizens up to €100 000 per person. Because of the imminent failure of several banks, the government decided to inject fresh capital into the sector, hoping for a recovery in the economy. The conditions imposed were mainly limited to (a higher) representation on the board of directors of the bank. The funds came from regular government receipts, collected through direct and indirect taxes, capital taxes and non-fiscal receipts.

### **1.3 Broader consequences: how well prepared was Belgium for an economic shock?**

The impact of the global financial crisis on Belgium's gross domestic product (GDP) was similar to the impact in other countries. The impact became apparent in mid-2008 and in the first semester of 2009, when the GDP per capita was 4% lower than the year before. The economy recovered slowly, and

by 2012 had reached a GDP level of barely 0.1% above the level of mid-2008 (Eurostat, 2013a). Total government revenues increased between 2008 and 2012, from 48.7% of GDP to 51.0% of GDP. At the same time, the level of expenditure increased markedly from 45.9% in 2008 to 51.6% in 2012, leading to an increasing government deficit.

The average increase in government expenditure was 2.6% from 2002 to 2014: 1.3 percentage points higher than GDP growth. Social security expenditure started to increase at a more rapid rate from 2009 onwards. Almost one-third of social security expenditure consists of pensions. The real increase in pensions accounted for 3.4% in 2012. Sickness and disability insurance benefits also increased because of the broadening of welfare measures.<sup>1</sup> This growth in social security expenditure was tempered by the moderate or even decreasing trend in other types of social security expenditure. For example, annual average health care expenditure per capita (which represents almost one-third of the total social security budget) grew by only 0.6% in real terms between 2009 and 2011, much less than in previous years (the annual average growth rate between 2000 and 2009 was 3.7%) (Eurostat, 2013a; OECD, 2013c). Measures that contributed to this tempering of health care expenditure included savings on physician fees and drug reimbursement measures (see section 3.3).

While the government's deficit as a percentage of GDP or gross debt had been decreasing since 2000, it started to increase again in 2007 (when it was 84% of GDP) and in 2012 stood at approximately 100% of GDP (Eurostat, 2013c) (Table 1.1). The increase of the debt ratio was the result of the country's worsening economic prospects, the capital injections the government administered to ailing financial institutions and also from exogenous factors such as the European Union's (EU) financial measures to support Greece, Ireland and Portugal. In terms of the Belgian Government's sovereign credit worthiness and borrowing capacity, the average 10-year government bond rate generally remained solid, despite some fluctuations, throughout the previous decade, even with the impact of the economic crisis. The average 10-year government bond rate decreased between 2000 and 2005 to reach its lowest level before the crisis in 2005, at 3.4%. The situation worsened afterwards and interest rates started to increase until 2008, reaching 4.5%. However, between 2008 and 2010 trust was regained, particularly after the formation of the new federal government and its budgetary agreements, and this was reflected in a decline in the interest rate. In 2012, Belgian bond rates approximated those of the strongest European countries, at 3% (Eurostat, 2013b).

<sup>1</sup> For example, the eligibility period for receiving the invalidity pension after the pensionable age was equalized between men and women, and greater numbers of people with psychiatric disorders and locomotor or connective tissue diseases became eligible for invalidity benefits.

**Table 1.1** Demographic and economic indicators in Belgium 2003–2012, or latest available year

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Population levels (thousands) <sup>a</sup>	10,355	10,396	10,445	10,511	10,584	10,666	10,753	10,839	10,951	11,035
People aged 65 and older (% of total population) <sup>a</sup>	17	17	17	17	17	17	17	17	17	17
Dependency ratio (%) <sup>b,*</sup>	53.09	53.20	52.86	52.50	52.22	52.02	52.13	52.59	52.86	53.27
GDP per capita (US\$: current prices and PPP) <sup>c</sup>	29,100	30,600	31,100	33,000	36,200	37,400	36,800	37,800	38,200	–
Real GDP growth (%) <sup>c</sup>	1.1	2.6	1.5	3.0	2.8	1.0	–2.7	2.0	1.9	–
Government deficit (% of GDP) <sup>d</sup>	–0.1	–0.1	–2.5	0.4	–0.1	–1.0	–5.6	–3.7	–3.7	–4.0
Government consolidated gross debt (% of GDP) <sup>d</sup>	98.4	94.0	92.0	87.9	84.0	89.2	95.7	95.7	98.0	99.8
Total unemployment rate (%) <sup>d</sup>	8.2	8.4	8.5	8.3	7.5	7.0	7.9	8.3	7.2	7.6
Unemployment, male (%) <sup>d</sup>	7.7	7.5	7.6	7.4	6.7	6.5	7.8	8.1	7.1	7.7
Unemployment, female (%) <sup>d</sup>	8.9	9.5	9.5	9.3	8.5	7.6	8.1	8.5	7.2	7.4
Long-term unemployment (% of all unemployed) <sup>a</sup>	46.3	49.6	51.7	51.2	50.4	47.5	44.2	48.8	48.4	44.7
Long-term unemployment (% of active population) <sup>c</sup>	3.7	4.1	4.4	4.2	3.8	3.3	3.5	4.1	3.5	3.4

*Notes:* PPP: purchasing power parity; \*The dependency ratio is the ratio between the total number of people younger than 15 years of age or 65 years and older and the number of persons of working age (from 15 to 64).

*Sources:* <sup>a</sup>OECD, 2014; <sup>b</sup>Belgian Federal Government, 2013; <sup>c</sup>Index Mundi, 2014; <sup>d</sup>Eurostat, 2013a.

The net borrowing of the Belgian Government quadrupled in absolute values between 2008 and 2009. As a percentage of GDP, Belgium's net borrowing level was better than the average for the EU27 (27 Member States at January 2007) in the period 2005–2011. However, it could not maintain this position in 2012 (Eurostat, 2013c). In view of these economic conditions, the federal government introduced an economic stimulus plan in the middle of 2012 (Federal Planning Bureau, 2013). In 2013, a social agreement was established for the non-profit-making sector in Belgium. This agreement foresaw €40 million earmarked towards financing the costs of 800 additional full-time equivalent positions in the health care sector; other actions related to the health care sector are described in section 3.

At the household level, price index data show that inflation has not been as high in health care (i.e. cost of health care services) as in many other sectors in Belgium. Only communication services have had a lower inflation in the period from 2003 to 2013 (Eurostat, 2013d).

## **2. Health system pressures prior to the crisis**

### **2.1 Demand-side pressures**

An underlying source of pressure for the health care sector not directly linked to the financial crisis has been the increasing population (Table 1.1). Belgium's population has increased by 6% over 10 years (2003–2012). The composition of the population in terms of age has not changed markedly throughout the years. Since 2003, approximately 20% of the population is under 18 years of age, 62% is between 19 and 64 years and approximately 18% is 65 years and older (Statbel, 2013). Within the group of people aged 65 years and older, however, the proportion of people older than 80 increased from 23.7% in 2003 to 29.8% in 2012, demonstrating the rapidly growing segment of the oldest part of the population (Statbel, 2013). An ageing population puts pressure on the health system. The same applies to the share of people at risk of poverty, which is currently almost 25% in Belgium after social transfers. Compared with similar European countries, this is a relatively high rate of poverty risk. The crisis has had a visible impact on the proportion of people at risk of poverty, which started to increase in 2009 after a period of decrease before the economic crisis.

### **2.2 Supply-side pressures**

#### ***Health system financing***

Another pressure on the health system is sustainable financing. On the one hand, Belgium has always attached high importance to health care; on the other hand, the health care system relies heavily on social security contributions for financing. In 2013, government spending on health care amounted to 16% of



total public expenditure (National Bank of Belgium, 2013). Another indication of the importance attached to health care is the establishment (in 1995) of the real growth cap for setting the federal health budget and its gradual increase until 2012, when a cap of 4.5% was no longer considered acceptable given the pressure on public spending induced by the financial crisis.<sup>2</sup> Given its generosity, rather than acting as an excessive restraint on health care spending, the cap actually guaranteed annual increases to the financial resources devoted to health care. Moreover, given the application of the real growth cap in the years well before those of the financial crisis, the health care sector was better prepared to absorb the full effects of the crisis, which occurred in 2012. Lower growth caps for the federal health budget were set at 2% in 2013 and 3% in 2014.

A related problem for health system financing is the heavy reliance on social security contributions for financing.<sup>3</sup> The low participation rate of people aged 55–64 in the workforce and the growing proportion of inactive (non-working) people are a potential threat to financing (Eurostat, 2013a).

In addition, the level of private expenditure for health care is relatively high, ranging from 20% of total health care expenditure for patients' out-of-pocket (OOP) costs to 24% for expenditure on private health insurance (PHI) plus patients' OOP costs in 2011 (Assuralia, 2013). This level has remained more or less stable since the early 2000s. From the citizen's point of view, the supplements that can be asked by non-contracted physicians over and above the reimbursement tariff are a potential threat for the affordability of health care. As supplements are not included in social protection mechanisms (such as maximum billing), they risk reducing the effectiveness of these protection measures. The economic crisis may not have created a sudden increase in such supplements as yet, but this is unclear as data on (ambulatory) supplements are not systematically recorded.

### ***Health care delivery***

A weakness in health care delivery is the shortages in certain categories of health care personnel. In terms of supply, there is no problem with the number of physicians supplying services in the country. While the total number of physicians registered at the Belgium National Institute for Health and Disability Insurance (Dutch, Rijksinstituut voor ziekte- en invaliditeitsverzekering (RIZIV); French L'institut national d'assurance maladie invalidité) per 1000 population is among the highest in the world (Vlayen et al., 2010), these data overstate the

<sup>2</sup> In 1995, the real growth cap was fixed at 1.5% per year, then raised to 2.5% in the period 2000–2004 and to 4.5% in the period 2005–2011. In 2012, the real growth cap of 4.5% was not applied at all.

<sup>3</sup> Belgium has a system of compulsory health insurance covering 99% of the population. Altogether there are seven health insurance entities: five national associations of health insurers are the main players and are nongovernmental, non-profit-making organizations known as sickness funds. There is also one public fund that acts as the insurer of last resort (for those not wishing to join any of the other five sickness funds) and a separate fund only for railway employees. The five national associations are made up of around 60 local sickness funds. The RIZIV manages and supervises the compulsory health insurance system.

number of physicians with real clinical activities. Taking into account only those physicians who performed at least one clinical service (consultation, visit), then the number of physicians per 1000 population falls below the European average. However, there seems to be shortages of different types of professional in the sector, as demonstrated by the number of vacancies for health care-related jobs, excluding physicians, in Flanders (VDAB Studiedienst, 2013). Occupations with shortages in the health care sector are nursing (except for midwifery), hospital pharmacy, physiotherapy (increasing demand linked to the ageing of the population) and general caregivers. Despite these shortages, currently there are practically no waiting times for providing health care services.

### 3. Health system responses to the crisis

#### 3.1 Changes to public funding for the health system

##### *Health budget*

The setting of health budgets has been subject to legally entrenched growth caps since 1995. Even though these caps were habitually exceeded prior to 2005, they were set at a generous 4.5% from 2005 to 2012. Moreover, given that actual health expenditure has tended to be less than estimated, budget surpluses have accrued over a long period, even during the years after the crisis hit (except for 2012), thus cushioning the impact of tighter fiscal measures during these years.

Since the introduction of the real growth cap in 1995, there has been an annual budget for the compulsory health insurance system. Total federal spending on health care for a given year is equal to the budget for the previous year plus a percentage increase in real terms (the growth cap) and inflation in terms of the health index (consumer price index) but with goods and services detrimental to health excluded. The important point to note about the health budget growth cap is that, although its main purpose is to limit the annual growth of funds allocated to health to a given ceiling, it legally guarantees the set funding level for the health sector for that year. Moreover, historically, the cap allows for some flexibility in total spending since some exceptional or specific expenses are excluded from the ceiling. These are heterogeneous spending items, such as innovative drugs and services, vaccination and part of salary increases of health care personnel (e.g. subsidies to the supplementary pensions of physicians and dentists). Before 2005, the growth cap was mostly not respected, with substantial budgetary overruns (Table 1.2), in particular for pharmaceuticals and to a lesser extent for ambulatory care (OECD, 2005).<sup>4</sup> Over the period 2005–2011,

<sup>4</sup> Although quarterly budget controls were in place, adjustment mechanisms or penalties were exceptional (Belgian Court of Audit, 2011). Therefore, the growth cap was more a target than a real cap.

the budget was allowed to grow by 4.5% per year in real terms. Importantly, during the same period, actual spending grew more slowly and the gap between the federal health budget and actual spending widened. Even in recent years when a reduced growth cap has been imposed, actual spending has continued to be less than the set budget.

Although the growth cap is the most important instrument in determining the growth rate of the budget for the compulsory health insurance system, the annual growth rate was in most years far above 4.5% (Table 1.2).<sup>5</sup> With a growth cap of 2.5% in the period 1999–2004, extensive use was made of the possibility to deviate from the cap for exceptional or specific expenses. After 2005, this budget escape route was hardly used because of the rapid increase in the budget ceiling to a more generous 4.5% (OECD, 2005). In more recent years (until 2012), the difference between the growth cap of 4.5% and the budget increase mainly reflects the way inflation is captured. To determine the health budget for the next year, the expected increase in the health index (corrected consumer price index) is applied to the total health budget, although in practice indexation does not apply to all parts of the health budget since different indexation rules exist depending on the spending item. Moreover, since the health index of a given year is applied to the health budget of the previous year plus the growth cap of 4.5%, there is a cumulative effect of both measures. Over the period 2005–2011, the accumulated difference between the indexation budget based on the health index and the budget based on applying the different indexation rules amounted to €1265 million (Belgian Court of Audit, 2011).

Instead of reducing the real growth rate, the government decided to transfer the budget surplus (the difference between the spending ceiling and actual spending) to be used in the future or to other subsectors of social security (Table 1.3). Normally, the health care budget included a mixture of new initiatives and savings, with new initiatives having to be balanced by savings in other sectors. For example, increased reimbursement of spectacles or hearing aids could be financed by (increased) turnover taxes on pharmaceuticals. The year 2012, however, was a special year. When new initiatives and savings for the 2012 budget had to be submitted, there was no government in situ.<sup>6</sup> Moreover, in early 2012, the newly formed federal government had to impose a package of austerity measures worth €11.3 billion on its public expenditure, of which €2.3 billion was in the health sector. Structural savings accounted for about €553 million. The largest part of savings in the health sector was realized by not applying the growth cap. For the first time since the introduction of the growth cap, the budget was aligned to the amount of estimated expenses and

5 The increase of 9.25% in 2008 can be partly explained by the integration of the small health risks of the self-employed into the compulsory health insurance system.

6 Between the elections of June 2010 and December 2011 (541 days), Belgium had a federal caretaker government meaning that, in line with Belgian political tradition, no new legal measures could be taken.

savings, without taking the growth cap into account. Furthermore, no new initiatives were introduced in 2012. For 2013 and 2014, the growth cap was reduced to 2% and 3%, respectively. In 2013, structural savings amounted to €406 million. In addition, a specific budget was made available for job creation in the non-profit-making sector. Even with the reduced budget growth in 2013, a (smaller) budget surplus was expected (Table 1.3).

**Table 1.2** Growth rate of the health budget in Belgium and actual spending between 2002 and 2013

	Health budget (million €)	Percentage increase over previous year	Actual spending (million €)	Percentage increase over previous year
2002	14,412	–	14,163	–
2003	15,342	6.45	15,384	8.62
2004	16,258	5.97	16,822	9.35
2005	17,398	7.01	17,250	2.54
2006	18,473	6.18	17,735	2.81
2007	19,619	6.20	18,875	6.43
2008	21,434	9.25	20,677	9.55
2009	23,084	7.70	22,422	8.44
2010	24,249	5.05	22,826	1.80
2011	25,869	6.68	24,077	5.48
2012	25,627	-0.94	24,985	3.77
2013	26,677	4.10	26,215 <sup>a</sup>	4.92

*Note:* <sup>a</sup>Actual spending for 2013 is based on estimations (RIZIV, 2013a).

*Source:* Yearly reports and budget documents from RIZIV.

**Table 1.3** Distribution of the health budget in Belgium between current spending and transfers, 2007 to 2011

	Health budget (million €)	Current spending (million €)	Fund for the Future (million €)	Other subsectors of social security (million €)
2007	19,619	19,444	175	–
2008	21,434	21,128	306	–
2009	23,084	22,785	300	–
2010	24,249	23,605	294	350
2011	25,869	24,776	–	1,094

*Source:* Belgian Court of Audit, 2011.

While the budget surplus equalled €148 million in 2005, it amounted to €1.8 billion in 2011. Since 2007, part of the budget surplus has been pooled in a fund called the Fund for the Future (Dutch, Toekomstfonds; French, Fonds pour le futur) to build up a reserve for future costs caused by the ageing population. However, because of the economic crisis, no money has been put into the fund in recent years. The fund could only be used at the earliest from 2012 onwards, but until now no funds have been used, mainly because of the yearly budget surpluses. Since 2010, the largest part of the health budget surplus has been transferred to other social security sectors with a deficit.

Once the total budget is determined, sub-budgets for categories of spending such as physicians, pharmaceuticals and hospitals are fixed. The sub-budgets for about 50 spending categories are the result of policy priorities and close consultation between stakeholders. Aggregated spending categories, in line with the yearly reports of the RIZIV, highlight that in 2011 budgets for pharmaceuticals and physicians were cut more than budgets for other health care sectors.

### ***Statutory health insurance revenue***

No major changes have been introduced since the beginning of the economic crisis in the way health insurance revenue is generated.

### ***Fiscal policy***

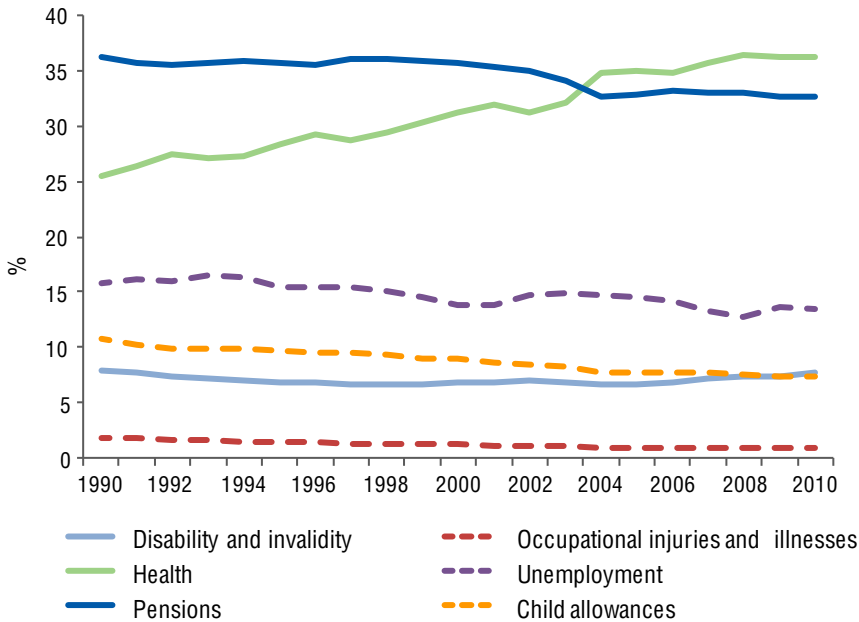
In Belgium, there are no tax subsidies for OOP payments or PHI premiums. In recent years, excise duties on tobacco and alcohol, which are earmarked for social security in general and health care in particular (tobacco), have been raised. For example, the excise duties on tobacco (July 2013) and on alcohol (August 2013) were increased by 8%. The expected revenue was €50 million in 2013 and €100 million in 2014.

### ***Priority given to the health sector***

Since the beginning of the 1990s, the share of federal spending on health care has steadily increased, to reach more than 36% of total social security spending in 2010. The share slightly decreased in 2009 and 2010 (Fig. 1.1).

In effect, the health budget's growth cap is the most important countercyclical measure that has been used to guarantee the flow of funds to the health sector during the period of economic crisis in that until 2012 it provided a legal guarantee that the budget for the compulsory health insurance system could increase by 4.5% in real terms annually. Moreover, given the exceptional situation in which there was a caretaker government in place for 541 days, this protected the health insurance system from austerity measures until the end of 2011 when the health care budget for 2012 was decided.

**Fig. 1.1** Relative share of spending by sector as a proportion of total social security spending in Belgium, 1990–2010



Source: Federal Planning Bureau, 2014

### Breakdown of spending by agent in 2007 and 2011

The breakdown of spending on health into public and private components is shown in Fig. 1.2.<sup>7</sup> Part of the increase in spending by social security (compulsory health insurance) between 2007 and 2011 was the result of the integration of the so-called small health risks of the self-employed (e.g. ambulatory care, pharmaceuticals for outpatient care, home care and dental care) into the compulsory system. Supplementary payments are charges in excess of some amount (e.g. the cost of prescription drugs in excess of a reference price) and health care services not covered by compulsory health insurance. These supplementary payments are paid by patients on top of official co-payments. The share of both supplementary payments and co-payments decreased between 2007 and 2011 (from 16.97 to 15.55% and from 4.5 to 4.2%, respectively), which is a striking result in a period of crisis. Compared with other countries, the share of PHI as a proportion of total health spending is low in Belgium.

<sup>7</sup> Spending by local governments and companies is not included in total health spending (equalling 0.2% of total spending in 2011).

### ***Breakdown of spending by sector in 2007 and 2011***

The evolution of total RIZIV expenditure by health sector is presented in Fig. 1.3. The data demonstrate the limited impact of the crisis on the subsectors of health care. Expenditure on curative, rehabilitative and long-term nursing care increased in relative terms compared with expenditure for pharmaceuticals and ancillary services to health care. The impact was largest for pharmaceutical expenditure because of the measures taken in this sector (see section 3.3).

## **3.2 Changes to coverage**

### ***Population entitlement***

Since 1 January 2008, the entire population (almost) has been covered for the same health services. Before that date, the benefits package for most self-employed people and their dependants did not include the so-called small health risks. However, the decision to remove the distinction in coverage between the self-employed and the rest of the population had already been taken before the start of the crisis.

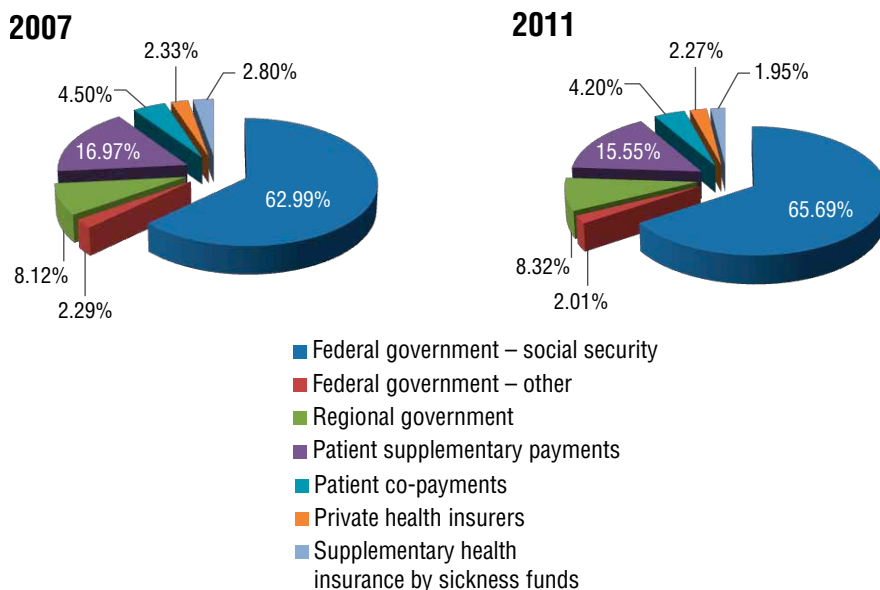
### ***The benefits package***

Insurance coverage is uniform for all insured people, who are entitled to the same benefits package in the compulsory health insurance system, with some exceptions. For example, since July 2007, active bandages and (some) painkillers are (partly) reimbursed for chronically ill patients but not for the general population; in addition chronically ill children under 18 who are treated in rehabilitation centres receive compensation for travel costs (since May 2011). Since the outbreak of the crisis, no measures have been taken to exclude or reduce health services covered by compulsory health insurance. An exception is the health technology assessment (HTA)-determined reduction in the number of conditions eligible for reimbursed oxygen therapy (2012).

### ***User charges***

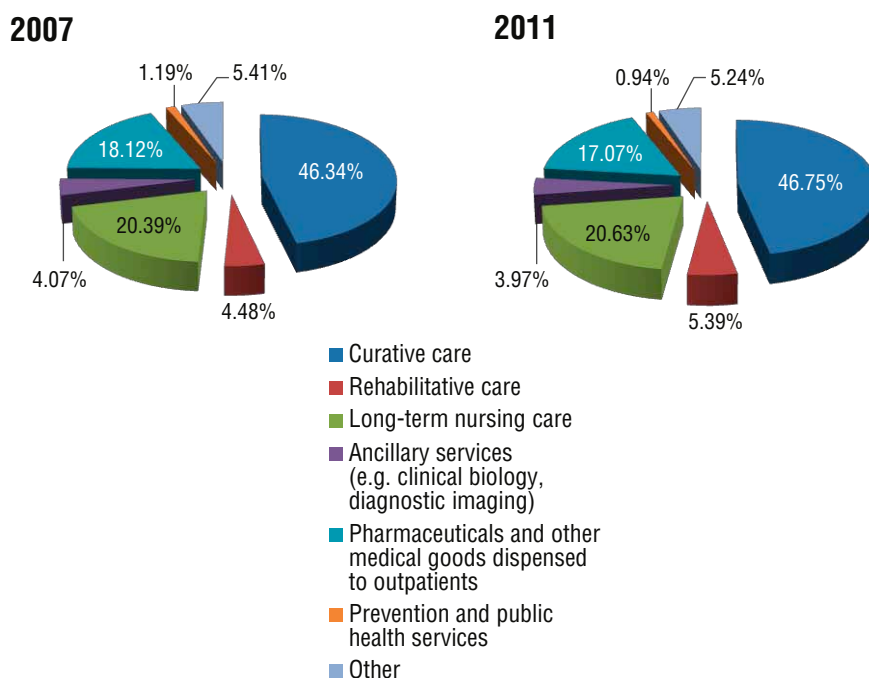
Belgium has a complex structure of patient cost-sharing. Two cost-sharing arrangements coexist: for some services, patients pay a percentage of the price or fee (co-insurance), for example, 25% of the drug price; for others, they pay a fixed amount (co-payment), for example €6 for a general practitioner (GP) consultation. In the period 2008–2013, a number of measures related to patient cost-sharing were introduced. As can be seen from the measures listed in the next sections, there has been an emphasis on trying to minimize financial barriers to accessing health care and to protect vulnerable groups. Although most of these measures were not necessarily a direct response to the crisis and were already being considered before the crisis, they highlight the primary goal of policy-makers.

**Fig. 1.2** Public and private health spending in Belgium in 2007 and 2011 as a percentage of total health spending



Source: Assuralia, 2010, 2013.

**Fig. 1.3** Spending by sector in Belgium in 2007 and 2011 as a percentage of total health spending



Source: Eurostat, 2014.



*GP services*

Before December 2011, cost-sharing arrangements for GP office consultations had a complicated structure. They depended on having a global medical record, on eligibility for increased reimbursement of health care costs, on regular or out-of-hours consultations and on GP qualifications. Since 1 December 2011, all co-payments and co-insurance rates for GP consultations were replaced by four co-payments, where the amount of the co-payment depends on the eligibility for increased reimbursement and on having a global medical file.<sup>8</sup> Also since December 2011, extra fees for out-of-hours consultations are fully reimbursed by the RIZIV. Although the new cost-sharing structure for GP consultations was mainly motivated by reasons of administrative simplification and not to increase financial accessibility to health care, the measure has facilitated the expansion of the system of social third-party payments (see Protection mechanisms, below) (Farfan-Portet et al., 2012).

*Medical specialist services*

Since 1 November 2010, co-insurance rates for specialist care (40%) are subject to a ceiling of €15.50 for individuals not eligible for increased reimbursement. Patients eligible for increased reimbursement have much lower co-payment levels.

*Dental care*

Since September 2005, co-payments have been waived for dental care services for children under 12 years of age. In July 2008, this measure was extended to children up to 15 years of age, and in May 2009 to children up to 18 years. In addition, the age limit for those eligible to have their annual preventive dental check-up reimbursed was raised to 63 years of age in 2012. The co-payment waivers (since 2008) and the expanded check-up coverage have increased public expenditure for dental services for these user groups (RIZIV, 2013d).

*Pharmaceuticals*

Before April 2010, co-insurance rates for drugs dispensed by community pharmacies were determined by the drug category: 0% for drugs in category A, 25% in category B, 50% in category C, 60% in category Cs and 80% in category Cx. For patients entitled to increased reimbursement of medical costs, the co-insurance rate for drugs in category B equalled 15%. In addition, patient cost-sharing was capped for drugs in categories B and C to avoid large amounts being paid as OOP payments. Due to the new remuneration system for pharmacists, introduced in April 2010 (see section 3.3 on provider payment reforms), the way the level of cost-sharing was calculated for outpatient drugs

<sup>8</sup> The global medical file was introduced to increase the availability of medical, social and administrative patient information and access to such information (Gerkens & Merkur, 2010). The ultimate aim of the measure was to optimize primary care quality. The GP holds the file with the patient's consent and shares relevant information with other providers.

dispensed by community pharmacists had to be adapted. A co-insurance rate as a percentage of the reimbursement basis (pharmacy retail price) was replaced by a percentage of the reimbursement basis ex-factory price (usually equal to the ex-factory price). The main objective of the new reimbursement basis was to keep patient cost-sharing unaffected by the new pharmacist remuneration scheme.

#### *Disease management programme*

As a response to the crisis, cost-sharing has been eliminated for services included in the disease management programme (DMP) for patients with type 2 diabetes or chronic kidney failure; both changes introduced in 2009. For example, financial incentives to enter the programme for type 2 diabetes include total reimbursement of all consultations with the coordinating GP, total reimbursement of consultation(s) with the diabetes specialist, partial reimbursement of dietician and podiatrist consultations, reimbursement of diabetes education and free access to self-management education materials, such as glucose meter, glucose test strips and lancets (Cleemput et al., 2012).

#### **Protection mechanisms**

Protection mechanisms have always been present in the Belgian health care system to enhance access to health services for economically vulnerable groups. However, since the onset of the economic crisis, some additional measures have been added. OOP payments have been estimated to account for about 20% of total health care expenditure. However, the financial burden of the poor and the sick has been shifted to the public authorities by a wide range of protection measures, which can be classified into two groups. The first group consists of measures that reduce the cost of health care for each encounter with the health care system. An example of this is the system of increased reimbursement of medical costs, in which patients with a specific social status (e.g. the long-term unemployed or pensioners with a limited gross taxable household income) or households below a certain income threshold are entitled to reduced co-payments and co-insurance rates. The (social) third-party payment system is another example. The second group of protection measures, such as the system of maximum billing that was introduced in 2002, puts a cap on a patient's total health care costs. Finally, (regulatory) measures to protect patients from supplements that are too high have been introduced since the start of the economic crisis.

#### *Increased reimbursement of medical costs*

Financial protection of economically vulnerable patients was already provided for in the first Health Insurance Act of 1963. At that time, vulnerable patients were defined as widows/widowers, orphans, pensioners, persons with disabilities and their dependants. They were fully reimbursed. Over the years, the definition

of the vulnerable population was extended to other groups; the principle of full reimbursement was replaced by increased reimbursement of medical costs (preferential reimbursement) compared with the general population, and eligibility for preferential reimbursement became means-tested. Some people are entitled on the basis of a granted social benefit without conditions based on income; such as people entitled to social integration revenue or social aid from the Public Welfare Centre. Others are entitled on the basis of status as long as their gross annual taxable income does not exceed a certain limit; these include widows/widowers, orphans, pensioners, persons with disabilities or those who have been unemployed for at least one year. Since 1 July 2010, the group of people entitled to preferential reimbursement was extended to include members of single-parent families and the age limit (over 50 years) for the long-term unemployed was abolished. Since 1 July 2011, people entitled to a fund for domestic oil from the Public Welfare Centre are also entitled to preferential reimbursement of medical expenses.

#### *Omnio-status*

Already in 1994, the General Report on Poverty (King Baudouin Foundation, 1995) recommended that preferential reimbursement should be given to individuals based on their income and not on social status. However, because of budget restrictions, it was not until July 2007 that the government responded to this report by generalizing eligibility for preferential reimbursement solely based on income by creating the Omnio-status. All patients with a household income below a certain threshold are entitled to Omnio-status and hence to increased reimbursement of health care costs. While take-up of this status was low in the beginning, at the end of 2012 almost 280 000 individuals were registered. On 1 January 2014, eligibility criteria for Omnio-status and for the increased reimbursement based on social status were synchronized.

#### *Extension of the (social) third-party payment system*

In general, a direct payment system applies to ambulatory care and the third-party payment system applies to inpatient care and pharmaceuticals. To improve access to health care, the (social) third-party payment system was extended to ambulatory care on 1 July 2011 for some vulnerable population groups, such as people in an occasionally precarious financial situation and people entitled to preferential reimbursement or Omnio-status. Although this measure does not change the amount of co-payments that must be paid, it increases accessibility at the point of use.

#### *Maximum billing system*

The maximum billing system puts a ceiling on the total amount of co-payments (excluding supplements and also some co-payments) to be paid during a

calendar year. The maximum share of co-payments as a proportion of total net taxable household income varies between 2.4% and 3.9%, except for the very poor (with a net taxable income below €11 500), where it can be larger than 3.9%, and the very rich, where it can be smaller than 2.4%. The system has been expanded gradually since its introduction in 2002. For example, for chronically ill patients, some non-reimbursed painkillers were included in the calculation of the maximum billing ceiling. Since January 2009, the co-payment threshold has been reduced by €100 for individuals who have exceeded the limit of €450 of co-payments for two consecutive years. These individuals are considered to be chronically ill.

#### *New status for patients with a chronic illness*

In September 2013, the status of "chronic illness" was adopted by the government. The status will be automatically assigned by the sickness funds to patients with at least €300 of health care expenses (not only OOP) for eight consecutive trimesters or who are entitled to the lump sum payment for the chronically ill (Dutch, *zorgforfait*; French, *forfait de soins*).<sup>9</sup> Patients suffering from a rare or orphan disease are also entitled to the new status. Patients with the status of having a chronic illness are automatically eligible for the lower maximum billing ceiling (as of 1 January 2013) and for third-party arrangements (as of 1 January 2015).

#### *Supplements*

While the system of maximum billing offers protection against the accumulation of co-payments to be paid, it does not include supplements (i.e. extra-billing above the officially agreed tariff). Supplements in the hospital sector are regulated and registered, but information on supplements charged in an ambulatory setting by doctors who have not signed the fee agreement is currently not available. However, a new law on transparency is in preparation that will require physicians and dentists to mention the exact amount (including supplements) that has been paid by a patient on the medical attestation to be submitted to the sickness fund.

Hospitals and medical specialists can charge supplements on their fees, on the price of the room and on implants and medical devices. In the last few years, particularly since the onset of the crisis, the reimbursement level for implants and medical devices has increased. In addition, the fee and room supplements have increasingly been regulated, which is based on the room type. In 2010, supplementary charges for two-person hospital rooms were abolished. Since 1 January 2013, patients in rooms with two or more people are almost fully protected against fee and room supplements. The only exception is the possibility

<sup>9</sup> Patients are entitled to this lump sum payment if the sum of their co-payments has exceeded a threshold in each of the two previous years and they can prove that they have lost their ability to live independently to a major extent.

for medical specialists who have not signed the agreement to charge supplements for day-stay care. However, the National Committee of Representatives of Physicians and Sickness Funds recommends that medical specialists do not charge supplements to patients with preferential reimbursement, chronically ill patients and for day-stay care in oncology.

### 3.3 Changes to health service planning, purchasing and delivery

There also have been efforts to protect access to the health care system by policies intended to control volume or prices. Such policies mainly have been implemented in the pharmaceutical sector: 42% of all savings in 2012–2013 were realized in this sector (Gillis, 2014).

#### ***Policies affecting health system input prices***

##### *Pharmaceuticals*

A wide variety of measures have been taken to reduce input prices, particularly of pharmaceuticals (Table 1.4). Although these measures were part of ongoing reforms, they have been intensified in recent years. They have contributed to decreases in public pharmaceutical spending as a proportion of total health spending.

**Table 1.4** *Pharmaceutical prescribing, pricing and reimbursement policies in Belgium*

<b>Policy</b>	<b>Measure<sup>a</sup></b>
<i>Generic policy changes</i>	
Reference price level	Percentage reduction in the ex-factory price of the original drug of 31% (gradual increase since 2001) Additional reductions for drugs in reimbursement category A (no co-payment) (2012)
Generic substitution	For acute treatments with an antibiotic or antifungal (May 2012)
Minimum prescription of low-cost drugs	Increase of quota (2011)
INN prescription	Obligation to dispense a drug among the group of cheapest drugs for every INN prescription (April 2012)
<i>Price cuts</i>	
Linear price cuts	Reduction of reimbursement basis for old drugs since 2010; price cut of 1.95% in April 2012 and April 2013
International price comparison	Reduction of prices in line with evolution of ex-factory prices in six EU countries
Taxes	Turnover taxes of maximum €100 million if there is budget overrun (2008); crisis tax of 1% since 2010 and 0.13% since 2013

*Notes:* INN: international non-proprietary name; <sup>a</sup>The list of measures is not exhaustive.

In Belgium, the reference price level is based on a simple linear reduction (percentage) in the original ex-factory price of the brand drug (Vrijens et al., 2010). The result is then increased by the distribution and delivery margins to obtain the public price. When the reference price system was first introduced in 2001 for off-patent reimbursable drugs – provided that a low-cost<sup>10</sup> alternative existed – the percentage reduction was fixed at 16% (imposed by the government). It was then progressively increased throughout the years and since April 2011 has been 31% for drugs included in the reference price system for the first time, with an additional reduction of 6% for drugs included in a reference group for over two years plus a reduction of 5.5% for drugs included for over four years.

Since April 2012, drugs in reimbursement category A (no co-payment) have enjoyed a price decrease of 41% instead of 31% if they are included for the first time, with an additional reduction of 7% (instead of 5.5%) if they are included for over four years. A large number of companies producing branded drugs lowered their price to the reference price level. This method for setting the reference price has the benefit of guaranteeing savings to the public authorities, but it has, in general, not generated price reductions of generic medicines below the reference price (Dylst, Vulto & Simoens, 2012).

On 1 April 2012, an overall price reduction of 1.95% for all drugs came into force. Pharmaceutical companies can choose between this linear reduction of 1.95% on all their products or a flexible reduction of prices for some products (some more than 1.95% and others unchanged). The flexible reduction can only be applied in certain conditions, for example a maximum 20% reduction per product for pharmaceuticals that have been in the reference price system for less than four years and a maximum of 6% otherwise; pharmaceuticals under a compulsory substitution policy (antibiotics and anti-inflammatory drugs) are excluded. The 1.95% price reduction was also applied on 1 April 2013, resulting in a price reduction for more than 2500 drugs.

In order to allow price comparisons, pharmaceutical companies since 2012 have been required to submit the ex-factory prices of drugs under patent on the Belgian market for more than 5 and less than 12 years as used in six EU countries with a comparable standard of living (Austria, Finland, France, Germany, Ireland and the Netherlands). If a significant decrease is observed abroad, the reduction will also have to be applied in Belgium.

#### *Overhead costs*

In 2011, the federal government decided to reduce the budget for overhead costs of the sickness funds (i.e. administrative costs) by €43.3 million in 2012, €91 million in 2013 and €112 million in 2014. In response, in 2011 some sickness funds reduced their number of employees.

<sup>10</sup> Low-cost drugs are generic drugs and brand name original products with lowered price to the reference price.

### *Reductions in health sector salaries and changes to working conditions*

In 2012, in response to the crisis, the government decided to reduce the amount paid to physicians through fee for service (FFS) by €60 million, to save €122 million on the indexation of these fees and to reduce RIZIV reimbursement to orthopaedists and some types of pharmacist by €8.5 million. As part of these measures, indexation of fees for GPs and medical specialists was reduced to 1.5% (from 2.99%). In 2013, physicians unions and the government agreed to make a saving of €105 million by limiting and reallocating the funding available for indexation on a variety of health personnel and services (clinical biologists, medical imaging, surgery, gynaecology services, and GP and specialist consultations). In contrast to these reductions, in 2013 a social agreement was established for the non-profit-making sector (see also section 1.3) in which a budget of €40 million was put aside for financing the cost of 800 additional full-time equivalent positions in the health care sector.

### **Pharmaceutical sector reforms**

Policies to make drug prescribing, use and pricing more rational were introduced. Table 1.4 summarizes the main policies affecting the prescribing, pricing and reimbursement of pharmaceuticals in Belgium. The possibility of generic substitution was introduced by law in 1993, but the royal decree required to put the law into practice was not adopted until 2012. Since May 2012, pharmacists have been required to treat a prescription for acute treatments with an antibiotic or an antifungal as a prescription by international nonproprietary name (INN), even if a specific brand is mentioned. However, a physician can specify that a brand name drug be dispensed in cases of allergy or intolerance or for therapeutic reasons. Moreover, since April 2012, community pharmacists have been required to dispense a drug among the group of cheapest drugs for every INN prescription. The group of cheapest drugs are those with the same molecule, administration form and dosage and for which the public price is within a range of 5% above the cheapest (European Observatory on Health Systems and Policies, 2014). Since 2005, physicians have been allowed to prescribe drugs by INN. Although this is not obligatory, physicians are encouraged to do so by a quota system introduced in 2005 whereby GPs and other medical specialists are required to prescribe a minimum percentage of low-cost drugs, including drugs prescribed by INN. The minimum percentage differs per medical specialty. Since January 2011, the percentage for GPs has been increased from 27 to 50%.

In 2001, a closed budget for pharmaceuticals was introduced. Between 2001 and 2005, a clawback system<sup>11</sup> and other contributions were in place forcing pharmaceutical companies to contribute to the financing of public pharmaceutical spending. In 2006, a single system of contributions (called provisional funds) was installed, which was based on taxes on the turnover of reimbursed pharmaceuticals (9.73% in 2006, 8.73% in 2007, 7.73% in 2008 and 2009, and 6.73% since 2010). Turnover taxes are reduced in some specific situations (e.g. if pharmaceutical companies have invested in research, development and innovation) or for specific pharmaceuticals, for example orphan drugs and drugs in category Cx (contraceptives and antispasmodics) (Gerkens & Merkur, 2010). The mechanism of provisional funds was abolished in 2008 and replaced by a similar system of contributions based on taxes on turnover, which are due in case of a budget overrun and cover up to €100 million. Additional taxes on the turnover of reimbursed pharmaceuticals have recently been implemented in response to the economic crisis. Examples are a "crisis" tax of 1% since 2010 and a tax of 0.13% since 2013 (European Observatory on Health Systems and Policies, 2014).

### **Provider payment reforms**

#### *Pharmacists*

A new remuneration system was introduced in April 2010, mainly to reinforce the intellectual role of pharmacists and partly to disconnect remuneration from drug prices. The system where pharmacists received a percentage (with a ceiling) of the retail price was replaced by a basic fee for intellectual services (a fixed sum per package for reimbursable drugs, equal to €4.16 since 1 January 2014), and an economic margin (for ex-factory prices smaller than or equal to €60, this margin was 6.04% of the ex-factory price; for ex-factory prices above €60, the margin was €3.62, plus 2% of the difference between the ex-factory price and €60). A third part of the new remuneration system consists of some extra fees, for example for INN prescribing of drugs in the reference pricing system (€1.28 per delivery since 1 January 2014) and for advisory consultation services for new inhaled corticosteroids for asthma (€19.13 per talk; introduced on 1 January 2014).

#### *GPs*

Although GPs are mainly paid on a FFS basis, the share of lump sum payments increased from 2.6% in 2000 to 20% in 2010 (Verzekeringwereld, 2011). Lump sum payments were introduced for managing the global medical file, for coordinating care in the DMPs for patients with type 2 diabetes and chronic

<sup>11</sup> If the sub-budget for pharmaceuticals is exceeded, pharmaceutical companies have to reimburse 65% (later increased to 72%) of the budgetary deficit. The remainder is paid by the sickness funds (Gerkens & Merkur, 2010).



kidney failure, and for being on call. GPs are also paid a fixed amount per year to use a software package for the global medical file (telematics premium). The policy goals behind the gradual decline of FFS as the dominant remuneration system are diverse. One of the objectives of the DMPs (introduced in 2009) was to reinforce the role of GPs in the treatment and follow-up of patients with a chronic illness. At the same time, the measure aims to increase patient access. The lump sum payment for managing the global medical file is also meant to reinforce the role of GPs.

### *Hospitals*

The system of reference amounts was introduced in 2002 to detect and control large variability in hospital practices for standard interventions provided in inpatient settings (Van de Sande et al., 2010). The reference amount is a standard by which the hospital is compared and is calculated as the national average expenditure increased by 10%. Only expenditure on clinical biology, medical imaging and other technical services (internal medicine, physiotherapy and various medico/technical services) are included. If hospital expenditure exceeds the reference amount, the expenditure surplus (difference between hospital expenditure and median national expenditure) is paid back to the RIZIV. In an attempt to increase efficiency of resource use, the system has been expanded to day care and to services provided up to 30 days before the hospital stay (since January 2013).

### *Information and communication technology*

There has been a gradual elaboration of the e-health digital platform, set up in 2008 to permit an electronic exchange of secure data between all health actors. Since 2009, the federal government has decided to invest in new software, such as MyCareNet, to improve the monitoring of patients (e.g. patients' insurance status, health status and right to increased reimbursement).

## **4. Implications for health system performance and health**

### **4.1 Equity in financing and financial protection**

#### ***Equity***

Earlier sections of this chapter have stressed that safeguarding an accessible health care system of high quality has always been the first concern of policy-makers and stakeholders in Belgium. The overview of protection measures that were taken since the crisis in 2008 illustrates this concern. Although we believe that an evaluation of health policy in terms of equity should capture a

concept of individual well-being,<sup>12</sup> it is of course also possible to evaluate the evolution of specific indicators reflecting the financial accessibility of the health care system.

### **Equity in financing**

A popular aggregate evaluation criterion is the degree of progressivity of the health care financing mix. Progressivity measures were developed to evaluate to what extent health care financing adheres to the ability-to-pay principle. Table 1.5 illustrates how the overall financing mix of health insurance has been growing less progressive since 2006 in that income sources that are proportional to income (mainly social security contributions) are increasingly complemented with receipts from regressive income sources (mainly indirect taxes). However, in Belgium's system of global management, the calculated degree of progressivity of health care financing necessarily rests on arbitrary assumptions about the assignment of health care expenditure to different financing sources. Moreover, the share of PHI and the share and distribution of OOP payments are not captured by the measure of overall progressivity of the financing mix, although these are essential features of an equitable health system.

**Table 1.5** *Equity in financing of health insurance in Belgium between 2006 and 2011*

<b>Financing source</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Proportional receipts/total receipts (%)	71.1	71.0	72.0	70.6	69.4	64.8
Progressive receipts/total receipts (%)	18.9	19.0	18.0	17.3	17.2	19.4
Regressive receipts/total receipts (%)	10.0	10.0	10.0	12.1	13.4	15.8

*Source:* Vrijens et al., 2012.

## **4.2 Access to services and quality of care**

Since the early 2000s, several policy measures have been taken to stabilize OOP expenditure for health care and to reduce it for population groups with low income. In 2012, patients paid, on average, 6.54% co-payments on physician fees. When co-payments for partly reimbursed drugs are included, the share of co-payments as a proportion of total health care expenditure amounts to more than 8%.

### **Maximum billing system**

Table 1.6 shows the number of patients and households who were reimbursed by the system of maximum billing because they exceeded their income-dependent

<sup>12</sup> For a more elaborate discussion on the concept of well-being as a broader perspective on equity in health, see Schokkaert & Van de Voorde (2013).

co-payment limit as well as the total amount of reimbursements in the period 2008–2011. The figures clearly show the effect of the introduction of maximum billing for the chronically ill in 2009 on total maximum billing reimbursements. The decrease in the number of patients receiving such reimbursements in 2010 and 2011 can be explained by a change in the eligibility criteria. Before 2009, as soon as one person with preferential reimbursement in a household reached the co-payment ceiling, all the members of that household (living at the same address) became eligible for maximum billing reimbursements, independent of whether these other household members had preferential reimbursement status. Since 2009, only the household members with preferential reimbursement status are eligible for maximum billing reimbursements if the household has reached the co-payment ceiling.

**Table 1.6** System of maximum billing in Belgium, 2008–2011, number of patients/households and total reimbursements

	2008	2009	2010	2011
No. patients	1,123,204	1,173,327	1,101,393	1,088,409
No. households	630,339	643,343	610,091	602,282
Total reimbursements (thousands of €)	277,153	305,619	326,335	329,653

*Source:* RIZIV, 2012.

The impact of the maximum billing system can be translated into a lower average co-payment for reimbursed products and services. For example, without the maximum billing system, the average of co-payments as a ratio of total expenditure for physician fees would have been 7.8% in 2012. The maximum billing system reduced the average co-payment pressure to 6.54%, representing a decrease of more than 16%. In addition, the average co-payment pressure for physician fees fell between 2007 and 2012, even independently of the maximum billing system (Table 1.7) mainly through increasing lump sum financing for physician services (e.g. for services provided within DMPs), the increasing number of patients with a global medical record and its associated benefits (e.g. lower co-payments for physician visits) and the systematic implementation of preferential reimbursement status for specific groups.

**Table 1.7** Co-payment pressure in Belgium for physician fees with and without the maximum billing system

	Co-payments as a percentage of total fee expenditure, excluding supplements	
	Without maximum billing	With maximum billing
2007	8.66	7.20
2008	8.60	7.32
2009	8.54	7.23
2010	8.22	6.85
2011	7.91	6.60
2012	7.80	6.54

Source: RIZIV, 2012.

### Medical houses

Medical houses are primary care centres where a team of GPs, physiotherapists and nurses offers medical care free of charge to patients. The RIZIV reimbursement takes the form of a lump sum per registered patient (risk-adjusted capitation payment), paid directly to the providers working in the medical house. In contrast to their colleagues, health care providers are not paid on a FFS basis with co-payments from patients. Also in contrast to single-provider practices, patients do not have to pay the full fee upfront and claim reimbursement afterwards. This reduces financial barriers to access to health care services. In general, medical houses are situated in disadvantaged neighbourhoods. However, with the crisis, they are becoming increasingly important. Patients still have to pay for pharmaceuticals, bandages and other nursing material. When a patient goes to another provider (e.g. a GP not working in the medical house), this service is not reimbursed by the RIZIV (except for out-of-hours consultations).

The number of medical houses and the number of people registered with them has increased more rapidly in Belgium since 2003, and this trend continued after the onset of the crisis. In 2008, there were 88 medical houses with just under 189 000 registered patients; in 2011 there were 119 medical houses with 250 075 registered patients. On 30 June 2012, there were 129 medical houses with about 274 000 registered patients, representing a 10% increase over 2011 (RIZIV, 2013b). Consequently, the RIZIV expenditure for medical houses also increased rapidly, from €25.9 million in 2003 to €92.8 million in 2012, with the greatest increase for nursing services. The increase cannot, however, be attributed to the crisis.

### ***Hospital care***

The Belgian Government has taken several measures to reduce OOP costs for hospitalized patients. Three major measures were taken:

- protection against room (2010) and fee (2013) supplements charged by hospital physicians for patients staying in a room with two or more beds, independent of the qualification of the physician or the status of the patient, except for non-contracted physicians in day care;
- better reimbursement of medical devices and implants (since 2008, but the effects have been more pronounced since 2012); and
- increased transparency on the costs charged to patients (2013).

These measures have had an impact on patients' OOP costs associated with hospitalization. There has been an increasing divergence between the cost of a hospital stay in a single room and that for a stay in a room for two or more people. Physicians and hospitals reacted to the tightening of the regulation by increasing supplements where they were still allowed: between 2004 and 2011 fee supplements for the members of the Christian Sickness Funds increased each year by 5.4%. Nevertheless, the overall cost of a stay in a single room has remained more or less stable in recent years, because the increase in fee supplements was compensated by a decrease in material supplements (Crommelynck, Cornez & Wantier, 2013; Schokkaert & Van de Voorde, 2013). There is, however, large variation among hospitals, with a small fraction of hospitals charging fee supplements that amount to 400% of the official tariff (Crommelynck, Cornez & Wantier, 2013; Laasman, 2013). Hospitals charging large fee supplements are mainly located in Brussels and to a lesser extent in the Walloon Region. For people without preferential reimbursement, supplements in 2012 amounted to an average of €1100 in Flanders, €1490 in Wallonia and €2384 in Brussels. Fee supplements, and to a lesser extent room supplements, were responsible for these striking differences.

### ***Population with preferential reimbursement***

An analysis of the data of the Christian Sickness Funds showed that between 2009 and 2011 15% more people became eligible for preferential reimbursement (Christian Sickness Funds, 2012). The socialist sickness funds made similar observations among their members. Since the economic crisis, the proportion of members from the socialist sickness funds with preferential reimbursement status, including those with Omnio-status, increased from 15% in 2006 to more than 23% in 2012 (Laasman, 2013). Assuming that the

extension of eligibility for increased reimbursement in 2007 (introduction of Omnio-status) had already had its complete effect in 2009, this observation may indicate that the number of people in a problematic financial situation is increasing. However, the take-up of Omnio-status was slow, as people were not aware of their eligibility and had to submit a request to their sickness fund on their own initiative. Therefore, it is unlikely that the measures taken in 2007 have already shown their complete effect. Further increases in the population eligible for increased reimbursement can be expected, also because of measures to widen the eligibility criteria (e.g. extension of preferential reimbursement entitlement to single-parent families in 2010 and to persons entitled to a fund for domestic oil from the Public Welfare Centre in 2011) and not simply because of the economic crisis. Moreover, a more proactive policy to detect people who are eligible for preferential reimbursement will be possible in the near future because of an exchange of information between the RIZIV, the sickness funds and the fiscal authorities.

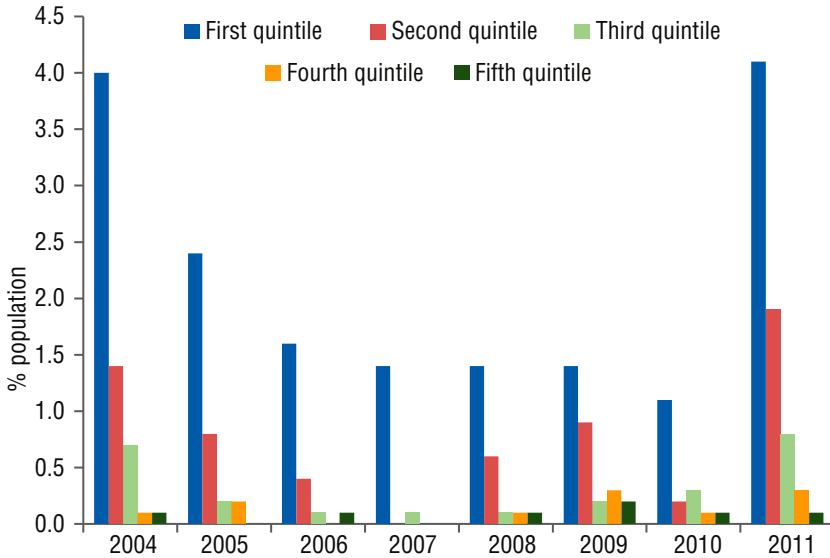
### ***Postponing health care expenditure for financial reasons***

According to the Health Interview Surveys conducted in 1997, 2001, 2004 and 2008 (Demarest et al, 1998, 2002; Bayingana et al., 2006; Van der Heyden et al., 2010), an increasing number of households declared they had to postpone health care (medical care, surgery, drugs, spectacles/contact lenses, mental health care) during the previous 12 months because they could not afford it. The share of respondents was relatively stable between 1997 and 2004 (around 9%), but increased to 14% in 2008 and returned to 9% in 2013. These averages hide large differences due to age, education level, household composition and region. For example, in 2008, 9% of households in the group with the highest education level postponed health care versus 18% for those belonging to the group of lowest level, and 30% of single-parent households reported to have postponed health care for financial reasons. Currently (March 2014), a fifth Health Interview Survey is being conducted.

More recent data from a large online survey in 2013 (21 957 respondents) on the perception of health care by the Belgian population (Christian Sickness Funds, 2013) showed a different picture. Of all respondents, 11% reported that they had to postpone health care expenditure for financial reasons. In addition, Eurostat data on income and living conditions highlighted in Fig. 1.4 show that self-reported unmet need for financial reasons declined by quintile of equivalized income (Eurostat (2013e)).<sup>13</sup>

13 Unmet need is defined as the share of the population perceiving an unmet need for medical examination or treatment. Reasons include problems of access (could not afford to, waiting list, too far to travel) or other (could not take time, fear, wanted to wait and see, did not know any good doctor or specialist, other).

**Fig. 1.4** Self-reported unmet need because health care was too expensive by quintile of equivalized income, Belgium, 2013



Source: Eurostat, 2013e.

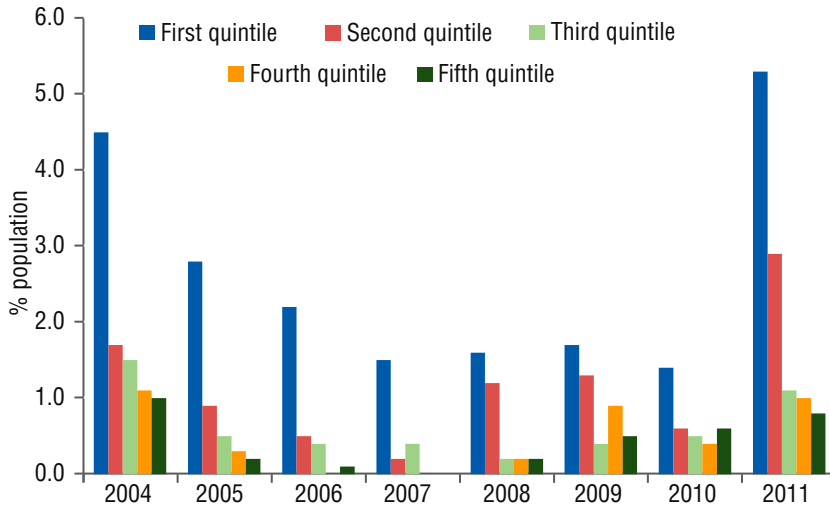
Finally, a survey conducted in 2013 by the socialist sickness funds among 1521 citizens revealed that 23.6% had postponed health care expenditure or health care services for financial reasons in the last year. The population groups showing the highest rate of self-reported postponed expenditure or care were those aged between 31 and 45 (30.7%), single parents with children (40.6%) and people with a preferential reimbursement status (39.4%) or Omnio-status (38.2%). Most frequently, expenditure for pharmaceutical products was postponed (35.6%), followed by dental care services (23.2%). More research is needed to interpret these different numbers.

**Unmet need**

Data on unmet need show that lowest income groups, in particular, perceive that they have unmet health care needs. The reason for needs being unmet has been reported to be mainly related to the cost of health care (see above). Other reasons (travel distance, waiting times, lack of time, not knowing a good doctor, fear, wanting to wait and see, and other) accounted for less than 0.6% in all income quintiles up to 2010. In 2011, the relative importance of these other reasons for the lowest income quintile increased compared with financial reasons (mainly "having no time to seek health care"). There are no perceived unmet needs because of waiting times in Belgium. A large disparity remains between the lowest income groups (first quintile) and the highest

income groups (fifth quintile) with regard to perceived unmet needs in health care (Fig. 1.5). This huge disparity has been observed for several years. Before the crisis, a marked downward trend was observed in perceived unmet needs in all income groups as well as in the difference between the lowest and highest income groups. In 2011, the perceived unmet needs started to increase again in all income groups and the gap between the lowest income groups and the highest income groups widened.

**Fig. 1.5** Self-reported unmet needs by quintile of equivalized income, Belgium, 2004–2011



Source: Eurostat, 2013e.

### 4.3 Transparency and accountability

In 2003, the Belgian Health Care Knowledge Centre was established to perform HTA and health services research for policy-makers, and to develop clinical practice guidelines for health care providers. The aim was to increase efficiency in health care and improve the transparency of the reasons behind reimbursement decisions.

Current initiatives to increase transparency include a law to increase the financial transparency of health care for citizens. The changing economic and political climate has been one of the motives for this law. With the increasing pressure on government budgets from the economic crisis and the financial problems it has created for some groups of citizens, it is felt that it is unjustifiable that there is an almost complete lack of transparency for patients in the financial consequences of using health care. Moreover, to be able to allocate health care budgets more efficiently and to ensure equity, it is important to have



transparency about the complete financial consequences of using health care. The proposal to increase financial transparency encompasses many elements: the publication of the status of health care providers (whether they have signed the convention or not) on the web site of the RIZIV; a measure to regulate supplements charged for clinical biology, pathology–anatomical research and genetic tests; regulations regarding the information health care providers have to provide to patients about the cost of health care services, medical materials and devices; and regulations on presenting this information on health care service delivery certificates or similar documents.

#### **4.4 Impact on health**

##### ***Mortality***

Cardiovascular diseases comprise the major cause of death in Belgium. Improved treatment strategies and preventive efforts have induced a significant decrease in cardiovascular mortality over the last decade. While in 2003 almost 345 per 100 000 population died of cardiovascular diseases, this number was reduced to 254 per 100 000 in 2009. More recent data are not yet available. The next most frequent cause of death is cancer, with mortality from cancer remaining relatively stable between 2003 and 2009, at around 228 per 100 000 population a year. The Cancer Plan (launched in 2008) with 32 specific initiatives organized into three main principles (actions on prevention and screening; actions on care, treatment and support; and actions on research, technological innovation and assessment) is expected to show its effects only in the longer term.

##### ***Self-reported health***

Data on self-reported health by income quintile show that there is a huge gap between the highest and the lowest income groups: about 85% of the population in the highest income quintile report a health state of good or very good, while this proportion is about 59% in the lowest income quintile. This gap has remained stable since 2004. No marked changes have been observed as a result of the financial crisis. Self-reported health by education also shows a socioeconomic gradient (OECD, 2013c). Populations with low education show a lower self-reported health than highly educated population groups. The proportion of the population reporting their health as being good or very good has decreased for the low education group since 2008, whereas this proportion has remained stable for the groups with medium or high education. Finally, a difference in self-reported health is observed between men and women in Belgium (OECD, 2013b). The difference between both groups has steadily decreased since the early 2000s.

## ***Disease prevalence***

### *Long-term disability*

Between 2005 and 2010, there was a steep increase of 82% in the number of people with long-term disability. It is believed that this partly reflected stricter eligibility conditions being imposed to receive a retirement pension; however, it is difficult to confirm a causal relationship.

### *Mental disorders*

A survey conducted in 2012 by the socialist sickness funds in Wallonia and Brussels and interviews with GPs, psychiatrists and psychologists revealed that 1 in 10 people (very) regularly suffers from depression or anxiety. This is mainly caused by being/becoming unemployed.<sup>14</sup> Health care expenditure data show an increase in the use of antidepressants by 45% between 2004 and 2012. The increase was strongest between 2006 and 2008, but since 2010 the increase has been limited to 4.6%. Of all age groups, those aged between 51 and 70 years have experienced the largest increase. The use of antidepressants decreased in children (0–10 years) from 2004 onwards and in adolescents and younger adults (to 30 years of age) from 2008 onwards because alerts were published concerning the increased risk of suicidal thoughts, suicide and self-mutilation associated with the use of antidepressants in children and adolescents. The biggest users of antidepressants are aged between 41 and 80 years.

The use of antipsychotic drugs has increased significantly since 2004 (by 50% between 2004 and 2012) and the financial crisis did have an accelerating impact. The biggest users are between 41 and 60 years of age. A consistent growth in their use also has been reported for adolescents and children, particularly for those aged between 12 and 17 years. The number of patients in this age group increased by 16% while the population decreased by 3% (RIZIV, 2013c).

Mental illnesses are the primary cause of invalidity in Belgium, with 27% of long-term absenteeism being related to mental issues. There also has been a rapid increase in disability benefit claims because of mental health disorders in recent years: 1% of the Belgian population or one-third of all claims (95 000 people in June 2012 compared with 86 000 in June 2010). Claimants were mainly aged between 40 and 55, but the number of young people is increasing (Solidaris Mutualité, 2012). Moreover, the life expectancy of psychiatric patients is, on average, 15 year shorter than the average (Van Herck & Van de Cloot, 2013).

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<sup>14</sup> Telephone survey in 2012 of 1000 adults between 18 and 75 years and web-based questionnaire for physicians.

## 5. Discussion

### 5.1 Drivers of change

The drivers of change in the health system in response to the crisis can only be understood against the background of European obligations and some specific characteristics of the Belgian health care sector.

#### *European obligations*

In 2009, Belgium was urged by the Council of the EU to take measures to reduce its government deficit, which accounted for 5.6% of GDP at that time. Between 2010 and 2012, the deficit needed to decline by 0.75% of GDP per year (Council of the European Union, 2009). By the end of 2012, the objective had not yet been reached, mainly because of the capital injections the government made into the banking sector (about 0.8% of GDP) (European Commission, 2013).

#### *Instruments available since the beginning of the 1990s*

Despite this fiscal pressure, the need and possibilities for change in the health care sector were limited in the early years of the crisis. Several factors contributed to this. First, at the outbreak of the crisis in 2008, Belgian policy-makers had a set of instruments at their disposal that postponed the impact of the crisis on the health sector. These instruments were introduced at the beginning of the 1990s to fulfil the convergence criteria as outlined by the Maastricht Treaty, which entered into force in 1993. The convergence criteria with respect to government finance imply that the ratio of gross government debt to GDP must not exceed 60%<sup>15</sup> and the ratio of the annual government deficit to GDP must not exceed 3% at the end of the preceding fiscal year. In 1993, the gross government debt was 137.8% of GDP (National Bank of Belgium, 2013) and the government deficit was 7.5% of GDP (OECD, 2013c).

The main purpose of the reforms in the 1990s was to increase the cost-consciousness and cost-participation of all the partners in the health care sector. The idea of monitoring the development of health spending within an a-priori budget and close monitoring of subsector budget overruns was the first important innovation. A real growth cap was introduced in 1995 to restrict the annual maximum increase in the health budget to 1.5% in real terms. In 1999, when Belgium entered the Economic and Monetary Union, the growth cap was raised to 2.5%, and then to 4.5% from 2005, resulting in annual health budget surpluses since that year. Between 2005 and 2010, this budget surplus

15 This rule was not enforced, as most members of the Economic and Monetary Union were unable to meet this criterion before 1999.

was transferred to the so-called Fund for the Future, to other subsectors of social security or was used for new initiatives. Moreover, the budget surplus allowed policy-makers to focus on protection measures to shelter citizens from potential access barriers to health care. A second innovation of the reforms at the beginning of the 1990s was the introduction of individual and collective financial responsibility for the sickness funds. These structural reforms had been in place for more than 15 years before the outbreak of the crisis, and accorded important protection to the system.

### ***No government for 541 days***

A second factor limiting the need for change was that between June 2010 and December 2011 Belgium had a caretaker government that could not impose austerity measures. The health budget for 2011 was consequently established under special circumstances: by a government that could not take new legal initiatives, in a context where the general government deficit was very large and where there was a surplus in the health care budget of €1.8 billion. Stakeholders were aware that this situation had protected the health care sector probably more than other sectors. They realized that the need to implement savings was inevitable and that the real growth cap could not be maintained given the economic situation. This is illustrated, for example, by the advice of RIZIV's Health Care Insurance Committee, consisting of representatives of the major stakeholders, to transfer €1464.9 million of the surplus in the health care budget (about 5.3% of the total health care budget) to other social security sectors. Moreover, while new initiatives costing €125.8 million in total were still honoured, at the same time savings measures were taken (worth €116.5 million) to compensate for the costs of the new initiatives. In 2012, there was no increase in the health care budget and the decision was taken to reduce the real growth cap for 2013 and 2014, although it still remained positive.

### ***Fiscal federalism reform***

The fiscal federalism reform (called the Sixth State Reform or Butterfly Agreement: Dutch, Vlinderakkoord; French L'accord papillon) is a third factor explaining health system changes. The reform gives more spending responsibilities to the federated entities (regions) (estimated at 4.5% of GDP in 2011), mainly in the areas of family allowances, health care and labour market policies (OECD, 2013a). The transfer of competencies in the health care sector relates to residential nursing care for older patients, hospital infrastructure and investment in the organization of primary care. The main option chosen in the reform was to maintain the financing and accreditation of basic (para)medical activities at the federal level and to transfer infrastructure-related and organizational competences to the communities, with effect from

1 July 2014. The Sixth State Reform is first and foremost a political agreement with a substantial transfer of powers in health care to the communities. The aim of the transfer is to have a more rational distribution of tasks, but the issue of conflicting incentives between government levels has not been addressed (OECD, 2013a).

All of these background factors forced policy-makers to be more explicit about choices. Safeguarding and improving financial accessibility to high-quality health care was the first concern. A second priority was to ensure a sufficiently large workforce in the health care sector. The fact that budget proposals for 2012 and 2013 had to be formulated within tight budgetary margins raised awareness among stakeholders that measures to increase health care efficiency were inevitable. In that sense, several agreements (between sickness funds and health care professionals) contained structural measures (some not implemented yet) based on evidence-based medicine instead of the former linear cuts in indexation. Examples include the revision of the Belgian fee schedule (to take place in the years to come), whereby fees become better correlated with real-time investment and costs; measures to increase the attractiveness of general practice; the revision of financing mechanisms for medical imaging, dialysis and emergency care; the development of DMPs for chronic diseases; emphasis on preventive and conserving dental care; and the promotion of INN prescribing (see also section 3).

For 2013 and 2014, priorities continued to be accessibility and quality of care. An important additional objective is financial transparency, especially in the ambulatory sector. Concrete initiatives include proposed new laws to increase accessibility to drugs for unmet medical needs and to introduce greater transparency for ambulatory care costs. The major breakthrough regarding transparency will be that, from 2016 onwards, the health care certificate that patients receive when they visit a doctor will mention explicitly the supplement paid over and above the official tariff, the latter equalling the sum of the reimbursed amount and the co-payment.

The pressure on government budgets has also breached certain taboos, for example regarding the fight against social fraud, the monitoring of outliers in dental care, the lack of transparency in supplements paid by patients to medical doctors, the explicit comparison of the quality of care in hospitals, and so on. Measures have been applied in the dental care sector, for example, to reduce expenditure because a small group of outliers was exploiting the system, albeit in a legally correct manner as they could not be prosecuted for their excessive activities.<sup>16</sup> This was frustrating to the larger group of responsible dentists

16 To illustrate the extent of the excesses: simulations showed that 31 dentists (0.4% of all dentists) accounted for 1.35% and 1.30% of total expenditure for dental care in 2010 and 2011, respectively.

acting in the interests of attaining financial balance in their sector. In 2012, the association of dentists and sickness funds (Nationale Dento-Mutualiste) developed legal instruments to sanction the outliers, which became effective from 2013. Such action illustrates the goodwill of providers and sickness funds to collaborate to fight excesses.

## **5.2 Content and process of change**

As discussed above, the process of change in Belgium following the crisis has been determined to a large extent by the measures and mechanisms already in place before the crisis. A few observations can be made. First, the health care budget tends to be estimated on an annual basis and a long-term sustainable plan seems to be lacking. A report from the Organisation for Economic Co-operation and Development (OECD) in 2013 recommended the introduction of a detailed medium-term budget to enhance strategic reflection on the desired level of spending (OECD, 2013a). A focus on the medium term would also be useful to reflect the effect of new measures in a transparent way (OECD, 2013a). Second, between 1993 and 2008 the main objectives of health care policy were defined as keeping health care expenditure within acceptable limits, guaranteeing accessibility and quality while ensuring respect for therapeutic freedom and freedom of choice. During implementation, it was realized that accessibility and quality of care were not always compatible with therapeutic freedom and freedom of choice, but the former were maintained as basic objectives.

The basic principle applied during health policy changes was to first use the existing reserves to take measures that would not be felt directly. Once the reserves were exhausted, measures started to focus on increasing efficiency (e.g. INN prescribing, day hospitalization, DMPs) and fighting malpractice (e.g. in dental care). Belgium is currently in the process of considering efficiency measures requiring more structural changes (e.g. alternative ways to finance hospital services and development of additional DMP pathways with adapted financing). With the exception of pharmaceuticals, the health system did not particularly focus on lowering input prices in its process of change. More indirect measures, which ultimately have an impact on average input costs, include the legal means provided to sickness funds to control medical services and to recover incorrectly charged reimbursements, the means to monitor and sanction outliers in terms of volume, and more accurate financing of dialysis and medical imaging based on needs rather than on supply or financing.

Intersectoral collaboration between institutional health care and ambulatory health care has been relatively weak in Belgium. The examples of DMPs are limited to two clinical care pathways, one for end-stage kidney disease and one for type 2 diabetes, introduced in 2009. The intersectoral clinical care pathways

were evaluated as being successful: a large number of patients participated in the DMPs and the quality of care was considered to be improved. However, as it was not possible to assess the impact of the DMPs on patient outcomes because the observation period was too short, it was decided not to extend the system of DMPs to other target groups.

Better collaboration has, however, been achieved in the area of data analysis and policy research. Belgium has very rich databases on health care consumption and expenditure (excluding fee supplements in the ambulatory sector) but limited resources for the analysis of these data. Because of this and the perceived need to have a stronger evidence base (based on real-life data) for policy changes to cope with the crisis, successful collaborations have been set up between research departments of different institutions, such as the Intermutualistic Agency, the Health Care Knowledge Centre, the RIZIV and the Scientific Institute of Public Health.

### 5.3 Implementation challenges

A major challenge to implementing changes in the Belgian health system is dealing with the fragmented structure of the system. Subsectors are vertically divided into several segments (pillars; *zuilen*) and it is hard to breach the boundaries. The FFS schedule is a list of fees and tariffs for isolated health care activities. It is still the major remuneration system for physicians. The FFS systems contain incentives to provide more services to increase incomes, thus mitigating against the efficient use of resources. In addition, the fees are no longer a good reflection of the real costs for many procedures because they have never been modified despite evolutions in science and medical practice (RIZIV, 2013d). Therefore, the fee schedule will have to be revised. Along with this revision, hospital financing may be reconsidered and both might be more effectively coordinated, particularly from the perspective of integrated care. From this perspective, collaboration between hospitals may also be a challenge. Currently, such collaboration is limited and most hospitals wish to provide all services.

Another challenge will be the possible resistance of stakeholders to measures that are designed to maintain accessibility and quality of care but which might restrict therapeutic freedom and freedom of choice. This relates to additional measures to increase the efficiency of health care and avoid inappropriate use, but also to increase transparency in (supplementary) charges to patients in the ambulatory sector, which is currently still a "black box" for both patients and policy-makers.

Belgium has rich data on health care expenditure and consumption. However, some data are old and updates are not regular enough to allow swift reactions. This applies, for example, to hospital clinical data (available with a delay of

three years) and the data from the National Health Survey (performed only every four years; the most recent available data are from 2008). The technical possibilities are huge; the decision taken in the 1980s to introduce a unique registration number for all citizens created the theoretical opportunity to couple several databases. This was combined with strict privacy regulations to avoid misuse. Current discussions at the European level to abolish the unique national registration number, in the context of new privacy guidelines, are a threat to the possibilities currently available in Belgium to support evidence-based policy.

A final challenge is related to the Sixth State Reform, whereby certain health care responsibilities have been transferred to the communities. This fragmenting of responsibilities between the federal and the regional level will be a challenge for the implementation of integrated care. In addition, the Sixth State Reform risks increasing overhead costs related to the administration of health care reimbursements, and thus the efficiency of this administration.

#### **5.4 Resilience in response to the crisis**

Rapid change was not felt to be an urgent requirement in the wake of the crisis in Belgium because of the reforms introduced at the beginning of the 1990s and because there was no government for much of 2010 and 2011. Between 2008 and 2012, there was time to formulate policies that met stricter budgetary limits and at the same time could guarantee accessibility to services and more efficiency. When it became clear that the surplus in the health care budget had to be used for other social security sectors, all stakeholders became aware that greater efficiency measures were needed in the health care sector. This mentality change may have long-term consequences, both for the responsible and appropriate use of resources and for the acceptance of efficiency measures.

Technical measures have been taken to improve communication between different official data sources, such as the data from the sickness funds, (clinical) data registered at hospitals to allow them to obtain their annual budget, and fiscal data. This offers efficient instruments for generating data that are directly useful for policy-makers.

Belgium has invested in the monitoring of the health care budget since 1994, and in 2010 investments were made to prepare an assessment of health system performance (Vanthomme et al., 2010). A core set of 55 indicators was identified, of which 40 would eventually be measured. After the publication of the preparatory report in 2010, additional indicators were added that related to health promotion, mental health care, general medicine, long-term care, end-of-life care, continuity of care, patient centredness and equity. In 2012, the first Health System Performance Assessment report was published (Vrijens et al., 2012).



The report highlighted that the strengths of the Belgian health system are related to the vaccination rate in children, survival rates five years after a breast cancer or colorectal cancer diagnosis, relational continuity with GPs and increases in the prescription of low-cost drugs. Room for improvement was found in very high suicide rates, the growing number of people who are overweight or obese, the coverage rate of breast and cervical cancer screening in target groups, the high rate of caesarean sections and the social inequalities in many indicators.

## 6. Conclusions

The financial and economic crisis did not have a huge immediate impact on the Belgian health care system, mainly because of the measures to protect the health care budget installed before the crisis. Because of the real growth cap applied to the health care budget since 1995 and budget surpluses built up in previous years, the Belgian health system was well prepared to buffer the effects of the economic crisis. Budgetary margins were often used to improve accessibility to health care. Accessibility and quality of care are, and have long since been, the major objectives of health care policy, with respect for therapeutic freedom and freedom of choice. Therefore, when it became necessary to start taking economic measures, the focus was first on measures that would not be felt immediately by patients. Misuse of the system and outliers in terms of volumes of health care service provision were tackled first. Efficiency measures were then taken. Measures taken in the pharmaceutical sector were very effective. Future plans for efficiency measures will focus on evidence-based reimbursement (e.g. fee-related real costs); appropriate use and financing of medical imaging, dialysis and DMPs; efforts to promote primary care; and the further development of integrated care for chronic diseases.

Resistance may be expected from stakeholders when efficiency measures reduce therapeutic freedom and perhaps freedom of choice. In addition, changes in financing, envisaged, for example, for the national fee schedule used in FFS reimbursement, will be challenging, as it currently determines the income of health care providers.

Moving towards more integrated care will require a mentality shift among stakeholders. The Sixth State Reform will make this shift even more challenging, as some health responsibilities are moved to the communities while others remain a central government responsibility. Goodwill and communication between the different levels will be indispensable.

Data technical measures have been helpful in the process of implementing evidence-based policy changes. Several measures have been taken in the past to facilitate communication between data sources. Involved stakeholders are

increasingly aware of the benefit of collaborating and are increasingly setting up formal collaborations to develop policy-preparing documents.

It is expected that the consequences of the economic recession will continue to be felt during the years ahead. The Belgian stability programme established in 2010 aims to reduce government debt to end the EU excessive debt procedure that was to be achieved by 2012 and to restore budgetary balance by 2015. The objective is to maintain a socially secure society with accessible and efficient health care.

## References

- Assuralia (2010). *De nationale uitgaven in de gezondheidszorg*, 9th edn. Brussels, Assuralia (Assurinfo No. 26) ([http://www.assuralia.be/fileadmin/content/stats/03\\_Cijfers\\_per\\_tak/05\\_Gezondheid/06\\_Nationale uitgaven\\_gezondheidszorg/NL/120913\\_NL\\_uitgaven2010\\_gezondheid.pdf](http://www.assuralia.be/fileadmin/content/stats/03_Cijfers_per_tak/05_Gezondheid/06_Nationale uitgaven_gezondheidszorg/NL/120913_NL_uitgaven2010_gezondheid.pdf), accessed 5 March 2015).
- Assuralia (2013). *De nationale uitgaven in de gezondheidszorg*, 10th edn. Brussels, Assuralia (Assurinfo No. 39) ([http://www.assuralia.be/fileadmin/content/stats/03\\_Cijfers\\_per\\_tak/05\\_Gezondheid/06\\_Nationale uitgaven\\_gezondheidszorg/NL/uitgaven2011\\_NL.pdf](http://www.assuralia.be/fileadmin/content/stats/03_Cijfers_per_tak/05_Gezondheid/06_Nationale uitgaven_gezondheidszorg/NL/uitgaven2011_NL.pdf), accessed 5 March 2015).
- Bayingana K et al. (2006). *Gezondheidsenquête door Interview, België, 2004 [Health Interview Belgium, 2004]*. Brussels, Department of Epidemiology, Scientific Institute of Public Health [Afdeling Epidemiologie, Wetenschappelijk Instituut Volksgezondheid] (IPH/EPI Reports 2006-035) ([https://his.wiv-isp.be/nl/SitePages/Volledige\\_rapporten\\_2004.aspx](https://his.wiv-isp.be/nl/SitePages/Volledige_rapporten_2004.aspx), accessed 18 March 2015).
- Belgian Court of Audit (2011). *Begroten en beheersen van de uitgaven voor geneeskundige verzorging: opvolgingsaudit*. Brussels, Belgian Court of Audit (<https://www.ccrek.be/NL/Publicaties/Fiche.html?id=611db233-246e-4308-b4e6-a4aee880d110>, accessed 5 March 2015).
- Belgian Federal Government (2013). *FOD Economie, K.M.O., Middenstand en Energie*. Brussels, Federale Overheidsdienst Economie, K.M.O., Middenstand en Energie (<http://economie.fgov.be/nl/>, accessed 5 March 2015).
- Christian Sickness Funds (2012). *Press release: 15 procent meer Omnio-gerechtigden sinds crisis. Persberichten [Press release: 15 percent more Omnio claimants since the crisis]*. Brussels, Christelijke Mutualiteiten.
- Christian Sickness Funds (2013). *Belg tevreden over arts. Transparantie en kostprijs blijven pijnpunt*. Brussels, Christelijke Mutualiteiten ([http://www.cm.be/binaries/50jaarZIV\\_tcm375-127052.pdf](http://www.cm.be/binaries/50jaarZIV_tcm375-127052.pdf), accessed 5 March 2015).
- Cleemput I et al. (2012). *Principles and criteria for the level of patient cost-sharing: reflections on value-based insurance*. Brussels, Belgian Health Care Knowledge Centre (<https://kce.fgov.be/publication/report/principles-and-criteria-for-the-level-of-patient-cost-sharing-reflections-on-valu#.VEqBLvldW5I>, accessed 5 March 2015).

Constâncio V (2013). The European crisis and the role of the financial system. In *Bank of Greece conference on the crisis in the euro area*, Athens, 23 May ([http://www.ecb.europa.eu/press/key/date/2013/html/sp130523\\_1.en.html](http://www.ecb.europa.eu/press/key/date/2013/html/sp130523_1.en.html), accessed 5 March 2015).

Council of the European Union (2009). *Council recommendation to Belgium with a view to bringing an end to the situation of an excessive government deficit*. Brussels, Council of the European Union ([http://ec.europa.eu/economy\\_finance/economic\\_governance/sgp/pdf/30\\_edps/104-07\\_council/2009-12-02\\_be\\_126-7\\_council\\_en.pdf](http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/30_edps/104-07_council/2009-12-02_be_126-7_council_en.pdf), accessed 5 March 2015).

Crommelynck A, Cornez A, Wantier M (2013). Achtste CM-barometer van de ziekenhuisfactuur. Ziekenhuisfactuur ontspoort voor duizenden Belgen. *CM-Informatie*, 251:15–27 ([http://www.cm.be/binaries/CM-Info-volledig-nummer\\_tcm375-124537.pdf](http://www.cm.be/binaries/CM-Info-volledig-nummer_tcm375-124537.pdf), accessed 5 March 2015).

De Leeuw S (2010). *De effecten van de steunmaatregelen aan de banken op de overheidsfinanciën* [thesis]. Ghent, Ghent University.

Demarest S et al. (1998). *De gezondheid van de bevolking in België. Gezondheidsenquête door middel van Interview, België, 1997* [Health interview Belgium, 1997]. Brussels, Department of Epidemiology, Scientific Institute of Public Health [Afdeling Epidemiologie, Wetenschappelijk Instituut Volksgezondheid] ([https://translate.googleusercontent.com/translate\\_c?depth=1&hl=en&prev=search&rurl=translate.google.co.uk&sl=nl&u=https://his.wiv-isp.be/nl/Gedeelte%2520%2520documenten/synthese\\_1997.pdf&usq=ALkJrhj16QSWYd3cfPHRtWClGcaZ1vMJnA](https://translate.googleusercontent.com/translate_c?depth=1&hl=en&prev=search&rurl=translate.google.co.uk&sl=nl&u=https://his.wiv-isp.be/nl/Gedeelte%2520%2520documenten/synthese_1997.pdf&usq=ALkJrhj16QSWYd3cfPHRtWClGcaZ1vMJnA), accessed 18 March 2015).

Demarest S et al. (2002). *Gezondheidsenquête door middel van Interview, België, 2001* [Health interview Belgium, 2001]. Brussels, Department of Epidemiology, Scientific Institute of Public Health [Afdeling Epidemiologie, Wetenschappelijk Instituut Volksgezondheid] (IPH/EPI Report 2002-25) ([https://his.wiv-isp.be/nl/SitePages/Volledige\\_rapporten\\_2001.aspx](https://his.wiv-isp.be/nl/SitePages/Volledige_rapporten_2001.aspx), accessed 18 March 2015).

Dylst P, Vulto A, Simoens S (2012). How can pharmacist remuneration systems in Europe contribute to generic medicine dispensing? *Pharmacy Practice*, 10(1):3–8.

European Commission (2013). *Council decision: establishing that no effective action has been taken by Belgium in response to the Council Recommendation of 2 December 2009*. Brussels, European Commission ([http://ec.europa.eu/economy\\_finance/economic\\_governance/sgp/pdf/30\\_edps/126-08\\_commission/2013-05-29\\_be\\_126-8\\_commission\\_en.pdf](http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/30_edps/126-08_commission/2013-05-29_be_126-8_commission_en.pdf), accessed 5 March 2015).

European Observatory on Health Systems and Policies (2014). *Health systems and policy monitor: Belgium*. Copenhagen, WHO Europe on behalf of the European Observatory on Health Systems and Policies (<http://hspm.org/countries/belgium25062012/countrypage.aspx>, accessed 5 March 2015).

Eurostat (2013a). *Statistics database 2013*. Luxembourg, Eurostat (<http://epp.eurostat.ec.europa.eu>, accessed 5 March 2015).

Eurostat (2013b). *Databases: interest rates*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/portal/page/portal/interest\\_rates/data/database](http://epp.eurostat.ec.europa.eu/portal/page/portal/interest_rates/data/database), accessed 5 March 2015).

Eurostat (2013c). *General government gross debt, % of GDP and million EUR*. Luxembourg, Eurostat (<http://epp.eurostat.ec.europa.eu/tgm/graph.do?tab=graph&plugin=1&language=en&pcode=tsdde410&toolbox=type>, accessed 5 March 2015).

Eurostat (2013d). *Statistical database: harmonized indices of consumer prices (HICP)*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/portal/page/portal/government\\_finance\\_statistics/data](http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/data), accessed 5 March 2015).

Eurostat (2013e). *Self reported unmet need for medical examination or treatment, by income quintile*. Luxembourg, Eurostat (<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdph270>, accessed 5 March 2015).

Eurostat (2014). *Annual net earnings of European countries (2004–2014)*. Luxembourg, Eurostat ([http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=earn\\_nt\\_net&](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=earn_nt_net&), accessed 5 March 2015).

Farfan-Portet M-I et al. (2012). *Simplification of patient cost-sharing: the example of physician consultations and visits*. Brussels, Belgian Health Care Knowledge Centre ([http://kce.fgov.be/sites/default/files/page\\_documents/KCE\\_180C\\_simplification\\_patient\\_cost\\_sharing\\_second%20print.pdf](http://kce.fgov.be/sites/default/files/page_documents/KCE_180C_simplification_patient_cost_sharing_second%20print.pdf), accessed 5 March 2015).

Federal Planning Bureau (2013). *Monitoring van de relancestrategie van de Federale regering*. Brussels, Federaal Planbureau ([http://www.plan.be/admin/uploaded/201307190932060.NL\\_REP\\_monrelan\\_130712.pdf](http://www.plan.be/admin/uploaded/201307190932060.NL_REP_monrelan_130712.pdf), accessed 5 March 2015).

Federal Planning Bureau (2014). *Indicatoren van duurzame ontwikkeling*. Brussels, Federaal Planbureau (<http://www.indicators.be/nl/indicator/sociale-zekerheid-uitgavencategorieen?detail=>, accessed 5 March 2015).

Gerken S, Merkur S (2010). Belgium: health system review. *Health Systems in Transition*, 12(5):1–266.

Gillis O (2014). Budget 2014. Budgettaire maatregelen in de aanloop naar de noodzakelijke hervorming van ons gezondheidszorgstelsel. *CM-Informatie*, 255:3–8 ([https://www.cm.be/binaries/CM-255-NL-Budget\\_2014\\_tcm375-137077.pdf](https://www.cm.be/binaries/CM-255-NL-Budget_2014_tcm375-137077.pdf), accessed 5 March 2015).

Index Mundi (2014). [web site]. (<http://www.indexmundi.com/>, accessed 5 March 2015).

King Baudouin Foundation (1995). *Rapport general sur la pauvrete*. Brussels, Fondation Roi Baudoin (<http://www.kbs-frb.be/publication.aspx?id=294657&langtype=2060>, accessed 5 March 2015).

Laasman J-M (2013). *Accessibilité financière aux soins de santé: quel bilan? Quelles priorités?* Tubize, Mutualité socialiste du Brabant Wallon (<http://www.solidaris.be/BW/Presse/Communiqués/Pages/Accessibilite-financiere-aux-soins-de-sante-quel-bilan.aspx>, accessed 5 March 2015).

National Bank of Belgium (2013). *Belgostat. Receipts, expenditure and overall balance of general government*. Brussels, National Bank of Belgium (<http://www.nbb.be/belgostat/PublicatieSelectieLinker?LinkID=188000079|910000082&Lang=E>, accessed 5 March 2015).

OECD (2005). *Economic surveys: Belgium 2005*. Paris, Organisation for Economic Co-operation and Development.

OECD (2013a). *Economic surveys: Belgium*. Paris, Organisation for Economic Co-operation and Development ([http://www.oecd-ilibrary.org/economics/oecd-economic-surveys-belgium-2013\\_eco\\_surveys-bel-2013-en](http://www.oecd-ilibrary.org/economics/oecd-economic-surveys-belgium-2013_eco_surveys-bel-2013-en), accessed 5 March 2015).

OECD (2013b). *Health at a glance 2013. OECD indicators*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/els/health-systems/Health-at-a-Glance-2013.pdf>, accessed 5 March 2015).

OECD (2013c). *OECD.stat* [database]. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd-ilibrary.org/content/data/data-00285-en>, accessed 5 March 2015).

OECD (2014). *OECD.stat Extracts*. Paris, Organisation for Economic Co-operation and Development (<http://stats.oecd.org/>, accessed 5 March 2015).

RIZIV (2012). *De begroting van de verzekering voor geneeskundige verzorging en uitkeringen in cijfers [The budget of the health care insurance and benefits in figures]*. Brussels, Rijksinstituut voor ziekte- en invaliditeitsverzekering [National Institute for Health and Disability Insurance] (<http://www.riziv.fgov.be/nl/themas/financiering/begroting-rekeningen/Paginas/default.aspx#.VPiMqfmsVMg>, accessed 5 March 2015).

RIZIV (2013a). *Gebruik van antidepressiva en antipsychotica [Use of anti-depressants and anti-psychotics]*. Brussels, Rijksinstituut voor ziekte- en invaliditeitsverzekering [National Institute for Health and Disability Insurance].

RIZIV (2013b). *Gestandaardiseerd verslag met betrekking tot de geboekte uitgaven van het jaar 2012 (permanente audit), Deel 4, Nota CGV 2013/279*. Brussels, Rijksinstituut voor ziekte- en invaliditeitsverzekering [National Institute for Health and Disability Insurance].

RIZIV (2013c). *Gestandaardiseerd verslag met betrekking tot de geboekte uitgaven van het jaar 2012 (permanente audit), Deel 5, Nota CGV 2013/284*. Brussels, Rijksinstituut voor ziekte- en invaliditeitsverzekering [National Institute for Health and Disability Insurance].

RIZIV (2013d). *Rapport van de commissie voor begrotingscontrole in het kader van de vaststelling van het budget voor geneeskundige verzorging voor het jaar 2014 [Commission's report on budgetary under definition, the budget for medical care for the year 2012]*. Brussels, Rijksinstituut voor ziekte- en invaliditeitsverzekering [National Institute for Health and Disability Insurance].

Schokkaert E, Van de Voorde C (2013). Equity in the Belgian health care system. In: Maystadt P et al., eds. *Le modèle social belge: quel avenir?* Charleroi, Presses Interuniversitaires de Charleroi:145–177.

Solidaris Mutualité (2012). *Comment allons-nous? L'Etat de bien-être psychologique de la population*. Brussels, Le thermomètre des Belges (<http://www.west-info.eu/files/Thermometre-Solidaris.pdf>, accessed 5 March 2015).

Statbel (2013). *Statistics Belgium*. Brussels, Statbel (<http://statbel.fgov.be/en/statistics/figures/>, accessed 5 March 2015).

Van de Sande S et al. (2010). *Étude de faisabilité de l'introduction en Belgique d'un système de financement hospitalier "all-in" par pathologie [Feasibility study of the introduction of an all-inclusive case-based hospital financing system in Belgium]*. Brussels, Belgian Health Care Knowledge Centre (KCE Report 121B) ([https://kce.fgov.be/sites/default/files/page\\_documents/d20101027301.pdf](https://kce.fgov.be/sites/default/files/page_documents/d20101027301.pdf), accessed 5 March 2015).

Van der Heyden J et al. (2010). *Gezondheidsenquête door Interview België, 2008, Rapport I [Health Interview Belgium, 2008, Report I]*. Brussels, Brussels, Department of Epidemiology, Scientific Institute of Public Health [Afdeling Epidemiologie, Wetenschappelijk Instituut Volksgezondheid] (IPH/EPI Report 2010/004) ([https://his.wiv-isp.be/nl/SitePages/Volledige\\_rapporten\\_2008.aspx](https://his.wiv-isp.be/nl/SitePages/Volledige_rapporten_2008.aspx), accessed 18 March 2015)

Van Herck P, Van de Cloot I (2013). *Hoe gezond is de geestelijke gezondheidszorg in België? De feiten achter de mythen*. Brussels, Itinera Institute ([http://www.itinerainstitute.org/sites/default/files/articles/pdf/20120701\\_geestelijke\\_gezondheidszorg\\_pvh\\_0.pdf](http://www.itinerainstitute.org/sites/default/files/articles/pdf/20120701_geestelijke_gezondheidszorg_pvh_0.pdf), accessed 5 March 2015).

Vanthomme K et al. (2010). *Un premier pas vers la mesure de la performance du système de soins de santé Belge*. Brussels, Belgian Health Care Knowledge Centre.

VDAB Studiedienst (2013). *Knelpuntberoepen 2013*. Brussels, VDAB ([http://www.vdab.be/trends/vacatureanalyse/vacatureanalyse\\_2013.pdf](http://www.vdab.be/trends/vacatureanalyse/vacatureanalyse_2013.pdf), accessed 5 March 2015).

Verzekeringswereld (2011). *Gezondheidszorg. Kwalitatief, toegankelijk, duurzaam en efficiënt?* Antwerp, Verzekeringswereld ([http://www.expatinsurance.eu/pers/VZW\\_mei\\_11.pdf](http://www.expatinsurance.eu/pers/VZW_mei_11.pdf), accessed 5 March 2015).

Vluyen J et al. (2010). *Un premier pas vers la mesure de la performance du système de soins de santé belge*. Brussels, Belgian Health Care Knowledge Centre.

Vrijens F et al. (2010). *The reference price system and socioeconomic differences in the use of low cost drugs*. Brussels, Belgian Health Care Knowledge Centre (KCE Report 126C) ([https://kce.fgov.be/sites/default/files/page\\_documents/d20101027320.pdf](https://kce.fgov.be/sites/default/files/page_documents/d20101027320.pdf), accessed 5 March 2015).

Vrijens F et al. (2012). *Performance of the Belgian health system 2012*. Brussels, Belgian Health Care Knowledge Centre.

# Chapter 2

## **The impact of the crisis on the health system and health in Estonia**

*Triin Habicht and Tamás Evetovits*

### **Introduction**

The Estonian health care system was affected significantly by the financial shock of the economic crisis but it was relatively well prepared to deal with the impact because of its short duration and the considerable reserves that had been accumulated by the Estonian Health Insurance Fund (Eesti Haigekassa (EHIF)) in the years prior to 2008 (EHIF, 2008). However, since the government did not permit the EHIF to use all of its accumulated funds to cover temporary budget deficits and, in fact, borrowed some of these reserves (on paper) to balance budgets in other sectors, cost savings were sought mainly through a reduction in health system input costs.

The main measures included a cut to the central government's contribution to the health budget, temporary reductions in the tariffs (prices) paid to health care providers by the EHIF, a significant reform of the temporary sickness benefits scheme, introduction of coverage restrictions to the previously universal adult dental benefit and measures to increase the use of active ingredient prescribing and use of generic drugs. Despite the country's swift economic recovery and sound economic management, the financial sustainability of the health care system remains a longer-term concern, particularly as financing relies almost exclusively on labour-related health insurance contributions.

### **1. The nature and magnitude of the financial and economic crisis**

#### **1.1 The origins and immediate effects of the crisis**

Between 2001 and 2007 Estonia had one of the fastest growing economies in Europe, with annual GDP growth rates ranging from 6.3 to 10.1% (Table 2.1).



The global financial crisis affected Estonia mostly through the significant contraction in export markets and deflation of its domestic housing bubble. Being a small open economy, Estonia experienced a rapid credit expansion up to 2007 as well as very high levels of private and public consumption. During the crisis, GDP decreased by 4.2% in 2008 and by 14.1% in 2009, making it the third-deepest decline in the EU. In the following years, GDP grew by 3.3% in 2010 and 8.3% in 2011, but this relatively quick recovery slowed to 3.2% in 2012.

In 2007, the unemployment rate was 4.8% – relatively low because of the increasing number of unsustainable jobs in construction and retail generated by the credit bubble. As a result of the crisis, the unemployment rate tripled to 16.9% in 2010, followed by a rapid improvement to 12.5% in 2011 and to 10.2% in 2012. However, it is a continuing challenge to lower unemployment further because of the mismatch between demand and the supply of workers with particular skills. The economic crisis also resulted in an increased risk of poverty or social exclusion, although the relative poverty rate decreased. These developments clearly indicate how vulnerable those at the lower end of the income distribution have been (Masso et al., 2012). According to a study by Kutsar & Trumm (2010), the increase in unemployment has been the main contributor to increasing poverty. However, official migration statistics show that emigration did not rise sharply during the main crisis years (by 6% between 2007 and 2009), indicating that the strains of the economic downturn did not motivate people to leave the country (Philips & Pavlov, 2010).

## 1.2 Government responses to the crisis

The government's main goal before and during the crisis was to ensure medium- to long-term fiscal sustainability to support growth and, as part of this strategy, to meet the Eurozone criteria to enable Estonia to adopt the euro in January 2011. To achieve this goal, Estonia went through fiscal consolidation that equalled (cumulatively) 16% of GDP from 2008 to 2010. In 2009 alone, fiscal tightening accounted for 9% of GDP. About two-thirds of fiscal consolidation measures were on the expenditure side. These included limiting pension increases; cutting operating expenditure, defence expenditure and farming subsidies; a ban on borrowing by municipalities; and a reduction in the health insurance budget of 8% (see below). Consolidation on the revenue side included increases in alcohol, fuel and tobacco excise taxes; an increase in value added tax (VAT) from 18% to 20%; a decrease in the list of goods and services with reduced VAT; a rise in unemployment insurance contributions to 4.2% of wages; suspension of the step-by-step lowering of the income tax rate; a reduction in the dividends paid out from state-owned companies; and increased land sales.

**Table 2.1** Demographic and economic indicators in Estonia, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population (in thousands) <sup>a</sup>	1,379.3	1,373.5	1,367.6	1,361.6	1,356.2	1,351.2	1,346.0	1,342.0	1,342.3	1,340.3	1,338.5	1,336.9	1,335.0
People aged 65 and over (% total population) <sup>a</sup>	15.0	15.2	15.6	16.0	16.4	16.7	17.0	17.3	17.4	17.4	17.4	17.5	17.8
GDP per capita (€) <sup>a</sup>	5,800	6,200	6,600	7,100	7,600	8,300	9,200	9,900	9,500	8,100	8,400	9,100	9,400
Real GDP growth (%) <sup>a</sup>	–	–	–	7.8	6.3	8.9	10.1	7.5	–4.2	–14.1	3.3	8.3	3.2
Government deficit (% GDP) <sup>b</sup>	–	–	0.3	1.7	1.6	1.6	2.5	2.4	–3.0	–2.0	0.2	1.1	–0.2
Government consolidated gross debt (% GDP) <sup>b</sup>	5.1	4.8	5.7	5.6	5.0	4.6	4.4	3.7	4.5	7.1	6.7	6.1	9.8
Total unemployment (% total labour force) <sup>a</sup>	13.6	12.6	10.3	10.0	9.7	7.9	5.9	4.8	5.5	13.8	16.9	12.5	10.2
Long-term unemployment (% active population) <sup>a</sup>	6.2	6.1	5.4	4.6	5.1	4.2	2.8	2.3	1.7	3.8	7.7	7.1	–

*Note:* Population figures may differ slightly from national sources.  
*Sources:* <sup>a</sup>OECD, 2014; <sup>b</sup>Eurostat, 2013.

### 1.3 Broader consequences

As a result of these measures, Estonia was able to keep public sector debt at around 7% of GDP in 2009, which was one of the lowest rates in Europe. The overall public sector budget deficit was 2% of GDP in 2009 followed by a surplus of 0.2% in 2010 and 1.1% in 2011. The government reserves were 11.6% of GDP in 2009 and 12% of GDP in 2010.

## 2. Health system pressures prior to the crisis

The health system was relatively well prepared for an economic shock of this magnitude, which was a significant contraction but of short duration. The EHIF accumulated sufficient reserves during the previous years of rapid growth – in fact far more than was legally required – signalling its careful expansion policy. Because significant restructuring in service delivery and payment reforms took place long before the crisis, major inefficiencies in the health system had already been dealt with. Although EHIF spending increased during the years of growth, these increases were not as great as increases in other parts of the public sector and, in any case, were less than increases in revenue. The EHIF focused on enhancing cost–effectiveness in pricing, contracting and the benefits package. Financial protection has also improved since 2009 through policies to encourage rational prescribing, generic substitution and limitation of the financial burden of user charges on patients (see section 3.2). In addition, in the years immediately preceding the crisis, the health system had invested in analysing a range of key issues, including financial sustainability. As a result of all these measures, the health system was relatively well placed to manage a short-term crisis.

## 3. Health system responses to the crisis

The main change affecting the health sector was the restructuring of health expenditure in line with reduced health budgets while simultaneously trying to have the least possible effect on the financing of core health care services. At the beginning of the economic crisis, the health sector, and the national health insurance system in particular, was in a better position compared with other parts of the public sector as the EHIF had accumulated substantial reserves through rapid revenue growth during the early 2000s. In addition, the health sector had more leeway in responding to the crisis as most of the high-impact changes introduced during the crisis (mainly measures to control expenditure growth) were already in the pipeline before the crisis.

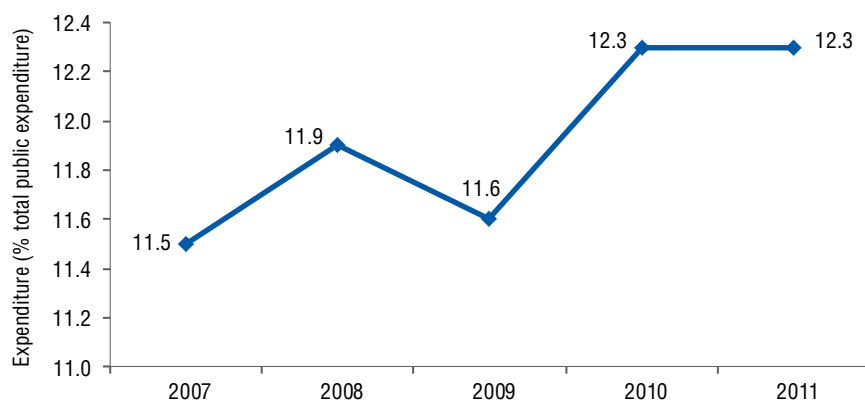
### 3.1 Changes to public funding for the health system

One of the major fiscal responses to the economic crisis was to cut public expenditure to ensure a stable, medium-term fiscal position and to support

sustainable recovery. The health budget was not cut drastically compared with other sectors. In fact, there was an increase in the health share of total public expenditure from 11.5% in 2007 to 12.3% in 2011 (Fig. 2.1). The reason for this increase was the reduction of expenditure on temporary sick leave cash benefits in the EHIF's budget, leaving more funds to finance health care (see below).

Total health expenditure increased in 2008 by 18.6%, followed by decreases of 1.5% and 6.3% in the years that followed (Table 2.2). The decrease in public spending on health was a little smaller, leading to an increase in public spending on health as a share of total health expenditure compared with the pre-crisis period from 75.6% in 2007 to 79.3% in 2011 (see also Table 2.3).

**Fig. 2.1** Public expenditure on health as a share of total public expenditure in Estonia, 2007–2011



Source: National Institute for Health Development, 2013a.

**Table 2.2** Total and public expenditure on health in Estonia, 2006–2011

Year	THE		Public sector health expenditure		Public spending on health as a share of THE (%)
	€ millions	Change (%)	€ millions	Change (%)	
2006	671.8		492.1		73.3
2007	829.1	23.4	626.7	27.3	75.6
2008	983.5	18.6	765.3	22.1	77.8
2009	968.7	-1.5	729.0	-4.7	75.3
2010	908.0	-6.3	716.0	-1.8	78.9
2011	944.6	4.0	749.3	4.7	79.3

Note: THE: Total health expenditure.

Source: National Institute for Health Development, 2013a.

**Table 2.3** Health expenditure trends in Estonia, 2000–2010

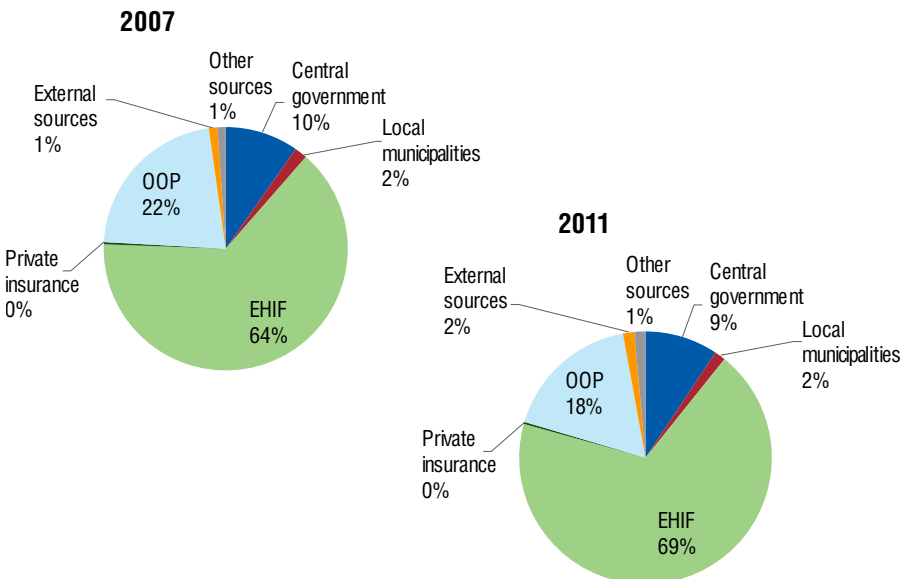
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
THE per capita (US\$ PPP) <sup>a</sup>	522.70	520.64	581.22	659.71	758.87	831.32	960.28	1,113.8	1,336.80	1,370.70	1,273.90	1,302.70
THE (% GDP) <sup>a</sup>	5.3	4.9	4.8	4.9	5.1	5.0	5.0	5.2	6.1	7.0	6.3	5.9
Public expenditure on health (% THE) <sup>a</sup>	77.2	78.6	77.1	76.7	75.5	76.7	73.3	75.6	77.8	75.3	78.9	79.3
Public expenditure on health (% all government spending) <sup>b</sup>	11.3	10.9	10.5	10.9	11.4	11.5	10.9	11.5	11.9	11.7	12.3	12.3
Voluntary health insurance (% THE)	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	0.2	0.2	0.2	–
OOP expenditure (% THE) <sup>a</sup>	19.9	19.0	20.1	20.4	21.3	20.4	25.1	21.9	19.7	20.3	18.6	17.6

Notes: PPP: Purchasing power parity; THE: Total health expenditure.

Sources: <sup>a</sup> OECD, 2014 (data for 2012 and later are not available); <sup>b</sup> WHO Regional Office for Europe, 2014.

The composition of total health expenditures by different financing agents did not change significantly during the crisis (Fig. 2.2). The biggest change was the increasing role of the EHIF in total health expenditures, rising from 64% in 2007 to 69% in 2011. The main reason for this trend was the reduction in temporary sick leave benefits paid out from the EHIF's budget,<sup>1</sup> enabling the Fund to spend relatively more on health care services. The second biggest change was the decreasing role of OOP payments from 22% of total health expenditure in 2007 to 18% in 2011. One explanation for this reduction is methodological; for some years (including 2008 and 2009) OOP expenditure was estimated as the Household Expenditure Survey was not performed at that time. Some decrease in OOP payments also can be explained by the reduction in dental care expenditures as adult dental care is not financed by EHIF and the (dental care) cash benefit was abolished during the crisis. This may have led to postponing of the use of dental services by adults. Another reason is the increasingly rational utilization of medicines, which has reduced patient cost-sharing (see below).

**Fig. 2.2** Breakdown of total health expenditure by expenditure source in Estonia, 2007 and 2011



Source: National Institute for Health Development, 2013a.

<sup>1</sup> Expenses for sick leave benefits are not counted as health care expenditure in the National Health Accounts.

Central government spending on health accounts for about 10% of total health spending. Over 90% of central government health expenditure is financed through the Ministry of Social Affairs. In 2009, the central government health budget was cut by 26% (Table 2.4). This reduction was partially achieved through cutting administrative costs within the Ministry of Social Affairs, terminating the financing of capital costs from the state budget (capital costs accounted for about 7% of central government expenditure in 2008) and cutting the public health budget (see below). The European Social Fund was used to compensate for the reduction in the public health budget.

**Table 2.4** Central government health expenditure in Estonia, 2007–2011

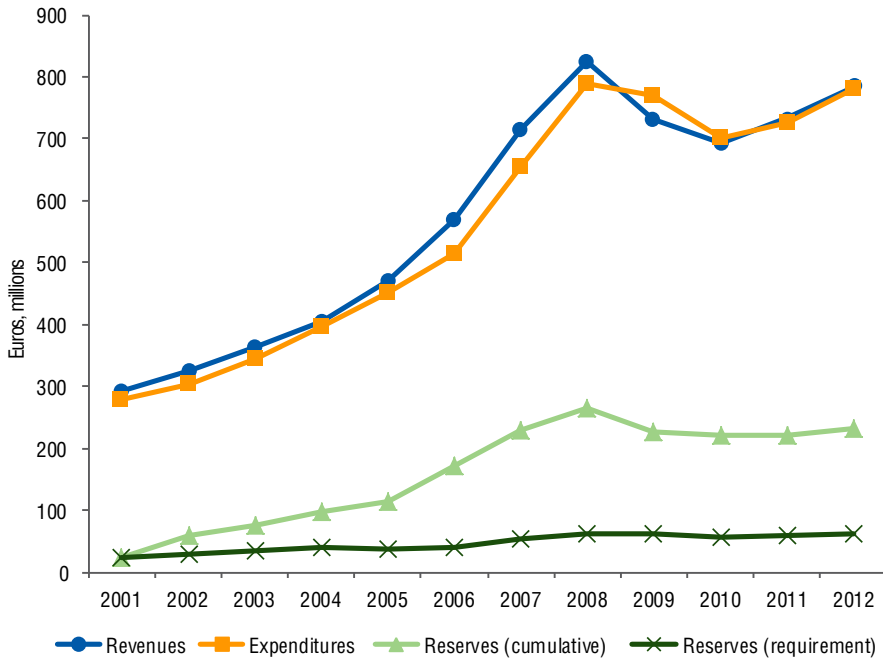
Year	Central government health expenditure (€ millions)	Change (%)	Share of total health expenditure (%)
2007	80.6		9.7
2008	112.9	39.9 <sup>a</sup>	11.5
2009	83.2	-26.3	8.6
2010	86.0	3.3	9.5
2011	88.3	2.7	9.3

*Note:* <sup>a</sup>In 2008, a one-time capital cost transfer from the state budget was made to the EHIF, which explains the high increase in that year.

*Source:* National Institute for Health Development, 2013a.

In terms of social health insurance contributions, the EHIF's revenues were down by 11% in 2009 and by 5% in 2010, mainly because of increased unemployment and lower salaries. In 2011 and 2012, revenue increased by 6% and was projected to reach 2008 levels in 2013 (Fig. 2.3).

In 2009, the EHIF's expenditure exceeded revenue by around 2%. This gap was eventually addressed by drawing on the EHIF's accumulated reserves. The EHIF has mandatory legal and risk reserves to ensure solvency. The legal reserve, 6% of EHIF's budget, decreases the risk from macroeconomic changes and may be used only after government approval. The risk reserve, 2% of the budget, minimizes risks arising from health insurance obligations and can be used after a decision of the EHIF's supervisory board. In addition to its reserves, by the end of 2011 the EHIF had retained about €150 million (almost a quarter of the annual budget), mostly as a result of previous years' higher actual revenues compared with those anticipated. In 2008, before the crisis hit, the EHIF had over four times more reserves than the required level (Fig. 2.3).

**Fig. 2.3** EHIF revenues, expenditures and reserves, 2001–2012

Source: EHIF data.

In September 2008 the government initiated legislative amendments to the EHIF and the Unemployment Fund Acts to channel the financial income (interests earned on the invested reserves) of these agencies directly to the state budget revenues. As a result, the EHIF revenues would have been decreased by 105 million Estonian kroons (about 1% of total revenues) in 2009. The Minister of Finance argued that the EHIF and the Unemployment Fund are fully financed by the state budget and taking away the financial income would motivate the funds to focus on their main activities. This plan was terminated because of resistance by the boards of the funds.

Initially, the government did not allow the EHIF to draw on its reserves to balance the decrease in revenues. The main reason for this was that, as part of the general state budget, the reserves enabled the government to formally balance the deficit in other sectors without effectively taking these funds away from the EHIF.

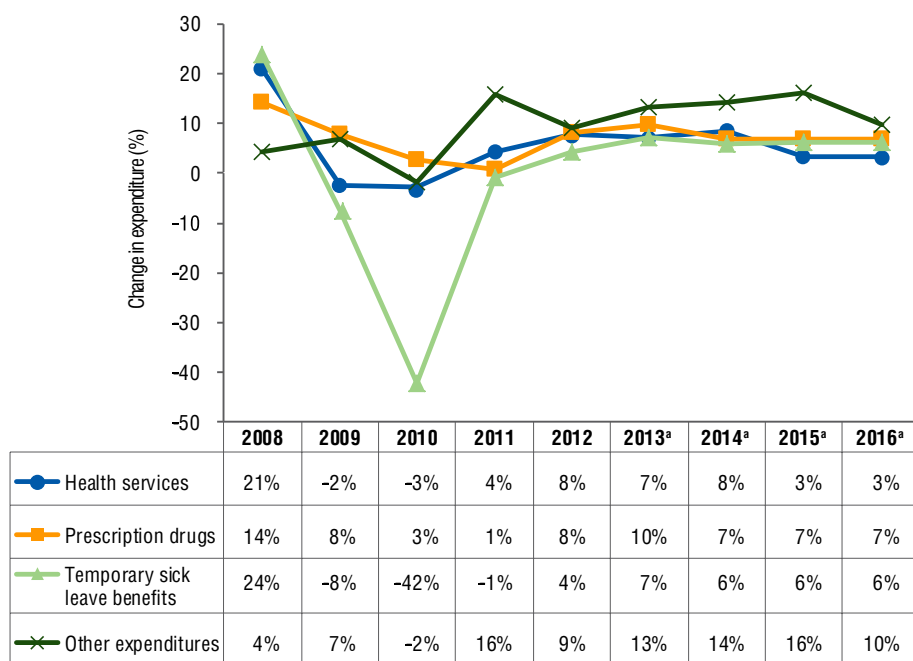
However, public opposition made the government reconsider these plans. As the crisis continued, these reserves were gradually used to partially compensate for reduced revenues. In total, the use of reserves formed about 5% of the 2009 budget. As Fig. 2.3 shows, a more pronounced run-down of reserves could have financed an even larger share of EHIF deficits in 2009 and 2010 without



running below the legal requirement and could have allowed avoidance of any decline in EHIF expenditure. Maintaining the level of reserves above the legal requirement was one of the triggers of a health workers' strike in October 2012; the message of the strikers was that the strategy of containing costs in the health sector was not justified and if reserves cannot be used when needed this undermined the rationale for accumulating such reserves. Against this, adjustments in the EHIF budget in 2009 and 2010 facilitated further efficiency gains within the health care system, which, in turn, contributed to the longer-term financial viability of the EHIF.

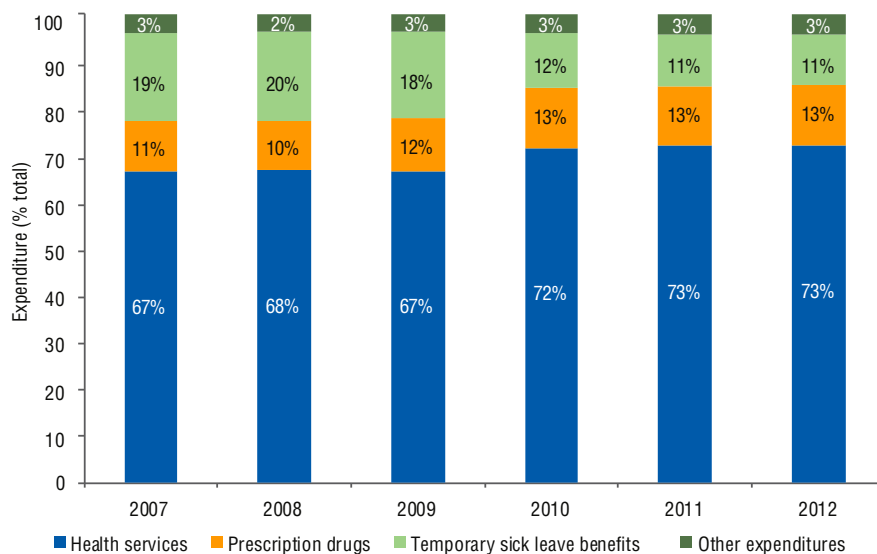
The changes in EHIF expenditure by main cost categories are shown in Fig. 2.4. In 2008, all expenses increased and the biggest increases were in temporary sick leave benefits (24%) and in health services (21%). Although the crisis was already present it had no effect on the EHIF's expenditure in 2008. In that year, the magnitude and duration of the crisis was not entirely clear and, therefore, the plans for 2009 were not as yet far reaching. According to the budget plan, EHIF expenditure was planned to continue to increase by 7% in 2009. However, at the end of August 2009, the EHIF's supervisory board approved an amendment of the budget, which reduced expenditure by €70 million (about 9% of the 2008 budget). This was achieved through decisions to lower health service tariffs and to reduce temporary sick leave benefits (see below). Thus, in 2009, health services expenditure decreased by 2% and in 2010 by an additional 3%. By far the majority of the reduction affected expenditure for temporary sick leave benefits, which in 2010 decreased by 42% as a result of changes in the benefit scheme that already had been on the government's agenda for years. Since 2011, total public spending by the EHIF has been increasing.

The composition of EHIF expenditure has changed compared with the pre-crisis period. In 2007, health services expenses accounted for 67% of total health insurance expenditure while temporary sick leave benefits accounted for just 19% (Fig. 2.5). In 2011 the shares were 73% and 11%, respectively. It is important to highlight that if no changes had been made to reduce temporary sick leave benefits (and assuming that the health services share of total health insurance expenses would have remained at the pre-crisis level of 67%) the level of expenditure on health services would have been 8% lower in 2012. Therefore, reducing temporary sick leave benefits was crucial to maintaining expenditure on health care during and after the crisis and this allowed the EHIF to avoid making more radical decisions with regard to funding cuts for health services. It is also worth noting that this was a policy decision that had been on the agenda prior to the crisis and the government used the opportunity to implement it in the face of growing fiscal pressure.

**Fig. 2.4** Changes in EHIF expenditure by category, 2008–2016

Note: <sup>a</sup>Estimate.

Source: EHIF data.

**Fig. 2.5** Composition of EHIF expenditure by categories, 2007–2012

Source: EHIF data.

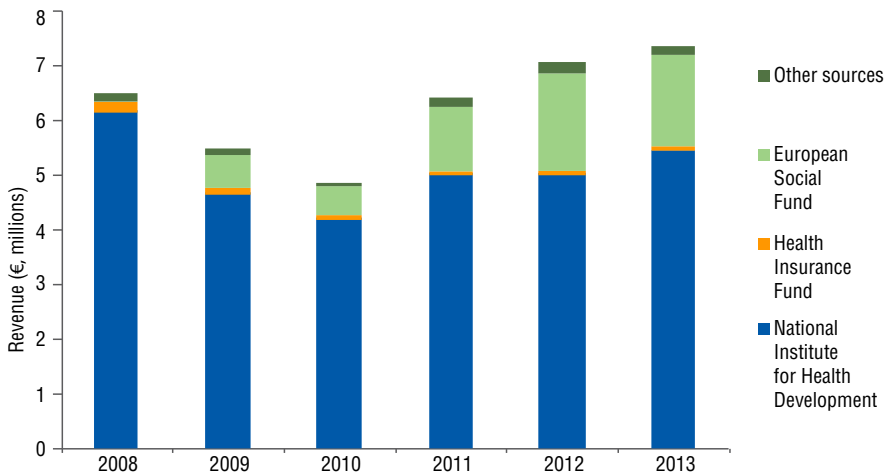
During and after the crisis, the only change in health insurance revenue collection was related to the financing of capital costs. Since 2003, these had been included in the health service tariffs paid by the EHIF. In 2008, the legal basis for the capital costs financing scheme was changed and these costs were financed from the state budget as allocations to the EHIF, but they were still included in health service tariffs. The idea was to release EHIF funds to finance other service provision costs. In 2008, a one-time allocation was made from the state budget to the EHIF, totalling approximately €8 million, which formed about 7% of total central government expenditure on health. Due to that transfer, the central government's share in total health expenditure increased markedly (the central government share of total health expenditures was 9.7% in 2007 and 11.5% in 2008; Table 2.4). In 2009, the capital costs allocations from the state budget to the EHIF were abolished and the EHIF once again became responsible for covering these expenditures from regular health insurance revenues. This one-off transfer also partly explains the dramatic decrease in central government health expenditures by 26% in 2009. However, after 2009, the interruption of transfers from the state budget to the EHIF to cover capital costs in health care tariffs was partly compensated by grants from European Structural Funds directly to health care providers.

Public health programmes implemented by the National Institute for Health Development (Tervise Arengu Instituut) suffered significant budget cuts as a result of the financial and economic crisis over several years, starting from 2008. In 2009, national funding of public health programmes decreased by 28.3% compared with 2008 and an additional 5.5% in 2010 compared with 2009 (Fig. 2.6). Budget reductions prompted the Institute to review and reconsider public health-related priorities, including target groups and crucial health care and social services, as well as the availability of these services. The objective was to maintain all health care and social services in the areas of prevention and treatment for HIV and tuberculosis; drug addiction prevention, rehabilitation and treatment services; and cervical and breast cancer screening programmes. These services amount to 80% of the overall national budget allocated to implement the Institute's public health programmes.

The use of European Social Fund resources mitigated budget cuts by providing funding implemented through county-level governments for cardiovascular diseases prevention programmes (including smoking cessation and early detection of alcohol abuse, plus counselling services) and community-level health promotion. However, the National Institute for Health Development faced a challenge in 2014 when most of the public health programmes previously funded by the European Social Fund must continue with

funding from national sources, increasing the Institute's funding needs through the national budget from €5.5 million in 2013 to €8.22 million in 2014.

**Fig. 2.6** Revenue sources of national public health programmes implemented by the National Institute for Health Development in Estonia, 2008–2013



Source: National Institute for Health Development, personal communication 2013.

### 3.2 Changes to coverage

Population coverage was only slightly affected by the crisis, but both the scope of services covered and cost coverage have seen reductions in response to the crisis. In addition, the reform of the temporary sick leave benefit system introduced employers' risk sharing in the scheme but also reduced employees' cash benefits. As mentioned in section 3.1, this reform reduced the EHIF's expenditure on sick leave benefits and had a crucial role in protecting the provision of the EHIF's reimbursed health services. Cash benefits were also reduced through the abolition of the adults' dental care cash benefit.

#### **Population entitlement**

There were no major changes in the population's coverage by health insurance. Before the crisis there were discussions on extending coverage to uninsured population groups but these policy debates ended when the crisis hit. The only exception was coverage for the long-term unemployed, for whom coverage was extended as long as they participated in active labour market programmes. As a result, a higher number of unemployed people are now covered by health insurance, but the total number of the insured population has slightly decreased

(EHIF, 2012a, 2013) which may partially reflect a decrease in total population. According to 2011 census data (Statistics Estonia, 2013b), the share of insured people as a proportion of the total population at the end of 2011 was 96.2%.

### ***The benefits package***

The system for temporary sick leave benefits was reformed radically and responsibilities are now shared by both patients and employers. This idea had been discussed for a long time but there was no support from employers as the reform directly increases their costs. However, the crisis situation and other ongoing labour market reforms (such as the new Employments Contracts Act) provided the opportunity for change. Starting in July 2009, no sickness benefit is paid during the first three days of sickness or injury (previously only the first day was excluded); the employer pays the benefit from the fourth to eighth day and the EHIF starts to pay the benefit from the ninth day. This is a new cost-sharing mechanism since the employer did not participate previously and the EHIF covered this cash benefit starting from the second day of sickness leave.

In addition, the sickness benefit rate was reduced from 80% to 70% of the insured person's income. The sickness benefit rate in the case of caring for a sick child aged under 12 was reduced from 100% to 80%. In addition, the maximum length of maternity leave was reduced from 154 days to 140 days. As a result, temporary sick leave benefit expenditure decreased by 42% in 2010 compared with 2009 and its share of the total health insurance budget dropped from 20% in 2008 to 12% in 2010.

Before 2009, all insured people aged 19 and over could apply for the dental care benefit of €19.18 per year; however, from 2009, this right was retained only by insured people over 63 years of age, people eligible for a work incapacity pension, those with an old-age pension, pregnant women, mothers whose child is under 12 months old and those who have an increased need for dental care. However, the savings from these measures for the EHIF's total budget was not very large, representing less than €4 million annually.

Services also have been subject to some rationing through increases in official waiting times: maximum waiting times for outpatient specialist visits increased in March 2009 from four to six weeks.

### ***User charges***

In response to the crisis, the government introduced a 15% co-insurance rate for nursing inpatient care in 2010. This plan was proposed before the financial crisis as a means of including patients and municipalities in the co-financing of long-term nursing care, but it was not possible to implement it until the crisis because it was so unpopular.

Although user charges for outpatient specialist visits and inpatient stays had not changed since 2002, the issue played an important role in the negotiations during the health care workers' strike in October 2012. The Hospital Association was in favour of increasing user charges, but doctors were against it. As a compromise, the maximum fee for outpatient specialist visits increased from €3.20 to €5.00<sup>2</sup> and the bed day fee from €1.60 to €2.50.<sup>3</sup> These changes will increase revenue by about €4.5 million per year (assuming no reduction in utilization).

### **3.3 Changes to health service planning, purchasing and delivery**

#### ***Reducing health service tariffs***

The main response to the economic crisis was a reduction in health service tariffs (prices) paid by the EHIF to health services providers. At the end of 2009, the EHIF reduced the tariffs of health services by 6%. The tariff reduction was general: it did not target any particular inputs (e.g. salaries), leaving the cost optimization decisions at provider level. The objective of the tariff reduction was to balance the health insurance budget and thus minimize the need to diminish access to care during the crisis period. Before the crisis, health service tariffs had increased very rapidly and, therefore, the 6% cut was not considered to be a big economic shock for providers. In 2011, the tariffs for health services were lower than the 2008 baseline but by a smaller rate of 5%, except for primary care where the rate was only 3%. These reductions were short lived: in 2012 health service tariffs increased to pre-crisis levels and in 2013 tariffs increased further as a result of agreements made during the physicians' strike.

#### ***Reductions in health sector salaries and changes to working conditions***

The tariff reduction policy resulted in a decrease in health workers' salaries (Fig. 2.7), which were mainly achieved by cutting additional payments for overtime.

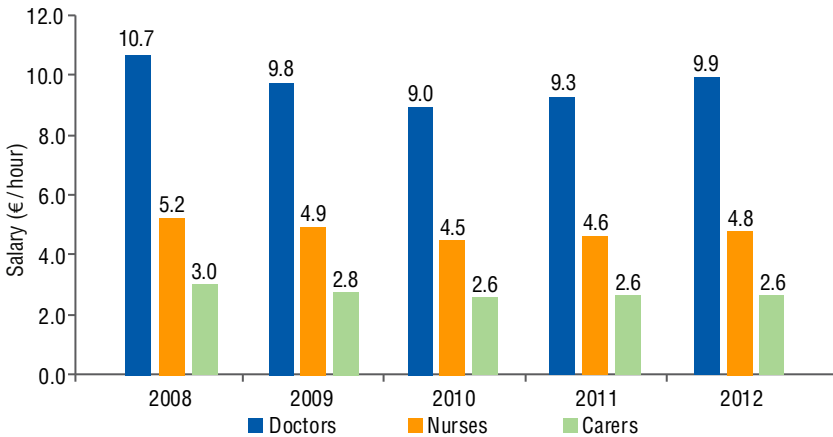
Another, less explicit, tariff reduction became effective in mid-2009. This related to the new labour market regulation, which abolished most reduced working hours. Prior to 2009, several health professionals had reduced working hours (e.g. a radiologist had six hours per day compared with the general eight hours) and this was also taken into account when health service tariffs were calculated. Since mid-2009, all health professionals have common working hours of eight hours per day and 40 hours per week as the standard. The accompanying expenditure decrease had an overall effect on the health insurance budget

2 Children under 2 years of age and pregnant women (after week 12) are exempted.

3 For up to 10 days per episode of illness. Children, pregnant women and patients in intensive care units are exempted.

by saving over €6 million per year (about 1% of EHIF's budget) and the compromise was that these savings would be used to improve access to care, giving priority to outpatient care and making an effort to keep the number of financed treatment cases to pre-crisis levels. It is quite obvious that these kinds of tariff reduction would not have occurred in a non-crisis environment.

**Fig. 2.7** Health workers' hourly salaries by categories in Estonia, 2008–2012



Source: National Institute for Health Development, 2013c.

### **Pharmaceutical sector reforms**

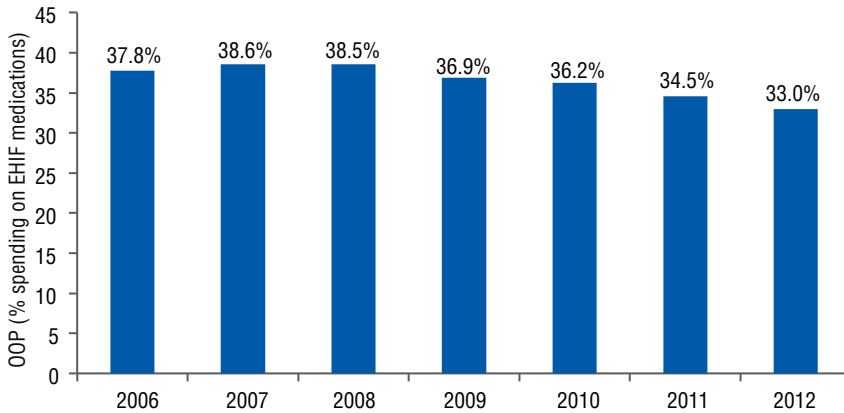
In April 2010, the Health Insurance Act was amended to extend the application of tariff agreements and reference pricing to medicines in the lowest (50%) reimbursement category (which contains many less cost-effective drugs). Tariff agreements previously only applied to drugs reimbursed at higher rates.

Using the crisis as an opportunity to implement policies that had already been planned, the Ministry of Social Affairs in March 2010 amended the ministerial decree on drug prescriptions to support active ingredient-based prescribing and dispensing. The amendment did not change prescribing rules but did require pharmacies to provide patients with the drug with the lowest level of cost-sharing and to note if patients refuse cheaper alternatives. In September 2010, the EHIF launched an annual generic drug promotion campaign on television and through billboards, in cooperation with the Ministry of Social Affairs, the State Medicines Agency and the Association of Family Physicians.

In another initiative in 2010, the EHIF and Ministry of Social Affairs launched a new e-prescription system, which currently operates alongside paper prescribing. The new system makes active ingredient-based prescribing the default option.

Finally, in 2012, the reimbursement cap per prescription of 50% for reimbursed pharmaceuticals was removed with the amendment of the Health Insurance Act. This, and the other measures in this sector, had a significant effect in reducing patients' OOP payments, which fell from 38.6% of expenditure on EHIF-reimbursed medicines in 2007 to 33.0% in 2012 (Fig. 2.8). Utilization slightly decreased in 2009, but it rose again thereafter (EHIF, 2012a).

**Fig. 2.8** OOP share of spending on EHIF-reimbursed medications in Estonia, 2006–2012



Source: EHIF data.

## 4. Implications for health system performance and health

### 4.1 Equity in financing and financial protection

The reduction in patient co-payments for prescribed medicines, achieved through better enforced generic prescription and tariff reductions in general, may have contributed to the continued improvement of financial protection in Estonia, but further research on utilization patterns is needed to confirm causality. Similarly, the small increase in co-payments for services, the abolition of the dental care cash benefit and the larger increase in co-insurance for inpatient nursing care are subjects for closer scrutiny in terms of their impact on care utilization and financial risk protection.

### 4.2 Access to services and quality of care

The impact of reduced coverage of sick leave benefits is one of the main areas that need to be monitored as patients may delay seeking care when needed and instead stay at work.



In addition, it is difficult to assess the impact of increases to waiting time limits. The number of EHIF-reimbursed cases decreased to some extent in 2009 (Table 2.5), particularly in inpatient care, where there was a reduction of about 3%. However, this reduction was small and by 2010 levels had been restored to those in the pre-crisis period. There was some reduction in outpatient visits, including primary care, of approximately 4% in 2009 (EHIF, 2009; National Institute for Health Development, 2013d). The number of emergency calls to the ambulance service did not increase in 2009 compared with 2008 but the number of patients arriving at hospital emergency departments increased by 8% (National Institute for Health Development, 2013b). The latter data also could be influenced by the fact that new emergency department premises were opened that year, which may have increased patients' preferences towards using emergency departments compared with family doctors.

**Table 2.5** Number of EHIF-reimbursed cases per 1000 insured in Estonia

Type of specialist care	2007	2008	2009	2010	2011
Outpatient	2,079	2,174	2,129	2,232	2,331
Day care	41	44	43	46	52
Inpatient	193	195	188	191	192

Source: EHIF data.

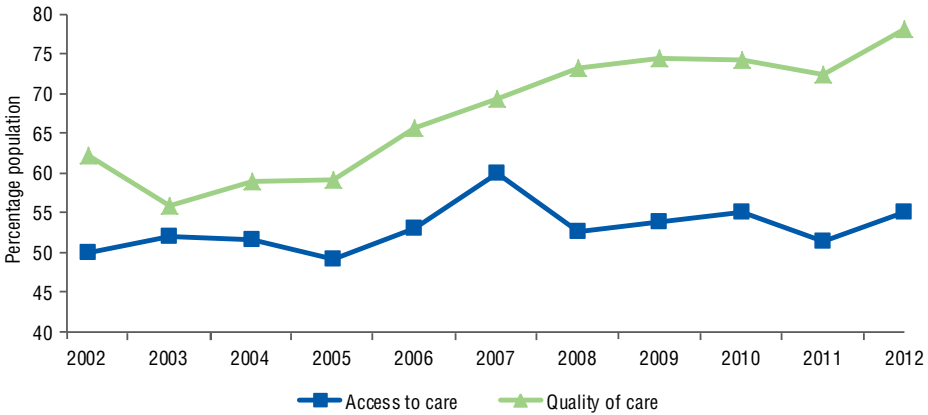
At the same time, a public survey showed a sharp decrease in satisfaction levels with regard to access to care, from 60% in 2007 to 53% in 2008 (Fig. 2.9). The results for 2008 probably reflect the public perception of general insecurity related to the crisis rather than actual negative experiences as changes to the health system had not yet taken place at the time of the survey. At the same time, the survey respondents' assessment of the quality of care increased from 69% to 73%, which may reflect that people do not expect quality of care to be hampered even in situations of austerity.

Utilization of dental care by adults is expected to be sensitive to the crisis. The cash benefit for adult dental care was abolished in 2009 and, thus, the ability to pay for dental care OOP decreased. According to the public survey, mentioned above, the share of the adult population not seeking dental care during the previous 12 months increased from 51% in 2008 to 60% in 2011 (EHIF and Ministry of Social Affairs, 2014).

The use of prescription medicines was affected by the crisis through both a decrease in patients' incomes and an increase in VAT for medicines from 5%

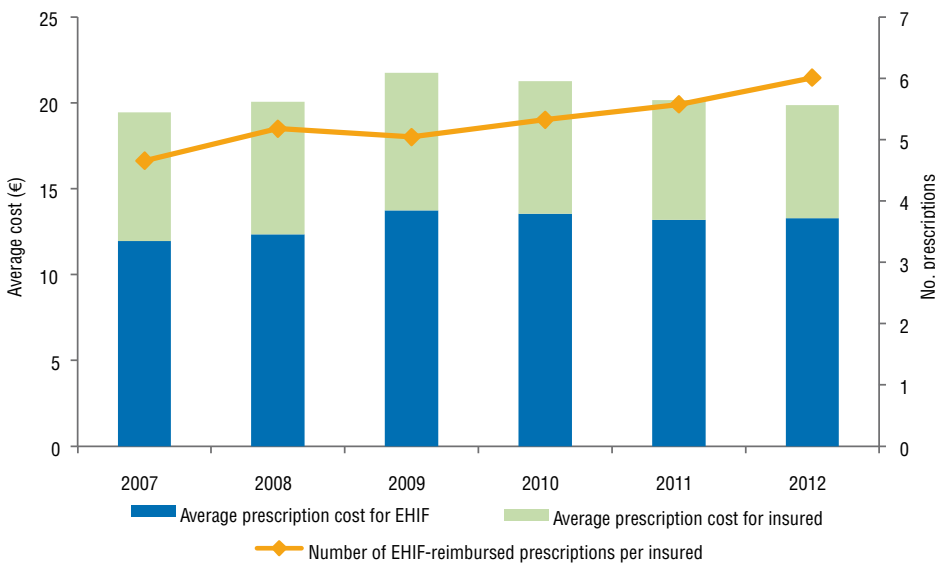
to 9% since 2009. The latter could be one of the explanations for the small decline in the number of prescriptions per insured and for the increase in cost per prescription in 2009 (Fig. 2.10).

**Fig. 2.9** Population satisfaction (satisfied or very satisfied) with access to and quality of care in Estonia, 2007–2012



Source: Estonian Health Insurance Fund and Ministry of Social Affairs, 2014.

**Fig. 2.10** Number of EHIF-reimbursed prescription drugs per insured and average cost per prescription to the EHIF and to the insured in Estonia, 2007–2012



Source: EHIF data.

### 4.3 Impact on efficiency

The pressure to improve efficiency in the health sector led to a marginal shift in the balance of care between outpatient specialist services and inpatient hospital admission in favour of the former. In parallel, the rights of nurses and midwives to work independently were increased to enable a more efficient skill-mix to be employed. While hospital admissions decreased a little, outpatient specialist services continued to increase during the crisis. Nevertheless, there was no shift from inpatient care to day care as implementing this change would have required the reorganization of patient care pathways at the hospital level, for which there are still no strong incentives in the current system.

A more significant achievement was the increased use of generic medicines, which had the dual effect of containing public spending and reducing the financial burden on households (Fig. 2.8).

A potential impact of the crisis has been the overall positive attitude towards the importance of improving cost–effectiveness, and as a result, it has been easier to introduce measures such as the promotion of generic prescriptions, as well as taking into account cost–effectiveness when developing clinical guidelines. In addition, the medical profession's acknowledgement of the need to develop capacity in HTA supported the establishment of a special university unit for this purpose.

### 4.4 Transparency and accountability

The direct impact of the crisis in increasing transparency and accountability is difficult to assess. In Estonia, the need to increase providers' public accountability has been an issue since the early 2000s. In 2012, for the first time, the EHIF published its hospital feedback report, which contained 19 indicators on access, care processes and efficiency (EHIF, 2012b). The report was published on the EHIF's web page, representing an important step in changing attitudes towards providers' public reporting and benchmarking.

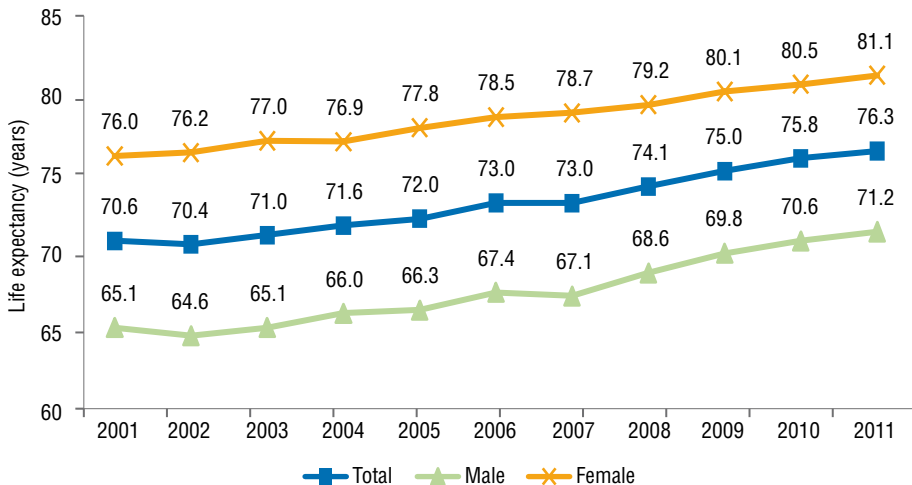
Transparency and accountability in policy-making in Estonia, and by the EHIF in particular, have been recognized internationally as best practice (Kutzin, 2008). The government continued this tradition during the period when a decision had to be made on whether to continue with its conservative fiscal policy and to prioritize joining the Eurozone at the expense of maintaining spending levels on government programmes through deficit financing. Initially, there was no tangible public opposition against this explicit priority given to the objective of joining the Eurozone and cutting public spending, but later on, the health sector experienced strikes by health workers, prompted by the implementation of austerity measures. The subsequent negotiations led to an

agreement between government and different stakeholders: and various working groups were set up to review strategic directions for health system reforms.

#### 4.5 Impact on health

The fastest increase in life expectancy in Estonia since the early 2000s was seen during the years of the economic crisis 2008–2010, when it increased by approximately one year annually (Fig. 2.11). The increase in male and female life expectancy was similar, leaving a 10 year gap between genders (71.2 and 81.1 years, respectively, for men and women). Healthy life expectancy in Estonia increased over the period, 2004–2009, by more than four years for both men and women, but starting in 2010 this measure began to decrease by almost two years reaching 53 years in males and 57 years in females in 2012.

**Fig. 2.11** Average life expectancy at birth in Estonia, 2001–2011



Source: Statistics Estonia, 2013a.

The standardized death rate from external causes per 100 000 inhabitants decreased from 164.0 in 2008 to 140.2 in 2012 for males and from 34.4 to 28.3 for females. A similar pattern can be observed for cardiovascular diseases, where the standardized death rate decreased by 18% for both males and females during the same period.

HIV incidence came down from 108.1 diagnosed cases per 100 000 in 2001 to 47.2 in 2007, and continued to decrease during the crisis to 24 in 2012, while tuberculosis incidence also fell from its highest point of 59.4 cases per 100 000 in 1998 to 34.8 in 2007, and to 20.8 in 2012.

The crisis seems to have had a dampening effect on alcohol consumption. The high consumption of alcohol is a serious public health issue in Estonia.

Consumption of pure alcohol per capita increased from 5.6 litres in 1995 to 12.6 litres in 2007 as the relative price of alcohol decreased as incomes grew faster than alcohol prices. Alcohol consumption did fall during 2008–2010 (9.7 litres of pure alcohol per capita in 2010) as incomes dropped during the economic crisis and as alcohol excise taxes were raised. During 2011 and 2012, consumption increased to 10.6 litres of pure alcohol per capita as incomes started to increase. Lower alcohol consumption rates explain the reduction in injuries and deaths from external causes in 2008–2010; and it is also partly the reason for increasing life expectancies. In addition, lower fatality rates in road traffic accidents are probably also partly related to decreased alcohol consumption: the number of death caused by road traffic accidents decreased from 196 in 2007 to 132 in 2008 and to 100 in 2009 (Maanteemä, 2013).

## **5. Discussion**

### **5.1 Drivers of change**

The response of the health system to the crisis was part of a coordinated government policy guided by the aim of fulfilling Maastricht criteria in spite of the unfavourable economic environment. The fact that the objective of joining the Eurozone was publicly accepted made it easier for the government to justify crisis-related reforms and decisions.

It took over six months for the government to understand the seriousness of the crisis. The first signs were noticed in early 2008 but still most of the decisions were made according to pre-crisis forecasts. In September 2008, the Ministry of Finance's forecast were still calculated on the basis of 10% growth for EHIF revenues in 2009, and in the following January the EHIF's supervisory board approved an increase in health service tariffs. However, implementation of this decision was postponed because of the increasingly pessimistic economic outlook. By the end of February 2009, the parliament had approved an amendment of the government budget. This amendment included a package of decisions to contain and cut public sector expenditure, among which was the reform of temporary sick leave benefits, which came into force in mid-2009. This was a long-debated reform and a striking example of how the crisis created an opportunity to reach political agreement and implement the otherwise controversial cuts.

### **5.2 Content and process of change**

At the end of October 2009, the scale of the crisis increased further, prompting the approval of an overall reduction in health service tariffs by 6%, which came

into force in mid-November. With this exception, the health sector was able to avoid serious cuts to services; some funds were released from the EHIF's financial reserves, but more importantly, savings from the reform of temporary sick leave benefits freed up resources. The latter proved to be crucial to ensure the EHIF's ability to sustain the level of financing for health care services without heavy reliance on reserves over multiple years.

By not allowing the EHIF to deplete its reserves, the government, in fact, used these accumulated funds to balance the general budget by covering deficits in other sectors. This did not mean the actual removal of the funds from the health insurance system, but it signalled a significant reduction in the autonomy of the EHIF and raised doubts about the rationale for accumulating reserves in the health insurance system when the EHIF does not have full decision rights over their use. Currently, most EHIF reserves have remained unused, enabling it to cope with potential future short-term relapses in the economy given the prolonged economic downturn across Europe. The future will tell if this experience has an adverse effect on the EHIF's incentive to be conservative in planning expenditures and accumulate reserves.

The 6% cut in health service tariffs was also important in filling the gap in the EHIF's budget. The tariff reduction followed several years of significant increases and, therefore, it did not have a major negative effect on providers' ability to function; it also enabled the EHIF to cope with the rather short-lived crisis. This may also be the reason why further restructuring of the hospital network<sup>4</sup> did not occur during the crisis even though this policy had been on the agenda for some time.

### **5.3 Implementation challenges**

A marginal shift from inpatient to outpatient care was detected during the crisis, but it may be time for policy-makers to revisit the need for the full implementation of Estonia's Hospital Master Plan or to consider a strategic revision of that plan in the context of current needs, new fiscal realities and achievements since the mid-2000s.

In contrast to the relative protection of funding for the rest of health services, the public health budget suffered significant cuts (reaching more than 30% in two consecutive years). The use of European Social Funds covered part of the gap, but the challenge will be for the government to sustain these programmes in 2014 and beyond. Clearly, the budget for public health programmes was less protected from spending cuts.

<sup>4</sup> The Hospital Master Plan 2015, prepared in 2000 and updated more recently, and the Hospital Network Development Plan, approved in 2003 for the next 15 years, are the key documents in this area. The latter defines the list of 19 strategic hospitals with whom EHIF is obliged to contract.

## 5.4 Resilience in response to the crisis

In the longer term, the sustainability of the current health system financing principles remains an important issue. Near exclusive reliance on labour-related contributions make the system vulnerable to fluctuation in economic growth and labour market dynamics. Most of the recommendations in a report on the sustainability of health financing in Estonia (Thomson et al., 2010) hold true in mid-2014 and, in particular, the revenue-side challenges will need to be addressed in the near future. The reform of temporary sick leave benefits released funds in the health insurance budget to cover medicines and health services expenditure in the short term. Nevertheless, Estonian health expenditure levels are relatively low by international comparison, which provides a strong basis for arguments in favour of higher spending and drives expectations among health system stakeholders.

## 6. Conclusions

The Estonian health care system was relatively well prepared for a financial shock of significant magnitude as the duration of the crisis was short and economic recovery was swift. From a fiscal policy perspective, the strong track record of balanced annual public budgets, the low level of government debt and the reserves accumulated by the EHIF during the years of rapid growth prior to the crisis provided a range of options for fiscal policy to cope with the financial crisis. The option of depleting the EHIF's accumulated reserves could have completely covered the funding gap in the health sector. In addition, the health system's capacity to absorb a short-term decline in revenues was strong after a decade of growth in health sector revenue and smart investments in reconfiguring regional hospitals using EU Structural Funds as part of the strategic restructuring of the service delivery system.

Estonia had learnt the lessons of the financial crisis it experienced in the late 1990s and followed a careful path both on the revenue and the expenditure sides. In particular, the establishment of a legal requirement to accumulate reserves was the consequence of the previous crisis experience when the EHIF's own (at the time voluntary) savings enabled it to overcome a short-term fall in revenues and to prove its ability to cope without external support from the government budget. This time, however, the reserves were not used to their full potential as the government gave priority to meeting the Maastricht criteria in order to join the Eurozone in 2011. As a result, the EHIF was not allowed to spend much of its reserves.

Despite unfavourable fiscal policy from the health sector's perspective, the Estonian health system seems to have recovered from the crisis rather rapidly and used the crisis as an opportunity to introduce reforms that had been

planned for a long time. This relative success is in part because of the ability of the health system itself to absorb shock, but also because the crisis in Estonia was relatively short in duration and the economy recovered much faster than in most of the other hard-hit countries of western Europe.

## Appendix 2.1

### Major crisis-related events and changes in the Estonian health system, 2009–2013

Date	Event/action
<b>2009</b>	<p>The central government health budget, which accounts for approximately 10% of total health spending, was cut by 26%</p> <p>The EHIF's revenues (social health insurance contributions) fell by 11%, mainly through increased unemployment and lower salaries</p> <p>The EHIF reduced its budget expenditures by €70 million (8%) compared to 2008</p> <p>A radical reform of temporary sickness benefits, which now included employers paying some of the benefit and reductions to the benefit rates, resulted in considerable savings and funds being released to the EHIF to pay for health services</p> <p>Prices/tariffs paid to health care providers were reduced by 6%, leading to significant savings for the EHIF</p> <p>As part of health providers tariff cuts, salaries of health professionals fell, mainly through cuts in overtime and by standardizing working hours to 8 hours per day</p> <p>The previously universal adult dental care cash benefit became restricted to insured people aged over 63 and some other groups, such as pregnant women and mothers with infants under 12 months</p> <p>VAT for medicines increased from 5% to 9%</p>
<b>2010</b>	<p>The unemployment rate reached 17.3%, triple that of 2007</p> <p>The EHIF's revenues (social health insurance contributions) fell by 5%</p> <p>A 15% co-insurance rate was introduced for nursing inpatient care</p> <p>Tariff agreements and reference pricing was extended to pharmaceuticals in the lowest (50%) reimbursement category (which contains many less cost-effective drugs)</p> <p>A ministerial decree encouraged prescribing and dispensing by active ingredient</p> <p>Pharmacists became required to provide patients with the drug with the lowest level of cost sharing</p> <p>A new e-prescription system was launched to operate alongside paper prescribing</p>
<b>2011</b>	<p>The unemployment rate improved to 12.8%</p> <p>EHIF revenue increased by 6%</p> <p>Prices/tariffs paid to all health care providers were still at a reduced rate (of 5%) except for primary care, where the price cut was 3%</p>



## Major crisis-related events and changes in the Estonian health system, 2009–2013 (continued)

Date	Event/action
2012	<p>Unemployment stabilized at 10.2%</p> <p>EHIF revenue again increased by 6%</p> <p>User charges for outpatient specialist visits increased from €3.20 to €5.00 and the bed-day fee from €1.60 to €2.50</p> <p>Prices/tariffs paid to health care providers were restored to original pre-crisis levels</p> <p>The reimbursement cap per prescription of 50% for reimbursed pharmaceuticals was removed, reducing patients' user charges</p>
2013	<p>Prices/tariffs paid to health care providers were increased after a physicians' strike</p>

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## References

- EHIF (2008). *Annual report 2007*. Tallinn, Eesti Haigekassa [Estonian Health Insurance Fund] (<http://www.haigekassa.ee/eng/ehif/annual>, accessed 19 October 2014).
- EHIF (2009). *Annual report 2009*. Tallinn, Eesti Haigekassa [Estonian Health Insurance Fund] ([www.haigekassa.ee/uploads/userfiles/file/ENG/Eesti\\_Haigekassa\\_majandusaasta\\_aruanne\\_2009\\_eng.pdf](http://www.haigekassa.ee/uploads/userfiles/file/ENG/Eesti_Haigekassa_majandusaasta_aruanne_2009_eng.pdf), accessed 19 October 2014).
- EHIF (2012a). *Annual report 2011*. Tallinn, Eesti Haigekassa [Estonian Health Insurance Fund] (<http://www.haigekassa.ee/eng/ehif/annual>, accessed 19 October 2014).
- EHIF (2012b). *Hospital Master Plan hospitals feedback report*. Tallinn, Eesti Haigekassa [Estonian Health Insurance Fund] (<http://www.haigekassa.ee/raviasutusele/kvaliteet/tagasiside>, accessed 29 October 2014).
- EHIF (2013). *Annual report 2007*. Tallinn, Eesti Haigekassa [Estonian Health Insurance Fund] (<http://www.haigekassa.ee/eng/ehif/annual>, accessed 19 October 2014).
- EHIF and Ministry of Social Affairs (2014). *Public evaluation of health and health care 2007–2011*. Tallinn, Eesti Haigekassa [Estonian Health Insurance Fund] (<http://www.haigekassa.ee/haigekassa/uuringud/>, accessed 29 October 2014).

Eurostat (2013). *Statistics database 2013*. Luxembourg, Eurostat (<http://epp.eurostat.ec.europa.eu>, accessed 29 October 2014).

Kutsar D, Trumm A (2010). Vaesuse mõjud ja toimetulek vaesusega. [Poverty impacts and coping with poverty]. In: Kutsar D, ed. *Vaesus Eestis. [Poverty in Estonia]*. Tallinn, Statistikaamet:138–171 (<http://www.stat.ee/38021>, accessed 29 October 2014).

Kutzin J (2008). *Health financing policy: a guide for decision-makers*. Copenhagen, WHO Regional Office for Europe, Division of Country Health Systems (Health Financing Policy Paper 2008/1) ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0004/78871/E91422.pdf](http://www.euro.who.int/__data/assets/pdf_file/0004/78871/E91422.pdf), accessed 19 October 2014).

Maanteeamet (2013). *Liiklus arvudes 2005–2012 [Traffic accidents 2005–2012]*. Tallinn, Maanteeamet [Road Administration] ([http://www.mnt.ee/public/lo\\_statistika/5-1.pdf](http://www.mnt.ee/public/lo_statistika/5-1.pdf), accessed 29 October 2014).

Masso J et al. (2012). *Growing inequalities and its impacts: country report for the Baltic States Estonia, Latvia, Lithuania*. Tartu, University of Tartu Faculty of Economics and Business Administration.

National Institute for Health Development (2013a). *Health statistics and health research database*. Tallinn, Tervise Arengu Instituut ([http://pxweb.tai.ee/esf/pxweb2008/Database\\_en/HCresources/10Expenditure/10Expenditure.asp](http://pxweb.tai.ee/esf/pxweb2008/Database_en/HCresources/10Expenditure/10Expenditure.asp), accessed 19 October 2014).

National Institute for Health Development (2013b). *Health statistics and health research database: emergency services and ambulance statistics*. Tallinn, Tervise Arengu Instituut ([http://pxweb.tai.ee/esf/pxweb2008/Database\\_en/HCServices/03Ambulance/03Ambulance.asp](http://pxweb.tai.ee/esf/pxweb2008/Database_en/HCServices/03Ambulance/03Ambulance.asp), accessed 29 October 2014).

National Institute for Health Development (2013c). *Health statistics and health research database: health care personnel's wages 2013*. Tallinn, Tervise Arengu Instituut (<http://www.tai.ee/en/health-data/health-statistics-and-health-research-database/latest-updates/3389-tervishoiutootajate-tootasu-2013>, accessed 29 October 2014).

National Institute for Health Development (2013d). *Health statistics and health research database: outpatient and home visits*. Tallinn, Tervise Arengu Instituut ([http://pxweb.tai.ee/esf/pxweb2008/Database\\_en/HCServices/01OutpatientHC/01OutpatientHC.asp](http://pxweb.tai.ee/esf/pxweb2008/Database_en/HCServices/01OutpatientHC/01OutpatientHC.asp), accessed 29 October 2014).

OECD (2014). *Health statistics*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 5 November 2014).

Philips K, Pavlov D (2010). Estonia. In: Platonova A, Urso G, eds. *Part 1: Migration and the labour markets in the European Union (2000–2009)*. Washington, DC, International Monetary Fund:93–103.

Statistics Estonia (2013a). *Life expectancy by sex and age*. Tallin, Statistikaamet ([http://pub.stat.ee/px-web.2001/Dialog/varval.asp?ma=PO045&ti=LIFE+EXPECTANCY+BY+SEX+AND+AGE&path=../I\\_Databas/Population/01Population\\_indicators\\_and\\_composition/02Main\\_demographic\\_indicators/&lang=1](http://pub.stat.ee/px-web.2001/Dialog/varval.asp?ma=PO045&ti=LIFE+EXPECTANCY+BY+SEX+AND+AGE&path=../I_Databas/Population/01Population_indicators_and_composition/02Main_demographic_indicators/&lang=1), accessed 2 November 2014).

Statistics Estonia (2013b). *Population and housing census 2011*. Tallin, Statistikaamet (<http://www.stat.ee/phc2011>, accessed 29 October 2014).

Thomson S et al. (2010). *Responding to the challenge of financial sustainability in Estonia's health system*. Copenhagen, WHO Regional Office for Europe.

WHO Regional Office for Europe (2014). *Health for All database* [online/offline database]. Copenhagen, WHO Regional Office for Europe (<http://data.euro.who.int/hfadb>, accessed 2 November 2014).

# Chapter 3

## **The impact of the crisis on the health system and health in France**

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### **Introduction**

In France, pre-existing fiscal pressures, which were aggravated by the economic crisis, led to the continued use of a familiar set of cost-containment tools being implemented after 2008. In this sense, the main budgetary responses have not been specific to the economic crisis. So far, the business-as-usual focus on containing expenditure has been successful; for example, the health care budget deficit overall was halved between 2009 and 2012, in part through an increase in statutory health insurance revenues and efficiency improvements, despite increases in the consumption volumes of medical products and services. Nevertheless, it is not clear whether the full impact of the crisis is yet to come, and barriers to more substantial reform are rooted in the institutional complexity of the French health care system, including the relationship between the state and the statutory health insurance (SHI) system; the organizational structure and payment system; and the lack of integrated and comprehensive approaches. In addition, the need to address the issue of equitable health financing is apparent, particularly given increases in private health expenditure and its impact on people with low incomes and high health needs.

### **1. The nature and magnitude of the financial and economic crisis**

#### **1.1 The origins and immediate effects of the crisis**

The 2008 recession marked the end of a growth cycle in France dating back to 2002, as the impact of the May 2007 subprime crisis finally manifested itself in the real economy. Growth had already begun to slow in the previous year in the face of falling housing investment, increasing trade deficits and rising

commodity prices, which had an inflationary effect that diminished household purchasing power.

A confluence of factors impacted on both household wealth and the competitiveness of French firms. Consumption declined under the weight of decreased disposable income combined with falling stock market indices and home values. At the same time, the fall in unemployment between 2006 and 2008 resulted in slower productivity growth via faster employment growth for individuals with lower education levels and consequently higher labour costs. The cash flow problems and the credit crunch of September 2008 led to an abrupt fall in activity, the collapse of confidence indices, temporary shutdowns in certain industries, a halt in corporate investment and higher unemployment (OECD, 2009).

## 1.2 Government responses to the crisis

At the macroeconomic level, France was less exposed to the effects of the financial and real estate crises than other countries because of the relatively low level of household debt. Nonetheless, the worldwide crisis threatened French banking institutions, leading the government to undertake emergency measures in October 2008: one measure allowed banks to refinance themselves with a state guarantee<sup>1</sup> and another injected equity into the banks to improve their solvency.<sup>2</sup> At the same time, the government instituted a lending programme for businesses with up to 5000 employees as well as an investment fund providing venture capital to deter foreign takeovers of firms in strategic sectors. The European Commission also took action with an EU-wide rescue plan that included cuts to the European Central Bank's key interest rate and easing of its lending conditions for banks. French banks weathered the crisis in relatively good shape compared with other countries: only two banks suffered sufficiently heavy losses to threaten their solvency, while most of the other French banks were profitable in 2008 (OECD, 2009).

At the fiscal level, a series of measures in 2007 and 2008, including a reduced number of tax brackets and a more generous earned-income tax credit (known as *prime pour l'emploi*), led to lower personal and corporate income tax revenues. However, these and other tax cuts were not accompanied by sufficient control over public expenditure, and the deficit as a percentage of GDP passed the 3% threshold in 2008, reversing the trend from 2003 to 2006 when the general government deficit shrank from -4.1 to -2.3% of GDP (OECD, 2009) (Table 3.1).

1 A 100% state-owned agency, the Société des Prises de Participation de l'État, was created; it acquired securities of indefinite term issued by the banks concerned and earns an annual interest of 8.2%.

2 The Société de Financement de l'Economie Française, owned 66% by the banks and 34% by the state, was set up to provide loans for a period of five years. Conditions include posting collateral that met certain requirements in terms of quality and an interest rate that represented a margin of 180 basis points over the rate the Société paid for its borrowing.

**Table 3.1** Demographic and economic indicators in France, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Population levels (thousands) <sup>a</sup>	59,062	59,476	59,894	60,304	60,734	61,182	61,597	61,965	62,300	62,615	62,927	63,249	63,556
People aged 65 and over (% of total population) <sup>a</sup>	16.1	16.2	16.3	16.4	16.5	16.5	16.5	16.5	16.6	16.7	16.8	17.1	17.5
Dependency ratio <sup>b,c</sup>	24.3	24.5	24.7	24.8	24.9	25.1	25.1	25.1	25.2	25.4	25.6 (f)	25.8 (f)	26.6 (f)
GDP per capita (US\$, current prices and PPP) <sup>b</sup>	25,275	26,644	27,676	27,299	28,172	29,554	31,454	33,100	34,167	34,111	34,894	36,391	36,933
Real GDP growth (%) <sup>a</sup>	3.68	1.84	0.93	0.90	2.54	1.83	2.47	2.29	-0.08	-3.15	1.72	2.03	0.01
Government deficit (% of GDP) <sup>b</sup>	-1.5	-1.5	-3.1	-4.1	-3.6	-2.9	-2.3	-2.7	-3.3	-7.5	-7.1	-5.3	-4.8
Government consolidated gross debt (% of GDP) <sup>a</sup>	57.3	56.9	58.8	62.9	64.9	66.4	63.7	64.2	68.2	79.2	82.4	85.8	90.2
Total unemployment rate (%) <sup>a</sup>	9.0	8.2	8.3	8.9	9.3	9.3	9.2	8.4	7.8	9.5	9.7	9.6	10.2
Unemployment, male (%) <sup>b</sup>	7.5	6.9	7.4	8.0	8.4	8.4	8.5	7.8	7.3	9.3	9.3	9.1	10.1
Unemployment, female (%) <sup>a</sup>	10.8	9.7	9.3	10.0	10.3	10.3	10.1	9.0	8.4	9.8	10.1	10.2	10.4
Long-term unemployment (as % of all unemployed) <sup>a</sup>	-	-	-	-	-	-	-	39.1	39.3	34.6	37.7	42.0	39.9
Long-term unemployment (as % of active population) <sup>b</sup>	3.5	2.9	2.9	3.5	3.8	3.8	3.9	3.4	2.9	3.4	3.9	4.0	4.1

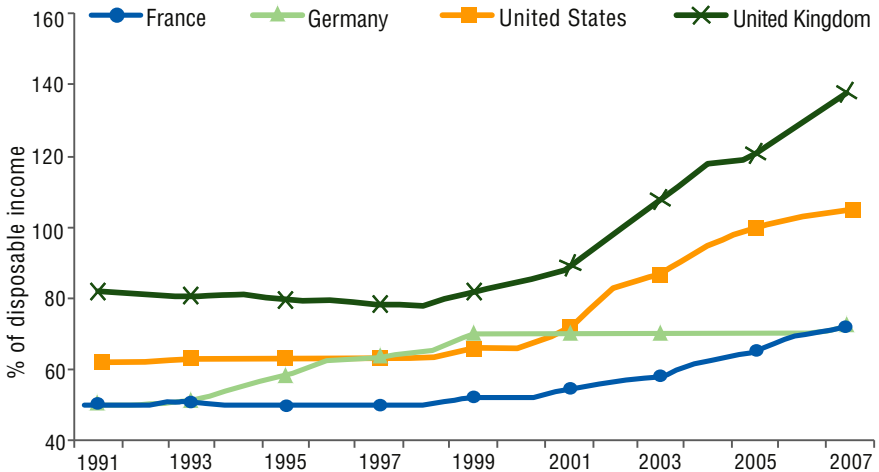
*Note:* <sup>c</sup>The dependency ratio is the ratio between the total number of people younger than 15 years of age or 65 years and older and the number of persons of working age; (f) Forecast; PPP: Purchasing power parity.

*Sources:* <sup>a</sup>OECD, 2013; <sup>b</sup>Eurostat, 2013.

### 1.3 Broader consequences

At the household level, the effect of falling house prices on household wealth and consumption was lower than in countries with greater exposure to the real estate crisis (Fig. 3.1). Indebtedness levels were much lower in France because there were generally stricter lending conditions. Moreover, with a savings ratio of 12% at the onset of the crisis, households were able to resort to their assets. The bankruptcy rate remained relatively low and consumption remained fairly stable at the beginning of the crisis. However, unemployment rates sharply increased from a 10-year low of 7.2% in early 2008 to 9.6% by the end of 2009, with more moderate increases in 2010 and 2011 (OECD, 2009) (Table 3.1).

**Fig. 3.1** Household mortgage debt in France as percentage of disposable income, 1991–2007



Source: OECD, 2009.

## 2. Health system pressures prior to the crisis

Major structural problems in the French health system prior to the crisis included lack of coordination between hospital and ambulatory services, between private and public provision of care, and between health care and public health (the last being concerned with prevention rather than care delivery). At the onset of the crisis, the Ministry of Health was preparing the Hospital, Patients, Health and Territories bill aimed at integrating public health, health care delivery and financing by creating a one-stop shop at regional level, the regional health care agencies (*agences régionales de santé*). Since 2010, the regional health care agencies in the 26 French regions govern all these aspects of the health system

and have a major role in articulating the ambulatory, hospital, and health and social care sectors.<sup>3</sup>

Moreover, the financial sustainability of the health system was relatively fragile at the onset of the crisis. Since the 1980s, the need to control SHI expenditure had led to several measures attempting to contain demand, to increase SHI resources or to decrease SHI expenses, eventually leading to an increase in patient OOP payments. In acknowledgement that such measures may have negative effects on equity in access, counterbalancing measures were introduced. These included the creation of safety nets for given populations, such as free public complementary universal health coverage (*couverture maladie universelle complémentaire*; CMU-C) for people with low income and financial aid for purchasing voluntary health insurance (VHI) contracts for households with an income just above the ceiling for free complementary health insurance.<sup>4</sup>

Despite these measures, socioeconomic disparities in access to health care were increasing and, as a consequence, disparities in health status remained significant. These social health inequalities result not only from risk factors, such as alcohol and tobacco consumption, but also from differences in access to health care that seem to increase over time. In 2008, 16.5% of the population aged 18–64 years reported having forgone health care in the last 12 months for financial reasons, compared with 14% in 2006. This inequity in access was concentrated in a limited number of goods and services for which patients' OOP expenditure is the highest. Dental care was of greatest concern (10.7% of the population aged 18–64 years had forgone dental care in the previous 12 months), followed by spectacles (4%). Forgoing health care increases inversely with the level of income: people in the poorest quintile forgo three times more care than people in the richest quintile. Several public policies have been implemented since the late 1990s to tackle this issue, mainly focused on improving access to health care, although they have not shown significant results (Chevreul et al., 2010).

To tackle the debt accumulated by the SHI (estimated at around €135 billion in 2009), France implemented a budget cap for SHI expenditure by creating the national ceiling for SHI expenditure (*objectif national des dépenses d'assurance maladie*) in 1996. One difficulty with this measure is that statutory tariffs for self-employed professionals, medical devices and drugs are negotiated on

3 From 1 April 2010, and with the aim of achieving better governance of the system at the regional level, better response to needs and greater efficiency, the regional health care agencies were created by merging seven regional institutions: the Regional Hospital Agency, the Regional Union of Health Insurance Funds, the Regional Health Insurance Fund, the Regional Directorate of Health and Social Affairs, the departmental Directorate of Health and Social Affairs (which was the subsidiary of the Ministry of Health at the departmental level), the Regional Public Health Group and the Regional Health Mission. For additional information on the role of the regional health care agencies, see Chevreul et al. (2010).

4 In 2013, the revenue ceilings for access to free public complementary health insurance and financial assistance to purchase a private VHI contract were exceptionally increased by 7%. While the ceilings are adjusted annually for inflation, this additional increase was undertaken to improve financial access to care by expanding VHI coverage of the less healthy well-off population.



a multiyear basis and, therefore, tend to be fixed for a given period of time, and there is no a-priori control of the volume of care consumed. However, more recent measures have attempted to make the national ceiling for SHI expenditure into a harder form of budget capping. The first measure was the creation of the Alert Committee in 2004 and the group for the statistical monitoring of the national ceiling in 2010, while the second gave the head of the Directorate of Social Security the power to present a financial rescue plan when the overrun exceeds 0.6% of SHI expenditure or to introduce correcting interventions during the year.

These correcting interventions included, for example, a decrease in hospital tariffs for diagnostic-related groups (DRGs) set by the Ministry of Health (public and private hospitals are the responsibility of the Ministry of Health, and hence it sets the DRG tariffs) and a freeze in the share of budgets dedicated to the Quality and Coordination of Care Fund (Fonds d'intervention pour la qualité et la coordination des soins), to the social and health care sector and, finally, to the hospital block grant for the Public Utility Mission (Mission d'intérêt général et d'aide à la contractualisation), which is dedicated to the coordination of care, research and teaching, plus epidemiological surveillance and expertise. However, strikingly, these measures barely touched goods and services delivered or prescribed on a private basis by self-employed professionals, despite the fact that the overrun was greatest in this area. For example, of the €930 million that was spent in excess of the overall target in 2008, €800 million came from the private practice subarea of expenditure, while only €130 million came from the hospital sector.

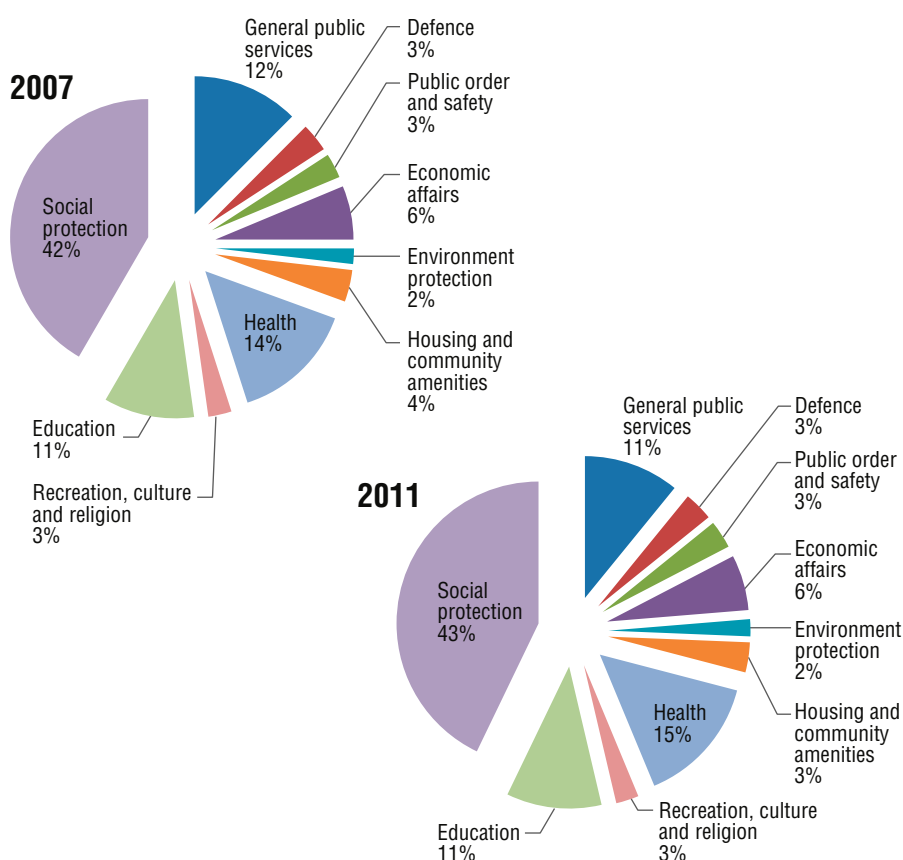
Finally, France faces the pressure of a rapidly growing ageing population, resulting from increasing life expectancy (but not from declining fertility rates). The baby boom effect after the Second World War will exacerbate this trend in the medium term. Because the probability of becoming dependent greatly increases with age, the number of frail older people is expected to grow 40% by 2030 and 60% by 2060, rising from 1.15 million in 2010 to 1.55 million in 2030 and 2.3 million by 2060, corresponding to an estimated 3% of the population (Charpin & Tlili, 2011). As a result, there is an increasing need for long-term care to provide personal assistance to frail older people at home, in nursing facilities or in other residential care settings. While the social security system was the main funding source for long-term care after its creation, since the 1970s, the local authorities' responsibility for funding long-term care has grown following the creation of a universal allowance with a means-tested co-insurance. Overall, this can be regarded as a shift from national solidarity-based financial protection to local tax-based financial protection, increasing geographical inequity. Moreover, this shift in long-term care financing is regressive, as a share of local taxes is not income based (Chevreul & Berg Brigham, 2013).

### 3. Health system responses to the crisis

#### 3.1 Changes to public funding for the health system

The health budget deficit increased by approximately 2.5 times between 2008 and 2010 (rising from €4.4 billion to €11.9 billion), but was reduced to €8.6 billion in 2011 through better expenditure control and an increase in revenues. In this context, an amendment to the 2012 budget was passed to reduce the health budget deficit to €5.5 billion in 2012 and to €5.1 billion in 2013. In 2010, the national ceiling on health insurance expenditure was met for the first time since 1997. Accordingly, the total health expenditure growth rate has fallen markedly, from a 4.8% increase between 2006 and 2007 to a 2.5% increase between 2010 and 2011. At the same time, public expenditure as a share of total health expenditure has fallen from 77.1% in 2007 to 76.7% in 2011 (OECD, 2013). Expressed as a share of total government expenditure, health sector funding has increased from 14% in 2007 to 15% in 2011 (Fig. 3.2).

**Fig. 3.2** Percentage of government spending by sector in France, in 2007 and 2011



Source: OECD, 2013.

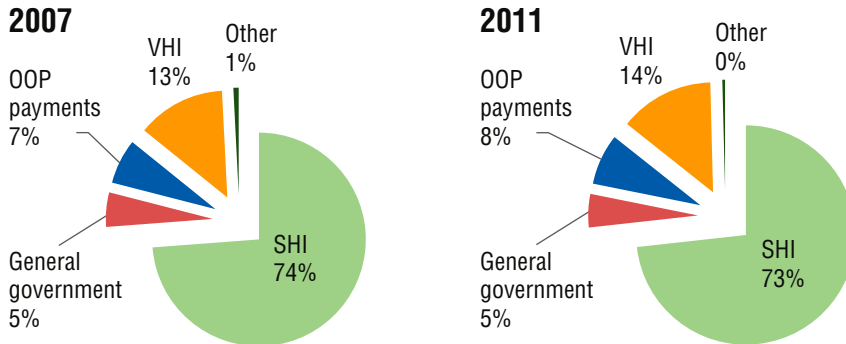
On the fiscal side, the share of tobacco tax revenues earmarked for health was increased in 2007 to 98.75% taking effect from 2009, and the share of capital gains tax revenues earmarked for health was increased from 12.3% to 13.5% in 2011. Since 2013, tobacco products that previously benefited from a reduced tax rate are taxed like cigarettes, with a mean contribution of about 81% of the end price. Moreover, a new tax on beer was introduced in 2013 and earmarked for health, generating an expected €480 million. Likewise, since 2012, a new tax on soft drinks of €0.04 per litre has been levied and earmarked for health. In addition, the new social security contribution introduced in 2009 (*forfait social sur l'épargne salariale*) was increased from 2% in 2009 to 4% in 2010, 6% in 2011, 8% in January 2012 and 20% in August 2012 (Marc, 2012). Currently, 25% of these revenues are earmarked for health. Finally, an increase in the earmarked tax for funding social security was implemented for individuals with annual earnings of over €150 000 in 2013.

To meet EU fiscal targets, the government's deficit plan proposed an additional allocation of taxes to social security in 2012 to be partly financed by reducing tax shelters for payroll taxes earmarked for social security. The reduction in health expenditure of €2.4 billion planned for 2013 was divided between ambulatory care (€1.75 billion) and hospital care (€0.65 billion) and was to be achieved mainly through lower prices for drugs and medical devices in ambulatory and hospital care (€1 billion) and by eliminating inappropriate and unnecessary care. The latter measure is partly set within the national agreement with self-employed physicians, based on increased financial incentives (e.g. targets related to the appropriate prescription of antibiotics).

In terms of the SHI revenue base, from 2013 onwards, SHI contributions increased for self-employed people with annual earnings above a certain threshold and, under certain conditions, for elected local officials and people who employ domestic help. In addition, from 2013 onwards, employers have to pay contributions (*forfait social*) on a portion of severance paid to employees in the context of employment termination by mutual consent. Finally, a new tax (earmarked for the social security budget) has been levied since 2013 on employees with annual earnings over €150 000.

Regarding sources of revenue, the pre-crisis trend of shifting financing from SHI towards private expenditure continued during this period. The SHI share of total health expenditure decreased slightly from 73.8% in 2007 to 73.1% in 2011, while the share financed by VHI increased from 13.4 to 13.9% and the share of OOP expenditure increased from 6.8 to 7.5% (Fig. 3.3).

**Fig. 3.3** Percentage of total expenditure on health according to source of revenue in France, in 2007 and 2011



Note: Data rounded to the closest whole number.

Source: OECD, 2013.

## 3.2 Changes to coverage

### Population coverage (entitlement)

There were only minor changes in entitlement for coverage in a population benefiting from 99% SHI coverage prior to the crisis (Chevreul et al., 2010). In 2009, the minimum subsistence income (*le revenu minimum d'insertion*) was replaced by the active solidarity income (*revenu de solidarité active*) to provide income support to the working poor while enhancing incentives to work. This increased the overall number of recipients of this benefit and the population entitled to free coverage since the beneficiaries of the new active solidarity income automatically has the right to benefit from the statutory universal health coverage (*couverture maladie universelle*; CMU) and VHI (CMU-C). In addition, the income threshold giving access to the health insurance voucher plan (*aide pour une complémentaire santé*; ACS) was lifted from 20% above the CMU ceiling to 30% in 2011 and to 35% in 2012, and the state defined minimum criteria for ACS vouchers delivered by VHI in 2012. Finally, measures to increase coverage of disadvantaged students and people over 60 via the ACS scheme were enacted in 2013.

### Benefits package

From 31 March 2013, abortions (and related hospital costs) have been fully covered, leading to an estimated increase in overall expenses from €13.5 million to €31.7 million (*LeMonde.fr*, 2012). Likewise, contraception for girls aged 15–18 has been fully covered from the same date.<sup>5</sup>

<sup>5</sup> Décret No. 2013-248 du 25 mars 2013 relatif à la participation des assurés prévue à l'article L. 322-3 du code de la sécurité sociale pour les frais liés à une interruption volontaire de grossesse et à l'acquisition de contraceptifs par les mineures [Decree 2013-248 of 25 March 2013 on the participation of insured in fees linked to abortion and the acquisition of contraceptive drugs by minors].

Since 2003, some drugs with low therapeutic value have been delisted based on reviews using effectiveness criteria. In 2010, the coverage rate for drugs with weak relative medical benefit decreased from 35% to 15%, and in 2011, the rate for drugs with moderate medical benefit was reduced from 35% to 30%. An additional 26 drugs were delisted in 2011, including 17 that had been covered at 15%.

### **User charges**

Overall, user charges for French patients have increased during the crisis (Fig. 3.3). In 2009, the penalty (co-insurance) for patients who do not follow an agreed medical pathway was increased from 40% to 70%. This should be understood in the context of the broader 2004 reform, which attempted to make patients more responsible for their consumption of care, including strong financial incentives for VHI not to cover the higher co-insurance and deductibles (applying for doctors' visits, some procedures and drugs). Moreover, in the context of the delisting of certain drugs described previously, co-insurance rates for certain less effective drugs increased from 65% to 70% in 2010. Likewise, the co-payment for inpatient stays increased from €16 to €18 per day. In addition, the co-insurance rates for medical devices increased from 35% to 40% in 2011. Finally, in 2012, the government abolished the €30 deductible for beneficiaries of state medical assistance for undocumented migrants (*aide médicale de l'état*) introduced in 2011.

There has been no specific response of the VHI sector to the crisis and the decrease in SHI coverage. As expected and observed already before the crisis, VHI demand and coverage increased, including also the CMU-C and ACS schemes, which are financed by the CMU Fund and operated by VHI firms (for the role of VHI, see also section 4.1).

## **3.3 Changes to health service planning, purchasing and delivery**

### **Prices and delivery of medical goods**

Under the 2013 Social Security Financing Law, lower prices for drugs and medical devices in both the ambulatory and hospital sectors are expected to result in savings of €1 billion, after price reductions have been repeatedly practised in previous years. This has been accompanied by incentives to control costs on the delivery side: in 2011, pharmacist remuneration was made partly independent of sales volume to encourage the dispensing of cheaper drug alternatives, which was complemented in 2012 by a pay-for-performance component rewarding the delivery of generic drugs (Caisse nationale de l'assurance maladie des travailleurs salariés, 2013).

### **Health workforce and salaries**

The crisis had a varied effect on the income of the physician workforce, depending on the workplace setting, but there was no specific policy to cut remuneration.<sup>6</sup> While GPs in private practice saw their incomes decrease for two consecutive years from 2008 (a decrease of 0.66% and 1.73% in 2009 and 2010, respectively), specialists in private practice experienced an increase of 3.18% between 2009 and 2010, after a decrease in the previous year (Caisses Autonomes de Retraite des Médecines de France, 2012). Salaries of physicians in public hospitals (who have the status of civil servants) decreased by 0.6% between 2009 and 2010, representing a more significant decrease than the 0.2% experienced by civil servants in regional and local administration in the same period. The crisis, however, does not appear to have significantly affected the physician workforce: the growth rate of the number of practising doctors has been constantly decreasing for decades, going from 1.4% in 2002–2003 down to 0.5% in 2007–2008 and nearing zero between 2010 and 2013 (Conseil National de l'Ordre des Médecins, 2013). In public hospitals, the number of doctors increased by 1.6% between 2008 and 2009, by 1.8% between 2009 and 2010, and by 0.3% between 2010 and 2011 (DREES, 2011, 2012c, 2013).

### **Payment to providers**

Pay for performance for GPs was introduced on a voluntary basis in 2009 and generalized and expanded as part of the 2012 agreement between SHI and GPs, with GPs receiving, on average, an additional 5% of their regular income. The pay-for-performance scheme encourages GPs to develop prevention activities, improve treatment and follow patients with a range of chronic conditions (mainly hypertension and diabetes), and to improve efficiency by increasing the rate of generic prescribing. The objectives are based on public health priorities set by parliament and recommendations issued by the French National Agency for Medicines and Health Products Safety (Agence nationale de sécurité du médicament et des produits de santé)<sup>7</sup> and the National Health Authority (Haute Autorité de santé).<sup>8</sup> An internal evaluation (with a control group) by SHI suggests moderate improvements, for example in the prescription of testing for glucose control (glycated haemoglobin, HbA1c) for diabetic patients and of low-dose aspirin for patients with heart failure. In 2012, pay for performance was also included in the SHI agreement with cardiologists.

<sup>6</sup> All figures concerning physician income in this section account for inflation.

<sup>7</sup> The National Agency is the competent authority for all safety decisions concerning health products from their manufacturing to their marketing. It carries out three core missions: (1) scientific evaluation, (2) laboratory and advertising regulation, and (3) inspection of industrial sites. It also coordinates vigilance activities relating to all relevant products.

<sup>8</sup> The National Health Authority was set up in 2004 to bring together under a single roof a number of activities designed to improve the quality of patient care and to guarantee equity within the health care system. Its activities range from the assessment of drugs, medical devices and procedures to the publication of guidelines and accreditation of health care organizations and certification of doctors (Chevreul et al., 2010).

FFS payment levels for certain health professionals, such as radiologists and pathologists, were decreased in 2011, and official tariffs for laboratory and other diagnostic tests and services were reduced throughout 2011, 2012 and 2013. Along with the reduction of drug prices, these measures have formed key elements in the effort to slow health expenditure and limit the health budget deficit.

### ***Overhead costs: restructuring the Ministry of Health and purchasing agencies***

In 2009, the Health Reform Act created the National Agency to Support the Performance of Health and Social Care Organizations and Services (Agence nationale d'appui à la performance des établissements de santé et médico-sociaux), with the mission of helping all health care facilities (both private and public) and social care providers to modernize their management, optimize their real estate assets and monitor and improve their performance to control spending. In addition, a reform to support the pooled procurement of hospital supplies was introduced in 2011, with the aim of achieving lower prices. Finally, since 2008, a series of measures have been undertaken by SHI to address fraud.

### ***Provider infrastructure and capital investment***

Financed largely through borrowing, €10 billion was allocated to a five-year hospital sector investment plan from 2008 to 2012, called Hôpital 2012. In light of the increasing debt levels of public hospitals (Fig. 3.4),<sup>9</sup> the aim was to maintain the previous level of hospital investment to support regional planning goals, the development of HTA systems and the updating of safety standards. The first portion of €2.2 billion was spent in the first three years. In 2013, an expenditure of €354 million on capital investments in the hospital sector was planned, with a third of the funds dedicated to improving information systems to improve efficiency. Concomitantly, in 2013, the European Investment Bank signed an agreement to invest €1.5 billion in the hospital sector over three years.

### ***Priority setting or protocols to change access, coordination of care and patterns of use***

The 2013 Social Security Financing Law sought to achieve efficiency savings by shifting care from hospitals to primary and community care settings. In this context, incentives were put in place to encourage day surgery and hospitalization at home. Economic evaluations as part of the HTA process became mandatory, starting in October 2013. In addition, the long-term care programme introduced in 2012 provided care pathways for certain chronic diseases (including chronic obstructive pulmonary disease, Parkinson's disease, chronic kidney failure and

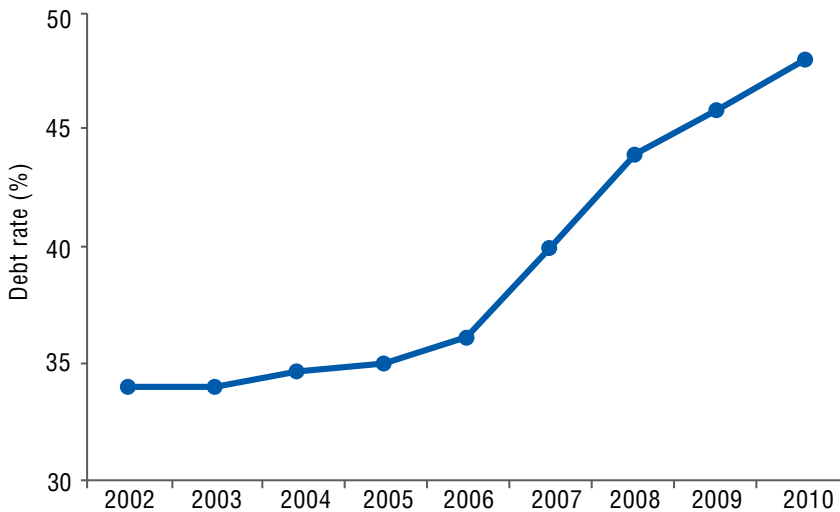
<sup>9</sup> In France, public hospitals account for three-quarters of acute medical care capacity (80% of medical beds and 70% of day-care beds) and perform 75% of full-time episodes and 55% of day-care episodes.

chronic heart failure) and working documents on the improvement of care organization for older people in 2013. DMPs have also been implemented. A voluntary DMP for diabetic patients was introduced in 2008 as a pilot project and by 2013 had 500 000 participants. A similar programme has been developed for patients with asthma. Finally, new case management programmes seek to facilitate home care after hospital discharge for childbirth or heart failure.

### **Health promotion and prevention**

In 2011, 2012 and 2013, new taxes (or increases in existing taxes) were put in place for tobacco, alcohol and energy drinks (see section 3.1).

**Fig. 3.4** Debt rate of public hospitals in France, 2002–2010



Source: DREES, 2012c.

## **4. Implications for health system performance and health**

### **4.1 Equity in utilization and financing**

As a result of the incentives that have been put in place, there has been a rapid increase in the number of at-home hospitalization days (119% between 2005 and 2010), although this still accounts for only a small percentage of hospitalization days (Durand et al., 2010).

Overall, increasing cost-sharing within the SHI system implies two things: increased reliance on VHI and decreased utilization of care. In 2009, it was



estimated that complementary VHI covered about 13% of all health care expenses in France, which is a larger share than in other European countries (Thomson, Foubister & Mossialos, 2009). On average, it also results in the lowest OOP expenditure among OECD countries. Nonetheless, the increased participation of VHI in health care financing during the crisis has decreased equity in financing because SHI contributions are income related, while VHI premiums usually are not. Consequently, wealthier people spend a lower proportion of their incomes on health care compared with the poor. Moreover, certain population groups, such as the unemployed and the retired, cannot benefit from the more favourable premiums and terms of group contracts.

#### 4.2 Access to services and quality of care

Concerning utilization, an increasing proportion of individuals reported in 2010 that they had unmet health care needs for financial reasons. This may be because of the imposition of new or increased user charges, including extra-billing, which limits access to specialist care. Indeed, 15.4% of the population said they did not access health care in 2008 because of the associated expenses (1.2% more than in 2006). However, this mainly concerned services such as dental care (10%), optometry services (4%) and, to a lesser extent, doctor consultations (3.4%). Forgoing care was more frequent among patients who did not have complementary VHI (over 30% of people in this group; Després et al., 2011). Likewise, a study conducted in 2012 showed that one in five recipients of social benefits (*minima sociaux*) did not access medical care for financial reasons within the previous year (Isel, 2014). Another cohort study conducted in 2010 in Paris (3000 people surveyed) found similar results. It reported that 30% of respondents did not seek medical care when they needed it, half of them for financial reasons (DREES, 2012a). In addition, a study by the nongovernmental organization Médecins du Monde reported that the proportion of people delaying seeking care increased from 11% in 2007 to 17% in 2008, 22% in 2009 and 24% in 2010. The financial barriers to access health care are further compounded by socioeconomic inequalities, as illustrated by Table 3.2.

**Table 3.2** Social inequalities in health and access to care between workers and managers in France

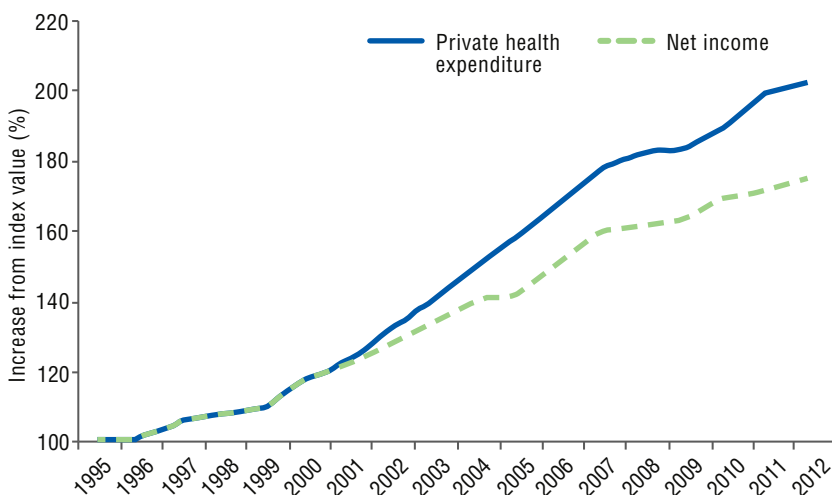
	Average No. diseases declared	Obesity (%)	Dental problems (%)	Access to dental care in the previous two years (%)
Workers	2.9	15.2	44.0	63.9
Managers	2.5	6.3	29.4	82.3

Sources: Dourgnon, Jusot & Fantin, 2012; Calvet et al., 2013; OECD, 2013.

Overall, the share of the French population satisfied with access to health care decreased from 82% in 2007 to 68% in 2013 (physicians), and from 81 to 70% (dentists). This may be explained, in part, by higher medical fees. Between 2007 and 2012, the share of GPs practising extra-billing grew from 15.5 to 17.4%, while for specialists it increased from 49 to 53% (Coppoletta & Le Palud, 2014).

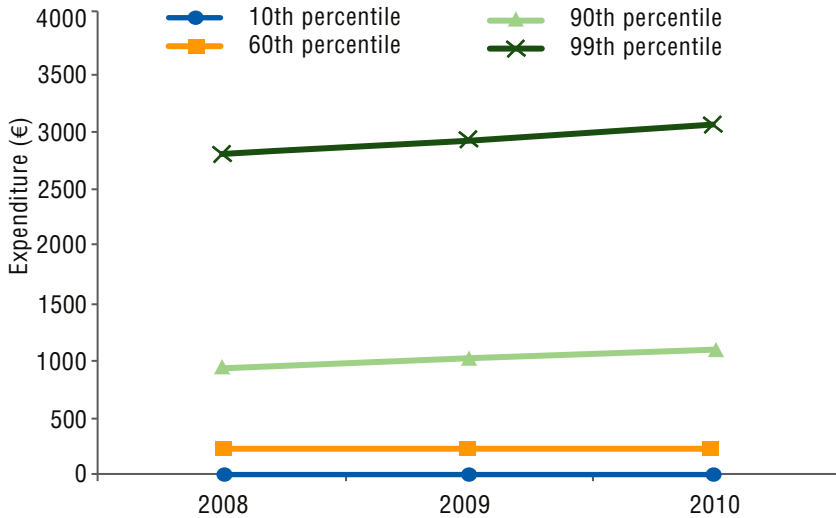
Two other factors serve to illustrate the increasing inequity in the system. First, since 2002 there has been a disconnection between increases in net income and private health expenditure. Since the latter is growing faster, patients increasingly have to rely on VHI or OOP payments, both of which reduce equity in financing (Fig. 3.5). This seems particularly noteworthy given that nearly 4 million people did not have complementary VHI in 2008 (Perronnin, Pierre & Rochereau, 2011). Second, between 2008 and 2010, the private health expenditure of intensive users of care increased more rapidly than that of less frequent users of care (Fig. 3.6). This strongly suggests that patients with high needs experienced a loss of coverage over time, which is a strong indicator of financial inequity. Finally, a striking indicator of increasing financial inequity appears to be the emergence of a "microcredit for health" of €600–4000 for 6–36 months at an interest rate of about 5% (Banque du Crédit Municipal de Paris, 2008; *Les Echos.fr*, 2010). This loan is proposed by a publicly owned bank, and its main users are unemployed single mothers. The need to increase individuals' ability to pay for health care is consistent with recent results of a three-year survey assessing the funds that a person estimates to have set aside for OOP payments: the amount has decreased from €570 in 2012 to €568 in 2013, and to €523 in 2014 (Sofinscope, 2014).

**Fig. 3.5** Evolution of private health expenditure and net income in France, 1995–2012



Notes: 1995 taken as the index value of 100.

Source: High Council for the Future of Health Insurance, 2013.

**Fig. 3.6** Private health expenditure by percentile of health service users in France, 2008–2010

Source: High Council for the Future of Health Insurance, 2012.

However, it seems likely that some inequities have been attenuated for the least well-off. There was a slight increase in the number of recipients of the CMU-C from 4.12 million in 2009 to 4.9 million in 2013 and a marked rise in beneficiaries of the ACS scheme, whose number almost doubled from 469 000 in 2007 to nearly 1.1 million in 2013 (Couverture Maladie Universelle, 2013).

At the same time, in a context in which there is diminishing coverage by SHI, more than 40% of French citizens say that they would prefer to pay more while maintaining the level of social protection, whereas fewer than 30% would prefer a lower level of social protection in exchange for lower contributions (Coppoletta, 2012). This is consistent with findings from a 2010 survey in which respondents expressed a higher need for social protection since the onset of the crisis, concomitant with a steady decrease in optimism for themselves and future generations (DREES, 2012b).

In addition, it is interesting but perhaps not surprising to note that the financial situation of VHI organizations did not significantly deteriorate during the crisis, despite the obvious effects that the shrinking employment sector had on VHI contracts offered through employers. This is, in part, explained by the decreasing coverage by SHI, the sustained demand for social protection, as discussed above (Caniard & Meyer, 2012), and the fact that the most costly patients are fully covered by SHI under the chronic illness (*affection de longue durée*) scheme.

### 4.3 Impact on efficiency

Overall, the health care budget deficit was halved between 2009 and 2012, in part through an increase in SHI revenues and efficiency improvements, in spite of the fact that the volume of consumption of medical products and services increased by 2.8% in 2011, following a similar increase in 2010. However, the budget deficit reduction was mainly achieved through a reduction in hospital fees and drug prices. This worked as a buffer against the increase in prices of ambulatory health care services (Le Garrec, Bouvet & Koubi, 2012), which partly reflected the introduction of the pay-for-performance scheme.

### 4.4 Impact on health

There is no specific monitoring of the impact of the economic crisis on health or related socioeconomic factors, but several surveys provide an overall picture on perceived health status and socioeconomic factors. For example, the Ministry of Health Directorate of Research, Studies, Evaluation and Statistics has commissioned an annual survey since 2000 that poses questions to a sample of about 4000 people on various socioeconomic issues (DREES, 2012d). During the course of the crisis, respondents perceived growing social injustice, decreasing confidence that the government can adequately address poverty and social exclusion, and decreasing belief that health insurance should be universal. At the same time, the percentage of respondents perceiving their health status as good rose to 74% in 2011, after a reported 71% in 2009 and 2010; likewise, access to health care continued to be considered universal by a high percentage of respondents (72%). At the same time, 26% thought themselves to be in poor health and among those, 6% in bad or very bad health; these results have remained stable and similar to previous years. Another report on poverty and social exclusion has been published every year since 2000 by the National Observatory in Poverty and Social Exclusion (Observatoire National de la Pauvreté et de l'Exclusion Sociale). In its report for 2012, the Observatory highlighted a steep increase in household debt overload in 2008 and a rise in poverty that was particularly marked for young adults (Observatoire National de la Pauvreté et de l'Exclusion Sociale, 2012). Finally, a scientific publication reported a significant increase in suicide rates for men (but not for women), by 4.7% in 2009 (representing 344 excess suicides) in comparison to increases of 5.5% in Germany and 10.4% in Greece (Chang et al., 2013).

### ***Preparedness***

Overall, two measures that were developed before the onset of the crisis may be considered to be the elements that buffered the impact of the crisis on individuals (at least to some extent). First, the active solidarity income was

created in 2009 and was extended, under certain conditions, to people under 25 years of age. In 2012, it was provided to almost 2.1 million households. Second, the CMU-C and ACS schemes enable people on low incomes to receive adequate health protection and have allowed an increasing number of people to benefit from such protection (see section 3.2).

## 5. Discussion

### 5.1 Drivers of change

In terms of drivers of change, there has been no direct influence of non-national actors on health system responses in France, unlike in other countries.<sup>10</sup> The recent policy recommendations of the European Commission to France in 2013 focused on labour costs and pension schemes, and contained only nonspecific recommendations to increase the cost-effectiveness of health care expenditure. French politicians have publicly shown reluctance to adopt any such external advice.<sup>11</sup> Furthermore, no crisis-related funds were received from the International Monetary Fund (IMF), and the actors of the Troika (European Commission, European Central Bank and the IMF) did not play a role in the French crisis response. However, such absence of direct external actors will have to be qualified by long-term processes known as policy learning, transfer or convergence. Several international actors, such as the European Observatory on Health Systems and Policies, have been contributing to such developments, which coexist with transnational initiatives such as direct contacts and networks, for example, between national agencies or SHI funds. If, in some cases, these so-called soft-drivers may have been facilitators of change (e.g. the long-standing European EUnetHTA initiative in fostering a knowledge base for HTA (European Network for Health Technology Assessment, 2014), or the English National Health Service pay-for-performance experience, which inspired the French one), they were, however, not, per se, initiators of change in the context of the crisis.

### 5.2 Content and process of change

Hence, there has been no direct influence or use of external agents in the crisis response, nor a concerted strategy to respond to specific phenomena. The main trigger for action in France was the fiscal pressure that pre-existed and was

10 At the EU level, such direct influence could have been attempted within the scope of the Stability and Growth Pact ensuring that Member States adopt appropriate policy responses to correct excessive deficits by implementing the Excessive Deficit Procedure. This procedure has been in place in France since 2009, and in that year, the European Commission recommended that France "swiftly implement the planned measures and reforms to contain current expenditure over the coming years, especially in the areas of health care and local authorities", without further specifications.

11 This was illustrated by representatives of the ruling Socialist Party, who stated that, instead of France following the recommendations, the European Commission should join French President François Hollande's fight for "a smart economic policy, which conciliates thorough budget policy with the preservation of pro-growth investments" (EurActiv, 2013).

exacerbated by events since 2008, including the need to meet EU fiscal targets within the Maastricht criteria. Under this pressure, an established set of actors with health budget responsibility<sup>12</sup> then resorted to a familiar set of technical tools instead of engaging in more significant and adapted responses. These technical tools are largely set within the concept of cost-containment strategies, including accounting measures and incentives for providers to promote the best medical practice. Hence, the response to the crisis was not specific. There was no public debate shaping it nor any systematic efforts to set priorities, although certain measures have been reinforced since the start of the crisis. Likewise, the sectoral boundaries of the key actors have kept their usual pattern.

### **5.3 Implementation challenges**

The barriers to a more substantial reform are rooted in the institutional complexity of the French health care system and the conflicts of power and legitimacy associated with it. Major issues include (1) the relationship between the state and SHI, (2) the organizational structure and payment system, and (3) the lack of integrated and comprehensive approaches.

With respect to the first, a 2004 reform clarified the respective fields of responsibility of the Ministry of Health and SHI. However, the shift of financial stewardship from the Ministry of Health to SHI is weaker than it could have been. The Ministry of Health kept the decisions on coverage and pricing for drugs and devices in house, and the SHI's decision-making power on the rate of coverage of goods and procedures is further weakened because it is directly derived from the level of medical benefit assessed by the long-term care system. Moreover, with regard to professionals' agreements, the government participates indirectly in the negotiation between SHI and professionals. Professionals' representatives continue to lobby the Ministry of Health, which retains a strong role in the negotiations (Chevreul et al., 2010; Ettelt et al., 2010).

Second, the organizational and payment structure of the French health care system makes the goal of cost-containment more difficult to achieve than in other national health systems. Indeed, controlling expenditure is a complicated task when the freedom of consumption by patients and provision of services by providers is unrestricted, where care is largely publicly funded and retrospectively reimbursed and where local SHI funds do not have real financial responsibility but are often described as payers reimbursing care without having any information on its appropriateness and efficiency. One

12 There is a tradition of joint health budget responsibility between the Ministries of Finance and Health, both chambers of parliament and a range of other actors including the General Accounting Office (Cour des comptes), the National Health Conference, and an Alert Committee composed of the Secretary General of the Social Security Accounting Commission (Commission des comptes de la sécurité sociale), the head of the National Institute of Statistics and Economic Studies (Institut national de la statistique et des études économiques) and an additional expert appointed by the President of the Economic and Social Council. This constellation of actors has been in place since 2004 and has not changed during the crisis.

important structural aspect of the French health system in this context is the FFS payment for self-employed professionals based on the national agreements they establish with the SHI. The newly established pay-for-performance contracts can be regarded as a first step in reforming the FFS model, although this remains an extremely challenging policy area. One important issue is the significant role of the Ministry of Health in the decision-making process and whether any government would have the required political power to defend major reform against the interests of professional groups. This difficulty was illustrated in 2009 by the Ministry of Health and Solidarity's reversal of the negative financial incentives set in legislation for doctors who refused to sign a contract to deliver care in underserved areas. Controlling expenditure in the private practice sector, therefore, remains a major concern.

Third, an integrated and comprehensive policy has been argued to be the appropriate response for tackling interdependent health determinants (Elbaum, 2007). The 2004 Public Health Act was an attempt to improve coordination and consistency in public health policies, but this has proven difficult in the French context. The fact that population health is affected by both income and income distribution was not systematically recognized by the public health acts and only 2 out of the 100 priorities in the 2004 Public Health Act directly concerned health inequities (Elbaum, 2007; Chevreul et al., 2010). Acting simultaneously on several determinants of health requires cooperation between administrations and payers, both at local and at national levels. Financing public health policies that deal with health determinants needs to cut across sectors (rather than being directed only at the health care sector). However, in the French system, the number of stakeholders (administrative departments) involved at the national and, more importantly, at the local level is high, potentially making this a difficult task. Nevertheless, these potential drawbacks may prove an unexpected political advantage: because of the separation of health care and health promotion budgets, health care professionals may not identify increases in budgets for health promotion as a threat to their budgets (Evans & Stoddart, 2003; Chevreul et al., 2010). Another positive element is the fact that the state and social security budgets were debated and approved simultaneously by the French Parliament for the first time in 2007. The justification was that there is little difference to citizens between taxes and social contributions and that the EU reporting regulations concern the expenditure of all public administration in total. The 2009 Hospital, Patients, Health and Territories bill enacted the merger of health care, public health and SHI funds at the regional level. This can be considered a major step towards the recognition that health needs should be identified and priorities established at the local level with the major stakeholders: hospitals, self-employed health professionals, public health decision-makers, patients' representatives, representatives of the state and representatives of the SHI (Chevreul et al., 2010).

All these elements illustrate the structural shortcomings hindering reforms as well as recent developments representing incremental change. While this sheds light on how the health system response to the crisis was more muted than it could have been, it is interesting to note major measures that were not taken because of the crisis. This was the case for the long-discussed and announced reform of long-term care financing. Despite the major challenge that long-term care represents and despite the fact that several concrete reform options were repeatedly debated (Chevreul & Berg Brigham, 2013), the Ministry of Health decided, in light of the crisis, not to initiate major long-term care financing reform. It must be wondered whether, in this case, the crisis represented an opportunity not to address a highly controversial policy issue.

While this suggests that the crisis itself, on the one hand, represents a barrier to change, on the other hand, it may also be argued that it constitutes an opportunity for health reform. Indeed, one of the impacts of the crisis may be that long-standing issues affecting the French health system and some of the proposed solutions dating to the pre-crisis period seem to be receiving increasing attention in civil society. For example, the 2013 National Health Conference<sup>13</sup> has published a memorandum on "how to exit the crisis stronger than before" (Conférence nationale de santé, 2013) in which, among others, the following recommendations were made:

- do whatever possible not to worsen health inequalities without abandoning the perspective of reducing them;
- before any decision, make use of analyses of added value and improvement in the relative medical benefit; and
- link financing solidarity with solidarity of care practice.

Hence, although these points were well acknowledged by actors inside an "inner circle" before the crisis, they seem to be increasingly recognized in a wider arena. This may indicate that efforts for system reform are gaining momentum, albeit at a slow pace. Indeed, in September 2013, the Ministry of Health launched the National Health Strategy (*stratégie nationale de santé*). It aims to reshape the French health system from 2014 onwards, and is centred on three domains: (1) prevention and information, (2) health care system organization, and (3) patient rights. In its current phase, nationwide stakeholder consultations are organized by the regional health care agencies (Ministry of Work, Employment and Health, 2014). Although the National Health Strategy is not, as such, a response to the crisis, it is in part based on the recommendations of the National Health Conference and may be interpreted as using the window of opportunity opened by the economic downturn.

<sup>13</sup> The National Health Conference (Conférence nationale de santé) was created as a permanent body by the 2004 Public Health Act; it brings together representatives of the health professions, health care facilities, regional health conferences and a number of additional experts to discuss and define health care priorities at the national level.



## 5.4 Resilience in response to the crisis

### *Midterm impact*

Overall, assessment of the system's resilience yields a dual picture. On the one hand, some elements at the macro and household level (such as household savings and universal coverage) have resulted in relatively mild effects on health system outcomes compared with those in other European countries. On the other hand, long-standing structural trends (outside and within the health system), in particular social and health inequities, combined with decreasing coverage scope (what is covered) and depth (how much of a benefit cost is covered) appear to have had effects, the full extent of which is yet to be seen.

In fact, while in a number of European countries the crisis is nearing the end, the current situation leads to the presumption that, in France, "the worst may be to come" (Europe1, 2013). Indeed, a report by the National Institute for Statistics and Economic Studies (Institut National de la Statistique et des Études Économiques, 2014) stressed that the recession that France officially entered in 2009 is atypical in two ways compared with previous recessions: first, GDP in early 2013 remained below any level reached before the crisis and, second, the trade balance of manufactured goods remained at a negative level owing to the lack of competitiveness and exterior demand.

For health system users, this protracted crisis seems to be accompanied by a series of recent phenomena that were perceived as marginal or even unknown before the onset of the crisis. For example, patients at present increasingly opt for low-cost VHI contracts, involving reduced coverage for so-called comfort benefits (e.g. a private room) and the necessity for advance payments at the point of service. In addition, the Internet has played an increasing role, not only as a means to obtain health information but also as a tool to save money when seeking health care (Pianezza, 2012). Further, medical tourism appears to have undergone a steep increase in popularity, with patients purchasing or acquiring consultations mainly from Belgium, Spain and Romania.<sup>14</sup> The number of French patients buying drugs (in person or online) abroad increased by three percentage points to 8% between 2012 and 2013, and the percentage of French patients consulting specialists abroad increased by one point to 4% between 2012 and 2013 (Sofinscope, 2014). Although these developments should be interpreted in the context of an increasing use of technology and cross-border services across all sectors of society, the data presented in this study raise the question of the extent to which the motivation may be financial rather than an indicator of zeitgeist.

<sup>14</sup> Services purchased within the EU are covered by SHI at the amount that would be reimbursed if the service had been purchased in France, if (1) previous authorization was obtained or (2) it is recognized as emergency treatment. Otherwise, coverage is decided on a case-by-case basis. VHI generally follows the same mode of operation.

## 6. Conclusions

The financial and economic crisis originating in 2008 has had a multifaceted impact on health and the health care system in France. In terms of immediate effects on perceived health, these appeared to be limited, as reflected in consistently high self-rated health. Nonetheless, other emerging trends, such as the increase in the suicide rate for men, may be exacerbated by the crisis. In terms of the changes to the health system following the onset of the crisis, they did not implicate a different set of actors from the pre-crisis period nor did they result from any direct influence or pressure from outside the country. Instead, the actions taken were a continuation of the incremental cost-containment measures undertaken since the late 1990s. Most importantly, these measures include a decrease in scope and depth of SHI coverage and an increase in the role of user charges and VHI, as well as supply-side measures, such as drug price reductions.

With regard to the midterm impact on the determinants of health, there has been a steady increase in unemployment and household debt, while personal health budgets are decreasing. The most important and burdensome element appears to be the exacerbating effect of the crisis on health and social inequalities, as indicated, for example, by an increasing percentage of people with low income forgoing care.

In a context in which it may be anticipated that the full impact of the crisis still lies ahead, the need to rapidly address the issue of equitable health financing is apparent. This is particularly urgent given the increase of private health expenditure and its impact on people with low incomes and high health needs at a time where the macroeconomic figures (February 2014) show that unemployment is still on the rise.

Although there are signs indicating that the move for significant reform is gaining momentum, it remains to be seen whether the government will be able to strike the right balance between equity and cost-containment efforts.

## References

Banque du Crédit Municipal de Paris (2008). *Financez vos projets. Prêt Santé*. Paris, Crédit Municipal de Paris (<http://www.cmpbanque.fr/pret-sante>, accessed 5 March 2015).

Caisses autonome de retraite des médecins de France (2012). *Bénéfices non commerciaux (BNC) des médecins libéraux 2010: deuxième année de baisse pour les généralistes!* Paris, Caisses autonome de retraite des médecins de France (<http://www.carmf.fr/chiffrescles/stats/2012/bnc2010.htm>, accessed 5 March 2015).

Caisse nationale de l'assurance maladie des travailleurs salariés (2013). *Avenant No. 2 à la convention nationale*. Paris, Caisse nationale de l'assurance maladie des travailleurs salariés (<http://www.ameli.fr/professionnels-de-sante/pharmaciens/votre-convention/convention-nationale-titulaires-d-officine/avenant-n-2-a-la-convention-nationale.php>; accessed 5 March 2015).

Calvet L et al. (2013). *Santé bucco-dentaire des enfants: des inégalités dès le plus jeune âge*. Paris, Ministère des Affaires sociales, de la Santé et des Droits des femmes (DREES Studies and Results No. 847) (<http://www.drees.sante.gouv.fr/sante-bucco-dentaire-des-enfants-des-inegalites-des-le-plus,11172.html>, accessed 5 March 2015).

Caniard É, Meyer C (2012). Les complémentaires et la crise?: menace ou opportunité? *Les Tribunes de la Santé*, 36(3):55–66.

Chang S-S et al. (2013). Impact of 2008 global economic crisis on suicide: time trend study in 54 countries. *BMJ*, 347:f5239.

Charpin J-M, Tlili C (2011). *Perspectives démographiques et financières de la dépendance*. Paris, Ministère des Affaires sociales, de la Santé et des Droits des femmes ([http://www.social-sante.gouv.fr/IMG/pdf/rapport\\_g2\\_def-2.pdf](http://www.social-sante.gouv.fr/IMG/pdf/rapport_g2_def-2.pdf); accessed 5 March 2015).

Chevreul K, Berg Brigham K (2013). Financing long-term care for frail elderly in France: the ghost reform. *Health Policy*, 111(3):213–220.

Chevreul K et al. (2010). France: health system review. *Health Systems in Transition*, 12(6):1–291.

Conférence nationale de santé (2013). *Avis sur la prise en compte de la crise économique sur les priorités et la politique de santé. Comment sortir plus forts de la crise?* Paris, Ministère des Affaires Sociales et de la Santé, Direction Générale de la Santé (<http://www.sante.gouv.fr/avis-du-02-04-13-sur-la-prise-en-compte-de-la-crise-economique-sur-les-priorites-et-la-politique-de-sante-comment-sortir-plus-forts-de-la-crise.html>, accessed 5 March 2015).

Conseil National de l'Ordre des Médecins (2013). *Atlas de la démographie médicale en France*. Paris, Conseil National de l'Ordre des Médecins.

Coppoletta R (2012). *Les attentes des Français en matière de protection sociale*. Paris, Ministère de la Santé.

Coppoletta R, Le Palud V (2014). *Qualité et accessibilité des soins de santé: qu'en pensent les Français?* Paris, Ministère de la Santé.

Couverture Maladie Universelle (2013). *Fonds CMU, Rapport d'activité 2013*. Paris, Couverture Maladie Universelle. ([http://www.cmu.fr/fichier-utilisateur/fichiers/Rapport\\_activite\\_2013.pdf](http://www.cmu.fr/fichier-utilisateur/fichiers/Rapport_activite_2013.pdf), accessed 5 March 2015)

Després C et al. (2011). *Giving up on health care for economic reasons: an econometric approach*. Paris, Institut de Recherche et Documentation en Économie de la Santé (Irdes: Issues in Health Economics No. 170.) (<http://www.irdes.fr/EspaceAnglais/Publications/IrdesPublications/QES170.pdf>, accessed 5 March 2015).

Dourgnon P, Jusot F, Fantin R (2012). Payer nuit gravement à la santé: une étude de l'impact du renoncement financier aux soins sur l'état de santé. *Economie Publique*, 28–29:123–147.

DREES (2011a). *Le panorama des établissements de santé*, édition 2011. Paris, Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, Ministère de la Santé.

DREES (2011b). *L'état de santé de la population en France*. Paris, Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, Ministère de la Santé.

DREES (2012a). *Colloque: renoncement aux soins*. Paris, Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, Ministère de la Santé.

DREES (2012b). *La protection sociale en France et en Europe en 2010*. Paris, Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, Ministère de la Santé.

DREES (2012c). *Le panorama des établissements de santé*, édition 2012. Paris, Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, Ministère de la Santé.

DREES (2012d). *Suivi Barométrique d'opinion des français sur la sante, la protection sociale, la précarité, la famille et la solidarité*. Paris, Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, Ministère de la Santé.

DREES (2013). *Le panorama des établissements de santé*, édition 2013. Paris, Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, Ministère de la Santé.

Durand et al. (2010). *Hospitalisation à domicile (HAD)*. Paris, Inspection Générale des Affaires Sociales (Tome 1 Rapport définitif).

Eco-Santé (2014). *France*. Paris, Institut de recherche et documentation en économie de la santé pour Eco-Santé (<http://www.ecosante.fr/index.html>, accessed 5 March 2015).

Elbaum M (2007). Inégalités sociales de santé et santé publique: des recherches aux politiques. *Revue d'Épidémiologie et de Santé Publique*, 55(1):47–54.

Ettelt S et al. (2010). Involvement of ministries of health in health service coverage decisions: is England an aberrant case? *Social Policy & Administration*, 44(3):225–243.

EurActiv.com (2013). *France placed under EU reform scrutiny*. Brussels, EurActiv (<http://www.euractiv.com/euro-finance/france-placed-eu-reform-scrutiny-news-528132>, accessed 5 March 2015).

EurActiv (2013). [web site] ([EurActiv.com](http://EurActiv.com), accessed 5 March 2015).

Europe1 (2013). *Crise: pour Raffarin, le pire est à venir* (<http://www.europe1.fr/Politique/Crise-pour-Raffarin-le-pire-est-a-venir-1505421/>, accessed 5 March 2015).

European Network for Health Technology Assessment (2014). [web site] (<http://www.eunethra.eu/>, accessed 5 March 2015).

Eurostat (2013). *Eurostat statistics*. Luxembourg, Eurostat (<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>, accessed 5 March 2015).

Evans RG, Stoddart GL (2003). Consuming research, producing policy? *American Journal of Public Health*, 93(3):371–379.

High Council for the Future of Health Insurance (2012). *Rapport annuel*. Paris, Haut conseil pour l'avenir de l'assurance maladie.

High Council for the Future of Health Insurance (2013). *Rapport annuel*. Paris, Haut conseil pour l'avenir de l'assurance maladie.

Isel A (2014). *Les conditions de vie des bénéficiaires de minima sociaux en 2012: privations et difficultés financières*. Paris, Ministère de la Santé.

Le Garrec M-A, Bouvet M, Koubi M (2012). *Les comptes nationaux de la santé en 2011*. Paris, Ministère de la Santé.

*LeMonde.fr* (2012). L'Assemblée vote le remboursement de l'IVG et la gratuité de la contraception pour les mineures. *LeMonde.fr*, 26 October 2010 ([http://www.lemonde.fr/sante/article/2012/10/26/l-assemblee-vote-le-remboursement-de-l-ivg-et-la-gratuite-de-la-contraception-pour-les-mineures\\_1781696\\_1651302.html](http://www.lemonde.fr/sante/article/2012/10/26/l-assemblee-vote-le-remboursement-de-l-ivg-et-la-gratuite-de-la-contraception-pour-les-mineures_1781696_1651302.html), accessed 5 March 2015).

*Les Echos.fr* (2010). Le Crédit Municipal de Paris lance le microprêt santé à 0%. *Les Echos.fr*, 9 February 2010 ([http://www.lesechos.fr/09/02/2010/LesEchos/20611-165-ECH\\_le-credit-municipal-de-paris-lance-le-micropret-sante-a-0-.htm](http://www.lesechos.fr/09/02/2010/LesEchos/20611-165-ECH_le-credit-municipal-de-paris-lance-le-micropret-sante-a-0-.htm), accessed 5 March 2015).

Marc F (2012). *Projet de loi de finances rectificative pour 2012: rapport*. Paris, Senat (<http://www.senat.fr/rap/111-689-1/111-689-1.html>, accessed 5 March 2015).

Ministry of Work, Employment and Health (2014). *La stratégie nationale de santé*. Paris, Ministère du travail, de l'emploi et de la santé (<http://www.sante.gouv.fr/planification-nationale-et-regionale-en-sante.html>, accessed 5 March 2015).

National Institute for Statistics and Economic Studies (2014). *Trente ans de vie économique et sociale, édition 2014*. Paris, Institut National de la Statistique et des Études Économiques.

Observatoire National de la Pauvreté et de l'Exclusion Sociale (2012). *Crise économique, marché du travail et pauvreté*. Paris, Organisation for Economic Co-

operation and Development (<http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/124000172/0000.pdf>, accessed 5 March 2015).

OECD (2009). *Economic surveys: France 2009*. Paris, Organisation for Economic Co-operation and Development.

OECD (2013). *Stat extracts*. Paris, Organisation for Economic Co-operation and Development (<http://stats.oecd.org/>, accessed 5 March 2015).

Perronnin M, Pierre A, Rochereau T (2011). *La complémentaire santé en France en 2008: une large diffusion mais des inégalités d'accès*. Paris, Institut de Recherche et Documentation en Économie de la Santé (Irdes: Questions D'économie de la Santé No. 161) (<http://www.irdes.fr/Publications/2011/Qes161.pdf>, accessed 5 March 2015).

Pianezza P (2012). La santé à crédit: les stratégies des patients face à la crise. *Tribunes de la Santé*, 36(3):67–72.

Sofinscope (2014). *Les Français et leur budget santé*. Paris, Sofinco.fr (<http://www.sofinscope.sofinco.fr/les-francais-leur-budget-sante-3/>, accessed 5 March 2015).

Thomson S, Foubister T, Mossialos E (2009). *Financing health care in the European Union: challenges and policy responses*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.



# Chapter 4

## **The impact of the crisis on the health system and health in Greece**

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### **Introduction**

Greece has been profoundly affected by the global financial and economic crisis, with wide-ranging economic, social and political consequences. In 2013, the country entered its fifth year of recession and was operating within severely constricted fiscal limits. Greece is still undergoing a massive and unprecedented process of change and structural reform, in large part driven by the terms of its loan agreement with the Troika and its Economic Adjustment Programme. This process contrasts starkly with previous attempts to reform the public sector, including the health sector, which were impeded by strong stakeholder opposition and weak administrative capacity (Economou, 2010).

Before the crisis, the Greek health system suffered from a wide range of problems. As a result, it was vulnerable to economic fluctuation and not well prepared to meet the changing needs of the population. While most of the reforms introduced since 2010 have been determined by the Troika, some of them had been proposed in the past. Current reforms have tended to focus on operational, financial and managerial dimensions, and cost-containment measures have generally taken the form of cuts across the board. In addition, reforms have often been implemented rapidly, without sufficiently considering potential side-effects. Nevertheless, important positive steps include the standardization of the health benefits package for all citizens, new monitoring tools for hospital management, a prospective payment system for hospital care, implementation of the System of Health Accounts of the OECD, a stronger and more transparent procurement system and the development of e-health governance tools.

What is needed now is a clearer, more integrated and better-designed health reform plan that accounts more fully for population health needs and adopts a more sophisticated and strategic approach, particularly regarding resource



allocation. Important barriers to effective structural reform include resistance by key stakeholders, low administrative capacities and the difficulty of getting the public health system bureaucracy to introduce managerial reforms and successfully complete complex tasks.

## **1. The nature and magnitude of the financial and economic crisis**

### **1.1 The origins and immediate effects of the crisis**

The global financial and economic crisis manifested itself in Greece in the form of a sovereign debt crisis that culminated in the largest international bailout ever agreed. Even in 2008, the Greek economy was already exhibiting a number of underlying economic problems; however, the revelation of inaccuracies in statistical indicators reported to Eurostat turned the spotlight of international financial markets on the country (Strupczewski, 2010). Within a matter of months, the budget deficit for 2009 was revised from the original 6% projection to the final 15.7% of GDP (Table 4.1). As the country's economy started to come under closer scrutiny, credit rating agencies repeatedly downgraded Greece's rating, and borrowing costs from markets started rising: the Greek Government's 10-year bond yield shot up from a maximum of 5.8% in May 2009 to a maximum of 12.1% a year later. By early 2010, it was clear that Greece would need international financial assistance to cover its budgetary needs for the year, and bailout negotiations started.

At the same time, households' preparedness to deal with the severe economic shock of the crisis was, at best, limited. The state of the economy steadily deteriorated in late 2009, prompting the first wave of comparatively mild austerity measures to be implemented. After years of steady decrease, unemployment started to rise rapidly from 2009 onwards; public sector salaries and pensions were sharply reduced, and household savings also began to decline, from €185 billion at the end of 2009 to €138 billion at the end of 2011 (Bank of Greece, 2013).

### **1.2 Government responses to the crisis**

The first bailout agreement was signed in May 2010: the funds available to the country were of the order of €110 billion, with €80 billion contributed by Eurozone governments and the rest by the IMF. This agreement in many respects resembled common IMF agreements: loan disbursement was phased over the three-year duration of the programme and was conditional on implementing specific reforms according to a predetermined timeline.

Greece's adjustment programmes failed to deliver the expected results in terms of achieving a primary surplus, reducing the debt burden and enhancing growth,

**Table 4.1** Demographic and economic indicators, in Greece, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population (in thousands) <sup>a</sup>	10,917	10,950	10,983	11,016	11,062	11,093	11,131	11,163	11,186	11,185	11,153	11,124	11,090
People aged 65 and over (% total population) <sup>a</sup>	16.6	17.0	17.4	17.7	18.0	18.3	18.5	18.6	18.7	18.8	19.2	19.1	19.9
Dependency ratio <sup>b,c</sup>	24.2	24.7	25.3	25.8	26.4	26.8	27.6	27.6	27.8	28.1	28.4	29.2	30.0
GDP per capita (US\$ PPP, current prices) <sup>a</sup>	18,249	19,744	21,402	22,497	23,861	24,349	26,803	27,709	29,569	29,384	28,444	26,934	25,475
Real GDP growth (%) <sup>a</sup>	4.5	4.2	3.4	5.9	4.4	2.3	5.5	3.5	-0.2	-3.1	-4.9	-7.1	-7.0
Government deficit (% GDP) <sup>b</sup>	-3.7	-4.5	-4.8	-5.6	-7.5	-5.2	-5.7	-6.5	-9.8	-15.7	-10.9	-9.6	-8.9
Government consolidated gross debt (% GDP) <sup>b</sup>	103.4	103.7	101.7	97.4	98.6	100.0	106.1	107.4	112.9	129.7	148.3	170.3	157.2
Total unemployment (% total labour force) <sup>b</sup>	11.2	10.7	10.3	9.8	10.5	9.9	8.9	8.3	7.7	9.5	12.6	17.7	24.3
Unemployment, men (%) <sup>b</sup>	7.4	7.1	6.8	6.2	6.6	6.1	5.6	5.2	5.1	6.9	9.9	15.0	21.4
Unemployment, women (%) <sup>b</sup>	17.1	16.1	15.6	15.1	16.2	15.3	13.6	12.8	11.5	13.1	16.2	21.4	28.1
Long-term unemployment (% of all unemployed) <sup>a</sup>	56.4	52.8	51.3	54.9	53.1	52.1	54.3	50.0	47.5	40.8	45.0	49.6	59.3
Long-term unemployment (% of active population) <sup>b</sup>	6.2	5.5	5.3	5.3	5.6	5.1	4.8	4.1	3.6	3.9	5.7	8.8	14.4

*Note:* c The dependency ratio is the ratio between the total number of people younger than 15 years of age or 65 years and older and the number of persons of working age (from 15 to 64).

*Sources:* a OECD, 2013; b Eurostat, 2013.

and the projections for the country's economic indicators were continuously revised to worse levels. In this context, the government's revenue-generating ability was constrained by the deteriorating economic situation, as well as rapidly rising unemployment, which placed additional fiscal demands on the public budget. Direct tax rates, VAT and a host of indirect taxes increased, but often they failed to meet the Economic Adjustment Programme's targets. The Troika required compensatory measures to be implemented in order to meet the fiscal targets, while the recession was deepening. Consequently, from 2010, Greece found itself having to implement extensive austerity measures aimed at drastically reducing public expenditure across the board, while cumulatively experiencing a 17.4% decline of its GDP in real terms between 2008 and 2012 (Matsaganis, 2012). The main economic indicators for the period 2000–2012 are summarized in Table 4.1.

Two further Memoranda of Understanding (MoUs) were signed in 2012, revising and consolidating details of the country's Economic Adjustment Programme. Indicatively, in February 2012, when the country was negotiating its second financial bailout agreement in the face of imminent bankruptcy, the government's 10-year bond yield reached an unprecedented 29.4%, levelling off eventually once new MoUs were signed in the course of 2012 (in March and November) and elections established greater political certainty.<sup>1</sup> In January 2013, the 10-year bond yield was still a very high 11.1%, (European Central Bank, 2013) highlighting the severely constricted fiscal space in which the country was still operating. The government's gross debt reached 170% of GDP in 2011 and the IMF projections were for 171% in 2012, 182% in 2013 and 180% in 2014 (IMF, 2013).

### 1.3 Broader consequences

At the time of writing (early 2014), economically, the Greek context is one of sustained economic recession, with the highest unemployment level in the Eurozone and large-scale retrenchment of public sector spending. Moreover, as a result of the conditionalities imposed by its international bailout agreement, austerity budgets will be the norm for the foreseeable future.

## 2. Health system pressures prior to the crisis

When the global financial and economic crisis started, the health system in Greece functioned within an outmoded organizational structure dominated by

<sup>1</sup> The political situation was particularly volatile between November 2011 and June 2012. In late 2011, Prime Minister George Papandreou, of the Socialist Party (PASOK), resigned in the face of significant political opposition and popular unrest over austerity measures and the terms of the second MoU that was being negotiated. A technocratic government of "national unity" took over until May 2012 when elections were held. Large gains by anti-austerity parties significantly changed the party-political landscape and no viable coalition partnerships were able to form a government. New elections in June resulted in a new unity government led by Antonis Samaras as Prime Minister.

clinical medicine and hospital services, without the support of an adequate planning unit or sufficient accessible information on health status, utilization of health services or health costs, and without being progressive and proactive in addressing the health needs of the population through actions in public health and primary health care.

As a result, the Greek health care system was suffering from several inefficiencies (Davaki & Mossialos, 2005; Economou, 2010), which can be summarized as follows:

- a high degree of centralization in decision-making and administrative processes;
- suboptimal managerial structures that lacked adequate information management systems and were often staffed by personnel without adequate managerial skills;
- lack of planning and coordination, and limited managerial and administrative capacity;
- unequal and inefficient allocation of human and economic resources;
- fragmented population coverage;
- an absence of a referral system and effective gatekeeping mechanisms;
- inequalities in access to services;
- high OOP payments;
- uneven regional distribution of human resources and health infrastructure;
- underdevelopment of needs assessment and priority-setting mechanisms;
- regressive funding mechanisms;
- an anachronistic retrospective reimbursement system; and
- absence of a health technology assessment system.

The old social health insurance system suffered from a large number of funds and providers with varying organizational and administrative structures offering services that were not coordinated. This resulted in different population coverage and contribution rates, different benefit packages and inefficient operation; all led to large accumulated debts.

In the context of the wider economic situation, the Greek health system came under pressure and reforming it was clearly a priority imposed by the Troika. It should be noted, however, that financial pressures predated the crisis, and structural problems had been accumulating for a decade (Economou, 2010). A failure to contain costs is evident from recent years' expenditure trends (Fig. 4.1). Over the 2000s, both public and private health expenditures steadily increased. Total expenditure on health rose from 8.6% of GDP in 2003 to 9.9% in 2009, despite the fact that total health expenditure (as a percentage of GDP) in Greece was already above the mean for the EU (8.06% in 2003 and 8.92% in 2009) (Eurostat, 2013). General government spending rose from 59.5% to 70.3% of

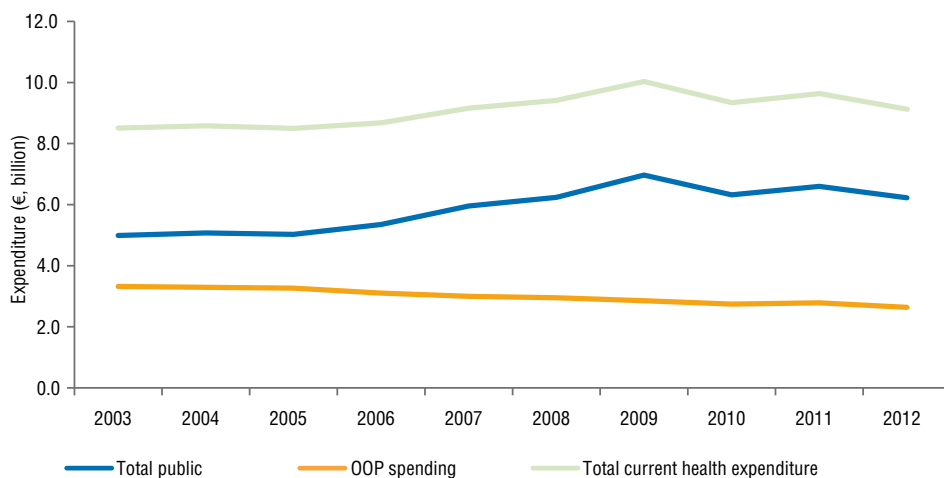
total health spending in the same period. High levels of private spending on health, primarily in the form of OOP payments, have always been a feature of the Greek health care system and continued to be high (Table 4.2). Pharmaceutical expenditure also shot up by 80% during the period, from €293 per capita in 2003 to €528 in 2010 (OECD, 2013), with more than 77% of spending covered by public money (OECD, 2013).<sup>2</sup> At the same time, the increase in pharmaceutical expenditure in other European countries was considerably less (29%) with the average per capita spending estimated at €326 in 2003 and €420 in 2010 (OECD, 2013). Table 4.2 presents the evolution of key expenditure indicators from 2003 to 2012. The failure to control expenditure growth can be attributed to a number of reasons, including the lack of control over investment and resource allocation as well as constant subsidies from the government budget to cover hospital deficits. It also contributed significantly to the growing deficits of some social health insurance funds (Economou, 2010).

Fragmentation of financing mechanisms between social health insurance funds and private sector physicians created incentives for supplier-induced demand, since physicians could be contracted by many insurance funds and be reimbursed on a FFS basis. Oversupply of services was further fuelled by the country's high number of physicians (Greece has the highest concentration of physicians among EU Member States) and a lack of control over private doctors, who were not required to implement any form of gatekeeping for hospital care or for referral to diagnostic or other specialized services. Furthermore, the pharmaceutical industry created incentives for supplier-induced demand by influencing physicians to prescribe more pharmaceuticals than needed. Indeed, studies suggest that the oversupply of services by private physicians had contributed to a higher annual per capita rate for medical visits compared with those in most western European countries, and to a relatively high number of pharmaceutical prescriptions (Kaitelidou et al., 2012b).

In general, rising health expenditure is an issue of constant concern in developed countries, and controlling its growth, as well as getting better value out of available resources, is an important objective of health policies. However, as mentioned above, Greece failed to control health spending: between 2000 and 2009, and the country's health budget deficit reached €50 billion (Liaropoulos, 2012). Consequently, at the onset of the crisis, the health sector was cited as "a major factor" in the country's economic derailment and as such came under intense scrutiny from the Troika.

Despite the highly centralized manner in which resources were allocated, the health system required more effective planning and coordination, managerial

<sup>2</sup> Results derived by the Centre for Health Services Management and Evaluation (CHESME), University of Athens. Reports on System of Health Accounts are subject to final approval by the Hellenic Statistical Authority (ELSTAT) before forwarding to the OECD.

**Fig. 4.1** Health expenditure as a percentage of GDP in Greece, 2003–2012

Source: OECD, 2013.

**Table 4.2** Health care expenditure trends in Greece, 2003–2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
THE per capita (US\$ PPP)	2,029	2,090	2,352	2,606	2,722	2,998	2,977	2,624	2,614	2,380
THE (€ billions)	14.7	15.9	16.4	18.1	20.4	22.0	23.2	20.8	20.2	17.7
THE (% GDP)	8.6	8.3	8.2	8.3	8.8	9.1	9.9	9.3	8.9	9.2
Total public expenditure on health (€ billions)	8.6	9.4	9.7	11.2	13.3	14.6	16.1	14.0	13.8	12.0
Public expenditure on health (% THE)	59.5	58.8	58.8	61.5	64.9	66.1	70.3	68.5	66.7	68.0
Total public expenditure on health (% all government spending)	11.7	11.1	12.8	13.2	12.3	13	12.9	12.4	11.4	11.4
VHI (% THE)	2.3	2.5	2.5	2.4	2.4	2.5	1.9	2.6	2.9	2.9
OOP expenditure (% THE)	38.2	38.7	38.8	36.1	32.8	31.4	27.6	28.5	30.2	28.8

Note: THE: Total health expenditure; PPP: Purchasing power parity.

Source: OECD, 2013.

capacity and adequate mechanisms to undertake needs assessment (Economou, 2010). Historically, hospitals operated by the national health service (NHS, known as ESY in Greek) had not enforced transparent and accurate tracking of their expenditures and the state had to step in regularly to cover accumulated deficits. In addition, an oversupply of specialist physicians coexisted with an undersupply of GPs and nurses. The lack of a functioning referral system between primary and higher level care, and problematic pricing and provider-reimbursement mechanisms, resulted in poor coordination of care, large OOP payments and a sizable black economy, impeding the system's ability to deliver equitable financing and access to services (Liaropoulos et al., 2008). At the same time, the age structure of the country has been changing. The percentage of the population over 65 rose from 16.6% in 2000 to 18.8% at the end of the decade (Table 4.1). The implications of this population ageing, together with the low birth rates, will need to be factored in when considering the country's economy and health care system.

By the time that the crisis hit, and despite the warning signs, both the Greek economy and the Greek health care system had amassed a number of structural problems. Past reform attempts in areas such as primary care, the organization and provision of health services by hospitals and the enhanced cooperation of social insurance funds failed to deliver the expected results or were not fully implemented (Davaki & Mossialos, 2005; Mossialos & Allin, 2005). Consequently, the need for reforms in the health care system is clear and has dominated the agenda of policy responses instigated by the crisis, particularly the attempt at large-scale cost-containment.

### **3. Health system responses to the crisis**

The health policy responses to the crisis and their effects should be seen from two perspectives. The first perspective relates to implementing much-needed operational and structural reforms, designed to address the weaknesses in the health care system as discussed in the previous section. The second perspective, which is particularly important when considering the effects of changes, relates to the measures stipulated in the MoUs, which, by and large, are fiscal consolidation measures.

#### **3.1 Changes to public funding for the health system**

Data reveal that public health expenditure, as a share of general government expenditure, reached its high point of 13.2% in 2006 (Health expenditure series; OECD, 2013; WHO Regional Office for Europe, 2014). However, after the introduction of extensive austerity measures, Greece had one of the lowest ratios in the EU by 2012, not exceeding 11.5% compared with the EU mean of 15%. Bailout conditions requiring a reduction in overall health expenditure

to 9% of GDP, and to less than 6% for public expenditure in 2012, had not yet been met but were close to the set target (Table 4.2). Between 2009 and 2012, total current health expenditure decreased by €5.4 billion (23.7%). Notably, in the same four-year period, public current health expenditure fell by a greater proportion, 25.2% or €4 billion (Table 4.2).

In particular, the MoUs required major cuts to hospital and pharmaceutical expenditure. Total public hospital sector expenditure (inpatient only, no outpatient services) decreased by 8%, from €7 billion in 2009 to €6.4 billion in 2012 (ELSTAT, 2014), through major savings in hospital supplies (medical supplies, orthopaedics, pharmaceuticals, etc.) and through MoU conditions stipulating cuts to health personnel salaries and benefits (see section 3.3). Expenditure trends for inpatient hospital stays are shown in Table 4.3.

An estimated fall of 32% (€2.1 billion) in total (outpatient) pharmaceutical expenditure also occurred, to the benefit of the social health insurance funds, which largely fund this expenditure. Public pharmaceutical expenditure (and other nonmedical durables) experienced the largest reduction, at 43.2%, from €5.2 billion (roughly 2.25% of GDP) in 2009 to €2.95 billion (or 1.53% of GDP) in 2012 (Table 4.3). Pharmaceuticals are an area that received special attention in the MoUs and a hard ceiling was set for 2012 and subsequent years. According to the MoUs, pharmaceutical expenditure should not exceed €2.44 billion in 2013 and €2 billion in 2014, thus setting a tight upper limit. If the limits were exceeded, clawbacks from producers (pharmaceutical companies) would be used to balance the budget.

The social health insurance funds also have seen reductions in revenue and government transfers. Because of rising unemployment and part-time employment, as well as a decrease in the working-age population, social insurance revenues decreased from €30.7 billion in 2008 to €24.4 billion in 2013 (ELSTAT, 2014). Moreover, MoU conditions aimed to curb the state's contribution to the civil servants' social health insurance fund. In the past, civil servants' contributions were 2.55% of their gross income and any spending that exceeded total contribution revenues was subsidized through the state budget. From 1 January 2011, the employers' contribution rate (i.e. the state's contribution rate) to the the civil servants' social health insurance fund was set at 5.1% of civil servants' salaries, while the contribution of the fund's retired pensioners was gradually increased from 2.55% to 4% in 2013.

OOP payments increased as a percentage of total health expenditure from 27.6% in 2009 to 28.8% in 2012 (see Table 4.2). Greece has always been characterized as quite a “privatized” system, particularly because of public underfinancing (Siskou et al., 2008). The black economy, including informal payments, represents a significant part of OOP payments (approximately 30%) and is indicative of the corruption in the health sector. Although these payments are very common in



**Table 4.3** Health care expenditure by sector in Greece, 2009–2012

	2009			2010			2011			2012		
	€ billion	% THE	% GDP	€ billion	% THE	% GDP	€ billion	% THE	% GDP	€ billion	% THE	% GDP
Inpatient health expenditure	8.45	36.44	3.66	7.62	36.72	3.43	7.99	39.64	3.83	8.2	46.31	4.24
of which public expenditure	6.97	30.06	2.89	6.00	28.91	2.7	6.29	31.21	3.02	6.43	36.31	3.33
Outpatient health expenditure	6.51	28.08	2.82	5.63	27.13	2.53	5.24	26	2.51	3.88	21.91	2.01
of which public expenditure	2.60	11.21	1.13	2.24	11.76	1.01	2.24	11.11	1.07	1.74	9.83	0.90
Pharmaceutical and other medical non-durables (outpatient) expenditure	6.56	28.29	2.84	5.95	28.67	2.68	5.48	27.19	2.63	4.46	25.19	2.31
of which public expenditure	5.20	22.43	2.25	4.55	21.93	2.05	4.00	19.85	1.92	2.95	16.66	1.53

*Notes:* THE: Total health expenditure. aIncludes diagnostic imaging and clinical laboratories.

*Source:* OECD, 2013.

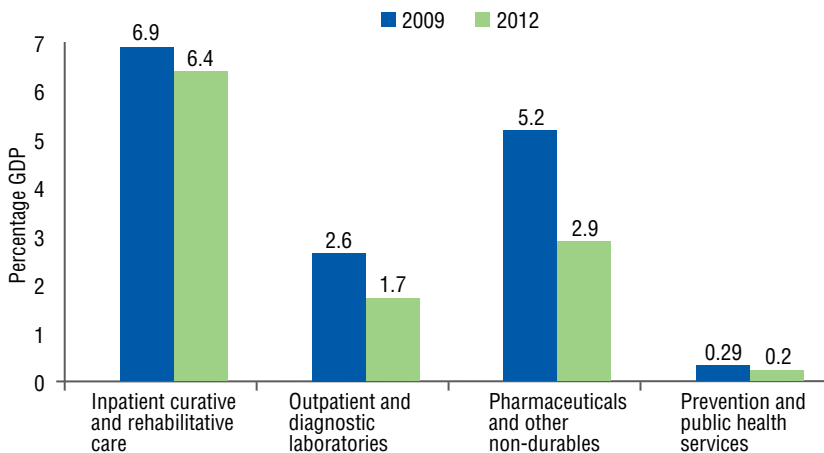
order to support insufficient health care budgets, they represent the worst option for financing the health sector as they cause inequalities affecting mostly the poor and vulnerable groups (Liaropoulos et al., 2008; Kaitelidou et al., 2013).

An increase in voluntary PHI between 2003 and 2012 has been observed (Table 4.2), although this still remains low compared with other EU Member States (Siskou et al., 2009). A number of factors explain people's reluctance to pay for additional insurance, including economic recession, social and cultural factors (e.g. low average household income), high unemployment and obligatory and full coverage by social insurance.

Government spending on prevention and public health services also was cut by around 13% even though this sector was already underfinanced in Greece. While the mean per capita expenditure on such services in EU Member States was €75.8 in 2009, the amount for Greece was estimated at €26.2, with further cuts reducing it to €23.1 in 2012 (OECD, 2013). Similarly, the expenditure for outpatient public curative services in Greece is 2.7 times lower than the EU mean for these services (OECD, 2013).

Summing up, Table 4.2 highlights the overall reductions in health care spending between 2009 and 2012. There have been consistent reductions not only in total current health expenditure but also in the public share of that expenditure (including spending by social health insurance funds, which decreased by 29.3% between 2009 and 2012). The changes in government spending on health by each subsector during the same period is shown in Fig. 4.2. It is clear that reductions have occurred across the board in hospital inpatient (curative and rehabilitative) care (7%), outpatient care (34.6%) and pharmaceuticals and other medical non-durable products (44.2%).

**Fig. 4.2** Government spending on health by sector in Greece, 2009–2012



Source: OECD, 2013.

## 3.2 Changes to coverage

### *Population entitlement*

Until 2011, the Greek social health insurance system provided coverage for almost 100% of the population through a network of several funds. The system was, and still is, linked to employment status and type of employment. The merger of almost all social health insurance funds and the creation of a unified fund had been proposed in several reforms since 1968 but had never been implemented. This situation changed in 2011 with the creation of the new National Health Services Organization (EOPYY) (see section 3.3).

EOPYY was intended to cover the vast majority of the population (workforce, dependants and pensioners), assuming the presence of only short-term unemployment. The basis for entitlement is insurance status. However, in the context of the deep crisis, unemployment rose rapidly to reach 27.3% in 2013. Under pre-existing legislation, EOPYY only effectively covers the unemployed for a maximum of two years, thus leading to a rise in the percentage of the uninsured population.<sup>3</sup> The Ministry of Labour currently estimates that approximately 2 million uninsured people do not have official access to health care. In order to address the high number of uninsured people, the Ministry of Health established in September 2013 a “Health Voucher” programme targeting people who have lost their insurance coverage and their dependant family members, which provides them with access to primary health care services (visits to contracted physicians, NHS facilities and services provided by contracted diagnostic centres). Health vouchers have a duration of four months and cannot be renewed. The programme was estimated to cover approximately 230 000 uninsured citizens until the end of 2014.<sup>4</sup>

### *The benefits package*

In June 2011, the benefit packages of the various social health insurance funds were standardized to provide the same reimbursable services across all funds, creating a new, common benefits package under EOPYY.<sup>5</sup> This process coincided with what is, in effect, the gradual administrative merger of the health divisions of the major social security funds (IKA, OGA, OAEE, OPAD, Oikos Naftou and TAYTEKO, covering salaried employees, agricultural workers, the self-employed, civil servants, sailors and merchant seamen, and banking and utilities employees, respectively) under EOPYY.<sup>6</sup> A basic characteristic of the common package is

<sup>3</sup> According to Laws 2434/1996, 2639/1998 and 2768/1999 and related ministerial circulars, unemployed people are covered for health insurance for two years.

<sup>4</sup> However, at March 2014, only approximately 23 000 health vouchers had been issued (out of 80 000 applications).

<sup>5</sup> The common benefits package is very similar to that which previously existed for the largest social health insurance fund, IKA.

<sup>6</sup> While the administration of the funds and their benefits packages have been brought into EOPYY, in some respects they are still operating as separate entities during the current transitional period.

the reduction in benefits to which the insured are entitled. For example, some expensive examinations, including polymerase chain reaction tests and tests for thrombophilia, that used to be covered, even partially, on an outpatient basis were removed from the EOPYY benefit package. In addition, entitlement restrictions were introduced in relation to childbirth, air therapy, balneotherapy, thalassaemia treatment, logotherapy and nephropathy treatment.

Moreover, the introduction of a negative list for medicines in 2012 resulted in the withdrawal of reimbursement status of various drugs that had previously been reimbursed (see also section 3.3).

### **User charges**

From 2011, an increase in user charges from €3 to €5 was imposed in outpatient departments of public hospitals and health centres. In addition, Law 4093/2012 introduced a €25 patient fee for admission to a state hospital from 2014 onward and an extra €1 for each prescription issued under the NHS (both in primary care and inpatient settings). However, the hospital admission fee was soon revoked because of the strong reaction of health care professionals and various other stakeholders; instead there are plans to replace it with an extra tax on cigarettes. User charges in all public facilities were removed for certain vulnerable groups (diabetics and transplant recipients have been added to the list). Increases in co-payments for medicines for specific diseases are outlined in Table 4.4. It is noteworthy that average monthly pharmaceutical expenditure increased between 2012 and 2013 despite price reductions in pharmaceuticals. This may be mainly attributed to increases in cost-sharing levels from October 2012. In general, average cost-sharing for pharmaceuticals rose from 13.3% in 2012 to 18% in 2013. Interestingly, only 8% of prescribed drugs (packets) were provided with 0% co-payment in 2013 compared with 13% in 2012 (Siskou et al., 2013).

**Table 4.4** *Increases in medicine co-payments for specific diseases in Greece, 2011*

<b>Diseases</b>	<b>Co-payment increase</b>
Alzheimer's disease, dementia, epilepsy, angiopathy, Buerger's disease, diabetes type 2, Charcot's disease	From 0% to 10%
Coronary heart disease, hyperlipidemia, rheumatoid arthritis, psoriatic arthritis, lupus, vasculitis, spondyloarthritis, scleroderma, chronic obstructive pulmonary disease, pituitary adenomas, osteoporosis, Paget's disease, Crohn's disease, cirrhosis	From 10% to 25%
Pulmonary hypertension	From 0% to 25%
Haemodialysis	No co-payment for medicines specifically treating the disease; previously, patients were exempt from co-payments on all drugs

Under Law 2883/2012, user charges for diagnostic tests in public hospitals have been abolished across the board even for the social health insurance funds that previously used to charge 25%.

### **3.3 Changes to health service planning, purchasing and delivery**

A number of measures have been introduced in an attempt to enhance efficiency through structural reforms, while others target shorter-term cost-cutting.

#### ***Health system structural reforms***

Structural reforms, particularly those targeting the fragmented and inequitable social health insurance system, had been identified as necessary long before the crisis occurred (Economou, 2010). Based on the provisions of the first MoU, Law 3863/2010 established a new framework for the functioning of the social health insurance system, which stipulated:

- the separation of the health branches of the wider social security funds from the administration of pensions;
- the merger of these health funds in order to simplify the overly fragmented social health insurance system;
- bringing all health-related activities under the Ministry of Health and Social Solidarity;<sup>7</sup> and
- the establishment of the Health Benefit Coordination Council.

The aim of the Council, whose actual existence was short lived, was to simplify the overly fragmented system with the establishment of criteria and terms for contracts between the social security funds and all health care providers in order to achieve reductions in spending.

By far the most significant structural reform has been the subsequent establishment of EOPYY and the administrative merging of the health care branches of the main social health insurance funds into a single health care insurance fund. EOPYY formally began operation in June 2011 and will act as the sole purchaser of medicines and all health care services for all those insured, thus acquiring higher bargaining power with suppliers (see below). EOPYY is also the country's main new body tasked with managing primary care. Its role is to coordinate primary care, regulate contracting with all health care providers and set quality and efficiency standards, with the broader goal of alleviating pressure on ambulatory and emergency care in public hospitals.

<sup>7</sup> Apart from the Ministry of Health, a number of other ministries previously had health-related responsibilities. For example, the Ministry of Labour was responsible for the health branches of the insurance funds while the Ministry of Development was responsible for the pricing of medical products.

Another significant development has been the effort to achieve greater decentralization of health care authorities. In June 2010, the new government enacted a law to establish a new architecture for municipalities and regions (known as the Kallikratis Plan). The Kallikratis Plan created 13 regions to replace 76 prefectures and 1034 municipalities were reduced to fewer than 370. Under the reorganization, regional health authorities were expected to play a much greater role in managing and organizing human resources in the NHS and in the provision of primary care services. However, to date, efforts to create these more empowered decentralized regional authorities either have not been implemented or have been substantially weakened. The existing regional health authorities have weak co-coordinating functions and the health care system is still characterized by strong centralization. A possible explanation is limited administrative capacity, limited available economic resources and (currently) the absence of a clear plan for reforming primary care (see also section 5.2).

More recently, (in February 2014) the Greek Parliament passed new legislation on primary health care, establishing the National Primary Health Care Network, coordinated by the regional health authorities. All primary health care facilities under EOPYY, rural health centres and their surgeries as well as the few urban health centres, are now under the jurisdiction of the regional health authorities. The aim is for these facilities to function 24 hours a day, seven days a week. In addition, the law provides for the establishment of a referral system based on GPs. The effectiveness of this new measure will rely heavily on robust implementation.

### ***Purchasing and procurement***

Under EOPYY, procurement of health supplies will be planned at the regional level via the development of regional programmes for goods and services. These programmes have to be adopted by the Co-ordination Committee for Procurement, which is responsible for assigning a contracting authority and the tender mechanism for each type of procurement. The Committee is able to select either a company or a private agency as a contracting authority, in line with its objective of achieving economies of scale and overall efficiency.

### ***Hospital sector efficiency***

Several measures have been introduced or are being attempted in the hospital sector, involving structural reforms, changes to the hospital payment system and reductions in the cost of hospital supplies.

Major restructuring of the public hospital sector has been targeted as part of efficiency-enhancing efforts, with the Minister of Health announcing in July 2011 a plan to cut the current number of public hospital beds from 35 000 to 33 000 and reduce the number of clinics and specialist units from 2000 to fewer than

1700, with 330 merging and another 40 being moved. In addition, instead of the 133 NHS hospitals having their own management boards, there will be a total of 83 councils responsible for administrating all public hospitals, and the number of directors and deputy directors will be reduced from 175 to 145 (Ministry of Health and Social Solidarity, 2011). It is estimated that these changes will lead to a reduction in spending by €75 million by 2014 and €150 million by 2015. The actual impact of these measures and their expected cost savings remain to be verified in 2015. Furthermore, as a revenue-raising measure, 500 public hospital beds will be set aside for priority use by PHI companies for their clients. In addition, no new doctors will be hired in state-owned institutions, but private doctors contracted with EOPYY may work in public hospitals one day a week. So far, progress in implementing this major restructuring of the sector has been limited. On the one hand, the planned mergers between hospitals owned by IKA, the main social health insurance fund prior to the introduction of EOPPY, and those owned by the NHS have been implemented, putting them all under state ownership. On the other hand, to date, implementation of the other major elements outlined above has been limited to the administrative merging of adjacent hospitals and the consolidation of similar departments within the same hospital.

In terms of rationalizing the hospital payment system, the former reimbursement method based on a fixed per diem charge was abandoned since it did not reflect the real hospitalization cost, excluding among others, the cost of personnel salaries. In 2012 a new payment system (called KEN-DRG), based on the German version of DRGs, was rapidly developed. The new system was implemented in January 2013 but has encountered a number of problems. A recent KEN-DRG data analysis showed that 8–21% of overall hospital revenue, depending on the health region considered, resulted from outlier payments, mostly covering per diem fees (i.e. cases in which inpatient treatment exceeded the average length of stay for the specific KEN-DRG). This implies that the current system requires corrective amendments and indeed, so far, four revisions have been made (Polyzos et al., 2013). Another problem is that the MoU impelled Greece to implement a DRG system in a very short time period (one year). As a result, the pricing of KEN-DRGs is based not on actual costs and clinical protocols but was achieved via a combination of activity-based costing with data from selected public hospitals, and “imported” cost weights. Furthermore, the salary cost of those employed in hospitals is not included.<sup>8</sup>

Reducing input costs, including the overall cost of hospital supplies (pharmaceuticals, medical supplies, orthopaedics and chemical reagents) has been a major objective. Hospital supplies represent 68% of total hospital

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<sup>8</sup> Those employed in public hospitals are civil servants paid directly through the state budget.

operating expenses (i.e. hospital expenditure excluding salaries and wages) and these costs were cut by approximately 38.2% between 2009 and 2011 by streamlined procurement procedures, implementing pharmaceutical policy reforms and through horizontal cuts decided by the Ministry of Health and Social Solidarity. Expenditure for orthopaedics and prosthetic devices was reduced by more than 67% during this period, followed by medical supplies, pharmaceuticals and chemical reagents, which fell by 38.5%, 29% and 30.5%, respectively (Ministry of Health and Social Solidarity, 2012b).

Counterbalancing these gains however, operating expenditures (e.g. consumables, overheads, security) showed a considerable increase in many hospitals and the immediate causes are not known. For example, in a sample of 40 general hospitals (out of 90) for which all expenditure data were available for 2009–2011, expenditure on various contracted-out services (e.g. legal services, counselling services) recorded an increase of 40% in 2010 (compared with 2009) and a further increase of 27% in 2011, while for the same periods the same hospitals managed to achieve decreases for pharmaceuticals equalling 12% (in 2010) and 28% (in 2011) and for medical supplies equalling 25% (in 2010) and 18% (2011). The results for other overheads or outsourcing services are similar. Examples include catering (an increase of 22% in 2010 and 12% in 2011 for the 19 hospitals for which data were available for the three-year period); cleaning (16% increase in 2010 and 24% increase in 2011 for 50 hospitals); and security services (23% increase in 2010 and a further 27% increase in 2011 for 34 hospitals). Considering the fact that overheads are among the first expenditures to be cut during cost-containment efforts, such results highlight that this is an area that should be examined more thoroughly in terms of identifying impediments to the efficient allocation of resources (Kaitelidou et al., 2012a).

In the private hospital sector it is difficult to obtain a clear picture as yet since the available data seem to be controversial. Anecdotal evidence is accumulating that the demand for private hospital services has decreased. According to ICAP (2011), private hospital revenues decreased by 14.1% between 2009 and 2010, which may reflect, among other things, delayed reimbursements by EOPYY. Despite this negative trend, the number of private hospital beds only slightly decreased (by 0.3%) between 2009 and 2010 and the number of staff fell by 5.3% (ICAP 2010, 2011). However, according to OECD data (OECD, 2013) private hospital expenditure (on a cash basis) slightly increased, from approximately €1.98 billion in 2009 to €2.53 billion in 2011. The main funding source was households since households contributed €921.6 million to total private hospital expenditure in 2011, compared with €771 million derived from general government and €360.6 million from PHI. The corresponding figures in 2009 were similar: €852.4 million (households), €824.4 million (general government) and €298.3 million (PHI).



### ***Reductions in health sector salaries and changes to working conditions***

Enhancing efficiency without the appropriate staffing levels and staff mix is – at best – a difficult endeavour. Even before the crisis, staffing levels for nurses and other health sector workers (excluding physicians) were already very low in Greece. According to OECD data, Greece has the lowest number of nurses per 1000 population in Europe (OECD, 2013). Exacerbating this problem, after the MoU, many health care professionals decided to retire in order to ensure better pensions; consequently, staffing levels have worsened.

The salaries of health care personnel in Greece were among the lowest in the EU even before the crisis. However, in the drive to reduce health system input costs, salary cuts were applied in 2010 to all public health care staff, including administrative personnel, doctors, nurses, pharmacists and paramedical staff (12% in January 2010 and a further 8% in June 2010). Additionally, almost all subsidies to health care staff were abolished.<sup>9</sup> In practice, three types of salary cut actually took place: horizontal cuts from tax increases and a special solidarity levy, cuts through the introduction of a new unified salary system for all public sector employees and cuts through reductions in the “special salary system” for doctors. Moreover, planned performance-based productivity bonuses were not implemented as no targets were set, nor did any staff evaluations take place.

Other workforce measures aimed at reducing costs include the non-renewal of contracts for temporary staff employed under fixed-term contracts and a reduction in the replacement levels of retiring staff (for every five people retiring only one will be appointed).

### ***Enhanced monitoring and accounting procedures***

Additional measures adopted concern the governance, monitoring and financing of the health system, as well as for hospitals and pharmaceuticals. More precisely, measures include:

- greater budgetary and operational oversight of health care spending by the Finance Minister and publication of audited accounts;
- data on expenditure pending payment (arrears) of the state and hospitals monthly, 30 days after the end of each month, to be provided by the Ministry of Finance;
- arrears to be reported to parliament as they develop (currently they are revealed only about every three or four years, when governments tend to turn over, and no aggressive policy response is discernible);
- the compulsory use (since July 2012) of e-prescribing for all medical activities (medicines, referrals, diagnostics, surgery) in all NHS facilities;

<sup>9</sup> Indicatively, a registered nurse with 16 years of professional experience receives a gross monthly salary of €1509.

- the establishment by the Ministry of Health and Social Solidarity of two web-based platforms, one for gathering and assessing monthly data from NHS hospitals (ESYnet; Ministry of Health and Social Solidarity, 2012a) and one for monitoring regional health resource allocation and regional health status (Health Atlas; Ministry of Labour, Social Insurance and Welfare, 2014); and
- the development of the Price Monitoring Tool for the collection and analysis of tenders and technical specifications published by hospitals.

In addition, a collaboration between the Ministry of Health and Social Solidarity, the Hellenic Statistical Authority (ELSTAT) and the University of Athens Centre for Health Services Management and Evaluation (CHESME) has resulted in the implementation (in 2013) of the OECD System of Health Accounts in Greece, providing for the first time, health economic data harmonized with the methodology used by Eurostat and the OECD.

In hospitals, a number of specific monitoring and accounting reforms have been introduced or are under consideration. For example, double-entry accrual accounting was introduced in all public hospitals in January 2012 and the cost accounting system was expected to be introduced during 2013. A uniform coding system was introduced in 2012 along with the establishment of a common registry for medical supplies for procurement purposes (by the Co-ordination Committee for Procurement). However, computerization, integration and consolidation of information technology systems, and centralization of information has not yet been achieved and hospitals use their own individual local information systems.

### ***Pharmaceutical sector reforms***

The pharmaceutical sector has seen a number of measures aimed at containing costs and enhancing efficiency.

1. Responsibility for the pricing of medicines has been transferred to the National Drug Organization (EOF) and all other aspects of pharmaceutical policy to the Ministry of Health and Social Solidarity. Previously, prices were set by the General Secretariat of Commerce.<sup>10</sup> This change was designed to stimulate more efficient decision-making and administration.
2. A positive list for medicines was reintroduced in 2011 (it had been abolished in 2006 on the grounds of enhancing access to medicines). Initially, the positive list, in and of itself, had little impact since all drugs that were reimbursed at the time were included in the positive list. Rather, the reintroduction was motivated by revenue raising as there was a requirement that a special fee be

<sup>10</sup> The General Secretariat of Commerce is situated within the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks.

paid by pharmaceutical companies whenever a new drug was added to the positive list. In 2012, a new negative list of non-reimbursable medicines was introduced, containing many pharmaceuticals that previously were eligible for reimbursement. Under the terms of the MoU, this negative list should be updated twice a year. In parallel, an over-the-counter drug list has been in place since 2012, comprising many medicines that until then had been reimbursed (e.g. some pain relief medicines) but which now must be paid for OOP.

3. Since November 2012, the prices of all medicines have been targeted through a new reference pricing system for the reimbursable drugs on the positive list, which has reduced the reimbursable price of drugs by up to 70% in some cases. This strategy followed the reduction in VAT for medicines (from 11% to 6.5%), implemented in 2011, which also reduced medicine prices. In parallel, a mechanism of quarterly rebates (automatic clawback) to be paid by the pharmaceutical industry has been implemented should pharmaceutical expenditure exceed pre-agreed ceilings.
4. The government has promoted the greater use of generic medicines and prescribing by active substance. A policy is now in place stipulating that the maximum price of generics cannot be set at more than 60% of branded drugs. Another important measure has increased the use of generics in public facilities, under a policy that 50% of medicines prescribed/used in public hospitals should be generics. Consequently, an increase in the use of generics was reported by almost all hospitals, representing 26% of the total pharmaceutical expenditure in public hospitals (as a value) in 2011 (Ministry of Health and Social Solidarity, 2012b).
5. Pharmaceutical expenditure has been tackled via more efficient purchasing strategies by NHS hospitals, including the reduction of drug procurement prices by 20% through the implementation of price caps for approved drugs; the establishment of tenders for the supply of pharmaceutical products based on the active substance; and the development of an (extended) list of hospital drug substances<sup>11</sup> for which the Co-ordination Committee for Procurement (see below) will issue unified tenders for supply contracts.
6. In a demand-side measure, prescription guidelines for physicians have been developed and issued on the basis of international prescription guidelines (Economou, 2012).
7. The implementation of a nationwide e-prescribing system is expected to limit the growth of pharmaceutical expenditure, particularly costs related to overprescribing since the system monitors the prescribing pattern of

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11 The hospitals drugs list is an extended version of the general positive list, containing more drugs and substances.

physicians and the dispensing patterns of pharmacies. Use of e-prescribing is also expected to serve as a tool to promote alignment with prescribing guidelines, document the medication profile of the population, support the process of applying clawbacks and enhance transparency by facilitating the prescription claims procedure.

Overall, reductions in pharmaceutical expenditure are being pursued mainly by price reductions, increased rebates (clawbacks imposed on private pharmacies and pharmaceutical companies for both inpatient and outpatient drugs) and, to some extent, control of the volume of consumption (e.g. via prescription control mechanisms and e-prescribing). The reductions in outpatient pharmaceutical expenses are being pursued not only through price reductions but also through the introduction of innovative and more efficient ways of distributing expensive drugs to chronically ill outpatients through public pharmacies, where prices are lower than in private pharmacies. In this respect, the percentage of social health insurance funds' pharmaceutical expenditure for drugs dispensed through public pharmacies increased from 6.5% in 2009 to about 13% in 2011.

### ***Reforms for pharmacies***

Measures have also been introduced to liberalize the pharmacy market to increase access and enhance efficiency: more than one pharmacist can now work at the same pharmacy; new pharmacists can form partnerships with incumbents; pharmacies can be established in closer proximity to each other; hours of business have been extended; a decrease in the population threshold for setting up a pharmacy has been implemented; and rebates can be imposed on pharmacies, effectively reducing their profit margins.

## **4. Implications for health system performance and health**

### **4.1 Equity in financing and financial protection**

Research conducted before the current economic crisis has documented amply that the financing of the Greek health care system is significantly inequitable. Public funding of the health sector is highly regressive, disproportionately burdening the lower socioeconomic groups of society, for a number of reasons: the high level of official and unofficial (hidden economy) private spending on health, widespread tax evasion and the high proportion of indirect taxation and social security contribution evasion (Liaropoulos et al., 2008; Siskou et al., 2008; Economou & Giorno, 2009; Economou, 2010). The crisis exacerbated existing problems, and many of the policy measures introduced under pressure from bailout conditions have made health sector financing more inequitable.

The imposition of public health spending restrictions (to no more than 6% of GDP) and the simultaneous decline in GDP (since 2009, with further decreases in the years that followed) means that the public health sector is called upon to meet the increasing needs of the population with decreasing financial resources. This has negative effects, particularly for the middle and the low income households that do not have the disposable income to buy private health services. Moreover, rising unemployment, part-time working, flexible employment and austerity measures (e.g. public sector salary cuts) have led to falls in household income and social health insurance funds' revenues. This situation has led to additional strains on the already overloaded public health system. Combined, these factors could lead to a de facto two-tier health system where those who can afford to pay for private health services will be able to meet their health needs, while those without sufficient resources must attempt to access services from a severely strained public system.

Other burdens on the population, particularly the poorer strata of society, include the increase in user charges, particularly for outpatient health care; private physician consultations in the afternoon surgeries of public hospitals on a FFS basis; patient fees for admission to public hospitals; increases in co-payments for medicines; and the removal of certain laboratory and other tests from EOPYY reimbursement.

#### **4.2 Access to services**

Access to care, an essential element in achieving quality of life and growth, is a main objective in the *Europe 2020* strategic plan (European Commission, 2014). In times of crisis, reduced resources have a negative impact on access to health care services mainly through increased demand, increased waiting times and increased co-payments, but even through decreased ability to make informal payments (Morgan & Astolfi, 2013).

Although there are no official data, anecdotal evidence from health care personnel suggest that waiting times to receive public health services have increased. In addition, according to data published by a market research company (which, however, are limited in scope, with small samples and, in some cases, unknown methods), 19% of survey respondents reported major problems in accessing public hospitals because of waiting list issues and 28% of the sample stated that they could not buy their medicines because of continuing pharmacists' strikes during 2011 (Tripsa et al., 2012).

In terms of actual utilization rates, the results are mixed. First, it appears that the use of public services, as opposed to private ones, has risen. For example, a 24% increase in patient admissions to public hospitals (with an average length of stay of 4.25 days) was recorded in 2010 compared with 2009, and

a 6% increase in patient admissions (with an average length of stay of 4.13 days) was recorded in 2011 compared with 2010. Additionally, the hospital bed occupancy rate rose from 64% in 2009 to 69% in 2010 and to 73% in 2011. There were also 6% and 18% increases in surgical interventions and laboratory examinations, respectively, from 2010 to 2011 (Ministry of Health and Social Solidarity, 2012a,b).

Moreover, visits to public hospital dental services and obstetricians also increased (these are two areas that, historically, have been mainly privately funded by the Greek population). Consequently, utilization has increased at a time when inputs and/or input prices have fallen. However, without adequate data on such factors as the quality of services, it is not possible to discern whether meeting these increased levels of utilization translates into actual increased efficiency in the delivery of the services mentioned. Nor can we tell whether or not adequate and appropriate levels of care are being provided and meet patients' needs.

At the same time, visits to outpatient departments of public hospitals decreased by 8.9% in 2010 compared with 2009 (from 12 497 294 in 2009 to 11 383 788 in 2010) and remained relatively stable in 2011 compared with 2010 (from 11 383 788 in 2010 to 11 367 493 in 2011). In addition, visits to afternoon surgeries of public hospitals (compulsory afternoon shifts)<sup>12</sup> decreased by 6% in 2010 compared with 2009 and by 19% in 2011 compared with 2010 (from 559 358 in 2009 to 527 602 in 2010 and 429 903 in 2011) (Ministry of Health and Social Solidarity, 2012a,b).

Law 3868/2010 introduced the mandatory all-day functioning of all public hospitals in order to increase access to health services and to cope with extra demand, as well as to increase revenues.<sup>13</sup> While the second objective was met (the target revenues of over €100 million was achieved), the decline in the number of visits to public hospitals is difficult to interpret; it may suggest that the policy did not achieve the first objective, which was to increase access.

Since the onset of the crisis, a number of nongovernmental organizations, such as Médecins du Monde and Médecins sans Frontières, which used to cater primarily for immigrant populations, have scaled-up their provision of a limited number of health services to a much broader constellation of groups, including the poor, the unemployed, the uninsured and undocumented migrants. Moreover, a number of “social surgeries”, medical practices staffed by volunteer doctors providing health services and drugs, have been established in large urban centres to cater to those in need.

12 The afternoon surgeries provide medical interventions beyond diagnostic and therapeutic medical actions; that is, they now also undertake invasive operations.

13 All-day functioning of hospitals had been introduced in 2001 but only applied to hospitals with the necessary infrastructure to support all-day clinics. The 2010 measure is obligatory for all public hospitals.

### 4.3 Impact on hospital sector efficiency

A recent university research study examining the performance of public hospitals in terms of their efficiency during the recession found that despite serious cost-containment efforts, only 28% of the 90 hospitals analysed were found to be efficient (Kaitelidou et al., 2012a). However using bootstrapping methodology, none of the hospitals appeared to be efficient while the utilization of the available inputs did not exceed 80%. Nevertheless, among the best practices used were effective procurement policies, e-auctions, tendering and renegotiation of contracts with a number of suppliers. In 2011, general hospitals focused only on cost-containment efforts, which, in fact, did not have the expected results. Expenditures were indeed cut by approximately €680 million (from 2009 to 2011) but this was mostly the result of cuts in “easily identified supplies” such as pharmaceutical, orthopaedic or medical supplies. Two more studies presented similar findings, highlighting that public hospitals have succeeded in reducing their budgets but at the same time not increasing substantially, their efficiency scores (Katharakis et al., 2013; Tsavalias, 2013).

### 4.4 Quality of care

Several initiatives have been implemented in attempts to improve quality of care. According to Law 3868/2010, all hospitals are now obliged to set up quality assurance departments and quality assurance committees. Their roles are to monitor and evaluate whether procedures on patient safety (e.g. incidence of hospital infections and control of antibiotic-resistant bacteria) and laboratory accreditation are being met. They report to the Ministry of Health and Social Solidarity on a quarterly basis. Additionally, patient satisfaction surveys are being conducted in hospitals on a compulsory basis. The Ministry of Health and Social Solidarity also organizes conferences on various aspects of health care quality which are compulsory for hospital employees, with the aim of promoting continuous education in the field. Lastly, a new agency, the National Evaluation Centre of Quality & Technology in Health (EKAPTY, <http://www.ekapty.gr/>) was established in 2010 for the certification of quality management systems, evolving from the Research Centre for Biomaterials (EKEVYL).

Although these measures are expected to have a positive impact, some other aspects of the functioning of the health system raise questions about the quality of services. For example, shortages in nursing personnel are a permanent characteristic of the public hospital sector, and staffing level problems have worsened since the application of the MoU as many health care professionals chose retirement in order to ensure better pensions. The impact on staff reductions on both efficiency and quality of services is not known but it is expected that both will decline.

## 4.5 Transparency and accountability

Before the economic crisis, a number of institutions were tasked with combating corruption and ensuring transparency and accountability in public administration and the health care sector. These include the General Inspector of Public Administration, the Body of Inspectors for Health and Welfare Services (SEYYP) and the Ombudsman of Health and Welfare as well as YPEDYFKA, the agency that monitors social health insurance funds' expenditure. Although these institutions have seriously tried to achieve their mandates, their effectiveness has been limited, mainly because of the incentives for unethical behaviours and opacity promoted by the health system's structural deficiencies. These deficiencies include

- a lack of information for health service users;
- long waiting lists because of unequal and inefficient allocation of human and economic resources and of facilities;
- ineffective managerial structures, lacking adequate information management systems and in many cases staffed by personnel who do not have the right managerial skills;
- limited administrative capacity;
- lack of coordination among the large number of payers;
- absence of adequate financial management and accounting systems;
- lack of monitoring processes and supervision mechanisms;
- irrational pricing and remuneration policy; and
- low health professionals' salaries that are not related to their performance.

Some of the reforms introduced after 2010 are expected to have a direct effect on transparency and accountability. Under Law 3892/2010, all physicians associated with the social security institutions, doctors working in public health service units as well as pharmacists, were required to register with the e-prescription system and enter the required prescription electronically. Later, the use of e-prescribing for all other medical acts (referrals, diagnostics, surgery) was expanded to all NHS facilities. Moreover, a comprehensive range of positive measures have been implemented to increase monitoring and make financial transactions within the health system more transparent (see section 3.3).

Last, but not least, the Clarity Programme promotes transparency and openness of the Greek Government and its policies (Diavgeia, <https://www.diavgeia.gov.gr>). Since October 2010, all ministries, public institutions, regulatory authorities and local governments have been obliged to upload their decisions onto the Internet, and, henceforth, these decisions, including those in the health sector, cannot be implemented if they are not uploaded on the Diavgeia web site.

These measures may have positive long-term effects provided that additional attention is given to their full implementation.



## 4.6 Impact on health

Economic crises can negatively affect health status, not least through declines in public spending and household income (Musgrove, 1995; Stuckler et al., 2009). Both have sharply declined in Greece, and the effects of the crisis and austerity on health have already been marked, particularly for vulnerable groups. Since the onset of the crisis, several studies have been published investigating the effects on public health, and the latest available information is reviewed here.

While it will take several years for the full effects of the crisis on population health to be fully assessed, key indicators have already significantly deteriorated. In relation to population health, the first effects of the crisis have been noted in self-reported health, mental health and infectious diseases. Studies of self-rated health using a pre-crisis benchmark found an increase in the prevalence of people reporting their health as bad, and who linked this development to the economic crisis (Kentikelenis et al., 2011; Zavras et al., 2012; VANDOROS et al., 2013). In addition, a significant increase in people reporting unmet medical and dental need was noted (Kentikelenis et al., 2011).

Mental health is particularly vulnerable to rapid economic fluctuations (Durkheim, 2006), and the first available data reveal worrisome trends. There was a 45% rise in suicides between 2007 and 2011 (ELSTAT, 2013), and this increase was particularly pronounced for men of working age (Kondilis et al., 2013). Psychiatric surveys also reveal a worsening of mental health status. The one-month prevalence of major depression was found to be 8.2% in 2011; a nearly 5% rise since 2008. This rise was significantly associated with economic hardship, thus linking the development to the crisis (Economou et al., 2012). In addition, a recent survey found a 36% increase between 2009 and 2011 in the number of people reporting an attempted suicide in the month before the survey, with a higher likelihood for those experiencing high economic distress (Economou et al., 2011).

Child health has also been affected. The latest available data indicate a rise in low-birth-weight babies by 19% between 2008 and 2010 (OECD, 2013), which can have long-term implications for a child's health and development (UNICEF, 2013). The long-term decline in infant mortality has reversed, with an increase of 43% over the same period (Eurostat, 2013). In addition, obstetricians have reported a 32% rise in stillbirths during the same period, while fewer pregnant women have access to prenatal care services (Vlachadis & Kornarou, 2013). While these indicators cannot be directly attributed to the effects of the economic crisis, the reversal in previously improving trends is a worrying factor.

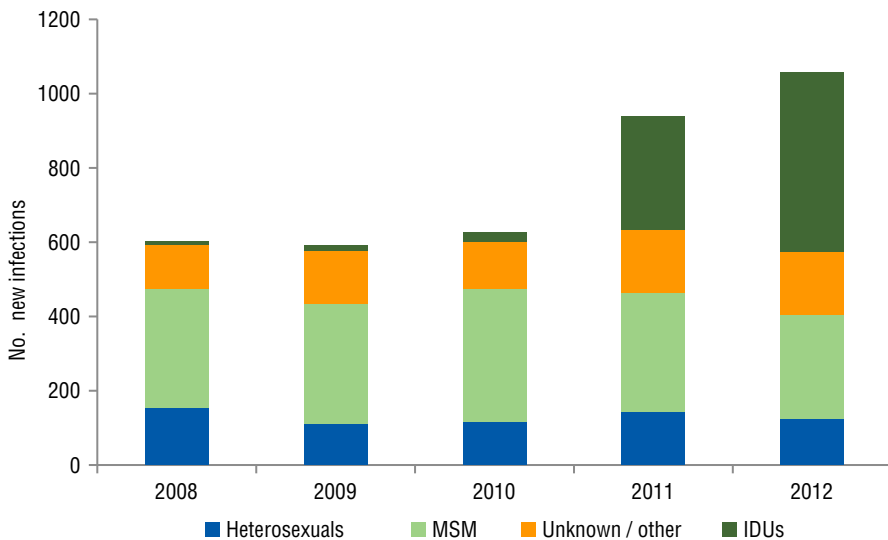
Infectious diseases have been shown to spread in periods of economic turmoil (Stuckler, King & Basu, 2008) and according to researchers at the Greek Centre for Disease Control and Prevention, Greece "has been suffering a

disproportionately high morbidity and mortality burden of different large-scale epidemics since the beginning of the economic crisis” (Bonovas & Nikolopoulos, 2012). For example, Greece ranked 4th out of 30 countries in deaths from the outbreak of the A(H1N1) influenza virus, and additional outbreaks of malaria and the Western Nile virus were noted over the period 2009–2012.

The crisis and associated adjustment policies have affected the health of vulnerable groups in particular (cf. Rechel et al., 2011). The most striking finding relates to the increase in incidence of HIV infections, with injecting drug users being the main driver for the increase (Fig. 4.3). The increase among this subpopulation of carriers was 12.3-fold from 2010 to 2011, and 1.6-fold from 2011 to 2012. This increase is directly linked to the crisis as funding available for HIV prevention and treatment services became limited. The distribution of both syringes and condoms fell between 2009 and 2010. However, in response to the outbreak, the number of syringes distributed rose from 7 per injecting drug user per year in 2010 to an expected 45 in 2012. While this is a welcome increase, it is still well below the minimum of 200 recommended by the European Centre for Disease Prevention and Control (2012).

On a more positive level, road accidents and related injuries and deaths are in steep decline, as people switch to alternative, more economical ways of travel or use cars less. Between 2008 and 2010, road traffic injuries fell by 23.5% and deaths by 37% (Michas & Micha, 2013).

**Fig. 4.3** Incidence of new HIV infections by transmission category in Greece, 2008–2012



Notes: IDU: Injecting drug users; MSM: Men who have sex with men.

Source: European Centre for Disease Prevention and Control, 2012; KEELPNO, 2013.

## 5. Discussion

### 5.1 Drivers of change

Most of the reform measures introduced after 2010 in the Greek health care sector have been determined by external agents and are specified as targets in the MoUs. This might be considered as a paradox given that quite a few of the measures were proposed in the past and are not new. Priority areas and necessary reform measures focusing on restructuring of primary health care, pooling of financial resources, changing the provider-payment system, introducing new managerial and administrative methods, adopting cost-effectiveness and monitoring mechanisms, and developing policies for better allocation of resources have been repeatedly analysed and developed by the scientific community (Economou, 2010). The paradox lies in the fact that, although the structural problems of the health system had been recognized, the absence of political will to promote changes made reform proposals only exercises on paper.

Explaining the drivers of health system reform in Greece is not simply a story of the government responding to external shocks, although this is a central factor. In a recently published study on England and Italy, Doetter and Gotze (2011) concluded that economic shocks, while creating windows of opportunity for significant policy change, do not play as significant a role as “system-specific deficits” in driving reforms. However, system-specific deficits do not suffice in explaining changes in regulation. Rather the content, timing and successful passage of reforms also depends largely on the acceptance and diffusion of policy ideas by political actors, who, driven by political ideology, push certain policy solutions through. We also see value in the thesis of Tsoukas and Papoulias (2005), which argued that a successful change process must first disrupt the self-referentiality typical of state-political organizations, and that such disruption happens mainly through externally generated behaviour-shaping information. Based on these insights, we conclude that in Greece's case the existence of system-specific deficiencies have provided the breeding ground for reform but in the absence of political will to drive the domestic reform agenda the role of economic shocks is crucial in promoting changes, particularly since political actors, decision-makers and stakeholders appear to disagree fundamentally over the values and the direction of health reforms (Economou, 2012).

However, a note of caution must be sounded. Although the current economic crisis may be seen as an external trigger that helped to create momentum for change, this does not imply an acceptance of the direction of all the reforms or of their impact on the effective and efficient functioning of the health system, or on equitable access to services.

## 5.2 Content and process of change

The reforms currently taking place in the Greek health care system have focused mainly on operational, financial and managerial dimensions. This might be considered reasonable as the reforms attempt to tackle serious long-term problems. However, this perspective seems to ignore the citizen/patient side of the equation in that the formulation of a patient-centred health system seems to be out of the scope of the current reform package. In order for the Greek health care system to achieve its stated objectives – to provide comprehensive and high-quality services equitably, universally and free at the point of delivery – it should be geared towards citizens and facilitate patients' orientation within the system. However, the Greek health care system is still chaotic for patients, given that a referral system based on general practice or primary health care groups has only just been mandated (in 2014) and we have yet to see whether its implementation will be successful. Since the creation of the NHS in 1983, Greece has lacked a GP-based comprehensive, integrated primary health care system, with gatekeeping functions, particularly in urban areas. Other areas that have not been included in the health reform agenda are measures to ensure continuity of care, establishing palliative care services and the integration of health and social care services. Consequently, up to now, the content and the process of change have been reduced to a strictly technocratic/managerial exercise without adequate consideration of the real health needs of the population.

Another important factor is that the general approach of cost-containment measures has taken the form of horizontal cuts (see Fig. 4.2) rather than a more sophisticated and strategic approach targeting resource allocation. Tellingly, the breakdown of government spending by sector (inpatient services, outpatient services, pharmaceuticals, etc.), is almost the same proportionally (except for pharmaceuticals) both at the start (2009) and during the crisis (2011), indicating that cuts were made across the board in order to achieve the targets set under the MoU and without an effort to support services that may prove more efficient in the long term (e.g. primary care services). This highlights the fact that, so far, cost-containment and greater efficiency have not been achieved via the introduction of necessary and major structural reforms. For example, a reorientation of the health system towards health promotion and primary care has not played a central role in the reform agenda. Furthermore, no significant progress has been made with regard to hospital mergers.

In this regard, the recommendations of a study commissioned by the Minister of Health from CHESME in January 2011 have not been adopted. The study recommended the creation of a national network of health services made up mainly of primary care units and the largest hospitals of the groups in each

health region. A new pattern of organizing hospitals into groups was also proposed, based on the reform of emergency care and the management of five main chronic diseases (acute myocardial infarction, stroke, cancer, diabetes mellitus and chronic obstructive pulmonary disease). In the context of improving hospital sector efficiency, ways of collaboration between the private and public sector and expenditure containment measures were also presented (Liaropoulos et al., 2012).

The difficulties the government has faced in introducing structural changes in the health care system, combined with the pressure exerted by the MoU provisions to achieve immediate results in health expenditure cuts, have resulted in a situation where the emphasis is on measures targeting micro-level management. Such measures include computerization, integration and consolidation of hospitals' information technology systems and the implementation of double-entry accrual accounting systems. Although most of these measures are going in the right direction, given that they place emphasis on the efficient functioning of health care units as well as on the rationalization of hospital funding, they do not adequately confront the fundamental structural inefficiencies of the health system.

It is also the case that in the hospital sector, cost reductions in supplies with a significant therapeutic impact in health care (e.g. pharmaceuticals and orthopaedics) have not been accompanied by similar monitoring and containment of expenditure on overheads and other supportive services, which actually recorded an increase in most hospitals (e.g. more than 60% of public hospitals increased their expenditures for cleaning and 45% increased security expenditures; see section 3.3). Policies promoting better resource allocation should also be targeting other aspects of hospital performance, such as the control of overheads and administrative services, rational distribution of human resources and hospital beds, undertaking medical audits, adherence to clinical guidelines and further fine-tuning of the KEN-DRG payment system.

A third important point is that the side-effects of certain measures have not been taken into account adequately. An example is the case of allowing private doctors to work in public hospitals, given that dual practice creates incentives for such doctors to maintain long waiting lists in the public sector in order to syphon off public patients to their private practices. Moreover, cuts to the already low salaries of health professionals working in the public system, particularly doctors, may lead to an increase in demands for informal payments, thus fuelling the black economy (see also section 3.1). Added to this, the worsening of reimbursement rates as well as working conditions has resulted in the migration of many young and well-qualified physicians and other health care professionals to other countries. In the longer term, this

“brain drain” may have a negative impact on the quality of health services and the number of highly skilled personnel, which commonly have been trained at a significant public cost.

Another example is the impact of repeated pharmaceutical price reductions in order to reduce pharmaceutical expenditure, which also has led to an increase in pharmaceutical parallel exports from Greece and shortages of medicines in the country (Karamanoli, 2012). An alternative policy that would achieve expenditure reductions would be to make stronger efforts to control the volume of consumption and to improve and extend the implementation of the e-prescribing system. Moreover, attention should be paid not only to price and volume but also to innovative ways of distributing pharmaceuticals. For example, public pharmacies could ensure lower distribution costs for specific expensive drugs compared with private pharmacies. Additionally, procurement reforms (e.g. e-procurement, the establishment of a Pricing Observatory for Medical Supplies (since 2009) and more tendering and negotiations with suppliers) have led to a significant reduction of hospital budgets and should be encouraged further.

All of these factors highlight that the current health reform plan needs to be more coherent, integrated and well designed. In this respect, it is indicative that although the Ministry of Health and Social Solidarity established a Task Force of Independent Health Experts (as was stipulated in the second MoU) to assess and propose structural changes, as opposed to the fiscal measures usually dictated by successive MoUs, the Task Force's proposals have not been implemented (Health Task Force on Structural Changes in the Greek Health Care System, 2012).

### **5.3 Implementation challenges**

The current phase of health reform in Greece faces a number of challenges. The first is the requirement to implement numerous, rapid and complex changes. The international experience of implementing health care reforms suggests that a big-bang approach based on the top-down imposition of a grand plan is not the most appropriate way to introduce change (Figueras, Saltman & Mossialos, 1997). However, in the case of Greece this fact has not been taken into consideration since the required changes have been rapid and in some cases not appropriately designed. Based on the provisions of the MoUs, and under the extremely strict reform targets and timetables imposed by its international creditors, the government has introduced a number of health reforms that follow the “shock” doctrine rather than the incremental approach.

The second challenge lies in the lack of political will and the resistance of key stakeholders to the introduction of structural reforms. A prevailing characteristic of Greek health policy has been the practice of voting in reform legislation that is soon abandoned or not implemented. Therefore, there is a gap between intentions and actual measures that seems to be reproduced even in times of economic crisis. As Mossialos, Davaki and Allin (2005) point out, health policy and health reforms in Greece have been path dependent and influenced by clientelism, the absence of consensus and weak civil society. The inability to bring about change has always been a consequence of the prevailing political conditions, the unresolved conflict between political parties and economic interests, and the substantial resistance from medical stakeholders.

A third challenge stems from the low level of administrative capacity and the inability of the public health system bureaucracy to introduce managerial reforms and to successfully complete complex tasks. The lack of information regarding health sector processes and outcomes, and consequently of performance evaluation, the absence of relevant technical skills and gaps in the flow of information between various government departments create a “comfort zone” that is resistant to change. It also engenders an organizational culture that lacks experience of evidence-based health policy.

#### **5.4 Resilience in response to the crisis**

The Greek health care system was not well prepared to cope with the challenges imposed by the economic crisis, given that it was suffering from multidimensional structural problems (section 2). These structural weaknesses created a health system that was vulnerable to economic fluctuations and unprepared to meet the increasing needs of the population.

The impact that the recent economic crisis of OECD countries has had on health systems is well summarized in a report published by WHO (2009). The report relates how in countries that have required emergency assistance from the IMF, the spending restrictions imposed during the loan repayment period, negative GDP growth, substantial increases in unemployment and decreasing revenues all impact on household income, government spending and the capacity of other actors in the private and voluntary sectors to contribute to the health effort, despite the fact that all this is happening at a time of greater health need. Because of the fall in household incomes, patients turn from the private to the public sector, just at the point where governments feel the financial need to cut back and so fewer resources flow to public sector services; as a result, quality of care may deteriorate and access to services may be restricted. Reductions in total expenditure have an impact

on the composition of health spending, resulting in reductions in salaries, infrastructure and equipment.

The broad picture presented in the WHO report on the negative effects of the crisis on the health sector is particularly pertinent to Greece. Additionally, there seems to be certain unintended consequences affecting health care system capacity. For example, health administrative and nursing personnel in public health units decreased by 4% between 2008 and 2011, mainly through retirement and migration. This has added to the existing shortages of nursing personnel, generating serious concerns regarding the quality of services that can be provided to patients. Another disquieting fact is the observed decline in relative biomedical research productivity in Greece, starting shortly after the initiation of the financial crisis; however, as yet, the precise consequences of this are unclear (Falagas et al., 2012). This raises serious concerns regarding the promotion of innovation, a key element for the development of the health sector, as well as the volume and the quality of information provided in order to monitor the impact of the current economic crisis.

However, one cannot ignore some of the positive steps that have been made in the last few years. These include mainly the monitoring tools introduced in hospital management with the aim of controlling resource utilization, the introduction of a prospective hospital payment system, the implementation of the OECD System of Health Accounts, the adoption of a better-designed and more transparent procurement system and the development of e-governance tools.

## **6. Conclusions**

The economic crisis has highlighted the need for radical restructuring of the Greek health care system towards its stated aim of providing high-quality services equitably, universally and free at the point of delivery. So far, the process of reform has been somewhat fragmented and a number of strategies, procedures and methods for the optimization of the NHS still need to be put in place. Adopted reform measures have decreased public health expenditure across the board (leading to some curtailed services and longer waiting times), increased user charges and reduced health worker numbers by cutting salaries, without taking into account allocative efficiency during the resource allocation process.

The WHO Regional Committee for Europe adopted in 2009 a resolution urging its Member States to ensure that their health systems continue to protect the most vulnerable, to demonstrate effectiveness in delivering personal and population services and to behave as wise economic actors in terms of investment, expenditure and employment. In addition, the WHO



Regional Committee invited Member States to step up the monitoring and analysis of ongoing changes in living conditions, to assess health system performance and to articulate realistic policy options aimed at responding to the negative impacts of the economic crisis on health and health systems (WHO Regional Office for Europe, 2009).

The analysis of the Greek case stresses the significance of this resolution, given that the health reform process in Greece could probably be implemented in a way that is more consistent with the resolution. While several reform measures instigated as responses to Greece's sovereign debt crisis are going in the right direction, more attention could be devoted to the public health effects of the crisis and the economic adjustment policies. Since 2010, the public health system has had to cope with a decrease in available resources and an increase in demand. As the crisis deepens and public expenditure declines, access to care becomes an issue of concern, particularly for low income and vulnerable groups, with as yet unknown effects on the health outcomes of the population. As the data of our analysis indicate, private expenditure as a share of total health expenditure has been increasing during the crisis period (compared with a falling trend between 2005 and 2009).

In this context, five priorities should be reconsidered by health policy-makers:

- equitable access to services;
- greater empowerment of citizens in decision-making about the services they need and their treatment options;
- restructuring of the health system towards a patient-centred, primary care system;
- greater decentralization and regionalization of decision-making and provision; and
- increasing the accountability of the health sector.

There is also a need to rethink and to promote a public debate on the health budget not as a financial burden but as a developmental tool, with the need to address not only economic dimensions but also the welfare of citizens. In other words, resetting the social values underlying the health care system is a prerequisite for establishing a new paradigm for its sustainable development.

## Appendix 4.1

### Major crisis-related events and changes in the Greek health system, 2009–2013

Date	Event/action
<b>2009</b>	End of year. A series of actions on the international markets downgraded Greece's credit rating; borrowing costs from markets rose to unsustainable levels
<b>2010</b>	
January	It became clear that Greece needed international financial assistance to cover its budgetary needs for the year, and bailout negotiations began Salary cuts (12%) applied to all health care staff
May	Greece signs first MoU with the Troika setting out an Economic Adjustment Programme, which included a series of measures in the health sector, focusing especially on the reduction of public expenditure
June	Further salary cuts applied to health care staff (8%) The Kallikratis Plan, creating a more streamlined regional and municipal structure, is implemented. Under this reorganization, regional health authorities are expected to play a much greater role in managing and organizing human resources in the NHS
<b>2011</b>	
January	Increased user charges introduced in outpatient departments of public hospitals and health centres and fees for prescriptions (with exemptions for specified vulnerable groups). An admission fee for state hospitals was introduced (taking effect from January 2014); later repealed Increased co-payments for medicines introduced (with exemptions for vulnerable groups) A positive list for medicines reintroduced, as well as a variety of policies to promote the use of generic medicines Mergers between hospitals owned by IKA, the largest social security agency and by the NHS, putting them all under NHS administration. A further process of planned hospital mergers and closures got underway, but with little discernible progress
<b>2011</b>	
June	The newly established EOPYY began operation as the country's main body coordinating primary care and health care reimbursement The health divisions of the main social health insurance funds was integrated into the EOPYY. As part of this process, health benefit packages and reimbursement of services by the various health insurance funds were streamlined. Some benefits were reduced
November	Negotiations with the Troika over the terms of a second bailout agreement precipitated a political crisis. George Papandreou resigned as Prime Minister and a temporary caretaker government of national unity was formed

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**2012**

January	A hard budget ceiling for pharmaceutical expenditure was set for 2012, with a clawback from pharmaceutical companies introduced if this target is not met
March	The Second MoU/Economic Adjustment Programme for Greece was signed. Health sector measures focus on further reductions in pharmaceutical and hospital expenditure and on public sector salaries and benefits
May	The results of a general election provided no winner and negotiations to form various coalition partnerships failed
June	A second general election resulted in a new unity government led by Antonis Samaras as Prime Minister
July	Compulsory e-prescription system began along with the application of physician prescription guidelines (with a focus on generics) to control volume and cost
November	Greece signed the Third MoU/Economic Adjustment Programme A new price list for reimbursable drugs introduced, decreasing reimbursable prices

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**2013**

January	A new pricing system based on DRGs introduced in hospitals, which would be used for setting hospital budgets Unemployment rate reaches 26.8%
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## References

Bank of Greece (2013). *Bank of Greece data*. Athens, Bank of Greece (<http://www.bankofgreece.gr/Pages/en/Statistics/accounts.aspx>, accessed 29 October 2014).

Bonovas S, Nikolopoulos G (2012). High-burden epidemics in Greece in the era of economic crisis. Early signs of a public health tragedy. *Journal of Preventive Medicine and Hygiene*, 53: 169–171.

Davaki K, Mossialos E (2005). Plus ça change: health sector reforms in Greece. *Journal of Health Politics, Policy and Law*, 30(1–2): 143–167.

Doetter L-F, Gotze R (2011). Health care policy for better or for worse? Examining NHS reforms during times of economic crisis versus relative stability. *Social Policy & Administration*, 45(4): 488–505.

Durkheim E (2006). *On suicide*. London, Penguin Classics (original publication 1897).

Economou C (2010). Greece: health system review. *Health Systems in Transition*, 12(7): 1–180.

Economou C (2012). The performance of the Greek healthcare system and the economic adjustment programme: “economic crisis” versus “system-specific deficits” driven reform. *Social Theory*, 2: 33–69.

Economou C, Giorno C (2009). *Improving the performance of the public health care system in Greece*. Paris, Organisation for Co-operation and Development (Economics Department Working Paper 722).

Economou M et al. (2011). Increased suicidality amid economic crisis in Greece. *Lancet*, 378(9801): 1459.

Economou M et al. (2012). Major depression in the era of economic crisis: a replication of a cross-sectional study across Greece. *Journal of Affective Disorders*, 145(3): 308–14.

ELSTAT (2013). *Suicide data*. Athens, Hellenic Statistical Service.

ELSTAT (2014). *The Greek economy*. Athens, Hellenic Statistical Service.

European Central Bank (2013). *Long-term interest rate statistics for EU Member States*. Brussels, European Central Bank (<http://www.ecb.int/stats/money/long/html/index.en.html>, accessed 29 October 2014).

European Centre for Disease Prevention and Control (2012). *Risk assessment on HIV in Greece*. Stockholm, European Centre for Disease Prevention and Control.

European Commission (2014). *Europe 2020*. Brussels, European Commission ([http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm), accessed 29 October 2014).

Eurostat (2013). *Eurostat statistics database 2013*. Luxembourg, Eurostat (<http://epp.eurostat.ec.europa.eu>, accessed 29 October 2014).

Falagas M et al. (2012). Biomedical research productivity in Greece: effect of the financial crisis. *International Journal of Epidemiology*, 41: 1206–1207.

Figueras J, Saltman R, Mossialos E (1997). *Challenges in evaluating health sector reform: an overview*. London, London School of Economics and Political Sciences (Health Discussion Paper 8).

Health Task Force on Structural Changes in the Greek Health Care System (2012). *Report of the Task Force (chaired by E. Mossialos and A.S. Sissouras)*. Athens, Health Task Force on Structural Changes in the Greek Health Care System.

ICAP (2010). *Private health services in Greece*. Athens, ICAP Group.

ICAP (2011). *Private health services in Greece*. Athens, ICAP Group.

IMF (2013). *World economic outlook database, October 2012*. Washington, DC, International Monetary Fund (<http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx>, accessed 29 October 2014).

Kaitelidou D et al. (2012a). Efficiency of Greek hospitals: best practices of three top-performing hospitals. In: *ISPOR 15th Annual European Congress*, 3–7 November 2012. Berlin:PHP95.

Kaitelidou D et al. (2012b). Understanding the oversupply of physicians in Greece: the role of human resources planning, financing policy, and physician power. *International Journal of Health Services*, 42(4): 719–738.

Kaitelidou D et al. (2013). Informal payments for maternity health services in public hospitals in Greece. *Health Policy*, 109: 23–30.

Karamanoli E (2012). Greece's financial crisis dries up drug supply. *Lancet*, 379: 302.

Katharakis G et al. (2013). Measuring hospital efficiency: comparing DEA and SFA methods. *Reviews in Clinical Pharmacology and Pharmacokinetics*, 1(27): 17–31.

KEELPNO (2013). *HIV/AIDS surveillance in Greece, 31-12-2012*. Athens, Centre for Disease Control and Prevention.

Kentikelenis A et al. (2011). Health effects of financial crisis: omens of a Greek tragedy. *Lancet*, 378(9801): 1457–1458.

Kondilis E et al. (2013). Suicide mortality and economic crisis in Greece: men's Achilles' heel. *Journal of Epidemiology & Community Health*, 67: e1.

Liaropoulos L (2012). Economic crisis and health in Greece, 2009–2012. *BMJ*, 345: e7988.

Liaropoulos L et al. (2008). Informal payments in public hospitals in Greece. *Health Policy*, 87(1): 72–81.

Liaropoulos L et al. (2012). Restructuring the hospital sector in Greece in order to improve effectiveness and efficiency. *Social Cohesion and Development*, 7(1): 53–68.

Matsaganis M (2012). *Reeling under pressure? The welfare state and the crisis in Greece*. Athens, Athens University of Economics and Business, Department of Economics (AUEB Working Paper 1231).

Michas G, Micha R (2013). Road traffic accidents in Greece: have we benefited from the financial crisis? *Journal of Epidemiology & Community Health*, 67(10):894.

Ministry of Health and Social Solidarity (2011). *Proposal for functioning rearrangements of the NHS health units*. Athens, Ministry of Health and Social Solidarity.

Ministry of Health and Social Solidarity (2012a). *ESYnet database*. Athens, Ministry of Health and Social Solidarity.

Ministry of Health and Social Solidarity (2012b). *Report on the outcomes of Ministry of Health and its health units, 2011*. Athens, Dionikos, March 2012 [in Greek].

Ministry of Labour Social Insurance and Welfare (2014). *National Insurance Registry "ATLAS"*. Athens, Ministry of Labour, Social Insurance and Welfare ([www.idika.gr/files/atlas\\_final\\_V2.pdf](http://www.idika.gr/files/atlas_final_V2.pdf), accessed 2 November 2014) [in Greek].

Morgan D, Astolfi R (2013). *Health spending growth at zero: which countries, which sectors are most affected?* Paris, Organisation for Co-operation and Development (OECD Working Paper N60).

Mossialos E, Allin S (2005). Interest groups and health system reform in Greece. *West European Politics*, 28(2): 420–444.

Mossialos E, Allin S, Davaki K (2005). Analysing the Greek health system: a tale of fragmentation and inertia. *Health Economics*, 14: 151–168.

Musgrove P (1995). The economic crisis and its impact on health and health care in Latin America and the Caribbean. *International Journal of Health Services*, 17(3): 411–441.

OECD (2013). *Health statistics*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 5 November 2014).

Polyzos N et al. (2013). Reforming reimbursement of public hospitals in Greece during the economic crisis: implementation of a DRG system. *Health Policy*, 109: 14–22.

Rechel B et al. (2011). Economic crisis and communicable disease control in Europe: a scoping study among national experts. *Health Policy*, 103: 168–175.

Siskou O et al. (2008). Private health expenditure in the Greek health care system: where truth ends and the myth begins. *Health Policy*, 88: 282–293.

Siskou O, Kaitelidou D, Economou C (2009). Private expenditure and the role of private health insurance in Greece: status quo and future trends. *European Journal of Health Economics*, 10: 467–474.

Siskou O et al. (2013). Investigating the economic impacts of new public pharmaceuticals policies in Greece: focusing on price reductions and cost sharing rates. *Value in Health*, 16(7): A470.

Strupczewski J (2010). Greek 2009 deficit revised higher, euro falls. *Reuters*, 22 April ([www.reuters.com/article/2010/04/22/us-eu-deficits-idUSTRE63L1G420100422](http://www.reuters.com/article/2010/04/22/us-eu-deficits-idUSTRE63L1G420100422), accessed 29 October 2014).

Stuckler D, King LP, Basu S (2008). International Monetary Fund programs and tuberculosis outcomes in post-communist countries. *PLoS Medicine*, 5(7): e143.

Stuckler, D et al. (2009). The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. *Lancet*, 374(9686): 315–323.

Tripsa T et al. (2012). *Recording and evaluation of issues encountered in the use of public health services in Greece*. Athens, IPSOS (<http://www.ipsos.com/content/ipsos-greece>, accessed 29 October 2014).

Tsavalias K (2013). *Factors affecting the performance of the public hospital sector and proposals for restructuring hospitals* [PhD thesis]. Athens, National and Kapodestrian University of Athens.

Tsoukas H, Papoulias D (2005). Managing third-order change: the case of the Public Power Corporation in Greece. *Long Range Planning*, 38: 79–95.

UNICEF (2013). *Report on the situation of children in Greece*. Athens, Hellenic UNICEF Committee.

Vandoros S et al. (2013). Have health trends worsened in Greece as a result of the financial crisis? A quasi-experimental approach. *European Journal of Public Health*, 23(5): 727–731.

Vlachadis N, Kornarou E (2013). Increase in stillbirths in Greece is linked to the economic crisis. *BMJ*, 346: f1061.

WHO (2009). *The financial crisis and global health. Report of a high-level consultation*. Geneva, World Health Organization ([http://www.who.int/mediacentre/events/meetings/2009\\_financial\\_crisis\\_report\\_en\\_.pdf](http://www.who.int/mediacentre/events/meetings/2009_financial_crisis_report_en_.pdf), accessed 29 October 2014).

WHO Regional Office for Europe (2009). *Resolution EUR/RC59/R3: health in times of global economic crisis: implications for the WHO European Region*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/66957/RC59\\_edoc07.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/66957/RC59_edoc07.pdf), accessed 29 October 2014).

WHO Regional Office for Europe (2014). *Health for All database* [online/offline database]. Copenhagen, WHO Regional Office For Europe (<http://data.euro.who.int/hfadb>, accessed 2 November 2014).

Zavras D et al. (2012). Impact of economic crisis and other demographic and socio-economic factors on self-rated health in Greece. *European Journal of Public Health*, 23(2): 206–210.

# Chapter 5

## **The impact of the crisis on the health system and health in Ireland**

*Anne Nolan, Sarah Barry, Sara Burke and Stephen Thomas*

### **Introduction**

The collapse of Ireland's overexposed banking and construction sectors at the onset of the global financial crisis precipitated a sovereign debt crisis that required a Financial Support Programme from the Troika. In parallel to sharply rising unemployment and declining household incomes, the terms of the country's international loan agreement required deep cuts to public sector spending, including the health sector, and incentivized reforms aimed at achieving greater efficiency and cost savings.

Public expenditure on health has fallen by about 9% since its historical peak in 2008, requiring several efficiencies to be achieved through lowering unit costs, particularly in pharmaceuticals and human resources, increasing productivity, laying the ground for a hospital payment system where “money follows the patient” and reallocating services across levels of care. To a large extent, the economic crisis helped to highlight the need for health system reform, and nowhere is this better exemplified than by the government's commitment to radically expand population coverage through a staged introduction of universal health insurance, starting with population-wide entitlement to free primary care services by 2015. A primary challenge will be to implement the major health financing reform associated with a new universal insurance system within the context of continued budgetary constraints. In addition, while there may be potential to develop longer-term real efficiency gains, most of the main cost-cutting measures already have been employed and care must be taken not to erode the health system's operational capacity, quality of services or access to care.



# 1. The nature and magnitude of the financial and economic crisis

## 1.1 The origins and immediate effects of the crisis

As a small open economy, Ireland was particularly exposed to, and affected by, the global financial and economic crisis. Domestically, access to cheap credit and inadequate government oversight of the financial sector led to the development of an unsustainable property bubble. When the global financial crisis hit in 2008, this contributed to an internal banking collapse and the collapse of the construction sector. In response, private bank debt was effectively converted into sovereign debt following the bank guarantee scheme announced in September 2008. On the revenue side, the tax base had become increasingly dependent on pro-cyclical consumption taxes (Thomas, Ryan & Normand, 2010); the widening gap between revenues and expenditure was reflected in a sharply increasing debt to GDP ratio (Thomas et al., 2012). In addition, between 2008 and 2011 Ireland's gross national product fell by nearly 20% (CSO, 2012b).

## 1.2 Government responses to the crisis

In 2008 and 2009, several budgets sought to address the impact of the economic crisis (Thomas & Burke, 2012). However, borrowing costs continued to rise: in November 2010, yields on the benchmark 9-year Irish Government bond reached 9% (Carswell, 2012). In November 2010, after continued deterioration in key economic indicators and increasingly unaffordable borrowing costs, Ireland accepted a Programme of Financial Support from the Troika worth €85 billion for the period 2010–2013. Despite a return to the bond markets in 2013, the economic outlook remained bleak, with low growth forecasts nationally and internationally (Duffy & Timoney, 2013), continued high unemployment of nearly 14% in 2012 (CSO, 2013b) and a large, albeit slightly falling, debt/GDP ratio of approximately 120% (Department of Public Expenditure and Reform, 2012b; Duffy & Timoney, 2013; see also Table 5.1).

## 1.3 Broader consequences

The Irish rate of unemployment increased sharply during the crisis, from under 5% at the end of 2007 to just under 14% at the end of 2012 (CSO, 2013b). Rates of unemployment among the younger population were higher still, at over 30% for males aged 15–24 years in 2012, while at the end of that year, long-term unemployment (defined as out of work for more than a year) accounted for nearly 60% of total unemployment (CSO, 2013b).

Household incomes and poverty rates also were affected, with household incomes falling by over 12% in nominal terms, the “at risk of poverty” rate increasing

**Table 5.1** Demographic and economic indicators in Ireland, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population levels (in thousands) <sup>a</sup>	3,805.2	3,866.2	3,932.0	3,996.6	4,070.3	4,160.0	4,274.1	4,399.0	4,543.9	4,459.0	4,519.4	4,576.8	4,586.9
People aged 65 and over (% total population) <sup>a</sup>	11.2	11.2	11.1	11.1	11.1	11.0	10.9	10.8	10.9	11.2	11.4	11.7	12.0
GDP per capita (€) <sup>a</sup>	33,600	64,800	36,100	36,900	37,900	39,200	40,300	41,500	39,900	37,500	37,200	37,600	–
Real GDP growth (%) <sup>a</sup>	9.3	4.8	5.9	4.2	4.5	5.3	5.3	5.2	3.0	7.0	0.4	0.7	0.7
Government deficit (% GDP) <sup>b</sup>	–	0.4	0.4	1.4	1.6	2.9	0.2	7.4	13.7	30.6	13.1	8.2	7.2
Government consolidated gross debt (% GDP) <sup>b</sup>	37.0	34.5	31.8	31.0	29.4	27.2	24.6	24.9	44.2	64.4	91.2	104.1	117.4
Long-term interest rates (10-year government rate) (%)	5.53	5.12	4.96	4.12	4.10	3.39	3.78	4.07	–	–	–	–	–
Total unemployment (% of total labour force) <sup>a</sup>	4.2	3.9	4.5	4.6	4.5	4.4	4.5	4.6	6.3	11.9	13.7	14.4	14.7
Long-term unemployment (% of total unemployed) <sup>a, c</sup>	–	33.1	30.1	32.8	34.9	33.4	31.6	29.5	27.1	29.2	49.3	59.4	61.7

Note: <sup>c</sup>12 months or more.

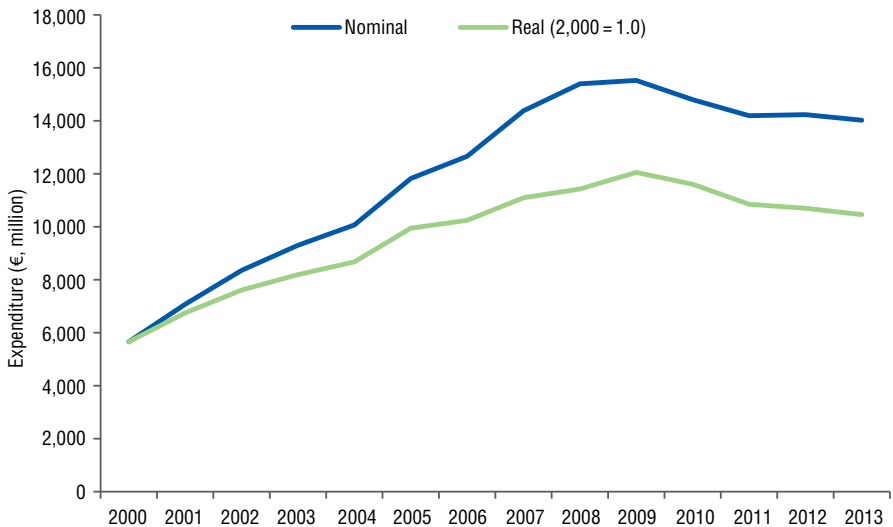
Sources: <sup>a</sup>OECD, 2013; <sup>b</sup>Eurostat, 2013.

from 14.4 to 16.0% and the proportion of the population experiencing two or more types of enforced deprivation (e.g. without heating in the last year, unable to afford a hot meal, etc.) increasing from 13.8 to 24.5% over the period 2008 to 2012 (CSO, 2013c). Inflation in health prices has consistently exceeded that of overall prices, and given the heavy reliance on OOP payments in the Irish health system (see section 3.2), this has created an additional burden on households. In particular, sharp increases in PHI premiums, in combination with deteriorating household finances, have been reflected in increasing numbers cancelling their PHI cover over the duration of the crisis (see section 3.2 for further discussion).

## 2. Health system pressures prior to the crisis

Since the start of the 2000s, overall levels of public expenditure on health have risen rapidly, albeit from a very low base (Fig. 5.1), and per capita levels are now broadly in line with expenditure in other countries (OECD, 2012a). However in the preceding 30 years, Ireland's health expenditure was considerably below the EU average, particularly for capital expenditure, which amounted to just 66% of the EU average over the period 1970–1996 (Wren, 2004).

**Fig. 5.1** Public health expenditure (capital plus current) in Ireland, 2000–2013



*Note:* Public health expenditure includes capital expenditure.

*Sources:* CSO, 2014a; Department of Public Expenditure and Reform, 2014.

As illustrated in Fig. 5.1, there have been substantial cuts in public expenditure on health since 2008 (see also Tables 5.2 and 5.3). The total public health budget in 2008 was €15.4 billion, that for 2013 just €13.6 billion (Department

**Table 5.2** Public expenditure on health in Ireland (including capital expenditure), 2006–2014

	2006	2007	2008	2009	2010	2011	2012	2013 (e)	2014 (e)
Public expenditure (€ millions)	12,658	14,379	15,395	15,529	14,800	14,191	14,043	14,024	13,810

*Notes:* (e): Estimate; figures for private expenditure are not presented as they are only available up to 2009 but indicate that private expenditure grew by over 20% in nominal terms between 2006 and 2009 (Department of Health, 2012b).

*Sources:* Department of Public Expenditure and Reform, 2012a, 2014.

**Table 5.3** Health care expenditure trends in Ireland, 2000–2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
THE per capita (US\$ PPP)	1,761.4	2,060.2	2,331.0	2,529.1	2,762.8	2,937.6	3,181.7	3,571.3	3,848.1	4,036.7	3,780.2	3,699.5
THE (% GDP)	6.1	6.7	7.0	7.3	7.5	7.6	7.5	7.9	9.1	10.0	9.3	8.9
Public expenditure on health (% THE)	75.1	75.6	76.4	76.8	77.3	76.0	75.4	75.7	75.4	72.6	69.6	67.0
VHI (% THE)	7.69	6.39	6.28	6.56	6.78	7.29	8.28	8.04	7.94	11.09	13.61	–
OOP spending (% THE)	16.0	15.2	14.4	15.3	15.2	16.1	16.1	14.8	15.3	16.1	18.2	18.2

*Notes:* PPP: Purchasing power parity; THE: Total health expenditure.

*Source:* OECD, 2014 (health data for 2012 and beyond are not available).

of Public Expenditure and Reform, 2012a; Thomas et al., 2012). Much of the reduction in public health expenditure to date has been achieved through cuts to staff numbers and staff pay, as well as driving efficiencies across the public health system (Thomas & Burke, 2012). In October 2012, there was an overrun of €360 million in public health expenditure (Department of Public Expenditure and Reform, 2012a), although this had been reduced to €75 million by the end of 2012 (HSE, 2013d). Overruns such as these illustrate the difficulties of achieving continued expenditure reductions year on year.

The cuts in public health expenditure have occurred against a backdrop of existing political commitments to make improvements in primary and community care, in mental health, in some chronic DMPs and in the quality of public hospital care. In 2011, the new coalition government made a commitment to introduce free care by GPs for everyone by 2015 and to implement a universal, single-tier health service through the introduction of universal health insurance (Government of Ireland, 2011a). The new commitments reflect aspects of the pre-election manifestos of both coalition partners.

Studies on Irish health expenditure highlight the importance of national income, population size and distribution, prices and institutional features of the system (such as provider-reimbursement methods) (Brick & Nolan, 2010; Borowitz, Moran & Pearson, 2011; Normand, 2011). The greatest immediate pressure on the Irish health system is the reduced public health budget that is expected to meet the needs of a growing population. The Irish population is relatively young and has the highest fertility rates in the EU (Department of Health, 2012a). Of particular relevance for longer terms financial pressures is the projected increase in the dependency ratio (the ratio of the population aged 65+ years to the population aged 18–64 years) from 0.18 in 2011 to 0.38 in 2041 (Barrett et al., 2011).

High and increasing prices have been a continuous source of financial pressure in the Irish health system. Between 2005 and 2011, health care costs in Ireland increased by over 20%, while overall prices increased by approximately 10% (Thomson, Jowett & Mladovsky, 2012). This very high health inflation was largely driven by continued increases in hospital charges, outpatient fees, doctors' fees and dental fees, which impose a particularly large burden on the section of the population with the lowest income. In addition, PHI premiums rose by 22% in 2011 and a further 16% in 2012 (CSO, 2012a, 2013a), although these increases have also been driven by recent moves by the government to ensure full economic costing of private activity in public hospitals.

Approximately 14% of public expenditure on health in Ireland is expenditure on prescription pharmaceuticals (Gorecki et al., 2012). Public expenditure on pharmaceuticals rose very rapidly after 2000, but some recent measures have reversed this trend (see Brick, Gorecki & Nolan (2013) and Gorecki

et al. (2012) for a full description), and legislation to introduce a system of reference pricing and generic substitution for certain pharmaceuticals was passed in 2013 (Government of Ireland, 2013b). However, there has been slow progress on the implementation of additional cost-cutting measures (Thomson, Jowett & Mladovsky, 2012) and a recent comparison of ex-factory prices of the leading pharmaceuticals found that originator on-patent and generic pharmaceutical prices were higher in Ireland than in other EU Member States (Brick, Gorecki & Nolan, 2013).<sup>1</sup>

Other drivers of increases in expenditure typically include unmet need (areas identified in Ireland include chronic diseases, mental health services and services for children), raised expectations (which may lead to demand for unmet needs to be met) and technological change (although there is some debate over whether technological change is a significant cost driver in health care, see for example Dormont, Grignon & Huber (2006) and Normand (2011)).

A critical source of financial pressure in the Irish health care system is the means-tested medical card scheme, whereby those on low incomes receive free public health care. With rising unemployment and falling incomes, the proportion of the population with medical cards is now over 40%, up from approximately 30% in 2008 (see section 3.2 below).

Despite declining budgets and staff numbers, the Irish public health system is providing more care in certain areas to a growing, ageing population with a higher burden of chronic disease (e.g. inpatient and outpatient throughput has increased year on year since the crisis began; see section 3.3). However, many weaknesses in delivery and financing structures that existed before the economic crisis remain. Despite the increased expenditure on health over the 2000s, Ireland still has a very underdeveloped primary and community care sector; long waits and unequal access for public patients to hospital care;<sup>2</sup> concerns about poor quality and overstretched hospital infrastructure; and staffing constraints (Health Information and Quality Authority, 2007, 2008a, 2008b; Ruane, 2010).

The 2001 “Primary Care Strategy: A New Direction” recommended the introduction of an interdisciplinary team-based approach to the delivery of primary care services (Department of Health and Children, 2001a), but its recommendations have been largely unimplemented. Despite the targets set out in successive Health Service Executive (HSE) national service plans, progress on the development of primary care teams to date has been slow (Comptroller and Auditor General, 2011; Department of Health, 2011; HSE, 2013g).

<sup>1</sup> The study also found that originator off-patent pharmaceutical prices were lower in Ireland than in other EU Member States.

<sup>2</sup> While medical cards have been proven to be a pro-poor measure, those with medical cards often have to wait longer to gain access to public hospital care than those with PHI or who can afford to pay privately (Ruane, 2010).

While there are currently 426 primary care teams in place (HSE, 2013g), those working on the ground acknowledge that just a fraction of these are fully functioning teams, as the HSE simply defines a primary care team as one where clinical team meetings have commenced (HSE, 2013g).

A consequence of poor primary and community care service provision is the existence of long waiting lists for certain services. Recent data indicate that at least 72 000 people are waiting for physiotherapy, speech and language and occupational therapy services in the community. This is a minimum figure as waiting lists are not kept in areas where services do not exist and people have no choice but to buy the service privately or go without the service (Oireachtas, 2012a).

Community child and adolescent mental health teams are the first line of specialist mental health services. "A Vision for Change", the national mental health policy published in 2006, outlined that there should be 92 such teams with 1196 staff in place by 2012 (Department of Health and Children, 2006). A recent review shows that just 58 of these teams are in place, with under 40% of the staffing required, and that waiting times remain high (HSE, 2013g). The government target for December 2012 was that no child would wait more than a year for their first appointment. However, by December 2012, there were 338 children waiting for their first appointment (HSE, 2012b). The waiting list for these child and adolescent mental health services was up 17% from December 2011 (HSE, 2012b). No such data are kept on adult mental health services but the 2012 Annual Report of the Inspector of Mental Health stated that "services were stagnant and perhaps have slipped backwards" (Mental Health Commission, 2013).

Home help services are an essential mechanism for caring for people in their own homes and keeping them out of hospitals and nursing homes, particularly older people. In 2008, 12.6 million home help hours were delivered to 55 366 individuals; in 2012 just 9.8 million hours were provided to 44 387 individuals, reflecting cuts to the health budget and community services (HSE, 2008, 2013g).

There has been strong political pressure to reduce long waiting times for treatment for public patients. Despite a dedicated budget for an independent treatment purchase fund since 2002 and renewed political pressure after the election of a new government in spring 2011, the numbers waiting for elective public hospital inpatient/day treatment have remained high. The HSE committed to the target that no adult should have to wait more than eight months for inpatient or day treatment by the end of June 2013; unfortunately, the numbers waiting in excess of eight months for both inpatient and day treatment continued to increase through 2013 (HSE, 2013f), despite some promising reductions in the numbers at the end of 2012/2013 (National Treatment Purchase Fund, 2013).

In terms of outpatient services, over 100 000 people were waiting in excess of 12 months for a public hospital outpatient appointment in April 2013 (the HSE target was zero by end June 2013) (HSE, 2013f).

The current nature of health coverage in Ireland is a significant weakness. Ireland is the only European country not to offer universal access to free or heavily subsidized GP care, and OOP GP costs are correspondingly much higher than in other countries (Thomson, Jowett & Mladovsky, 2012). In addition, Ireland's unusual mix of public funding, PHI and OOP payments (Ruane, 2010; Smith, 2010b) results in a complex, and often conflicting, set of financial incentives (Brick et al., 2012). Despite its relatively small contribution to overall health financing in Ireland, PHI plays an important role in financing specific types of care, particularly public hospital care, and is subsidized by the state via tax relief on premiums and by the practice of not charging the full cost of private beds in public hospitals.<sup>3</sup> In this way, the existence of PHI distorts the incentives facing users and providers of health care, with well-documented negative effects on equity and efficiency (Nolan & Wiley, 2000; O'Reilly & Wiley, 2010; Brick et al., 2012).

### **3. Health system responses to the crisis**

#### **3.1 Changes to public funding for the health system**

Successive budgets since October 2008 sought to curtail public expenditure, including health, as a response to the crisis. Over the course of the Troika bailout, stricter parameters and supervision have been placed on health expenditure. As illustrated in Table 5.2, public health expenditure fell by approximately 9% in nominal terms between 2008 and 2012 and further large adjustments were required in 2013–2014. The public health system has suffered unprecedented cuts in real terms at a time when financial pressures from demographic changes and policy needs are very strong (Table 5.3).

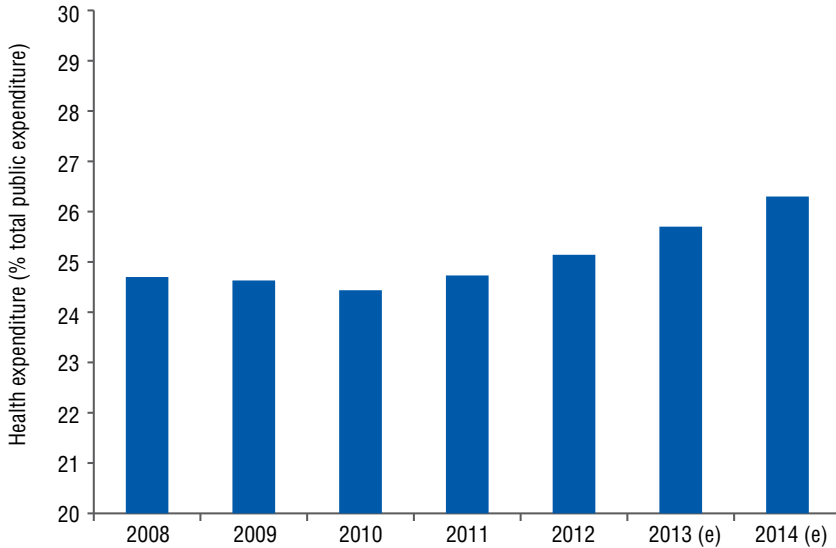
The proportion of total health expenditure coming from statutory or public sources in Ireland reduced gradually from a high of 77% in 2004 to 67% in 2011 (Fig. 5.2 and Table 5.3), consistent with trends towards increasing OOP expenditure by individuals. This reduction means that, for the first time in recent years, statutory funding in Ireland as a share of total health expenditure has fallen below the average for OECD countries and is quite low for a European tax-based health financing system. Private health expenditure has continued to increase (Department of Health, 2012a), but since 2008, the numbers of households purchasing PHI has been declining (Health Insurance

<sup>3</sup> However, recently drafted legislation provides for significantly increased charges for private beds in public hospitals (Government of Ireland, 2013a).



Authority, 2013). While health now accounts for a larger share of declining public expenditure, the recovery in the share devoted to health also highlights that the initial pace of cuts could not be sustained given demand pressures.<sup>4</sup>

**Fig. 5.2** Proportion of total public expenditure devoted to health in Ireland, 2007–2014



Note: (e): Estimate.

Source: Department of Public Expenditure and Reform, 2012a, 2014.

As noted, government revenues became increasingly reliant on indirect taxation after 2000, although by 2011, the proportion of total government revenue generated by indirect taxes had fallen below the level in 2000 as the government sought to stabilize its finances (Thomson, Jowett & Mladovsky, 2012). Prior to the crisis, public funding for health was marginally progressive (Smith, 2010a). Since then, a number of changes to direct taxation policy suggest that this source has become more progressive (Thomson, Jowett & Mladovsky, 2012). Smith (2010a) concluded that indirect taxes were regressive in the late 1990s/early 2000s. Analysing welfare and direct taxation changes in each of the six “austerity” budgets since 2008, Callan et al. (2012) found that the overall impact has been progressive but that recent budgets have been regressive because of the front-loading of tax increases and effective public sector pay cuts in the period October 2008 to April 2009.

<sup>4</sup> In addition, it is important to understand the extent to which cost-shifting to the private sector has occurred, via the government’s policy to increase OOP payments and the rapid increase in premiums for PHI (discussed in section 3.2).

Sin taxes (e.g. taxes on alcohol and tobacco) currently play a limited role within public revenue in Ireland (Thomson, Jowett & Mladovsky, 2012). A Special Action Group on Obesity was established in 2011 and in May 2013 the Institute of Public Health in Ireland published its health impact assessment of a proposed tax on sugar-sweetened drinks (Institute of Public Health in Ireland, 2013). However, a sugar tax has not been introduced and there are no plans at present to do so.

### 3.2 Changes to coverage

The breadth (who), scope (what) and depth (how much) of public cover have all changed over the duration of the crisis.

#### **Population entitlement**

Statutory entitlements to publicly financed health care in Ireland are complex (Brick et al., 2010; Thomson, Jowett & Mladovsky, 2012), as described in Table 5.4. The most significant change reducing the breadth of cover was the abolition, in 2009, of the automatic entitlement to a medical card for those aged over 70. Nevertheless, more than half a million more people had medical cards in 2013 than in 2008, reflecting lower incomes and a significant extension of coverage during the crisis.

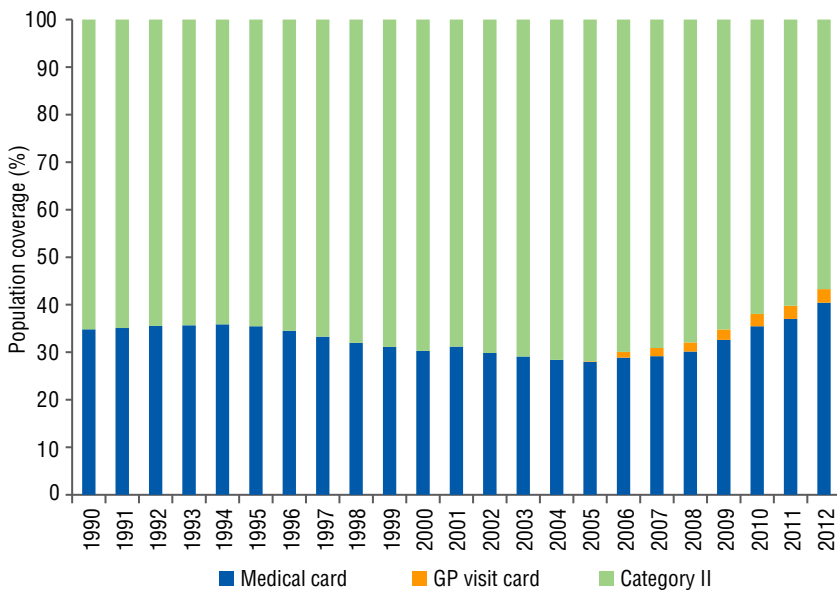
**Table 5.4** *Entitlement to publicly financed health care in Ireland, 2013*

Type of care	Category I (medical card holders)	Category II (do not hold medical cards)	GP visit card
GP services	Free	Pay full charge	Free
Pharmaceuticals	Pay €1.50 per prescription item up to €19.50 per month per family (General Medical Services Scheme)	Pay full cost up to €144 per month per family (Drugs Payment Scheme); free for specified long-term illnesses (Long Term Illness/High Technology Drug Schemes)	As for category II
Public hospital inpatient care	Free	Pay €75 per night up to €750 per year per person	As for category II
Public hospital outpatient care	Free	Free emergency department attendance with GP referral or pay €100 per visit without GP referral; free access to all other outpatient services	As for category II
Other	Various entitlements to community, personal and social care services, dental, ophthalmic and aural care services; other benefits (e.g. maternity and infant care)	As for category I	As for category I

Source: Thomson, Jowett & Mladovsky, 2012.

Eligibility for category I (medical card holders) is primarily determined on the basis of an income means test. Individuals in category II, including GP visit card holders, have access to a range of public assistance schemes such as the Drugs Payment Scheme, the Long Term Illness Scheme and the Treatment Benefit Scheme (see Thomson, Jowett & Mladovsky (2012) for further details). The share of the population in category I fell in the late 1990s because of the rapid economic growth, a steady decline in unemployment and annual increases in real incomes (Fig. 5.3). However, it has increased steadily since 2005 (along with the introduction of the GP visit card), and from 2008 with the onset of the severe and prolonged recession. In December 2012, 40.4% of the population had a medical card, with an additional 2.9% of the population holding a GP visit card.

**Fig. 5.3** Population coverage by category in Ireland, 1990–2012



*Note:* Population data refer to April but coverage data refer to December.  
*Sources:* HSE, 2011a, 2012c, 2013g; CSO, 2014b; also annual reports (various years) from the Primary Care Reimbursement Service and the General Medical Services Payment Board.

Many people in category II and a small proportion of those in category I purchase PHI, which is supported in public policy via generous tax relief. PHI cover increased steadily over time, reaching a peak of 51.4% of the population in 2006, but then declining to 46.0% in 2012<sup>5</sup> and is declining at an increasing

<sup>5</sup> Figures calculated from the Health Insurance Authority (2012, 2013) and the CSO databank.

rate (Health Insurance Authority, 2013). Originally designed to offer cover for hospital care, several PHI plans now also offer some cover for GP and other primary care expenses. While everyone is entitled to public hospital care at a maximum cost of €800 per annum, individuals take out PHI in order to gain faster access into the public hospital system (Watson & Williams, 2001).

Proposed changes to population coverage are part of wider government commitments to reform health financing in Ireland, as set out in the 2011 Programme for Government (Government of Ireland, 2011a). Under the banner of “universal health insurance”, entitlement to GP visit cards is to be extended to the whole population by 2015. Movement towards this goal began with the drafting of primary legislation to provide GP visit cards to those covered by certain illnesses (Dáil Éireann, 2012), but this aspect of the plan has since been dropped because of legislative difficulties (Cullen, 2013). An alternative mechanism for the extension of free GP care to the entire population is currently being developed, with suggestions that it will be extended on an age-related basis starting with children under 5 years of age.

Key targets in the phasing in of universal primary care have been missed. It is not clear how the Programme for Government proposals will change coverage in practice, partly because details of expanded coverage of other services have yet to be specified and partly because of the budgetary environment. Furthermore, the 2013 Budget announced plans to restrict eligibility to medical cards for 2013, specifically taking full medical cards away from 40 000 people and replacing them with GP visit cards (HSE, 2013b). Moreover, the HSE Service Plan allowed for a net increase of 60 000 full medical cards in 2013, considerably less than the approximately 160 000 full medical cards granted in 2012 (HSE, 2013d), highlighting that further rationing of medical cards would lie ahead. One million medical card reviews were planned for 2014.

Between September 2013 and March 2014, 65 000 medical cards were withdrawn. This was a result of the increased standardization of eligibility criteria brought about by the centralizing of the medical card assessment service in 2012/2013, combined with reducing income limits and tighter conditions for eligibility, as well as better linking with other government data. There was huge public and political discontent, with a range of high-profile stories in the public domain of very sick people losing their medical cards. In response to this, combined with a very poor performance of government parties in local and European elections in May 2014, the government suspended reviews of all discretionary medical cards, the removal of which caused the most controversy. They also committed to extending medical card access on the basis of need, not just financial hardship. An expert panel was established to advise government on how best to progress this issue by Autumn 2014.

### ***The benefits package and user charges***

The scope of cover has been reduced through the introduction of limits to dental and ophthalmic benefits for the whole population and the rationing of some services such as therapies and home help (Table 5.5). However, most of the changes have targeted the depth of cover by increasing user charges.

**Table 5.5** *Changes to statutory entitlement in Ireland, 2008–2013*

<b>Year</b>	<b>Category I</b>	<b>Category II (includes GP visit card)</b>
2008	None	All: increase in hospital emergency department attendance charge (without a referral) to €66 (from €60); increase in the public hospital inpatient charge to €66 per day (from €60)  DPS: increase in monthly deductible to €90 (from €85)
2009	Automatic entitlement to medical cards removed from people over 70 years of age and replaced with a means test	All: increase in hospital emergency department attendance charge (without a referral letter) to €100 (from €66); increase in the public hospital inpatient charge to €75 per day  DPS: increase in monthly deductible to €100  Tax relief on unreimbursed medical expenses restricted to the standard rate of tax (20%)
2010	GMS: introduction of €0.50 charge per prescription item (October)  Dental Treatment Services Scheme: dental entitlements cut (April)	DPS: increase in monthly deductible to €120  TBS: dental and ophthalmic entitlements cut
2011	None	None
2012	None	DPS: increase in monthly deductible to €132  TBS: aural entitlements cut  Long Term Illness Scheme: commitment to extend entitlement to free GP care as phase 1 of free primary care strategy (abandoned and due to be replaced with an alternative plan to extend free GP care to the entire population) <sup>a</sup>
2013	GMS: increase to €1.50 in charge per prescription item  Lowering of thresholds for medical cards for the those over 70 years of age to exclude a further 40,000 people (April)	DPS: increase in monthly deductible to €144  Hospitals: increase in the public hospital inpatient charge to €80 per day

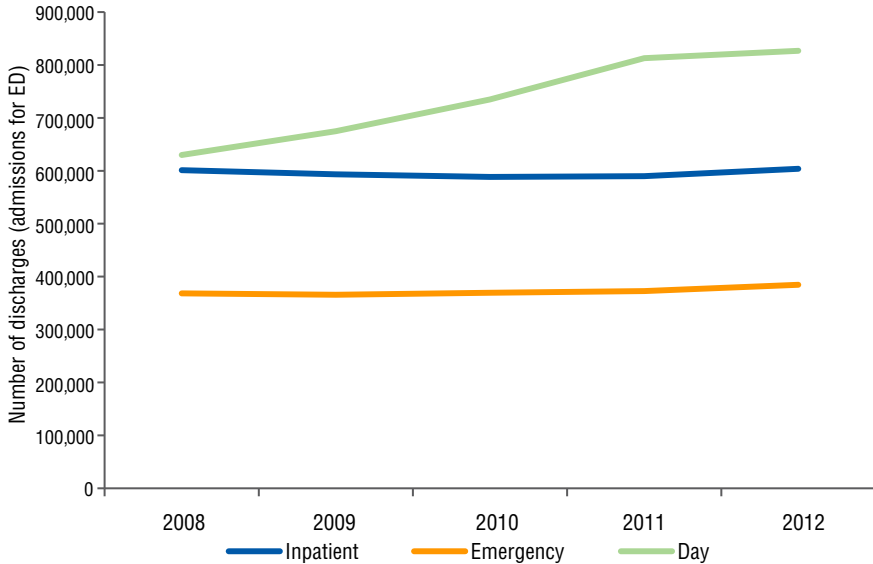
*Notes:* DPS: Drug Payment Scheme; GMS: General Medical Scheme; TBS: Treatment Benefit Scheme; unless otherwise stated, all measures came into force on 1 January of each year; <sup>a</sup>In May 2013, it was reported that the government had encountered legal difficulties in drafting legislation to extend free GP care to those covered by the Long-term Illness Scheme (Cullen, 2013). An alternative plan to extend free GP care to the entire population is currently being developed although no further details are available.

*Sources:* Thomson, Jowett & Mladovsky, 2012; HSE, 2013ab; Citizen's Information Board, 2014.

### 3.3 Changes to health service planning, purchasing and delivery

As noted, there is evidence that in several areas the health system is doing more with fewer resources (e.g. inpatient, emergency and day case activity) (Fig. 5.4).

**Fig. 5.4** *Inpatient, emergency and day case activity in Ireland, 2008–2012*



Note: ED: Emergency department.

Sources: HSE, 2010, 2011b, 2012b, 2013g.

Further improvements in efficiency have been achieved by:

- reducing the unit costs of health system inputs (such as human resources and pharmaceuticals);
- improving productivity; and
- moving some activities to more cost-effective levels of care.

Nevertheless, there is still scope for more efficiency in the system.

#### **Payments to health workers and human resources policies**

As pay accounts for approximately 50% of overall public health expenditure (but can be as high as 70% in the acute hospital sector) (Brick & Nolan, 2010), securing greater efficiencies in this expenditure via reductions in numbers, as well as optimal use of existing staff, has become a key mechanism for cutting costs. In common with the general public service, the public health service is subject to a moratorium on recruitment and promotions (since 2009), albeit with some exceptions (medical consultants, physiotherapists, etc.). In addition, there have been reductions in pay, and a number of incentivized voluntary

retirement schemes. The number of full-time equivalents in the public health service has fallen by over 11 000 (or nearly 10%) since 2007, and there are now just over 101 000 full-time equivalent staff in the public health system (HSE, 2013c). However, in this context, there are concerns over the costs of employing replacement agency staff, and despite efforts to reduce agency costs, the HSE reduced its expenditure on agency staff by just 2% in 2012 (HSE, 2013d). There are also concerns over curtailment of some services (e.g. cancelled surgery, reduced community services). Apart from restrictions on numbers employed, changes to staffing levels, skill-mix and staff attendance patterns/rosters are being implemented within the context of the 2010–2014 and 2013–2016 Public Service Agreements (also known as the Croke Park and Haddington Road agreements, respectively). Under the terms of these agreements, staff have agreed to greater flexibility to help to achieve efficiencies in exchange for a commitment to no further pay reductions and no compulsory redundancies (up to 2016). The Haddington Road Agreement took effect from 1 July 2013 and provides for further pay cuts for those earning over €65 000 per annum, increment freezes, increases in hours worked and decreases in overtime and other premium payments.

As part of the Financial Emergency Measures in the Public Interest (FEMPI) Act 2009, there were reductions in the rates of payment to GPs, pharmacists and opticians in 2009, 2010 and 2011 (Government of Ireland, 2009, 2010, 2011b) and further cuts for GPs and pharmacists were introduced in 2012 and 2013 (Department of Health, 2013). The 2011 Programme for Government contains a commitment to introduce a new contract for GPs and to reduce the amount GPs and hospital consultants are paid (Government of Ireland, 2011a). A 30% lower pay scale for new consultant recruits was introduced from 1 October 2012 (HSE, 2012a). In February 2014, a draft new GP contract was published that, if introduced, will radically alter the way GPs are paid and the type of services they provide. It has a much greater emphasis on public health and the management of chronic diseases, as well as containing more controversial measures such as a gagging clause on GPs and the ability to cut fees at any time. After months of a stand-off between GPs and government, both sides entered negotiations on a new contract in May 2014.

### ***Pharmaceutical sector reforms***

As a first step to secure greater efficiencies in the provision of pharmacy services, recent attempts have focused largely on securing price reductions, rather than attempting to influence product mix or volume. Setting the reimbursement price for pharmacy services in Ireland follows a complex procedure (Brick & Nolan, 2010; Brick et al., 2010; Gorecki et al., 2012; Brick, Gorecki & Nolan, 2013). In recent years, the ex-factory price, wholesale mark-up and retail mark-up

have all been targeted (see Table 2.3 in Gorecki et al. (2012) for a summary). However, in spite of these reductions and the recent legislation on reference pricing and generic substitution (Government of Ireland, 2013b), there have been few attempts to adopt other initiatives that would cut costs significantly, such as competitive tendering for high volume off-patent products.

A new deal with pharmaceutical manufacturers in October 2013 included reductions in the cost of in-patent and off-patent pharmaceuticals, as well as securing the provision of new and innovative pharmaceuticals. Although earmarked to deliver savings of €400 million over three years, a detailed reading of the agreement shows that new pharmaceutical costs are estimated at €210 million, therefore resulting in net savings of only €190 million (Oireachtas, 2012b). Initial savings promised under this deal were not realized in 2012 and contributed to the need for a supplementary health budget in December 2012. A new agreement with the representative body of generic manufacturers was also completed in October 2013. The newly enacted legislation on reference pricing and generic substitution gives the HSE the power to use additional criteria other than the agreements with the pharmaceutical manufacturers (e.g. tendering, prices in other countries, etc.) to set pharmaceutical prices in Ireland. While this is a significant development, the impact of the new legislation on future pharmaceutical expenditure is uncertain (Brick, Gorecki & Nolan, 2013).

### ***Delivery of clinical care programmes***

Since 2008/2009, the HSE has been developing national clinical care programmes in an effort to improve quality of care and to provide more efficient care pathways and planned patient care. The cancer care programmes and subsequent clinical care programmes were a response to a series of high-profile patient safety concerns that occurred during 2007–2008 (Health Information and Quality Authority, 2008a,b). The programmes have been designed to achieve high levels of acceptance from clinicians, who have been closely involved in their development. In many cases, the ambition is both to improve the quality of patient care and to release resources for reinvestment in the service. The approach has similarities to the successful development of new models of cancer care in Ireland, which have achieved important improvements in outcomes and have reduced variation in the care provided (HSE, 2013a).

The clinical care programmes have been reinforced by a renewed focus of the government and the HSE on initiatives to increase efficiency by improving delivery, including work done by the Special Delivery Unit. The Special Delivery Unit, originally set up in the Department of Health, became part of the HSE in January 2013 and is focused on driving down waiting times for hospital treatment.



### ***Hospital services***

In terms of acute hospital services, the Programme for Government contains a commitment to pay hospitals according to the care they deliver and to incentivize them to deliver more care in a “money follows the patient” system (Government of Ireland, 2011a). Up to 2012, all public hospitals received annual budgetary allocations in return for undertaking activity levels specified in the HSE's annual national service plans, with allocations largely determined by historic factors (with a small proportion of resources allocated on a case-mix basis). From 2013, public hospital resources will be allocated on the basis of projected expenditure, in preparation for the “money follows the patient” system in 2014 (HSE, 2013e).

The payment of public hospital consultants has been the subject of much discussion since the agreement of a new consultant contract in 2008, with the degree of compliance by some consultants in relation to private practice also coming under particular scrutiny (Comptroller and Auditor General, 2010). Currently, public hospital services are delivered by a network of 52 hospitals, 34 of which are owned and operated by the HSE. The Programme for Government contains a commitment to establish all acute public hospitals as independent, non-profit-making trusts (Government of Ireland, 2011a).

### ***Delivery of integrated care***

Previous analyses of the Irish health system noted the barriers to the delivery of integrated care, such as incompatible financial incentives (on the part of both users and providers), human resource constraints and poorly developed community care services (Ruane, 2010; Brick et al., 2012). Such issues will have to be resolved to secure the full potential of efficiency gains.

## **4. Implications for health system performance and health**

### **4.1 Cost savings and efficiency**

Ireland entered its Troika bailout in October 2010 with regular reporting by both the European Commission and the IMF. These reviews were published along with the quarterly renewed MoU in a specific section of the Department of Finance's web site (2014), demonstrating the high level of monitoring of the agreement. The review reports provide a detailed analysis on how Ireland was meeting its commitments under the MoU. Up to 2012, there was little if any mention of the health system. However, throughout 2012, there was growing attention to health. This culminated in the European Commission Working Document, *Economic Adjustment Programme for Ireland*, where the

health sector received attention in the “fiscal policies” section. The report highlighted how, despite efforts to curtail health expenditure, there was an estimated overrun of €370 million in the HSE, which when combined with other “spending pressures... the structural gap of the health vote is about €700 million” (European Commission, 2012, p. 21).

The Working Document pointed out how government measures intended to save money in 2012 had not materialized and specifically mentioned the failure to legislate for charging private patients in public hospitals and to enact measures to reduce the pharmaceutical bill. The Commission highlighted the scope to increase efficiencies and cost-effectiveness, such as the introduction of a unique patient identifier and “money follows the patient” to foster integrated care. It also detailed how Ireland was paying more to doctors, particularly specialists. While it acknowledged the 30% cut in pay to newly appointed consultants, it suggested a “review of the market for medical staff”, noting the lower proportion of medical consultants in Ireland compared with other EU Member States (European Commission, 2012, p. 23). The report also suggests increasing “copayments for products and services, and tackling the unsustainable growth in medical cards, including greater use of GP visit cards to substitute for more expensive medical cards” (European Commission, 2012, p. 22).

## **4.2 Access to services**

While there is plenty of evidence regarding inequalities in health and health care utilization in Ireland (see Thomson, Jowett & Mladovsky (2012) for a review), there are no published data on trends since the onset of the crisis. However, in the context of reductions in breadth, scope and height of public cover, it is likely that barriers to access to health services have increased during the crisis.

## **4.3 Impact on health**

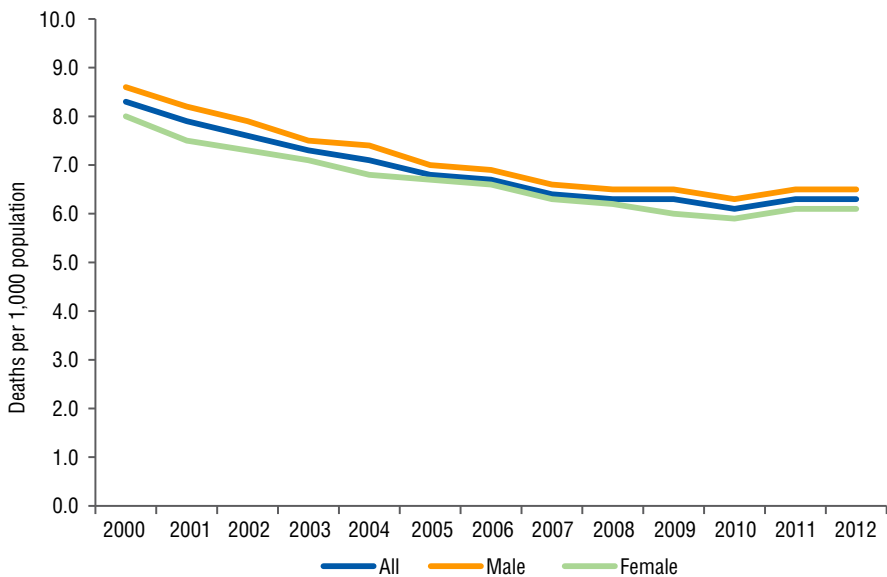
Rates of poverty and deprivation have increased in Ireland since the beginning of the crisis. Given the causal relationship between poverty and ill health, it is inevitable that increases in poverty will impact on population health, although they are not yet evident in most health statistics. There are two possible explanations for this: first, the time lag effect between declining incomes, increasing poverty and poorer health and, second, the delay in the publication of timely health statistics. As a result, it is probably still too early to observe any potential associations, and even more difficult to determine a causal relationship between the current crisis and health outcomes.

Published data indicate that the economic crisis has, so far, not been associated with negative effects on mortality. The upward trend in life expectancy at birth

has continued to 2011, the latest year for which data are available (Department of Health, 2012a; OECD, 2013). Population death rates for men and women have continued to decline, although all death rates experienced a slight increase from 2010 to 2011 before stabilizing again in 2012 (see Fig. 5.5).

Information on age-standardized death rates is available up to 2010 only but indicates a steady decline in all-cause mortality (OECD, 2012b). While age-standardized rates of death for external causes have fallen over the period of the crisis, much of this fall is accounted for by a substantial fall in deaths from accidental causes, particularly traffic accidents. While the age-standardized rate of death for “intentional self-harm” has remained relatively steady over the period 2008–2010 (OECD, 2013), more recent data suggest that the number of deaths by suicide per 1000 population has increased over the period 2007–2012, although the rate fell between 2011 and 2012 (CSO, 2013d).

**Fig. 5.5** Total, male and female death rates per 1000 population in Ireland, 2000–2012



Source: CSO, 2014b.

A recent study in Cork City identified an association between the impact of the economic crisis and suicide (Arensman et al., 2012), while a number of studies have analysed the impact of economic crises (and particularly the experience of unemployment) on both physical and mental health, as well as health behaviours (Delaney, Egan & O’Connell, 2011; Institute of Public Health in Ireland, 2011). There has been a consistent increase in calls to mental health

support services in the past five years. Organizations such as the Samaritans directly link the increased demand for their services with the broader economic crisis (Samaritans, 2012). While tobacco consumption has been falling steadily in Ireland since 2000, alcohol consumption started to decline with the onset of the economic crisis (Department of Health, 2012a).

An important indicator of population health status is self-assessed health, which has been found to be a good predictor of mortality and use of health care in numerous international studies (Idler & Benyamini, 1997; van Doorslaer et al., 2000; Burstrom & Fredlund, 2001). There is little evidence that perceptions of health have declined over the period of the crisis in Ireland. Data from the Quarterly National Household Survey show that while there was a decline in the proportion reporting “very good” health over the period 2007–2010 (from 47% to 45%), the proportion reporting “good” health increased from 40% to 42%, and the proportion reporting “fair” or “bad/very bad” health was unchanged (CSO, 2011). More recent data are not yet available.

While it is extremely difficult to infer causal relationships between economic crises and health outcomes, behaviours or inequalities at the population level, the trends observed are consistent with those found in previous analyses for other countries. In general, there is no simple answer to the question of how economic crises impact on health outcomes, behaviours and inequalities (Suhrcke, Stuckler & Leone, 2009; Suhrcke & Stuckler, 2012). For example, Ruhm (2000) found that total mortality and eight of the ten sources of fatalities exhibited a pro-cyclical fluctuation in the United States over the period 1972–1991, with suicides representing an important exception. However, the association at the individual level between lower income, unemployment and poor health is well established (reviewed by Suhrcke & Stuckler, 2012). Recently, the impact of the economic crisis on health outcomes in Ireland has been debated in a series of responses to an editorial in the *British Medical Journal* on health and the economic crisis in Europe (Carney, 2013; Jackson, 2013; Walsh & Walsh, 2013).

## **5. Discussion**

### **5.1 Drivers of change**

The core driver of change has been the need for fiscal consolidation. Public expenditure on health increased rapidly in the pre-crisis period; nonetheless, by 2008, primary and community care services were poorly developed; the public hospital system was experiencing capacity constraints and significant patient safety concerns; and price inflation was well in excess of that experienced in other sectors of the economy (and in most other EU Member States). Nevertheless, the huge growth in health expenditure that had occurred during

the boom years meant that there was room for efficiency gains in the recession. Essentially, built-in inefficiency provided a cushion for the hard fall of significant budget cuts in health. The system is now certainly more efficient than at the beginning of the crisis and is generally doing more with less (Thomson, Jowett & Mladovsky, 2012). The recession, at least in the first few years, proved to be a useful mechanism to reduce input costs (which were very high by international standards) and to increase productivity by treating patients more cost-effectively (e.g. increased day care in hospitals).

However, with further reductions in public health expenditure required over the period 2013–2015, there are doubts over the capacity of the system to absorb further cuts without damaging patient access and care (Thomson, Jowett & Mladovsky, 2012). In addition, it is now clear that the cuts proposed in each budget have proved increasingly hard to realize because of continued cost pressures (e.g. in terms of expenditure on agency staff) and failure to implement some key cost-reduction initiatives in the face of stakeholder pressure. Some input prices still remain high by international standards (Thomson, Jowett & Mladovsky, 2012; Brick, Gorecki & Nolan, 2013). It is also important to remember that such cuts are occurring in the context of a system that is experiencing significantly increased demands in the form of population ageing, increased fertility and rising rates of chronic disease.

## 5.2 Content and process of change

Despite the significant cuts in public health expenditure that have occurred, a crucial safety net for vulnerable groups has been maintained via the medical card scheme. However, there have been recent changes to both the breadth and depth of cover in the medical card scheme, and for those not covered by a medical card, the scope and depth of public cover has been continually eroded (see Table 5.5). The latter has occurred despite a recent report that found that Ireland is unusual internationally in terms of the high level of user fees that are charged for public health services (see Table 4.6 in Thomson, Jowett & Mladovsky, 2012).

In addition, in the context of a system that requires the majority of the population to pay the full, unregulated, OOP cost for primary care services, continued price inflation in doctors' and dentists' fees is a concern. Health care affordability is likely to become an even greater issue in future, as average annual disposable incomes continue to fall.

However, for the first time in the history of the Irish State, the principle of “a universal, single-tier health service, which guarantees access to medical care based on need, not income” (Government of Ireland, 2011a) is a core component of official health policy. The Programme for Government notes that everyone in Ireland will be able to obtain statutory benefits from an “insurer” of

their choice, including a public option. The assumption is that private insurers operating in the PHI market will compete with a public entity to offer statutory coverage. It is questionable whether a competitive insurance system will help to improve efficiency and control costs. The experience of insurer competition in Germany, the Netherlands and Switzerland suggests that such systems have not been effective in health care cost control (Westert et al., 2010; Maarse & Paulus, 2011; Schut and van de Ven, 2011; Busse & Blümel, 2014).

The Programme for Government sets out an ambitious range of reforms for the Irish health system. This involves the introduction of free GP care and universal health insurance, ostensibly all by 2016. In this regard, the economic crisis has helped to highlight the need for reform in the system, which was largely ignored in the pre-crisis period. The crisis has also reduced opposition to change (O'Riordan & Thomas, 2010) as can be seen most clearly by the implementation of the Public Service Agreements and the acceptance by stakeholders of the broad range of initiatives to cut costs around human resources and pharmaceuticals.

The ultimate aim of Irish and international health policy is to improve population health (Department of Health and Children, 2001b). In this regard, it is important to analyse the extent to which the economic crisis, and health system responses, have impacted on population health. Impacts on general population health are difficult to identify at this stage of the crisis because of the time lag in effects, although some initial health impacts have been identified in the Irish context, particularly in terms of mental health outcomes, as detailed above.

### **5.3 Implementation challenges**

Despite the acknowledgement of the need for changes, the continued austerity seems now to be working against reform. In 2013, the first steps to free GP care were postponed. Further delays in implementing policy may well be likely as the health system battles to continue to provide quality care with shrinking budgets and demographic pressures. In addition, it is unlikely that capacity can be expanded sufficiently to cope with the effects of removing price barriers to care without an injection of more funds and resources into the system (Thomas, Normand & Smith, 2008).

Perhaps of even greater concern is the slow erosion of public health entitlements and increase in co-payments that has occurred throughout the crisis. The creation of increased barriers to accessing pharmaceuticals through higher co-payments is of particular concern. Developments such as these raise questions about the extent to which the principle of “a universal, single-tier health service, which guarantees access to medical care based on need, not income” is being implemented in the current climate.

## 5.4 Resilience in response to the crisis

Beyond the substantive issues outlined above, some reflection is possible at this early stage of analysis. Interviews with senior health system decision-makers (carried out as part of a wider project on resilience in the Irish health system) provide some important insights.<sup>6</sup> As mentioned above, the core driver of change throughout the crisis has been the requirement for fiscal consolidation. Interviewees reflected that, “the financial requirements and the economic sovereignty of the country is taking precedent now”. The bailout agreement with the Troika (which ran to the end of 2013) framed this consolidation: “the arrangement with our partners as we call them, the EU/IMF and the ECB [the Troika] is ruling our policy approach”.

In the years before the crisis, the health system was largely in development mode. Interviewees noted, though, a lack of strategic thinking during this time, “in the period, say from 1997 to 2008, the solution to most problems, including health, was to throw money at the problem”. The crisis, and by implication the cost-cutting that has followed, was considered an opportunity to address what interviewees considered to be an over-resourcing of the system during the years of budgetary surplus: “in terms of strategic development the fact that we are in such huge economic and financial difficulty means that people are likely to be far more open to looking at alternative major reforms in health care than they would have been previously”. The influence of the Troika has “allowed or forced the political system to make more unpalatable decisions than they otherwise would have made”.

The health system reform policy itself may be considered another important driver of change as, at least in principle it is framing decisions being made. Nonetheless, implementation is fraught with a range of challenges, both organizational and political. These include, among others, stakeholder resistance, system complexity and pressure for reform in other sectors, which diffuses the focus on health. In effect, the economic crisis is forcing fiscal consolidation decisions, such as increased OOP payments, which seem to undermine the global policy drive towards universality for example.

Despite negative effects of the crisis, such as a reduction in health funding, less access to health care and less coverage, interviewees noted that “managing with less” has resulted in greater system efficiency and productivity. This trend seems now to have reached its limit, however, as the crisis is sustained and further rationalization becomes more difficult. Within these parameters, a tentative sequence has been identified whereby the first phase response of the

<sup>6</sup> This section draws heavily on interviews with senior health system decision-makers in Ireland as part of the HRB-funded project “Resilience of the Irish health system: surviving and utilising the economic contraction”. Further details on the methodology for the qualitative component of the research are available from Health Policy and Management (2013). See also Thomas et al. (2013).

Irish health system to the crisis has resulted in limited levels of financial resilience and significant adaptive resilience – enabled by surplus resourcing of the system during the period of economic boom (Thomas et al., 2012).

The system is now in a more challenging phase during which its transformative capacity is being tested. If the crisis as “opportunity” and the health system reform policy are core drivers of change, benefiting from this time in terms of better service delivery and health outcomes will require different kinds of system response. Whether changed system patterns are possible is unclear. Interviewees questioned, for example, if politicians could overcome the challenges of system reform, “I think we have learned a lot from it [the recession] certainly but with a question, is the political will there to take it on, to sort it out?” Further challenges include the capacity to use evidence to drive policy, a noted lack of management capacity to deliver on efficiency and reform targets, and a lack of integrated management systems.

Such organizational challenges compound the strategic process of response to the crisis. In practice this seems to some extent unplanned or reactive; interviewees recognized that their core challenge at that moment was to maintain a safe and efficient service first and foremost. Generating the motivation and additional resources for system reform is difficult. Reflection and lesson learning are questioned in this context: “we don't think clearly or radically enough to bring about these kinds of changes”. It is too early to clearly identify the lessons being learnt in practice through the experience of the crisis; nonetheless the opportunities to do this are valued, “I think we need to be prepared to step back a bit and think more. So often in this job and in the health services generally at any sort of a senior level you're just working flat out from one thing to the next to the next to the next and it's difficult to take the time out and step back and say, 'look what are we learning from this?'”. Beyond the fiscal indicators of system resilience and preparedness, as reported above, identifying and understanding the full consequence and implications of the economic crisis for the health system will require prioritizing high-quality reflection and dialogue.

## **6. Conclusions**

The Irish economy suffered a particularly severe financial and economic crisis. Key domestic causes were related to the fragility of the banking system, pro-cyclical government expenditure, an imbalanced taxation portfolio and lax government oversight and regulation. While in response, public expenditure on health has fallen by about 9% since its peak, public health care expenditure has been relatively protected in the recession compared with other sectors, primarily because of cost pressures from demographic trends and from increasing chronic disease prevalence.



Substantial efficiencies have been made to the public health care system through an emphasis on lowering unit costs, increasing productivity and reallocating services across levels of care. While there is potential for more efficiency, the “easy” cuts have been made and political obstacles to further cuts are very real around human resources and pharmaceuticals.

The affordability of accessing services is a concern, given the lower health care expenditure by government and regular increases of co-payments for a variety of services and for insurance premiums. Consequently, there is an increasing burden on households to pay for health care at the same time that disposable income has fallen. Nevertheless, the medical card scheme has functioned well and protected access to health care for the poorest and for most of those aged over 70. While the government's commitment towards a new universal health care system remains intact, progress has been delayed and there are concerns about implementation within the continued context of scarce public resources.

## Appendix 5.1

### Major crisis-related events and changes in the Irish health care system, 2008–2013

Date	Event/action
<b>2008</b>	
January	DoH increased emergency department, public hospital inpatient and prescription <sup>a</sup> charges for private (i.e. non-medical card) <sup>b</sup> patients
September	Government introduced Bank Guarantee Scheme
<b>2009</b>	
January	DoH increased emergency department, public hospital inpatient and prescription charges for private patients Tax relief on unreimbursed medical expenses restricted to the standard rate of tax (i.e. 20%) DoH removed automatic entitlement to medical cards from people over 70 years of age and replaced it with a means test DoH announced first in a series of annual increases in private and semi-private beds in public hospitals
March	Government introduced a pension-related deduction across the public service Government introduced a moratorium on recruitment and promotions across the public service (an incentivized early retirement scheme also introduced)
May	DoH implemented the first in a series of reductions in payments to health professionals (e.g. GPs, dentists, ophthalmologists, pharmacists, etc.) under the Financial Emergency Measures in the Public Interest (FEMPI) Act Government doubled the health levy and lowered the income threshold for the higher rate
November	Government made extra funds available to cover large increased demand under the medical card scheme

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**2010**

January	Government introduced progressive public sector pay cuts of between 5 and 15% DoH increased prescription charges for private patients and cut entitlements for private patients under the Treatment Benefit Scheme DoH announced first in a series of major annual cuts to public health budget <sup>C</sup>
February	DoH published interim agreements with pharmaceutical manufacturers
April	DoH cut entitlements for medical card patients under the Dental Treatment Services Scheme
June	DoH negotiated a Public Service Agreement with health professionals (as part of an agreement with the wider public service)
October	DoH introduced prescription charges for medical card patients
November	Ireland accepted an EU-IMF Programme of Financial Support worth €85 billion for the period 2010–2013

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**2011**

January	Government abolished the health levy and replaced it with a (non-earmarked) universal social charge
March	New coalition government announced commitment to a universal health insurance system (by 2016) and free primary care (to be phased in by 2015) in its Programme for Government

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**2012**

January	DoH published interim agreements with pharmaceutical manufacturers DoH increased prescription charges for private patients and cut entitlements for private patients under the Treatment Benefit Scheme
June	DoH published further interim agreements with pharmaceutical manufacturers
September	DoH introduced lower pay scales for newly appointed hospital consultants and nurses
November	DoH reached new agreements for the period 2012–2015 with pharmaceutical manufacturers EU-IMF expressed concern over health budget overruns (with a particular focus on pharmaceutical prices, costs to the state of private practice in public hospitals, salary levels and medical card costs)
December	First phase of the free primary care policy (GP visit cards for those on the Long Term Illness Scheme) delayed

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**2013**

January	DoH increased public hospital inpatient and prescription charges for private patients DoH increased prescription charges for medical card patients DoH decreased medical card income thresholds for over 70s DoH announced its intention to restrict access to medical cards for the remainder of the population through revised criteria for eligibility (legislation needed)
May	Government announced that the commitment to extend free GP care to those covered by the Long-Term Illness Scheme had been dropped; an alternative plan was being drafted New legislation to implement reference pricing and generic substitution was signed into law

## Major crisis-related events and changes in the Irish health care system, 2008–2013 (continued)

### 2013

July	Further public sector pay cuts, changes to overtime and premium payments, increases in working hours and other workplace reforms were implemented as part of the second Public Service Agreement ("Haddington Road") for the period 2013–2015
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*Notes:* DoH: Department of Health; <sup>a</sup>Prescription charges for private patients increased by raising the monthly deductible for the Drugs Payment Scheme; <sup>b</sup>See Thomson, Jowett and Mladovsky (2012) for a detailed description of entitlements to public health services in Ireland; <sup>c</sup>See Fig. 5.1 for further details.

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## References

- Arensman E et al. (2012). *First report of the Suicide Support and Information System*. Cork, National Suicide Research Foundation.
- Barrett A et al. (2011). *Fifty plus in Ireland 2011. First results from the Irish Longitudinal Study on Ageing (TILDA)*. Dublin, The Irish Longitudinal Study on Ageing.
- Borowitz M, Moran V, Pearson M (2011). The performance of the Irish health system in an international context. In: Callan T, ed. *Budget perspectives 2012*. Dublin, Economic and Social Research Institute:23–56.
- Brick A, Nolan A (2010). The sustainability of Irish health expenditure. In: Callan T, ed. *Budget perspectives 2011*. Dublin, Economic and Social Research Institute:83–118.
- Brick A et al. (2010). *Resource allocation, financing and sustainability in health care. Evidence for the Expert Group on Resource Allocation and Financing in the Health Sector*. Dublin, Department of Health and Children and Economic and Social Research Institute.
- Brick A et al. (2012). Conflicting financial incentives in the Irish health-care system. *Economic and Social Review*, 43: 273–301.
- Brick A, Gorecki P, Nolan A (2013). *Ireland: pharmaceutical prices, prescribing practices and usage of generics in a comparative context*. Dublin, Economic and Social Research Institute (ESRI Research Series No. 32).

Burström B, Fredlund P (2001). Self-rated health: is it as good a predictor of subsequent mortality among adults in lower as well as in higher social classes? *Journal of Epidemiology & Community Health*, 55: 836–840.

Busse R, Blümel M (2014). Germany: health system review. *Health Systems in Transition*, 16(2):1–296.

Callan T et al. (2012). *Budget 2013: distributional impact*. Dublin, Economic and Social Research Institute.

Carney P (2013). Re: health and the economic crisis. *BMJ*, 346: f4140.

Carswell S (2012). Nine-year government bond drops below 6%: lowest rate since bailout. *Irish Times*, 22 August.

Citizen's Information Board (2014). *Budget 2013* [online]. Dublin, Citizen's Information Board ([http://www.citizensinformation.ie/en/money\\_and\\_tax/budget\\_2013.html](http://www.citizensinformation.ie/en/money_and_tax/budget_2013.html), accessed 29 October 2014).

Comptroller and Auditor General (2010). *Annual report 2009*. Dublin, Stationery Office.

Comptroller and Auditor General (2011). *Annual report 2010*. Dublin, Stationery Office.

CSO (2011). *Quarterly national household survey (Q3 2010): health status and health services utilisation*. Dublin, Central Statistics Office.

CSO (2012a). *Consumer price index detailed sub-indices, December 2011*. Dublin, Central Statistics Office.

CSO (2012b). *Quarterly national accounts (Q4 2011 and year 2011 preliminary)*. Dublin, Central Statistics Office.

CSO (2013a). *Consumer price index detailed sub-indices, December 2012*. Dublin, Central Statistics Office.

CSO (2013b). *Quarterly national household survey (Q1 2013)*. Dublin, Central Statistics Office.

CSO (2013c). *Survey on income and living conditions (SILC): 2011 and revised 2010 results*. Dublin, Central Statistics Office.

CSO (2013d). *Vital statistics (Q4 and yearly summary)*. Dublin, Central Statistics Office.

CSO (2014a). *Statistics: CPA01: consumer price index by commodity group, year and statistic*. Dublin, Central Statistics Office (<http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?Maintable=CPA01&Planguage=0>, 3 November 2014).

CSO (2014b). *Statistics:CNA20: population by yearly age, sex, marital status and year*. Dublin, Central Statistics Office (<http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?MainTable=CNA20&PLanguage=0&PXSID=0>, 3 November 2014).

Cullen P (2013). GP card plan for long-term illness to be dropped. *Irish Times*, 8 May.

Dáil Éireann (2012). Long-term illness scheme. *Written Answers*, 771(3): 5.

Delaney L, Egan M, O'Connell N (2011). *The experience of unemployment in Ireland: a thematic analysis*. Dublin, University College Dublin (Geary WP2011/16).

Department of Health (2011). *Comprehensive review of expenditure September 2011*. Dublin, Department of Health.

Department of Health (2012a). *Health in Ireland: key trends 2012*. Dublin, Department of Health.

Department of Health (2012b). *Health statistics 2011*. Dublin, Department of Health.

Department of Health (2013). *Reduction in fees paid to general practitioners and pharmacists*. Dublin, Department of Health.

Department of Health and Children (2001a). *Primary care: a new direction*. Dublin, The Stationery Office.

Department of Health and Children (2001b). *Quality and fairness: a health system for you*. Dublin, The Stationery Office.

Department of Health and Children (2006). *Report of the Expert Group on Mental Health Policy: a vision for change*. Dublin, The Stationery Office.

Department of Finance (2014). *Ireland's programme (EU-IMF programme)*. Dublin, Department of Finance (<http://www.finance.gov.ie/what-we-do/eu-international/irelands-programme-eu-imf-programme>, accessed 29 October 2014).

Department of Public Expenditure and Reform (2012a). *Expenditure report 2013*. Dublin, Department of Public Expenditure and Reform.

Department of Public Expenditure and Reform (2012b). *Medium term fiscal statement November 2012 incorporating the Department of Finance's autumn forecasts*. Dublin, Department of Public Expenditure and Reform.

Department of Public Expenditure and Reform (2014). *Estimates of public expenditure 2000–2013*. Dublin, Department of Public Expenditure and Reform (<http://databank.per.gov.ie/Expenditure.aspx?rep=GrossVH>, accessed 29 October 2014).

Dormont B, Grignon M, Huber H (2006). Health expenditure growth: reassessing the threat of ageing. *Health Economics*, 15: 947–963.

Duffy D, Timoney K (2013). *Quarterly economic commentary: spring 2013*. Dublin, Economic and Social Research Institute.

European Commission (2012). *Economic adjustment programme for Ireland*. Brussels, Directorate General for Economic and Financial Affairs [Winter 2012 European Commission Working Document].

Eurostat (2013). *Health and long term care indicators*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/portal/page/portal/employment\\_social\\_policy\\_equality/social\\_protection\\_social\\_inclusion/indicators/health\\_long\\_term\\_care](http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_social_policy_equality/social_protection_social_inclusion/indicators/health_long_term_care), accessed 9 August 2013).

Gorecki P et al. (2012). *Delivery of pharmaceuticals in Ireland: getting a bigger bang for the buck*. Dublin, Economic and Social Research Institute (ESRI Research Series 24).

Government of Ireland (2009). *Statutory Instrument No. 262 of 2009: health professionals (reductions of payments to general practitioners) regulations 2009*. Dublin, The Stationery Office.

Government of Ireland (2010). *Statutory Instrument No. 638 of 2010: health professionals (reductions of payments to general practitioners) regulations 2010*. Dublin, The Stationery Office.

Government of Ireland (2011a). *Government for national recovery 2011–2016*. Dublin, Stationery Office.

Government of Ireland (2011b). *Statutory Instrument No. 556 of 2011: health professionals (reductions of payments to general practitioners) regulations 2011*. Dublin, The Stationery Office.

Government of Ireland (2013a). *Health (Amendment) Bill 2013*. Dublin, Stationery Office.

Government of Ireland (2013b). *Health (Pricing and Supply of Medical Goods) Act 2013*. Dublin, Stationery Office.

Health Information and Quality Authority (2007). *National Hygiene Services quality review 2007*. Dublin, Health Information and Quality Authority.

Health Information and Quality Authority (2008a). *Investigation into the circumstances surrounding the provision of care to Rebecca O'Malley, in relation to her symptomatic breast disease, the Pathology Services at Cork University Hospital, Symptomatic Breast Disease Services at Mid Western Regional*. Dublin, Health Information and Quality Authority.

Health Information and Quality Authority (2008b). *Investigation report into the pathology service and the symptomatic breast disease service at University Hospital Galway*. Dublin, Health Information and Quality Authority.

Health Insurance Authority (2012). *Annual report and accounts 2011*. Dublin, Health Insurance Authority.

Health Insurance Authority (2013). *May newsletter*. Dublin, Health Insurance Authority.

Health Policy and Management (2013). *Research projects*. Dublin, Health Policy and Management, Trinity College ([www.medicine.tcd.ie/health\\_policy\\_management/research/research-projects/Resilience-Project.php](http://www.medicine.tcd.ie/health_policy_management/research/research-projects/Resilience-Project.php), accessed 29 October 2014).

HSE (2008). *National service plan 2009*. Dublin, Health Service Executive ([http://www.hse.ie/eng/services/Publications/corporate/National\\_Service\\_Plan\\_2009.pdf](http://www.hse.ie/eng/services/Publications/corporate/National_Service_Plan_2009.pdf), accessed 29 October 2014).

HSE (2010). *Supplementary report December 2009*. Dublin, Health Service Executive.

HSE (2011a). *Supplementary report June 2011*. Dublin, Health Service Executive.

HSE (2011b). *Supplementary report December 2010*. Dublin, Health Service Executive.

HSE (2012a). *Revised salary scales: new medical consultants*. Dublin, Health Service Executive (HR Circular 017/2012).

HSE (2012b). *Supplementary report December 2011*. Dublin, Health Service Executive.

HSE (2012c). *Supplementary report June 2012*. Dublin, Health Service Executive.

HSE (2013a). *List of national clinical care programmes*. Dublin, Health Service Executive (<http://www.hse.ie/eng/about/Who/clinical/natclinprog/>, accessed 29 October 2014).

HSE (2013b). *National service plan 2013*. Dublin, Health Service Executive.

HSE (2013c). *Performance report April 2013*. Dublin, Health Service Executive.

HSE (2013d). *Performance report December 2012*. Dublin, Health Service Executive.

HSE (2013e). *PQ 7530-13*. Dublin, Health Service Executive.

HSE (2013f). *Supplementary report April 2013*. Dublin, Health Service Executive.

HSE (2013g). *Supplementary report December 2012*. Dublin, Health Service Executive.

Idler E, Benyamini Y (1997). Self-rated health and mortality: a review of twenty-seven community studies. *Journal of Health and Social Behaviour*, 38: 21–37.

Institute of Public Health in Ireland (2011). *Facing the challenge. The impact of recession and unemployment on men's health in Ireland*. Dublin, Institute of Public Health in Ireland.

Institute of Public Health in Ireland (2013). *Proposed sugar sweetened drinks tax: health impact assessment full report*. Dublin, Institute of Public Health.

Jackson T (2013). Re: health and the economic crisis. *BMJ*, 346: f4140.

Maarse H, Paulus A (2011). The politics of health care reform in the Netherlands since 2006. *Health Economics, Policy and Law*, 6: 125–134.

Mental Health Commission (2013). *Annual report of the Mental Health Commission including the report of the Inspector of Mental Health Services*. Dublin. Mental Health Commission.

National Treatment Purchase Fund (2013). *National trend analysis of waiting times*. Dublin, National Treatment Purchase Fund.

Nolan B, Wiley M (2000). *Private practice in Irish public hospitals*. Dublin, Economic and Social Research Institute (General Research Series 175).

Normand C (2011). The health care system in Ireland: controlling expenditure and making best use of resources. In: Callan T, ed. *Budget Perspectives 2012*. Dublin, Economic and Social Research Institute:57–84.

OECD (2012a). *Health at a glance 2011. OECD indicators*. Paris, Organisation for Co-operation and Development.

OECD (2012b). *Health statistics 2012*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 5 November 2014).

OECD (2013). *Health statistics 2013*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 5 November 2014).

OECD (2014). *Health statistics 2014*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 5 November 2014).

Oireachtas (2012a). *Dáil question response from Minister of State at the Department of Health (Ms Lynch) to Deputy Róisín Shortall for written answer on 21 February 2013 (Parliamentary Question Ref 9490/13)*. Dublin, Oireachtas ([www.oireachtas.ie](http://www.oireachtas.ie). <http://oireachtasdebates.oireachtas.ie/debates%20authoring/debateswebpack.nsf/takes/dail2013022100075?opendocumentWRAA01200>, accessed 29 October 2014).

Oireachtas (2012b). *Dáil question response to Thomas Broughan from Minister James Reilly, 23 October 2012 (Parliamentary Question 658)*. Dublin, Oireachtas ([http://oireachtasdebates.oireachtas.ie/debates%20authoring/debateswebpack.nsf/\(indexlookupdail\)/20121023-WRAA?opendocumentWRAA02200](http://oireachtasdebates.oireachtas.ie/debates%20authoring/debateswebpack.nsf/(indexlookupdail)/20121023-WRAA?opendocumentWRAA02200), accessed 29 October 2014).

O'Reilly J, Wiley M (2010). Who's that sleeping in my bed? Potential and actual utilisation of public and private beds in-patient beds in Irish acute public hospitals. *Journal of Health Services Research and Policy*, 15: 210–214.



O'Riordan M, Thomas S (2011). *Support for policy development of SHI in Ireland: a review of stakeholder views and values*. Dublin, Trinity College and NUI Galway (prepared for the Minister of Health).

Ruane F (2010). *Report of the Expert Group on Resource Allocation and Financing in the Health Sector*. Dublin, Department of Health and Children.

Ruhm C (2000). Are recessions good for your health? *Quarterly Journal of Economics*, 115: 617–650.

Samaritans (2012). *Impact report 2010–2011*. Dublin. Samaritans. <http://www.samaritans.org/sites/default/files/kcfinder/files/samaritans%20ireland%20impact%20report.pdf>, accessed 29 October 2014).

Schut E, van de Ven W (2011). Effects of purchaser competition in the Dutch health system: is the glass half full or half empty? *Health Economics, Policy and Law*, 6: 109–123.

Smith S (2010a). Equity in Irish health care financing: measurement issues. *Health Economics, Policy and Law*, 5: 149–169.

Smith S (2010b). The Irish health basket: a basket case? *European Journal of Health Economics*, 11: 343–350.

Suhrcke M, Stuckler D (2012). Will the recession be bad for our health? It depends. *Social Science & Medicine*, 74: 647–653.

Suhrcke M, Stuckler D, Leone T (2009). *Recession and health in Europe: what to expect?* Brussels, European Commission DG Employment, Social Affairs and Equal Opportunities.

Thomas S, Burke S (2012). Coping with austerity in the Irish health system. *Eurohealth*, 18: 7–9.

Thomas S, Normand C, Smith S (2008). *Social health insurance: further options for Ireland*. Dublin, Trinity College Dublin and the Adelaide Hospital Society.

Thomas S, Ryan P, Normand C (2010). *Effective foundations for the financing and organisation of social health insurance in Ireland*. Dublin, the Adelaide Hospital Society.

Thomas S et al. (2012). *Resilience of the Irish health system: surviving and using the economic contraction*. Dublin, Trinity College Dublin (Year 1 report of the Resilience Project).

Thomson S, Jowett M, Mladovsky P, eds. (2012). *Health system responses to financial pressures in Ireland: policy options in an international context*. Copenhagen, WHO Regional Office for Europe for the European Observatory on Health Systems and Policies ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/260088/Health-system-responses-to-financial-pressures-in-Ireland.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/260088/Health-system-responses-to-financial-pressures-in-Ireland.pdf), accessed 29 October 2014).

Thomas S et al. (2013). A framework for assessing health system resilience in an economic crisis: Ireland as a test case. *BMC Health Services Research*, 13: 450.

van Doorslaer et al. (2000). Equity in the delivery of health care in Europe and the US. *Journal of Health Economics*, 19: 553–583.

Walsh B, Walsh D (2013). Re: health and the economic crisis. *BMJ*, 346: f4140.

Watson D, Williams J (2001). *Perceptions of the quality of health care in the public and private sectors in Ireland*. Dublin, University College Dublin (Report to the Centre for Insurance Studies, Graduate Business School, University College Dublin).

Westert G et al. (2010). *Dutch health care performance report 2010*. Bilthoven, National Institute for Public Health and the Environment.

Wren M-A (2004). *Health spending and the black hole*. Dublin, Economic and Social Research Institute (Quarterly Economic Commentary) ([http://www.esri.ie/pdf/QEC0904SA\\_Wren.pdf](http://www.esri.ie/pdf/QEC0904SA_Wren.pdf), accessed 29 October 2014).



# Chapter 6

## **The impact of the crisis on the health system and health in Latvia**

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### **Introduction**

Latvia's economy and its health system were not well prepared for the financial crisis. As a result of growth in GDP driven by consumption and real estate investment, in addition to a growing current account deficit, the economy developed dangerous imbalances and fiscal space was constrained when capital inflows from abroad stopped. Population health was relatively poor compared with the rest of Europe, total spending on health was low (including as a share of public expenditure), OOP payments were high and there was not enough emphasis on primary care and prevention. Although the financial crisis brought enormous social and economic challenges, the presence of external agents and Latvia's commitment to loan conditionalities provided strong impetus for the Ministry of Health to push through less popular reforms that had been difficult to implement previously.

Health system reforms introduced in response to the crisis did not always follow objective and verifiable criteria and were sometimes influenced by political opportunities. Nevertheless, many necessary changes were made, including a shift away from hospital care to ambulatory and home care, concentration of state functions into fewer institutions with reduced staff numbers and rationalization of publicly financed pharmaceutical care. Throughout the reform process, the government tried to protect the most vulnerable groups of the population. The challenge now is to continue the reform effort in the context of an improving economy and less political pressure for change. The key challenges are to ensure a stable flow of funds to the health sector, while increasing public spending on health and reducing heavy reliance on OOP payments, and to continue to improve efficiency and equitable access to health care.

# 1. The nature and magnitude of the financial and economic crisis

## 1.1 The origins and immediate effects of the crisis

The 1990s and 2000s were turbulent decades for the Latvian economy. GDP declined by nearly 35% in 1992 and fluctuating growth rates persisted in the latter part of the 1990s (Mitenbergs et al., 2012). From 2000 to 2007, Latvia grew faster than any economy in the EU, reaching double-digit real GDP growth rates in 2005–2007 (the annual average growth rate was 10.3% during that period) (Table 6.1) (Ministry of Economics, 2012). High GDP growth was driven by a rapid expansion in domestic demand. Private consumption and investments were fuelled by large foreign capital inflows and a very high credit growth, which were mainly concentrated in real estate and other non-export sectors of the economy. Another factor driving domestic demand was high government spending fuelled by high tax revenues<sup>1</sup> and the government's pro-cyclical fiscal stance. Expenditure in all governmental functions at least doubled between 2004 and 2008 (World Bank, 2010a). This boom was not sustainable and the economy developed dangerous imbalances: on the eve of the crisis in 2007 consumer price inflation had reached double-digits, property prices had increased four-fold in the previous few years and nominal wages had doubled between 2004 and 2007, increasing much more than productivity. Imports grew much faster than exports and resulted in current account deficits above 20% of GDP in 2006 and 2007 (European Commission, 2012). Despite this, Latvia had no problems in attracting funding until the global financial turmoil worsened in late 2008.

Already in early 2007, increasing awareness of the country's economic imbalances prompted speculation about a potential devaluation of the lat (from 2005 to 2013 the lat had been pegged to the euro within the EU's exchange-rate mechanism) and whether the Bank of Latvia would have to intervene to support the currency. By 2008, economic recession had begun in Latvia. The contraction reflected a combination of the sudden stop in capital inflows, a freeze on liquidity and weak external demand, exacerbated by a loss of competitiveness (wages increasing faster than productivity) dating back to the boom years. This was further aggravated by the unfolding global financial crisis and record commodity prices (European Commission, 2012). The general risk aversion in global markets reached a peak after the collapse of Lehman Brothers, when the Latvian Government lost access to financial markets and the second largest bank, Parex, had to be bailed out in November 2008 (European Commission, 2012; Delna, 2013). A renewed bout of speculation in late 2008 prompted further concerns over the sustainability of the lat's peg to the euro (Economist Intelligence Unit, 2009).

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1 This was the case despite a relatively low tax burden; in 2007, Latvia's tax burden as a percentage of GDP was the fourth lowest in the EU.

**Table 6.1** Demographic and economic indicators in Latvia, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population (in thousands)	–	–	–	2,331.5	2,319.0	2,306.4	2,294.6	2,281.3	2,270.9	2,261.3	2,248.4	2,074.6	2,041.8
People aged 65 and over (% total population)	–	–	–	15.9	16.2	16.5	16.8	17.1	17.2	17.3	17.4	18.4	18.6
GDP per capita (€)	3,700 (b)	4,000 (b)	4,300 (b)	4,700 (b)	5,200 (b)	5,800 (b)	6,500 (b)	7,200 (b)	7,000 (b)	5,900 (b)	6,400 (b)	6,800 (b)	–
Real GDP growth (%)	–	–	–	7.6 (b)	8.9 (b)	10.1 (b)	11.2 (b)	9.6 (b)	–3.3 (b)	–17.7 (b)	–0.9 (b)	5.5 (b)	5.6
Government deficit (% GDP)	–	–	–2.3	–1.6	–1.0	–0.4	–0.5	–0.4	–4.2	–9.8	–8.1	–3.4	–2.1
Government consolidated gross debt (% GDP)	–	–	13.6	14.7	15	12.5	10.7	9.0	19.8	36.7	44.5	42.2	44.4
Long-term interest rates (10-year government rate) (%)	–	–	–	–	4.85	3.53	4.16	5.63	6.71	15.5	6.85	6.00	4.10
Total unemployment (% total labour force) <sup>a</sup>	14.5	13.4	13.4	10.7	10.1	9.0	7.0	6.1	7.7	17.5	19.0	16.5 (b)	13.8 (f)
Long-term unemployment (% active population)	7.9	7.2	5.8	4.7	4.9	4.4	2.7	1.7	2.1	4.9	8.9	8.8	7.8

Notes: <sup>a</sup>Employment data for 2011 and 2012 have been recalculated using data from the Population Census of 2011; recalculations for earlier years were not available at the time of writing. Therefore employment data for 2011 and 2012 cannot be compared with data from the previous years. (b): Break in the series; (f): Forecast.

Sources: Ministry of Economics, 2012; European Central Bank, 2013; Eurostat, 2013a.

These developments inevitably had a significant impact on public finances, with the budget deficit widening from 0.4% of GDP in 2007 to 4.2% in 2008 (Table 6.1, Central Statistical Bureau of Latvia, 2013). General government gross debt, which used to be one of the lowest in Europe, at only 9% of GDP in 2007 (Eurostat, 2013a), increased to almost 20% of GDP in 2008, and to over 42% of GDP in 2011; yet it still remained well below the average for the EU27 of over 80% of GDP (Eurostat, 2013a). GDP contracted by 10.5% in the last quarter of 2008 (Cochrane, 2009) and at the end of February 2009, Standard & Poor's lowered Latvia's credit rating to BB+, one level below investment grade, as the country faced bankruptcy if budget spending was not cut (Cochrane, 2009). Long-term interest rates on government bonds doubled between 2008 and 2009 (Table 6.1).

## 1.2 Government responses to the crisis

In late 2008, Latvia applied for financial assistance from international lenders. The agreed programme was centred on maintaining the currency peg in order to create conditions for accession to European Economic and Monetary Union in the medium term (the authorities had initially aimed to join in 2008 but high inflation forced them to drop this goal) (Economist Intelligence Unit, 2009). A total of €7.5 billion was made available between the end of 2008 and the first quarter of 2011, including a stand-by loan of around €1.7 billion from the IMF approved on 23 December 2008. The balance was provided mainly by the EU (a medium-term loan of up to €3.1 billion, with a maximum average maturity of seven years, agreed in early 2009), Scandinavian countries and the World Bank. As a precondition to the loan, the government pledged to implement significant restructuring measures in the Economic Stabilization and Growth Revival Programme.<sup>2</sup> The key features of this Programme, adopted by the Latvian authorities on 12 December 2008 (Cabinet of Ministers, 2008), included:

- stringent and stable monetary policy: fixing a peg rate for the Latvian lat to the euro;
- stringent fiscal policy: balancing of state and local government expenditure with their revenues (e.g. setting the upper limit for the state budget deficit at below 5.0% of GDP in 2009, 4.8% of GDP in 2010 and 2.8% of GDP in 2011);
- reducing salaries of public sector workers;
- reducing the number of public administration employees by at least 15% within two years;

<sup>2</sup> These conditions were listed in the Letter of Intent signed with the IMF and the MoU signed with the European Community.

- increasing the elasticity of the labour market by supporting employment (including training) of the temporarily unemployed;
- facilitating investment, including maintenance of investments in state financed and supported programmes;
- ensuring the availability of financing for activities related to the restructuring of the national economy, particularly for programmes co-financed with EU structural funds under conditions of “frozen” (i.e. severely constrained) credit resources;
- stabilizing the financial sector: provision of state aid to, and intensified supervision of, credit institutions in order to strengthen their reliability and performance; and
- maintaining social security measures to support the socially most vulnerable groups.

Health care was mentioned explicitly in Latvia's Economic Stabilization and Growth Revival Programme as one of the sectors where cuts to public administration would be made (Cabinet of Ministers, 2008, p. 3). The health sector was further singled out in the Letter of Intent signed with the IMF: “We have approached the World Bank to seek technical assistance on the comprehensive reforms of the education, civil service, state administration and the health care systems that we will launch in 2009. Once completed, these could eventually deliver annual savings of about 2% of GDP, including staff savings that will commence in 2010” (Government of Latvia, 2008, p. 10).

Between 2008 and 2011, significant budget consolidation measures were implemented, translating into a cumulative fiscal adjustment of 16.6% of GDP over that period (Ministry of Finance, 2013a). These measures included the following.

**Cuts in public sector expenditures.** This included the health sector and the Ministry of Health's budget dropped by 12.6% in 2009 (to LVL 503.7 million) and by 1.5% in 2010 (to LVL 496 million) (Ministry of Health, 2012) along with a minimum 10% cut in prices and an average 20% cut in the salaries of all health workers in 2009 (van Ginneken et al., 2012).

**Increases in tax rates.** In 2009, there were increases in the the rate of VAT (from 18% to 21% and from 5% to 10% for goods with a reduced tax rate, including pharmaceuticals and medical devices). In 2011 the VAT rate increased to 22% (to 12% for goods with a reduced tax rate) and was reduced back to 21% in July 2012 (no change for goods with a reduced tax rate). Excise tax on alcohol, tobacco and fuel also increased (rates vary depending on the amount purchased). The personal income tax rate was reduced from 25% to 23% in 2009, increased to 26% in 2010, and then reduced again to 25% in 2011 (and to 24% as of January 2013) along with an increase in the social insurance tax from 33.09% to 35.09%.



**Public administration reforms.** There were reductions in the number of ministries and public agencies.

From early 2010, economic growth slowly resumed and GDP increased by 5.5% in 2011, mainly driven by an increase in exports. Since then, private consumption has been gradually stabilizing but public consumption is very low because of the budget consolidation measures implemented in 2010. However, these measures allowed Latvia to keep its budget deficit well below the target agreed with the EU and the IMF, in order to comply with the Maastricht stability criterion on budget deficits in 2013 and 2014; the country joined the Eurozone and adopted the euro as its national currency in 2014. In addition, after the initial deflation caused by the crisis, prices grew again (at 4.4% in 2011) and GDP grew at about 5% in 2012 and 4% in 2013 (Ministry of Finance, 2012; Eurostat, 2013a). The situation in the labour market was expected to gradually improve in subsequent years; however, increases in employment are likely to be moderate (on average 2% per year) as growth will mainly depend on productivity increases (Mitenbergs et al., 2012).

On 22 December 2011, the IMF's Board supported the closure of Latvia's international loan programme. Of €7.5 billion that was made available, Latvia used only €4.5 billion. The IMF country report released in early 2012 stated that Latvia achieved many of its main objectives: "International reserves have recovered to above pre-crisis levels and the exchange-rate peg has held. The financial sector has strengthened, while fiscal adjustment ... has preserved fiscal sustainability. Competitiveness has improved but this was accompanied by a collapse in output, high unemployment, and (despite the programme's emphasis on emergency safety nets) increasing poverty, while external debt and problem assets in the banking sector have also increased" (IMF, 2012, p. 4).

### 1.3 Broader consequences

With strong economic growth, the level of registered unemployment had been steadily falling in recent years, from 14.4% in 2000 (Tragakes et al., 2008) to 5.7% in 2007 (Economist Intelligence Unit, 2009). However, low saving rates, likely encouraged by the easy availability of credit, made Latvian households more vulnerable to economic shocks. In 2007, the household savings rate in Latvia was the lowest in Europe and it was the only country in Europe with a negative savings rate (-4.3%).<sup>3</sup> Low (but positive) savings rates were also recorded in other Baltic countries (Lithuania, Estonia) and the United Kingdom, compared with an average of 10.8% in the EU27 (Eurostat, 2009).

<sup>3</sup> A negative savings rate means that households spend more than they receive as regular income, and finance some of their expenditure through credit or, to a lesser extent, through exceptional resources such as gains arising from the sale of (mostly financial) assets or running down cash/deposits. One factor that might have contributed to this negative savings rate was tax evasion (grey economy).

Although according to the Central Statistical Bureau of Latvia (2013) the overall share of households reporting economic strain decreased between 2005 and 2008,<sup>4</sup> as much as 80.4% of the poorest quintile indicated suffering from such strain in 2008. According to the World Bank (2010a), household spending on health rose significantly between 2003 and 2008, from 3.6% of household budgets to 4.8%. During this period, health care expenditures of the population increased by 99% while total expenditure grew by 46%. However, in 2008, the share of respondents to the European Union Statistics on Income and Living Conditions (EU-SILC) survey reporting unmet need for medical examination or treatment because it was “too expensive” was at its lowest point since 2005 (see Fig. 6.4 and 6.5 in section 4.2).

Health expenditure as a percentage of all expenditures grew more among the three poorest quintiles, implying that financial protection for the poor worsened. Poorer households also spent more on health as a percentage of their expenditure compared with the richer households: in 2008, the three poorest quintiles (i.e. the first, second and third quintiles) spent 4.8%, 6.6% and 5.4%, respectively, compared with 4.1% and 4.2% for the fourth and fifth quintiles.

However, combining household and government spending on health services (2008 data) suggests that, on the one hand, public spending in Latvia almost fully covered a catastrophic insurance system, financing 95% of inpatient care and emergency services and 76% of general and secondary ambulatory services. On the other hand, it financed only 28% of pharmaceuticals and medical devices, and 11% of dentistry (most state expenditure on dentistry is for children only) (World Bank, 2010a).

## **2. Health system pressures prior to the crisis**

Prior to the crisis, the Latvian health care system faced a number of pressures and challenges. These are discussed first in terms of demand for health care and then in terms of health care supply.

### **2.1 Demand-side pressures**

Latvia has been slow relative to other EU accession countries to shake off the inheritance of poor health outcomes from the Soviet era (World Bank, 2010a).<sup>5</sup> The average life expectancy in Latvia, although significantly higher than in the 1990s, remains the lowest among the Baltic countries and is much lower than the average for the EU27 (approximately eight years lower for

4 Households that indicated that they could not afford at least two of the following items were considered to suffer from economic strain: eat a meal with meat, chicken or fish or equivalent vegetarian meal every second day; cover unexpected expenses from own resources; spend one week annual holiday away from home; financially afford to keep their dwelling warm; cover utility costs, rent and credit (including loans and purchase instalments for purchase of goods).

5 Although most data in this section is for 2010, similar observations can be made for 2007 (i.e. before the crisis).

males and four years lower for females, according to 2010 data). Diseases of the circulatory system are the main cause of mortality and the standardized death rate for these diseases is considerably higher than the average for EU12 (Member States before 1995) and almost three times higher than the EU15 (Member States before May 2004) average. Malignant neoplasms (cancers) remain the second most common cause of mortality. The standardized death rate for malignant neoplasms has been fluctuating at about the same level since the 1990s and incidence has increased by over 30% between 2000 and 2010. Death attributable to external causes (injury or poisoning) remains the third most important cause of death and is the second highest in all EU27 Member States (after Lithuania; 2010 data).

Risk factors for circulatory diseases, such as unhealthy habits and behaviour (smoking, unbalanced diet, low physical activity and the consequently high body mass index), remain highly prevalent in Latvia (e.g. Latvia is placed second, after Greece, among the EU27 in terms of smoking prevalence). In addition, the incidence of diabetes mellitus (another risk factor for circulatory diseases) more than doubled between 2000 and 2012, from 145 to 388 per 100 000 (Mitenbergs et al., 2012). Little attention and resources were given to reversing the mortality trends through better primary care and prevention. Instead, resources were spent to improve acute care upon occurrence of a health event (World Bank, 2010a). Population ageing, like elsewhere in Europe, is putting additional pressure on the health system and its resources.

## **2.2 Supply-side pressures**

### ***Health system financing***

Spending on health care increased by more than 82% in real terms (in constant (2005) lats) between 2000 and 2007, outpacing the general economy, which grew by 56% during the same period; however, spending per capita (purchasing power parity (PPP)), at US\$ 1192 in 2008 (WHO, 2014), remained very low compared with the EU27 average of US\$ 3031 (WHO Regional Office for Europe, 2013). The Ministry of Health's budget increased by 94% in nominal terms between 2005 and 2008 (to LVL 576.6 million) (Ministry of Health, 2012). Following a change in government, with the new government less focused on health care, the share of general government health expenditure as a percentage of total health expenditure started to decline in 2008 (Table 6.2).

The share of private expenditure in health care financing was substantial. Although the share of OOP payments (which account for almost all private expenditure) as a percentage of total health expenditure dropped significantly in 2006, when general government health expenditure grew by 33%, it never fell below 30% and was as high as 34% in 2008. VHI plays a marginal role in

**Table 6.2** Health care expenditure trends in Latvia, 2000–2012

	2000	2005	2006	2007	2008	2009	2010	2011	2012
THE per capita (US\$ PPP) <sup>a</sup>	479	826	1,014	1,198	1,192	1,088	1,104	1,141	1,188
THE (% GDP) <sup>a</sup>	6.0	6.4	6.8	7.0	6.6	6.8	6.5	6.0	6.0
Mean annual real growth in THE (%)	-1.0	25.0	18.0	-2.0	-9.0	-15.0	-5.0	-2.0	2.0
Mean annual real growth in GGHE (%)	-7.0	26.0	33.0	-8.0	-6.0	-19.0	-5.0	-6.0	1.0
GGHE (% THE)	54.4	57.1	64.1	60.7	62.2	59.5	59.5	57.1	56.7
Private health expenditure (% THE)	45.6	42.9	35.9	39.2	37.7	40.5	40.4	42.9	43.3
GGHE (% general government expenditure)	8.7	10.1	11.4	11.8	10.6	9.3	8.9	8.9	8.9
GGHE (% GDP)	3.3	3.6	4.4	4.3	4.1	4.1	3.9	3.4	3.4
OOP expenditure (% THE)	44.1	40.7	32.4	34.9	33.7	35.3	34.9	37.1	37.4
OOP expenditure (% private health expenditure)	96.8	94.8	90.4	88.9	89.2	87.2	86.4	86.4	86.4
PHI (% THE)	1.5	2.2	2.4	1.9	1.8	0.8	2.3	2.5	2.5
PHI (% private health expenditure)	3.2	5.2	6.6	4.8	4.8	1.9	5.7	5.7	5.7

Notes: GGHE: General government spending on health; THE: Total health expenditure; <sup>a</sup>Constant 2005 international dollar. Source: WHO, 2014.

health care financing. Its population coverage peaked at 16% in 2008 (Financial and Capital Market Commission, 2005–2012); however, even then, most of the population remained exposed to high OOP payments: about 7% of the population reported foregoing care in that year because it was “too expensive”, compared with the average of 2.1% for the EU27 (Eurostat, 2012b).

In the pre-crisis years, Latvia focused additional resources on inpatient care, secondary ambulatory services and patient pharmaceuticals. Inpatient expenditure rose by 79% in real terms between 2005 and 2008; secondary outpatient ambulatory payments rose by 121% and spending on pharmaceuticals increased by 73%. In comparison, payments to GPs rose by 45%. In 2008, inpatient and secondary outpatient spending accounted for 68% of total spending on medical care (see Table 6.5 below).

FFS was an important element of reimbursement in the hospital and outpatient care sector, incentivizing providers in these sectors to provide more services for each patient. GPs, by comparison, were compensated for the most part through capitation and so had a financial incentive to do less (World Bank, 2010a).

### ***Health care delivery***

Although there were some improvements in the accessibility of day-care services and specialist outpatient care, and the funding for outpatient care increased, the implementation of the Development Programme for Outpatient and Inpatient Health Care Services Providers 2005–2010 (the so-called Master Plan), which was supposed to downsize hospital care and to support the development of ambulatory care, advanced very slowly because of strong opposition from local communities and concerned politicians.

There is little doubt that Latvia had an overcapacity of acute care hospitals and beds before the financial crisis. There was almost no change in the number of acute care beds between 2005 and 2007, and in 2007 there were 255 acute care beds per 100 000 people in Latvia, compared with an average of 205 per 100 000 in the EU15 (2006 data) (WHO Regional Office for Europe, 2013). In addition, financing for the inpatient sector was not reduced because of the increasing intensity of hospital care (i.e. higher cost per patient) and the expenditure for inpatient care grew by much more than expenditure on GPs between 2005 and 2008 (World Bank, 2010a; see also Health system financing above). The number of inpatients increased by only 5% and the number of bed-days rose by 4% during that period (World Bank, 2010a). The inflation rate in the health care sector was slightly lower than the general inflation rate but at the same time much higher than health care inflation rates observed in the EU27 (Table 6.3). The average length of stay in hospitals was, at 9.44 days in 2007,

slightly higher than the EU15 average of 8.63. The hospital occupancy rate was good (above 76.1% in 2007 compared with the EU15 average of 75.7%) (WHO Regional Office for Europe, 2013).

The number of long-term (nursing and elderly home) beds in Latvia, at 234 per 100 000 population in 2007, clearly lagged behind western European countries (there were 865 long-term beds in the United Kingdom in that year; the average for the EU15 is not available) (WHO Regional Office for Europe, 2013). By contrast, despite a strong decline in the number of psychiatric hospital beds per 100 000 population, Latvia still has one of the highest rates in Europe (154 compared with 66 per 100 000 in the United Kingdom; the average for EU15 is not available) (WHO Regional Office for Europe, 2013).

**Table 6.3** *Harmonized indices of consumer prices for all-items and for health in Latvia and in the EU27, 2006–2012*

	2006	2007	2008	2009	2010	2011	2012
Latvia (all items HICP)	106.57	117.32	135.21	139.62	137.91	143.73	147.02
Latvia (health)	106.58	114.12	129.37	152.49	152.65	148.64	149.2
EU27 (all items HICP)	102.31	104.73	108.56	109.63	111.91	115.38	118.43
EU27 (health)	101.66	103.91	106.43	108.39	109.91	112.15	115.02

*Note:* Harmonized indices of consumer prices (HICP) for all-items and health (CP06) where 2005 values equal 100.

*Source:* Eurostat, 2013b.

The overall availability of human resources was good. However, the number of GPs per 100 000 population, although above the average for the EU12 (29), was lower than the EU15 average of 91 (authors' estimates; no data on the number of GPs per 100 000 in Latvia from WHO Regional Office for Europe, 2013), and the proportion of nurses was very low (556 per 100 000 in 2007 compared with 847 in the EU15 (WHO Regional Office for Europe, 2013). Latvian patients have direct access (with restrictions, e.g. only patients with diabetes have direct access to endocrinologists) to many (11) types of specialist, including psychiatrists, oncologists, gynaecologists, paediatricians, endocrinologists, dermatovenerologists, ophthalmologists, narcologists (addiction specialists), and GPs do not usually deal with such patients. Family medicine was introduced as a new specialty in Latvia only in 1990 and considerable efforts were undertaken to retrain doctors who wished to become GPs in order to build a stronger primary care level (Mitenbergs et al., 2012).

### 3. Health system responses to the crisis

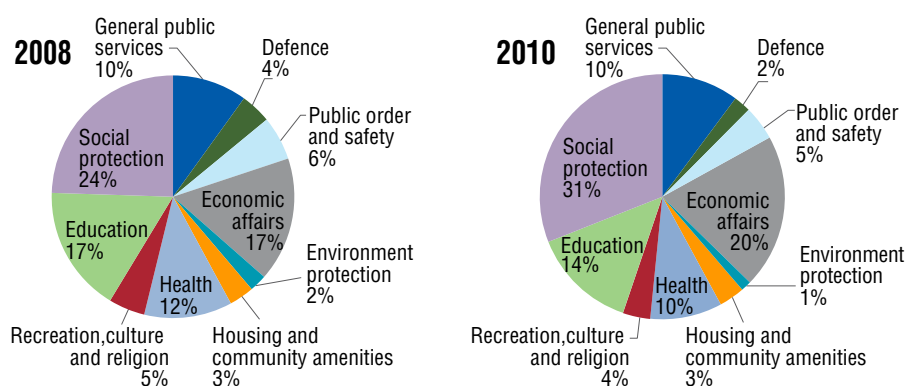
#### 3.1 Changes to public funding for the health system

Total health expenditure consistently increased until 2007. In real terms (in constant 2005 lats), spending on health care increased by more than 82% between 2000 and 2007, outpacing the general economy, which grew by 56% during the same period. However, with the emergence of the economic crisis in 2008, total health expenditure started to decrease and in 2009 it fell below the 2005 level (WHO, 2014).

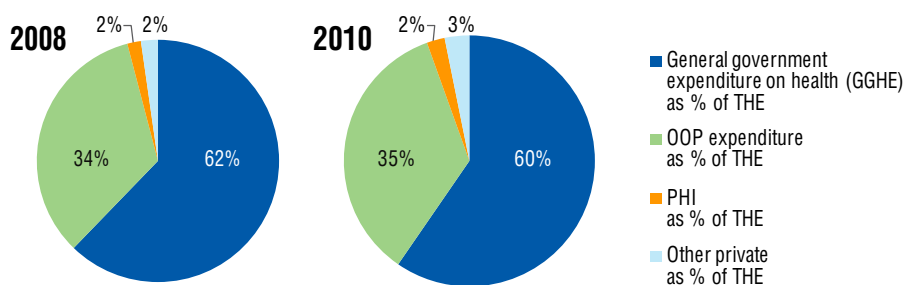
The share of health expenditure as a percentage of total general government expenditure, at 11.4% in 2006 and 11.8% in 2007, declined to 10.6% in 2008 and fell further to below 9% between 2009 and 2010 (or from 12% to 10% according to Eurostat data; Eurostat, 2013a). Other sectors that saw a decrease in the share of government expenditure were education and defence. At the same time, in accordance with the Economic Stabilization and Growth Revival Programme, spending on social protection and economic affairs was prioritized (Fig. 6.1).

Economic stabilization (and budget deficit targets agreed with international lenders) necessitated a contraction in public expenditure, including reductions in the statutory resources for health. While the total expenditure of central government decreased by 6.6% in 2009 (Ministry of Finance, 2013a), general government health expenditure decreased by almost 19% in 2009 compared with 2008. The Ministry of Health's budget fell by 12.6% in 2009 (to LVL 503.7 million) and after falling slightly again (by 1.5%) to LVL 496 million in 2010, it remained steady in 2011 and 2012 (Ministry of Health, 2012). The total budget subsequently increased by 4.1% in 2013 compared with 2012, reaching LVL 524.4 million (Ministry of Health, 2014). It is important to note that from 1 November 2011, the Ministry's budget did not include EU funds available for health care institutions that are not under its direct supervision. This funding is now included in the budget of the Ministry of Finance (and amounted to LVL 7.3 million in 2011, LVL 27.8 million in 2012 and LVL 32.3 million in 2013; U. Mitenbergs, personal communication with the Department of Budget and Investment, Ministry of Health 2013).

As a result of budget consolidation measures, private expenditure on health as a percentage of total health expenditure increased between 2008 and 2010 (see Fig. 6.2 and Table 6.4). Co-payments, which had been unchanged since 2005, rose significantly in 2009 (see section 2.2).

**Fig. 6.1** Public expenditure by sector in Latvia, 2008 and 2010

Source: Eurostat, 2013a.

**Fig. 6.2** Total expenditure on health by source of revenue in Latvia, 2008 and 2010

Note: THE: Total health expenditure.

Source: WHO, 2014.

**Table 6.4** Cost-sharing and OOP payments in Latvia, 2009–2012

	2008 (LVL)	2009 (LVL)	2010 (LVL)
Outpatient visit to GP	0.5	1	1
Outpatient visit to specialist	2	5	3
Outpatient visit to hospital	2	5	3
Outpatient surgery in hospital	0.5	5	5
Daily inpatient charge in hospital	5	12	9.5 (starting day 2)
Maximum patient contribution for one hospital episode	80	250	250
Maximum patient contribution for one year	150	400	400

Note: LVL: Latvian lats.

Source: World Bank, 2010a.



The gross of reductions in the health sector concerned the following areas (World Bank, 2010a).

**Expenditure on health care provision.** This accounted for 64% of spending in 2008 and was cut by 27% in 2009. Services in the following areas were prioritized (in relative terms, as all areas were cut): primary care (GPs), services for children and pregnant women, emergency medical assistance (ambulance services and emergency care at hospitals), subsidies for reimbursed pharmaceuticals and emergency safety net provisions. Hospital and secondary ambulatory services experienced the largest cuts. Public health (disease prevention, health promotion, environmental health, health statistics, public health surveys) also saw substantial reductions in financing; the budget for this sector was cut by 24% in 2009 compared with 2008 (Brigis, 2010).

**Expenditure on specialized health care provision.** This included areas such as infectious disease control and treatment of communicable diseases, accounting for 12% of spending in 2008 but was cut by 17% in 2009. Among all categories of specialized health care provision, emergency medical assistance experienced the smallest reductions.

**Expenditure on sector management.** This was cut by 33% in 2009: the Ministry of Health and its affiliated agencies were reorganized and employment was cut; a number of organizations were eliminated or merged. However, as expenditure on sector management accounted for only 1% of the total budget in 2008, cuts in this area had little impact on the total amount saved.

### 3.2 Changes to coverage

#### *Population entitlement*

There have been no changes to population coverage since the emergence of the crisis. Universal population coverage is guaranteed in the Constitution (basic medical assistance) and in the Medical Treatment Law (1997) (emergency medical care). The only (presumably small) population group without coverage are aliens and stateless individuals whose passports do not include a personal identity number and who have not been registered in the Population Register (Mitenbergs et al., 2012). However, one of the main priorities of the Ministry of Health is to implement a compulsory health insurance scheme or – at least – to link eligibility to receive health services to the payment of an earmarked income tax. The reason for this is that the current system of financing falls short in meeting the health needs of the population and there is little political or public support for increasing the share of the government budget to be allocated to health. As a result, OOP payments, in particular for pharmaceutical care, continue to be high and waiting times are increasing,

which further increases dissatisfaction with the health system. A significant proportion of the population either does not pay income tax or does not pay as much as it should. The government hopes that it can increase the populations' willingness to contribute financially to the health system if it links entitlement to payment of a contribution, as is the case in social health insurance systems. However, linking entitlement to payment of a contribution means a move away from universal population coverage and this will need to be managed extremely carefully to avoid adverse effects (Mitenbergs et al., 2012).

### ***The benefits package***

While universal population coverage was maintained, both service and cost coverage deteriorated. Although no benefits were explicitly removed from the benefits basket, certain services were implicitly removed through changes in the benefits basket legislation (e.g. Regulation No. 1046, Government of Latvia, 2006) and in NHS contracts. Global budgets were introduced to control hospital spending; at the same time, certain services (e.g. emergency assistance) and population groups (e.g. children and pregnant women) were prioritized in the contracts with providers. Consequently, as hospital budgets were used up for prioritized care, patients were faced with substantial waiting times for non-prioritized services, up to a point where these services can be considered to be implicitly excluded.

### ***User charges***

Co-payments for specialist outpatient care and per diem charges for inpatient care increased considerably in 2009, while co-payments for GP visits were kept relatively unchanged (to steer patients away from inpatient care and specialist outpatient care). In 2010, fees for specialist outpatient visits and per diem hospital charges were reduced by 40% and about 21%, respectively (Table 6.4).

In addition, a co-payment of up to LVL 30 (€42.77) was introduced in 2009 for inpatient surgical interventions. Patients also have to co-pay up to LVL 25 (€35.64) for various diagnostic/therapeutic services. There are no user charges for approved laboratory tests for which patients are referred by a physician; however, patients may be charged for syringes, needles and collection of blood samples for tests. Co-insurance for certain pharmaceuticals also increased in 2009, along with the change in the reimbursement system (see below). Most of the co-insurance increases were applied to medicines for cardiovascular diseases (the main cause of mortality in Latvia). In 2010, the co-insurance rate for cardiovascular diseases was reduced from 50% to the previous level of 25%.

Several mechanisms exist to protect the population from catastrophic expenditures or underuse of services, which could result from user charges.

*Exemptions for certain population groups.* These were based on medical, social, poverty and insurance cap criteria and existed before the emergence of the financial crisis (e.g. pregnant women and victims of political repression were exempt from user charges for certain medical services).

*The Emergency Social Safety Net Strategy.* Additional protection mechanisms for low income households were implemented in 2009.<sup>6</sup> Households with incomes below LVL 120 per family member per month were exempted from user charges and households with incomes below LVL 150 per family member per month were eligible for a 50% reduction in user charges. For these categories the co-payment for surgery during treatment in hospital was set at LVL 15 (€21.30). Since January 2012, lack of funding has made it necessary to discontinue all exemptions and reductions except for needy households with incomes below LVL 90 (€128) per family member per month (Mitenbergs et al., 2012).

*A cap on user charges.* The cap on all co-payments for outpatient and inpatient health care services per person per year was increased from LVL 150 to LVL 400 (€570) and the cap on total payment per hospitalization episode was increased from LVL 80 to LVL 250 (€356) in 2009.

### **The role of voluntary PHI**

Voluntary PHI has never substantially contributed to total health care expenditures in Latvia. However, it slightly increased from 1.8% of total health expenditure in 2008 to 2.5% in 2010 (Table 6.2 and Fig. 6.2) despite state institutions ceasing to sign new contracts with suppliers for their employees because of financial austerity measures. The voluntary PHI industry has not responded to the changes in coverage by, for example, developing new products to fill coverage gaps. One reason for this may be that coverage gaps are not well defined in Latvia.

<sup>6</sup> The Emergency Social Safety Net Strategy came into legal effect on 1 October 2009. It was developed with technical input from the World Bank and it underpins fiscal consolidation and structural reforms by deploying supplementary support to ensure that basic social services are maintained. The World Bank also provided financial support for the implementation of the Strategy. The Strategy finances and coordinates the efforts of national and local government agencies to (1) maintain pre-primary education and child development programmes for 5- and 6-year-old children; (2) cover the costs of transporting students from communities where schools have closed to their new places of instruction; (3) exempt needy households from health service co-payments; (4) subsidize pharmaceutical costs of needy households; (5) sustain and improve GP and primary health care services and access; (6) increase the coverage and pay-out period of unemployment insurance; (7) increase the coverage and amount of targeted social assistance benefits administered by local governments; and (8) for the growing number of unemployed who are not covered by unemployment insurance or other social support, the government has fortified the Strategy by re-allocating financing from the European Social Fund to expand and rapidly deploy labour-intensive emergency public-works programmes (World Bank, 2010b). "The most important ESSNS [Emergency Social Safety Net Strategy] measures concerning the health sector that were implemented between 2009 and 2011 were: (1) the exemption of needy persons (and people with low incomes) from user charges; (2) free accommodation for needy and low-income persons in hotel-type hospitals beds (in connection with travel for day surgery or chemotherapy); (3) the introduction of home care services for the chronically ill; (4) the development of day care centres for the mentally ill; (5) the provision of funding for an additional nurse at primary health care providers; and (6) the development of a family physician advisory telephone service" (Mitenbergs et al., 2012). According to Ministry of Welfare estimates, this new system was applicable to 700 000 adults (Bite, 2012). In reality, a much smaller number of people received the benefits. In 2010 about 21 500 patients were exempted from user charges for pharmaceuticals; co-payments were covered for 23 400 inpatient stays, 42 200 day cases, 129 100 outpatients and 5800 home care patients (Mitenbergs et al., 2012).

### 3.3 Changes to health service planning, purchasing and delivery

A number of efficiency-seeking measures have been implemented in response to the crisis. Key measures include reduction of administrative expenditures, restructuring of the hospital sector, reform of emergency medical services, changes to pharmaceutical reimbursement and changes to the quality of care system. Moreover, increased emphasis on ambulatory care, through, for example, the introduction of home care services, was another measure through which efficiency savings were sought.

#### ***Changes to state health administrations and health sector salaries***

Reduction of administrative expenditures was the main driving factor for institutional reforms in 2009. Between 2009 and 2012, both the number of employees and salaries were cut at the Ministry of Health and its agencies: overall, the number of employees at the Ministry and its agencies was reduced by 55% (Cabinet of Ministers, 2012). Numerous agencies were closed down within one year, including the State Agency of Health Statistics and Medical Technologies, the State Centre of Medical Professional Education and even the previously strengthened Public Health Agency. The financial pressure behind the closure of these institutions was so high that the process was at times chaotic and lacked a clear plan about which institutions would take over responsibilities of those that ceased to exist. For example, almost all public health functions were unassigned for three years after the Public Health Agency was closed down.

#### ***Health system restructuring***

In November 2011, the NHS was created<sup>7</sup> by merging two institutions (both established in 2009): the Health Payment Centre (responsible for purchasing) and the Centre of Health Economics (responsible for economic analysis and HTA), which had an overlap in responsibilities for the evaluation of medicines and formulating tariffs for services. The NHS is now the most important national institution for the implementation of health policies, administering public resources, determining the content of the benefits package (including the positive list of pharmaceuticals), contracting with providers, implementing the e-health system and registering clinical guidelines and medical technologies. However, by merging the two institutions, the HTA function may have been somewhat weakened (even though the NHS has increased the number of staff working in this area) as the payer (the NHS) is now also responsible for setting tariffs. This poses a risk that some tariffs are set below real costs, affecting quality

<sup>7</sup> During the 20 years since independence, Latvia has experimented heavily with different approaches to health care organization and financing. Health reforms in the early 1990s aimed to create a social health insurance type of system. However, apparent problems with decentralized planning and financing subsequently led to a reversal of this process. For more information, see Mitenbergs et al. (2012).

of care. However, as a DRG type of system is currently being introduced in the hospital sector, the NHS is not actively working with the new tariffs and therefore this risk may be minimized.

### ***Hospital sector restructuring and payment system***

The 2009 cuts accelerated restructuring of the hospital sector that so far had proceeded at a very slow pace under the Master Plan, which was officially discontinued in 2009 (perhaps to allow for faster changes). In parallel, the ongoing shift away from hospital care and towards service provision in ambulatory settings was accelerated: the number of hospitals contracted by the NHS was reduced from 72 in 2008 to 43 in 2009 and to 39 in 2012 and the number of (less intensive and less costly) day surgeries increased rapidly to compensate for reductions in inpatient surgical activity. For inpatient and secondary outpatient care, an Annex to Regulation No. 1046 (Government of Latvia, 2006) listed hospitals and priority secondary outpatient providers (hospitals) that were to be contracted by the NHS; hence, competition between these providers for contracts is rather limited (Mitenbergs et al., 2012). During this process, the status of several hospitals, which had been recently renovated and equipped with new technologies, was changed (e.g. to care hospitals or day hospitals) and the scope of provided services was substantially reduced, casting doubt on the usefulness of prior investments and leaving them with excess infrastructure (Mitenbergs et al., 2012).

Non-urgent surgeries (except for those within “earmarked services” as defined in Annex 22 of Regulation No. 1046<sup>8</sup>) that could be performed in outpatient settings were moved from inpatient settings to outpatient settings and were then paid in accordance with tariffs for day-care hospitals (the number of patients that can be treated is determined by the amount of the allocated budget divided by the price of treatment; treatment of additional patients is not paid for by the NHS) and day care has become an important part of hospital activity. To encourage greater use of day hospitals, the day-bed payment to hospitals was increased in 2009 by over 500% (to LVL 7.43). In mid-2009, chemotherapy and radiotherapy, previously available as an inpatient service, became available also on an outpatient basis. In 2010, day-care services were provided at 105 medical institutions, including almost all hospitals contracted by the NHS (37 out of 39), and the number of patients who received day-care services doubled between 2008 and 2010.

8 Each “earmarked service” refers to a specific service programme (a specified set of interventions, e.g. cardiac surgery, angioplasty or treatment of a condition such as cystic fibrosis or tuberculosis) or management of broadly defined conditions (e.g. psychiatric care, oncology programme). The idea of defining “earmarked services” is similar to the basic idea of DRGs. Each type of “earmarked service” is assigned a corresponding tariff. However, the grouping into “earmarked services” is relatively rudimentary as there are only 55 types and it is applied only to some patients. Annex 22 also distinguishes a group of tariffs for “other services” (which may vary depending on the group of hospitals and which are broken down for some hospital groups into one tariff for other surgical services and one tariff for other therapeutic services), one tariff for the treatment of patients in care hospitals and one per diem tariff for artificially ventilated patients.

While the number of inpatient surgeries fell by 30 000 from 2009 to 2010 (a decrease of 21%), the number of day-care surgeries, which are counted as outpatient surgeries in Latvia, increased by almost the same number (WHO Regional Office for Europe, 2013). However, there is some anecdotal evidence that some of the outpatients may in fact be “hidden” inpatients (with patients paying for the overnight stays as OOP payments because of limited funding for inpatient care). Spending on inpatient services was substantially reduced: while inpatient care accounted for almost 50% of Ministry of Health expenditure in 2008, this share was reduced to below 35% in 2011 and the share of spending on GP care increased from 9% in 2008 to 14% in 2010 (Table 6.5) (Mitenbergs et al., 2012). By comparison, home care (medical care provided at home by nurses or physicians' assistants to chronically ill patients or patients after surgery) was included in the statutory benefits basket (Mitenbergs et al., 2012). Moreover, to prevent situations where an ambulance is called unnecessarily, in 2011 a family doctor service was introduced, where everybody can obtain advice over the phone or other electronic means (e-mail, Skype, MSN Messenger) (Bite, 2012). The consultations are provided by GPs or physicians' assistants and are available from 5 pm to 8 am during weekdays and around the clock during weekends and holidays. From 2009, home care for chronically ill patients became a reimbursable service and the scope for home psychiatric care and care at day centres was expanded (while at the same time financial incentives were introduced to shift patients from psychiatric hospitals to social care institutions), creating further potential for reducing the use of inpatient facilities (World Bank, 2010a).

**Table 6.5** *Distribution of medical care spending in Latvia, 2005–2010*

Area	Percentage			
	2005	2008	2009	2010
Inpatient	48	50	45	35
Secondary ambulatory	14	18	18	18
GPs	11	9	11	14
Dentists	2	1	1	2
Emergency medical assistance	6	6	6	7
Patient pharmaceuticals	15	15	16	22
Centrally procured pharmaceuticals	4	1	1	2
Settlements with the EU	0	0	1	1

*Source:* World Bank, 2010a.

In order to improve cost control, a global budget system for hospitals was introduced in 2010 (replacing per diem fees with additional activity-based payments). The fixed monthly budget is one-twelfth of the calculated annual budget and does not depend on the current number of patients in the hospital.

Emergency hospitals receive an additional budget for emergency room and admission services. The hospitals bear the financial risk of running over their budgets if they have higher costs, even if they treat more patients or provide more services. In 2012, a decision was taken to introduce Nord-DRG (the Nordic DRG scheme) in hospitals in 2014. This is seen as a considerable advantage compared with the current payment system.

### ***Emergency care restructuring***

A reform of the emergency care service was undertaken in 2009 in order to save financial resources and to increase the effectiveness of service provision in the pre-hospitalization phase. As a result of the reform, the emergency care services of 39 municipalities, each with its own unique structures for the provision of emergency care, were merged into the state service under the supervision of the Ministry of Health. Consequently, the accessibility and quality of emergency care in most of the country has been harmonized and inefficiencies have been reduced. Access also improved through better coordination of emergency care (there is now a central call centre in Riga providing a single system for the whole country).

### ***Reductions in health sector salaries and changes to working conditions***

In addition to these changes to the health sector structure, the average monthly remuneration of all employees working in the health sector decreased by 3% between 2009 and 2010 (from LVL 446 (€635) to LVL 434 (€618)) while the average monthly salary stayed the same, at LVL 335 (€477). The average monthly remuneration of physicians, which includes salary, additional payments and bonuses, was, according to the Ministry of Health, LVL 657 (€935) in 2010. Since 2011, there has been a slight increase in salary levels (Mitenbergs et al., 2012).

### ***Pharmaceutical sector reforms***

In 2012, after difficult and controversial discussions, the government amended the Regulations on the Reimbursement System for Pharmaceuticals and Medical Devices to rationalize the pharmaceutical care provided by the NHS. The reference pricing system for pharmaceuticals in the reference list was changed. Previously, the NHS paid the same (lowest) price (reference price) for all products in the same reference group (products with similar chemical/therapeutic characteristics) and pharmacists and patients could choose any one of these products. The patient would need to pay the difference between the reference price and the actual price of the chosen drug OOP (in addition to the regular drug co-payment) if the drug was more expensive than the reference price. According to the new regulations,

there is only one pharmaceutical product in a reference group (usually the one with the lowest price). Prescriptions for new patients now have to be made by the active ingredient (prescribing based on the INN) and pharmacists have to dispense the cheapest drug (i.e. the only drug that is in the reference group). If patients choose a different product, they pay the full price OOP (except for existing patients for whom previously reimbursable products will remain reimbursable; however, the co-payments have increased considerably for these patients as the difference in price between the cheapest product and other products is growing constantly). The goal of the new system is to achieve cost savings – it stimulates competition between pharmaceutical companies because they have to rapidly decrease their prices in order to receive the status of being a reference medicine. It is estimated that this policy resulted in savings of about LVL 3.7 million (€5.3 million) in 2012, when the NHS was able to achieve price reductions for 600 pharmaceuticals. However, pharmaceutical companies and medical professionals strongly opposed the reform claiming that it imposed limitations on patient choice and the rational use of drugs (and the reform is being challenged in the Constitutional Court).

In addition, the NHS has implemented a clawback system, where pharmaceutical companies (depending on their market share) have to compensate the NHS to a certain degree if the annual drug budget is exceeded. This clawback system amounted to LVL 4 million (€5.6 million) in 2011 (Mitenbergs et al., 2012).

### ***Measures to improve quality***

Since 2009, accreditation of health care providers for inpatient and outpatient care, which was long considered a cornerstone of the quality management system, is no longer mandatory but instead has become voluntary (mainly to cut costs). Later, in 2010–2011, voluntary and compulsory quality incentive systems were introduced for GPs because, although GPs were “safe” from cuts during the crisis, there was growing criticism from the emergency and hospital sectors claiming that patients who should have been treated in the outpatient sector were in fact treated in other settings. The compulsory system sets a number of criteria that have to be achieved by GPs if they want to receive their full reimbursement (no pay for non-performance). The voluntary system incentivizes GPs to increase quality in order to receive more money (pay for performance). Quality criteria are intended to improve disease prevention and health promotion and were inspired by the United Kingdom's Pay-for-Performance scheme in primary care. However, only a small number of GPs joined the scheme because quality criteria are difficult to achieve and the financial benefits are relatively small. Therefore, a new mandatory quality system for GPs replaced the existing dual system (mandatory and voluntary) in 2013. The new system, which has been in place since the beginning of 2013, is compulsory for all GPs. It comprises 14 quality criteria, including preventive



activities, assessment of patients' health status, immunization, assessment of cardiovascular risks, and promotion of cancer screening programmes. GPs failing to meet these criteria will see their annual remuneration (capitation payment) reduced by up to 9%.

## **4. Implications for health system performance and health**

### **4.1 Equity in financing and financial protection**

In Latvia, more than 60% of total health expenditures come from general tax revenue. Therefore, equity in financing depends most importantly on the progressivity of the tax system. Vanags (2010) recently assessed the progressivity of the tax system using the Kakwani index following the implementation of a tax reform in 2010 and found the Latvian tax system to be slightly progressive, with a Kakwani index of 0.048. However, the overall progressivity of health care financing needs to be interpreted in view of the high level of OOP payments as a share of total health expenditures, which increased from 34% in 2008 to over 37% in 2012 (Table 6.2). In 2010, the third income quintile spent 8.5% of total household expenditures on OOP payments: this share was smaller for both the two richer and two poorer quintiles. The richest quintile spent the second lowest share of total household expenditures on OOP payments (Fig. 6.3). The smallest share spent on such payments was by the lowest income quintile, which may indicate that the implemented Emergency Social Safety Net Strategy was effective in protecting the lowest quintile from excessive OOP payments.

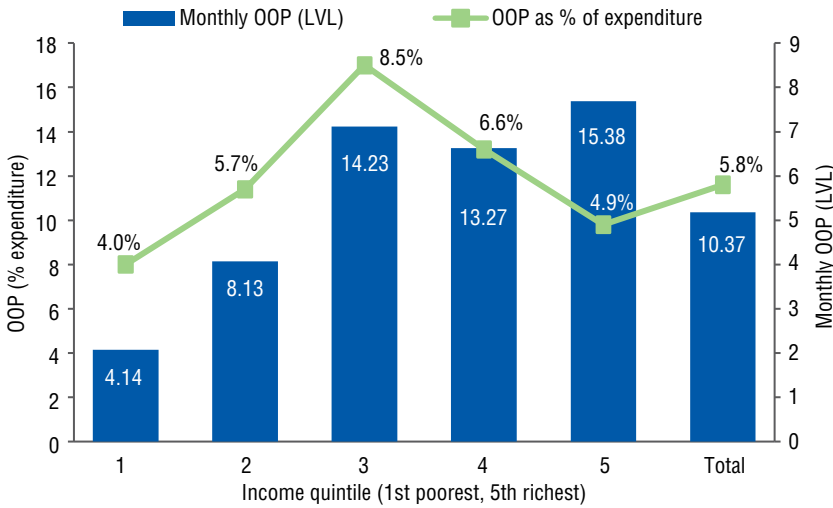
In summary, while the tax system is mildly progressive and OOP, as well as tax subsidies for VHI are, at least for higher income groups, strongly regressive, the overall progressivity of the Latvian health financing system remains somewhat unclear. It is most likely that it is roughly proportional – if not mildly regressive. If current reform proposals to switch to a compulsory health insurance system and to link a large proportion of personal income tax revenue to health are implemented, the importance of income tax in health care financing will increase, while the reliance on OOP payments will be reduced. This may contribute to a more progressive health care financing system (Mitenbergs et al., 2012). However, it is not possible to draw a clear conclusion without further analysis (particularly as a part of the population may be excluded from coverage).

### **4.2 Access to services**

Equity in utilization of health care services may have decreased through the cost-sharing applied to outpatient care, but again, the Social Safety Net measures worked in the opposite direction, protecting the poorest populations. However,

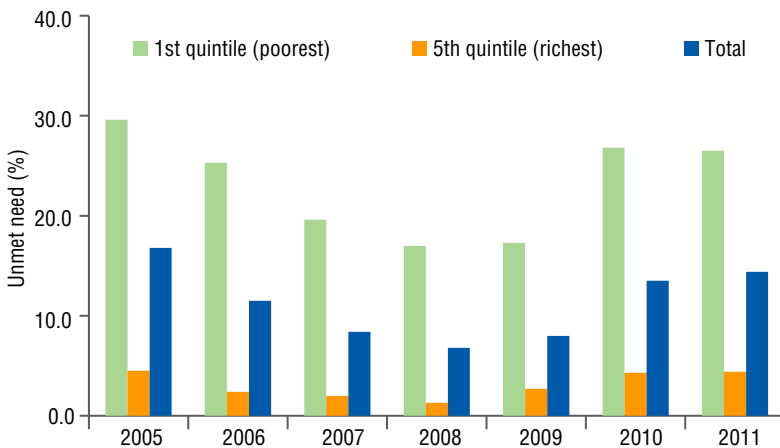
despite the introduction of the Social Safety Net, financial barriers remained the main reasons for inequity in access in 2011. According to the EU-SILC survey, almost 26.5% of people in the poorest quintile reported financial constraints as the reason for not accessing services, compared with only 4.4% of people in the richest quintile (Fig. 6.4).

**Fig. 6.3** Average monthly OOP payments per household member and OOP payments as a percentage of household expenditures by income quintile in Latvia, 2010



Source: Mitenbergs et al., 2012.

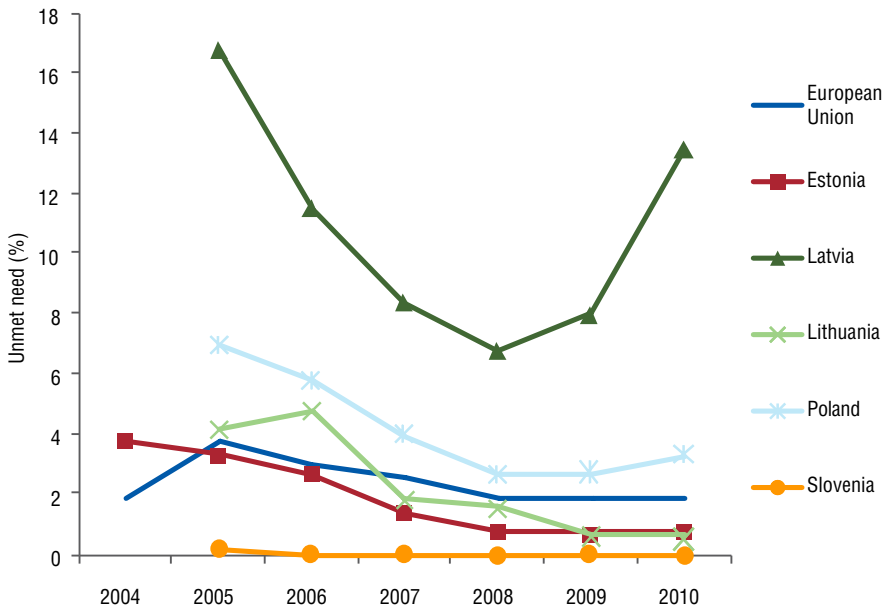
**Fig. 6.4** Percentage of self-reported unmet need for medical examination or treatment because it was “too expensive”, selected income quintiles in Latvia, 2005–2010



Source: Eurostat, 2012b.

In 2010, 13.5% of the Latvian population admitted having foregone care because it was too expensive (Fig. 6.5). In comparison, this number was below 1% in Estonia, Lithuania and Slovenia, and approximately 2% in most other EU27 Member States (Eurostat, 2012b). When examining the trend over time, it is clear that the percentage of people not obtaining care because of costs increased greatly since the start of the crisis in Latvia (Mitenbergs et al., 2012).

**Fig. 6.5** Percentage of self-reported unmet need for medical examination or treatment because it was “too expensive” in Latvia and selected comparators, 2004–2010



Note: EU25 to December 2006, EU27 from January 2007.

Source: Mitenbergs et al., 2012.

Limitations on the number of secondary outpatient visits (specialist consultations, clinical evaluations) affect access to care, particularly for people with low incomes as they are not able to purchase VHI or pay the full price for visits. Protection offered within the Social Safety Net Strategy safeguarded access to care for the poor, but it is likely that middle class citizens with relatively low incomes (but not poor) were affected negatively.

### 4.3 Impact on hospital sector efficiency

The overreliance on hospital care was successfully tackled by the restructuring of hospitals and prioritizing ambulatory and home care, and this will likely result in a more efficient allocation of resources. The strong financial restrictions were a clear message for hospitals to manage with less, limit hospitalizations and

shorten hospitalization times. However, there is scope for further improvements in this area; because of political pressure, too many types of hospital service were maintained in different regions when keeping only certain types in certain regions might have been more efficient. The reorganization of health sector institutions, including mergers and closing down of some agencies, might have resulted in some efficiency gains but it lacked a clear plan about which institutions would take over the responsibilities of those that ceased to exist and some functions were unassigned. The rationalization of pharmaceutical care was another area where efficiency gains have been achieved.

#### **4.4 Quality of care**

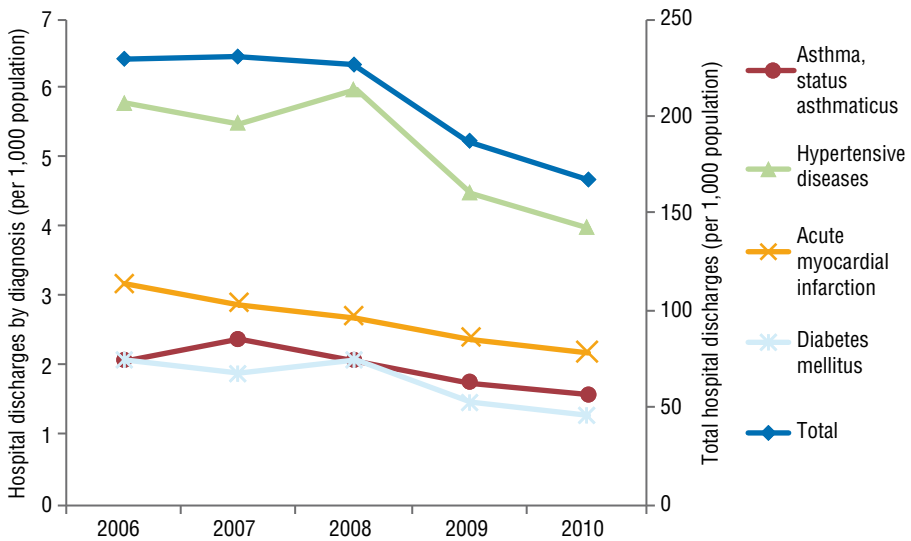
Limitations in the number of secondary outpatient visits probably also had a negative impact on the quality of care (as continuity of care may be affected) as had financial cuts (providers had to cut expenses and staff) and the introduction of payment mechanisms such as global budgets.

According to Mitenbergs et al. (2012), the unsatisfactory health status of the Latvian population, as well as the overall dissatisfaction with the health system (see Users' experience below), underlines the problem of health service quality. The majority of citizens (66%) evaluated the overall quality of health care as bad in 2011 (European Commission, 2011) and 65% thought that the quality of care in Latvia was worse than in the other EU Member States (European Commission, 2010). Currently, there is no comprehensive quality management system that encompasses reliable quality indicators and mechanisms for monitoring and continuous quality improvement. Analysis of health service outcomes and quality of care is hampered by a lack of data on key indicators, such as patient safety, both at national and organizational level. Consequently, international comparisons on the quality of medical services cannot include any assessment of the situation in Latvia.

Some data are available but only for preventive care. Immunization data show that coverage has decreased since 2008 and is now below the EU average for a number of vaccines and also below WHO's general target of 95%; the reasons for this reduction include socioeconomic factors and also an increasing number of people who are opposed to vaccination. Latvia has also tried to improve cancer care by launching a large-scale public screening programme against breast cancer, cervical cancer and colorectal cancer in 2009. However, in the first year, the population response was relatively low: only 7% of the eligible population received colorectal screening and 21% received breast cancer screening. According to data from the Centre for Disease Prevention and Control, five-year (absolute) cancer survival rates in Latvia in 2010 were 66.5% for breast cancer, 78.2% for cancer of the cervix uteri, 57.3% for colon cancer

and 57.1% for anorectal cancers, all of which represented a slight increase when compared with 2009. The number of potentially avoidable hospital admissions is an indicator that is frequently used to assess the quality of the primary/ambulatory care system. Total hospital discharges (a proxy for admissions) per 1000 population have been decreasing in Latvia since 2006 and more rapidly since 2008 (Fig. 6.6).

**Fig. 6.6** Total number of hospital discharges per 1000 population and discharges by primary diagnosis in Latvia, 2006–2010



Source: Mitenbergs et al., 2012.

### Users' experience

Although Latvia does not routinely conduct systematic surveys to gauge public perception of the health system, two surveys were conducted in 2008. One was commissioned by the State Compulsory Health Insurance Agency and was a representative survey of those aged 18–74 years to assess Latvians' views on receiving state-paid health care services (State Compulsory Health Insurance Agency, 2008). The other was a survey conducted by the Central Statistical Bureau of Latvia (2009) in the context of the European Health Interview Survey (Eurostat, 2012a). According to the survey carried out by the State Compulsory Health Insurance Agency, 77% of the population was either completely or partially satisfied with their family doctor and only 16% was completely or partially dissatisfied. However, positive responses to a more general question about the possibility to gain access to state-paid care were much rarer, with only 50% saying it was good or somewhat good and 36% saying it was somewhat

or completely bad. In the Central Statistical Bureau survey, the numbers were slightly worse, with only 61% being either rather or very satisfied, while about 14% were rather or very dissatisfied with their family doctor. Hospitals scored considerably worse with only 38% rather or very satisfied and 18% rather or very dissatisfied.

In 2011, a Eurobarometer survey assessed consumer opinion on health care. Most Latvians rated health care provision in their country as bad (66%), whereas only 30% judged it as good (European Commission, 2011), placing Latvia in the fourth lowest rank among the EU27. When asked how current health care provision compared with that received five years ago, the majority reported that the situation had deteriorated (58%), while 33% said that it had stayed about the same and only 5% thought it had improved. Nevertheless, it has to be emphasized that despite a substantial reduction in available financing (see section 2.1), the implemented reforms allowed for the delivery of basic health care services without substantial deterioration of the health status of the population (see section 4.6).

#### **4.5 Transparency and accountability**

Patients' rights were significantly strengthened by the adoption of the Law on Patients' Rights in 2010. Nevertheless, in practice, a number of problems persist. For example, while the law stipulates that patients have a right to information about quality, these data are generally unavailable. However, the introduction of a web-based information portal for the population in 2010 providing information about state-paid services, including health care services one has received (reported by health care providers), has quickly become very popular and shows the potential of e-health applications in strengthening patient involvement in holding providers accountable. In addition, there has been very serious interest in the reform process among the Latvian population (in extreme cases manifested by protests and demonstrations), forcing the Ministry of Health to increase its engagement in public discussions and information campaigns, contributing to enhancing transparency in the health sector.

#### **4.6 Impact on health**

Although it is premature to assess the long-term effects of the crisis on the health status of the population, available data suggest that there has been no negative short-term effect on mortality: the total standardized death rate decreased from 1006 per 100 000 in 2008 to 939 in 2010; the standardized death rate for suicide and self-inflicted injury decreased from 21 to 18, and that for diseases of the circulatory system (the leading cause of death in Latvia) went down from 506 to 478.

At the same time, there was an increase in the incidence of mental health disorders: after a decline from 417 per 100 000 in 2008 to 364 in 2009, it increased to 422 in 2010. There was also an increase in the number of new invalidity/disability cases (from 570 in 2008 to 740 in 2010), almost matched by an increase in the number of people receiving social/disability benefits (from 2929 to 3095) (WHO Regional Office for Europe, 2012).

Moreover, there is some evidence on changes to risk factors. For example, the lifetime smoking prevalence among students aged 15–16 years seems to have declined to 54% between 2007 and 2011 (from 80% in 2007). However, the lifetime prevalence rate of cannabis consumption increased from 18% to 24%. The self-perceived ease of obtaining alcoholic beverages, which may be a proxy for alcohol consumption, decreased slightly (in 2011, 84% of students deemed alcohol to be easily or very easily available, compared with 90% in 2007) (Trapencieris et al., 2012). Consumption of sugar-sweetened beverages, including soft drinks, decreased among schoolchildren aged 11–15 years: in 2010, 9.7% of boys and 7% of girls drank sugar-sweetened beverages compared with 13.5% and 12%, respectively, in 2006. Also, 24.4% of boys and 16% of girls in the 11–15 age group reported weekly physical activity to control their weight in 2010 compared with 27.6% of boys and 18.6% of girls in 2006. Lastly, more children ate fruit more than once a day (22.7% of boys and 31.6% of girls in 2010 compared with 18.7% and 27.3%, respectively, in 2006) (Pudule et al., 2012; Currie et al., 2012).

The shift in health spending to favour more intensive use of preventive and day-care procedures is likely to better address the health problems of Latvians in the future (World Bank, 2010a).

## 5. Discussion

### 5.1 Drivers of change

While necessary reforms, such as restructuring of hospitals, were previously avoided despite recommendations from actors such as the World Bank and WHO, as the country stood on the verge of bankruptcy, all stakeholders (the Ministry of Health, health care providers, patients, etc.) were in agreement that changes in the financing and organization of the health care system were inevitable. National policy-makers regarded the crisis as an opportunity to implement reforms that were difficult to implement previously.

The presence of external agents (IMF, World Bank, European Commission) and Latvia's commitment to loan conditions provided a strong argument for the Ministry of Health to push through less popular reforms. Although the lenders were sometimes used as a scapegoat, it was the Ministry of Health

that stood behind most changes. Financial cuts were focused on the health and welfare sectors because they had the biggest budgets. Even before the crisis, discussions about a more effective use of money in the health care sector were often raised by the Ministry of Finance and in the opinion of the Latvian population much of the financial resources received by the health sector was wasted.

## 5.2 Content and process of change

The implementation of reforms following the onset of the crisis occurred quickly. Some consultations took place (e.g. with the Chief Specialist's Institution), but most reforms were developed within the Ministry of Health, without discussions with other stakeholders or scientific analysis. Recommendations and restrictions imposed by the Ministry of Finance were strictly followed. In general, implemented measures reflected existing national priorities that could not be implemented previously as there was not enough political will and power to take them forward.

Although there was no clear strategy for responding to the crisis, as it was largely unexpected, Latvia had had some prior experience of working together with WHO and the World Bank and there were clear strategic and theoretical views about priorities and the desired organization of health care services (experts' opinions, country visits and reports; Edwards, Jesse & Kutzin, 2009). Moreover, historically, Latvia has had good information systems and registries providing information for planning. Nevertheless, some ideas, such as the shift to home care and day hospitalizations, were not discussed before the crisis and there was no clear methodology on how these would function.

Although all changes were difficult to implement, some were easier to implement than others. For example, it was relatively easy, on the one hand, for the Latvian Government to cut the number of staff and the salaries of employees at the Ministry of Health and its agencies because public opinion suggested that the public sector was too big and the cause of many problems. On the other hand, shutting down some small local hospitals and the development of a unified emergency service proved much more difficult as these measures were seen as very painful for local populations (because of the convenience of regional hospitals and emergency services to these populations and their symbolic value and function as local employers). Some measures were meant to be temporary. For example, as there was no time to develop more complex payment mechanisms during the crisis, global budgets were implemented first (as an effective measure to cut costs) and a DRG-type system is being developed in the post-crisis environment.

Public reaction to the painful cuts lacked a specific strategy – that is, groups protested against all reforms and cuts in general (all sectors and not only in



health care). Nevertheless, the protests opened the door to public discussion, which was not practised previously. Ultimately, society was not really involved in the decision-making process and was not able to stop undesired reforms. However, it is also noteworthy that the population understood that austerity measures were necessary to maintain political stability and to protect the country from bankruptcy. Thus, citizens were supportive of the government and Unity (Vienotība), previously the largest party in the parliament, remained in government after the 2011 parliamentary election (albeit falling to third place in terms of the number of parliamentary seats).

### 5.3 Implementation challenges

Besides public protests (see above), the speed at which reforms had to be implemented provided another challenge. Inevitably, this speed led to some mistakes in reform planning and implementation. In addition, occasionally, personal interests dominated the decision-making process and not all recommended changes were adopted (e.g. while the Master Plan called for the integration of the State Centre of Infectology into a bigger hospital, it happened only in 2012, after the Centre was initially strengthened in 2009).

### 5.4 Resilience in response to the crisis

Latvia's economy and health care system were quite vulnerable before the crisis. Economic growth, driven by consumption and investments in real estate along with a growing current account deficit, was not sustainable. As soon as capital inflows from abroad ceased and interest rates surged, there was little fiscal space for manoeuvre. Although the share of registered unemployment has been falling steadily, negative savings rates and high shares of OOP payments made Latvian households vulnerable to economic shocks. At the same time, the population's health status was relatively poor compared with the rest of Europe. Too little emphasis was placed on primary care and prevention, while most resources were spent on acute care. Other factors, such as low total expenditure on health, with a low share of public expenditure and a high share of OOP payments, exposed weaknesses in health system's financing. Excessive hospital capacity consumed most health care resources in 2008 and, as a consequence, this became one of the targets of government cuts when the crisis emerged.

The long-term implications of the crisis in terms of improving the health system's resilience are positive as Latvia managed to tackle many problems in a very short time (restructuring of hospitals, prioritizing primary care, centralizing emergency care services, supporting home care, etc.). Without the crisis, implementation of these reforms would have been lengthy and difficult, if not impossible.

Although restructuring of health care provision was quite radical and much has been achieved, there is scope for more improvement. For example, there are still as many as 42 hospitals, whereas perhaps only 10 or less are needed (authors' estimates based on Edwards, 2011). However, as the crisis period is effectively over for Latvia and the pressure to optimize health care provision is much lower, it will be much more difficult to implement further changes. One area that was negatively affected by the crisis was that of human resources in the health sector: to a certain extent, medical professionals and high-quality state employees found more stable and better paid jobs in other sectors and countries. Public health was also severely affected by the crisis (e.g. by the closing of the Public Health Agency) and will take time to strengthen.

The next step for Latvia is to start analysing the reform process and its results. This will be done in cooperation with the World Bank, particularly with regard to analysing the effectiveness of the Social Safety Net Strategy.

## **6. Conclusions**

The reform period between 2007 and 2012 can be divided into two stages: before (2007–2008) and after (2009–2012) the economic crisis. However, a substantial degree of continuity can be observed throughout both reform periods. The most important areas of reform (Mitenbergs et al., 2012) were:

- shifting away from hospital care to ambulatory and home care;
- concentrating state functions into fewer institutions (including the establishment of the NHS, which is now the main institution for the implementation of state health policies and for ensuring the availability of health care services in the country);
- reducing the number of staff; and
- rationalizing publicly financed pharmaceutical care.

The first stage of the reform period (2007–2008) was characterized by a continuing institutional centralization process and a slow shift away from hospital to outpatient care. As the magnitude of the economic crisis had not yet emerged, there was no urgent need for reforms. The second stage (2009–2012) was initiated by the enormous financial constraints resulting from the financial and economic crisis in 2009 and it witnessed rapid reforms. Several basic health laws were amended and substantial structural reforms of the health system were achieved. The reform process was very fast and measures were pushed through almost without discussion or scientific analyses. During this period, the Latvian Government succeeded in substantially reducing excessive hospital capacity and inpatient and secondary outpatient services, while prioritizing

primary care, services for children and pregnant women, emergency assistance and pharmaceutical policy. The government also managed to concentrate state functions into fewer institutions while reducing the number of staff. A Social Safety Net Strategy was implemented to protect low income households from user charges and to expand access to health services. Although these were impressive steps in the right direction, Latvia remains the EU Member State with the highest share of the population reporting an unmet need for medical examinations or treatment, and the level of OOP payments as a share of total health expenditure remains very high.

Although assessment of the long-term effects of the crisis is premature, available data suggest that there was no negative short-term effect on mortality. However, there are several challenges that need to be addressed. The first is ensuring sustainable and stable financing of the health care sector, while increasing public expenditure on health and reducing the enormous dependence on OOP payments. The Social Safety Net Strategy, which was implemented in response to the crisis, currently reduces problems in accessing care by the needy population, although only households with an income below LVL 90 (€128) per family member per month are eligible as of 2012. However, there is still room for improving equity, access and health equality for the rest of the population. Explicitly defining the statutory benefits package and increasing the role of PHI (e.g. with PHI offering coverage for benefits not included in the statutory benefits package) may contribute to better developing this sector as a source of financing, although the implications for equity should be carefully evaluated.

There is also a need to continue efforts to improve efficiency through structural reforms, including reductions in excess infrastructure and consistent and controlled investment, as well as evidence-based decision-making and more use of HTA processes (currently mainly used for pharmaceuticals) for a more efficient use of existing resources. Reforming provider-payment methods may further contribute to efficiency. While global budgets for hospitals may have contributed to cost-containment and were appropriate during the financial crisis, they do not provide incentives for greater efficiency or higher quality. Hence, the government's work towards the introduction of a DRG-based payment system is well substantiated. Creating an environment of more competition among health care providers of all ownership forms may further contribute to increased efficiency. In addition, the NHS could take greater advantage of its single payer status and engage in more selective contracting and the planned introduction of the e-health system could be another tool that may promote efficiency in the health sector.

## Appendix 6.1

### Major crisis related events and changes in the health system in Latvia, 2009–2012

Date	Event/action
<b>2009</b>	<p>Discontinuation of the “Development Programme of Out-patient and In-patient Health Care Providers” because of the economic crisis</p> <p>Consolidation of state functions into fewer institutions: closing down of the Public Health Agency, the State Centre of Medical Professional Education and the State Agency of Health Statistics and Medical Technologies; creation of the Centre of Health Economics to replace the State Medicines Pricing and Reimbursement Agency; closing down of the State Compulsory Health Insurance Agency and assigning its functions to three institutions: the Health Payment Centre, Centre of Health Economics and the Health Inspectorate</p> <p>Reduction in the number of staff at the Ministry of Health and its agencies</p> <p>Rapid reduction in the number of hospitals providing statutory services from 72 to 43 (some of the hospital closures had been planned for a long time)</p> <p>Creation of the state Emergency Medical Service, incorporating the State Centre of Emergency and Disaster Medicine, thus centralizing and rationalizing the provision of emergency medical assistance in the country</p> <p>Approval of the Safety Net Strategy by the Cabinet of Ministers (funding provided by the World Bank)</p>
<b>2010</b>	Law “On the Rights of Patients”
<b>2011</b>	<p>Cabinet approval of the Public Health Strategy 2011–2017</p> <p>Cabinet approval of the “Regulation of the National Health Service”: creation of the NHS as the result of merging the Health Promotion Centre with the Centre of Health Economics</p>
<b>2011/2012</b>	Reform of the pharmaceutical reference pricing system
<b>2012</b>	<p>Creation of the Centre for Disease Prevention and Control as the new national institute of public health</p> <p>Political decision to introduce the Nord-DRG system for payment of hospitals: preparatory work for implementation (piloting started in 2013)</p> <p>Reform of Regulations No. 899 (“On the Reimbursement of Expenditures for Medicinal Products and Medicinal Devices”), introducing 50% reimbursement for all prescription medicines (beyond those listed in the positive list) for children up to 24 months and 25% for all pregnant women (including up to 42 days after childbirth)</p>

*Note:* Nord-DRG: Nordic Diagnosis-related Group scheme.

## References

Bite I (2010). *Annual national report 2010, pensions, health and long-term care, Latvia*. Cologne, ASISP (Analytical Support on the Socio-Economic Impact of Social Protection Reforms) ([http://www.socialprotection.eu/files\\_db/902/ANR\\_2010\\_Latvia.pdf](http://www.socialprotection.eu/files_db/902/ANR_2010_Latvia.pdf), accessed 29 October 2014).

Bite I (2012). *Annual national report 2012, pensions, health and long-term care, Latvia*. Cologne, ASISP (Analytical Support on the Socio-Economic Impact of Social Protection Reforms) ([http://www.socialprotection.eu/files\\_db/1261/asisp\\_ANR12\\_LATVIA.pdf](http://www.socialprotection.eu/files_db/1261/asisp_ANR12_LATVIA.pdf), accessed 29 October 2014).

Brigis G (2010). Global and local financial crisis: a challenge to the national health system. Example of Latvia. *World Medical Journal*, 56: 173–175.

Cabinet of Ministers (2008). *Latvia's economic stabilisation and growth revival programme*. Riga, Cabinet of Ministers of the Republic of Latvia ([http://helios-web.saeima.lv/saeima9/lasa?dd=LP1007\\_0c](http://helios-web.saeima.lv/saeima9/lasa?dd=LP1007_0c), accessed 25 October 2014).

Cabinet of Ministers (2012). *Ziņojums par veselības aprūpes sistēmas strukturālās reformas norisi un plānotajiem pasākumiem tās tālākai īstenošanai [Report on the health care structural reform process and future developments]*. Riga, Cabinet of Ministers of the Republic of Latvia (<http://www.mk.gov.lv/lv/mk/tap/?pid=40143813>, accessed 29 October 2014).

Central Statistical Bureau of Latvia (2009). *Results of the survey on health of Latvia's population*. Riga, Central Statistical Bureau of Latvia (<http://www.csb.gov.lv/en/notikumi/results-survey-health-latvia-s-population-27174.html>, accessed 29 October 2014).

Central Statistical Bureau of Latvia (2013). *Database*. Riga, Central Statistical Bureau of Latvia (<http://data.csb.gov.lv>, accessed 29 October 2014).

Cochrane L (2009). Latvia's credit risk rises to record on bankruptcy concern. *Bloomberg*, 27 February (<http://www.bloomberg.com/apps/news?pid=newsarchive&sid=ax2zgzkO07EV4>, accessed 29 October 2014).

Currie C et al., eds. (2012). *Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey*. Copenhagen, WHO Regional Office for Europe (Health Policy for Children and Adolescents, No. 6).

Delna (2013). *Parex bankas pārņemšana valsts kontrolē [Takeover of Parex by the state]*. Riga, Delna (Latvian branch of Transparency International) (<http://www.deputatiuzdelnas.lv/notikumu-hronika/banku-krizes/parex-bankas-parnemsana-valsts-kontrol.html>, accessed 29 October 2014).

Economist Intelligence Unit (2009). *Latvia, country profile 2009*. New York, Economist Intelligence Unit.

Edwards N (2011). *Latvia mission report 15–18 February 2011*. Copenhagen, WHO Regional Office for Europe [http://www.vm.gov.lv/images/userfiles/phoebe/ministrija\\_sabiedribas\\_lidzdaliba\\_ab75e1a6c38b637dc22573d800293aaa/lva\\_report\\_final\\_151802\\_2011.pdf](http://www.vm.gov.lv/images/userfiles/phoebe/ministrija_sabiedribas_lidzdaliba_ab75e1a6c38b637dc22573d800293aaa/lva_report_final_151802_2011.pdf), accessed 29 October 2014).

Edwards N, Jesse M, Kutzin J (2009). *Latvia's health sector reform plans in the context of the economic crisis; a WHO review*. Barcelona, Division of Country Health System, Barcelona Office for Health System Strengthening.

European Central Bank (2013). *Long-term interest rate statistics for EU Member States*. Brussels, European Central Bank (<http://www.ecb.int/stats/money/long/html/index.en.html>), accessed 29 October 2014).

European Commission (2010). *Special Eurobarometer 327: patient safety and quality of healthcare*. Brussels, TNS Opinion and Social (at request of the European Commission Directorate General for Health and Consumers) ([http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_327\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_327_en.pdf)), accessed 29 October 2014).

European Commission (2011). *Special Eurobarometer 370/Wave EB75.4: social climate. Full report*. Brussels, TNS Opinion and Social (at request of the European Commission Directorate General for Employment) [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_370\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_370_en.pdf), accessed 29 October 2014).

European Commission (2012). *EU balance-of-payments assistance for Latvia: foundations of success*. Brussels, European Commission (Occasional Paper 120/2012, Summary for non-specialists) ([http://ec.europa.eu/economy\\_finance/publications/occasional\\_paper/2012/pdf/ocp120\\_summary\\_en.pdf](http://ec.europa.eu/economy_finance/publications/occasional_paper/2012/pdf/ocp120_summary_en.pdf)), accessed 29 October 2014).

Eurostat (2009). *Household saving rate higher in the EU than in the USA despite lower income, household income, saving and investment, 1995–2007*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-09-029/EN/KS-SF-09-029-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-09-029/EN/KS-SF-09-029-EN.PDF)), accessed 29 October 2014).

Eurostat (2012a). *Statistical database: collection population and social conditions. Health: public health – European health interview survey 2008*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)), accessed 29 October 2014).

Eurostat (2012b). *Statistical database: collection population and social conditions. Health: public health – European Union statistics on income and living conditions (EU-SILC) survey*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)), accessed 29 October 2014).

Eurostat (2013a). *Statistical database: government finance statistics*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/portal/page/portal/government\\_finance\\_statistics/data](http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/data)), accessed 29 October 2014).

Eurostat (2013b). *Statistical database: harmonized indices of consumer prices (HICP)*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/portal/page/portal/government\\_finance\\_statistics/data](http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/data), accessed 29 October 2014).

Financial and Capital Market Commission (2005–2012). *Annual reports 2005–2012*. Riga, Financial and Capital Market Commission ([http://www.fktk.lv/lv/publikacijas/gada\\_parskati/2013/](http://www.fktk.lv/lv/publikacijas/gada_parskati/2013/), accessed 29 October 2014).

Government of Latvia (2006). *Ministru kabineta noteikumi Nr. 1046: Veselības aprūpes organizēšanas un finansēšanas kārtība [Regulation 1046 of the Cabinet of Ministers: Regulations on organization and financing of health care]*. Riga, Government of Latvia (<http://www.likumi.lv/doc.php?id=150766>, accessed 29 October 2014).

Government of Latvia (2008). *Letter of intent* (to IMF, December 18, 2008). Riga, Government of Latvia ([http://fm.gov.lv/files/files/Letter\\_of\\_Intent\\_2008-12-18.pdf](http://fm.gov.lv/files/files/Letter_of_Intent_2008-12-18.pdf), accessed 29 October 2014).

IMF (2012). *Latvia country report No. 12/31*. Washington, DC, International Monetary Fund.

Ministry of Economics (2012). *Economic development of Latvia report*. Riga, Ministry of Economics.

Ministry of Finance (2012). *Main macroeconomic indicators and forecast (scenario as of December 2012)*. Riga, Ministry of Finance ([http://fm.gov.lv/lv/sadalas/tautsaimniecibas\\_analize/galvenie\\_makroekonomiskie\\_raditaji\\_un\\_proгноzes](http://fm.gov.lv/lv/sadalas/tautsaimniecibas_analize/galvenie_makroekonomiskie_raditaji_un_proгноzes), accessed 29 October 2014).

Ministry of Finance (2013a). *Valsts budžets [State budget]*. Riga, Ministry of Finance ([http://www.fm.gov.lv/lv/sadalas/valsts\\_budzets](http://www.fm.gov.lv/lv/sadalas/valsts_budzets), accessed 29 October 2014).

Ministry of Finance (2013b). *Veiktā budžeta konsolidācija no 2008. 2011. gadam (faktu lapa) [Budget consolidation 2008–2011 (fact sheet)]*. Riga, Ministry of Finance (<http://www.fm.gov.lv/lv/aktualitates/jaunumi/27969-veikta-budzeta-konsolidacija-laika-posma-no-2008-2011-gadam-faktu-lapa>, accessed 29 October 2014).

Ministry of Health (2012). *Budžets [Budget]*. Riga, Ministry of Health (<http://www.vm.gov.lv/lv/ministrija/budzets>, accessed 29 October 2014).

Ministry of Health (2014). *Budžets [Budget]*. Riga, Ministry of Health ([http://www.vm.gov.lv/images/userfiles/2014\\_gada\\_budzets\\_040913.pdf](http://www.vm.gov.lv/images/userfiles/2014_gada_budzets_040913.pdf), accessed 29 October 2014).

Mitenbergs U et al. (2012). Latvia: health system review. *Health Systems in Transition*, 14(8): 1–193.

Pudule I et al. (2012). *Latvijas skolēnu veselības paradumu pētījums, 2009./2010 m. g. aptaujas rezultāti un tendencijas [Latvian students health behaviour survey, 2009/2010, survey results and trends]*. Riga, Disease Control and Prevention Centre.

State Compulsory Health Insurance Agency (2008). *Survey to assess Latvians' views on receiving state-paid health care services*. Riga, State Compulsory Health Insurance Agency ([http://www.vnc.gov.lv/files/VOAVA\\_petijums\\_2008.pdf](http://www.vnc.gov.lv/files/VOAVA_petijums_2008.pdf), accessed on 31 August 2012).

Tragakes E et al. (2008). Latvia: health system review. *Health Systems in Transition*, 10(2): 1–253.

Trapencieris M et al. (2012). 2011, *Atkarību izraisīto vielu lietošanas paradumi un tendencijas skolēnu vidū [2011, Drug use habits and trends among students]*. Riga, Disease Control and Prevention Centre (<http://www.spkc.gov.lv/atkaribu-slimibu-petijumi-un-zinojumi>, accessed 29 October 2014).

Vanags A (2010). *Tax reform in Latvia: could it be fair?* Riga, BICEPS (SSE Riga/ BICEPS Occasional Paper 8) (<http://biceps.org/assets/docs/neregulara-rakstura/OccasionalPaperNo8>, accessed 29 October 2014).

van Ginneken E et al. (2012). The Baltic states: building on 20 years of health reforms. *BMJ*, 345: e7348.

WHO (2014). *Global health expenditure database*. Geneva, World Health Organization (<http://apps.who.int/nha/database>, accessed 29 October 2014).

WHO Regional Office for Europe (2012). *European detailed mortality database (DMDB)*. Copenhagen, WHO Regional Office for Europe (<http://www.euro.who.int/en/data-and-evidence/databases/european-detailed-mortality-database-dmdb2>, accessed 1 November 2014).

WHO Regional Office for Europe (2013). *Health for All database* [online/offline database]. Copenhagen, WHO Regional Office for Europe (<http://data.euro.who.int/hfadb>, accessed 2 November 2014).

World Bank (2010a). *From exuberance to prudence: a public expenditure review of government administration and the social sectors*. Washington DC, World Bank.

World Bank (2010b). *International Bank for Reconstruction and Development, program document for the first special development policy loan in the amount of euro 100 million*. Washington DC, World Bank (Report 51434-LV, 12 February 2010) ([http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/02/21/000333037\\_20100221232341/Rendered/PDF/514340PGD0P115101Official0Use0Only1.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/02/21/000333037_20100221232341/Rendered/PDF/514340PGD0P115101Official0Use0Only1.pdf), accessed 1 November 2014).





# Chapter 7

## **The impact of the crisis on the health system and health in Lithuania**

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### **Introduction**

In 2009, Lithuania faced a deep financial crisis. GDP fell by 15% and unemployment more than tripled in one year. In response, the government implemented strict fiscal consolidation measures. Public funding for the health system was partially protected from large reductions in SHI revenue thanks to counter-cyclical mechanisms that were in place before the crisis and strengthened in response to the crisis. Cuts to health services were tailored to try and increase provider efficiency in the short run. Over a longer period, however, they could lead to cumulating deficits and, therefore, needed to be supported by a shift in service provision towards prevention, primary care and outpatient settings. Through carefully implemented reforms, the health system was able to lower spending on pharmaceuticals without damaging access, even under crisis conditions.

### **1. The nature and magnitude of the financial and economic crisis**

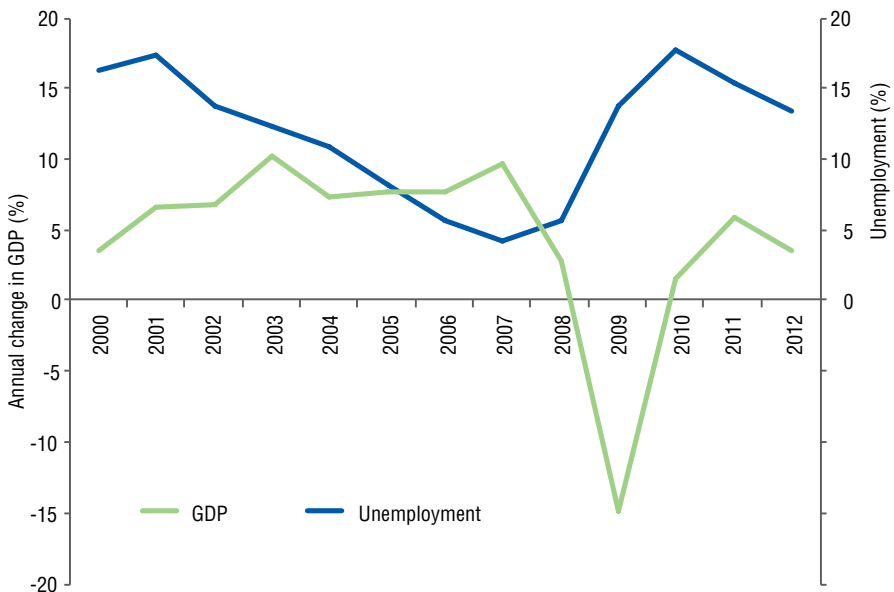
#### **1.1 The origins and immediate effects of the crisis**

The financial crisis impacted severely on Lithuania's economy in 2009 when GDP fell by nearly 15% in comparison to the previous year, and unemployment increased from 4.4% in 2007 to 18% in 2010 (Fig. 7.1 and Table 7.1). One of the major reasons that left Lithuania vulnerable to the economic shock was the expansion of banking sector loans, mostly for real estate, which caused a property bubble that subsequently collapsed. The large growth in banks' loan portfolios during the previous five years was unprecedented: between 2003 and 2008 the annual increase in the total Lithuanian commercial banking system's

loan portfolio was, on average, more than 40%. This growth was double that of deposits, and six times greater than the real GDP growth rate (Jakeliunas, 2010). Competition among banks in offering low-interest loans also influenced expectations underlying business and residential investment decisions and fuelled high levels of borrowing as well as intense domestic consumption. As a result, Lithuania found itself with significant deficits in its current and foreign trade accounts, while the growth of wages was much higher compared with labour productivity.

Prior to the onset of the crisis and during the first three years (2005–2007) of Lithuania's membership of the EU, the country received significant financial transfers of about €12.8 billion from external sources: €2.7 billion of EU support (mainly from EU structural funds), €1.8 billion in remittances from emigrants (official records) and €8.2 billion of parent banks' funds (mainly from Scandinavia). These transfers amounted to a substantial cash flow, equivalent to about 15–20% of GDP every year. As mentioned above, most of the domestic banks' loans were directed towards the real estate sector, leading to a real estate bubble. Meanwhile, during this period of growth the country did not accumulate financial reserves. While, the government deficit met Maastricht criterion until 2007, it started increasing in 2008 and peaked at 9.4% in 2009 (Table 7.1).

**Fig. 7.1** Changes in GDP and unemployment in Lithuania, 2000–2012



Source: Eurostat, 2013.

**Table 7.1** Demographic and economic indicators in Lithuania, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population level (in thousands)	-	-	-	3,462.6	3,445.0	3,425.3	3,403.3	3,384.9	3,366.4	3,349.9	3,329.0	3,052.6	3,007.8
People aged 65 and over (% total population)	-	-	-	14.7	15	15.1	15.3	15.6	15.8	16	16.1	17.9	18.1
GDP per capita (€)	4,100	4,400	4,800	5,300	5,800	6,300	6,900	7,700	8,000	6,900	7,100	7,700	8,100
Real GDP growth (%)	-	-	-	10.3	7.4	7.8	7.8	9.8	2.9	-14.8	1.5	5.9	3.6
Government deficit (% of GDP)	-	-	-1.9	-1.3	-1.5	-0.5	-0.4	-1.0	-3.3	-9.4	-7.2	-5.5	-3.2
Government consolidated gross debt (% GDP)	-	-	22.2	21.0	19.3	18.3	17.9	16.8	15.5	29.3	37.9	38.5	40.7
Long-term interest rate (10-year government rate) (%)	-	-	5.97	5.22	4.43	3.73	4.00	4.58	-	-	-	-	4.54
Total unemployment (% total labour force)	16.3	7.1	13.2	13.0	11.4	8.4	5.7	4.4	5.9	13.9	18.0	15.5	13.3
Long-term unemployment (% active population)	8.0	9.8	7.4	5.9	5.8	4.2	2.3	1.2	1.1	3.2	7.4	8.0	6.5

Sources: Eurostat, 2013; OECD, 2013.

According to official statistics, total (declared plus estimated) emigration was between 24 000 and 27 000 people annually in 2006–2008 (Statistics Lithuania, 2013). After the onset of the crisis, it rose to 35 000 in 2009, 83 000 in 2010 and 54 000 in 2011. During this period, over 80% of emigrants were part of the economically active population, with people aged between 20 and 34 constituting, on average, 55% of the total. The unemployment rate increased rapidly from 5.9% (2008) to 13.9% in 2009 and to 18.0% in 2010. With economic recovery and emigration, it decreased to 15.5% in 2011 and 13.3% in 2012.

## 1.2 Government responses to the crisis

In contrast to some other countries that were severely affected by the financial crisis, Lithuania did not apply to the IMF and European Central Bank for financial aid; instead, the strategy of the Government was to cope with the crisis using its own means by implementing strict fiscal policy, cutting public expenditure and borrowing on international markets. The situation was exacerbated by having to rescue one of the country's mid-sized domestic banks at the end of 2011. In addition to using funds accumulated in the bank deposit insurance fund, this required €725 million from the state budget.

During this period of economic contraction, the long-term interest rate in international markets rapidly increased from less than 5% in 2007 to 9% at the end of 2008, peaking at 14.5% in 2009 (European Central Bank, 2013). Later, as GDP returned to growth in 2010 and subsequent years, markets demonstrated increasing confidence in Lithuania's economy, and the interest rate reduced to 5% in 2010 and 2011, and 4% at the end of 2012.

Fiscally, Lithuania was not prepared for an economic downturn. During the years of fast economic growth that preceded the financial crisis, based partly on the disproportional growth of the real estate sector, which was stimulated by cheap loans, the country did not use available opportunities to accumulate financial reserves. Once the crisis deepened, and facing a deep contraction of the economy, the government chose to introduce strict fiscal discipline and public sector retrenchment. The policies introduced included:

- a reduction in public administration expenditure in 2009: through a 13% reduction of public servants' salaries, and an 8% reduction to those of other public sector employees as well as through public sector downsizing, mainly by merging institutions with similar functions; and
- balancing the social insurance budget and reducing social benefits, for example through such measures as a progressive cut in retirement pensions (from 2.1% to 12.3% for full-time pensioners and from 2.5% to 70% for

working pensioners) and social benefits for other groups, as well as the gradual extension of the retirement age.

These measures, together with some tax policy changes (see below) and policies directed towards improving the business environment, were included in the National Agreement (2009) drawn up in response to the crisis and signed by the government and other stakeholders (representatives of trade unions, businesses and employers, and pensioners) in October 2009 (Government of the Republic of Lithuania and Social Partners, 2009). Under this Agreement, some of the cuts (e.g. the reduction in retirement pensions) were abolished in 2012.

At the end of 2008, the government (2008–2012), which had just come to power after national elections, initiated a tax reform in an effort to stabilize public finances. The key elements of the reform introduced at the beginning of 2009 were:

- an increase of the rate of VAT rate from 18% to 21%;
- an increase of corporate tax rate from 15% to 20% with some exceptions for small business; the corporate tax rate was restored to 15% in 2010; and
- splitting income tax, which used to incorporate personal income tax and a health insurance contribution amounting to 24% of salary (on average), into two distinct categories of personal income tax (15%) and health insurance contribution (typically 9%) of total income.

The reform of personal income tax was a continuation of previous reforms directed towards the reduction and equalization of labour taxes. Before 2006, the tax rate was 33% for employees and 15% for the self-employed. In 2006, the rate for employees decreased to 27%, and in 2008, to 24%. Finally, as mentioned in 2009, personal income tax was formally separated from health insurance contributions and the rate of personal income tax was set at 15% for all categories of the economically active population.

Changes in the structure of tax revenue during the period 2006–2011 are shown in Table 7.2. The main shift was in 2010, when the share of revenues from income and corporate tax fell substantially, accounting for 19% of total tax revenues in comparison to almost 30% in 2008. At the same time, the share of support from EU structural funds increased from 13% in 2008 to 23% in 2010 of the national budget.

### **1.3 Broader consequences**

Increasing unemployment and loss of income affected household budgets. In 2011, OOP expenditure constituted 27% of total health expenditure. About two-thirds of OOPs were for pharmaceuticals, as patients have to cover the

full price of medicine unless they fall into exemption categories (including children, pensioners and people with chronic diseases) for which between 50% and 100% of the price is reimbursed by the state. The Household Expenditure Survey in 2008 (Statistics Lithuania, 2009) showed that average household monthly spending on health care was €11, which was about 4% of average household disposable income, with pensioners' households spending on average €23 (10% of disposable income) on health.

**Table 7.2** Changes in the structure of tax revenue in Lithuania, 2006–2011

	2006	2007	2008	2009	2010	2011
Taxes on income and profits (%), including:	32.5	29.5	29.8	22.6	19	18.2
personal income tax	20.8	19.0	18.6	15.6	14.9	14.8
corporate profit tax	11.7	10.5	11.2	7.0	4.1	3.4
Taxes on property (%)	1.4	1.2	1.1	1.3	1.5	1.3
Domestic taxes on goods and services (%), including	45.0	45.9	47.7	43.2	46.2	47.8
VAT	31.5	32.5	33.7	28.0	31.3	33.3
excises	12.2	11.7	12.2	13.4	13.0	12.4
Taxes on international trade and transactions (%)	0.9	0.9	0.9	0.7	0.8	0.8
Non-tax revenue (%)	7.9	7.1	7.2	7.4	9.2	8.5
Capital revenue (%)	1.2	1.0	0.6	0.4	0.5	0.6
EU support (%)	11.1	14.5	12.7	24.4	22.9	22.8
Total (€, million)	5,659.8	6,964.7	7,934.4	7,033.2	6,750.9	7,394.6

Source: Statistics Lithuania, 2010, 2012.

## 2. Health system pressures prior to the crisis

In terms of service provision, the health sector was insufficiently prepared to deal with the financial crisis because of its underdeveloped primary care system, excess capacity of the hospital sector and, as a result, overreliance on inpatient care despite the ongoing attempts to expand the reach of primary care and develop alternatives to inpatient services. In addition, total private expenditure, consisting mostly of OOP payments, are high, constituting 28% of total health

expenditure in 2011 (Health Information Centre, 2013), and may lead to growing financial barriers in accessing health services or pharmaceuticals when households' incomes fall.

In Lithuania, primary care has enjoyed organizational autonomy since 1997 and has performed a gatekeeping role since 2002. Around 90% of the population is registered with a GP or a primary care team. Payment for primary health care consists of a capitation component (82%) and a FFS and performance-related component (18%), which is tied to prevention activities and quality indicators (e.g. chronic disease management). However, the role of primary care is still underdeveloped, as many patients only schedule visits to receive a referral to a specialist (van Ginneken et al., 2012). This situation is combined with rather slow reform and excess capacity in the hospital sector. Since 2001, supported by financial incentives for hospitals, the range of alternatives to inpatient services has been increasing, including the introduction of day care and day surgery. In the past few years, the average growth of day surgery has been 10% per year, reaching 34% of all surgical operations<sup>1</sup> in 2011 (NHIF internal data, 2013). Despite this, there is still an overreliance on inpatient care and the hospitalization rate is one of the highest in the EU (see Murauskiene et al. (2013) for further details on health financing and provision of services). Selected indicators for acute hospitals in Lithuania and the EU over recent years are given in Table 7.3.

**Table 7.3** *Acute hospital indicators in Lithuania and the EU, 2006–2011*

	2006	2007	2008	2009	2010	2011
Hospital beds per 100,000						
Lithuania	511.5	510.7	505.9	503.4	504.2	509.1
EU average	419.0	410.1	402.8	399.2	393.5	n/a
Hospital discharges per 100						
Lithuania	19.8	19.8	20.0	20.3	20.3	20.5
EU average	15.7	15.6	15.6	15.6	n/a	n/a

*Note:* n/a: Not available.

*Sources:* Health Information Centre, 2013 (Lithuania); WHO Regional Office for Europe, 2013 (EU).

Notwithstanding these structural deficiencies, the government's use of a counter-cyclical mechanism, in this case the compulsory health insurance contributions made by the state on behalf of the unemployed and those who are economically inactive, was a major factor which helped to maintain this source of health sector funding despite falling revenues from those employed due to decreasing wages and increasing unemployment. Following existing legislation, the government has been increasing the share of the health insurance contribution per person

<sup>1</sup> The definition of day care in Lithuania may include overnight stays.



insured by the state since 2008, and as a result the transfers from the state budget to the National Health Insurance Fund (NHIF), increased substantially during the first years of the crisis (see section 2.1 for more detail). There were reserves amounting to €125 million in the NHIF at the beginning of 2009 (representing 10% of its budget), consisting of savings made from cancelling advance payments (7.5%) and bonuses (2.5%) to providers. This reserve was utilized to soften the impact of the crisis over the course of 2009.

### **3. Health system responses to the crisis**

#### **3.1 Changes to public funding for the health system**

##### ***Health budgets***

The NHIF is the single agency responsible for health service purchasing. It manages the compulsory health insurance scheme, accounting for 80 to 85% of public health expenditure. NHIF revenues mainly come from two major sources: health insurance contributions and contributions from the state budget for the economically inactive population and the unemployed as well as additional state budget transfers for some targeted programmes delegated to the NHIF for administration.

Before the crisis, total health expenditure in Lithuania was increasing steadily, and more than doubled between 2004 and 2008 to €2.1 billion. It started to decline in 2009, falling by 6% in comparison to 2008, and by a further 4% in 2010. However, by 2011, total health expenditure had increased almost to the 2008 level (Table 7.4).

Despite the economic downturn, the transfers from the state budget to the health sector (including contributions to the compulsory health insurance scheme as part of the NHIF's revenue) increased from €493.5 million in 2008 (100%) to €563.9 million in 2009 (114%), to €664.8 million in 2010 (135%) and €643.2 million in 2011 (131%) (Statistics Lithuania, 2013) due to the counter-cyclical mechanism in place and the increasing share of contributions for the inactive population and the unemployed. In light of the massive cuts in other public sectors, maintaining this increase was definitely a challenge for the Government and for the Ministry of Finance; however, the provisions of the Law on Health Insurance, which stipulate the level of the state budget contribution, were adhered to. Consequently, despite the crisis, the health sector was one of the sectors that received more funding as a proportion of total government expenditure in 2009. Between 2007 and 2009, there were also expenditure increases in the social sector whereas substantial reductions were implemented in general public services and in the defence budget.

**Table 7.4** Health expenditure trends in Lithuania, 2004–2011

	2004	2005	2006	2007	2008	2009	2010	2011 (p)
THE (€ million)	1,035.1	1,223.4	1,493.5	1,788.7	2,142.0	2,007.8	1,963.8	2,122.0
THE per capita (€)	301.3	358.3	440.0	529.9	637.9	601.2	597.5	658.6
THE (% GDP)	5.7	5.8	6.2	6.2	6.6	7.5	7.1	6.9
Public expenditure on health (€ million)	699.3	829.0	1,038.1	1,305.4	1,550.7	1,462.1	1,390.5	1,467.4
of which social security funds (€ million)	610.0	714.3	875.0	1,048.4	1,260.9	1,226.5	1,173.9	1,249.2
Private expenditure on health (€ million)	335.8	394.1	455.2	483.1	591.2	545.5	538.9	586.8
of which private household OOP expenditure (€ million)	330.6	388.4	447.8	475.0	579.2	531.3	527.1	573.6
Public expenditure on health (% of total public expenditure)	12.5	14.9	13.6	13.3	13.4	12.7	13.3	14.0
Public expenditure on health (% GDP)	3.8	4.0	4.3	4.5	4.8	5.4	5.0	4.8
Private expenditure on health (% THE)	32.4	32.2	30.5	27.0	27.6	27.2	27.4	27.7
Private expenditure on health (% GDP)	1.8	1.9	1.9	1.7	1.8	2.1	2.0	1.9
Public expenditure on health (% THE)	67.6	67.8	69.5	73.0	72.3	72.8	70.8	69.2

Notes: (p): Preliminary data; THE: Total health expenditure.

Source: Statistics Lithuania, 2013.

Before the crisis, in absolute terms, private spending on health was growing at a similar rate to public spending, while the share of private expenditure was very gradually decreasing (from 32.4% in 2004 to 27% in 2007). However, already in 2008 there was a rapid increase in private spending in absolute figures and a slight increase in relative terms (Table 7.4).

External funding increased annually during the crisis, from €10 million in 2007 to €60 million in 2011, as the health system received a total of €225 million from EU structural funds during the period 2007–2013 (Ministry of Health, unpublished internal information 2013).

### **SHI revenue**

Under the Law on Health Insurance there are two main sources of SHI revenue: the contributions of the economically active population, which account for approximately 40% of the total population, and the contribution of the state budget on behalf of the economically inactive population (pensioners, children, students, etc.) and the registered unemployed. For 2011, the contributions of the active workforce constituted approximately 60% of health insurance revenue, and the contribution of the state budget for the economically inactive and the unemployed constituted about 40%. The ratio between these two sources has changed over different stages of the economic cycle, depending mainly on the unemployment rate.

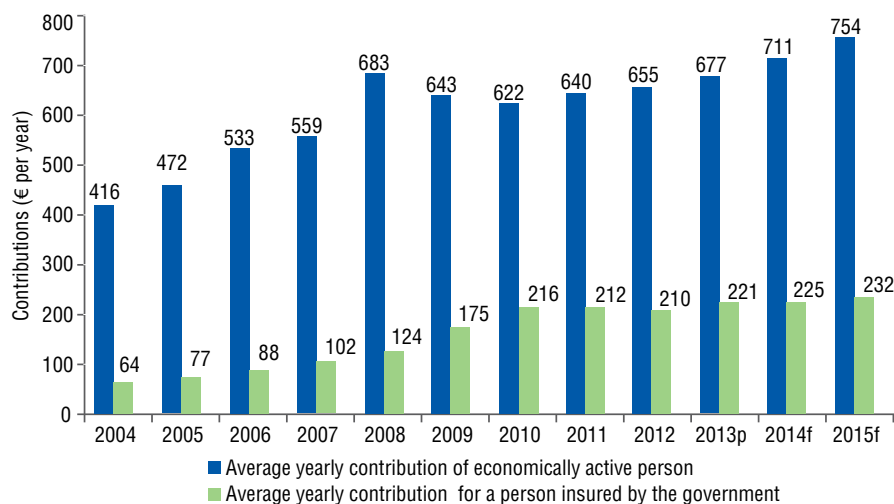
One important aspect, which is also the basis of the counter-cyclical mechanism, is that the state's contribution is tightly and retrospectively bound to that of the economically active population. In 1998, the Law on the Health System stipulated that public spending on health had to be at least 5% of GDP. However, this target was never achieved and eventually the provision was abolished as unconstitutional in 2002. Nevertheless, there was a need to establish a mechanism to ensure a gradual increase of the state budget contribution to health financing in accordance with the development of the general economy as well as to maintain the predictability of this financial flow. As a result, in 2004, the average monthly salary of 2003 was set as the basis for the share of the budget contribution towards SHI for the unemployed and inactive groups for forthcoming years. This was changed in 2007 when the state budget contribution was set as a share of the average gross monthly salary, lagged by two years, and this share has increased over time (Table 7.5). The effect of this measure on the health insurance fund's revenue is shown in Figs 7.2 and 7.3.

In addition, the tax reform adopted at the end of 2008 set clear rules for compulsory health insurance contributions. The original rate of personal income tax (24% of gross salary in 2008) contained compulsory health insurance

**Table 7.5** Share of the state budget contribution for people insured by the government as a percentage of the official (2-year lagged) average salary in Lithuania

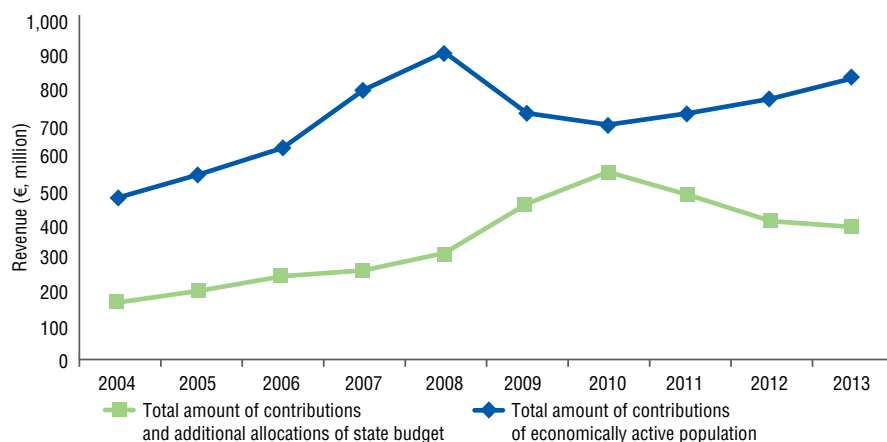
	2007	2008	2009	2010	2011	2012	2013	2014	2015
State budget contribution per person (%)	26	27	32	33	34	35	36	37	37

Source: Health Insurance Law (Parliament of the Republic of Lithuania, 1996, new edition 2003).

**Fig. 7.2** Contributions to SHI in Lithuania, 2004–2015

Notes: p: Preliminary data; f: Forecast.

Source: NHIF internal data, 2013

**Fig. 7.3** Functioning of the counter-cyclical mechanism of SHI revenue in Lithuania, 2004–2013

Source: NHIF internal data, 2013.

contributions (30% of the personal income tax). This was separated into a distinct tax on income (15%) and a health insurance contribution (9% in most cases). The result of the reform was that there were almost no unjustified exceptions left to SHI obligations and the collecting agents (mainly the Social Insurance Fund and the State Tax Office for some groups) substantially increased their effectiveness in enforcing payment of contributions through the implementation of government policy against the shadow economy and tax avoidance.

However, as can be seen in Fig. 7.3, due to increasing unemployment and decreasing wages the amount of money collected for SHI from the economically active population declined by 20% in 2009, and by 23.3% in 2010 in comparison to 2008. In 2011, it started to recover slightly, and this trend continued in 2012. In contrast, the amount of state budget contributions for people insured through the state budget rapidly increased and more than doubled between 2007 (€263 million) and 2010 (€554 million). According to legislation, the expenditure of the SHI fund has to be balanced with its revenues. The fund can accumulate reserves not exceeding 10% of revenue in a given year. The reserve is built up using previous years' surplus revenue and should be used to cover temporary deficits in revenue or for covering unpredictable expenditures.

### **3.2 Changes to coverage**

#### ***Population entitlement***

There were no essential changes in population entitlement to health care. SHI coverage has expanded slightly since 2009 through the implementation of clearer and more transparent rules for health insurance contributions as well as better collection. At the beginning of 2012, 91% of the population was covered by health insurance. The remaining 9% of the population (e.g. people who did not declare that they had left the country, those in the shadow economy, the homeless) was entitled to urgent care, which involved acute conditions that may result in serious complications, disability or death.

#### ***The benefits package***

Lithuania has quite a broad benefits package. There were no changes to service coverage and scope of services as a result of the financial crisis, with the exception of a reduction in temporary sick leave benefits, administered by the Social Insurance Agency. Before the crisis, sick leave benefit amounted to 85% of salary, while since 2009 those on a sick leave receive 40% of salary between the third and seventh day of their illness, and 80% of their salary subsequently.

### ***User charges***

As shown in Table 7.4, historically, private expenditure makes up approximately 30% of total expenditure on health. Virtually all of private expenditure consists of households' OOP payments. The share of private expenditure on health increased slightly during the crisis, from 27% in 2007 to 27.7% in 2011. While the bulk of OOP (about two-thirds) is attributed to payments for pharmaceuticals, private pharmaceutical expenditure decreased during this period (Garuoliene et al., 2011). This means that providers charged patients more often or with larger amounts for diagnostic tests and treatment. The extent of these charges is difficult to estimate, as some of them are not clearly defined and regulated, and de facto they exist as quasi-formal direct payments (Murauskiene et al., 2013). The increase in these charges, as well as in informal payments, has been reflected in a series of population surveys conducted by the NHIF (2012a), which indicated that between 2009 and 2011, OOP payments increased among survey respondents by 23% for diagnostic tests and by 9% for treatment.

### ***The role of VHI***

The introduction of VHI, planned to cover a substantial part of the population, was included in the government's programme between 2008 and 2012. The main rationale for this introduction was the belief that it had the potential to generate substantial additional funding for health care. However, a feasibility study commissioned by the Ministry of Health in 2010 highlighted the population's apparently negative attitude towards the idea of introducing VHI (Buivydas et al., 2010) and, therefore, this initiative was not implemented.

## **3.3 Changes to health service planning, purchasing and delivery**

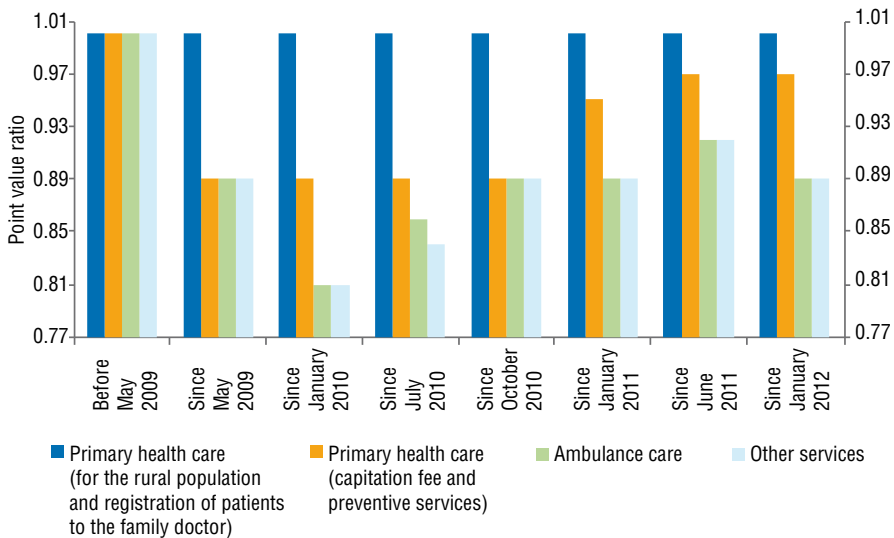
### ***Reducing health service tariffs***

An important measure introduced as a response to the crisis was a reduction in the prices of health care services paid to providers by the NHIF. These cuts were made in several rounds, using a mechanism of decreasing point values.

The first round of cuts was made in May 2009, when all prices of health care services were reduced by 11%, with the exception of the bonus payment per capita for the registered rural population and new registrations of patients with a family doctor (versus being registered with a primary health care team), which remained intact throughout the crisis. The next round, in January 2010, involved a further reduction of 8% (reduction of 19% in total) for most services, including ambulance service and specialist inpatient and outpatient care. Only capitation payments and payments for preventive services (accounting for

more than 80% of financing for primary care) stayed at the previous level. From July 2010 the lowest point value was gradually restored and remained at 89% until January 2012. There were also three retroactive attempts to partially compensate providers for significant cuts using the reserves. As a result, during the crisis and post-crisis period, prices were never reduced by more than 11% for most services; moreover, primary care had funding priority and experienced less drastic cuts compared with providers of other health services (Fig. 7.4).

**Fig. 7.4** Point value ratios for health care prices in Lithuania, 2009–2012



Source: NHIF internal data, 2013.

With existing reserves and room to increase efficiency, overall, providers maintained a positive balance in 2009 and 2010. However, by 2011 their reserves were depleted and there was an increasing number of hospitals declaring negative financial results in 2011 and 2012 (NHIF internal data, 2013).

### **Planned provider-payment reforms**

A long-term strategy of shifting care from inpatient to outpatient, ambulatory and day-care settings started in 2003 and continued during the crisis. The rationale behind this was to reduce existing high rates of inpatient admissions and increase the use of less resource-intensive services (outpatient visits, day care, day surgery and short-term hospitalizations). Thus, the hospital payment mechanism is aimed to incentivize hospitals to provide more of these types of service.

Another important provider-payment reform that was not related to the crisis was the replacement of local case-based payments (in use since 1997) by DRGs

(AR-DRGs version 6.0) for payment of acute inpatient care from 2012, after a preparation period in 2009–2011. As a change management measure, the strategy to freeze hospital budgets at the level of 2011 was applied for 2012 and 2013 and did not immediately affect the volumes and prices of services. However, implementation of DRGs triggered a shift in health services costing. By the end of 2012, a feasibility study was completed to identify alternatives in costing methodology. It is most likely that the pilot project using the selected methodology will take place in 2013–2016 with the aim of compiling comprehensive, detailed and reliable data for the calculation of DRG prices, and benchmarks for the management of the hospital sector at the macrolevel, and the management of hospitals at the meso- and microlevels.

### ***Service restructuring***

In 2009, a hospital restructuring master plan was introduced, as part of the broader service reconfiguration strategy being implemented since 2003. The plan consisted of:

- stratification of the hospital network into municipal, regional and national levels;
- the merger of hospitals into larger legal entities, particularly incorporating monoprofile specialized hospitals into multiprofile ones; and
- implementing elements of selective contracting by terminating contracting of surgery, obstetrics and intensive care services with small municipal hospitals that had not met the criteria of a minimal number of major procedures and deliveries.

The plan was implemented until 2012. As a result, some hospitals merged between 2009 and 2012, joining monoprofile hospitals with larger multiprofile institutions and thus reducing the number of legal entities by 25% (from 81 to 61), and some municipal hospitals ceased to provide surgery (eight) and obstetric (three) services. In order to maintain accessibility to a limited scope of services in these hospitals, additional funding was used to assure 24/7 access to a surgeon at an accident and emergency department, who could provide urgent care, conduct minor procedures and refer patients to a larger hospital. In addition, the providers of ambulance care and transfers received some funding to cover the higher number of patients transported to larger hospitals.

### ***Capital investment***

During the crisis, the governmental investment in health care projects decreased from €66 million in 2008 to €17 million in 2009, and €14 million in 2010 (Ministry of Health, unpublished internal information 2013). As the state share of investment dropped sharply, the funding from EU structural funds became the major source of capital investment.



### ***Reductions in health sector salaries and changes to working conditions***

The main costs of health care provision are related to the salaries of medical personnel, which account for 50–70% of expenditure in hospitals and 70–80% in outpatient care. Historically, health care sector salaries in Lithuania have been low in comparison with other EU Member States; consequently, a strategy to increase the salaries of medical personnel was implemented between 2005 and 2008, increasing the average monthly salary of health workers from €285 in 2005 to €635 in 2008 and €683 in 2009. However, reductions in the prices of health care services impacted mainly on salaries, which decreased on average by 13% for both doctors and nurses in 2010 and then started to recover gradually. In 2011, the level of salaries was almost back to that of 2009 (€661), and in 2012 exceeded this level (€710) (NHIF internal data, 2013).

### ***Pharmaceutical policy reforms***

Lithuania belongs to the group of countries (such as the Czech Republic, Poland, Austria, Belgium and Spain) with relatively high consumption rates for pharmaceuticals (with expenditure accounting for 1.7% to 1.9% of GDP and 15% of public health care spending). Public funding covers approximately 35% of total pharmaceutical expenditure. The share of generics accounts for 50% of packages (and 18% of expenditure) (Ministry of Health, 2012).

In response to the financial crisis, the Plan for Improving Pharmaceutical Accessibility and Reducing Prices (the “Drug Plan”) was approved in July 2009 and implemented in 2009–2010 (Ministry of Health, 2009). The Drug Plan consisted of a set of 28 measures addressed at producers, wholesalers, pharmacists, physicians and patients. The most effective measures of the Drug Plan were the expansion of the list of reference countries for setting reference prices; new requirements for generic pricing and the introduction of cost and volume agreements with producers. A new version of the catalogue of pharmaceuticals reimbursed by the NHIF (positive list) was introduced, and reference prices were set according to the average of eight EU Member States (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Poland, Romania and Slovakia) minus 5%. The effect of this measure was a substantial decrease in the prices of originators. From 2010, there were also new requirements for generic pricing in order to be reimbursed; for example, the first generic had to be priced 30% below the originator, while the second and third generics must be priced at least 10% less than the first generic. In addition, a reserve list of pharmaceuticals, to be introduced into the catalogue, was established. Moreover, pharmaceuticals started to be prescribed according to the active substance (INN) of the product, while patients were given the possibility to choose the medicine with the smallest co-payment.

The implementation of the plan resulted in a reduction in the reference prices of more than 1000 medicines, and pharmaceutical expenditures by both the NHIF and patient co-payments decreased substantially (Garuoliene et al., 2011). It is estimated that in comparison to 2009, €15 million in personal expenditure was saved in 2010, and €19 million in 2011, while the number of prescriptions increased (NHIF internal data, 2013), indicating an improvement in access to pharmaceuticals since the introduction of the Drug Plan.

NHIF expenditure on pharmaceuticals and medical devices in the ambulatory care sector decreased from €197.9 million in 2008 to €189.2 million in 2010. These savings created opportunities for the reimbursement of new innovative medicines. In 2011 reimbursement was applied to new drugs for the treatment of lung, breast, stomach and colon cancer as well as for ischaemic heart disease, mental and behavioural disorders, and some other diseases (NHIF internal data, 2013).<sup>2</sup>

### ***Prevention, health promotion and public health***

The impact on preventive services provided in primary care varied according to the programme. Some services continued to have funding priorities: funding for prevention of cardiovascular diseases steadily increased annually from €0.28 million in 2006 to €2.76 million in 2011; the new programme for colon cancer screening began in 2009 (€0.38 million) and continued in 2010 (€0.92 million) and 2011 (€0.71 million). At the same time, funding for breast, cervical and prostate cancer screening programmes declined in 2009 and 2010 and partially recovered in 2011 (NHIF, 2012b).

With the exception of the priority services discussed above, the funding for public health was not protected from budget cuts. Before the crisis, the public health budget (both national and municipal) grew from €19.6 million in 2006 to €29.5 million in 2008. Since 2009, there have been substantial cuts: to €22.4 million in 2009 and €18.9 million in 2010 (a 36% reduction compared with 2008) but with a minor recovery to €20.4 million in 2011 (Ministry of Health unpublished internal data, 2013). According to legislative changes introduced in 2007, public health bureaus, responsible mainly for health promotion, health status monitoring and child health, were established in municipalities. At the state level, following parliamentary decisions in 2011 and 2008–2012 and the government's policy to reduce bureaucracy and related costs, the State Public Health Service was abolished in 2012. Instead, the network of 10 regional public health centres, which are mainly responsible for public health safety and prevention and control of communicable diseases, are now directly supervised by the Ministry of Health.

<sup>2</sup> Some of these new pharmaceuticals include Gefitinibum, Anagrelidum, Pegfilgrastinum, Capecitabinum, Agomelatinum, Fulvestrantum, Palonosetronum and Ivabradinum.

## 4. Implications for health system performance and health

### 4.1 Equity in financing and financial protection

Changes during the crisis period increased equity in financing health care in terms of revenue collection. The tax reform at the end of 2008 had a positive impact both on vertical and horizontal equity. For example, some self-employed population groups such as artists, sportsmen and other freelancers started to pay contributions on a regular basis according to their income. In addition, the number of population groups paying fixed flat-rate contributions was reduced, and contributions became income based.

### 4.2 Access to services

Health care utilization indicators show that there were no evident changes in access to health care except for a slight temporal decrease of outpatient visits in 2009 and 2010, which then increased in 2011, exceeding the pre-crisis level (Table 7.6). However, the increase in OOP expenditure and data from patient surveys (NHIF, 2012a) indicate the presence of additional financial barriers to access to care. There is no comprehensive data on waiting lists.

According to EU-SILC survey data on self-reported unmet medical need, Lithuania's average unadjusted rate improved from 10.1% in 2005 to 3.6% in 2009; after that, unmet need increased to 4.4% in 2011 mainly for financial reasons and because patients chose to delay treatment (Eurostat, 2013).

**Table 7.6** Health service utilization per inhabitant in Lithuania, 2006–2011<sup>a</sup>

	2006	2007	2008	2009	2010	2011 <sup>a</sup>
Visits to GPs	4.4	4.6	4.7	4.6	4.5	4.7
Outpatient visits per person	6.6	6.9	7.0	6.9	6.9	7.2
Inpatient admissions per 100, total	21.6	21.6	21.8	22.2	22.2	22.7
Inpatient admissions per 100, acute	19.8	19.8	20.0	20.5	20.4	20.7
Day cases per 100, total	0.9	1.3	1.5	1.6	1.9	2.2

*Note:* <sup>a</sup>The increase across all indicators indicates a substantial change in the denominator (total population) as a result of more accurate recording of migration data and the availability of 2011 census data; corrections in population estimates for preceding years have not yet been published.

*Source:* Health Information Centre, 2013.

### 4.3 Impact on efficiency

Certain measures, mostly pre-dating the crisis, continued to address inefficiencies within the health system. First, established priorities, such as strengthening primary care, treating patients outside inpatient settings and prevention, were

maintained. Second, in line with reform of the hospital network, some services (surgery, obstetrics) were moved from local to larger hospitals.

To some extent, the measures taken during the crisis enabled the health system to manage with less. The most successful example is the implementation of the Drug Plan, which reduced pharmaceutical expenditure and improved patients' access to pharmaceuticals. In addition, reductions in the prices of health care services forced providers to maintain provision of services with lower levels of funding.

There is no comprehensive information related to changes in the quality of care. However, the maintenance of service provision levels by providers facing reduced budgets presumably resulted in cuts to the salaries of medical personnel, which could potentially have had a negative impact on quality of care.

#### **4.4 Quality of care**

According to the population survey conducted by the NHIF (2012a), waiting times and large co-payments were named as the main barriers to accessing health care. Between 2009 and 2011, the share of respondents indicating that they had experienced difficulties in accessing care with regard to visits to a specialist increased from 38% to 58%, for diagnostic tests from 27% to 40%, and for elective surgery from 11% to 19%. According to the same survey, the share of respondents assessing quality of care as low increased from 13% in 2009 to 28% in 2011. However, this was a general judgement not based on any specific aspect of quality.

#### **4.5 Transparency and accountability**

The tax reform of 2008 brought positive changes to transparency and accountability to tax payers. The separation of the SHI contribution into a separate component and improved collection served as a signal to tax payers, quantifying their input into the public financing of health care as well as emphasizing their duty to make the required contribution. Moreover, under strict fiscal discipline, general transparency and accountability in public finances has improved. For example, the Ministry of Finance initiated the implementation of a system for national budget monitoring while the Cabinet and the Ministry of Finance have tightened the terms of use of the compulsory health insurance fund's reserve.

#### **4.6 Impact on health**

While the financial crisis has not had an obvious impact on the overall health status of the population in Lithuania, falling incomes and rapid growth in

unemployment (peaking at 17.8% in 2010) theoretically increases the number of people at risk of suicides, mental health problems or not being able to access health services. The available evidence on changes to health mainly relates to an increase in suicides, depression and HIV infections, and a decrease in road traffic accidents and alcohol-related morbidity and mortality (Tables 7.7 and 7.8).

Historically, Lithuania has the highest recorded rate of suicides in the WHO European Region; however, a steady decline in deaths from suicides and self-inflicted injuries was seen during a number of years prior to the crisis, leading to the rate of 28.4 per 100 000 in 2007. This trend reversed in 2008 and 2009, amounting to an increase in the suicide rate to 31.5 per 100 000, and slightly decreasing since.

In mental health, depression increased during 2008–2010, reversing the previous falling trend. Similar results (on self-reported depression) have been reported in the population health survey, particularly in women (from 17% in 2008 to 25% in 2010), but also in men (from 25% in 2008 to 27% in 2010) (Grabauskas et al., 2011). Addiction disorders decreased, driven primarily by a reduction in mental health disorders caused by alcohol abuse, in line with other alcohol-related trends (see below). This was due to anti-alcohol policies introduced in 2007 and 2008, irrespectively of the crisis.

The introduction of anti-alcohol policies, prompted by rising alcohol consumption and worsening of alcohol-related health outcomes in the years leading to the crisis, had a positive impact in reducing alcohol-related mortality. In addition, road traffic deaths halved as a result of a combination of factors, including enforcement of road traffic safety (Training, Research and Development Centre, 2013), anti-alcohol measures (Veryga, 2009) and the effects of the financial crisis (Stuckler et al., 2011). Initially very noticeable, these changes seemed to slow down in 2011 but are still at levels that are higher than the EU average, indicating that the initial impetus has worn off.

According to data from the Lithuanian Centre for Communicable Diseases and AIDS, there was a substantial increase in HIV incidence in the period 2009–2011 in comparison with previous years (Centre for Communicable Diseases and AIDS, 2013; see also Table 7.8). Since 2004, HIV incidence had been gradually falling from 3.9 per 100 000 population in 2004 to 2.8 in 2008; however, it nearly doubled to 5.4 in 2009, 4.7 in 2010 and 5.2 in 2011 (Health Information Centre, 2013). The increase in absolute numbers was mainly seen among injecting drug users, which has been the main mode of HIV transmission in Lithuania (Table 7.8). Between 2006 and 2010, there was a reduction in funding available for needle exchange programmes, with distribution amounting to an estimated 45 syringes per user per year (European Centre for Disease Prevention and Control, 2012).

**Table 7.7** Selected health indicators in Lithuania, 2002–2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Depression (incidence per 100,000)	69.5	65.6	64.1	54.7	52.0	45.2	48.0	53.6	64.3	n/a
Addiction disorders (incidence per 100,000)	79.8	72.9	76.6	95.3	89.4	101.2	93.0	72.7	67.6	74.8
Suicides (SDR per 100,000)	44.7	42.1	40.2	38.6	30.9	30.4	33.1	34.1	31.0	31.6
Alcohol-related deaths (SDR per 100,000)	29.0	32.2	32.0	36.4	43.7	51.6	43.9	30.5	29.3	29.3
Transport accidents (SDR per 100,000)	23.9	24.7	25.1	25.9	26.5	26.0	17.9	13.7	11.3	11.2

Note: n/a: Data not available; SDR: standardized death rate.

Sources: Health Information Centre, 2013; State Mental Health Centre, 2013.

**Table 7.8** HIV incidence (absolute numbers) according to transmission mode in Lithuania, 2006–2011

	2006	2007	2008	2009	2010	2011
Heterosexual	15	27	26	34	26	31
Male to male sexual contact	8	4	9	9	5	7
Injecting drug users	62	59	42	117	106	86
Unknown	15	15	18	20	16	41
Perinatal	0	1	0	0	0	1
Total	100	106	95	180	153	166

Source: Centre for Communicable Diseases and AIDS, 2013.

The results from an adult population health survey (Grabauskas et al., 2011) showed that, overall, the proportion of respondents assessing their health as good remained relatively stable between 2008 and 2010, at 53% for men and 52% for women, with longer-term trends indicating an improvement since 2004. There were some positive trends towards healthier lifestyles in 2010. For men, daily smoking decreased from 39% in 2008 to 34% in 2010, while it increased slightly from 14% to 15% for women during the same period. The proportion of respondents drinking strong alcohol decreased in both sexes between 2008 and 2010, from 29% to 24% in males and from 12% to 9% in females. These trends are mirrored in national statistics, as cigarette sales fell

by 33% in 2009 and by 39% in 2010 compared with 2008 sales. However, these figures have to be treated carefully because of the possible increase in illegal tobacco sales. Alcohol consumption showed similar trends. However, the improvements in both indicators were short term, particularly in the case of alcohol, as in 2011 consumption bounced back to exceed pre-crisis levels (Table 7.9).

The medium- and long-term impact of the financial crisis on health is still unclear. However, evidence from previous recessions shows that sharp rises in unemployment and loss of income have long-term effects on health, particularly that of the most vulnerable.

**Table 7.9** *Smoking and alcohol consumption indicators in those aged 15 and over in Lithuania, 2007–2011*

	2007	2008	2009	2010	2011
Smoking (cigarettes per inhabitant per year)	1,457	1,421	947	863	987
Alcohol (100%) consumption, litres per inhabitant, (15+) population) per year	13.4	13.3	12.4	12.9	14.1

*Source:* Health Information Centre, 2013.

## 5. Discussion

### 5.1 Drivers of change

The most important factors driving crisis-related changes in Lithuania were agents external to the health system – the parliament, the government and the Ministry of Finance. The new conservative-led coalition government that came to power in December 2008 had to take urgent measures to reduce public spending in order to cope with the crisis that had started to unfold. The government and the Ministry of Finance involved representatives of the Ministry of Health and the NHIF in discussions and the preparation of draft legislative amendments in response to the crisis.

The crisis was regarded both as a challenge (bearing in mind the depth of the economic downturn) and as an opportunity to implement unpopular but necessary reforms. An example of such reforms was the restructuring of the hospital network with some reconfiguration of hospital services. However, the measures taken to rationalize hospital care were not sufficient (Karanikolos, Murauskiene & van Ginneken, 2013) and showed modest results. Therefore, it could be argued that this opportunity was not used to its full extent. However,

it should be recognized that the government at the time was working under huge time pressure, reacting to the consequences of the quickly deteriorating economic situation, and may not have had enough time to prepare and implement more comprehensive strategies.

## 5.2 Content and process of change

In May 2009, the World Bank presented the Social Sector Public Expenditure Review on Lithuania. On the basis of this review and its own analysis, the Ministry of Health prepared a strategy for the period 2009–2012. The main elements of this strategy were to strengthen primary care further; greater expansion of day care; reform of the hospital network, with a reconfiguration of services; and changes to pharmaceutical policy. To various extents, these measures were implemented by 2011 and 2012.

Prioritization of primary care, outpatient care and day care were, in fact, the continuation of pre-crisis policies and, therefore, were easy to pursue. Moreover, since the cuts in health care prices were differentiated, these services (primary care, outpatient care, day care and preventive services) saw less of a price reduction compared with other services. The funding for some public health prevention programmes financed through the NHIF (cancer and cardiovascular screening) also increased. At the same time, the state-funded public health budget was not protected by any counter-cyclical mechanism and so experienced substantial cuts.

The most difficult policies to implement were hospital reform (because of strong resistance from providers) and the Drug Plan (because of its complexity, with 28 measures). From the middle of 2009, substantial cuts in health services prices were introduced, and this measure quickly affected providers by forcing them to maintain services at lower cost, resulting in significant reductions in the salaries of medical personnel. To a certain extent, this helped the Ministry of Health to prepare and introduce more complex and difficult measures, such as the restructuring of the hospital network. The hospital restructuring and reconfiguration plan was partially fulfilled: mergers resulted in a decrease of 25% in the number of acute care providers (as legal entities), joining most of the monoprofile hospitals with larger multiprofile institutions. However, the overcapacity in inpatient care still remained, together with a high hospitalization rate.

Among the changes that were discussed but not implemented were the introduction of formal user charges and VHI. However both were dropped because of negative reactions from the population.

Some intersectoral action, coinciding with the crisis and involving improvements in road safety and alcohol control measures, resulted in a substantial reduction of road traffic deaths in 2008–2010.



### 5.3 Implementation challenges

Overall, there was quite strong motivation and political will to implement reforms at the central political level (parliament, government, Ministry of Health, Ministry of Finance). However, for hospital restructuring, there was resistance from municipal governments, which, as hospital owners, tried to protect local hospitals from the centralization of inpatient care. Therefore, not all planned restructuring was implemented, although this was not directly a result of the crisis. There was also resistance from health professionals anxious about the reductions in the prices of services, as they resulted in a decrease in salaries. However, these measures were pushed through mainly on the strength of the government's prevailing opinion that priority should be given to the health system's financial sustainability as a basis for future recovery.

### 5.4 Resilience in response to the crisis

Fiscally, Lithuania was not prepared for an economic downturn. During the years of fast economic growth (2004–2007), based partly on a real estate bubble, the country did not use all the available opportunities to collect financial reserves. As the economy rapidly contracted, the government introduced strict fiscal discipline and cuts to public sector spending. The health sector's preparedness was also insufficient because of existing inefficiencies and steady growth in input costs. However, in 2008, the reserve of the compulsory health insurance fund, which is responsible for over 85% of public expenditure on health, accounted for 7.5% of the total fund's budget. This reserve was utilized to soften the impact of the crisis at the beginning of 2009 but the reserve could not cover the simultaneous significant decrease in revenue. The two-year, counter-cyclical mechanism underlying SHI revenue collection on behalf of the state and the increasing size of the state contribution as a proportion of official salaries meant that the level of state budget transfers for people insured by the state rapidly increased in the first two years of the crisis. These measures softened the impact of reductions in health insurance revenues and enabled the government to avoid extreme cuts in health spending.

The Lithuanian health care system has learnt a number of lessons from going through the crisis. First, cuts to services, even if tailored to increase the efficiency of providers in the short term, lead to cumulating deficits in the long term and, therefore, should be supported by structural changes related to shifts in responsibilities and resources from inpatient to outpatient care settings, and from specialized to primary care. Second, the success of the Drug Plan indicates that complex measures involving multiple stakeholders that are consistently implemented can decrease expenditure and increase accessibility of pharmaceuticals. Third, a health care financing model based on a mix of

contributions (SHI contributions from the economically active population and transfers from the budget for those insured by the state) in combination with a counter-cyclical mechanism proved its capacity to counteract falling revenues and to ensure that the share of public spending on health remained intact during the crisis.

Because of the time lags involved, it is still too early to assess the medium- to long-term impact of the crisis on the health system and population health in Lithuania.

## **6. Conclusions**

Lithuania's health care system experienced substantial financial pressure under the large contraction of the country's economy in 2009 (GDP fell by almost 15%). The health system was not properly prepared for the crisis because of the existing inefficiencies in the inpatient sector and primary health being limited in its role in providing appropriate curative and preventive services in the community. At the same time, Lithuania's health financing model based on a single purchaser, a mix of SHI revenue sources, and a counter-cyclical mechanism, proved its vitality as public financing for health care was affected much less than the economy in general.

The main policy during the crisis period was to maintain access to the health benefits package provided by the publicly funded health care system. In order to do this, providers were forced to increase efficiency through reductions in the prices of services covered by the NHIF, restructuring of the hospital network and introducing incentives to treat more patients in primary care and outpatient settings. As a result, there were no changes in health coverage during the crisis. The main drawbacks of the reform measures undertaken during the crisis period were the reduction to health care workers' salaries and hospitals growing financial deficits. While service utilization data showed no major changes, it is difficult to interpret these data because of changes in population numbers. However, population surveys and the increase in OOP payments indicate that some reductions in access to care have been experienced.

As demonstrated by the Drug Plan, well-designed and properly implemented complex measures can decrease expenditure without impairing accessibility (of medicines) even in conditions of crisis.

The crisis seems to have had a short-term impact on the population's mental health, reflected in the increases in depression, addiction disorders and suicides rates. In addition, there has been an increase in HIV incidence among injecting drug users. At the same time, there has been a decrease in road traffic accidents and alcohol-related morbidity and mortality, as well as temporal reductions in

the consumption of tobacco and alcohol. The medium- and long-term impact of the financial and economic crisis on health is still unclear; however, evidence from previous recessions shows that sharp rises in unemployment and loss of income affect the health of the most vulnerable groups well into the future.

## Appendix 7.1

### Major crisis-related events and changes in the health system in Lithuania, 2008–2011

Date	Event/action
2008	<p>Government, with parliament's support, implemented tax reform, separating personal income tax into a personal income tax component and a SHI contribution</p> <p>Unemployment rate reached 5.9%</p>
2009	<p>Ministry of Health and the NHIF implemented a policy to reduce the prices of services paid to health care providers by the NHIF</p> <p>Ministry of Health implemented a plan for improving pharmaceutical accessibility and reducing prices ("The Drug Plan")</p> <p>National Agreement on Crisis Measures is signed between the government and social partners</p> <p>Government begins an ongoing programme for the restructuring of health care institutions, particularly hospitals and services (until 2012)</p>
2010	<p>Unemployment rate peaked at nearly 18%</p> <p>NHIF revenues declined by 23.3% (compared with 2008) due to increasing unemployment and decreasing wages</p> <p>New requirements for generic pricing and prescribing by INN came into force</p> <p>Salaries for doctors and nurses declined by an average of 13% (but recovered to over pre-crisis levels in 2012)</p>
2011	<p>Reimbursement was applied to new drugs for the treatment of lung, breast, stomach and colon cancer as well as for ischemic heart disease, mental health and behavioural disorders, and some other diseases</p>
2012	<p>In conjunction with reductions to some parts of the public health and prevention budget, the State Public Health Service was abolished</p> <p>Unemployment level stabilized at 13.3%</p>

## References

- Buivydas R et al. (2010). *Papildomo savanoriškojo sveikatos draudimo analizė [Supplementary voluntary health insurance analysis]*. Vilnius, Health Economics Centre.
- Centre for Communicable Diseases and AIDS (2013). *Statistics/reports on sexually transmitted diseases 2006–2011* [online]. Vilnius, Centre on Communicable Diseases and AIDS (ULAC) (<http://www.ulac.lt/lytiskai-plintanciu-infekciju-ataskaitastatistika>, accessed 29 October 2014).
- European Central Bank (2013). *Long-term interest rate statistics for EU Member States*. Brussels, European Central Bank (<http://www.ecb.int/stats/money/long/html/index.en.html>, accessed 29 October 2014).
- European Centre for Disease Prevention and Control (2012). *Detecting and responding to outbreaks of HIV among people who inject drugs: best practices in HIV prevention and control*. Stockholm, European Centre for Disease Prevention and Control (Meeting report).
- Eurostat (2013). *Statistics database*. Luxembourg, Eurostat (<http://epp.eurostat.ec.europa.eu>, accessed 29 October 2014).
- Garuoliene K, Alonderis T, Marcinkevičius M (2011). Pharmaceutical policy and the effects of the economic crisis: Lithuania. *Eurohealth*, 17(1): 1–4.
- Government of the Republic of Lithuania and Social Partners (2009). *National agreement*. Vilnius, Government of the Republic of Lithuania.
- Grabauskas V et al. (2011). *Health behaviour among Lithuanian adult population, 2010*. Kaunas, Lithuanian University of Health Sciences Academy of Medicine.
- Health Information Centre (2013). *Statistical database* [online]. Vilnius, Health Information Centre, Institute of Hygiene (<http://sic.hi.lt/>, accessed 29 October 2014).
- Jakeliunas S (2010). *Lietuvos krizės anatomija [Anatomy of Lithuania's crisis]*. Kaunas, Kitos knygos.
- Karanikolos M, Murauskiene L, van Ginneken E (2013). The Lithuanian health system: pursuing efficiency in the delivery of health care. *Eurohealth* 19: 44–47.
- Ministry of Health (2009). *Vaistų prieinamumo gerinimo ir jų kainų mažinimo priemonių planas [A plan for improvement of drugs accessibility and price reduction]*. Vilnius, Ministry of Health.
- Ministry of Health (2012). *Analizė, kaip panaudotos vaistams ir medicinos pagalbos priemonių kompensavimui skiriamos PSDF biudžeto lėšos [Analysis on the use of financing from the Compulsory Health Insurance Fund for reimbursement of medicines and medical devices]*. Vilnius, Ministry of Health.

Murauskiene L et al. (2013). Lithuania: health system review. *Health Systems in Transition*, 15: 1–150.

NHIF (2012a). *Lietuvos gyventojų nuomone apie privalomojo sveikatos draudimo sistema, ligonių kasų ir sveikatos priežiūros įstaigų veiklą 2009, 2010, 2011 [Opinion of Lithuanian residents about the compulsory health insurance system, the National Health Insurance Fund and health care institutions in 2009, 2010 and 2011]*. Vilnius, National Health Insurance Fund.

NHIF (2012b). *Prevention services* [online]. Vilnius, National Health Insurance Fund ([http://www.vlk.lt/veikla/veiklos-sritys/prevencines-programos/apie-prevencines-programas/Documents/Prevenciniu%20programu%20finansavimas%20PSDF%20biudzeto%20lesomis%20\(pdf\).pdf](http://www.vlk.lt/veikla/veiklos-sritys/prevencines-programos/apie-prevencines-programas/Documents/Prevenciniu%20programu%20finansavimas%20PSDF%20biudzeto%20lesomis%20(pdf).pdf)), accessed 4 November 2014).

OECD (2013). *Health statistics*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 5 November 2014).

Parliament of the Republic of Lithuania (1996). *Health Insurance Law No. I-1343 (new edition 2003)*. Vilnius, Parliament of the Republic of Lithuania.

State Mental Health Centre (2013). *Mental health statistics* [online]. ([http://www.vpsc.lt/index.php?option=com\\_content&view=category&id=12&Itemid=23&lang=en](http://www.vpsc.lt/index.php?option=com_content&view=category&id=12&Itemid=23&lang=en)), accessed 29 October 2014).

Statistics Lithuania (2009). *Household budgets*. Vilnius, Lietuvos statistikos departamente [Statistics Lithuania].

Statistics Lithuania (2010). *Statistical yearbook of Lithuania 2010*. Vilnius, Lietuvos statistikos departamente [Statistics Lithuania].

Statistics Lithuania (2012). *Statistical yearbook of Lithuania 2012*. Vilnius, Lietuvos statistikos departamente [Statistics Lithuania].

Statistics Lithuania (2013). *Database of indicators* [online]. Vilnius, Lietuvos statistikos departamente [Statistics Lithuania] (<http://www.stat.gov.lt/lt/>), accessed 29 October 2014).

Stuckler D et al. (2011). Effects of the 2008 recession on health: a first look at European data. *Lancet*, 378: 124–125.

Training, Research and Development Centre (2013). *Sveikatos sektoriaus prioritetų 2014–2020 m. Europos Sąjungos struktūrinės paramos panaudojimo laikotarpiu strateginis vertinimas [Strategic evaluation of health sector priorities for EU structural support use in 2014–2020]*. Vilnius, Training, Research and Development Centre (MTVC) and the Ministry of Health.

van Ginneken, E et al. (2012). The Baltic states: building on 20 years of health reforms. *BMJ*, 345: e7348.

Veryga A (2009). 2008: Lithuania's year of sobriety – alcohol control becomes a priority of health policy. *Addiction*, 104: 1259.

WHO Regional Office for Europe (2013). *Health for All database* [online/offline database]. Copenhagen, WHO Regional Office for Europe (<http://data.euro.who.int/hfadb>, accessed 2 November 2014).

World Bank (2009). *Lithuania: social sectors public expenditure review*. Washington DC, World Bank (<https://openknowledge.worldbank.org/handle/10986/3090>, accessed 29 October 2014).



# Chapter 8

## **The impact of the crisis on the health system and health in the Netherlands**

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### **Introduction**

At the onset of the crisis, the Dutch health care system was still in the process of transition following a major reform in 2006 that had as its main aims an increase in efficiency and a reduction in costs. Consequently, it is often unclear whether changes that happened after 2008 were the result of the crisis or the result of adjustments to enhance the operation of the new system. Moreover, health care was one of the last sectors in the Netherlands to be affected by budget cuts. Nevertheless, the worsening economic situation acted as a motivation for policy-makers, stakeholders and the public to discuss essential questions such as the affordability of health care, the generosity of the benefits package and the extent of user charges or compulsory deductibles within the health insurance system.

With the aim of controlling costs, a number of agreements were negotiated between the government and stakeholders, the most important of which was the 2013 Health Agreement with providers and health insurers. Mainly, measures targeted a reduction in input costs, such as limiting the income of medical specialists or encouraging GPs to prescribe cheaper drugs. Much more complex structural measures, such as the reform of long-term care, are only just beginning to be tackled and the outcomes remain to be seen. Within this context, accessibility, quality and affordability of care remain key concerns.

### **1. The nature and magnitude of the financial and economic crisis**

#### **1.1 The origins and immediate effects of the crisis**

During the 1990s, the Netherlands recorded steady economic growth. In 2001, the rate of GDP growth slowed sharply and almost ground to a halt



in 2002–2003. Some of the downturn was attributable to the downturn in the global economic cycle and much lower rates of export growth in 2001–2003 (exports accounted for 70% of GDP in the Netherlands in 2000). Private consumption fell in real terms in 2003 and investment fell in both 2002 and 2003 (Economist Intelligence Unit, 2008). From 2005, the economic recovery gathered pace until the start of the global economic crisis in 2008 (Schäfer et al., 2010). Most of the acceleration between 2005 and 2008 resulted from increased domestic demand (Economist Intelligence Unit, 2008). Growth in GDP became negative in the fourth quarter of 2008 and this trend continued until the end of 2009 (Table 8.1).

In 2009, exports declined sharply (Table 8.1) as the transport and trade services sectors, the main pillars of Dutch exports, were harmed by the global economic slowdown. The housing market collapsed as banks tightened their lending criteria for new mortgages, and households postponed or cancelled buying new homes. With falling house prices, many households found themselves with mortgages exceeding the value of their houses and decreased their consumption (individual savings have been negative since 2003). Almost half of the decrease in private consumption can be attributed to the effect of falling house prices (Social and Economic Council, 2013). It is worth noting here that since the early 2000s, as a consequence of very lax mortgage lending since the 1990s, Dutch households had the highest level of long-term debt in the Eurozone (Social and Economic Council, 2013). Households were also affected by the decline in real wages (since 2010) and an increase in unemployment (during 2009 and from mid-2011 onwards). Business investments declined not only because of reduced (re)export volumes, but also as a consequence of political measures, such as cuts to government spending on defence and the arts and in the budgets of municipalities and provinces (from 2010). Later, in 2012, measures such as the so-called crisis levy applied to incomes over €150 000 per year and an increase in VAT suppressed economic activity further.

## **1.2 Government responses to the crisis**

Between 2008 and 2011, the government took special measures to support businesses and the banking sector struggling with the fallout of the financial crisis. Almost €6 billion was provided by the central government and a further €1.5 billion by the provinces and municipalities to enable businesses to reduce the working hours of their employees (shift to part-time employment), avoid lay-offs and retain skilled workers (with the idea of employing them again full-time when the economic situation improved). In 2008, the government took over Fortis Bank Nederland, including parts of ABN AMRO. It also allocated €20 billion to strengthening capital reserves in the banking and insurance sectors, with the ING Group being the first bank to receive such a capital

**Table 8.1** Demographic and economic indicators in the Netherlands, 2000–2012

	2000	2006	2008	2009	2010	2011	2012
Population (thousands)	15,926	16,346	16,446	16,530	16,615	16,693	16,695
People aged 65 and over (% of total population)	13.58	14.37	14.86	15.15	15.45	15.91	16.20
GDP per capita (€)	26,244	33,049	36,148	34,678	35,433	36,007	35,799
Real GDP growth (%)	3.9	3.4	1.8	3.7	1.5	0.9	1.2
Government debt (% of GDP)	63.89	54.51	64.80	67.63	71.89	76.16	82.74
Government deficit (% of GDP) <sup>a</sup>	2.0	0.5	0.5	0.5	5.6	5.1	4.3
Government consumption (% of GDP) <sup>b</sup>	39.9	39.0	39.2	38.2	38.9	38.6	39.0
Private consumption (% of GDP) <sup>c</sup>	50	47	45	46	46	45	46
Investments (% of GDP)	22.03	20.01	20.50	18.40	17.98	18.09	17.15
Long-term interest rate (%) <sup>d</sup>	5.4	3.8	4.3	3.7	3.0	3.0	1.9
Exports (% of GDP)	70	73	76	69	79	84	88
Imports (% of GDP)	65	65	68	62	71	75	80
Unemployment rate (%)	3.1	4.4	3.1	3.7	4.5	4.4	5.3
Long-term unemployment rate (%)	0.0	1.7	0.9	0.8	1.2	1.5	1.7

Notes: <sup>a</sup>Economic and Monetary Union balance; <sup>b</sup>Public expenditure; <sup>c</sup>Household final consumption expenditure; <sup>d</sup>10-year government bonds.  
Sources: IMF, 2013; Netherlands Bureau for Economic Policy Analysis, 2013; OECD, 2013; World Bank, 2014.

injection in 2008. In addition, €200 billion was made available in 2012 to financial institutions as a guarantee on bank loans. In 2008, in line with the new European regulation (European Union Financial Sector Assessment Programme – Deposit Guarantee Schemes; IMF, 2013), the guarantee on deposit accounts (current and savings accounts) was increased from €40 000 to €100 000 (Government of the Netherlands, 2013).

The rapid increase in public spending and the fall in tax revenues caused a substantial increase in the public budget deficit. In 2013, a set of austerity measures amounting to €6 billion was agreed by the government and the political parties (see section 2.2). The most important of these measures were a reduction of surcharges, stabilization of salaries in the public sector and cuts in public expenditure. The aim of the consolidation programme was to significantly reduce the public budget deficit and debt by 2015 to ensure compliance with the public deficit limit imposed by the Stability and Growth Pact. While this package was necessary to meet this limit, it may also have caused an increase in the unemployment rate in the immediate future.

### **1.3 Broader consequences**

The economic decline and cuts in government budgets continue to create uncertainty for Dutch households and companies. Some optimistic signs could be discerned at the end of 2013, with both GDP and house prices forecast to grow at a minimal pace in 2014. At the same time, Standard and Poor's Financial Services (a credit-rating agency) downgraded the Dutch economy in November 2013 from AAA to AA+, stating that the Dutch economy was lagging behind other economies in Europe, which were recovering more quickly.

## **2. Health system pressures prior to the crisis**

In 2006, a single health insurance scheme, compulsory for all Dutch residents, was introduced, intended to radically change the roles of patients, insurers, health care providers and the government. The main aims of the reform were to increase solidarity and efficiency, decrease government involvement, ensure good access to care and enhance freedom of choice (Schut & van de Ven, 2011).

Three “markets” can be distinguished in the Dutch health care system: the health insurance market, the health provision market and the health care purchasing market. Managed competition is now intended to be the major driver in the health care system. Within the health care purchasing market, insurers have to negotiate with providers on price, quality and volume of care. In the health care provision market, patients can choose the provider they prefer. In the health insurance market, citizens can purchase a health insurance plan that best meets their needs. The system of managed competition is currently in place

for curative care and some mental health care (up to one year for ambulatory and institutional mental health care). The role of the government has changed from directly steering the system to safeguarding the proper functioning of the health care markets.

## **2.1 Pressure prior to the crisis**

Health care is one of the largest sectors in the Netherlands, as measured by the size of its budget (29% of the total government budget in 2013) and by the number of employees (about 1.4 million people worked in or contributed to the health care sector in 2013) (Statistics Netherlands, 2013a).

The need to contain growing health care expenditure was already recognized as far back as the oil crisis in the 1970s. Expenditure started to grow in the early 2000s (it grew from €46.9 billion in 2000 to €70.7 billion in 2006, an increase of over 50%) (Statistics Netherlands, 2013a) and made the need to contain costs even more pressing. Therefore, it is not a coincidence that one of the goals of the 2006 reform was to reduce the total cost of primary and specialized care.

Regulated market competition in the three health care markets was introduced and health insurers were given a more central role in contracting with health care providers and purchasing care for their clients. It was hoped that the competition would lead to an increase in the quality of care and a decrease in prices. Hard budgets were replaced by payment mechanisms linking payments with performance mechanisms, and complex systems to define and register performance and reimbursement were introduced.

Health care expenditure continued to increase after 2006, reaching €79.8 billion in 2008 (Statistics Netherlands, 2013b) or 10.2% of GDP (OECD, 2013). Between 2004 and 2008, the growth rate of expenditure increased from 3.5 to 6.8% per year. According to the estimations by the National Institute for Public Health and the Environment (Rijksinstituut voor de Volksgezondheid en Milieuhygiëne), half of the health expenditure growth between 1999 and 2010 could be attributed to growth in the volume of care (number of treatments) and in the number of treatment options, driven by technological advances. In comparison, price increases accounted for 35% of growth and population ageing for “only” 15%. Treatment of mental health disorders, which includes care for people with a mental disability or dementia, accounted for the largest share in the growth of health expenditure, followed by treatment of diseases of the locomotor system and connective tissue. In 2007, mental health disorders accounted for the highest share of health expenditure (20% of total health care expenditure), followed by cardiovascular care (9%) (Slobbe et al., 2011).

### Cost control

A number of measures had been put in place before the start of the financial crisis to control increasing health care costs. These measures aimed to change the behaviours of both health care users and providers and concerned both curative care and long-term care.

Citizens were discouraged from consuming unnecessary care by the “no-claim” regulation introduced in 2005. According to this regulation, citizens who had spent less than €225 per year on health care were paid back the difference between this amount and the sum spent, up to €225 for those who consumed no health care. However, the no-claim regulation was found to be ineffective (the refund being made only in the following year and so not a timely incentive to consume less health care) and was replaced by the compulsory deductible in 2008.

The reform of the GP remuneration system in 2006<sup>1</sup> (and the change in GPs' claims behaviour and the increase in supplier-induced demand that followed it) led to a rapid increase in GP remuneration from 2006 and budget overruns (Schut, Sorbe & Høj, 2013). In 2007, the amount overspent on GP care was €356 million (i.e. approximately 21% over the budget; Table 8.2). In response, GP fees were frozen (not indexed for inflation) for two consecutive years, 2007 and 2008; later, the freeze also continued in 2009 (Ministry of Health, 2009).

**Table 8.2** Overspending in health care in the Netherlands, 2007–2012

Care sector	Overspend (€ millions (%)) <sup>a</sup>					
	2007	2008	2009	2010	2011	2012
GP care	356.4 (20.6%)	134.4 (6.8%)	50.8 (2.3%)	204.3 (10.1%)	168.6 (7.6%)	231.0 (11.0%)
Specialist medical care <sup>b</sup>	301.8 (17.6%)	113.8 (6.3%)	832.3 (52.4%)	401.6 (23.9%)	246.5 (13.3%)	63.0 (3.2%)
Use of hospital facilities <sup>c</sup>	585.9 (12.8%)	58.3 (0.4%)	413.5 (2.9%)	869.9 (6.1%)	910.2 (6.0%)	324.0 (1.9%)
Pharmaceutical care	30.1 (0.6%)	28.2 (0.6%)	177.5 (3.3%)	306.7 (5.6%)	298.2 (5.3%)	710.6 (13.2%)

*Notes:* <sup>a</sup>Overspending: the difference between the actual amount spent and the amount foreseen in the budgets; <sup>b</sup>Care provided directly by medical specialists, both in ambulatory and inpatient settings; <sup>c</sup>Use of items such as hospital beds and food, plus provision of, among others, nursing care and the use of laboratory facilities.

*Source:* Ministry of Health, 2008–2012.

1 Previously, GPs were remunerated via capitation for two-thirds of the population and FFS for the other third of the population. The new system is a mix of capitation and FFS for all patients (Schut, Sorbe & Høj, 2013).

Overspending was also recorded in the area of specialist care; overspending in this area was much greater (in both absolute and percentage terms) compared with GP care. One of the reasons for overspending in the area of specialist care was that the tariffs of medical specialists had been, since the introduction of a system based on DRGs, known as diagnosis and treatment combinations (*diagnose behandel combinaties*; DBCs), in 2005, based on normative times assigned to treatments. These appeared to have been incorrectly calculated.<sup>2</sup> However, it was initially (2008) compensated from additional government revenue recorded in that year and no measures to reduce it were implemented, pending research into the causes of the overspending (Ministry of Health, 2008). In later years, overspending in specialist care was addressed by implementing tariff cuts (see section 3.1).

In the area of pharmaceuticals, a so-called clawback mechanism had been in place since 1998. Pharmacies received price reductions from the pharmaceutical industry when buying pharmaceuticals; to redistribute this profit from pharmacies to consumers, a fixed percentage of the reductions was taken back by the government (i.e. clawed back) (Schäfer et al., 2010). This percentage was set at 6.28% and up to a maximum of €6.80 per prescribed medicine, with some temporary increases in 2007 and 2009–2010 (for administrative reasons rather than because of the financial crisis).<sup>3</sup> The clawback was abolished in 2012, when free prices for pharmaceutical care were introduced (Foundation for Pharmaceutical Statistics, 2012). According to Boonen et al. (2010), the government's attempts to claw back part of the discounts offered to pharmacies were only marginally successful. This was because suppliers increased the prices of pharmaceuticals to compensate pharmacies for the clawback – this was possible as long as the prices were set below the legally set maximum prices.

Overspending in the area of pharmaceuticals in 2007 and 2008 was modest (Table 8.2) mainly because of the preferred pharmaceuticals policy. Since 2005, health insurers were allowed to identify preferred pharmaceuticals for the three most frequently used active substances: omeprazole, simvastatin and pravastatin. From these categories of pharmaceuticals, reimbursement occurs only for those that are at the same price level as the cheapest pharmaceutical (mostly a generic) plus 5%, assuming that active ingredients, concentration and mode of administration are similar. This means that if a patient chooses a non-preferred drug, the extra cost of this drug compared with the preferred drug is no longer

2 Overspending in the area of specialist care may also be the result of the relatively low number of specialists: the number of specialists has been traditionally restricted to limit supplier-induced demand; however, restricting the number of specialists is no longer a solution in a more market-oriented system as it may reinforce their bargaining position and hence their ability to influence prices upwards (Schut, Sorbe & Høj, 2013).

3 The 2007 increase was introduced because certain financial targets agreed between the pharmaceutical industry, the Ministry of Health and the Association of Health Insurers were not met. The 2009–2010 increase was imposed because part of the 2008 clawback was actually not clawed back as there was a court ruling against it. After this was overruled in an appeal, the Dutch Health Care Authority (Nederlandse Zorgautoriteit) decided to have the shortage in clawback amount compensated via an increase in the clawback percentage.

reimbursed by the insurer.<sup>4</sup> The list of preferred pharmaceuticals is revised every six months. Health insurers were initially required to set the list of preferred pharmaceuticals collectively, but since July 2008 they have been allowed to do so individually. In 2008, four of the largest five insurers started to experiment with preferred pharmaceuticals, selecting preferred drugs through tenders among suppliers of several high-volume generic drugs. As a result, list prices of the 10 biggest-selling generic drugs fell between 76% and 93%, leading to an estimate saving of €346 million in 2008 (Schut & van de Ven, 2011). To put this saving into perspective, total expenditure on pharmaceuticals for acute care (care under the Health Insurance Act (*Zorgverzekeringswet*)) was €6019 million in 2007 (National Institute for Public Health and the Environment, 2014). In 2009, the use of preferred pharmaceuticals was extended to more generic drugs and adopted by more health insurers (Schut & van de Ven, 2011). The total savings in the area of pharmaceuticals can be seen in Table 8.2 (savings have been realized since 2009). The savings are remarkable given that between 2008 and 2012 the total volume of pharmaceutical prescriptions issued to patients increased by 21% (GIP Databank, 2014).

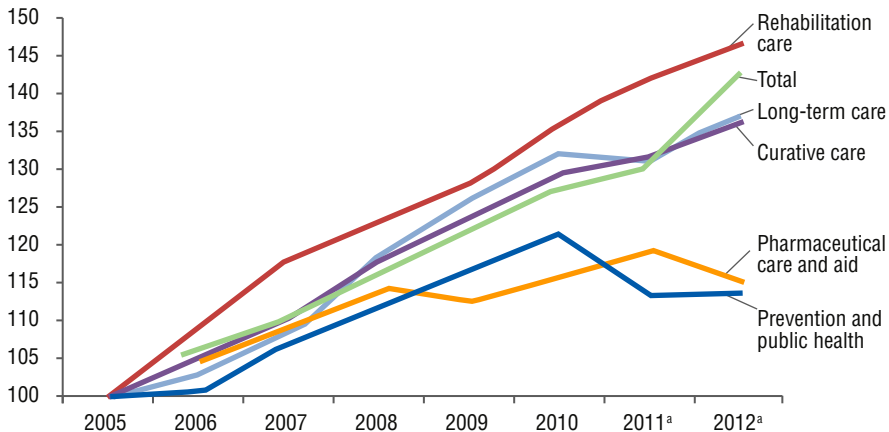
Rapid growth in expenditure was also noted in the area of long-term care, particularly in the growth of the personal budget scheme whereby users can opt for cash payments and pay providers directly. Since the introduction of the Exceptional Medical Expenses Act (*Algemene Wet Bijzondere Ziektekosten*) in 1968, its coverage has been extended from institutional care to many types of care, including home care, mental health care, counselling and aids for people with disabilities. This resulted in a rapid growth in expenditure (see Fig. 8.1 for 2005–2012), threatening affordability and necessitating a reform. To put a halt to this, starting in 2007, several types of home care (home-help, counselling) were transferred to the municipalities while at the same time their long-term care budgets were effectively frozen (2014).<sup>5</sup> It was assumed that municipalities would be able to provide care more efficiently and tailor it better to the needs of recipients since they are closer to citizens and, more importantly, since this meant that the rights-based approach of the Exceptional Medical Expenses Act would be replaced with a compensation-based approach under the Social Support Act (*Wet Maatschappelijke Ondersteuning*) for services shifted to the municipalities (section 3.2 has more discussion of the compensation-based approach). This transfer has had far-reaching consequences for health care users since municipalities, which were charged with the implementation of the Social Support Act, have much discretion in the way they implement it. The

<sup>4</sup> The regulation concerns homogeneous products without quality differences and, as such, the regulation should not have negative effects on the quality of pharmaceutical care. If a physician decides that for medical reasons a patient should receive a non-preferred pharmaceutical, it can be indicated in the prescription. The non-preferred pharmaceutical will then be fully reimbursed to the patient (Schäfer et al., 2010).

<sup>5</sup> Although there have been some increases in the budget, every year the planned budgets for consecutive years have been equal to or lower than the budget for the next year (budgets are planned for several, usually five, consecutive years).

success with which the Act has been implemented varies among municipalities given that the definition of compensation for disabilities also varies among them and, as a result, there are differences in the generosity of care provision among municipalities (Ursum et al., 2011). In 2008, extra funds were made available for long-term care that was not transferred to the municipalities (institutional care, home nursing care, all care under the Exceptional Medical Expenses Act); these funds were intended to increase the number of long-term care personnel to meet increased demand: €340 million was reserved for 5000–6000 additional long-term care nurses, for the provision of daytime activities for people with disabilities, and to increase the volume of long-term care (Ministry of Health, 2008).

**Fig. 8.1** Indexed growth in health care expenditure per sector in the Netherlands



Notes: 2005 taken as the index value of 100; <sup>a</sup>Provisional data.

Source: Statistics Netherlands, (2013b).

Overall, the most successful cost-containment measure prior to the crisis was the preferred pharmaceuticals policy, which is still in place in 2015. This policy led to a structural decrease in the growth of health care expenditure. The area where the least cost-saving was achieved before the crisis is specialist care.

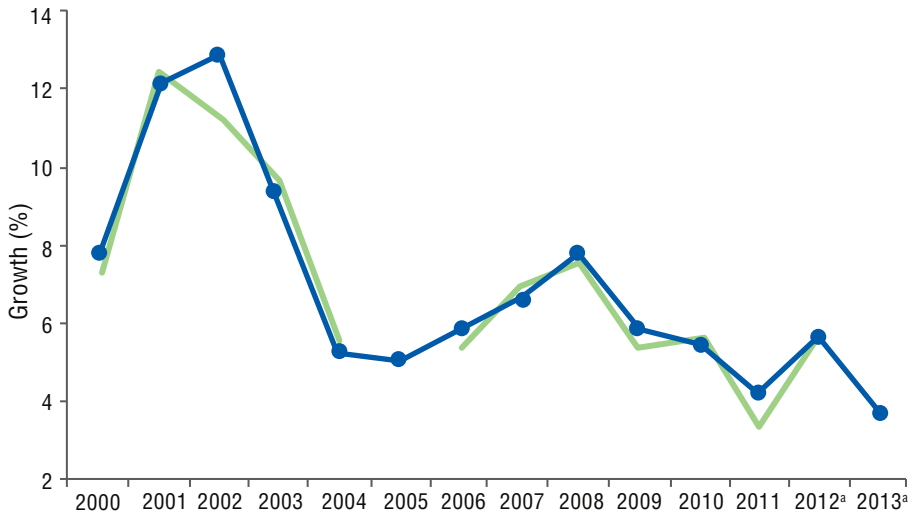
## 2.2 Pressures emerging during the crisis

In 2009, the government's revenue from taxes and premiums fell short of the estimates by €18 billion (i.e. by about 23%). Since health care expenditure kept increasing at a steep rate (see Fig. 8.1) and accounts for a large and increasing share of total public expenditure (20% in 2010 compared with 13% in 2000; National Institute for Public Health and the Environment, 2013), the pressure to contain health care costs, already apparent before the crisis, became even stronger.



The cuts applied to the health care sector were similar to or even somewhat less than in other public sectors such as social welfare, defence or education. The share of health care expenditure increased to 25.5% of total public expenditure in 2012 (Ministry of Finance, 2012), while the loss of jobs that affected other sectors was not felt in health care. The yearly nominal growth in health care expenditure fell significantly between 2008 and 2011 (Fig. 8.2).

**Fig. 8.2** Annual nominal growth in health care expenditure in the Netherlands, 2000–2013



Notes: <sup>a</sup>Provisional data; Dark blue: Total Dutch Health Accounts; Light green: Total OECD System of Health Accounts (gap in this series at 2005 results from a change in definition, giving an unreliable growth figure for that year).

Source: Based on: Zorgbalans (Fig. 8.1, p. 241), National Institute for Public Health and the Environment, 2014.

In 2013, it was agreed that public expenditure growth could exceed 2.5% for mental health care between 2013 and 2014, 2.5% for specialized care between 2012 and 2015, and 2.5% for primary care between 2014 and 2017. Nevertheless, planned government spending on health care (including premiums for social security) for 2014 was €77.8 billion, or 29% of the total public budget (Government of the Netherlands, 2014). This is higher than the 2012 share of 25.5%, which means that the assumed growth in the share of health care expenditure in total public spending between 2012 and 2014 is 7% per year on average. Investment in the education of health care personnel was protected from budget cuts until 2014 to ensure quality of care. In 2014, however, a budget cut was implemented in the area of education of medical specialists: the length of education was shortened and the number of new specialists was reduced (Broersen & Visser, 2013). The education of physicians is the financial

responsibility of the Ministry of Education (Ministerie van Onderwijs, Cultuur en Wetenschappen). The Ministry of Health (Ministerie van Volksgezondheid, Welzijn en Sport) is responsible for educating a sufficient number of medical specialists (education should be of good quality and at a reasonable cost).<sup>6</sup> The Dutch Health Care Authority (Nederlandse Zorgautoriteit) decides on how much hospitals are paid for educating physicians. This amount is financed from public sources. If hospitals have to invest more than the amount set by the Health Care Authority, they will have to finance the extra costs through their own means.

The steep increase in the nominal growth in health care expenditure in the early 2000s (Fig. 8.2) was mainly a result of government programmes to reduce waiting lists. The sharp decrease observed between 2002 and 2005 cannot be easily explained, but it seems to be related to a decrease in the use of and referrals to (specialized) mental health care. Mental health care appears to have been a major driver of health care costs until about 2002. The growth observed since 2006 is from increases in both the volume of care and in tariffs. The reduction in the nominal growth in health care expenditure after 2008 can be attributed to a sharp decrease in pharmaceutical expenditure and, to some extent, also to tariff cuts (see section 3.1).

### 3. Health system responses

Measures to control health care costs have been implemented by the government since 2008 for acute care and since 2010 for long-term care. The breach of the Stability and Growth Pact criteria in 2010 reinforced the government's recognition that an effective control of public costs (including health care costs) was needed.

The political drive of the current government (in office since 2012) to reduce the national debt to no more than 3% of the national budget has led to significant reductions in the health care budget. The measures that have been implemented can be grouped into four categories:

- shifting costs from public to private sources;
- shifting costs between various statutory sources (e.g. transfer of care from coverage by the Exceptional Medical Expenses Act to the municipalities), mostly in combination with major cuts in the budgets;
- substitution between different types of care: institutional care with home care, and secondary care with primary care; and
- increased focus on improving efficiency and eliminating fraud.

These are discussed in more detail below.

<sup>6</sup> For more information, see the Care Training Fund (Opleidingsfonds Zorg; Ministry of Health, 2014).

Initially, from 2009, the measures were mainly targeted at reduction, shifting costs from public to private sources by limiting the basic package, and efforts to prevent improper health care consumption. From 2011 onwards, the measures focused more on structural changes in the area of acute care, with the government seeking to reach a consensus with stakeholders to agree on further cost-containment, and in the area of long-term care, where there was a shift towards more decentralization of care in combination with major budgetary cuts.

Despite all the cost-saving initiatives taken between 2009 and 2012, falls in expenditure were only recorded in the area of pharmaceutical care and medical devices, mainly through the use of the preferred pharmaceuticals policy and tendering by the insurers; instead, expenditure on all other types of care kept increasing (Fig. 8.1).

The previous government fell in February 2010 (for reasons unrelated to the financial crisis). As a result, cost-saving measures in the area of health care came to a total standstill in a period when achieving savings was very important. No new measures or reforms could be introduced between February and October 2010, when a new government took power.

### **3.1 Shifting costs from public to private sources**

Costs were shifted from public to private sources by reducing service and cost coverage, with patients bearing more of the costs, and by reducing overspending on primary and specialized care by making health care providers more responsible for the amounts overspent.

#### ***Population coverage (universality)***

Universal population coverage for both curative care under the basic health insurance scheme (regulated by the Health Insurance Act) and long-term care under the Exceptional Medical Expenses Act has not changed since the introduction of the Health Insurance Act in 2006. However, changes in service coverage have resulted in narrower population coverage for certain services or benefits. For example, the eligibility for a long-term care personal budget was limited (Tables 8.3 and 8.4); however, people needing care can still receive it through in-kind provision.

#### ***Service coverage (benefits package)***

Several changes to the benefits package have been made since the emergence of the financial crisis (Table 8.3). Changes in the benefit package are prepared by the National Health Care Institute (Zorginstituut Nederland; previously the College van Zorgverzekeringen) and approved by the government before they

are implemented. Treatments or aids that are considered to be affordable for individual patients and treatments or aids that are not effective or not medically necessary may be considered for removal from the package.

Exclusions from the benefit package are not always permanent. Lobbying or new scientific discoveries may lead to the exclusion decisions being reversed. For example, smoking cessation therapy was added to the package in 2011, removed from it in 2012 and reintroduced in 2013 following lobbying by antismoking organizations (Longfonds, 2013). Coverage of dietary advice was severely limited in 2012 (only reimbursed as part of an integrated care package for a limited number of chronic diseases) and extended in 2013 (although with a limitation of the number of reimbursed hours) as research into the effects of dietary advice revealed that the abolition of dietary advice would lead to higher secondary care consumption (Lammers & Kok, 2012).

### ***Shifting costs to the insured***

A number of measures have been taken to shift costs from public to private sources. For example, the financial burden borne by the insured or users of care has been repeatedly increased (e.g. by increasing the compulsory deductible and cost-sharing; Table 8.4). These measures were mainly focused on somatic and mental health care; however, all co-payments for mental care were abolished in 2014, when a new remuneration scheme was introduced for ambulatory mental health care providers (psychological care) in the primary care sector (see section 3.4), while long-term care was largely unaffected. Only in 2013 was cost-sharing in long-term care increased, when a share of taxable assets was added to personal incomes to calculate cost-sharing. However, the justification for this measure was improving equity in financing rather than cost-shifting or cost-containment (wealthy people with high assets and low incomes paid co-insurance based only on their incomes, which was considered unfair). The measure was first considered in 2009, but it took until 2013 before the Ministry of Health managed to get the regulation through parliament and have it implemented.

However, at the same time, the most vulnerable populations have been somewhat protected from the cost-shifting measures. For example, GP care, maternity care and care for children were excluded from the “no-claim” regulation (and later from the compulsory deductible), and, as of 2012, the gradual decrease of care allowance was adjusted in such a way that people with lower incomes experienced less reduction than people with higher incomes.

**Table 8.3** Changes in the benefits package in the Netherlands, 2008–2012

Area	Year	Affected benefits	Changes to the benefits package
Treatments	2008	Limited dental care for 18–21-year-olds	Included
		5 hours extra maternity care	Included
		Psychological counselling, first eight sessions	Included, with a co-payment of €10 per session
	2009	Severe dyslexia diagnostics and treatment for children aged 6–7 years	Included
	2011	Limited dental care for 18–21 year olds	Removed
		Physical therapy, first 12 sessions	Removed
		Physical therapy for urine incontinence (all sessions)	Included
		Uncomplicated dental extraction by dental surgeon	Removed
		Smoking cessation treatments	Included
	2012	Physical therapy, first 20 sessions	Removed
Smoking cessation treatments		Removed	
Dietary advice		Removed, except under certain conditions	
Treatment of adjustment disorders		Removed	
Primary psychological care, five sessions		Reduced (number of sessions reduced from eight to five)	
Pharmaceuticals	2008	Contraceptives for all ages	Included
	2009	Sleeping pills and tranquilizers (benzodiazepines),	Removed, except for severe cases or for long-term use
		Gastric acid blockers	Removed
		Statins	Reimbursement limited, only if in line with professional guidelines
	2010	Acetylcysteine (reduces the viscosity of mucous secretions)	Removed
	2011	Contraceptives for women aged 21 and over and antidepressants	Removed
	2012	Gastric acid blockers	Removed
Medical aids	2009	Stand-up chairs ( <i>sta-op-stoelen</i> ), walkers and anti-allergen mattress covers	Removed
	2013	Simple walking aids	Removed
Long-term care	2009	Counselling for people with psychosocial problems	Removed
	2012	Eligibility for personal budgets limited to people with an assessed need for institutional care or for home care for more than 10 hours per week	Reduced

**Table 8.4** Measures shifting costs to the insured in the Netherlands, 2008–2013

Year	Measure
2008	Introduction of a compulsory deductible of €150 per year, replacing "no-claim" regulation
2009	Compulsory deductible increased to €155
2010	Compulsory deductible increased to €165
2011	Compulsory deductible increased to €170 Gradual decrease of care allowance to take place between 2011 and 2040 by increasing the percentage of income that may be spent on the community-rated premium
2012	Compulsory deductible increased to €220 The gradual decrease of care allowance (see above) adjusted in a way that lower incomes are protected more than higher incomes Introduction of a co-payment for secondary mental health care of €100–200 per treatment Increase of the co-payment for primary mental care from €10 to €20 per session Increase of the co-payment for stay in mental care hospital of €145 per month
2013	Compulsory deductible increased to €350 Maximum income for the eligibility for care allowance decreased from €35,059 to €30,939 for singles and from €51,691 to €42,438 for two-person households Private assets above €100,000 taken into account when considering eligibility for care allowance 8% of taxable assets are included in the calculation of cost-sharing for long-term-care (previously, assets were not included in the calculation of cost-sharing)

### Shifting costs to insurers

Since 2012, health insurers no longer receive retrospective compensation for macroeconomic developments (*macronacalculatie*) and for outlier risk sharing (*hogekostencompensatie*) – for large deviations from the budget set by the government. The latter compensated 90% of the costs of an insured individual above a certain threshold. The abolition of this compensation was primarily meant to shift the risk for these deviations from the state to the insurers, but also to promote competition among insurers: if health insurers bear more risk, they will have the incentive to negotiate better contracts with health care providers and this would allow them to offer lower premiums and sell more health insurance plans. The cost of health plans indeed decreased in 2014, but it is not clear whether this was a result of negotiations or other causes, such as higher (than expected) profits in the previous year or selling cheaper health plans with higher voluntary deductibles.

### ***Reduction of overspending***

Overspending has been a long-standing problem in both primary and specialized care. Since 2008, if health care providers exceeded the amounts agreed in the contracts, they have had to pay back the amount overspent in the next year. This was done in the form of tariff measures (Table 8.5). Such tariff measures have been applied to care provided by GPs, medical specialists and hospital facilities and to some extent also to pharmaceutical care (clawbacks). Tariff measures applied to medical specialist care appeared not to be very effective, since the overspending in the area of specialist care remained relatively high in 2009–2011 (at 13–52%; see Table 8.2), whereas overspending on GP care and on the use of hospital facilities remained below 10% of their respective budgets in the same period. More measures to curb overspending have been implemented since the emergence of the crisis.

### ***Changes to somatic care***

In 2009, the normative times assigned to treatments by medical specialists and the compensation for supporting specialists (e.g. radiologists, medical specialists who are not the main responsible physicians and treating physicians) were reconsidered (i.e. recalculated with new assumptions)<sup>7</sup> and the Health Care Authority formulated measures aimed at recovering overspending. For example, the budget for tariffs for medical specialists was cut by €375 million in 2009 (Table 8.5). The announcement of further cuts in 2010 (€512 million) led to many protests by medical specialists, resulting in an agreement in December 2010, signed between the Association of Medical Specialists (Orde van Medisch Specialisten), the National Hospital Association (Vereniging van Ziekenhuizen) and the Ministry of Health.<sup>8</sup> The budget for specialized care was to be capped at €2 billion per year in 2012, with the growth in budget limited to 2.5% per year until the tariffs of medical specialists become part of the free negotiations between providers of secondary care and insurers, which is assumed will happen in 2015 (Association of Medical Specialists, National Hospital Association & Ministry of Health, 2010). At present (2014), 70% of hospital care is subject to price negotiations between insurers and hospitals, while the remaining 30% of tariffs is set by the Health Care Authority. However,

7 Treatment times for medical specialists and supporting specialists are difficult to estimate and remain approximations of actual treatment times.

8 Agreements between the Ministry of Health and health care providers or health insurers are concluded by their respective umbrella associations on their behalf. These associations have no means of controlling production of health care services or to sanction any unwanted behaviour of their members. The system of agreements works because there is always the latent threat that the Ministry of Health can impose measures, such as tariff cuts, if the agreed terms are not met (e.g. if there is overspending). Since the role of the government in the Dutch health care system is to watch from a distance rather than to be directly involved, the preference is to use agreements negotiated between the parties instead of imposing measures in a one-way fashion by the Ministry of Health. It is assumed that the health purchasing market (insurers purchase care from health care providers) will provide sufficient incentives for both insurers and providers to produce health care of good quality at acceptable prices. It is important to mention that the use of agreements between parties is part of Dutch political culture and such agreements also exist in other sectors, for example in the education sector.

**Table 8.5** Overview of major cost-saving initiatives aimed at health care providers initiated by the Dutch Government and the respective planned savings (if available)<sup>a</sup>

	Measure <sup>b</sup>	Area affected by the measure	Planned saving (€ millions (% of the respective budgets <sup>c</sup> ))
2008	GP tariffs not indexed for inflation	Tariffs	n.a.
	Hospitals budget reduced by €160 million with the aim of stimulating efficiency (hospitals had to provide the same amount of care with less money)	Budgets (hospital care)	n.a.
	Tariff agreement with medical specialists	Tariffs	175 (10%)
2009	Tariff measure for medical specialists	Tariffs	375 (24%)
2010	Tariff measure for medical specialists	Tariffs	479 (28%)
	Agreement between the Ministry of Health, the Association of Medical Specialists and the National Hospital Association to introduce a budget cap for medical specialists between 2012 and 2015 (limiting the growth to 2.5% per year)	Budgets/tariffs	n.a.
	GPs encouraged to prescribe generic drugs	Pharmaceutical prescribing	130 (6%)
	Capitation fee for GPs lowered	Tariffs	60 (3%)
	Reduction of mental health care budget and tariffs	Budgets/tariffs	119 (3%)
2011	Tariff measure for pharmacists	Tariffs	74 (1%)
	Tariff measure for hospitals	Tariffs	316 (2%)
	Tariff measure for medical specialists	Tariffs	606 (33%)
2012	Tariff measure for GPs	Tariffs	98 (5%)
	Reduction of mental health care budget and tariffs	Budget/tariffs	222 (6%)
2013	Implementation of the agreement between the Ministry of Health and GPs (signed in 2012) to cap growth in expenditure on GP care at 2.5% per year between 2014 and 2017; not impose a tariff measure for overspending in 2011; GPs to save €50 million on prescriptions of medicines (e.g. by prescribing cheaper generic drugs)	Efficiency	n.a.

Notes: <sup>a</sup>This table is not exhaustive, as only major cost-containment measures are listed; <sup>b</sup>Tariff agreement means that the group and the Ministry of Health decided together on the tariff cuts while a tariff measure means that the Ministry of Health sets an amount (at the national level) that should be saved by health care providers to pay back the overspending in the previous year, the Dutch Health Care Authority deciding on how this saving is to be achieved for individual providers; <sup>c</sup>For example, budgets for GP care, medical specialists' care, hospital care, pharmaceutical care, mental care; n.a.: Not available.

Source: Annual reports of the Ministry of Health, 2008–2012.



medical specialist care provided in hospitals is currently not included in these negotiations because of this budget cap. From 2015 onwards, 70% of hospital care will be subject to price negotiations, including medical specialist care.<sup>9</sup> The Health Care Authority will continue to set the remaining 30% of tariffs.

Health care budgets were also reduced in the area of primary care: in 2010, the budget for capitation fees for GPs was reduced by €60 million and GPs were allowed to earn it back by prescribing medicines more efficiently (e.g. prescribe cheaper generic drugs; Table 8.5) and thus reducing the expenditure on pharmaceutical care. In 2012, the Ministry of Health concluded an agreement (implemented in 2013) with the National Association of General Practitioners: no tariff reduction would be imposed by the Ministry for the amount overspent in 2011 (€99 million), while at the same time the National Association agreed to realize a saving of €50 million through prescribing cheaper generic drugs in 2012. It was also agreed that the central role of GPs as gatekeepers would be strengthened and GPs would have a more central role in the provision of care in the community. Therefore, expenditure on GP care was allowed to grow by 2.5% per year between 2014 and 2017. In addition, expenditure on the coordination of community care (including GPs and other providers) was allowed to grow by an additional 0.5% per year in 2012 and 2013 (National Association of General Practitioners & Ministry of Health, 2012).

In an agreement signed in 2013 between health care providers (in both primary and specialized care), insurers, patient associations and the Ministry of Health, all stakeholders agreed to a further decrease in the growth in health care expenditure to 1.5% in 2014 and to 1% per year between 2015 and 2017. This decrease was mainly to be achieved through the substitution of secondary care with primary care and by continuing the efforts to prescribe medicines more efficiently. Moreover, public health expenditure would be monitored closely and reimbursement of treatments, medication and medical devices could be put on hold if the agreed growth in expenditure was exceeded. For GP care, a higher percentage of 2.5% per annum between 2014 and 2017 was maintained, provided that GPs managed to decrease the number of referrals to hospital care (no absolute target was prescribed but GP practices would receive information about referral rates of other practices – practices with relatively high referral rates should reduce the number of referrals). If GPs do not achieve a decrease in the number of referrals, the Ministry of Health could impose new (tariff) measures (National Association of General Practitioners & Ministry of Health, 2013).

<sup>9</sup> Diagnosis and treatment combination prices are negotiated by hospitals; prices cover the normative working times of medical specialists. These working times are set by scientific associations of medical specialists and cannot be negotiated; however, their price can be. Currently, because of the budget cap for medical specialists, hospitals can no longer negotiate on the price of these working times. This will change in 2015: hospitals will again be able to negotiate on DBC prices, including the price of working times of medical specialists, with the insurers and will then negotiate on the payments with their medical specialists.

### **Changes to mental health care**

The budget for mental health care was cut by €119 million in 2010. In 2012, reductions of the budget and the tariffs on curative mental health care were set with the aim of achieving a saving of €222 million in 2012. To put this in perspective, in 2010, the total turnover of mental health care providers was €3956 million for curative mental care and €1431 million for long-term mental care. How the reductions would affect different providers of mental health care would be decided by the Health Care Authority. Reductions in both years (2010 and 2012) largely concerned curative mental health care under the Health Insurance Act provided by self-employed and institutional mental health care providers.

### **Changes to long-term care**

The budget for long-term care also experienced cuts, including measures such as a reduction of entitlements for personal budgets and for counselling (see Table 8.3). In 2013, geriatric rehabilitation care was shifted from the Exceptional Medical Expenses Act to the Health Insurance Act (see section 3.2). From 2015, a structural yearly budget cut of €50 million is predicted and a major reform of long-term care is planned for that year.

## **3.2 Shifting costs between various statutory sources**

Statutory financing has been reorganized with costs being shifted among various statutory sources. For example, some of the care previously insured under the Exceptional Medical Expenses Act was shifted to the Health Insurance Act (geriatric rehabilitation care in 2013) or to the municipalities (psychological counselling in 2009), often with decreases in the budgets. In the reform of long-term care, which is under consideration (2014), there are plans to shift more long-term care from the Exceptional Medical Expenses Act to other acts, decentralizing its financing and governance, and decreasing the respective budgets. The reason for shifting long-term care to the municipalities is the idea that they can provide it more efficiently. Personal care, such as assistance with activities of daily living (*algemene dagelijkse levensverrichtingen*), and counselling will be removed from coverage under the Exceptional Medical Expenses Act and transferred to either the health insurers or the municipalities. The exact division of tasks is currently the subject of a political debate. The important difference between shifting care to the municipalities or to coverage under the Health Insurance Act is that care provided by the municipalities is compensation based (i.e. citizens have to be compensated for their disabilities in such a way that they can participate in society) and care provided under the Health Insurance Act is rights based (there is a list of entitlements). This

means that the municipalities have more policy discretion in shaping provision of services formerly provided under the Exceptional Medical Expenses Act, as long as they compensate citizens for their inability to participate in society. For example, municipalities may choose to substitute professional care with other solutions, such as care provided by neighbours or volunteers. The new Act, containing only intensive long-term care for older people and people with disabilities, will be called the Long-Term Care Act (*Wet Langdurige Zorg*) and should come into force in 2015. Personal care (e.g. help with washing, dressing, eating) will be removed from the entitlements under the Exceptional Medical Expenses Act, with only nursing care and institutional care to be covered under this Act. The exact content of the new Act is still subject to discussion (2014).

The government has succeeded in limiting the growth of its own contribution to health care financing since the beginning of the crisis (Table 8.6). The decrease in expenditure under the Exceptional Medical Expenses Act 2007 and 2008 can be attributed to the transfer of home-help to the municipalities (see section 2.1 on Cost control). In the following years, a steady growth in expenditure under the Exceptional Medical Expenses Act has been noted. The decrease in the growth rate of expenditure covered under the Health Insurance Act (2009–2011) can mainly be attributed to the lower expenditure on pharmaceuticals. The growth in OOP expenditure can be attributed to the changes in the scope and depth of coverage and the introduction (and subsequent increases) of the compulsory deductible in 2008.

**Table 8.6** Health care expenditure in the Netherlands, 2006–2011

	Expenditure (€ million (% change))					
	2006	2007	2008	2009	2010	2011
Government	8,206 (n.a.)	10,724 (31%)	11,328 (6%)	12,390 (9%)	12,825 (4%)	12,915 (1%)
Exceptional Medical Expenses Act	23,177 (n.a.)	23,007 (-1%)	22,169 (-4%)	23,201 (5%)	24,187 (4%)	25,263 (4%)
Health Insurance Act	26,727 (n.a.)	27,693 (4%)	32,325 (17%)	34,143 (6%)	35,623 (4%)	36,030 (1%)
VHI	2,904 (n.a.)	3,146 (8%)	3,154 (0%)	3,384 (7%)	3,429 (1%)	3,734 (9%)
OOP	6,896 (n.a.)	7,237 (5%)	7,913 (9%)	7,870 (1%)	8,075 (3%)	8,565 (6%)
Other	2,812 (n.a.)	2,837 (1%)	2,866 (1%)	2,913 (2%)	3,044 (4%)	2,874 (-6%)
Total	70,722 (n.a.)	74,644 (6%)	79,755 (7%)	83,901 (5%)	87,183 (4%)	89,381 (3%)

Source: Statistics Netherlands, 2013b.

### 3.3 Substitution between different types of care

In the 2012 agreement between the Ministry of Health and GPs, the latter agreed to support a reduction in the number of referrals to secondary care and their gatekeeping role was strengthened (see section 3.1). For example, mental health care,<sup>10</sup> which had always been the responsibility of GPs but was in practice delivered by the mental health care sector, was shifted to primary care for non-complicated cases. In 2008, special practice nurses for mental health care were introduced into primary care, and in 2011, the hours for practice nurses were increased from four hours per week to over eight. Care for patients with chronic conditions was also strengthened at the level of primary care, by introducing practice nurses specialized in cardiovascular diseases, diabetes and chronic obstructive pulmonary disease/asthma within GP practices. (The role of practice nurse for chronic diseases was introduced in 1999. After 10 years, about 75% of GPs employed a practice nurse.)

Substitution between secondary and primary care was also emphasized in the 2013 agreement between GPs and the Ministry of Health, which contained the intention to introduce a new remuneration system for GPs in 2015 (see section 3.4). Another agreement, signed in the same year, between health care providers (hospital, medical specialists, providers of mental health care and GPs), insurers, patient associations and the Ministry of Health stipulated that, whenever possible, care should be shifted from secondary to primary care and from primary care to self-care. Quality of care should be improved, for example by a stricter application of care guidelines.

### 3.4 Increased focus on improving efficiency and eliminating fraud

#### *Improving efficiency*

After an initial period of getting accustomed to their new role as health care purchasers (bestowed on health insurers in the 2006 reform), health insurers started to increasingly use selective contracting and other tools to negotiate on price and quality with health care providers. The first attempt at selective contracting was made in 2012 when CZ (an insurer) did not contract with all hospitals for breast cancer surgery. In the same year, a large hospital in Amsterdam (Slotervaart Hospital) was forced to accept lower prices set by Achmea (a large insurer) as most of its patients were insured by this insurer and the loss of contract with Achmea would have led to the hospital's bankruptcy. By 2014, the share of health plans using selective contracting had increased, also as a result of the agreement between hospital care providers, health insurers

10 Referral rates to specialized mental health care had grown from about 3% of all patients with mental health problems in 1980 to about 12% in 2010 (Verhaak et al., 2000; Wiegiers et al., 2011).

and the government in 2011 (National Hospital Association & Ministry of Health, 2011)<sup>11</sup> in which health insurers agreed to expand selective contracting starting in 2012. At the same time, in 2014, the basic health care premium decreased, which is remarkable after years of increases.

There were no major changes in the payment system for health care providers between 2006 and 2012. An experiment with free prices for dental care in 2012 was abolished in 2013 because it led to higher costs instead of cost-containment. For other providers where the reform of 2006 had led to overspending, mainly reductions in the budgets for tariffs have been introduced.

As discussed above, in 2012, an agreement was signed between the Ministry of Health and GPs in which the latter agreed to promote prescription of cheaper medicines and a reduction in the number of prescribed drugs. It was estimated that this would bring savings of about €50 million in 2013. If the saving was not achieved, the difference between the actual amount saved and the planned savings would have been subject to a tariff measure; currently (2014), it is not clear if the saving was achieved and what the next steps will be (National Association of General Practitioners & Ministry of Health, 2012).

The 2013 agreement between GPs and the Ministry of Health contained the intention to introduce a new payment system in 2015. The new payment system would distinguish three segments: (1) provision of basic GP care, (2) multidisciplinary coordination of care for chronic diseases, and (3) incentives for innovation and improved performance. The new payment system should take into account population characteristics as determinants of health care needs, emphasize substitution from secondary to primary care and from primary care to self-care, facilitate payment for performance through negotiations between GPs and insurers (e.g. linking remuneration to health outcomes should be possible),<sup>12</sup> be transparent and as simple as possible, and contribute to control of costs at the macro level. It is unclear just what level of savings this measure may generate, but the emphasis on substitution from secondary care to primary care and from primary care to self-care and prevention should be central in generating savings.

In 2014, a new remuneration system for mental health care was introduced. Whenever possible, patients with mental health care problems would be treated in a GP practice (by a GP assisted by a practice nurse specialized in mental health care) (see section 3.3). If the problems are too severe, the patient would be referred to basic mental health care (outpatient based), where four different care products exist: short-term, medium-term, intensive and chronic care.

11 This 2011 agreement differed from the agreement described here. Many agreements are signed each year between various parties and only selected agreements are described in this chapter.

12 How innovation and performance are to be rewarded is yet to be developed (National Association of General Practitioners & Ministry of Health, 2013).

The tariffs are set by the Health Care Authority (Dutch Association for Health Psychology, 2014). Specialist mental health care, which can be both inpatient and outpatient, is paid according to a DBC system. Since 2014, patients no longer have to pay any additional cost-sharing charges.

Other efficiency-improving initiatives, such as connecting information and communication technology systems between hospitals and GPs, have been continued and were not triggered by the crisis. Merger of hospitals, which had been taking place since around the 1960s (Schäfer et al, 2010), was another development that contributed to improving efficiency in the sector.<sup>13</sup> Changes in the delivery of care that have taken place since 2008 contributed to hospital mergers: insurers and professional associations have increasingly set rules for the minimum number of treatments performed by health care personnel that are necessary to ensure sufficient quality in performing these treatments. Complex care is increasingly organized centrally in a few specialist centres.

### ***Elimination of fraud***

Since 2010, more attention has been paid to fighting fraud in the health care sector. The need to contain costs because of the economic crisis probably increased awareness of the existence of fraud in the sector, and increased attention to fraud is relatively new in this sector. While previously the integrity of health professionals had not been questioned (patients asked for permission by the health insurer before seeking care and this was sometimes checked by a physician employed by the health insurer), currently remuneration claims are subject to much more scrutiny. The implementation of the new case-based payment systems may have increased fraud in the sector as upcoding leads to higher payments. However, it is not always clear how the procedures should be coded: the regulation of case-based payment is in itself a source of much confusion. According to estimates, the monetary value of fraud in health care (i.e. care that was never provided and fraudulent reimbursement claims submitted by health care providers to health insurers) is between €1 billion and €3 billion (Blokker & Rosenberg, 2013). Exact figures are not available and, therefore, on the request of the Ministry of Health, the Health Care Authority is currently (commencing 2014) conducting research into the magnitude of the problem.

With the exception of initiatives to optimize logistics in the area of pharmaceuticals (taking into account their expiry date) and medical equipment, measures to limit fraud, inefficiencies and waste of resources quickly became

13 Motives for mergers included, among others, providers' strategic motives: a larger hospital has more possibilities to invest in buildings or new medical technologies, and a merger might enable synergies by eliminating duplicate services; larger hospitals also have more countervailing power against health insurers. Moreover, government policy promoted mergers: the budgets of new large hospitals were higher than the sum of budgets of the smaller hospitals before the mergers. Finally, the introduction of market mechanisms and the preceding discussions formed an argument for hospitals to merge in the 1990s. The trend towards consolidation resulted in a reduction in the number of hospitals from 172 in 1982 to 94 in 2005 (Schäfer et al., 2010).

the subject of public debate. For example, measures aimed at further limiting personal budgets in long-term care, introduced in 2012 as a cost-containment measure but also partly because of fraud, were heavily criticized as fraud in these cases was debatable and the measures had the potential to harm older people and people with disabilities who were highly dependent on the personal budgets.

## 4. Implications for health system performance

### 4.1 Equity in access and financing

Currently, no specific information is available on equity in the use of health care services. Consumption levels of health care decreased for the first time in decades in 2012, but it is difficult to estimate to what extent this was the result of the economic crisis. Socioeconomic inequalities in access to health care have always been relatively low in the Netherlands, according to several international comparative studies (Westert, 2010) and so far there is not much evidence that this has changed.

#### *Financing*

Interestingly, despite the measures to shift costs from the public purse to citizens, the share of OOP expenditure in health care financing has not increased (Table 8.6 and Fig. 8.3). The combined burden of the premiums for both acute care (Health Insurance Act) and long-term care (Exceptional Medical Expenses Act) also remained rather stable: 68.3% of total health expenditure in 2008 and 68.6% in 2011 (Fig. 8.3). However, it should be noted that the effect of the substantial increase in the compulsory deductible from €210 in 2012 to €350 in 2013 is not yet included in these data. Moreover, the net contribution of the government to health care financing (i.e. from taxation, which is a progressive source of financing) grew substantially from 11.6% of total health care expenditure in 2006 to 14.2% in 2008 and 14.4% in 2011 (Statistics Netherlands, 2013b).

### 4.2 Access to services

Few studies are available on the potential effects of the crisis on the financial accessibility of health care. A few recent facts and figures have been documented, but it is difficult to say whether they have been the effect of the crisis or not.

There has been an increase in the number of defaulters and uninsured: the proportion of defaulters (i.e. people who have not paid their premiums for at least six months) has increased from 1.5% in 2006 to 2.4% in 2009. In 2010, a new, stricter definition of defaulter was introduced. According to the new

definition, 1.9% of the population defaulted in 2011 and 2.1% in 2012 (Statistics Netherlands, 2013b). The number of uninsured has also likely increased but no data are available to quantify this trend. According to Statistics Netherlands, 0.1% of the population was uninsured in 2012 (Statistics Netherlands, 2013a).

There has also been an increase in cost-related access problems. A study by the Commonwealth Fund among 1000 Dutch citizens revealed that 22% of respondents experienced cost-related access problems and 9% experienced problems with paying their medical bills in 2013 (Schoen et al., 2013). In 2012, a survey among 854 Dutch respondents revealed that 9% of this population sample stated that they did not go to the GP because of the high deductible, even though the deductible does not apply to GP care (Reitsma-van Rooijen, Brabers & De Jong, 2012). Since 2012, a decrease in the volume of hospital care has been observed. This is an important break in the trend, since the volume has been increasing for decades. The decrease might have been caused by the economic crisis, but this is not yet fully clear or explained (Heijjn, 2013).<sup>14</sup> In 2013, a survey among 8500 Dutch GPs showed that 94% were consulted by patients who had difficulties paying for non-refundable medications and other medical aids (24% dealt with such patients on a daily basis); 77% of the surveyed GPs said that they sought alternative solutions for their patients, such as additional consultations, before referring them to care that was subject to the compulsory deductible (National Association of General Practitioners, 2013). Reduction of referrals is also in line with the 2013 agreement with the Ministry of Health (see section 3.1), but it is not clear what influenced the behaviour of doctors: the crisis, the 2013 agreement or both.

The financial vulnerability of health insurers has grown through the increase in risk bearing as a result of the abolition of financial safety nets, such as the retrospective compensation for large deviations from the budget set by the government. Increased competition on premiums might also have contributed to this. Recently, a Dutch newspaper (*De Telegraaf*) reported that in 2013 patients increasingly had trouble paying the compulsory deductible and that health insurers were frequently asked by their clients to come to an insolvency arrangement (Boon & Navis, 2013). If this trend continues, the financial vulnerability of health care providers and even access to health care may be affected in the future.

As noted above, in 2013 health insurers were for the first time able to lower premiums for the basic package. This might have happened at the expense of reducing the choice of provider and increasing the level of deductibles, but

14 The International Health Policy surveys conducted by the Commonwealth Fund show that, in 2010, 4% of Dutch respondents "did not see a doctor when sick or did not get recommended care because of cost"; this figure was 20% in 2013. In other countries, the percentage of respondents that agreed with this statement remained stable or decreased (e.g. from 23% in 2010 to 10% in 2013 in Germany; Schoen et al., 2013).



this link needs to be better analysed in the future.<sup>15</sup> Lower premiums and the limited choice of health care provider for patients can only partly be related to the crisis as it is also the result of the market regulation introduced in 2006. Health insurers have now become accustomed to their new roles as purchasers of care and have succeeded in achieving a stronger bargaining position vis-à-vis health providers. Whether the limited choice of provider will cause access problems for patients will become clearer in the years to come.

### 4.3 Quality of care and user experience

There is currently no evidence that quality of care has been affected by the crisis. There has been no increase in waiting times for curative care and they do not seem to be excessive. (In the area of curative care, health insurers are responsible for helping patients to find alternative providers if the waiting lists are long.) In the area of long-term care, the percentage of patients waiting for admission to inpatient long-term care facilities who waited longer than the normative waiting time increased by 6–11 percentage points between 2010 and 2012 and by 14–21 percentage points for nursing homes. No changes in waiting times were observed for patients in need of inpatient mental health care (93% of patients were admitted within the normative waiting time; Dutch Health Care Authority, 2013). However, a periodical survey conducted by the Netherlands Institute for Social Research (Sociaal en Cultureel Planbureau) among 1307 Dutch citizens in 2013 showed that 11% of respondents saw health care and care for older people as the largest social problem and the top priority for the country (Dekker et al., 2013). Other issues that were considered to be of top priority were the economy and income (17%), social norms and values (17%) and crime. Citizens were also increasingly worried about the effects of cuts on the quality of care (Dekker et al., 2013). However, it also has to be noted that some measures have been taken to protect the quality of health care. For example, investments in medical education were protected from the cuts until 2013.

### 4.4 Impact on efficiency

Even before the crisis, the 2006 reform promoted improving the efficiency of health care delivery. The efficiency-improving measures are still being continued and have not been affected by the crisis. For example, the reform included measures such as the programme introducing logistic principles known as “faster, better” (Vos et al., 2008). The reform also promoted delegation of tasks from physicians to less-expensive, suitably trained health care professionals, such as nurses (see section 3.4). This should improve the multidisciplinary collaboration

15 The ability to reduce premiums for the basic package might also have been the result of the savings accumulated by insurers. The financial results of health insurers (for the basic package and VHI together) have been positive since 2008 (Foundation for Pharmaceutical Statistics, 2012).

between different health care professions, leading to less dependency on highly specialized care and to lower costs for care. However, delegation of tasks has appeared to be difficult in practice as it requires the adaptation of hierarchies, legal medical responsibilities, competencies and professional domains.

#### 4.5 Transparency and accountability

Increased focus on improving efficiency and prevention of fraud has likely contributed to increasing attention being paid to the transparency of the health care system. Other measures may have also contributed (indirectly) to increasing transparency, although it has to be noted that they were not driven by the economic crisis. Examples are the application of information and communication technology, innovations to streamline health care processes and the (re)design of health care organizations to increase their flexibility, efficiency and patient service (e.g. enabling e-mail consultations). In the area of specialized care, the DBC financing system, which had been in place since 2005, was redesigned in 2012 to increase its transparency, with the number of DBCs reduced from over 30 000 to about 3000. This new project was named “DBC’s on the way to transparency” (DBC’s Op weg naar Transparantie). Another example of increasing transparency in the system is the increasing publication of comparative information on health care providers on the Internet, for example through web sites such as the National Health Care Institute’s *kiesBeter* ([www.kiesbeter.nl](http://www.kiesbeter.nl)) and *Care Map Netherlands* (*Zorgkaart Nederland*; [www.zorgkaartnederland.nl](http://www.zorgkaartnederland.nl)), enabling patients to choose providers and publish their experiences. More recently, in January 2014, the organization that governs the DBC system (DBC-Onderhoud) decided to publish a range of prices for specialized care to inform citizens and enable them to compare providers (including hospitals).

#### 4.6 Impact on health

The health status of the Dutch population remains at a high level. In general, it seems safe to state that it has not yet been affected by the economic crisis. However, some negative signs have been reported recently.

In 2013, the Dutch Financial Times (*Het Financieele Dagblad*) reported that doctors and health organizations saw an increase in the number of employees who visited their GP or occupational physician because of mental health problems resulting from fear of job loss (Cats & Olsthoorn, 2013). In the same year, the Netherlands Centre for Occupational Diseases (Nederlands Centrum voor Beroepsziekten) reported an increase in the number of “burnout” cases and depression linked to job loss and lowering housing prices (Netherlands Centre for Occupational Diseases, 2014). The Trimbos Institute has started research on the relationship between the economic crisis, depression and suicide (Cats & Olsthoorn, 2013), but no data are available as yet.

## 5. Discussion

### 5.1 Drivers of change

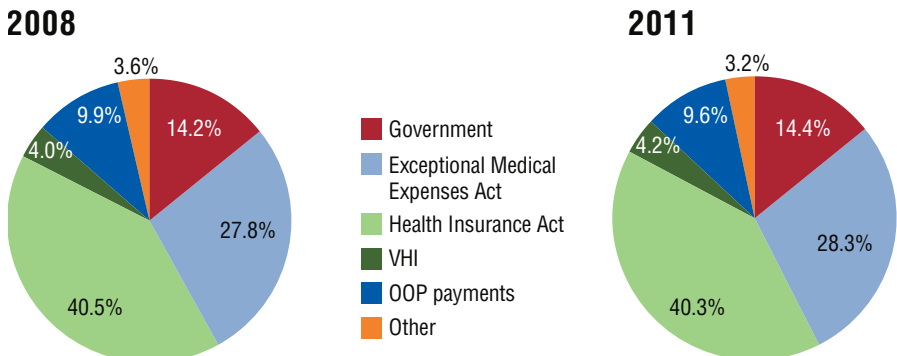
The key changes in the Dutch health care system described in this chapter date from before the start of the economic crisis and were mainly affected by the 2006 reform that aimed to increase efficiency and reduce costs. The economic crisis hit the Dutch health care sector relatively late and in an indirect way compared with other countries and other sectors in the Dutch economy. The crisis mainly reinforced the measures implemented in earlier years. Some changes started to take place from 2014 and their effects remain to be seen.

### 5.2 Content and process of change

At the onset of the crisis, the Dutch health care system was still in the process of transition following the 2006 reform. This reform came with many protective measures aimed at preventing financial problems in the health care sector and giving stakeholders the opportunity to become accustomed to their new roles. It is, therefore, often unclear whether changes in the system that happened after 2008 were the result of the economic crisis or the result of adjustments to promote good working of the new system and abolish protective measures.

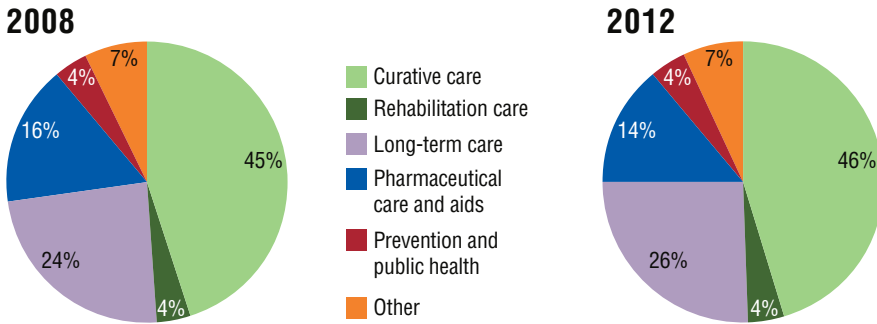
With the export and financial services sectors hit first and with budget cuts first affecting the defence and arts budgets, it seems that health care is one of the last sectors in the Netherlands to be affected by the economic crisis. Indeed, the cost-saving measures implemented in the health care sector between 2009 and 2011 have hardly had an impact on the distribution of health care expenditure among the different financing agents (Fig. 8.3) and on the composition of health care expenditure (Figs 8.4 and 8.5) between 2008 and 2011.

**Fig. 8.3** Breakdown of total health care expenditure by financing agent in the Netherlands at the beginning (2008) and during (2011) the crisis



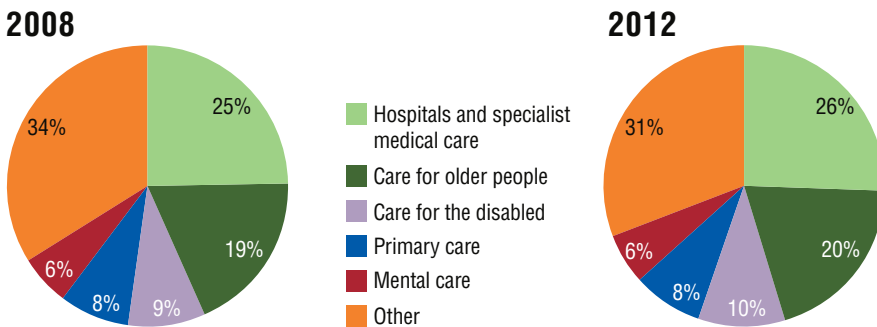
Source: Statistics Netherlands, 2013b.

**Fig. 8.4** Breakdown of health care spending by sector in the Netherlands, in 2008 and 2012



Source: Statistics Netherlands, 2013b.

**Fig. 8.5** Breakdown of health care spending by type of care in the Netherlands in 2008 and 2012



Source: Statistics Netherlands, 2013b.

### 5.3 Implementation challenges

The deterioration of the economic situation opened up public discussion on fundamental questions, such as what is affordable health care, what should be collectively financed and what are unnecessary treatments and processes in health care. Dutch citizens seem to understand that all public sectors are influenced by the crisis and that a better control of costs is necessary. In 2011, a poll by the Netherlands Institute for Social Research showed that 60% of respondents agreed or were neutral towards the statement that the government is right in limiting the basic insurance package to control health care costs (Netherlands Institute for Social Research, 2012).

To create support for the measures that were undertaken, the government negotiated a number of agreements with key stakeholders in the sector (see section 3.1). The most prominent is the 2013 Health Agreement with all sector

stakeholders (medical professionals, hospitals and health insurers). Pressure from the austerity measures was one factor that helped in reaching an agreement.

However, controlling growth in health care costs remains difficult because of the complexity of the system and the determination to maintain high quality of care despite high costs and inefficiencies. Some achievements in cost control have been achieved in recent years, such as those derived from GPs prescribing cheaper drugs or by limiting the income of medical specialists. This might have been supported by other trends, for example by the fact that a growing number of specialists prefer a salaried hospital position. These can be seen as examples of so-called low-hanging fruit (i.e. easier measures) while the reform of long-term care and achieving cost savings in this area are examples of higher-hanging fruit.

Finally, the segmentation of health care echelons and occupations remain conservative and poses a barrier to change in times of crises. The slow progress in task delegation and use of information technology, for example, can be seen as an expression of these problems. While task shifting and functional/clinical integration are advocated throughout the sector, differences in clinical practices and culture, and in the financial regimes, of health care providers in the different sectors between various types of care has prevented intersectoral collaboration from actually happening. For example, payment mechanisms for hospitals and medical specialists (DBC's) differ from those used for GPs (capitation and FFS), making the introduction of bundled payments for integrated care difficult. In addition, most policy measures appear to be highly sensitive to the public and political debate, specifically if they could lead to inequality in access to care, as equality in access to care is highly valued by the Dutch population.

#### **5.4 Resilience in response to the crisis**

It seems that the Dutch health system was not well prepared at the onset of the economic crisis, but measures taken in earlier years (to control costs and improve efficiency) are likely to have made the effects of the crisis less severe. Another factor that alleviated the effects of the crisis was the implementation of those easy-to-make changes (low-hanging fruit) described earlier in this chapter. One of the potentially negative consequences of the crisis may be the reduction in the number of home-help personnel and nursing assistants, following the shift from institutional care to home care. There are signs (spring 2014) that some nursing homes may need to be closed and home care organizations may need to reduce the number of home-help personnel and nursing assistants if they lose contracts with municipalities. It is expected that nurses, nursing assistants and home care employees will be needed in the near future and their exit from the Dutch labour market should be avoided. If they do leave, the resilience of the health care system may be reduced.

## 6. Conclusions

In retrospect, it can be concluded that the 2006 reform has been the most influential development in the Dutch health care sector since the early 2000s. Relative to this, the economic crisis has had limited effects on accessibility, quality and affordability of care. However, although the Dutch population accepts that having world-class health care comes at a high cost, the question of affordability of care remains the main topic of concern. This is reflected in the plans for a major reform of long-term care that is currently under consideration.

## References

- Association of Medical Specialists, National Hospital Association, Ministry of Health (2010). *Onderhandelingsresultaat. Hoofddlijnen bekostiging van medisch specialisten transitie 2012–2014*. Utecht, Orde van Medisch Specialisten, De Nederlandse Vereniging van Ziekenhuizen en het Ministerie van Volksgezondheid, Welzijn en Sport (<http://www.rijksoverheid.nl/documenten-en-publicaties/convenanten/2010/12/15/onderhandelingsresultaat-hoofddlijnen-bekostiging-vrij-gevestigd-medisch-specialisten-transitie-2012-2014.html>, accessed 5 March 2015).
- Boon P, Navis J-W (2013). Buikpijn van zorgrisico. *De Telegraaf*, 2 December ([http://www.telegraaf.nl/overgeld/gezin-zorg/22104156/\\_\\_\\_Buikpijn\\_van\\_zorgrisico\\_\\_\\_](http://www.telegraaf.nl/overgeld/gezin-zorg/22104156/___Buikpijn_van_zorgrisico___), accessed 5 March 2015).
- Boonen LHHM et al. (2010). Pharmaceutical policy in the Netherlands: from price regulation towards managed competition. In: Dor A, ed. *Pharmaceutical markets and insurance worldwide. (Advances in health economics and health services research, vol. 22)*. Bingley, UK, Emerald:53–76.
- Blokker B, Rosenberg E (2013). Fraude in Nederland heeft ‘onverantwoorde’ omvang. *NRC Handelsblad*, 25 June 2013 (<http://www.nrc.nl/nieuws/2013/06/25/fraude-in-nederland-heeft-onverantwoorde-omvang-miljarden-verdwijnen-jaarlijks/>, accessed 5 March 2015).
- Broersen S, Visser J (2013). Korting vervolgoeding treft vooral ziekenhuizen. *Medisch Contact*, 43:2194–2195.
- Cats R, Olsthoorn S (2013). Meer aanloop bij huisartsen door de crisis. *Financieel Dagblad*, 1 November.
- Dekker P et al. (2013). *Burgerperspectieven 2013–14. Continu Onderzoek Burgersperspectieven*. The Hague, Sociaal en Cultureel Planbureau.
- Dutch Association for Health Psychology (2014). *Basis GGZ in hoofddlijnen*. Utrecht, Nederlandse Vereniging voor de Gezondheidszorgpsychologie (<http://www.nvgzp.nl/basis-ggz-in-hoofddlijnen>, accessed 5 March 2015).

Dutch Health Care Authority (2012). *Marktscan. Zorgverzekeringsmarkt: Weergave van de markt 2008–2012*. Utrecht, Nederlandse Zorgautoriteit ([http://www.nza.nl/104107/105773/475605/Marktscan\\_Zorgverzekeringsmarkt.pdf](http://www.nza.nl/104107/105773/475605/Marktscan_Zorgverzekeringsmarkt.pdf), accessed 5 March 2015).

Dutch Health Care Authority (2013). *Marktscan en beleidsbrief. AWBZ: Weergave van de markt 2010–2012*. Utrecht, Nederlandse Zorgautoriteit ([http://www.nza.nl/104107/105773/953131/Marktscan\\_AWBZ\\_en\\_beleidsbrief.pdf](http://www.nza.nl/104107/105773/953131/Marktscan_AWBZ_en_beleidsbrief.pdf), accessed 5 March 2015).

Economist Intelligence Unit (2008). *Country profile 2008. The Netherlands*. London, Economist Intelligence Unit.

Foundation for Pharmaceutical Statistics (2012). *Data en feiten 2012. Het jaar 2011 in cijfers*. The Hague, Stichting Farmaceutische Kengetallen (<http://www.sfk.nl/pdf-documenten/data-en-feiten/data-en-feiten-2012>, accessed 5 March 2015).

GIP Databank (2014). *Genees- en hulpmiddelen Informatie Project Databank*. Diemen, Zorginstituut Nederland (<http://www.gipdatabank.nl/default.asp>, accessed 5 March 2015).

Government of the Netherlands (2013). *The Netherlands and the credit crisis*. The Hague, Government of the Netherlands (<http://www.government.nl/issues/financial-policy/how-did-the-netherlands-handle-the-credit-crisis>, accessed 5 March 2015).

Government of the Netherlands (2014). *Prinsjesdag 2014. Miljoenennota, Rijksbegroting en Troonrede* (<http://www.rijksoverheid.nl/onderwerpen/prinsjesdag>, accessed 5 March 2015).

Heijn J (2013). *Vraag naar ziekenhuiszorg daalt dit jaar minstens zo hard als in 2012*. Financieel Dagblad, 24 September 2013 (<http://fd.nl/economie-politiek/37446/vraag-naar-ziekenhuiszorg-daalt-dit-jaar-minstens-zo-hard-als-in-2012>, accessed 5 March 2015).

IMF (2013). *Data and statistics*. Washington, DC, International Monetary Fund (<http://www.imf.org/external/data.htm#data>, accessed 5 March 2015).

Lammers M, Kok L (2012). *Kosten-batenanalyse diëtetiek*. Amsterdam, SEO Economisch Onderzoek ([http://www.seo.nl/uploads/media/2012-76\\_Kosten-baten\\_analyse\\_dietetiek.pdf](http://www.seo.nl/uploads/media/2012-76_Kosten-baten_analyse_dietetiek.pdf), accessed 5 March 2015).

Longfonds (2013). *Stoppen-met-roken weer volledig vergoed*. Amersfoort, Longfonds (<https://www.longfonds.nl/nieuws/stoppen-met-roken-weer-volledig-vergoed#>, accessed 5 March 2015).

Ministry of Finance (2012). *Financieel Jaarverslag van het Rijk 2012. Bijlage 1: Budgettaire Kerngegevens [Annual Financial Report of the State. Annex 1: budgetary core*

*data*). The Hague, Ministerie van Financiën ([http://www.rijksbegroting.nl/2012/kamerstukken,2013/5/16/kst812050\\_2.html](http://www.rijksbegroting.nl/2012/kamerstukken,2013/5/16/kst812050_2.html), accessed 5 March 2015).

Ministry of Health (2008). *Jaarverslag en slotwet Ministerie van Volksgezondheid, Welzijn en Sport 2008 [Annual Report and Final Budget Act for Health, Welfare and Sport 2008]*. The Hague, Ministerie van Volksgezondheid, Welzijn en Sport.

Ministry of Health (2009). *Slotwet en jaarverslag ministerie van Volksgezondheid, Welzijn en Sport 2009 [Final Budget Act and Annual Report for Health, Welfare and Sport 2009]*. The Hague, Ministerie van Volksgezondheid, Welzijn en Sport (<http://www.rijksbegroting.nl/2009/verantwoording/jaarverslag,kst900004.html>, accessed 5 March 2015).

Ministry of Health (2010). *Jaarverslag en slotwet Ministerie van Volksgezondheid, Welzijn en Sport 2010 [Annual Report and Final Budget Act for Health, Welfare and Sport 2010]*. The Hague, Ministerie van Volksgezondheid, Welzijn en Sport ([https://www.eerstekamer.nl/wetsvoorstel/32710\\_xvi\\_jaarverslag\\_en\\_slotwet](https://www.eerstekamer.nl/wetsvoorstel/32710_xvi_jaarverslag_en_slotwet), accessed 5 March 2015).

Ministry of Health (2011). *Jaarverslag en slotwet Ministerie van Volksgezondheid, Welzijn en Sport 2011 [Annual Report and Final Budget Act for Health, Welfare and Sport 2011]*. The Hague, Ministerie van Volksgezondheid, Welzijn en Sport ([https://www.eerstekamer.nl/wetsvoorstel/33240\\_xvi\\_jaarverslag\\_en\\_slotwet](https://www.eerstekamer.nl/wetsvoorstel/33240_xvi_jaarverslag_en_slotwet), accessed 5 March 2015).

Ministry of Health (2012). *Jaarverslag en slotwet Ministerie van Volksgezondheid, Welzijn en Sport 2012 [Annual Report and Final Budget Act for Health, Welfare and Sport 2012]*. The Hague, Ministerie van Volksgezondheid, Welzijn en Sport. ([http://www.eerstekamer.nl/wetsvoorstel/33605\\_xvi\\_jaarverslag\\_en\\_slotwet](http://www.eerstekamer.nl/wetsvoorstel/33605_xvi_jaarverslag_en_slotwet), accessed 5 March 2015).

Ministry of Health (2014). *Opleidingsfonds Zorg (Care Training Fund)* [website]. The Hague, Ministerie van Volksgezondheid, Welzijn en Sport (<http://www.opleidingsfondszorg.nl>, accessed 5 March 2015).

National Association of General Practitioners (2013). *Economische crisis dringt door tot spreekkamer huisarts*. Utrecht, Landelijke Huisartsen Vereniging (<https://www.lhv.nl/actueel/nieuws/economische-crisis-dringt-door-tot-sprekkamer-huisarts>, accessed 5 March 2015).

National Association of General Practitioners, Ministry of Health (2012). *Convenant huisartsenzorg 2012/2013. Akkoord tussen de Landelijke Huisartsen Vereniging (LHV) en de minister van Volksgezondheid, Welzijn en Sport (VWS) over de huisartsenzorg*. The Hague, Landelijke Huisartsen Vereniging en Ministerie van Volksgezondheid, Welzijn en Sport ([http://www.loketgezondleven.nl/object\\_binary/o15878\\_convenanthuisartsenzorg20122013.pdf](http://www.loketgezondleven.nl/object_binary/o15878_convenanthuisartsenzorg20122013.pdf), accessed 5 March 2015).



National Association of General Practitioners, Ministry of Health (2013). *Het onderhandelingsresultaat eerste lijn 2014 tot en met 2017*. The Hague, Landelijke Huisartsen Vereniging (<http://devrijehuisarts.org/stukkenpdf/KanttekeningenBijConvenantLHVWS240713.pdf>, accessed 5 March 2015).

National Hospital Association & Ministry of Health (2011). *Bestuurlijk hoofdlijnenakkoord [Administrative Framework Agreement]*. The Hague, Nederlandse Vereniging van Ziekenhuizen per Ministerie van Volksgezondheid, Welzijn en Sport, Nederlandse Vereniging van Ziekenhuizen, de Nederlandse Federatie van Universitair Medische Centra, Zelfstandige Klinieken Nederland en Zorgverzekeraars Nederland.

National Institute for Public Health and the Environment (2013). *Groei zorguitgaven*. Amsterdam, Rijksinstituut voor Volksgezondheid en Milieu. Ministerie van Volksgezondheid, Welzijn en Sport.

National Institute for Public Health and the Environment (2014). *Kosten van ziekten*. Bilthoven, Rijksinstituut voor Volksgezondheid en Milieu (<http://www.kostenvanziekten.nl/systeem/kosten-van-ziekten-tool/>, accessed 5 March 2015).

Netherlands Bureau for Economic Policy Analysis (2013). *Database*. The Hague, Netherlands Bureau for Economic Policy Analysis (<http://www.cpb.nl/en/data>, accessed 5 March 2015).

Netherlands Centre for Occupational Diseases (2014). *Key figures for occupational diseases in 2013*. Amsterdam, Centrum voor Beroepsziekten (<http://www.occupationaldiseases.nl/content/key-figures-occupational-diseases-2013>, accessed 5 March 2015).

Netherlands Institute for Social Research (2012). *Social and cultural report 2012*. The Hague, Sociaal en Cultureel Planbureau.

OECD (2013). *Stat extracts*. Paris, Organisation for Economic Co-operation and Development (<http://stats.oecd.org/>, accessed 5 March 2015).

Reitsma-van Rooijen M, Brabers AEM, De Jong JD (2012). *Veel zorggebruikers verwachten belemmeringen voor noodzakelijk zorggebruik bij een verplicht eigen risico van 350 euro*. Utrecht, Nederlands Instituut voor Onderzoek van de Gezondheidszorg [Netherlands Institute for Health Services Research] (<http://www.nivel.nl/sites/default/files/bestanden/Factsheet-zorggebruikers-verwachten-belemmeringen-eigen%20risico-350euro.pdf>?, accessed 5 March 2015).

Schäfer W et al. (2010). The Netherlands: health system review. *Health Systems in Transition*, 12(1):1–228.

Schoen C et al. (2013). Access, affordability, and insurance complexity are often worse in the United States compared to ten other countries. *Health Affairs*, 32(12):2205–2215.

Schut E, Sorbe S, Høj J (2013). *Health care reform and long-term care in the Netherlands*. Paris, Organisation for Economic Co-operation and Development (Economics Department Working Paper 1010) (<http://www.oecd.org/eco/reform/2013-2.pdf>, accessed 5 March 2015).

Schut FT, van de Ven WP (2011). Effects of purchaser competition in the Dutch health system: is the glass half full or half empty? *Health Economics, Policy, & Law*, 6(1):109–123.

Slobbe LCJ et al. (2011). *Kosten van Ziekten in Nederland 2007: Trends in de Nederlandse zorguitgaven 1999–2010*. Bilthoven, Rijksinstituut voor Volksgezondheid en Milieu (<http://www.rivm.nl/bibliotheek/rapporten/270751023.pdf>, accessed 5 March 2015).

Social and Economic Council (2013). *Dutch economy in calmer waters. A macro-economic exploratory survey*. The Hague, Sociaal Economische Raad (<https://www.ser.nl/en/publications/publications/2013/dutch-economy-in-calmer-waters.aspx>, accessed 5 March 2015).

Statistics Netherlands (2013a). *Gezondheid en zorg in cijfers 2013*. Heerlen, Centraal Bureau voor de Statistiek (<http://www.cbs.nl/NR/rdonlyres/B3173C43-368C-4190-8D9C-88E6BBF2CBE8/0/2013c156puberr.pdf>, accessed 5 March 2015).

Statistics Netherlands (2013b). *StatLine*. Heerlen, Centraal Bureau voor de Statistiek (<http://statline.cbs.nl/statweb/>, accessed 5 March 2015).

Ursum J et al. (2011). *Overzichtsstudies. Zorg voor chronisch zieken. Organisatie van zorg, zelfmanagement, zelfredzaamheid en participatie*. Utrecht, Nederlands Instituut voor Onderzoek van de Gezondheidszorg [Netherlands Institute for Health Services Research] (<http://www.nivel.nl/sites/default/files/bestanden/Rapport-zorg-voor-chronisch-zieken.pdf>, accessed 5 March 2015).

Verhaak PF et al. (2000). GPs' referral to mental health care during the past 25 years. *British Journal of General Practice*, 50(453):307–308.

Vos L et al. (2008). Naar een procesgestuurd ziekenhuis: beoogde effecten van een logistiek verbeterprogramma. *TSG: Tijdschrift voor Gezondheidswetenschappen*, 86(4):207–215.

Westert GP (2010). *Dutch health care performance report 2010*. Bilthoven, Rijksinstituut voor Volksgezondheid en Milieu.

Wiegers T et al. (2011). *Overzichtsstudies: de eerste lijn*. Utrecht, Nederlands Instituut voor Onderzoek van de Gezondheidszorg [Netherlands Institute for Health Services Research].

World Bank (2014). *World Bank open data*. Washington, DC, World Bank (<http://data.worldbank.org/>, accessed 5 March 2015).



# Chapter 9

## **The impact of the crisis on the health system and health in Portugal**

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### **Introduction**

The economic crisis in Portugal is a product of both internal and external factors. Internally, low investment in tradable goods and slow economic growth in the first decade of the 21st century led to a lack of competitiveness compared with the rest of Europe. Weak economic growth was associated with increased public deficits, as well as increasing private and public foreign debts. Externally, the global financial crisis resulted in a sudden and sizable increase in financial market interest rates for the more vulnerable economies in the EU, including Portugal. Under these circumstances, Portugal was unable to refinance its foreign debt and was forced to request financial assistance from the EU, the European Central Bank and the IMF. An Economic and Financial Adjustment Programme (AP) was agreed between these institutions and the Portuguese Government in May 2011. The primary challenge for Portugal was to respond to the crisis in a manner that successfully met the financial targets included in the AP, supported the development of an economic model centred around tradable goods and services, and ensured social protection for the Portuguese population.

This case study summarizes policy responses to the crisis in Portugal and reviews the impact on health and the health system from 2008 to mid-2013.<sup>1</sup> There are a number of limitations in achieving such an objective:

- the events under analysis occurred at a rapid pace, making it difficult to identify the effects of specific actions;
- the impact of the crisis is likely to manifest itself in different time frames depending on particular health and health systems domains; and
- official reports and systematic studies on these matters are scarce.

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<sup>1</sup> Portugal exited the three-year AP in May 2014.

In order to complement existing information, interviews were conducted and two expert panels were convened (see Appendix 9.1 for details). Experts included individuals involved in community health, health service management and provision of care.

## **1. The nature and magnitude of the financial and economic crisis**

### **1.1 The origins and immediate effects of the crisis**

Portugal already suffered from internal imbalances prior to the current crisis, with low economic growth, low productivity and low competitiveness. This situation worsened with the international economic crisis, mainly because of a shortage of credit, which left Portugal unable to finance its debt obligations. As in many other European countries, Portugal's public deficit and debt increased substantially after 2008 following the EU's relaxing of fiscal targets in the context of the crisis (Table 9.1). The poor macroeconomic outlook for Portugal led to a deterioration of confidence and rising market pressures on Portuguese debt, with consecutive downgrading of Portuguese sovereign bonds by credit rating agencies. The risk premium of 10-year Portuguese treasury bonds began to widen as the financial crisis deepened, reaching 5.4% in 2010 and exceeding 10% in 2011 (OECD, 2013b). These unsustainable borrowing costs and reduced access to international debt markets led to a request for international financial assistance by the Portuguese Government at the beginning of April 2011.

### **1.2 Government responses to the crisis**

In April 2011, Portugal negotiated a bailout with the Troika. The Portuguese Government and the Troika signed a MoU in May 2011 for a €78 billion loan (with interest rates averaging 4.3% in 2011 and 3.9% in 2012) conditional on adoption of the AP, which contained a set of requirements covering the period 2011–2014. The AP included austerity requirements, such as reducing public spending and increasing tax revenues in order to reduce the budget deficit, and focused on fiscal policy, stabilization of the financial sector and structural reforms in a large number of areas, including labour, goods, services and housing.

Between mid-2011 and the last trimester of 2012, the AP was implemented under relatively favourable political and social conditions. There was broad political support within the government and limited negative reaction to the austerity programme among the Portuguese population. However, support for the austerity measures decreased after September 2012. Following the fifth AP evaluation and preparation of the 2013 state budget, it became clear that the 2012 austerity measures had not successfully achieved targets, such as

**Table 9.1** Demographic and economic indicators in Portugal, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population (in thousands)	10,226	10,293	10,368	10,441	10,502	10,503	10,522	10,543	10,558	10,568	10,573	10,558 (b)	10,704
People aged 65 and over (% total population)	16.2	16.4	16.6	16.7	16.9	17.3	17.5	17.6	17.8	18.1	18.4	18.8 (b)	18.4
GDP per capita (€)	12,500	13,100	13,600	13,700	14,200	14,600	15,200	16,000	16,200	15,900	16,300	16,100	15,600
Real GDP growth (%)	3.9	2.0	0.8	-0.8	1.5	0.8	1.4	2.4	0.0	-2.9	1.9	-1.3	-3.2
Government deficit (% GDP)	-3.0	-4.3	-2.9	-3.0	-3.4	-6.5	-4.6	-3.2	-3.7	-10.2	-9.8	-4.3	-6.5
Government consolidated gross debt (% GDP)	61.1	62.6	66.1	67.2	69.5	77.7	77.5	75.5	80.8	94.0	98.1	97.2	127.9
Long-term interest rates (10-year government bonds) (%)	5.6	5.2	5.0	4.1	4.1	3.4	3.9	4.4	4.5	4.2	5.4	10.2	10.5
Total unemployment (% of economically active population)	4.0	4.0	5.1	6.4	6.8	7.7	7.8	8.1	7.7	9.6	11.0	12.9	15.9
Long-term unemployment (% of economically active population)	1.7	1.5	1.8	2.1	2.9	3.7	3.9	3.8	3.7	4.2	5.6	6.2	7.7

Note: (b): Break in series

Sources: OECD, 2013a.

reducing the deficit to 4.5% of GDP. This target was subsequently increased to 5%, with the time period for ultimately achieving a 3% target increased from three to four years. Unemployment figures were also worse than predicted. Despite this, more austerity was planned for 2013.

Results from the seventh AP review in March 2013 raised more public concerns. The revised 2012 public deficit target of 5% of GDP was still not achieved (6.4%); the 3% deficit target was then postponed for one more year (from four to five years) (European Commission, 2013a). The persistent current account deficits led to greater public debt, which was then projected to peak at close to 124% of GDP in 2014. As a result, the government announced that during 2013 and 2014, public expenditure would need to be reduced by €4.7 billion.

### 1.3 Broader consequences

During the crisis, the unemployment rate increased from 7.7% in 2008 to 15.9% in 2012 and was 16.7% in mid-2013 (Eurostat, 2013). In mid-2012, one-fifth of Portuguese households were affected by unemployment. Among surveyed households, there was a 32.2% reduction in expenditure for leisure activities, 30.3% for essential goods, 22.2% for health care and 5.1% for education (SEDES, 2012). The percentage of unemployed individuals not receiving unemployment benefits was 73.6% by the end of 2012 (Statistics Portugal, 2013). The risk of poverty of Portuguese children also increased from 23.0 in 2010 to 26.8 in 2012 (Caritas Europa, 2013).

Unemployment has contributed to substantial increases in emigration, by 116% between 2008 and 2011 (Statistics Portugal, 2013). Many of these new migrants are young and well educated. For example, in July 2013 the medical and nursing associations reported that in the last 18 months approximately 5000 medical professionals (about one-third physicians and two-thirds nurses) requested documentation allowing them to practise elsewhere (Ordem dos Enfermeiros, 2013; Ordem dos Médicos, 2013).

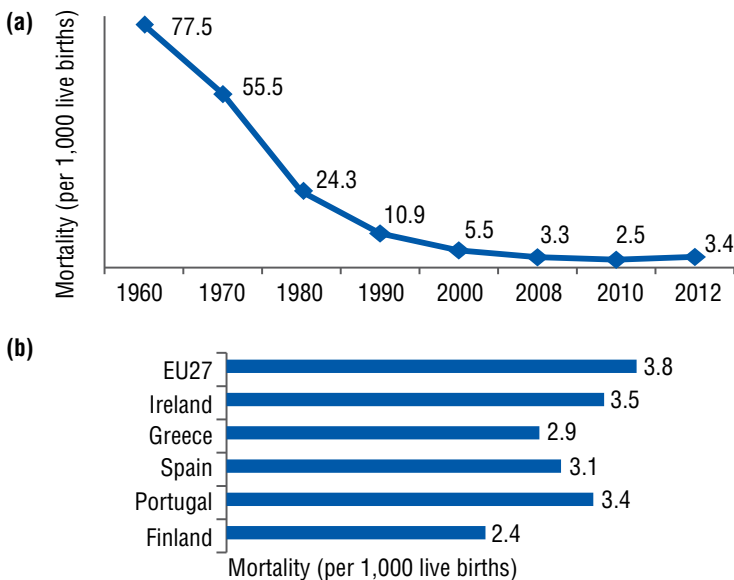
As early as May 2010, a Eurobarometer study monitoring the social impact of the crisis through public perceptions reported the following findings (European Commission, 2010):

- 72% of Portuguese respondents perceived changes in the level of poverty in the areas they lived (over the last 12 months), compared with 85% of Greek, 50% of Irish and 22% of Swedish respondents; and
- 69% of Portuguese respondents were concerned that their income in old age would not be sufficient to live on with dignity, compared with 73% of Greek, 49% of Irish and 19% of Danish respondents.

## 2. Health system pressures prior to the crisis

In recent decades, the health of the Portuguese population has improved considerably; for example, there has been remarkable progress in infant mortality over the past 30 years, from the very worst rate in the EU15 in 1985 to one of the best by 2010 (Fig. 9.1). However there remain many areas where the population is vulnerable. These include child poverty (Bastos, 2012), unhealthy behaviours (e.g. motorcar accidents, substance abuse) and a relatively unhealthy ageing population (OECD, 2012a).

**Fig. 9.1** Trends in infant mortality: (a) in Portugal (1960–2012) and (b) in European countries (2012)



Sources: OECD, 2012b; PORDATA, 2013.

In the decade prior to the crisis, important changes were made to the Portuguese health system. Following conceptual and organizational developments introduced in the late 1990s, a comprehensive primary health care reform was initiated in 2005 by providing support for the rapid expansion of family health units, known as *unidades de saúde familiares*, which are small, multiprofessional public primary health care teams operating under performance contracting that choose their own leadership, thus setting up a primary health care network. Other changes included adopting national health strategies and plans (in 1998 and 2004), taking steps towards decentralizing public hospital management and adopting public–private partnerships for new public hospitals, developing a long-term care network, investing in new mechanisms for health services



contracting, advances in pharmaceutical policy such as the introduction of generic drugs, improvements to waiting list management, rationalizing emergency and maternity services, and investment in more human resources for health services, particularly physicians and nurses.

Although the Portuguese NHS is considered to be better performing than many of the country's other public sectors, and a "Portuguese health cluster" bringing together health services, research institutions and industry to promote the economic value of the health sector was created in the 2000s, concerns about the sustainability of the NHS have been voiced repeatedly since the mid-1990s. In 2007, a Commission on the Financial Sustainability of the NHS established by the Ministry of Health reported its main findings and recommendations (Simões, Barros & Pereira, 2007). These included:

- maintaining the principle of basic, mandatory and universal health insurance, financed through taxation;
- reducing the tax credits for private health care expenditures;
- making public subsystems that finance health care expenditures for public servants financially self-sustainable (i.e. discontinuing subsidies from the general state budget); and
- under exceptional circumstances, temporarily establish an earmarked tax to complement NHS financing.

These recommendations were not implemented at the time, but most of them were included in the AP by mid-2011.

By 2008, notable challenges included high OOP payments, relatively high expenditure on pharmaceuticals and low nurse-to-physician and GP-to-specialist ratios. There were also difficulties accessing primary health care services in some parts of the country. Although surgical waiting times were still high, some progress had been achieved, although less so for outpatient waiting times. Lastly, local public health infrastructure still required modernization.

### **3. Health system responses to the crisis**

Specific to the health system, the objectives of the AP were to improve efficiency and effectiveness, encourage more rational use of services, control expenditure, reduce public spending on pharmaceuticals (to 1.25% of GDP by the end of 2012 and about 1% of GDP in 2013) and reduce hospital operating costs. More rational use of services and cost-containment were expected to generate savings of 0.3% of GDP in 2013, of which two-thirds of savings were expected from pharmaceuticals (Table 9.2). The Ministry of Health was actively committed to implementing the AP, particularly those on pharmaceutical policies.

**Table 9.2** Summary of the Portuguese AP health content: initial version, May 2011

Health sector area	Summary of targeted policies
Financing	User charges: review existing exemption categories; increase and expand co-payments (moderating fees) for certain services; index NHS moderating fees to inflation; cut tax allowances for health care; reduce cost of existing schemes for civil servants; produce a health sector strategic plan consistent with the medium-term budget framework
Drug pricing	Set the maximum price of the first generic introduced in the market to 60% of the branded product; revise reference pricing based on international prices
Prescribing	Compulsory electronic prescription for medicines and diagnostics covered by public reimbursement for physicians in public and private sectors; improve monitoring system of prescriptions and establish a systematic assessment in terms of volume and value; incentivize public and private physicians to dispense generic medicines and less costly branded products; establish clear rules for prescription and complementary diagnostic examinations (prescription guidelines for physicians); remove entry barriers for generic medicines
Pharmacies	Change the calculation of profit margin into a regressive mark-up and a flat fee for wholesale companies and pharmacies; ensure a reduction in public spending and encourage the sales of less expensive pharmaceuticals (lower profits were expected to reduce public spending on pharmaceuticals by €50 million); introduce a pay-back scheme if initiatives are unsuccessful
Procurement	Set up a centralized procurement system for medical goods in the NHS in order to reduce costs and fight waste; finalize coding system and a common registry for medical supplies; take measures to increase competition among private providers and reduce spending on private providers delivering diagnostic and therapeutic services to the NHS by at least 10% by the end of 2011 and by an additional 10% by the end of 2012; introduce a regular revision of the fees paid to private providers with the aim of reducing the cost of older diagnostic and therapeutic services; assess compliance with European competition rules
Primary care	Increase the number of family health units (unidades de saúde familiares) operating under contracting with regional authorities using a mix of salary and performance-related payments; set-up a mechanism to guarantee a more even distribution of family doctors across the country
Hospitals	Set out a timetable to clear all arrears (accounts payable to domestic suppliers past the due date by 90 days) and introduce standardized commitment control procedures for all entities to prevent the re-emergence of arrears; provide detailed description of measures aimed at achieving a reduction of €200 million hospitals' operational costs in 2012 (€100 million in 2012 in addition to savings of over €100 million in 2011), including a reduction in the number of management staff as a result of concentration and rationalization in public hospitals and health centres; continue the publication of clinical guidelines and associated auditing system; improve selection criteria for chairs and members of hospital boards; set up a system for benchmarking hospital performance and produce regular annual reports, with the first to be published by end 2012; ensure full interoperability of information technology systems in hospitals and produce monthly reports to the Ministry of Health and Ministry of Finance; continue with the reorganization and rationalization of the hospital network through specialization and concentration of hospital and emergency services and joint management; a detailed action plan was to be published by 30 November 2012 and its implementation was to be finalized by the first quarter of 2013; move some hospital outpatient services to family health units; implement stricter control of hospital staff working hours and activities

**Table 9.2** Summary of the Portuguese AP health content: initial version, May 2011 (cont.)

Health sector area	Summary of targeted policies
Human resources	Annually update the inventory of practising doctors and identify future staff needs; prepare regular annual reports (the first by end of March 2012), planning for the allocation of human resources up to 2014; introduce rules to increase mobility of health care staff; adopt flexible schedules for all staff, reducing by at least 10% spending on overtime in 2012 and another 10% in 2013
Other	Finalize the establishment of a system of patient electronic medical records; reduce costs for patient transportation by one third

*Note:* The measures in the AP were expected to be implemented within 18 months. They have been reviewed every three months, with the last review in the second quarter of 2014. During the seven AP reviews to date, new measures have been introduced, some measures completed or reoriented and others removed. Some of these changes are described in the text for pharmaceutical drugs and primary health care.

To some extent, the objectives of the AP are an extension of cost-containment measures that were adopted during 2009–2011, prior to the signing of the AP. This included three cost-containment packages that were applied across the public sector, which included measures such as a 5% reduction to public workers' salaries, which also affected NHS staff. A number of specific health policy responses to the financial crisis were also adopted during this period. These included health budget and expenditure cuts; drug price cuts and changes to cost-sharing rules; price reductions for services provided by the private sector to the NHS (diagnostic tests and renal dialysis); reductions in spending on overtime for NHS workers; and reductions to non-emergency patient transportation.

### 3.1 Changes to public funding for the health system

#### *Health expenditure*

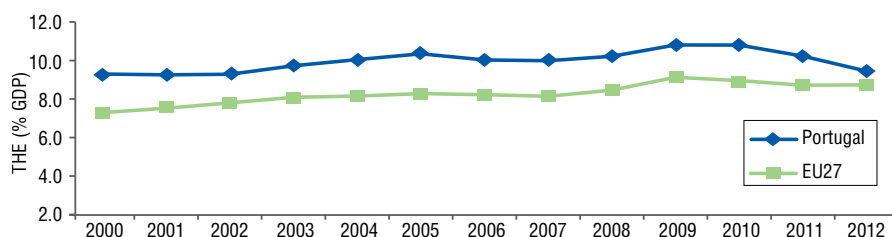
In 2008, health spending was 10.2% of GDP, above the EU average of 8.5%. It peaked at 10.8% in 2009 and 2010 and decreased to 9.5% in 2012 (Fig. 9.2). However, historically, health care expenditure per capita has been below the EU average (US\$2399 per capita, PPP, in 2012; approximately 20% below the EU average (Fig. 9.3).

The percentage of total health expenditure financed by public sources is shown in Table 9.3; this is made up mainly from taxation (over 90%,) including funding of the NHS and subsidies to the other health subsystems for public sector employees (see also Pita Barros, Machado & Simões, 2011). Private expenditure mainly includes OOP payments and VHI.

Public expenditure as a share of total health expenditure remained essentially unchanged from 2008 to 2011, at about 65%, followed by a small dip to 62.6% in 2012, well below the EU average (72.3%) (Fig. 9.4). The health share of total

government expenditure decreased from 14.9% in 2008 to 13.5% in 2011; the broader social sector changed from 35.1% to 37.0% of the government budget during the same period (Statistics Portugal, 2013).

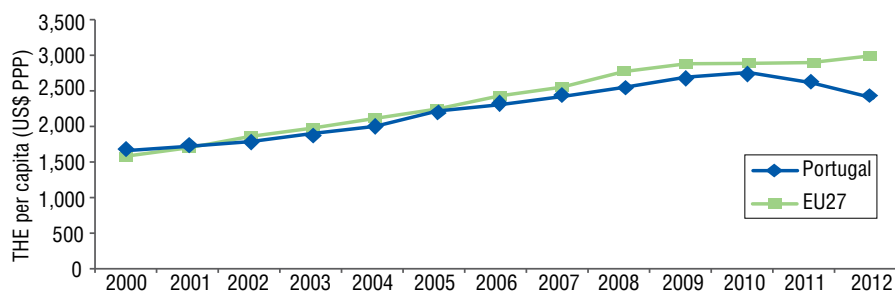
**Fig. 9.2** Total expenditure on health as a percentage of GDP, Portugal and EU average, 2000–2012



Note: THE: Total health expenditure.

Source: WHO Regional Office for Europe, 2014.

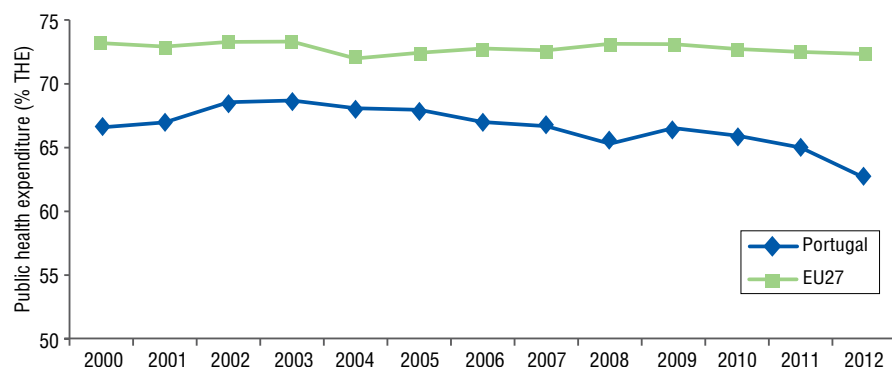
**Fig. 9.3** Total expenditure on health per capita, Portugal and EU average, 2000–2012



Notes: THE: Total health expenditure.

Source: WHO Regional Office for Europe, 2014.

**Fig. 9.4** Public expenditure on health as a share of total health expenditure, Portugal and EU average, 2000–2012

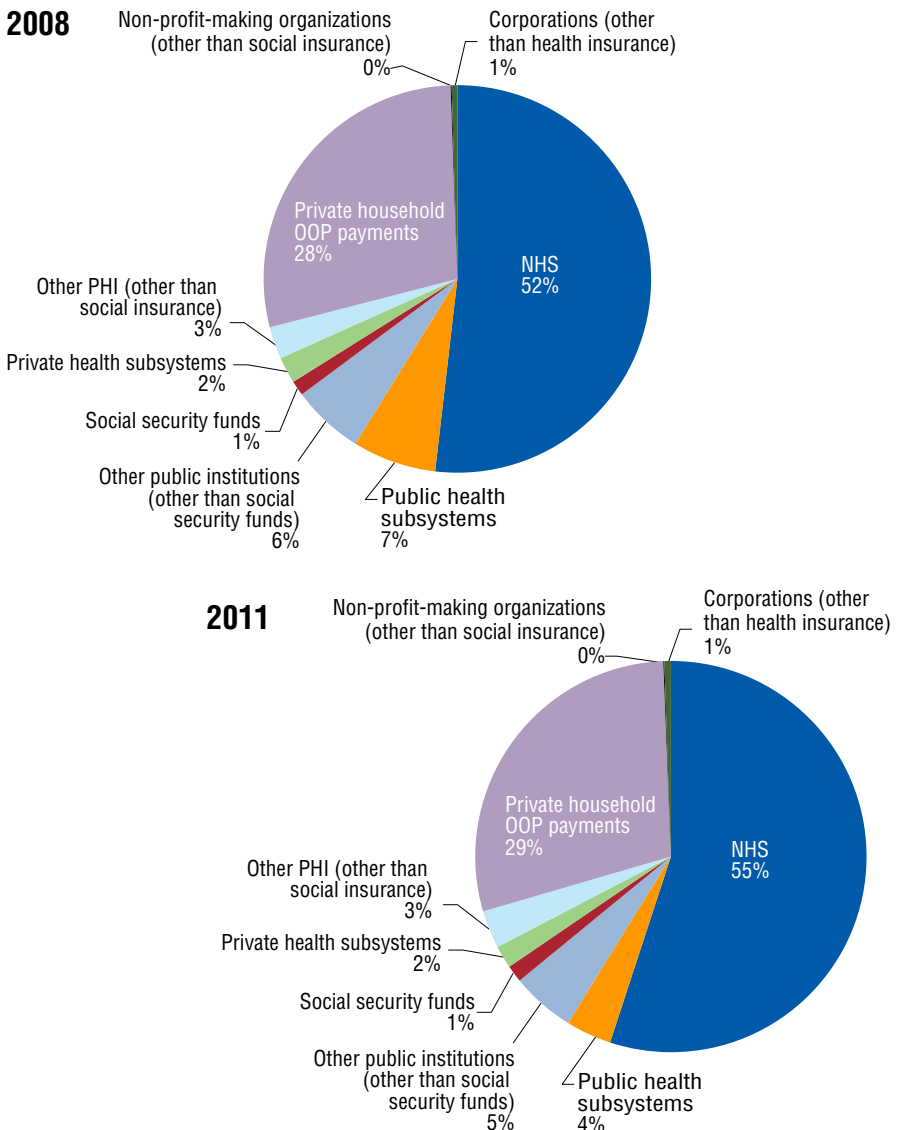


Note: THE: Total health expenditure.

Source: WHO Regional Office for Europe, 2014.

The private expenditure share of total health expenditure slightly increased from 35% in 2008 to 37.4% in 2012 (Table 9.3). Total private expenditure in 2011 came from OOP payments (29% of total spending), PHI (3%), private health subsystems (1.9%) and other sources 0.5% (Fig. 9.5). OOP payments increased from 28.5% of total health expenditure in 2008 to 28.9% in 2011 (Statistics Portugal, 2013; Fig. 9.5); this increase came prior to an increase in user charges introduced in 2012 (see section 3.2).

**Fig. 9.5** Breakdown of total health care expenditure by expenditure provider in Portugal, 2008–2011



Source: OECD, 2012b

**Table 9.3** Health expenditure trends in Portugal, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
THE per capita (US\$ PPP)	1,659	1,720	1,786	1,900	2,000	2,216	2,304	2,419	2,549	2,693	2,758	2,615	2,399
THE (% GDP)	9.3	9.3	9.3	9.7	10.1	10.4	10.0	10.0	10.2	10.8	10.8	10.2	9.5
Public sector expenditure on health (% THE)	66.6	67.0	68.6	68.7	68.1	68.0	67.0	66.7	65.3	66.5	65.9	65.0	62.6
Public expenditure on health (% all government spending)	14.9	14.4	14.8	15.0	15.1	15.1	14.9	15.0	14.9	14.5	13.8	13.5	12.5
VHI (% THE)	3.3	3.4	3.7	4.4	4.6	4.2	4.5	4.4	4.6	4.3	4.3	4.6	n/a
OOP expenditure (% THE)	24.3	24.1	23.2	23.3	23.4	23.8	25.1	25.4	26.9	25.9	25.8	27.3	31.7
Private expenditure on health (% THE)	33.4	33.0	31.5	31.3	31.9	32.0	33.0	33.3	34.7	33.5	34.1	35.0	37.4
OOP expenditure (% private expenditure on health)	72.8	72.9	73.8	74.6	73.4	74.5	76.1	76.4	77.5	77.3	75.8	78.1	84.7
Private prepaid plans (% private expenditure on health)	9.8	10.4	11.7	14.2	14.4	13.0	13.5	13.1	13.3	12.9	12.7	13.1	n/a

Notes: n/a: Not available; THE: Total health expenditure.

Source: WHO Regional Office for Europe, 2014.

## Health budget

The NHS budget is established within the annual government budget. The initial allocation to the NHS showed a rising trend between 2005 and 2010 but decreased in both 2011 and 2012 (Table 9.4). In 2013, this value slightly increased compared with 2012.

**Table 9.4** Annual government budget funding to the Portuguese NHS, initial and final allocation, 2005–2013

Year	IA (€, millions)	FA (€, millions)	Variation between IA and FA (%)	Adjusted IA + PIDDAC (€, millions)	GDP (€, millions, current prices)	(Adjusted IA + PIDDAC)/ GDP (%)
2005	5,834.0	7,634.0	3.11	5,914.2	154,268.7	3.83
2006	7,636.7	7,631.9	30.90	7,685.0	160,855.4	4.80
2007	7,674.8	7,673.4	0.50	7,710.5	169,319.2	4.55
2008	7,900.0	7,900.0	2.93	7,937.2	171,983.1	4.62
2009	8,100.0	8,200.0	2.53	8,136.7	168,503.6	4.83
2010	8,698.7	8,848.7	7.39	8,180.8	172,669.7	4.74
2011	8,100.0	8,251.8	-6.88	7,574.8	170,909.0	4.43
2012	7,525.1	9,695.8	-7.10	6,976.4	166,342.0	4.19
2013	7,801.1	7,882.5	3.67	7,252.4	165,690.0	4.38

Notes: IA: Initial allocation; FA: Final allocation; PIDDAC: Central Government Expenditure and Investment Programme.

Source: ACSS, 2012a; Statistics Portugal, 2013; Government budgets.

Traditionally, there have been soft budgets given that actual health expenditure usually exceeds the budget limits by a wide margin; this has necessitated approval of supplementary budgets. Since 2006, total government spending has been kept within the initial allocations of the budget, which resulted in a hidden debt that surfaced in mid-2011. In order to clear arrears in the health sector, in accordance with the AP, the final allocation of 2012 included an additional €1932 million for the extraordinary debt settlement programme. This final allocation in 2012 also included the debt of other public sector health subsystems to the NHS (€65 million).

Spending for all public sector health subsystems has been under the responsibility of the NHS since 2010. Additionally, since 2012, autonomous funding from the Central Government Expenditure and Investment Programme is no longer provided to NHS entities; therefore, capital investments must now be funded from the initial allocation. If we consider these added expenses, the reductions of recent years place even greater pressure on the NHS. For example, the initial

allocation to the NHS decreased by 13.5% between 2010 and 2012, but if the additional expenses are included, the NHS budget decreased by 14.4%. Using this calculation of the NHS budget, the budget allocation to finance the NHS in 2012 and 2013 was, in nominal terms, below the 2006 level and even below the final allocation of 2005. As a share of GDP, the NHS budget decreased each year from 2009 until 2012.

### ***Changing rules for financing public insurance of public servants***

The Directorate-General of Social Protection for Workers in Public Administration (Direção-Geral de Protecção Social aos Funcionários e Agentes da Administração Pública; ADSE) is a public fund for public servants and their families. Its beneficiaries have dual public health service coverage through the NHS and ADSE. ADSE provides complementary health care coverage for about 13% of the population and is an important source of revenue for the private sector. As a result, historically it has been politically difficult to reform ADSE. ADSE is one of three existing subsystems, the others being *Assistência na Doença a Militares*, which provides care to the armed forces, and *Assistência na Doença da Polícia de Segurança Pública*, which provides care to police. The AP stated that the cost of existing subsystems should be reduced by 30% in 2012 and a further 20% in 2013. Further reductions were planned in subsequent years with the goal that these subsystems will be self-sustainable by 2016. The costs of these schemes will be reduced by lowering the employer contribution rate to 1.25% in 2013, increasing employee contributions and adjusting the scope of health benefits.

### ***Phasing out of fiscal credits for private health care expenditure***

In 2012, tax credits for private health care were reduced from a maximum of 30% to 10% of total personal private expenditure. These tax credits have now been discontinued for those in the upper income brackets.

## **3.2 Changes to coverage**

### ***Population entitlement***

There are few explicit changes to coverage for NHS users. Within the health subsystems framework, membership of ADSE has been voluntary since 2011.

### ***The benefits package***

In accordance with the AP, patient transportation costs were to be reduced by one-third by the fourth quarter of 2012 compared with costs in 2010; this was to be accomplished by limiting non-urgent patient transport (e.g. transportation to therapeutic services/rehabilitation) and specific rules were issued to health

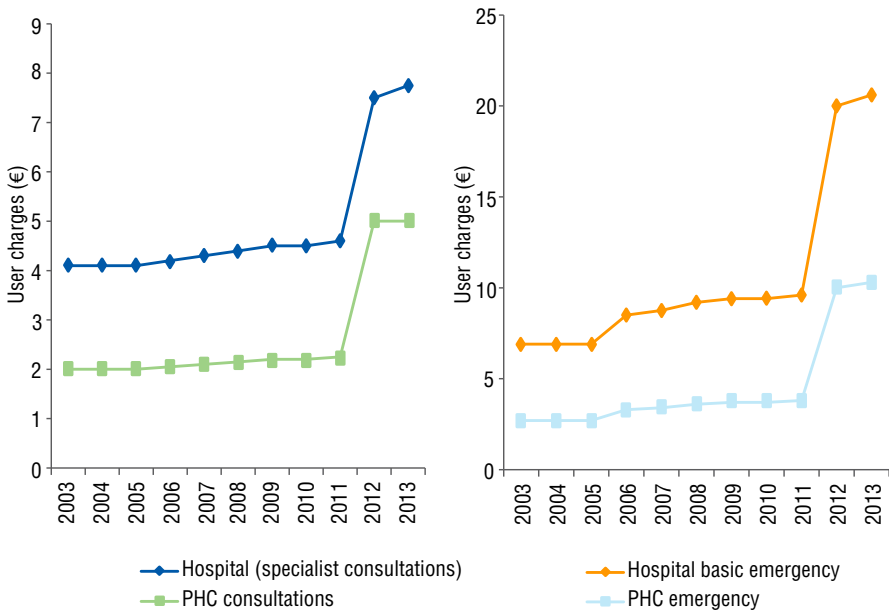


services providers concerning transportation authorizations. In addition, entitlements for patient transportation in non-emergencies is now means tested. Consequently, the target was achieved and transportation costs decreased by 39% (€58 million) between 2010 and 2012 (Ministry of Health, 2013a).

**User charges**

The primary change that affects access to services is to user charges. User charges were introduced for the first time in the NHS in ambulatory care in 1980 as “moderating fees”, with the explicit objective of regulating overutilization of health care services. Moderating fees had been fairly stable up until 2011; in 2012 they were increased following implementation of the AP (Fig. 9.6).

**Fig. 9.6** Evolution of selected user charges in Portugal, 2003–2013



Note: PHC: public health centre.  
Source: ACSS, 2012b.

In the AP, changes to moderating fees were categorized as “financing” and were expected to generate additional revenues of €150 million in 2012 and an additional €50 million in 2013. Changes to user charges in the context of implementing the AP have occurred within three distinct dimensions: increases in user charges, extension of user charges to cover most services, and changes to user charges exemptions. Some of the main increases in user charges that have been implemented since 2011 are summarized in Table 9.5.

**Table 9.5** *Changes to a selection of user charges in Portugal, 2011–2013*

<b>Services</b>	<b>Change in user charges</b>
<i>Primary and ambulatory care</i>	
Specialist visits	Increased from €4.60 to €7.75
Primary health care consultations	Increased from €2.25 to €5
Urgent attendances in health centres	Increased from €3.80 to €10.30
<i>Hospital care</i>	
Type 1 hospital emergency	Increased from €9.60 to €20.60
Type 2 hospital emergency	Increased from €8.60 to €15
Type 3 hospital emergency	Increased from €8.60 to €17.50
Since January 2013	Increase of 2.8% in all hospital user charge

There was also an extension of user charges to include nursing services, vaccines not included in the national vaccination plan and diagnostic imaging and therapy in the context of emergency services. User charges are cumulative in a single emergency episode, with total payment capped at €50; day care in hospitals is capped at €25. However, user fees are not collected in situations such as family planning, respiratory home care and population-based organized screening (Health Regulatory Authority, 2013b).

Finally, in 2012 user charge exemptions were extended to cover about 50% of the population. Exemption is based on economic status (average monthly income less than or equal to €628.83) and dependent members of those low income households, as well as the unemployed registered at employment centres, their spouses and minor dependents; in addition exemption is also provided for children under 12 years; pregnant women; organ transplant recipients; the disabled (with higher than 60% incapacity); blood donors; patients with chronic disorders; living donors of cells, tissues and organs (only for primary health care services); firefighters; members of the military or veterans with service-related permanent disability; and recluses.

### **The role of VHI**

VHI insurance in Portugal has been increasing steadily since the 1990s but more recently this rising trend seems to have slowed down. Overall, the population covered by individual insurance increased by 4% between 2008 and 2011; during the same period, the population covered by group insurance (workers and families insured by their employers/companies) increased by 7%. The number of individual insured fell 2.5% in 2011. In 2011, the population covered by some sort of VHI (individual and group) was reported as being

nearly 2.1 million, which represents approximately 20% of the Portuguese population (Portuguese Insurance Institute, 2011; Statistics Portugal, 2013). The average premium per insured person with individual insurance increased by 9% between 2008 and 2011 (Statistics Portugal, 2013).

VHI covers the relatively young, for whom health care use tends to be limited. This may explain why the approximately 20% of the population covered by VHI only accounts for around 3% of total health expenditure.

### **3.3 Changes to health service planning, purchasing and delivery**

#### ***Centralized procurement***

A Central Purchasing Authority (Servicos Partilhados do Ministerio da Saude) was created in 2010 in order to reduce costs through price–volume agreements and to reduce waste. More restrictive practices and lower prices for public purchasing of private services (e.g. laboratory tests, imaging diagnostics and rehabilitation services) were established in 2011.

#### ***Hospitals***

The AP outlined several measures aimed at increasing efficiency and decreasing hospital costs (see Table 9.1). The aim was to achieve a reduction of €200 million in hospital operating costs in 2012 (€100 million in 2012 in addition to savings of over €100 million in 2011). Hospital mergers, already taking place during the previous decade, were also given a new impetus, expecting to result in additional cuts in operating costs by at least 5% in 2013. Lastly, a timetable was established to clear all arrears (accounts payable to domestic suppliers that were past their due date by at least 90 days) and new legislation was passed in 2012 forbidding public services from incurring expenditure not covered in their approved budget (*lei dos compromissos*), therefore preventing the accumulation of new debts.

#### ***Changes to state health administrations and health sector salaries***

Cost-saving measures targeting public workers have taken place, particularly since 2010. These include freezing or reducing salaries (e.g. annual bonuses consisting of two months' salary were abolished in 2012), stopping promotions, reducing existing staff and new hirings, reducing overtime hours and the amount paid for overtime work (by 10% in 2012 and a further 10% in 2013), and reducing retirement benefits. The NHS is staffed by public sector workers, who are also affected by general government reforms in the public sector and not only changes aimed at the health sector.

These measures had spillover effects. Concerns about the future of young medical professionals in public service led to a medical strike in July 2012. After the strike, the Ministry of Health and the medical unions negotiated an agreement, signed in October 2012, that included changes in remuneration, working schedules, performance evaluation, new hiring to the NHS (2000 new health professionals in 2013–2014), career development opportunities, extending GP patient lists from 1500 to 1900 and extended mobility of physicians within the NHS. A family nurse project is also being designed with the purpose of enhancing primary health care, particularly for chronic diseases and long-term care conditions.

### **Pharmaceutical policy reforms**

Between 2010 and 2011, NHS spending on drugs was reduced by €668 million, as this area was a priority for savings even before the AP (Directorate-General of Budget, 2012a,b; Portuguese Observatory on Health Systems, 2012). In 2011, there was a 19.2% decline in NHS expenditure on drugs prescribed in ambulatory care, accounting for more than €312 million in savings. In 2012, expenditures continued to decrease by 11.4%. NHS hospital drug expenditures in 2011 slowed to 1.2% growth, but decreased in 2012 by 1.1% based on data through to November (Infarmed, 2011; Portuguese Observatory on Health Systems, 2012) (Table 9.6). In addition, in May 2012, the Ministry of Health signed an agreement with the Portuguese Association of Pharmaceutical Industries to reduce public expenditure on drugs by €300 million in 2012, to ensure more rapid payment by the NHS on accumulated debts owed to the pharmaceutical industry and to improve access to new drugs in the Portuguese market.

**Table 9.6** *Changes in drug expenditure (NHS ambulatory and hospital) as a percentage of that in the previous year, 2007–2012*

<b>Year</b>	<b>Drug expenditure changes in ambulatory sector (%)</b>	<b>Drug expenditure changes in hospital sector (%)</b>
2007	-1.7	3.2
2008	5.0	4.9
2009	6.2	9.7
2010	5.2	3.1
2011	-19.2	1.2
2012	-11.4	-1.1 (Jan. to Nov.)

*Source:* Infarmed, 2013.

Average drug prices decreased from €13 in 2007 to €10.70 in 2012, and NHS drug expenditure per capita fell from €171 to €144 during the same period (Infarmed, 2012). In some areas, reductions in drug prices were particularly pronounced. For example, the average price of simvastatin (a statin used for cholesterol control) decreased from €28 in 2009 to €6 in 2012. In the same period, omeprazole (a proton pump inhibitor) decreased from €36 to €6 and clopidogrel (a blood clotting inhibitor) decreased from €33 to €8 (Infarmed, 2012). There have been concerns that delays in establishing prices and making cost-sharing decisions for new drugs are becoming obstacles to introducing innovative drugs in the Portuguese drug market. The Ministry of Health has agreed with industry to establish appropriate procedures to deal with this situation.

In addition to price cuts, there have also been attempts to increase generic prescribing. Since June 2012, it has been mandatory for doctors to prescribe pharmaceuticals by their active ingredient rather than by their commercial brand name. The share of generic drugs dispensed increased from 21% in 2011 to 25% in 2012, albeit still short of the 30% target set by the AP. Some other steps have been taken to influence prescribing, such as providing feedback to individual prescribers on their prescribing patterns. In September 2011, electronic prescription of publicly financed drugs and diagnostic procedures also became mandatory. Finally, beginning in 2013, medical doctors, scientific societies and patient organizations were required to declare conflicts of interest, particularly in their interactions with the pharmaceutical industry.

The objectives in the original AP, summarized in Table 9.2, were also complemented with new measures introduced after the joint Troika/Portugal periodic reviews of the AP. For example, during the second review, legislation was enacted that automatically reduced the price of drugs by 50% when a patent expires, while the third review introduced monthly monitoring of pharmaceutical spending to ensure that AP targets are reached.

### ***Health care delivery***

The most important organizational change in the Portuguese health system since the early 2000s was the primary health care reform (see section 2). One of the main objectives of this reform was to improve accessibility of health care services. The AP included a small number of measures for primary health care (Table 9.2). The second AP review (December 2011) added the following aspects: shifting human resources from hospitals to primary care settings, reconsidering the role of nurses and other specialties in the provision of services, and increasing the number of patients per GP. The third review of the AP in March 2012 focused on the need to extend performance assessment to other primary care units, beyond family health units.

Long-term care services developed in cooperation between the health and welfare sectors, initiated in the late 1990s, were further developed after 2006 as long-term care networks. These networks are intended to respond to the needs of older people with some functional dependence, patients with chronic conditions and patients needing palliative care. The 2015 targets established in 2006 for the long-term care networks were 2700 convalescence beds, 3000 medium-term care beds, 7700 long-term care beds, 2300 day-care vacancies and 900 palliative care beds in both public and private contracted facilities. In June 2012, there were 906 convalescence beds, 1808 medium-term care beds, 3041 long-term care beds and 193 palliative care beds (RNCCI, 2012; Health Regulatory Authority, 2013a). Although there has been a steady increase of resources for long-term care in the country (e.g. a 6.3% increase in beds from 2011 to 2012), overall long-term care beds are still far below the established targets, even when considering that such targets may have been overambitious (RNCCI, 2012); geographic distribution of beds is also unequal (Health Regulatory Authority, 2013a). There is no reference to long-term care networks in the AP despite their significance.

A “Quality in Health” department was established by the General Health Directorate in 2009. This department promotes a large number of initiatives, including patient information and complaint management, guidelines for good medical practice and patient safety issues. A Scientific Commission for Clinical Good Practice was established and a large number of good practice guidelines (105) have been issued since 2011. An in-depth evaluation of their impact has already been initiated (87 health services audits have taken place). A specific health care services accreditation model was adopted and the first unit was accredited in 2010. Since then, 18 such accreditation exercises have been completed, and 15 are currently underway (Directorate-General of Health, 2013).

### **Health plans**

There have been two health strategies/plans in Portugal since the mid-1990s: the 1998–2002 Health Strategy and the 2004–2010 Health Plan. The implementation of these Health Plans has been limited. In early 2012 it was decided that the priorities of the 2004–2010 Health Strategy (HIV, cardiovascular diseases, cancer, mental health) would be extended to include the following domains: diabetes, tobacco, healthy diet, respiratory diseases and stroke. In mid-2012, a 2012–2016 Health Plan was adopted, covering four main domains: citizenship and health, access and equity, quality in health, and healthy policies. However, this Health Plan does not focus specifically on the health effects of the current crisis; it is now in a very early stage of implementation and is not mentioned in the AP.

## 4. Implications for health system performance and health

Capturing process changes in the Portuguese health system is particularly difficult using current reporting from official sources. Nevertheless, many changes in health care processes have been reported through personal communications, formal and informal technical meetings and in the media.

To identify early effects of the crisis not yet apparent through routine health service data, two expert panels were convened during March 2013 (see Appendix 9.1) with the purpose of contributing and validating such evidence (Atkins et al., 2004; Weightman et al., 2005; Figueras, 2011). To note these panels' contributions, the note "expert panels" has been adopted in this text. The impact of the current crisis on the health system and health system performance are analysed in terms of (1) changes in health care-seeking behaviour, (2) effects on providers, and (3) disease burden (reviewed under the subsection on the impact on health).

### 4.1 Changes in health care-seeking behaviour

Detailed analysis of health services data cannot be easily undertaken because of uneven data quality and irregular collection procedures. Another caveat is that current data and level of analysis do not allow us to disentangle the relative contributions to changing health care-seeking behaviour of factors such as community impoverishment, increased user charges and transportation difficulties, and fear of unemployment as a result of sick leave or time spent in health care. The regional and local illustrations in this section have been selected on the basis of the data available and the technical credibility of the information sources, and also because they do not represent a particularly underprivileged section of the Portuguese population. It is also important to note that for primary care, data are automatically recorded and collected centrally, with great reliability, but hospital data are recorded manually, with some local and regional exceptions.

Bearing this in mind, official data reported at national level indicate a decrease in GP appointments of 3.6% from 2011 to 2012 (comparing the first 9 months of 2012 with a similar period in 2011). During the same time period, primary health care urgent attendances decreased by 27.9%, while hospital emergencies experienced a 9.1% reduction (ACSS, 2012a). Health authorities have recently noted a considerable increase in the number of missed NHS appointments (ACSS, 2013; Ministry of Health, 2013b). Moreover, patients are missing mental health care appointments because they cannot afford transportation costs, according to the National Mental Health Plan coordinator in March 2013 (Carvalho & Rodrigues, 2013).

A report by the Portuguese Health Regulatory Agency (2013b) based on a sample of 79 NHS primary health care organizations found that the average number of monthly medical attendances decreased between 2011 and 2012 by 9.2% (10.8% reduction for the less affluent who are exempt from user charges; 6.4% reduction for the non-exempt). Primary health care visits that did not require a medical consultation increased by 10%, but this increase was only observed for those exempt from user charge. This report also confirms the low contribution of user fees to health care financing in Portugal: 0.74% of NHS revenues in 2010, 0.95% in 2011 and 1.7% in 2012 came from user charges.

There was a slight increase in NHS-financed drug purchases between 2011 and 2012, associated with a substantial fall in both public and private expenditures on pharmaceuticals (Infarmed, 2013). However, there are some indications that certain patients are having difficulties accessing the drugs they need. It has been reported (expert panels) that the types of prescribed drug that patients more often fail to acquire are those associated with chronic conditions, such as those aimed at lowering cholesterol and hypertension, as well as antidepressants. Patients who cannot pay for prescribed medication are increasing and “this is a worrying situation that many health professionals feel in their workplaces” according to the President of the Social Services Professional Association in March 2013 (Carvalho & Rodrigues, 2013). In 2010, a law that granted a 100% state subsidy for antipsychotic drugs and other drugs associated with the treatment of a few serious mental health illnesses (such as schizophrenia, dementia, autism, major depression and bipolar disorder) was discontinued. These patients now have to pay 5–10% of the cost of treatment.

In May 2010, relatively early in the crisis, a Eurobarometer survey (European Commission, 2010) on monitoring the social impact of the economic crisis through public perceptions reported that 61% of Portuguese respondents stated that their ability to afford health care decreased during the past six months, compared with 79% of Greeks, 35% of Irish, and 7% of Swedes. In a 2009 Portuguese survey on mental health, 22% of respondents declared non-adherence to treatment for financial reasons, with the most commonly skipped drugs being antidepressants, followed by antipsychotic drugs. This impact was higher in low socioeconomic classes (Frasquilho & Frasquilho, 2011).

In May 2012, among 980 Portuguese families surveyed on their well-being during the economic crisis (SEDES, 2012), 22.2% of respondents stated that they had had to reduce health care expenditures. For families with one or more members unemployed (20% of the families surveyed), 39.9% reported that they reduced health care expenditures.

Another study investigated the reported health care-seeking behaviour of the Portuguese population over 15 years of age (Pita Barros et al., 2013). Two



analyses were performed on a representative sample (1254). The first of these approaches focused on the overall experience of the study population and found that 15.1% of those surveyed had experienced a situation where they did not acquire necessary pharmaceuticals and 8.7% reported not attending a necessary medical consultation, both because of lack of financial resources; 5.0% did not attend a necessary medical consultation because of transportation costs; while 6.0% did not attend an urgent medical consultation because they could not afford to lose one day of salary. The second approach focused on the respondent's last disease occurring between April 2012 and April 2013: 541 respondents (43.6%) reported that they experienced some sort of illness during this one-year study period. Of those reporting being ill, 74 (14%) did not seek medical attention, with a large majority of those 74 reporting not seeking medical care because they felt their illness was not serious enough to justify medical attention and five stating that they did not seek medical attention because of user charges. The authors estimate that this figure corresponds to 73 303 people in the overall study population.

Preliminary data from a northern region of Portugal (population 244 836) show that there was a 6.2% decrease for primary health care visits between 2011 and 2012, but this decrease in health service utilization was mainly observed for those exempt from user charges (9.4%). It was also observed in this region that there was a reduction in transportation expenditure associated with primary health care services of 24.0% between 2010 and 2011 and of 10.7% between 2011 and 2012. Data from this northern region of the country also show a 76% increase in referred cases for inpatient admissions between 2011 and 2012, which may be attributable to a worsening of the clinical situation of patients with mental health problems because of a lack of appropriate compliance with their therapeutic regimens (Barbosa, 2013).

In the Lisbon district, 10 GPs and 9 nurses from a family health unit performed a yearly "one day census" survey of its users, as part of its own self-evaluation process (Biscaia, 2013). Two questions related to the financial crisis were included in the 2012 and 2013 censuses. The 2012 survey took place in November; 173 users were invited to participate, and 128 returned a usable questionnaire reflecting their experience during the first 10 months of 2012. Of those surveyed, 27.2% stated that they refrained from using health care services or taking pharmaceuticals during that time period. The 2013 survey took place in April 2013, reflecting users' experience during the first trimester of 2013 (132 users were invited to participate, with 104 returning usable questionnaires); here 17.6% reported that they refrained from using health services. It should be noted that in these samples the percentage of users having a university degree varied from 20 to 25%. Comparative data prior to 2012 are also not available.

## **4.2 Changes to health services and providers**

Reductions in health professionals' remuneration since 2010 have led some health professionals to emigrate, retire early or transfer from the public to the private sector. It has been reported (expert panels) that such public to private shifts are mainly occurring in the larger metropolitan areas.

Patient and professional associations have occasionally reported (Silva, 2012) instances of what could be called “implicit rationing” in Portuguese health services. This may occur if health services operate with rapidly reduced budgets that require decreases in the volume of services. There is no current explicit policy towards rationing and, also, there are no systematic studies to confirm or deny these reports. Nevertheless, there has been a considerable debate on the issue of “rationalizations versus rationing” following a report of the National Commission of Medical Ethics (2012). More recently, a group of 20 well-known health experts, with the support of the pharmaceutical industry, came together in a three-year initiative (dubbed the “latitude initiative”) to discuss the use of pharmaceuticals in the current context.

It has been reported (expert panels) that a number of cost-shifting or revenue-generating practices have been observed, although whether these are direct consequences of the crisis is not possible to ascertain. Examples include transferring patients and costs unnecessarily from less renowned hospitals to more expensive specialized ones; delaying payment or shifting responsibility for paying for diagnostic or therapeutic procedures from one service to another; and referring patients back to health centres and then again to hospital care so the second appointments can be recorded as higher paid first appointments. The large number of measures to be implemented over a relatively short time period, monitored by the Troika every three months, requires a strong central command. Centrally issued directives, associated with across-the-board budget cuts and a new legislative norm prohibiting further indebtedness, all within a short time frame, leaves hospital managers in a delicate situation, which may lead to these sorts of practices.

According to the National Association of Pharmacies, the crisis and associated drug policies are having serious effects on pharmacy revenues (Cordeiro, 2012): an estimated 600 pharmacies were expected to close in 2013.

Slower implementation of primary health care reform has also been reported (expert panels) possibly through financial constraints. For example, during the first trimester of 2013 only one new family health unit was created (there are 357 such units in the country, covering about 50% of the Portuguese population). This is the lowest trimester implementation figure since 2006, although it should be noted that the creation of new family health units is voluntary and depends on the initiative of physicians. By the end of July 2013,

18 new units had been implemented. In 2010 and 2011 a total of 48 and 44 units, respectively, were created.

### 4.3 Impact on health

Before the crisis, Portugal had one of the highest rates of mental illness in the EU (WHO, 2009) and limited investment in preventive mental health services (Caldas de Almeida, 2009). There were also relatively high utilization rates for drugs that treat mental health conditions (OECD, 2011). Since the crisis, increases in anxiety and depression in Portugal have been reported by a number of different sources, including surveys of professionals' perceptions of changing morbidity associated with the current crisis (Portuguese Observatory on Health Systems, 2012) and GPs' clinical records. Preliminary data from a northern region of the country show that for a population group of 244 836 inhabitants, there was approximately a 30% increase in depression cases between 2011 and 2012 according to clinical records (Barbosa, 2013). While some of this increase may reflect improvements in reporting, it is unlikely that this explains the full increase.

Between 2011 and 2012, there was a 7.6% increase in sales of antidepressants and mood stabilizers and a 1.5% increase in sales of anxiolytic, sedative and hypnotic drugs in the ambulatory market (Infarmed, 2013). Anxiolytic prescriptions more than doubled between 2011 and 2012 among those aged 65 and older, while antidepressants and mood stabilizers almost doubled in the same period for this age group (Campos, 2013; Morato, 2013). The magnitude of this change seems unlikely to be attributable to reduced drug prices.

The number of suicides increased between 2009 and 2010 (Statistics Portugal, 2012) but a similar trend did not occur between 2010 and 2011 (Statistics Portugal, 2012). It is possible that suicides are underreported in Portugal (Directorate-General of Health, 2013). In Portugal, 14% of registered deaths are recorded as "ill defined", which is the second highest percentage in the EU). A 27% increase in the number of calls to the National Institute of Medical Emergency Medicine related to suicidal behaviour occurred from January to July 2011 compared with the same period in 2012 (National Institute of Medical Emergency Medicine, 2013). The study using data from a northern region of Portugal also found the number of suicide attempts increased by 35% for men and 47% for women (Barbosa, 2013).

So far, there is no indication of worsening alcohol-related conditions but there is limited evidence of increased illegal drug consumption among unemployed drug addicts (Goulão, 2012).

The Portuguese older population has reported poorer health compared with those in other European countries (OECD, 2012a). Due to the crisis, younger families and family members are becoming financially dependent on their

older parents. Under these circumstances, families may experience physical, emotional and financial problems (Lopes et al., 2012a,b).

Child poverty is also an issue of concern; the risk of poverty for children increased from 23% in 2010 to 26.8% in 2012 (Caritas Europa, 2013). It is known that chronic stress associated with adverse social conditions influences normal child development (Evans & Schamberg, 2009), affects parent–child relationships and affects the psychological well-being of adolescents (Solantaus, Leinonen & Punamaki, 2004; Currie et al. 2012). Portuguese children are already among the most obese in Europe (OECD, 2012b). Nevertheless, properly feeding children from impoverished families has become a new challenge. During Christmas 2012, school canteens were kept open to ensure that children from families with severe economic difficulties could have at least one acceptable meal. Over 3% of the population in 2012 was supported by Banco Alimentar (a food bank nongovernmental organization), representing an increase of 57% from 2006 to 2012 (Francisco Manuel dos Santos Foundation, 2013).

There may also be links between economic crisis and communicable disease (Rechel et al., 2011; Suhrcke, et al., 2011). Portugal has one of the lowest capacities for heating homes during winter among European countries (WHO Regional Office for Europe, 2012), which may play a role in winter mortality. In the first months of 2012, excess mortality associated with influenza and cold weather was reported in Portugal, as in many other European countries for those aged 65 and older. However, excess mortality in those aged 15–64 years only occurred in Portugal and Spain (Mazick et al., 2012). Hospital infections also require careful monitoring given budgetary cuts.

Finally, mortality from road accidents has been decreasing steadily during the 2000s. This pattern accelerated between 2011 and 2012, as there was a 20% decrease of motor car circulation volume and 16% decrease in mortality (European Commission, 2013b).

## **5. Discussion**

The Portuguese health system has considered important reform initiatives over several decades, particularly after the democratization of Portuguese society in 1974. However, the implementation of these reforms has been relatively slow – and sometimes discontinuous. Difficulties in managing change in the health sector can be attributed to poor information for decision-makers, centralized command and control traditions, lack of policy continuity, key “good governance” limitations and influential stakeholders predominating over the common good. Such limitations are not specific to the health sector or Portuguese culture but they tend to reflect how imbedded health systems are in their social, economic, cultural and political environment.

## 5.1 Drivers of change

Between 2009 and 2011, political decisions were often reactive to the rapidly evolving financial crisis. The adoption of the AP resulted in a three-year plan for the health sector, becoming the key driver for health systems changes during this time period. Resistance to policy implementation by interested stakeholders and the political costs of some reforms for national decision-makers was considerably minimized by the “external and mandatory” nature of the AP. External pressure exercised during a limited period of time, unconcerned with eliciting and sustaining broad internal support, may be effective in changing those aspects of the health care system that can be singled out, are amenable to clearcut normative action and are perceived as unavoidable at that time. However, more complex transformative action usually requires sustained coordinated progress, involving many different domains and stakeholders, thus implying a reasonable degree of social acceptance.

## 5.2 Content and process of change

The health section of the AP contains a large number of positive measures, most of which have been previously identified as necessary, and whose implementation was long overdue. Two types of health measure can be found in the AP, aside from general austerity measures that can affect social determinants of health. The first are measures directly related to generating savings for the health budget, which focused on pharmaceuticals and hospitals. The second set pertained to a broad range of areas that lacked an explicit evidence base or a clear policy framework, including reforms in primary health care, information systems and patient transportation. There are also aspects of significant policy importance not referred to in the AP, such as health governance, health strategies, NHS organization development and improved health and social sector cooperation, particularly for long-term care.

There was a strong commitment by the Portuguese Government to implement the AP and to complement it with additional policy initiatives. Positive developments have been observed, including some degree of budget protection from 2013 onwards, efforts to address accumulated NHS debts, initiatives to improve equity by phasing out tax credits for private health care expenditure, reviews of state budget subsidies for public subsystems, and measures aimed at rationalizing health resources use and improving health services efficiency. In particular, pharmaceutical policies have led to significant savings. This is important for the financial sustainability of the NHS and has made pharmaceuticals less expensive for patients.

Primary health care accessibility has been addressed by a commitment to increase the primary care workforce and by successful negotiation with medical unions to

increase GPs' patient lists from 1550 patients to an average of 1900. Substitution policies, such as the family nurse project and an initiative to shift some renal dialysis from health care units to home care, are at the design stage. A patient-centred health care information system is also at an experimental phase.

### **5.3 Implementation challenges**

During the crisis, a large number of measures had to be implemented in a short time period, without consideration as to their optimal sequencing or to the implementation capacity of the Portuguese health administration. As a result, some initiatives may not have fully achieved their objectives. For example, reducing pharmaceutical drug prices through negotiations or administrative action can be implemented rapidly, but effectively changing drug prescription and use patterns may take more time. Increasing GP availability in health centres is necessary, but maintaining the pace and dynamics of the primary health care reform and the required underlying social and professional consensus is also important. Rationalizing NHS resources is certainly an important contribution to improving sustainability, but worsening working conditions in the NHS may be counterproductive and undermine financial sustainability.

While efforts to generate savings in hospitals and pharmaceuticals have been generally accepted, one of the more controversial issues in the current reform programme is the extension of user charges. User charges have been adopted under the designation of “moderating fees” and justified in terms of their role in regulating access to health care. However, their actual moderating effect has not been rigorously evaluated. In addition, in the AP, these moderating fees (user charges) have been placed under the heading of “financing” and not “access regulation”. Given the fact that these user charges have been extended to almost all health care practices, including diagnostic tests in emergency departments, where there is no choice to defer treatment for those who require services, it seems that their underlying logic is essentially that of raising revenues.

There are several aspects of this policy that are open to question. First, doubling user charges at a time of severe economic and social crisis is certainly a problematic decision from a financial protection perspective. Second, while introducing means-tested exemptions protects the poor from user charges, it also reintroduces into the health system “poverty certificates”, which are more akin to “social assistance” than to the principle of universalism underpinning a national health system. Third, the transaction costs associated with user charges and processing different kinds of exemption have not been assessed. Lastly, doubling user charges does not make their contribution to NHS revenues any more significant. In order for user charges to make a significant contribution to the health budget beyond the current 1.7% (maintaining current exemption policies), these charges would have to reach high levels that would be politically unfeasible and would strongly

affect health care access for both cost-effective and non-cost-effective care (Evans et al., 1993; Swartz, 2010; Glassman & Chalkidou, 2012).

## **5.4 Resilience in response to the crisis**

### ***Limitations in ascertaining the impact of the crisis on health and health systems***

Identifying the health impacts of the current crisis depends on the quality of available information, active monitoring and sharing of relevant health data, adequate resources for analysing health data and the recognition that health effects may not occur immediately. It also depends on health authorities' willingness to report these effects. Most of these requirements for identifying the health impact of the crisis have not been fulfilled at this time. In this context, while evidence on the impact of the crisis on mental health and health care-seeking behaviour is relatively well documented, at present, it is not possible to identify the relative contribution of impoverishment, increased user charges, transportation difficulties and unemployment risks.

### ***Health in all policies***

A major breakthrough for European public health was the recognition in the Maastricht Treaty (1992, article 129) that all public policies should be analysed before their implementation in terms of their effect on health. This notion was broadened and reinforced by the social clause of the Lisbon Treaty (2007). Moreover, Health in All policies is a key concept in the EU's 2007 European Health Strategy and was the subject of a reference publication during the 2007 Finnish Presidency of the EU. Despite this, there is no indication that social and health implications were considered in designing and adopting austerity programmes, including the Portuguese AP. This omission may have far-reaching consequences in that alternative policies that might be more likely to minimize negative health impacts may not have been considered. Monitoring systems to ensure that adverse health outcomes do not occur do not appear to have been put in place. In addition, local intersectoral health strategies to respond to deteriorating social determinants of disease and health have not been adopted.

Likewise, it is also difficult to identify the effects of budget cuts, salary reductions and changes in working conditions on health care processes. Nevertheless, more attention should be given to the importance of the health sector for the economy. For example, a study published by Health Cluster Portugal predicted that by 2020 the health system will produce €4 billion worth of health goods, (e.g. pharmaceuticals, information systems and equipment), 75% of which is expected to be exports (Cunha, 2012). Therefore, abrupt policy change may result in significant economic losses.

## 6. Conclusions

The current financial, economic and social crisis in Portugal resulted from a complex interplay of external and internal factors. While the government implemented a number of austerity measures before 2011, it was the adoption in mid-2011 of the three-year AP, negotiated with the Troika, that brought about more severe socioeconomic changes.

The health section of the AP contained a number of measures that had been called for before the crisis began. These measures were mostly focused on reducing health care costs, rationalizing the use of health resources and increasing revenues through mechanisms such as user charges. However, in many ways the AP did not consider the potential effects of austerity on health and health care. One of the more significant omissions of the AP was the lack of early health impact assessment of the crisis and associated austerity measures. With better monitoring, policy-makers could have designed adequate measures to minimize negative health effects. Moreover, adopting a transparent approach would have allowed for more evidence-based assessment of the true impact of the crisis on health.

Based on the limited data available by mid-2013, there seems to have been a negative impact of the crisis on mental health and health care-seeking behaviours, particularly among vulnerable groups. The likely impacts on alcohol and drug addiction and on acute and chronic conditions are more difficult to clearly ascertain at present. Moreover, identifying the relative contribution of impoverishment, increased user charges, transportation difficulties and unemployment concerns is not possible on the basis of the data that are currently available. Likewise, budget cuts, salary reductions and adverse working conditions for health managers and health care professionals are likely to have negative effects on health care processes.

There are many challenges for Portuguese society in the months and years ahead. Despite compliance by the government in implementing the AP and improvements in access to financial markets, public debt has been increasing substantially; private access to credit remains difficult; unemployment continues to be high; economic growth prospects are slim; and in this context the public deficit targets in line with the new European Treaty (Fiscal Compact) do not seem to be very realistic without further social hardship and cuts in public expenditure.

Placing health visibly on the public policy agenda, both nationally and at European level, through a comprehensive approach to public policies, looking explicitly at the intermingled effects of financial, economic and social policies, is a fundamental requirement for looking ahead towards a better future.



## Appendix 9.1

### Expert panels on impact on health and health systems

Two expert panels were convened on the impact of the socioeconomic crises, one on health and another on health systems, in order to complement existent information and assist in a more in-depth analysis and weighting of available evidence.

The panel on the health impacts met 5 March 2013 and included two practising medical public health experts, one from a northern part of the country and another from the centre–south; an endocrinologist coordinating the Portuguese Diabetes Observatory; a mental health expert engaged in research concerning the mental health effects of this crisis; an expert on the health of older people who had a nursing background, and a GP, coordinating a family health unit.

The panel on the health systems impact met 6 March 2013 and included the executive director of a health centre grouping, the basic organizational set up of primary health care in Portugal; two hospital administrators with a managerial background; a hospital director with a medical background; and a physician experienced in coordinating hospital emergency departments.

Panel members received advance information concerning the study objectives, process and questions included in the study framework regarding health and health systems impact, as well as the way panels were expected to operate.

The panel worked on the basis of a focus group approach, as follows.

#### *1st round*

**Initial statement.** Considering questions indicated above, each expert will make an initial statement, selecting those questions he/she feels more appropriate to address (on the basis of his/hers professional experience and knowledge).

**Discussion.** All other experts were invited to complement the initial statement from each expert.

**Clarifications.** At the end of this first round of statements, case study coordinators could ask for some further explanations and clarifications;

The panel members were informed that their statements could be based on one or more of the following information sources: personal experience or personal information from reliable sources, objective information from reliable sources, official reports and/or systematic studies.

#### *2nd round*

**Final discussion.** All experts were invited to a final statement on the issues discussed.

### *Reporting on the Panel findings*

Reporting on the findings was carried out in several steps. After the Panel meeting, a summary report on the exercise (where contributions were not nominally attributed) was circulated to participants, for possible corrections or additions. All members were invited to respond to this request, even if only to state that no change were necessary.

A final Panel report was than prepared and its contents are reflected in sections 3 and 4 of the case study.

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## **References**

- ACSS (2012a). *Monitorização Mensal da Actividade Assistencial do SNS, 2012*. Lisbon, Administração Central do Sistema de Saude [Central Administration of the Health System, Ministry of Health].
- ACSS (2012b). *Utentes Isentos de Taxas Moderadoras [User charges data]*. Lisbon, Administração Central do Sistema de Saude [Central Administration of the Health System, Ministry of Health] (<http://www.acss.min-saude.pt/DownloadsePublica%C3%A7%C3%B5es/TabelaseImpressos/TaxasModeradoras/tabid/142/language/pt-PT/Default.aspx>, accessed 29 October 2014).
- ACSS (2013). Utentes faltam a um milhão de consultas por ano. *Jornal SOL*, 4 March ([http://sol.sapo.pt/inicio/Sociedade/Interior.aspx?content\\_id=69330](http://sol.sapo.pt/inicio/Sociedade/Interior.aspx?content_id=69330), accessed 3 November 2014).

Atkins D et al (2004). Systems for grading the quality of evidence and the strength of recommendation I: critical appraisal of existing approaches. The GRADE Working Group. *BMC Health Services Research*, 4: 38.

Barbosa AM (2013). O que faz e/ou pode fazer o SNS antes & depois do hospital. In: *Debate preparatório do 1.º Congresso da FSNS, A saúde dos portugueses: antes & depois do hospital*, Porto, Fundação para a Saúde, Serviço Nacional de Saúde.

Biscaia A (2013). *Unidade de saúde familiar: um modelo positivo*. Braga, Fundação para a Saúde, Serviço Nacional de Saúde.

Caldas de Almeida JM (2009). Portuguese national mental health plan (2007–2016) executive summary. *Mental Health and Family Medicine*, 6(4): 233–244.

Campos A (2013). Receitas de ansiolíticos para idosos duplicaram. *Jornal Público*, 22 February (<http://www.publico.pt/portugal/jornal/receitas-de-ansioliticos-para-idosos-duplicaram-26105732>, accessed 3 November 2014).

Caritas Europa (2013). *The impact of the European crisis. A study of the impact of the crisis and austerity on people, with a special focus on Greece, Ireland, Italy, Portugal and Spain*. Brussels, Caritas Europa.

Carvalho A, Rodrigues F (2013). Doentes mentais estão a abandonar tratamento por falta de dinheiro. *Jornal Público*, 10 March (<http://www.publico.pt/portugal/jornal/doentes-mentais-estao-a-abandonar-tratamento-por-falta-de-dinheiro-26191140>, accessed 29 October 2014).

Cordeiro J (2012). Farmácias à beira da falência. *RTP*, 10 August (<http://www.rtp.pt/noticias/index.php?article=578145&utm=2&layout=123&visual=61>, accessed 29 October 2014).

Cunha J (2012). *As exportações do sector da saúde cresceram 8% em 2012*. Lisbon, Health Cluster Portugal.

Currie C et al., eds. (2012). *Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey*. Copenhagen, WHO Regional Office for Europe, 2012 (Health Policy for Children and Adolescents, No. 6).

Directorate-General of Budget (2012a). *Orçamento do Estado 2013 [State budget 2013]*. Lisbon, Ministério das Finanças Direção-Geral do Orçamento.

Directorate-General of Budget (2012b). *Síntese da execução orçamental [Summary of execution of state budget]*. Lisbon, Ministério das Finanças Direção-Geral do Orçamento (<http://www.dgo.pt/execucaoorcamental/Paginas/Sintese-da-Execucao-Orcamental-Mensal.aspx?Ano=2012&Mes=Maio>, accessed 29 October 2014).

Directorate-General of Health (2013). *Departamento da Qualidade na Saúde [Department of Quality in Health]*. Lisbon, Directorate General of Health ([www.dgs.pt/ms/8/default.aspx?id=5521](http://www.dgs.pt/ms/8/default.aspx?id=5521), accessed 29 October 2014).

European Commission (2011). *Eurobarometer 2010*. Brussels, European Commission.

European Commission (2010). *Flash Eurobarometer 289: monitoring the social impact of the crisis – public perceptions in the European Union*. Brussels, European Commission,

European Commission (2013a). *Eurobarometer 2012*. Brussels, European Commission, 2012

European Commission (2013b). *Statistics, accidents data*. Brussels, European Commission Mobility and Transport, Road Safety ([http://ec.europa.eu/transport/road\\_safety/specialist/statistics/index\\_en.htm](http://ec.europa.eu/transport/road_safety/specialist/statistics/index_en.htm), accessed 29 October 2014).

Eurostat (2013). *Unemployment statistics*. Luxembourg, Eurostat ([http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Unemployment\\_statistics](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Unemployment_statistics), accessed 29 October 2014).

Evans GW, Schamberg MA (2009). Childhood poverty, chronic stress, and adult working memory. *Proceedings of the National Academy of Sciences USA*, 106: 6545–6549.

Evans G, et al. (1993). *Who are the zombie masters, and what do they want?* Vancouver, Health Policy Research Unit, Centre for Health Services and Policy Research.

Figueras J (2011). *Health policy, getting evidence into practice. What is the evidence? What are the implications for Public Health?* Lisbon, European Observatory on Health Systems and Policies, 3 June (oral communication).

Francisco Manuel dos Santos Foundation (2013). *Conhecer a crise*. Lisbon, Fundação Francisco Manuel dos Santos (<http://www.conheceracrise.com>, accessed 29 October 2014).

Frasquilho MA, Frasquilho D (2011). Impacto do contexto socio-económico na adesão ao tratamento psicofarmacológico. In: *Congresso da Associação Psiquiátrica Alentejana*.

Glassman, A, Chalkidou K (2012). *Priority-setting in health building institutions for smarter public spending*. London, Priority-Setting Institutions for Global Health Working Group, Centre for Global Development.

Goulão J (2012). Crise está a provocar 'fenómeno' de 'consumos de desespero' de drogas. *Jornal SOL*, 12 April (<http://www.sol.pt/noticia/46596>, accessed 29 October 2014).

Health Regulatory Authority (2013a). *Avaliação do acesso dos utentes aos cuidados continuados de saúde*. Lisbon, Entidade Reguladora da Saúde ([https://www.ers.pt/uploads/writer\\_file/document/824/Cuidados\\_continuados.pdf](https://www.ers.pt/uploads/writer_file/document/824/Cuidados_continuados.pdf), accessed 29 October 2014).

Health Regulatory Authority (2013b). *O novo regime jurídico das taxas moderadoras. Junho 2013*. Lisbon, Entidade Reguladora da Saúde ([https://www.ers.pt/uploads/writer\\_file/document/892/Estudo\\_Taxas\\_Moderadoras.pdf](https://www.ers.pt/uploads/writer_file/document/892/Estudo_Taxas_Moderadoras.pdf), accessed 29 October 2014).

Infarmed (2011). *Análise mensal do mercado do medicamento [Monthly analysis of the pharmaceutical market]*. Lisbon, Ministério da Saúde Infarmed ([http://www.infarmed.pt/portal/page/portal/INFARMED/MONITORIZACAO\\_DO\\_MERCADO/OBSERVATORIO/ANALISE\\_MENSAL\\_MERCADO](http://www.infarmed.pt/portal/page/portal/INFARMED/MONITORIZACAO_DO_MERCADO/OBSERVATORIO/ANALISE_MENSAL_MERCADO), accessed 29 October 2014).

Infarmed (2012). *Análise mensal do mercado do medicamento [Monthly analysis of the pharmaceutical market]*. Lisbon, Ministério da Saúde Infarmed ([http://www.infarmed.pt/portal/page/portal/INFARMED/MONITORIZACAO\\_DO\\_MERCADO/OBSERVATORIO/ANALISE\\_MENSAL\\_MERCADO](http://www.infarmed.pt/portal/page/portal/INFARMED/MONITORIZACAO_DO_MERCADO/OBSERVATORIO/ANALISE_MENSAL_MERCADO), accessed 29 October 2014).

Infarmed (2013). *Análise mensal do mercado do medicamento [Monthly analysis of the pharmaceutical market]*. Lisbon, Ministério da Saúde Infarmed ([http://www.infarmed.pt/portal/page/portal/INFARMED/MONITORIZACAO\\_DO\\_MERCADO/OBSERVATORIO/ANALISE\\_MENSAL\\_MERCADO](http://www.infarmed.pt/portal/page/portal/INFARMED/MONITORIZACAO_DO_MERCADO/OBSERVATORIO/ANALISE_MENSAL_MERCADO), accessed 29 October 2014).

Instituto Europeu, Faculdade de Direito (2013). *Sondagem: atitude dos portugueses face à troika*. Lisbon, University of Lisbon.

Lopes M et al. (2012a). *Violência, abuso, negligência e condição de saúde dos idosos*. Lisbon, Directorate General of Health, University of Évora, New University of Lisbon and Escola National Institute of Public Health (<http://dspace.uevora.pt/rdpc/handle/10174/7231>, accessed 29 October 2014).

Lopes M et al. (2012b). *Violência sobre os idosos: um olhar sobre a atualidade*. In: *11 Conferência Internacional de Representações Sociais. As representações sociais em sociedades em mudança*, June.

Mazick A et al. (2012). Excess mortality among the elderly in 12 European countries, February and March 2012. *Eurosurveillance*, 17: 14.

Ministry of Health (2013a). *Custos com transportes de doentes diminuíram 39% nos últimos dois anos*. Lisbon, Ministério da Saúde (<http://www.portugal.gov.pt/pt/os-ministerios/ministerio-da-saude/mantenha-se-atualizado/20130430-ms-transporte-doentes.aspx>, accessed 29 October 2014).

Ministry of Health (2013b). *Utentes faltam a um milhão de consultas por ano [Users are missing a million visits per year]*. Lisbon, Ministério da Saúde ([http://sol.sapo.ao/inicio/Sociedade/Interior.aspx?content\\_id=69330](http://sol.sapo.ao/inicio/Sociedade/Interior.aspx?content_id=69330), accessed 29 October 2014).

Mourato P (2013). Consumo de ansiolíticos em maiores de 65 anos duplicou. *DN Portugal*, 21 February ([http://www.dn.pt/inicio/portugal/interior.aspx?content\\_id=3065534&page=-1](http://www.dn.pt/inicio/portugal/interior.aspx?content_id=3065534&page=-1), accessed 3 November 2014).

National Commission of Medical Ethics (2012). *Parecer sobre um modelo de deliberação para financiamento do custo dos medicamentos*. Lisbon, Conselho Nacional de Etica Para as Ciências da Vida [National Commission of Medical Ethics].

National Institute of Medical Emergency Medicine (2013b). Tentativas de suicídio aumentam com a crise. *Jornal Público*, 7 January (<http://www.publico.pt/sociedade/noticia/tentativas-de-suicidio-aumentam-com-a-crise-1579762>, accessed 29 October 2014).

OECD (2011). *Health at a glance Europe 2011*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/health/health-systems/49105858.pdf>, accessed 5 November 2014).

OECD (2012a). *Health at a glance Europe 2012*. Paris, Organisation for Co-operation and Development ([http://ec.europa.eu/health/reports/docs/health\\_glance\\_2012\\_en.pdf](http://ec.europa.eu/health/reports/docs/health_glance_2012_en.pdf), accessed 5 November 2014).

OECD (2012b). *Health statistics*. Paris, Organisation for Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 5 November 2014).

OECD (2013a). *Country statistical profile: Portugal*. Paris, Organisation for Co-operation and Development (Key tables 10.1787/csp-prt-table-2013-2-en).

OECD (2013b). *Economics: key tables*. Paris, Organisation for Co-operation and Development ([http://www.oecd-ilibrary.org/economics/economics-key-tables-from-oecd\\_2074384x](http://www.oecd-ilibrary.org/economics/economics-key-tables-from-oecd_2074384x), accessed 5 November 2014).

OECD (2014). *Demographic and economic indicators*. Paris, Organisation for Co-operation and Development.

Ordem dos Enfermeiros (2013). *Solicitação de Declarações das Diretivas Comunitárias*. Lisbon, Ordem dos Enfermeiros, 2013

Ordem dos Médicos (2013). *Pedidos de certificados para apresentar no estrangeiro*. Lisbon, Ordem dos Médicos, 2013

Pita Barros P, Machado S, Simões J. (2011). Portugal: Health system review. *Health Systems in Transition*, 13(4): 1–156.

Pita Barros P et al. (2013). *Impacto das taxas moderadoras na utilização de serviços de saúde*. Lisbon, Nova School of Business and Economics (<http://www.acss.min-saude.pt/Portals/0/impacto-taxas-moderadoras-v3.pdf>, accessed 5 November 2014).

PORDATA (2013). *Health expenditure as a % of GDP in Europe*. Lisbon, PORDATA (<http://www.pordata.pt/en/Europe/Health+expenditure+as+a+percentage+of+GDP-1962>, accessed 29 October 2014).

Portuguese Insurance Institute (2011). *Estatísticas de Seguros*. Lisbon. Instituto de Seguros de Portugal ([http://www.isp.pt/Estatisticas/seguros/estatisticas\\_anuais/historico/EstatSeguros2011.pdf](http://www.isp.pt/Estatisticas/seguros/estatisticas_anuais/historico/EstatSeguros2011.pdf), accessed 29 October 2014).

Portuguese Observatory on Health Systems (2012). *Crise e Saúde: Um país em sofrimento. Relatório de Primavera 2012*. Lisbon, Observatório Português dos Sistemas de Saúde (<http://dspace.uevora.pt/rdpc/handle/10174/7263>, accessed 29 October 2014).

Rechel B et al. (2011). Economic crisis and communicable disease control in Europe: a scoping study among national experts. *Health Policy*, 103(2–3): 168–175.

RNCCI (2012). *Relatório de monitorização do desenvolvimento e da actividade da Rede Nacional de Cuidados Continuados Integrados (RNCCI) 1 Semestre de 2012*. Lisbon, Ministério da Saúde ([http://www.rncci.min-saude.pt/SiteCollectionDocuments/rev\\_relatorio\\_1\\_ semestre\\_2012.pdf](http://www.rncci.min-saude.pt/SiteCollectionDocuments/rev_relatorio_1_ semestre_2012.pdf), accessed 29 October 2014).

SEDES (2012). *O Impacto da Crise no Bem-estar dos Portugueses*. Lisbon, Associação para o Desenvolvimento Económico e Social (<http://www.sedes.pt/multimedia/File/SEDES-icc-Estudo.pdf>, accessed 29 October 2014).

Shurcke M et al. (2011). The impact of economic crises on communicable disease transmission and control: a systematic review of the evidence. *PLoS ONE*, 6: 6.

Silva JM (2012). Ordem dos Médicos confirma racionamento. *Expresso* 14 June (<http://expresso.sapo.pt/ordem-dos-medicos-confirma-acionamento=f732940>, accessed 29 October 2014).

Simões, J, Barros PP, Pereira J (2007). *A sustentabilidade financeira do serviço nacional de saúde*. Lisboa: Ministério da Saúde, 2007

Solantaus T, Leinonen J, Punamaki RL (2004). Children's mental health in times of economic recession: replication and extension of the family economic stress model in Finland. *Developmental Psychology*, 40(3): 412–429.

Statistics Portugal (2012). *Taxas de suicídio por 100 000 habitantes em Portugal*. Lisbon, Instituto Nacional de Estatística (<http://www.spsuicidologia.pt/sobre-o-suicidio/estatistica>, accessed 3 November 2014).

Statistics Portugal (2013). *Conta satélite da saúde*. Lisbon, Instituto Nacional de Estatística ([http://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_contas\\_nacionais&contexto=cs&selTab=tab3&perfil=97154797&INST=116634832&xlang=pt](http://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_contas_nacionais&contexto=cs&selTab=tab3&perfil=97154797&INST=116634832&xlang=pt), accessed 29 October 2014).

Swartz K (2010). *Cost-sharing: effects on spending and outcomes*. Princeton, Robert Wood Johnson Foundation (<http://www.rwjf.org/en/research-publications/find-rwjf-research/2011/12/cost-sharing--effects-on-spending-and-outcomes.html>, accessed 3 November 2014).

Weightman A et al. (2005). *Grading evidence and recommendations for public health interventions: developing and piloting a framework*. London, Health Development Agency.

WHO (2009). *Health survey initiative*. Geneva, World Health Organization.

WHO Regional Office for Europe (2012). *Environmental health inequalities in Europe*. Copenhagen, WHO Regional Office for Europe.

WHO Regional Office for Europe (2014). *Global health observatory data repository*. Copenhagen, WHO Regional Office for Europe (<http://apps.who.int/gho/data/node.main.475?lang=en>, accessed 3 November 2014).





Part II

**Country profiles  
of health system  
responses to the crisis**



# Albania

*Genç Burazeri and Enver Roshi*

## Economic trends

- Albania's economy did not contract during crisis, although per capita GDP growth slowed in 2009 and 2010. Government spending as a share of GDP increased slightly in 2009 but declined in 2010 and 2011; expenditure levels are low relative to other European countries.
- Public per capita health expenditure growth declined by 10.7% in 2010; OOP health expenditure levels decreased to a lesser extent (Albania: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- No response reported.

### Changes to health coverage

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

- No response reported.

#### *User charges*

- No response reported.

### Changes to health service planning, purchasing and delivery

#### *Prices of medical goods*

- No response reported.

#### *Salaries and motivation of health sector workers*

- No response reported.

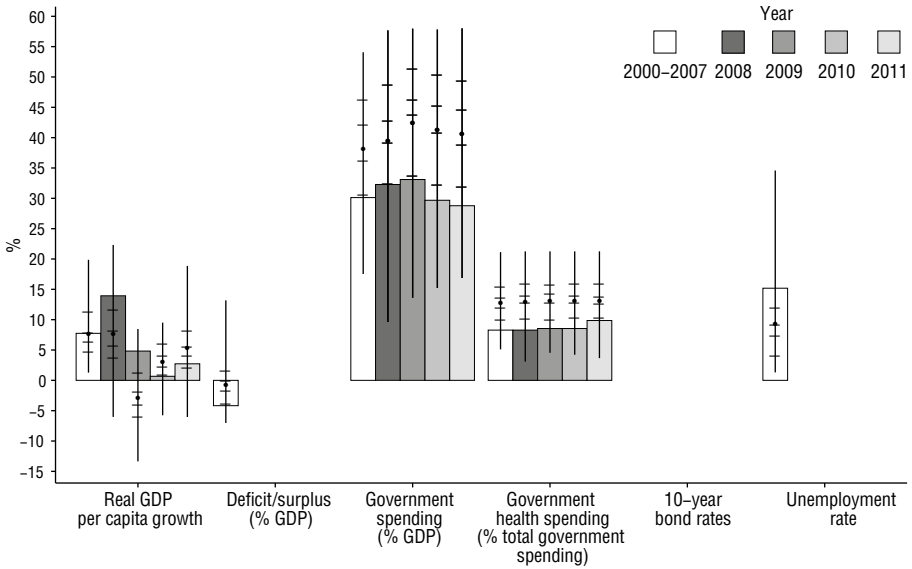
#### *Payment to providers*

- No response reported.

#### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

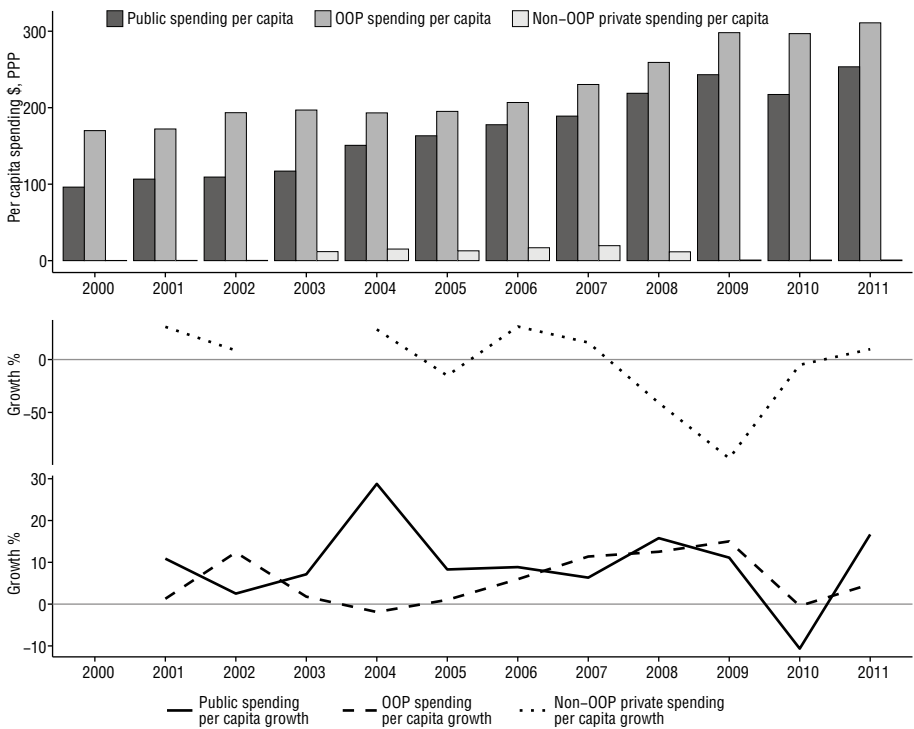
- No response reported.

**Albania: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011<sup>1</sup>



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Albania: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

1 In the Figure 1 for each country in Part II, vertical lines indicate the distribution across European countries in each year, by quintile; the dots are average values across European countries in each year.

*Provider infrastructure and capital investment*

- No response reported.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- No response reported.

# Armenia

*Lyudmila Niazyan and Varduhi Petrosyan*

## Economic trends

- Per capita real GDP contracted by 13.2% in 2009, which was the most substantial slowdown in the European region in that year. Real GDP growth rebounded in 2010 and 2011 to be on par with mean growth rates in Europe. During the crisis in 2009, deficit levels as a share of GDP increased as total government spending did not decrease along with the overall economy. The health share of government spending, however, has been progressively lower in every year from 2008 to 2011.
- Unemployment rates have been below the European average throughout the crisis.
- The primary source of health financing has been OOP payments since the early 2000s; OOP spending levels continued to increase from 2008 to 2011. While there had been a convergence in the proportion of spending from OOP payments and from the government, these two sources of funds have diverged once more since 2008 as public per capita spending decreased (Armenia: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- No response reported.

### Changes to health coverage

#### *Population (entitlement)*

- No response reported.

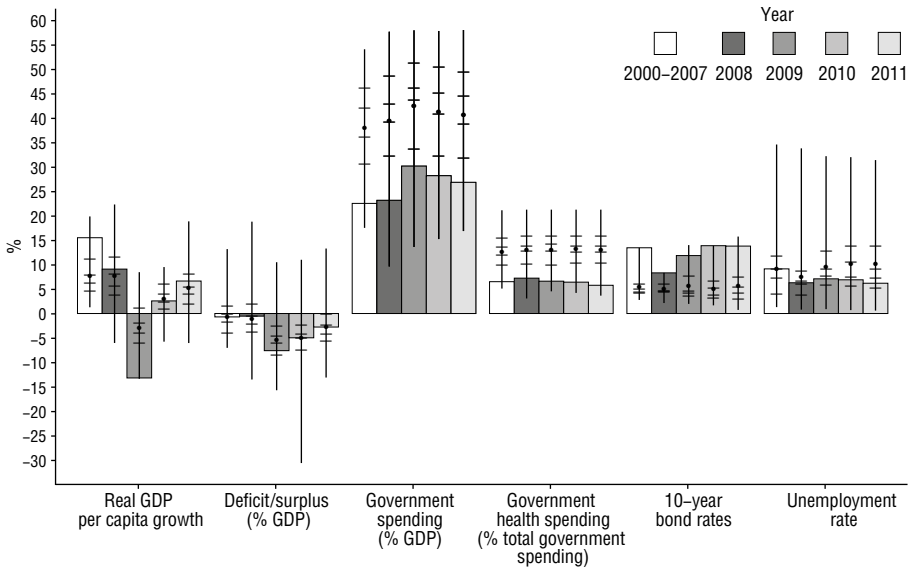
#### *The benefits package*

- No response reported.

#### *User charges*

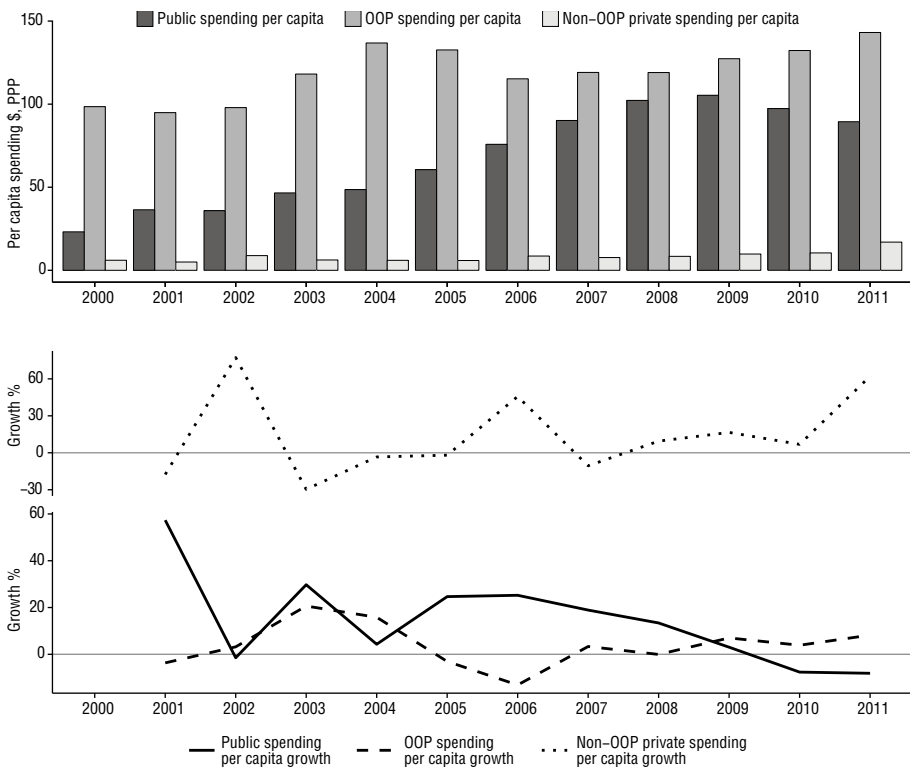
- Introduction of user charges for emergency care (exemption for emergency resuscitation) and gynaecological services (2011) and for cancer treatment and treatment for sexually transmitted infections (2012).

**Armenia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; 10-year bond rates: IMF; Other indicators: WHO Health for All.

**Armenia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- No response reported.

### *Salaries and motivation of health sector workers*

- No response reported.

### *Payment to providers*

- No response reported.

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

### *Provider infrastructure and capital investment*

- Delayed hospital and ambulance service modernization projects until 2011.

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

### *Waiting times*

- No response reported.

### *Health promotion and prevention*

- No response reported.

# Austria

*Thomas Czypionka and Maria M. Hofmarcher*

## Economic trends

- Austria's economy contracted in 2009 at a rate comparable to the European mean, but quickly returned to pre-crisis growth rates. While deficit levels have hovered around the European average in every year, 10-year bond rates are low. Government spending as a share of GDP has stayed in the highest quintile, and health spending as a share of government spending is also comparably high.
- Unemployment rates have consistently been among the lowest in Europe.
- Public health care spending per capita has grown steadily since 2000, although growth rates slowed since 2008 (Austria: Fig. 1).
- Austria Fig. 2 gives the trends in per capita spending on health.

## Policy responses

### Changes to public funding for the health system

- *The Health Fund Law introduced an annual federal government cash transfer to SHI to help sickness funds to balance budgets, conditional on the sickness funds defining and achieving a cost-containment “roadmap” (2009).*
- *In parallel, a Debt Forgiveness Law wrote off debts accumulated by the sickness funds in the years prior to the crisis (€150 million written off per year between 2010 and 2012) (2009); the cash transfer was set at €100 million in 2010 and cut to €40 million in 2011 because of crisis-related budget consolidation; tax-funded subsidies for health insurance are being kept in spite of balanced budget sheets.*
- However, the cut had negligible effect as sickness funds had consolidated their finances between 2008 and 2010 through improvements in purchasing and, more importantly, as a result of *robust revenue growth coming from the favourable employment figures, resulting in financial surpluses*; to meet EU fiscal targets, the federal government established a consolidation package to cut its spending by €26 billion between 2012 and 2016, with an estimated 13% of the cut coming from the health sector (2011).

- *The health sector is to achieve a cost-containment of €3.4 billion between 2012 and 2016. This should be achieved through a global budget cap for public spending on health (growth in health care expenditure should not exceed predicted annual GDP growth): 60% of the savings are to be generated by the regions (länder) and 40% by the sickness funds (2013).*
- SHI figures for 2013 indicate a much lower level of indebtedness than projected, largely because of higher than expected revenues but also because of a slowdown in nominal health spending growth (5% a year pre-crisis to almost 0% in 2012), a trend that is expected to continue.
- *Introduction of a budget ceiling at the federal level requiring federal ministries to adhere to multiyear spending ceilings (2011). As the federal level only finances about 5% of total public spending on health (with the biggest share of this amount allocated to hospital care), the impact of this measure on health spending is likely to be marginal.*

## Changes to health coverage

### Population (entitlement)

- Extended access to health insurance to recipients of a minimum income scheme who were previously not entitled (about 35 500 people, mainly children) (2012).

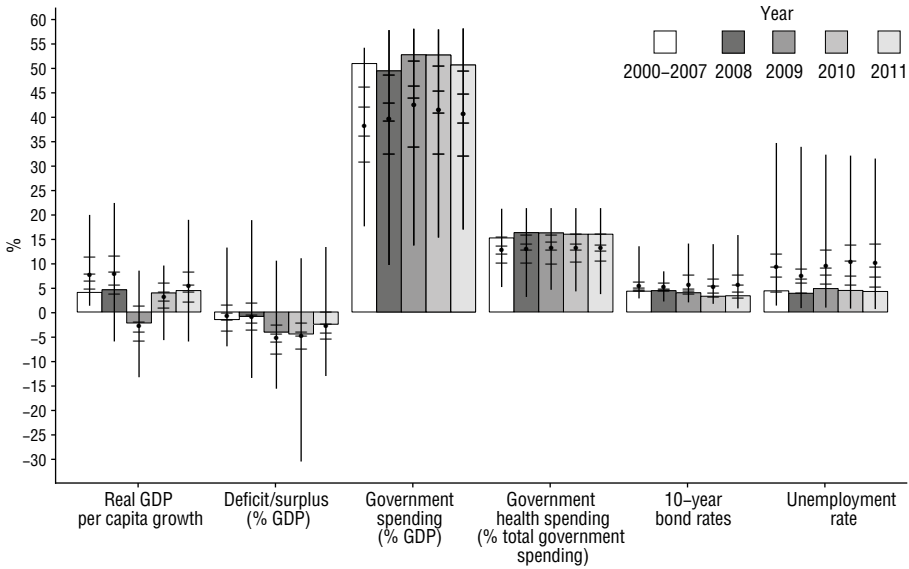
### The benefits package

- *Extended sick leave benefits to the self-employed, entitling them to €27 per day after the 43rd day of sickness (2012).*
- *Expanded ambulatory dental care benefits for the whole population by allowing dental clinics owned by sickness funds to offer a full range of dental services, including dentures (2012).*
- *Expanded list of occupational diseases covered by SHI (2012).*
- *Expanded accident insurance coverage for foster children (2012).*

### User charges

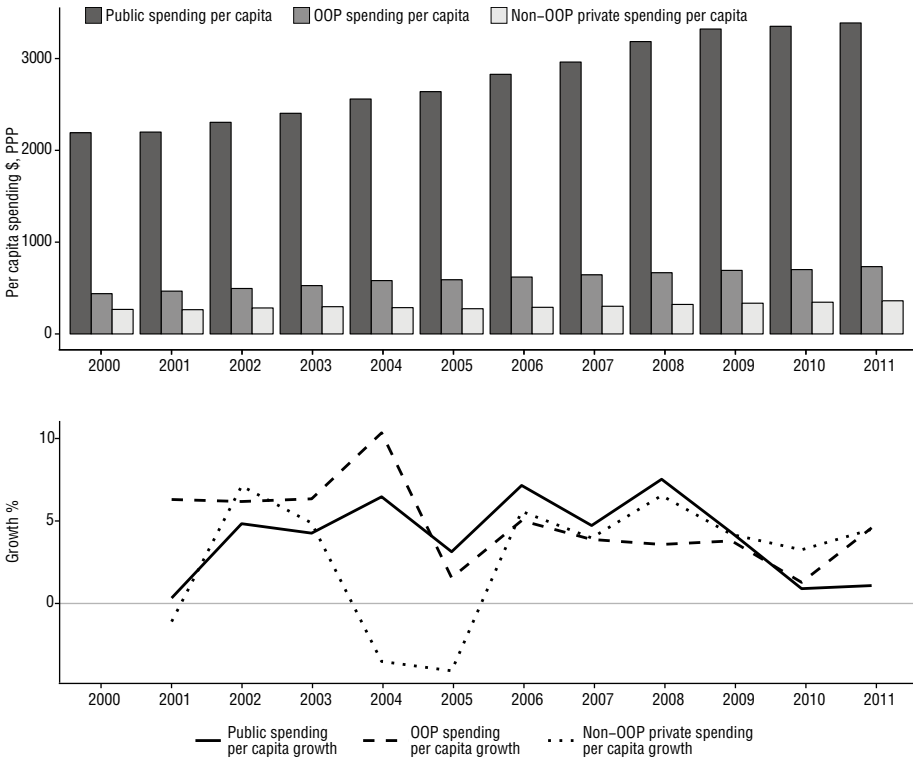
- *Capped user charges for prescription drugs at 2% of annual net income per calendar year for people with low incomes and high drug consumption (intended to benefit around 300 000 people); some lack of clarity as to who will finance the cap (2008).*
- *Increase in the annual cost of the e-card proving eligibility for statutory coverage from €10.00 to €10.30, with exemptions for non-contributing dependants (2013).*

**Austria: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Austria: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- *VAT on pharmaceuticals reduced from 20% to 10% (2009).*

### *Salaries and motivation of health sector workers*

- *Lower wage increases for health and social care professionals (2009, 2011).*

### *Payment to providers*

- No response reported.

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- The Austrian Government decided not to replace retired civil servants (2010). The Federal Ministry of Health was affected by this measure.

### *Provider infrastructure and capital investment*

- *The 2013 Health Reform aimed to implement a global budget cap through the federal infrastructure plan (Austrian Structural Plan for Health). This plan determines regional infrastructure targets, including the maximum number of ambulatory care providers and advanced technology equipment. In order to monitor compliance, federal states are required to adhere to the 2012 fiscal stability pact between the federal and regional levels of government. In the past, adherence to infrastructure targets such as reduction of the number of beds has been limited.*

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *The 2013 Health Reform defined a set of goals aimed at improving health care delivery:*
- *ensure right point of delivery and time of care;*
- *make quality measurement transparent and patient-oriented; and*
- *optimize organization of care and communication.*
- *Multiprofessional and integrated delivery models promoted.*

### *Waiting times*

- No response reported.

### *Health promotion and prevention*

- *Regional budgets for health promotion and prevention to receive additional €150 million over 10 years (2013).*
- *Setting of 10 new health targets related to promoting healthier living and health outcomes (2013).*

# Azerbaijan

*Fuad Ibrahimov*

## **Economic trends**

- Azerbaijan's real per capita GDP growth slowed consistently between 2008 and 2011; however, the economy did not contract. The government has maintained a balanced budget, although spending levels are among the lowest in Europe. Health expenditure as a share of government expenditure is low compared with other European countries (Azerbaijan: Fig. 1).
- OOP payments are the main source of health financing; growth rates for all sources of health financing are volatile, largely because of low expenditure levels (Azerbaijan: Fig. 2).

## **Policy responses**

### **Changes to public funding for the health system**

- No response reported.

### **Changes to health coverage**

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

- No response reported.

#### *User charges*

- No response reported.

### **Changes to health service planning, purchasing and delivery**

#### *Prices of medical goods*

- No response reported.

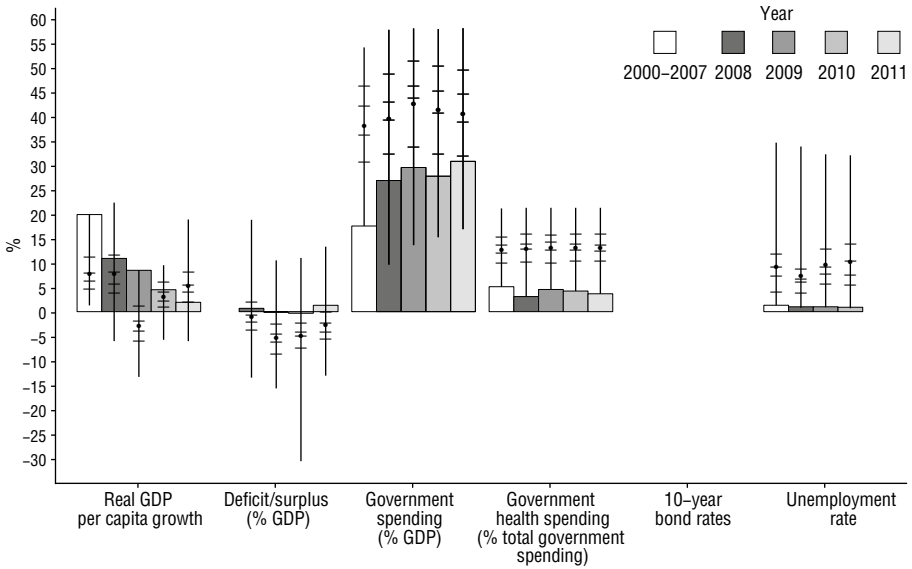
#### *Salaries and motivation of health sector workers*

- *Steady annual increases in the salary levels of public sector employees, whose salaries historically have been very low (2007, 2008, 2010, 2011).*

#### *Payment to providers*

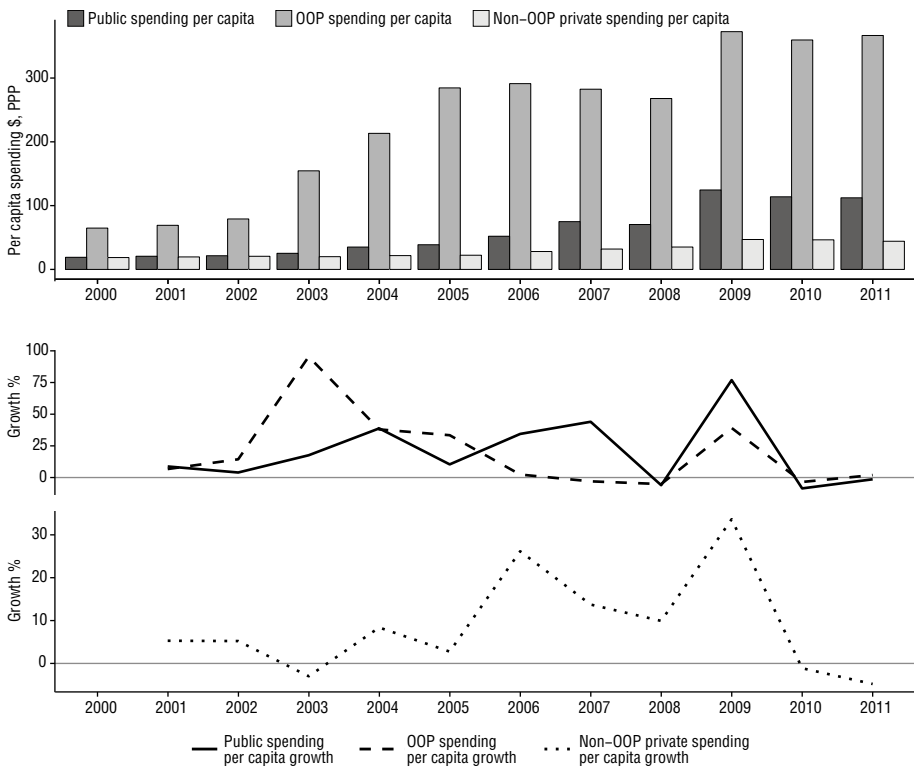
- No response reported.

**Azerbaijan: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Azerbaijan: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

*Provider infrastructure and capital investment*

- *The majority of small rural hospitals have been closed, which resulted in almost a 50% reduction in the number of beds in the country between 2010 and 2012; this was part of national health sector reforms planned before the crisis began and supported by a World Bank project.*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- No response reported.



# Belarus

*Aleksander Grakovich and Irina Novik*

## **Economic trends**

- Belarus has been less affected by the financial crisis than other European countries, although real per capita growth slowed in 2009 to 1.7%. Government expenditure as a share of GDP decreased substantially in 2010. Since 2010, health spending as a share of the government budget has increased to the European mean (Belarus: Fig. 1).

## **Policy responses**

- Belarus Fig. 2 gives the trends in per capita spending on health.

## **Changes to public funding for the health system**

- Because of the economic crisis and the 2010 devaluation of the Belarusian rouble, government spending on health has fallen from 4.3% of GDP in 2010 to 3.7% in 2012 (a decrease of 13% in per capita government spending on health in dollars between 2010 and 2011).
- High-technology medical and educational services for foreigners raised US\$ 18.6 million in off-budget revenue for health in 2010 and US\$ 21.4 million in 2011.

## **Changes to health coverage**

### *Population (entitlement)*

- No response reported.

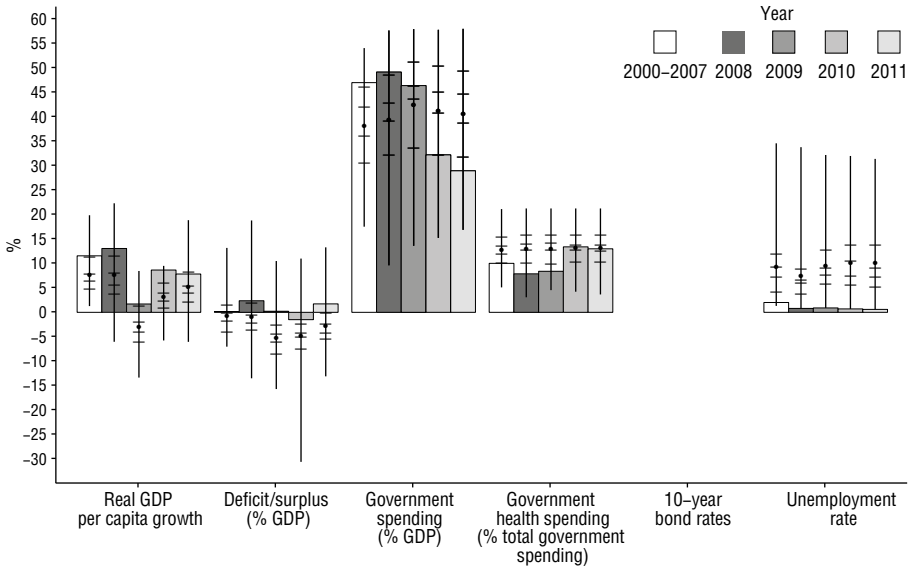
### *The benefits package*

- No response reported.

### *User charges*

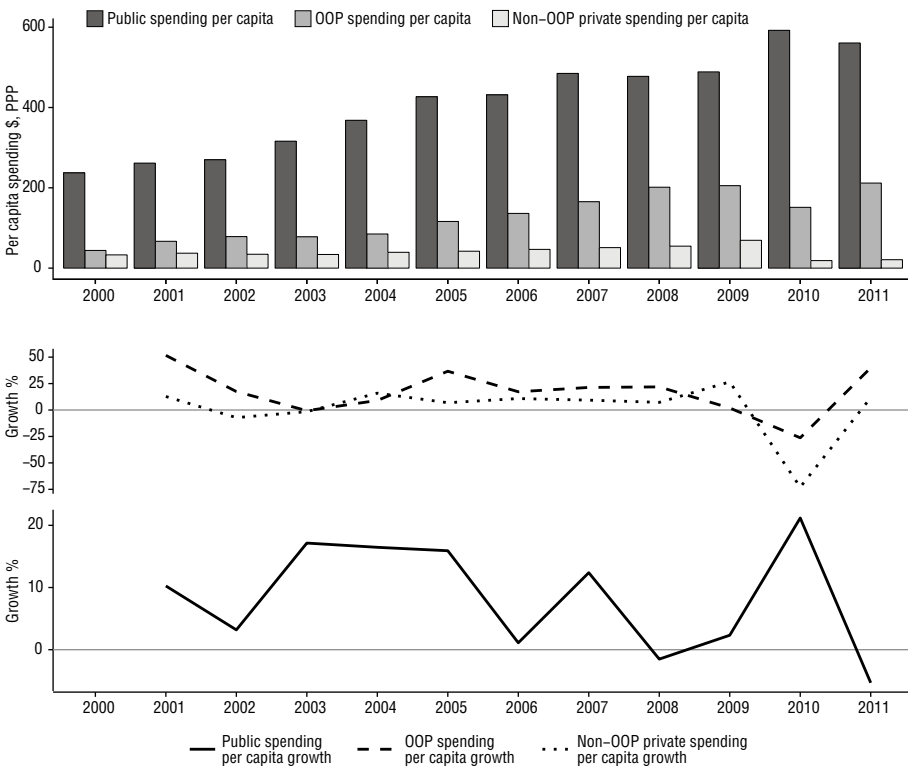
- Drugs not normally covered can be registered and prescribed on preferential terms to individual patients deemed to be in particular need (2009).
- Chernobyl victims and disabled people (previously exempt) must pay 10% of the cost of prescribed drugs and bandages on the positive list (2009).
- Pensioners and children under 3 years (previously exempt) must pay for prescription drugs (2011; policy reversed for children in 2012).

**Belarus: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Belarus: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- The Ministry of Health signed a memorandum on cost-containment with leading producers and distributors (2011) and established a Pharmaceutical Department (2012); responsibility for regulating drug prices was moved from the Ministry of Economy to the Ministry of Health (2012).
- Adopted a policy of import substitution aimed at increasing the share of domestic products and of allocation of financial resources to priority needs (2010–2012).

### *Salaries and motivation of health sector workers*

- *Eliminated ineffective positions; introduced population-to-staff ratios in outpatient settings and “doctor’s assistant” positions in outpatient primary care settings (since 2009).*
- Salary increases of 25% for all physicians working in public (budgetary) institutions and 10% increases for young health care workers (2010).
- Further salary increases for health professionals (2011) and nurses (2012).
- *Launched a pilot project aimed at improvement of planning, distribution and financing of health care institutions’ expenditure in two regions of the country. As part of the project, quality indicators measuring prevention, management of chronic diseases, replacement of secondary (specialized) medical care and organizational issues were used to determine physicians’ bonuses in outpatient and inpatient health care (2013).*

### *Payment to providers*

- No response reported.

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Reduction of expenditure on fuel and energy resources, transport, business trips and communication services (July 2011).
- Merged the “parallel” budgets of Belarusian Railway, Medical Service of Civil Aviation, Ministry of Education with the budget of the Ministry of Health in order to consolidate finance for health care and rationalize financing (2011–2012).

### *Provider infrastructure and capital investment*

- Reduction of and/or deferred investment in capital assets (infrastructure and equipment), expensive facilities and construction. However, information technology systems are being introduced in many regions

of the country and telemedicine and tele-consultation have still seen considerable investment (2011).

- Allocation of budgetary funds to specific projects decided according to economic evaluation.
- *The pilot project (see above) aimed for allocation of about 40% of the total health care funding to outpatient institutions (including emergency medical care); expansion of rights and independence of managers and heads of health care institutions in cost-management and use of resources; restructuring of hospital bed numbers initiated, taking into consideration population needs and morbidity (2013).*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Decreased proportion of inpatient services and redirection of resources to day care and outpatient care (expenditure allocated to outpatient institutions as a percentage of total health expenditure increased from 31.4% in 2008 to 35.0% in 2009, 38% in 2010 and 40% in 2011).
- Elimination of laboratory testing duplication at different levels of the system (2010–2012).

*Waiting times*

- No response reported.

*Health promotion and prevention*

- *Annual increases in the price of alcohol and tobacco (since 2010).*
- *Increase in the price of tobacco by 62% and in the price of alcohol by 28.4% (2012).*

# Belgium

*Irina Cleemput and Carine Van de Voorde*

## Economic trends

- The Belgian economy contracted in 2009 and the government has run larger deficits since that time. Overall, the economy has been recovering, with below average unemployment rates and real per capita GDP growth returning to pre-crisis levels. Government spending as a share of GDP has remained high relative to other European countries, which led to higher deficits beginning in 2009.
- Health as a share of government spending has been stable above the European average. Public per capita health care spending grew more slowly in 2010 but continued to show positive growth. OOP expenditure per capita decreased by 1.6% in 2009 (however, this may reflect, in part, the inclusion, in 2008, of the coverage of minor health risks for the self-employed into the compulsory health insurance scheme) (Belgium: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

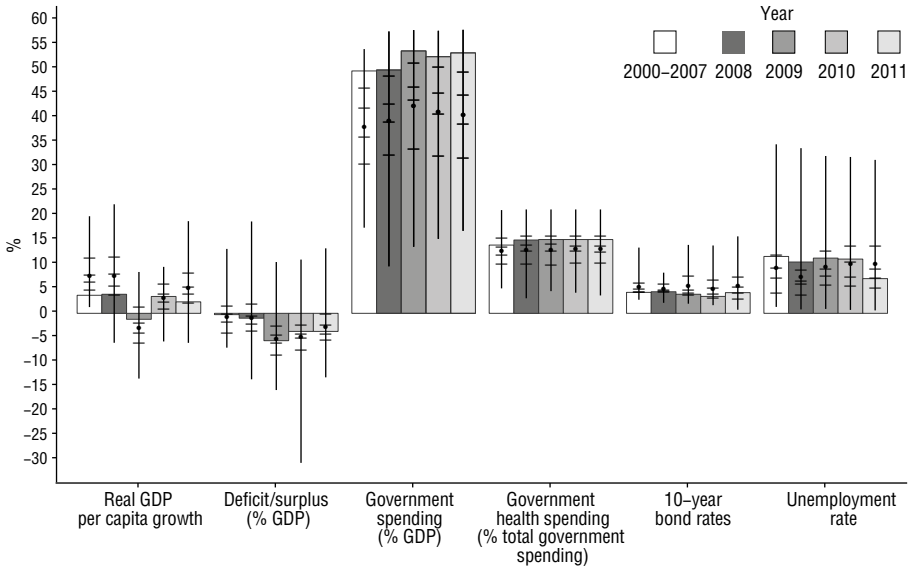
- Because of the economic crisis, the compulsory health insurance system did not transfer revenue to its reserve Fund for the Future (set up to compensate SHI for population ageing) in 2011 or 2012.
- The usual compulsory health insurance budget cap (the “growth norm” of 4.5% in real terms plus inflation) was not applied in 2012. The budget was set at a lower rate of €25.6 billion (€0.2 billion less than in 2011).
- The budget cap was reduced to 2% in 2013 (from 4.5%) and 3% for 2014.
- *The share of VAT and tobacco tax revenues earmarked for social security was increased to limit government subsidies and reduce employer contributions and labour costs (a gradual increase since 2008).*

### Changes to health coverage

#### *Population (entitlement)*

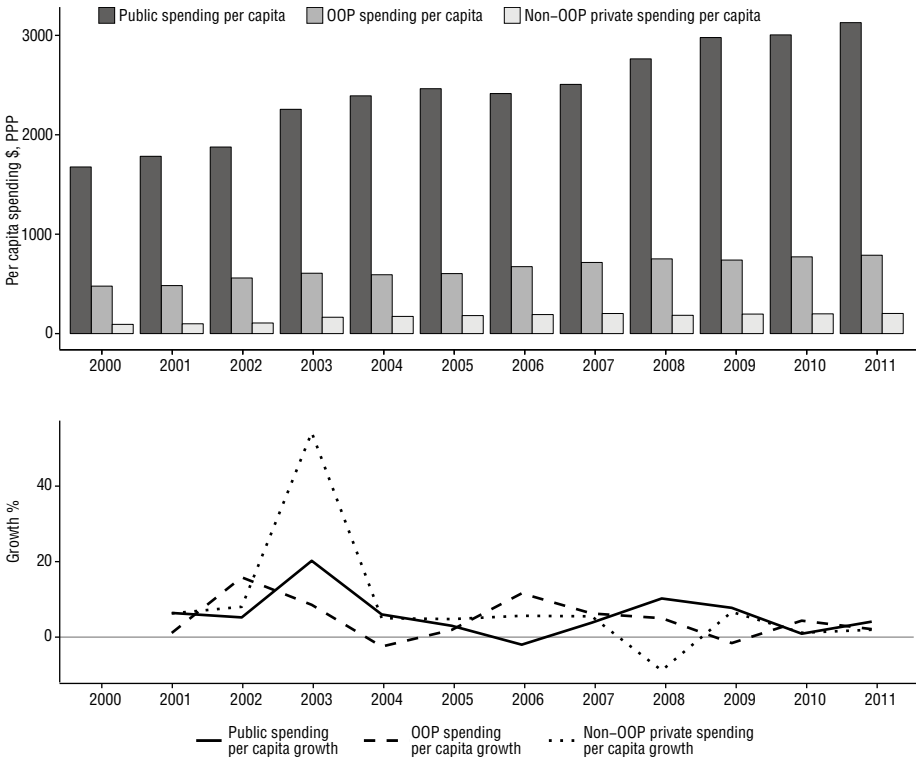
- *Co-payments for dental care services (but excluding orthodontic treatment) waived from September 2005 onwards for children under 12 years of age. In*

**Belgium: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Belgium: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*July 2008 this measure was extended to children up to 15 years of age and in May 2009 to up to 18 years of age. In addition, the age limit for those eligible to have their annual preventive dental check-up reimbursed was raised from 60 to 63 years of age in 2012.*

- *Benefits package for the self-employed and their dependants extended to include so-called small health risks (e.g. ambulatory care, pharmaceuticals for outpatient care, home care, dental care) in 2008, removing the distinction in coverage between the self-employed and the rest of the population (decision taken before the start of the crisis).*

#### The benefits package

- *Introduction of reimbursement of travel costs for chronically ill children under 18 years of age treated in rehabilitation centres and cash benefits for incontinence materials for people with untreatable incontinence (2011).*
- *Extended entitlement to benefits in kind to ambulatory care for some vulnerable population groups (benefits paid by the sickness funds: social third-party payment system) (2011).*
- *HTA-determined reduction in the number of conditions eligible for reimbursed oxygen therapy (2012).*

#### User charges

- *Cap on payment above the reference price per prescription drug introduced (2010).*
- *User charges for GP office consultations simplified to four levels to increase transparency (2011). The amount of the co-payment depends, since December 2011, on the eligibility for an increased reimbursement of medical costs and on having a global medical file. Also, supplementary fees for out-of-hours consultations are fully reimbursed by the SHI.*
- *Cost-sharing for services included in the DMPs eliminated for patients with type 2 diabetes or chronic renal failure (2009).*
- *Cap on OOP payments (maximum billing system) extended to include prescription drugs in psychiatric hospitals (2009) and travel costs for children treated in rehabilitation centres (2011).*
- *Increased reimbursement extended to people on a low income receiving fuel benefits and to indebted people (2011).*
- *Additional charges for hospital rooms with more than one bed (2010) prohibited; also prohibited additional fees charged in hospital rooms with more than one bed, except for day care provided by physicians who did not sign the agreement with the sickness funds (2013).*

- *Status of “chronic illness” introduced (2013), automatically assigned by the sickness fund to patients with at least €300 of health care expenses per trimester (not only OOP) for eight consecutive trimesters or who were entitled to the lump sum payment for the chronically ill. Patients suffering from a rare or orphan disease are also entitled to the new status. Patients with the chronic illness status are automatically eligible for the lower co-payment ceiling (as of 1 January 2013) and will be eligible for third-party payer arrangements (as of 1 January 2015).*

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- Reduction in covered drug prices by 15–17% in 2010 and by 17–19% in 2011. This measure only applies to medicines that had been reimbursed for a long time.
- Maximum reimbursement price set for drugs no longer under patent (2010).
- Price of originals reduced by 31%-41% (2011); all drug prices cut by 1.95% (2012).
- Legislation expanded to allow risk-sharing volume agreements for products without added therapeutic effect (2010).
- Drug companies obliged to submit the ex-factory prices of drugs under patent in six EU countries (Austria, Finland, France, Germany, Ireland, the Netherlands) to allow price comparisons (2012).
- Pharmacists must offer drugs in the cheapest category for INN prescriptions (2011) and acute antibiotic or antifungal treatments (2012).

### *Salaries and motivation of health sector workers*

- *Impulseo III programme aimed at strengthening primary care through granting financial incentives to GPs to establish their practices in deprived areas (2012).*
- Physicians unions and the government agreed to make a saving of €105 million by limiting and reallocating the funding available for indexation of physician fees. The indexation of fees for clinical biologists was set at 1%; medical imaging, surgery and gynaecology services at 1.5%; GP and specialist consultations at 2%; and consultations for some specialists (neurologists rheumatologists, geriatricians, dermatologists) at 5%. Dialysis fees were not modified (2013).
- *Financial incentive designed to motivate GPs to use electronic health records revised to optimize the effective implementation in primary health care (2013).*



### Payment to providers

- *A new system of remuneration for pharmacists came into force to strengthen the role of pharmacists and to partly disconnect remuneration from the price of drugs. For example, an annual lump sum of €500 per pharmacy was provided to encourage pharmacists to give detailed information to patients treated for chronic diseases when dispensing their first prescription (2010).*
- The government decided to reduce the amount paid to physicians through FFS by €60 million, to save €122 million on the indexation of these fees and to reduce the RIZIV reimbursement to orthopaedists and some types of pharmacist by €8.5 million. As part of these measures, indexation of fees for GPs and medical specialists was reduced to 1.5% (from 2.99%) (2012).
- *The percentage lump sum payments to GPs (20% in 2010) increased for maintaining the global medical file, following care trajectories and being on call.*
- *Reference amounts for hospitals (a standard which compares hospitals' expenditures to the national average) adjusted to include day care and a selection of services provided up to 30 days before the start of hospital stay (since January 2013).*

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- Some sickness funds reduced the number of employees (2011).
- In 2011, the federal government decided to decrease the budget for overhead costs of the sickness funds (i.e. administrative costs) by €43.3 million in 2012, €91 million in 2013 and €112 million in 2014.

### Provider infrastructure and capital investment

- *Gradual elaboration of the e-health digital platform, set up in 2008 to permit an electronic exchange of secured data between all health actors.*
- *Several loans of the European Investment Bank (at special interest rates) have been granted for the construction of hospital complexes (since 2011).*
- *Since 2010, there has been an increased number of hospital mergers, collective purchasing of hospital materials and cooperation for information and communication technology and training. The number of hospitals decreased from 218 in 2005 to 193 in 2012 through mergers. The number of beds remained more or less constant over the same period (70 817 in 2005 and 69 972 in 2012).*
- *The federal government decided to invest in new information technology software such as MyCareNet in order to improve monitoring of patients (e.g. patients' insurance status, health status and right to increased reimbursement) (2009).*
- *Investment in the development of EBMPpracticeNet, a database of evidence-based practice guidelines for health care providers (2010).*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Improved coordination of care trajectories for diabetes and end-stage renal failure in group GP practices (2009 onwards).*
- The following measures taken to reduce health care consumption (2012):
  - reduction of the volume of pharmaceuticals requiring a-priori approval by the supervising physician of sickness funds, through stricter control of whether patients receiving approvals for pharmaceutical reimbursement fulfil the reimbursement criteria;
  - reduction of the prescribed volume of proton-pump inhibitors and antibiotics;
  - reduction of the cost of drugs used (volume) in retirement homes through compulsory use of therapeutic compendium and compulsory purchase of drugs through hospital pharmacies (this is cheaper than purchasing them from ambulatory pharmacies); and
  - limitation of the number of indications for which oxygen therapy can be reimbursed.
- Introduction of compulsory use of therapeutic guidelines when prescribing drugs in nursing homes (2012).

*Waiting times*

- No response reported (no major problems with waiting times in Belgium).

*Health promotion and prevention*

- *Subsidies given for several tobacco, alcohol and drug prevention projects (since 2007).*
- *Pilots related to breast, cervical and colorectal cancer screening in Flanders (2011 and 2012).*
- *A smoking ban imposed in indoor public places, except for isolated “smoking rooms” (nationally, 2011).*
- *Free vaccination against human papillomavirus in Flanders (2010) and nationally (2011).*
- *A national Cancer Plan (2008) launched.*
- *The National Action Plan for Alcohol 2008–2012 launched.*
- *GP-led preventive health care maintenance module launched for patients aged 45–75 (2011).*

# Bosnia and Herzegovina

*Milka Dancevic-Gojkovic*

## Economic trends

- Bosnia and Herzegovina's economy was affected by the crisis in 2009; positive growth returned in 2010 and by 2011 growth was at the European average. Total government spending and the government's priority for health spending remained above the European average after 2008. Unemployment started rising after the onset of the crisis, reaching 11.2% in 2011.
- Public and OOP payments per capita spending on health rose since the early 2000s, with public per capita spending levels tripling since 2000. Public per capita expenditure growth slowed in 2010 and 2011 compared with growth in prior years (Bosnia-Herzegovina: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- SHI revenues fell due to higher unemployment and lower salaries; in 2012 Republican Srpska SHI revenue fell by 24%.

### Changes to health coverage

#### *Population (entitlement)*

- *Extended coverage to children whose parents are not covered, people over 65 years of age and the uninsured (2009).*
- *Amended law not fully implemented because of lack of funding.*

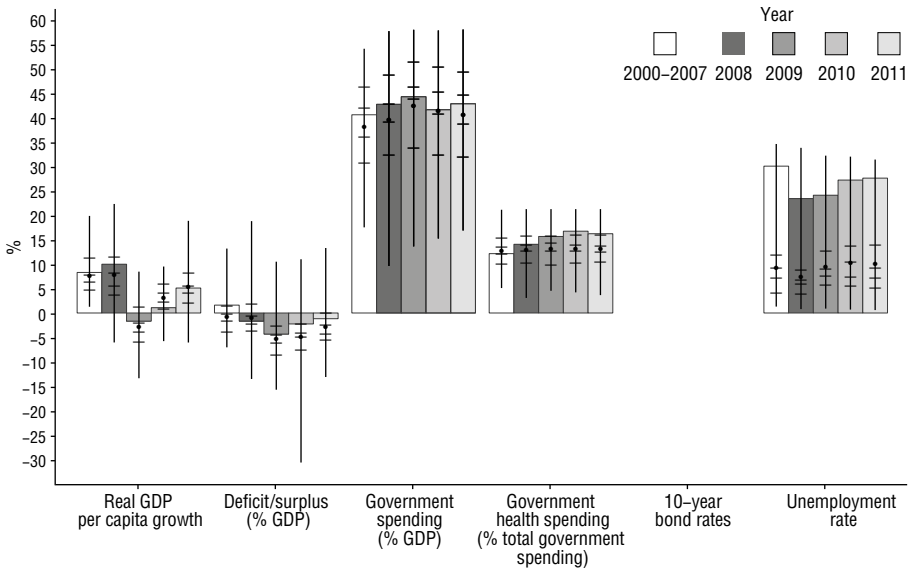
#### *The benefits package*

- *Reduction of statutory coverage of treatment abroad and sick leave benefits.*
- *Created a positive list of essential drugs that are fully covered and the Ministry of Health recommended revising the list every six months to improve access to drugs.*

#### *User charges*

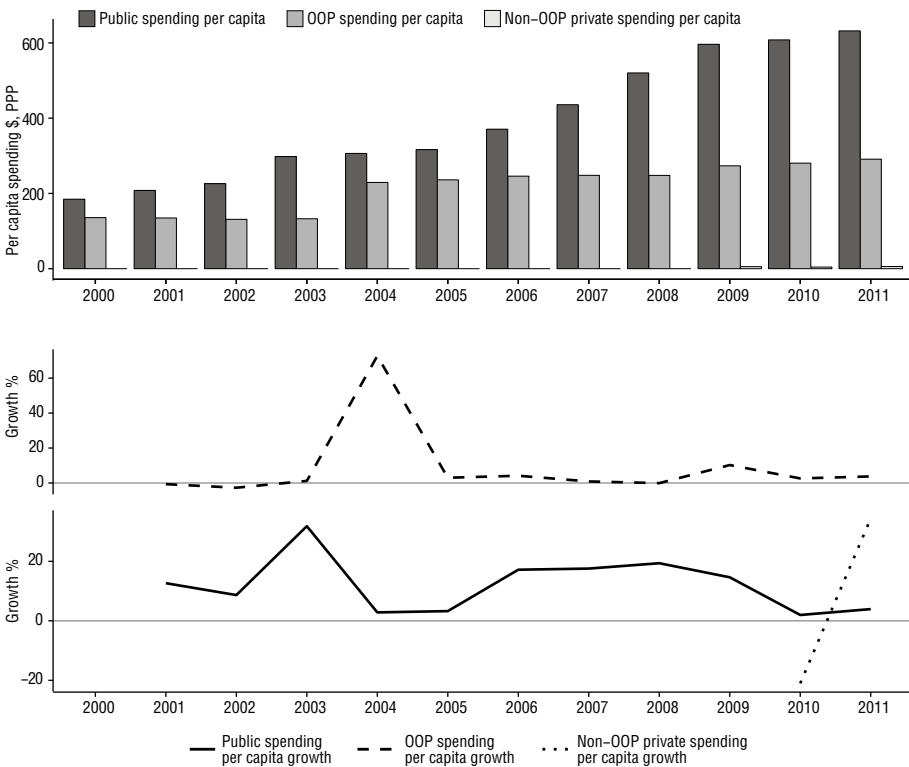
- No response reported.

**Bosnia-Herzegovina: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Bosnia-Herzegovina: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- Reduction of drug prices by 20% (2012).

### *Salaries and motivation of health sector workers*

- No response reported.

### *Payment to providers*

- *Funds to subsidize VAT for health care institutions no longer included in federal and cantonal budgets and health care institutions no longer have the right to VAT refunds (since 2009).*
- Health insurance funds introduced additional contractual measures to manage, reduce and control costs of health care providers (targeting capital investments and overhead costs such as water, electricity and pharmaceuticals and devices) and quality (minimum required amount of stock).

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

### *Provider infrastructure and capital investment*

- The share of capital investment decreased from 9% to 5.1% of public health expenditure between 2008 and 2010.

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

### *Waiting times*

- No response reported.

### *Health promotion and prevention*

- *Media campaigns and health promotion and prevention activities used to promote healthy lifestyles (2008 and 2009).*

# Bulgaria

*Antoniya Dimova and Mina Popova*

## Economic trends

- Bulgaria's real per capita GDP growth decreased by 2.1% in 2009, but by 2011 recovered to levels above the European average; the unemployment rate, however, continued to increase through 2011. Government spending as a share of GDP fell in 2010 and again in 2011. Throughout the crisis, health spending as a share of government spending has been relatively stable, although below the European average. OOP expenditure per capita has slowed since 2008, although it has maintained positive growth (Bulgaria: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- The Ministry of Health's budget was reduced in 2009, 2010 and 2012.
- SHI revenues were lower than expected in 2009 but higher than expected in 2010 and 2011 because of an increase in the contribution rate paid by employers and employees (2009).
- In 2011, the Ministry of Health received transfers from SHI; SHI was in surplus in 2009, 2010 and 2011 and the Health Insurance Law was amended to lower its reserve from 10% to 9% of revenue (2011).
- The SHI contribution rate for employers and employees was increased from 6% to 8% of contribution income (2009).
- The ceiling on contribution income was increased from BGN 2000 to BGN 2200 (2013).

### Changes to health coverage

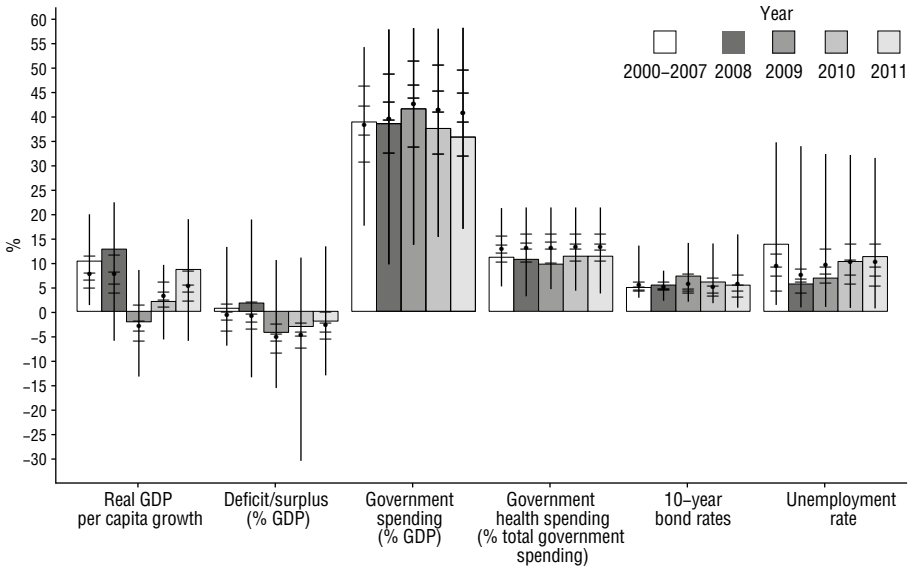
#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

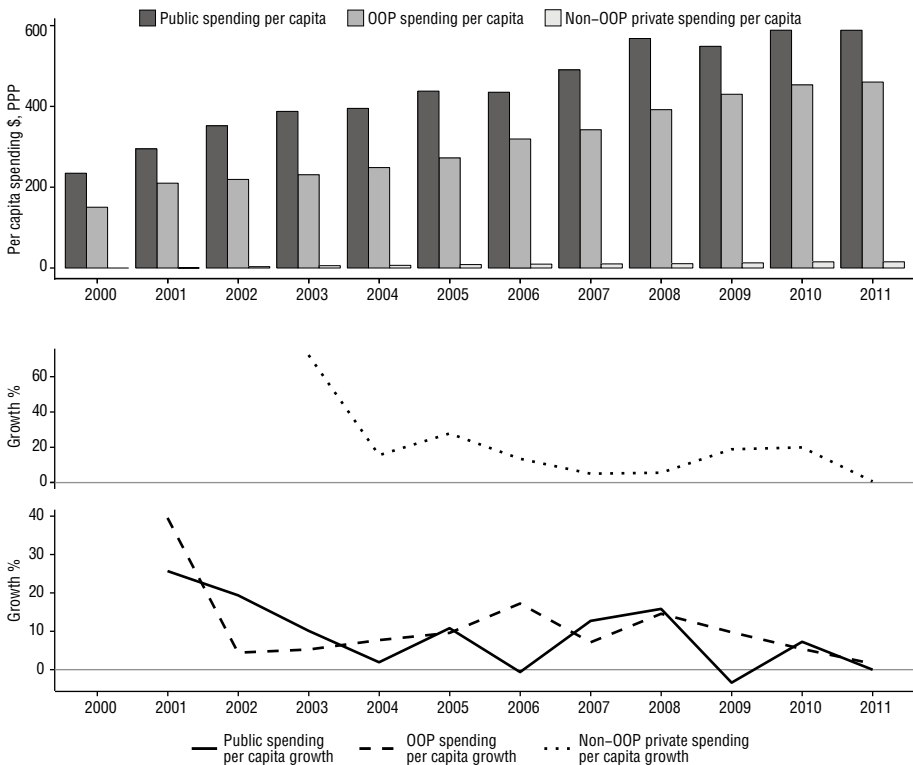
- *Provision for children under 18 years of age for direct access to specialists without a cap on the number of referrals (2011).*
- Benefits previously covered by the Ministry of Health (and therefore available to the whole population) were moved to SHI (e.g. intensive care,

**Bulgaria: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Bulgaria: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

immunization, ambulatory mental health, dermatological and sexually transmitted infection care, in vitro fertilization, immunosuppressive drugs, drugs for rare diseases, hormone therapy), where they are only available to the insured (2012).

- Created a positive list of medical devices (2012).

#### *User charges*

- Reduction of user charges for pensioners from 1% of the minimum monthly salary to BGN 1 per outpatient visit, with SHI paying the difference between the reduced and full user charge to outpatient physicians (2008, protection abolished in 2011).
- User charges set as a percentage of the minimum monthly salary replaced by fixed co-payments to protect pensioners and other vulnerable groups (2012).
- The fixed co-payments rate increased for outpatient visits and inpatient care following lobbying by the Physicians' Union, but it still remains less than 1% of the minimum monthly salary (second half of 2012).

### **Changes to health service planning, purchasing and delivery**

#### *Prices of medical goods*

- Moved procurement from the Ministry of Health to hospitals and allowed SHI to contract selectively with manufacturers offering the lowest prices (2011).

#### *Salaries and motivation of health sector workers*

- The Ministry of Health introduced a fee ceiling for all hospital contractors of the National Health Insurance Fund. The maximum fee for a team of physicians is BGN 900 and BGN 700 for one physician. Previously the fees were set by every hospital without regulation (2010).

#### *Payment to providers*

- The Health Insurance Act was amended in 2009 to give the Ministry of Finance the role of setting prices for health services funded by the National Health Insurance Fund. The Ministry of Finance initiated this policy. Until that time prices were negotiated between the Fund and doctors' organizations. As a result of dissatisfaction expressed by the Physician's Union, a new amendment was made to the Health Insurance Act in 2011 and the pricing process is once again implemented by negotiation between the National Health Insurance Fund and doctors' organizations.



- *The National Health Insurance Fund implemented capped hospital budgets by limiting the numbers of patients funded (2009, 2010 and 2011).*
- *The National Health Insurance Fund introduced delegated budgets for hospitals (a maximum amount of money which the Fund would pay to a certain hospital per month and per year) (2010).*

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- The new government announced plans to reduce administrative and overhead costs in all government institutions by 10% (2009).
- The Minister of Health announced plans to reduce administrative costs of the Ministry by 29.4% amounting to a saving of BGN 4 million annually (2010).
- As a percentage of the Ministry of Health's total expenditure, administrative costs decreased from 5.7% in 2008 to 2.4% in 2010. However in next two years they rose again, reaching 4.9% in 2012.
- Changes instituted in the administrative and managerial structure of the National Health Insurance Fund with the aim of reducing overhead costs by several thousand Bulgarian levs (2010). The Fund's administrative costs decreased from 3.0% in 2008 to 2.2% in 2012.
- The number of employees in the Ministry of Health and the structures under the Ministry of Health was reduced. The National Centre of Public Health Protection and the National Centre for Health Informatics were merged into the National Centre of Public Health and Analysis. The 28 regional health centres and regional inspections of public health protection and control were merged to form 28 regional health inspections (2011).

*Provider infrastructure and capital investment*

- *Introduction of standards of competence with the aim of reducing the overall number of hospitals and National Health Insurance Fund-supported medical facilities (2010).*
- *In a reform funded by BGN 300 million from the European Commission, the government proposed: stabilization and modernization of state oncology hospitals and treatment centres; restructuring of some municipality and state acute and long-term care hospitals; closure of some small hospitals; modernization of state and municipality hospitals; and closure of homes for social and medical care for children, which would be replaced by new day centres (2010).*
- *The maximum numbers of beds, doctors and health establishments were set for each region of Bulgaria (in addition to existing regulations specifying*

*the minimum) (2011). The aim of the reform was to reallocate resources according to needs.*

- The Minister of Health postponed a stimulus policy for acute hospital care because of a lack of resources (2011).

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- *The National Health Insurance Fund introduced monthly ceilings on hospital admissions by clinical pathway, which is expected to increase waiting times (2013).*

*Health promotion and prevention*

- *A smoking ban instituted for indoor public places (2012).*
- *Prices of cigarettes increased by 25% (2009) and 38% (2010).*
- *Additional BGN 2 million allocated to the National Health Insurance Fund for vaccinations against cervical cancer (2012).*
- *BGN 35 million allocated to the National Health Insurance Fund for vaccinations for obligatory immunizations and re-immunizations (2013).*

## Economic trends

- Croatia's economy contracted in 2009 and 2010, and while economic growth was positive by 2011, it remained below pre-crisis levels and the European average. By contrast, the unemployment rate failed to recover after 2008. Government health spending as a share of total government expenditure has been stable and high compared with other European countries.
- Growth in health spending per capita has been volatile since the early 2000s. All health care financing sources reduced their spending in 2009 and 2010 (Croatia: Fig. 1).
- Croatia Fig 2 gives the trends in per capita spending on health.

## Policy responses

### Changes to public funding for the health system

- Deficits in public spending on health preceded the crisis.
- Legislation was introduced to require government departments, including the Ministry of Health, to maintain fiscal balance (2011), with new borrowing only permitted to cover previous liabilities or development projects.
- From 2011, the government budget was to be reduced annually by one percentage point of projected GDP.
- SHI contributions on pensions were introduced, with varying rates depending on pension income (2011): SHI contributions on wages were reduced from 15% to 13% to reduce labour costs (2012).
- Earmarking of tobacco tax revenue for health was introduced (2011).

### Changes to health coverage

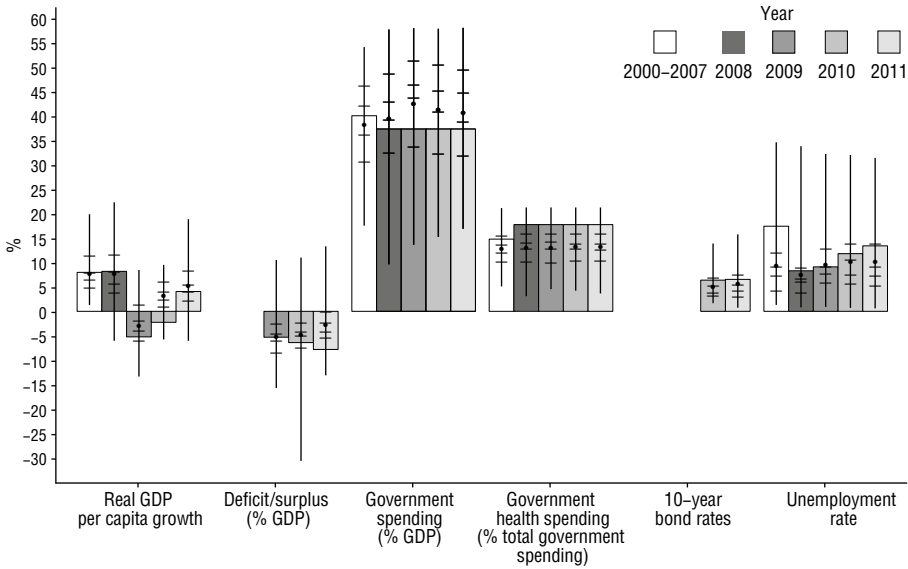
#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

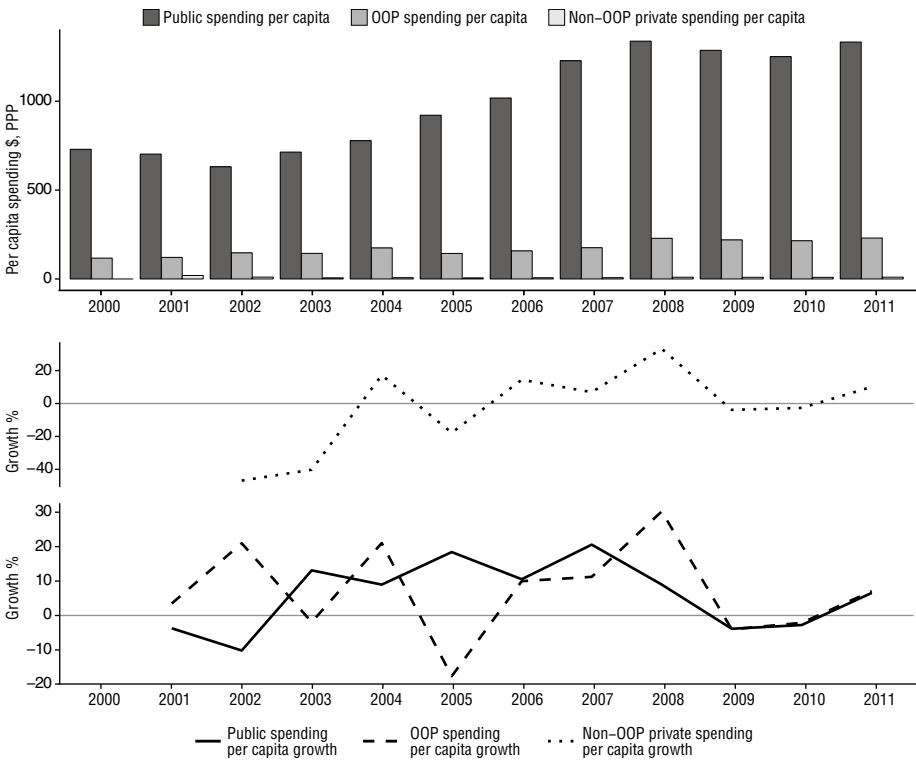
- *Addition of 64 new drugs to the positive list achieved through savings from improvements in pharmaceutical pricing and reimbursement (2010).*
- *Introduction of criteria for including drugs in basic and supplementary lists of covered drugs (2012).*

**Croatia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Croatia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

#### *User charges*

- *Introduction of user charges for primary care visits and outpatient prescription drugs (2011).*

### **Changes to health service planning, purchasing and delivery**

#### *Prices of medical goods*

- *Introduction of pay-back agreements for drugs (2010).*
- *Introduction of reference pricing (2010).*
- *VAT on pharmaceuticals and medical devices introduced (5%) (2012).*
- *Introduction of new rules on wholesale pricing and on recalculating the prices of medical devices on an annual basis (2012).*

#### *Salaries and motivation of health sector workers*

- *The number of nonmedical workers on temporary contracts reduced (2012).*

#### *Payment to providers*

- *Reduction of the global budget for hospitals by 3.28% compared with 2009 (2010).*
- *Reviews instituted for hospital budgets to identify potential savings (2010 onwards).*

#### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- *The Croatian Health Insurance Institute and the Croatian Institute for Health Protection and Safety at Work merged to create a national health insurance fund (Croatian Institute for Health Insurance) (2011).*

#### *Provider infrastructure and capital investment*

- *No response reported.*

#### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Prescriptions for certain medicines became valid for longer (six months), in order to lessen the burden on family medicine doctors, reduce unnecessary visits and decrease administrative costs (2009).*

#### *Waiting times*

- *No response reported.*

#### *Health promotion and prevention*

- *Strong investment in prevention programmes, including cancer screening, healthy school meals and prevention of cardiovascular diseases.*

# Cyprus

*Elisavet Constantinou and Mamas Theodorou*

## **Economic trends**

- Cyprus' economy contracted in 2009 and growth was near zero in 2010 and 2011. Deficits remained high by 2011, even as most other European countries had improved their fiscal situation; 10-year bond rates had also increased slightly by 2011.
- Health spending as a share of government expenditure, while among the lowest in Europe, remained steady from 2008 to 2011. While there was significant growth in OOP and public health care spending per capita in 2008, growth in both series slowed considerably in 2009, 2010 and 2011 (Cyprus: Figs 1 and 2).

## **Policy responses**

### **Changes to public funding for the health system**

- Due to cuts initiated by the Ministry of Finance, the Ministry of Health budget was 5.3% lower in 2012 than in 2011, with additional cuts expected in 2013.

### **Changes to health coverage**

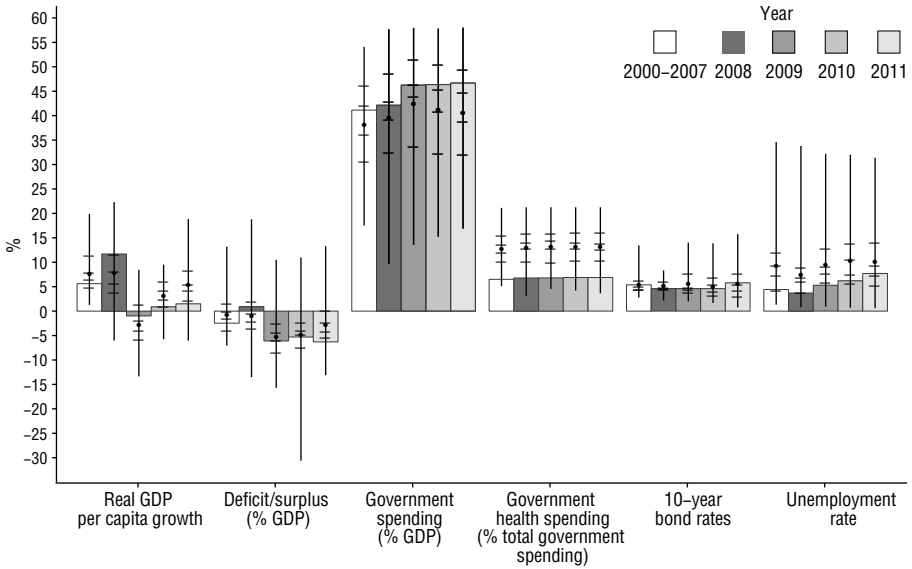
#### *Population (entitlement)*

- Entitlement category B was abolished for all except people with specific chronic diseases (MoU 2013), which increased the share of the population without free access to publicly financed health care from 17% to 19%.
- Free care access for public employees and state officials who have to contribute 1.5% of their gross salary or pension in order to be beneficiaries of public health services was abolished (implemented from 1 August 2013 under the third term of the MoU).
- Implementation of national health insurance postponed to 2015 (2013).

#### *The benefits package*

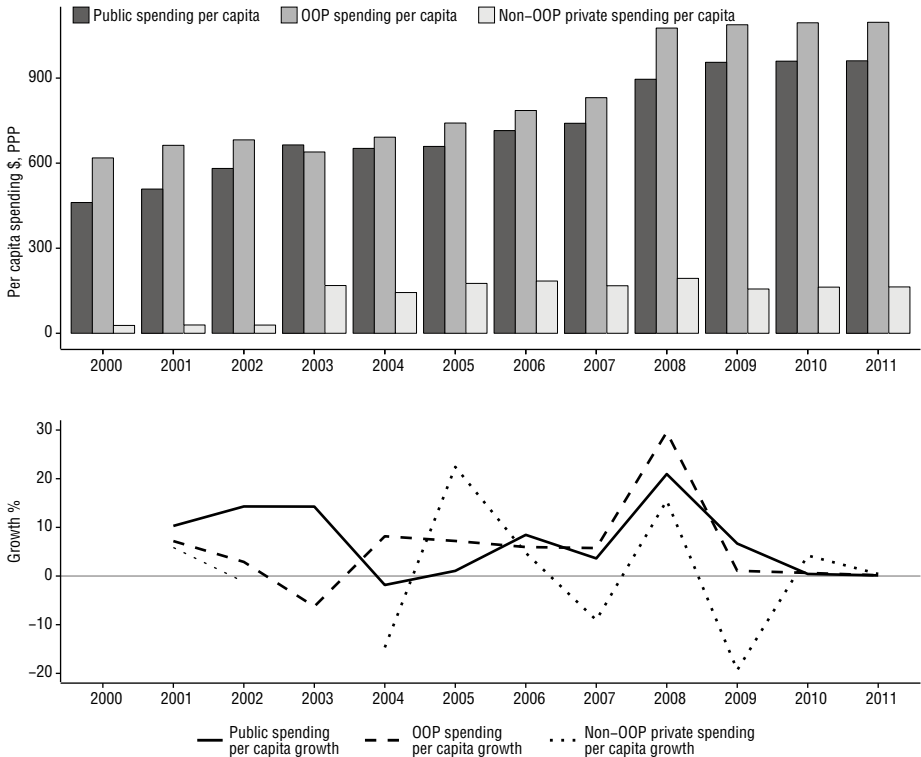
- Ministry of Health plans to define a national benefits package based on systematic criteria including cost-effectiveness (MoU 2013).

**Cyprus: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Cyprus: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*User charges*

- Introduction of a co-payment of €1 per prescription in private pharmacies (2012).
- Introduction of new user charges of €10 for emergency department use, €0.50 per laboratory test (capped at €10 per referral), €0.50 per prescribed drug (capped at €10 per prescription) (from 1 August 2013).
- Co-payments for a GP visit increased from €3 to €6 and for a specialist visit from €2 to €6. Beneficiaries over 65 years have to pay these co-payments (previously they did not pay) (from 1 August 2013);
- User charges increased for non-beneficiaries. More specifically they have to pay €15 for a GP visit and €30 for a specialist visit, instead of €14.5 and €15, respectively. Additionally non-beneficiaries have to pay 30% more for inpatient hospitalization and for all medical procedures, examinations and laboratory tests during their hospitalization (from 1 August 2013).

**Changes to health service planning, purchasing and delivery***Prices of medical goods*

- Wholesale prices of prescription medicines in 10 EU countries to be considered when pricing; prices of new drugs costing over €10 to be updated every 12 months for the first two years and then every two years (2012).
- Reduction of the profit cap from 37% to 33% for medical products of €50–250 (giving pharmacists a margin of around 25% of the retail price) and from 37% to 25% for products costing over €250 (pharmacist margin of around 20%) (2012).
- VAT introduced for all pharmaceuticals at 5% (2011).
- Introduction of a new surveillance mechanism to monitor polypharmacy in the public sector (2010).

*Salaries and motivation of health sector workers*

- Reduction in the salaries of all public sector health professionals (2011, 2012).
- Additional scaled reductions in remuneration of public sector employees and pension recipients (2012).
- Overtime rates reduced (2012).

*Payment to providers*

- In accordance with the MoU, the Ministry of Health is required to move from national case-based payment for hospitals to a DRG system (2013).



- The Pancyprian Medical Association urged doctors in the private sector to reduce prices of outpatient visits and medical procedures (2012).
- The Pancyprian Medical Association froze prices included in the list of services agreed with the insurance companies until the end of 2013.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Procurement moved to the Ministry of Health (2011).

*Provider infrastructure and capital investment*

- The Council of Ministers approved the Ministry of Health's proposal for the reorganization of public hospitals (2012). The proposal aimed to increase cost control and improve quality by reinforcing managerial structures, allocating budgets to each hospital and clinic and creating hospital clusters between neighbouring districts. In order to facilitate implementation, the Ministry of Health prepared a new structure for the clinics in each hospital, which was approved by trade unions (2012).

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Planned to introduce protocols and financial disincentives (user charges) to minimize the provision of medically unnecessary laboratory tests and drugs (second quarter of 2013).

*Waiting times*

- No response reported.

*Health promotion and prevention*

- Excise duties increased on tobacco products, beer and alcoholic products (2013).

# Czech Republic

*Tomáš Roubal and Jan Šturma*

## Economic trends

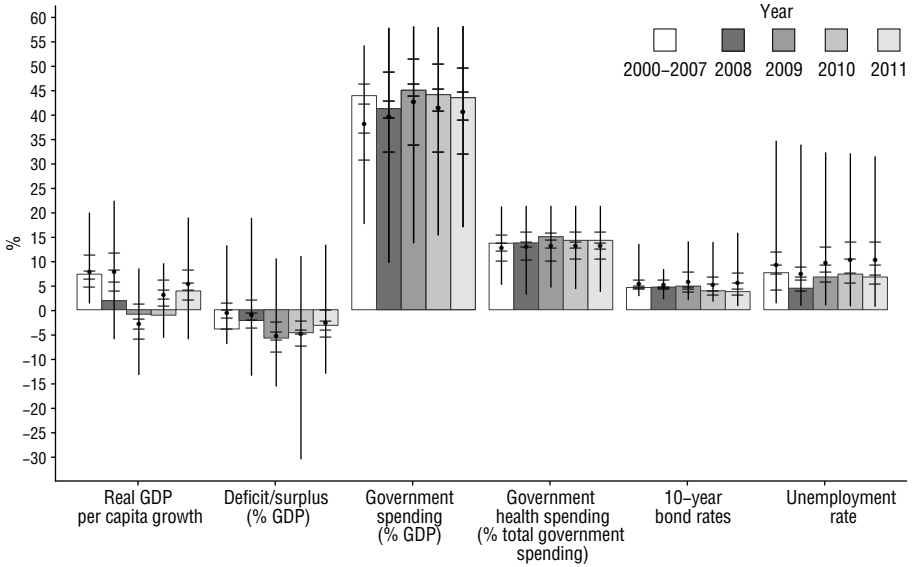
- Real per capita GDP growth in the Czech Republic slowed in 2008 and was negative in 2009 and 2010. The deficit increased in 2009 although it decreased in subsequent years.
- Unemployment remains low.
- Ten-year bond rates decreased relative to other countries in Europe after 2009.
- Government spending on health as a share of the budget has remained fairly steady during the crisis. In 2010, growth in OOP and public spending per capita was negative, although both returned to positive growth in 2011 (Czech Republic: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

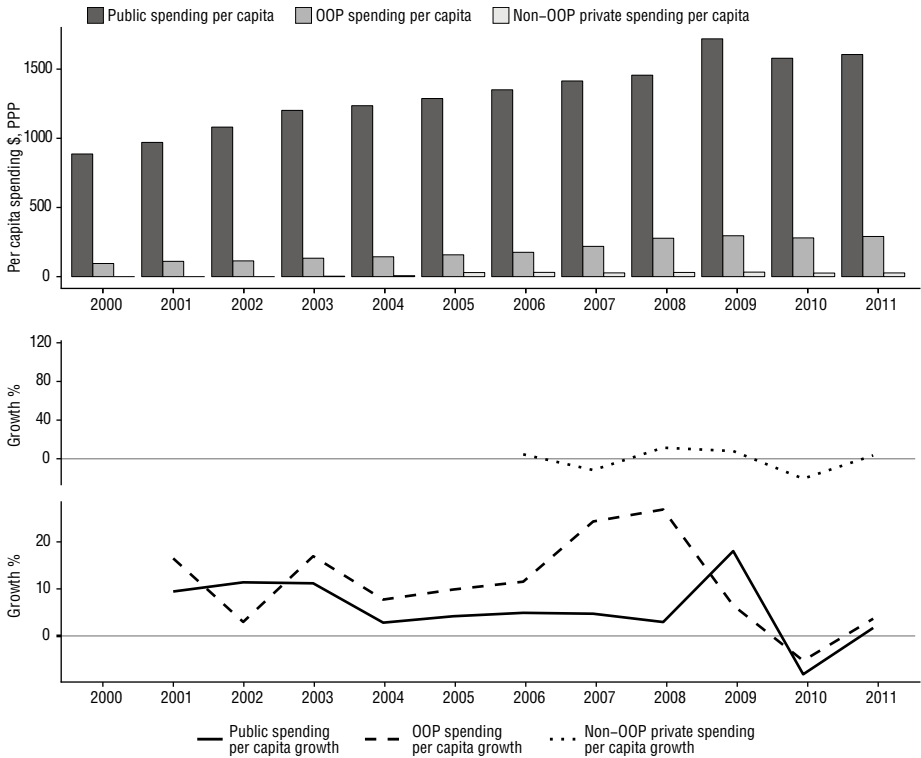
- Total spending on health fell between 2007 and 2011, remained stable between 2011 and 2012 and was expected to fall by 1% in 2013 as a result of cuts in reimbursement of hospitals, outpatient clinics and ancillary services (laboratory tests).
- The Ministry of Health budget decreased in 2010 and public investments have since remained low.
- SHI revenues increased slightly between 2008 and 2012 through the use of reserves and deficit spending.
- Contributions paid by the government on behalf of the economically inactive have been frozen since 2010 but rose slightly in 2014.
- The ceiling on contribution income for employees was abolished, increasing differences in contributions paid by employees and self-employed people (2013).
- There are plans to increase the contributions paid by people without taxable income and to abolish some exemptions from paying contributions from 2014.

**Czech Republic: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Czech Republic: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health coverage

### *Population (entitlement)*

- Reduction of entitlement to statutory coverage for foreign residents and transferred responsibility for coverage to private insurance, resulting in higher premiums for this group (2011).

### *The benefits package*

- Ministry of Health providers (university hospitals with half of all beds) must adhere to positive drug lists and further lists are to be developed (2011).
- Health insurers to develop positive lists for ambulatory care in 2013 (2011).
- Spa treatment and some dental care was removed from statutory coverage (2012).
- A Ministry of Health committee was set up to develop negative lists and exclude some services from the benefit package (2012).
- Ministry of Health plans to exclude dental amalgams for adults aged 19–64 years were opposed.

### *User charges*

- Drug reimbursement rates that had been cut in 2009 were increased (2011).
- There was a reduction in the drug reimbursement rate by 7% between 2009 and 2011 (the increased financial burden on patients was offset by lower drug prices but once the reimbursement rate was increased, drug prices went up again) (2009).
- User charges increased for inpatient stays from CZK 60 to CZK 100 per day in hospital (2011) were deemed unconstitutional in 2013 and, therefore, these user charges were eliminated in 2014.
- Introduction of reference pricing for vaccinations and medical devices (2011).

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- The approval process for the entry of generic drugs was simplified (2010 and 2012).

- Introduction of auctions for purchasing medical equipment for hospitals (2011).
- VAT on pharmaceuticals and medical devices increased from 9% (2011) to 14% (2012) and 15% (2013).

*Salaries and motivation of health sector workers*

- Decrease of 10% in expenditure on public administration employees, including health sector administrative workers (2009).
- Salaries of physicians working in public hospitals increased (after a national strike) (2011, 2012) but only implemented in university hospitals.

*Payment to providers*

- *Established DRG payment for acute hospital care (previously global budgets were used) (2010 and 2012 onwards).*
- The government decree that defines the relationship between providers and health care insurance funds limited the total reimbursement of outpatient services to 98% of the 2011 level; decreased the maximum production of acute inpatient care to 95% (relative to the year 2011), for which it slightly raised the reimbursement rates; decreased the reimbursement of outpatient care provided in hospitals; equalized prices for DRGs among various hospitals; and decreased reimbursement of laboratory tests (2013).

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- The administrative costs of health insurance funds were temporarily decreased and these savings were used to pay for health care (2011).
- Proposed to create one health insurance office that would integrate all technical activities of the health insurance funds (e.g. payment for care in the EU, defining the DRG structure, classifications and registers of contracted providers and clients) (2013).
- The largest health insurance fund (VZP) centralized its processes, further concentrated its structure and sold redundant property (2012).
- Health insurance funds used “packages” for purchasing specific services (e.g. cataract surgery, hip replacement).

*Provider infrastructure and capital investment*

- Planned to abolish 6000 inpatient acute care beds across all hospitals in 2012 but this was not fully implemented because of resistance by hospitals.

- The health insurance funds, backed by the Ministry of Health, proposed that in 2013 they would not renew contracts with 12 inpatient providers (2012). These 12 providers would be transformed into long-term care facilities (and hence acute beds transformed into long-term care beds).
- The Ministry of Health issued a call for proposals on e-health planning (2012).

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Governmental decree defined obligations for health insurance funds to contract and secure access and maximum waiting times (2013).
- Centralization of specialized care (transplants, oncology, cardiology, brain injury) across several tiers of care with a referral system.

*Waiting times*

- *A governmental decree established maximum waiting times for planned medical procedures and maximum distances (average time taken to drive) to facilities (2013).*

*Health promotion and prevention*

- Large reductions made to the National Institute of Public Health budget, but these were compensated by public awareness campaigns financed by the European Fund for Regional Development (2010, 2011, 2012).

# Denmark

*Andreas Rudkjøbing and Karsten Vrangbæk*

## Economic trends

- Real per capita GDP in Denmark contracted in 2009 but returned to positive growth in 2010; however, the economy was sluggish in 2011. Before the crisis the government had run a budget surplus, but there have been repeated years of deficit from 2009 to 2011. Government spending as a share of GDP is consistently the highest in Europe, while 10-year bond rates have dropped and are among the lowest in Europe.
- Health spending forms a significant portion of government spending and the government is the primary source of funding; per capita growth slowed from 8.6% in 2009 to 2.0% in 2010 (Denmark: Fig. 1).
- Denmark Fig 2 gives the trends in per capita spending on health.

## Policy responses

### Changes to public funding for the health system

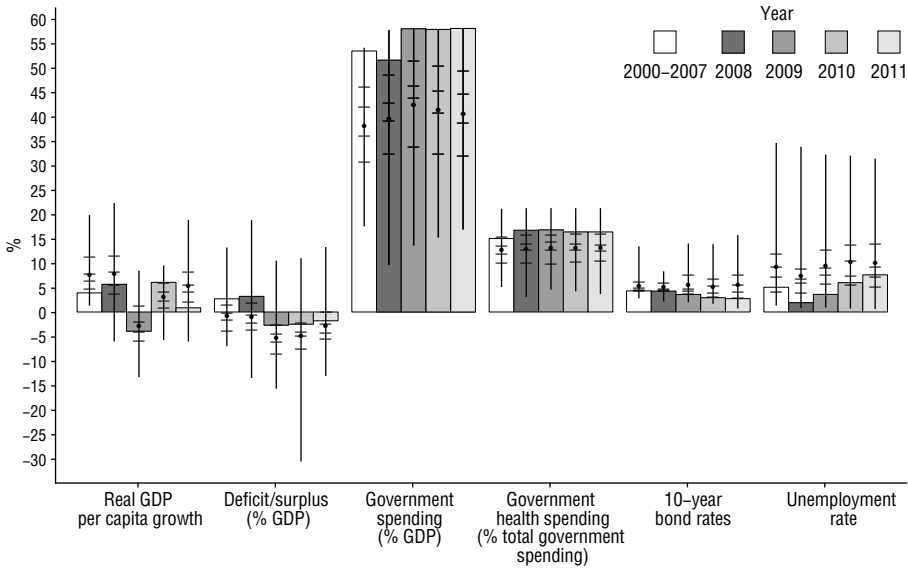
- *In 2009, budgets were exceeded across the public sector.*
- *The government pledged to allocate an extra DKK 5 billion to the health sector in 2011–2013 (2010), enabling continued growth in regional public spending on health care, which rose from 67% of total spending on health in 2007 to 75% in 2011, while total spending on health declined in 2010 and 2011.*
- *Tax relief for corporate purchase of VHI was abolished (2011).*
- *A budget law limited the government's structural deficit to 0.5% of GDP and established binding expenditure ceilings, effective from 2014, for state, regions and municipalities, although the ceilings exclude unemployment benefits, cash benefits and public investments (2012).*
- *Taxes on saturated fat and sugars introduced in 2011 (not earmarked for health) were abolished because of increasing cross-border trade with (especially) Germany, which limited their effect on public health (2013).*

### Changes to health coverage

#### *Population (entitlement)*

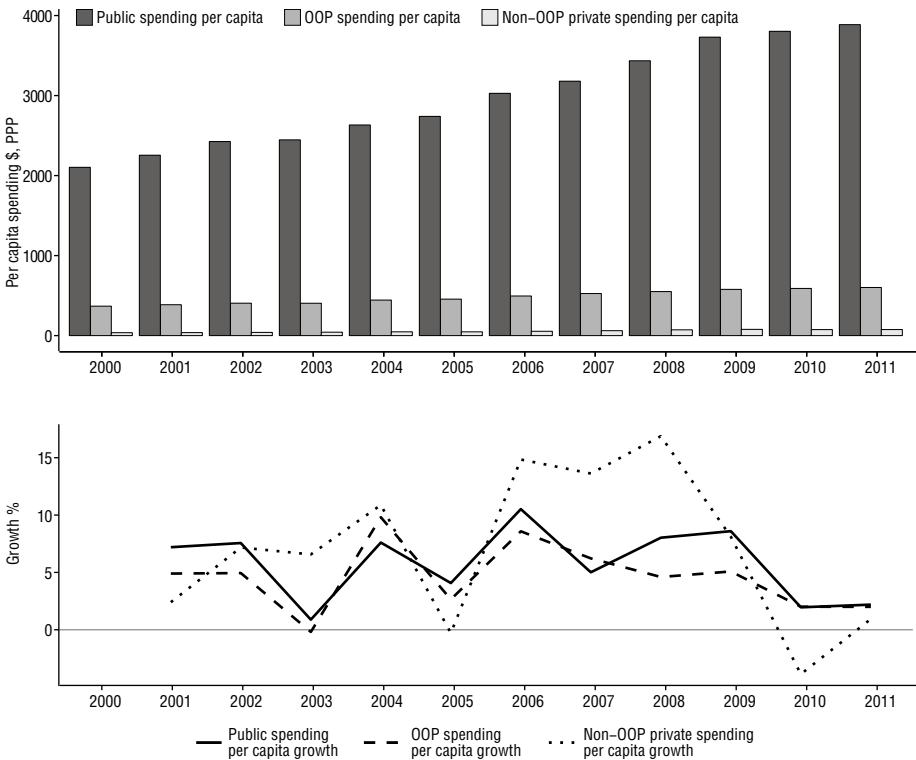
- No response reported.

**Denmark: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Denmark: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



### The benefits package

- *Development of new guidelines for referrals for various forms of surgery (bariatric, back, arthritic knee, shoulder) and other guidelines are being developed (2011, 2012).*

### User charges

- *User charges introduced in 2011 were abolished (2012) and proposals to introduce new user charges for GP and hospital visits were rejected.*
- *Introduction of user charges for in vitro fertilization, sterilization and re-fertilization and for translation services for certain migrant groups (2011, abolished in 2012).*
- *User charges increased slightly for some dental care services, over-the-counter drugs and hearing aids to provide finance for initiatives in Danish prisons (2013).*

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- *The Danish regions established the Council for the Use of Expensive Medicines in Hospitals to improve the rational use of medicines and to develop and align guidelines across regions, with a focus on drugs with a high share of the budget and high cost growth (2009); they also established a council to coordinate the use of new drugs, particularly new cancer drugs (2012).*

### Salaries and motivation of health sector workers

- *Only limited salary increases for health professionals (2012).*

### Payment to providers

- *Competition strengthened among providers, for example, through the increased use of tenders (involving public hospitals outside each region, and private hospitals and suppliers to public hospitals in each region) and reviews of hospital budgets to identify potential savings (2008 onwards).*
- *Reimbursement rates for medical interventions in private hospitals (mainly elective surgeries) decreased by approximately 20% (2010).*
- *The new government changed the calculation of rates paid to private providers under the “waiting time guarantee scheme” from fixed rates to regionally negotiated agreements (2011). This lowered the rates and resulted in lower revenues for private hospitals.*

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- *The Council for the Use of Expensive Medicines in Hospitals was set up by the Danish regions to strengthen the regions' bargaining power when procuring drugs (2009).*

- *The Ministry of Health conducted a major restructuring of the central health agencies and subsequent budget cuts, as part of a general state programme to cut costs of public administration (2012):*
  - *the number of organizational units at the Ministry was reduced from three to two and division of tasks was aligned with other agencies;*
  - *between 10 and 25% of the employees of the Ministry and related health agencies were laid off (a total of 140 employees, with the highest relative lay-offs at the Ministry);*
  - *the Danish Medicines Agency was merged with the National Board of Health creating the new Health and Medicines Agency;*
  - *The National Board of e-Health was merged with the Statens Serum Institut; and*
  - *The Knowledge and Research Centre for Alternative Medicine was closed.*

#### Provider infrastructure and capital investment

- *Planned to invest DKK 40 billion in the building and improvement of hospitals (2007). The government set aside DKK 25 billion in 2007 and in 2010 the regions agreed to invest the remainder. These investments are on track.*
- *Acceleration of the ongoing centralization (hospital and department closures) in order to achieve economies of scale and reduce maintenance costs (2008 onwards).*
- *Acceleration of ongoing improvements in information technology in the health sector (2008 onwards).*
- *Facilitation of public–private partnerships by loosening state control over regional agreements for these. For example, regions and municipalities were relieved of the obligation to provide 100% of financing costs for new public–private partnership projects, up to total of DKK 300 million nationally (2013). An agreement was made to build a new mental health facility in southern Denmark as a public–private partnership (2012).*

#### Priority setting or protocols to change access to treatments, coordination of care and patterns of use

- *Ongoing discussions took place on the establishment of a national prioritization institute (2010–2011), but no agreement had been reached. Instead, a decision was made to establish a broader research institute (covering all welfare sectors and providing evaluations and policy advice) by merging three existing research and assessment institutes for welfare services (including health care) under the name KORA (2012).*

- *Introduction of new guidelines for referrals for various forms of surgery (bariatric, back, arthritic knee, shoulder) and other guidelines are being developed (2011, 2012).*

#### *Waiting times*

- *Guaranteed maximum waiting time for hospital treatment increased from one to two months (2013); the increase does not apply to patients with more severe diseases but, unlike previous guarantees, it will also apply to mental health care (previously there was no waiting time guarantee for mental care needs); patients were given the right to diagnosis within four weeks (2013).*

#### *Health promotion and prevention*

- *Taxes on beer and wine increased by 25% and 55%, respectively (2012).*
- *Taxes on cigarettes rose by DKK 3 per pack (2012).*
- *Tax on saturated fats and sugars introduced in 2011 was rescinded (2013).*
- *Budget cuts for the Health Promotion Foundation by DKK 300 million (2011).*
- *Extra funds of DKK 300 million allocated to municipal health promotion and rehabilitation for the elderly and patients with chronic diseases (2013).*

# Estonia

*Triin Habicht and Mall Leinsalu*

## Economic trends

- In 2009, real GDP per capita contracted by 11.8%, although growth returned the following year and by 2011 was in the top quintile of the European region. Unemployment also increased sharply and is currently still above the European average. From 2000 to 2007, government spending as a share of GDP was below the European mean; however, spending in 2009 as a share of GDP was above the mean. While there was a government deficit in 2008 and 2009, by 2010 the government was again running a budget surplus.
- Estonia's health spending priority has been stable although at a level slightly lower than the European mean. Per capita public health care spending growth was near 0 in 2009 and negative in 2010, but grew by 3.2% in 2011. OOP expenditure declined to a greater extent than public spending (Estonia: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

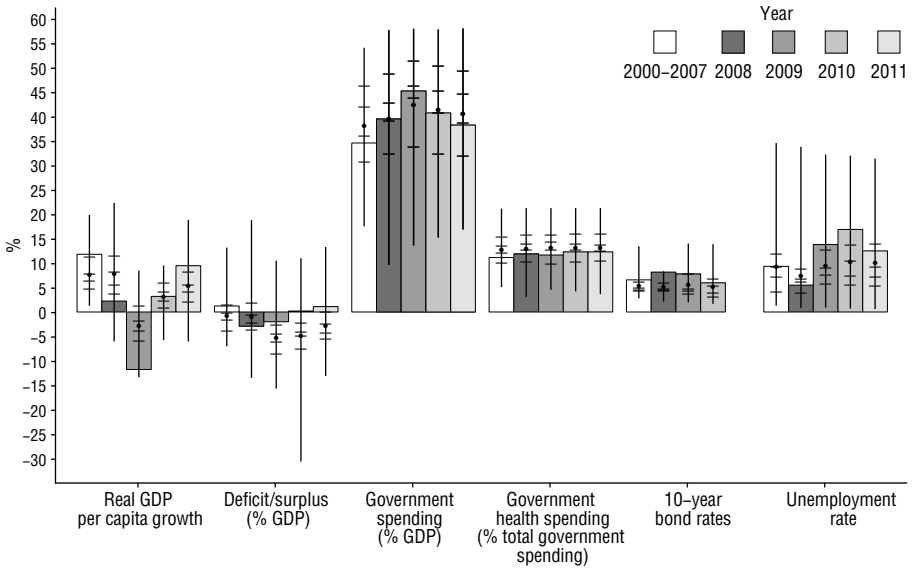
- Spending on health by the Ministry of Social Affairs was 27.1% lower in 2009 than in 2008, largely because capital expenditure was no longer being funded by the state budget (without capital expenditure, the spending decrease was 6.8%), but increased by 4.7% in 2010 and 1.9% in 2011.
- EHIF's revenues were 11% lower in 2009 and 5% lower in 2010 as a result of higher unemployment and lower salaries, but increased by 6% a year in 2011 and 2012.
- EHIF reserves were used to compensate for some of the fall in revenue (equal to about 5% of the social health insurance budget in 2009) but the government did not allow these reserves to be depleted.

### Changes to health coverage

#### *Population (entitlement)*

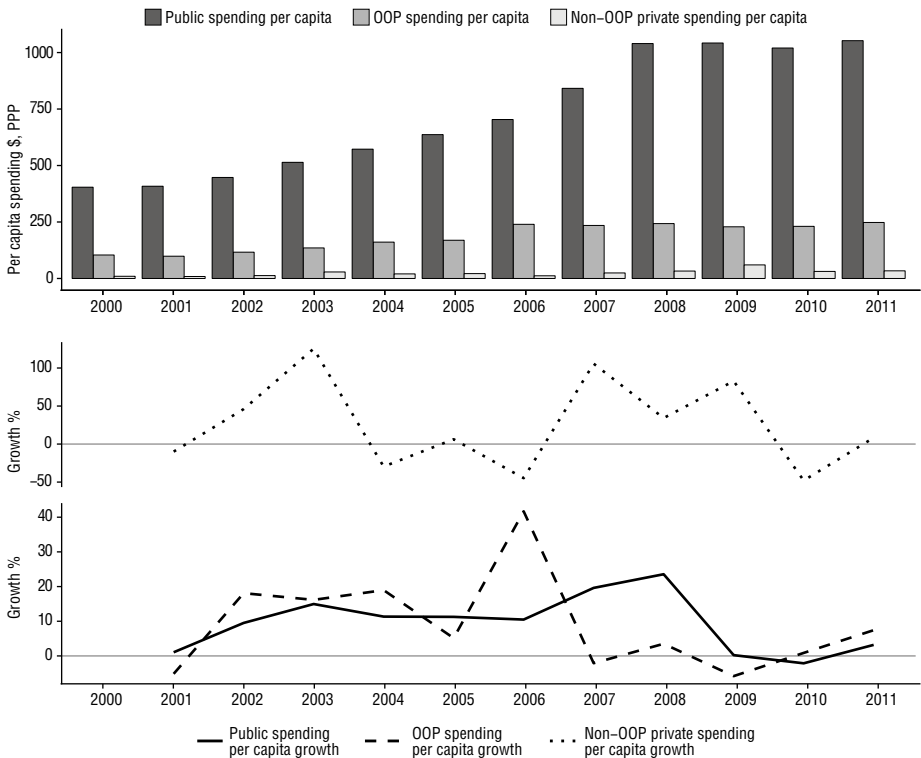
- Coverage extended to people registered as unemployed for more than nine months who were seeking work (2009).

**Estonia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: IMF; Other indicators: WHO Health for All.

**Estonia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

### The benefits package

- *Financing of temporary sick leave benefits shifted to patients and employers and benefits reduced.*
- *Benefits were now only paid from the fourth day (rather than the second day), days four to eight paid by the employer (previously paid by the EHIF), the rate of reimbursement reduced from 80% to 70% of wages and the rate for caring for a sick child reduced from 100% to 80% (2009).*
- *Reduction of the cap on maternity leave from 154 to 140 days (2009).*
- *As a result, spending on temporary sick leave benefits fell by 42% in 2010 and its share of the health insurance budget fell from 20% in 2008 to 12% in 2010.*
- *Eligibility for dental benefits removed from insured persons aged between 19 and 63 years (2009).*

### User charges

- *Introduction of a co-insurance rate of 15% for nursing inpatient care (2010).*
- *Cap on reimbursement for drugs reimbursed at the 50% level abolished (2012).*
- *Co-payments for outpatient specialist visits increased from €3.20 to €5 and for inpatient stays from €1.60 to €2.50 following negotiation with providers (2013).*

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- *Introduction of a new annual generic drug promotion campaign on television and billboards (2010).*
- *Price agreements extended to medicines in the lowest (50%) reimbursement category (some effective drugs and many less cost-effective drugs) (2010).*
- *Pharmacists must offer the drug with the lowest user charge and note if patients refuse cheaper alternatives (2010).*
- *Reference pricing extended to drugs in the lowest (50%) reimbursement category (some effective drugs and many less cost-effective drugs) (2010).*

### Salaries and motivation of health sector workers

- *Basic salaries were not affected but reductions to additional remuneration components affected the monthly salaries of most categories of health sector personnel (2009–2012).*

- *Because of new labour market regulations, all health professionals have common working times of eight hours per day and 40 hours per week as the standard (before several health professionals had reduced work time, e.g. radiologist had six hours per day compared with the general eight hours) (2009 onwards).*

*Payment to providers*

- EHIF reduced health services prices by 6% from 2009. The objective was to balance the health insurance budget without diminishing access to care. Cuts in primary care were relatively low (3%). However, before the crisis, health service expenditures (also prices) increased very rapidly and, therefore, the cuts did not represent a big economic shock for providers; in addition, the cuts were temporary and by 2012 the EHIF had increased health service prices to pre-crisis levels.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

*Provider infrastructure and capital investment*

- The capital costs financing scheme was reformed by financing it from the state budget as allocations to the EHIF, thereby releasing EHIF funds to finance other costs of service provision (2008). The first allocation of €8 million was transferred from the state budget to the EHIF in 2008. However, in 2009, the reform was reversed and EHIF had to cover this expenditure from regular health insurance revenues, as before. (Note capital costs in this context are part of health service prices and not separate allocations.)

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Establishment of an HTA programme in 2012 that provided project-based support to establish an HTA centre.
- Revision of clinical guidelines development process supported by WHO (2010–2011).

*Waiting times*

- The EHIF increased the maximum waiting time for outpatient specialist visits from four to six weeks (2009).

*Health promotion and prevention*

- *Excise tax for both alcohol and tobacco was increased in 2008 (twice), 2010, 2011 (only for tobacco), 2012, 2013 and 2014.*

# Finland

*Jan Klavus and Lauri Vuorenkoski*

## Economic trends

- Real per capita GDP in Finland declined by 6.7% in 2009 but has since made a recovery that is below the mean growth in the European region. Government spending as a share of GDP is among the highest in Europe and increased in 2009 during the crisis, leading to repeated years of budget deficit.
- Unemployment rates remain comparatively low by European standards.
- Ten-year bond rates have fallen during the crisis and are among the lowest in Europe.
- The share of government spending dedicated to health is below the European average. Growth in all sources of financing slowed from 2008 to 2009. In 2010, public per capita spending decreased while there was a slight acceleration in OOP expenditure (Finland: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- The central government subsidy to municipalities (a third of which is spent on health services) was cut by 7% (2012) and its contribution to the national health insurance scheme was cut by €153 million (4.2% of NHS expenses) from 2013, with savings expected from changes to national health insurance reimbursement of drugs, travel costs and private treatment.

### Changes to health coverage

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

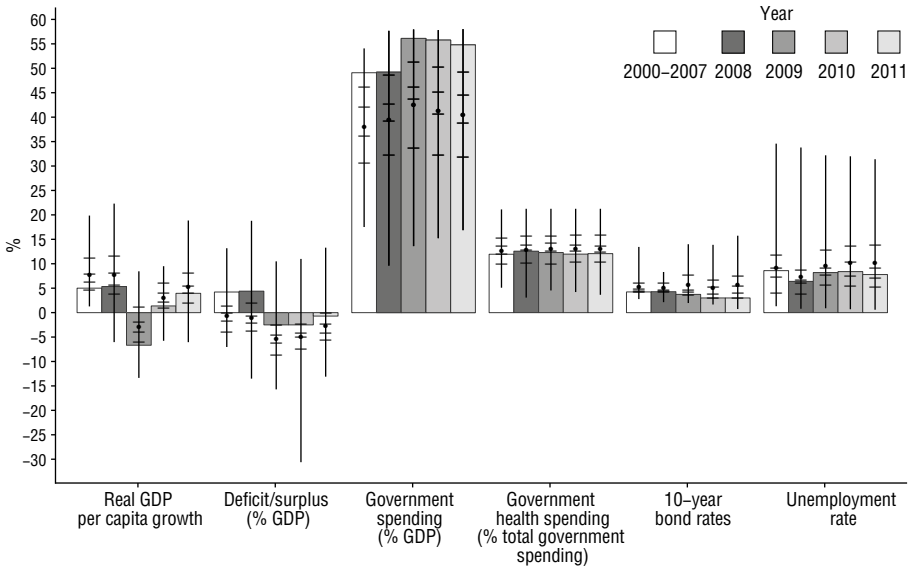
- No response reported.

#### *User charges*

- *Co-payments abolished for health centre visits in Helsinki (2012).*
- *User charges increased for public health services (revised every other year based on the public pensions index) by 9.3% (2010) and 0.4% (2012).*

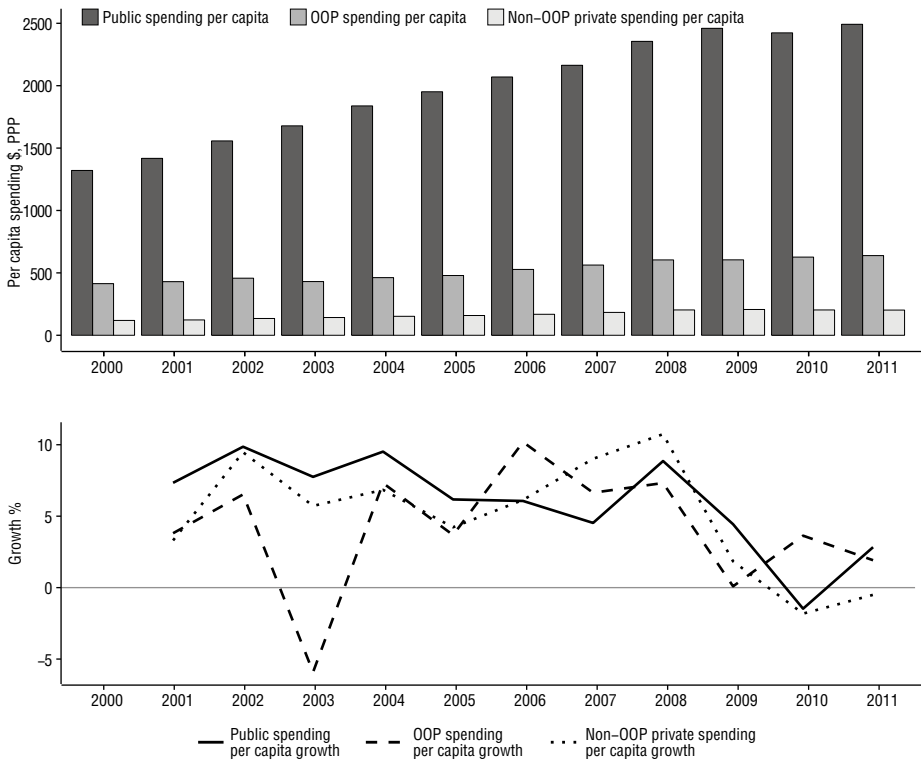


**Finland: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Finland: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

- Annual deductible for outpatient prescription drugs reduced from €700.92 to €670, after which patients pay €1.50 per prescription (2013).
- Reduction of the outpatient prescription drug reimbursement rate from 42% to 35% and from 72% to 65% (2013).
- Reimbursement of private treatment changed from a percentage-based system to a flat rate (2013).
- Co-payments for travel costs increased from €9.25 to €14.25 per trip (2013).
- Annual cap on OOP travel costs increased from €157.25 to €242.25 (2013).
- Plans for a new annual deductible of €50 for outpatient prescription drugs for adults from 2015.

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- Reduction of maximum wholesale drug prices by 5% (2013).

### *Salaries and motivation of health sector workers*

- No response reported.

### *Payment to providers*

- *Introduction of vouchers for health services to mitigate public sector pressures and increase freedom of choice for services users (2011); vouchers used by 27 municipalities while 32 plan to expand or introduce them.*

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- The government plans to drastically increase the size of municipalities (which have the responsibility to fund and organize services). The plan was originally announced in 2005 as the Paras-project (Project to Restructure Local Government and Services). Among other things this is anticipated to increase financial stability and efficiency of services.

### *Provider infrastructure and capital investment*

- *Reduction of the number of municipalities from 432 to 336 between 2005 and 2011 through restructuring and mergers, in order to increase pooling of resources.*

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- *The new Health Care Law increases patient choice of provider, which is expected to lower waiting times (2011).*

*Health promotion and prevention*

- No response reported.

# France

*Karine Chevreul, Karen Berg Brigham and Sandra Mounier-Jack*

## Economic trends

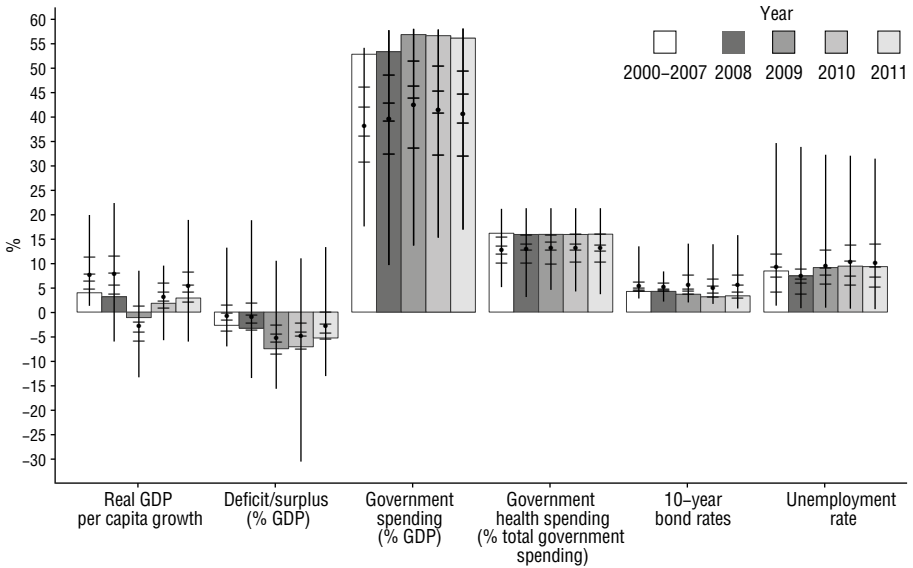
- Real per capita GDP in France declined slightly in 2009 by 1.1% and returned to positive growth by the following year. Government expenditure as a share of GDP increased since 2008, as have budget deficits.
- Ten-year bond rates have fallen and are slightly lower than rates in the United Kingdom but higher than rates for countries such as Germany and the Netherlands.
- Unemployment rate increased since the onset of the crisis; in 2012 it was just below the European average.
- Health as a share of government expenditure, which is just below the European average, is lower than it was in 2008. Per capita spending by public and private sources slowed in 2010 but growth accelerated in 2011 (France: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

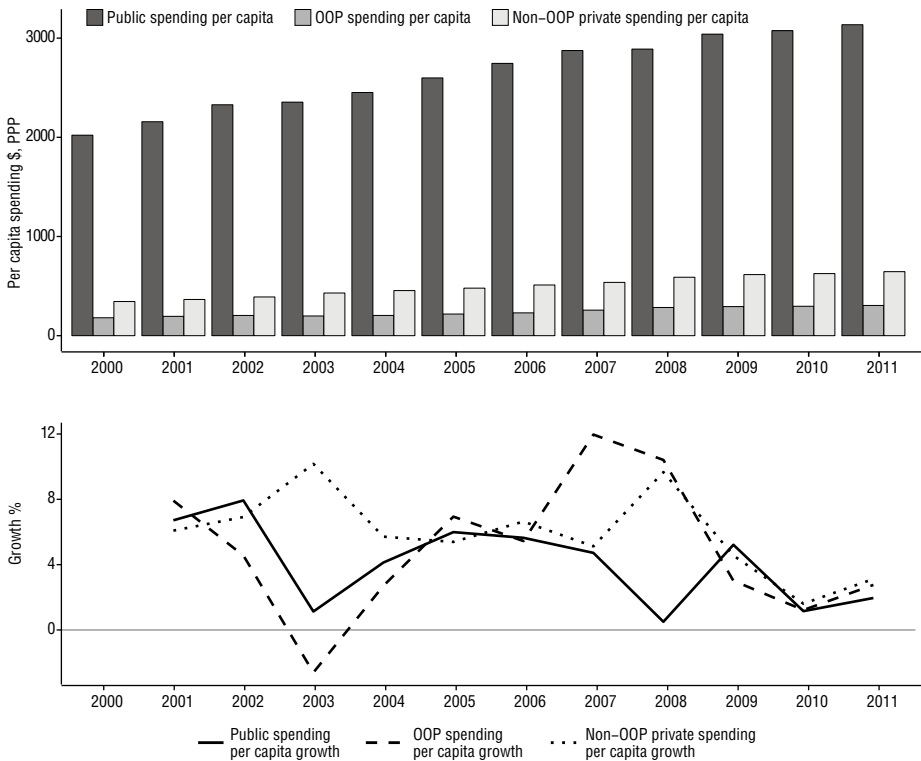
- The health budget deficit increased by approximately two and a half times between 2008 and 2010 (rising from €4.4 billion to €11.9 billion) but was reduced (to €8.6 billion) in 2011 through better expenditure control and an increase in revenues; an amendment to the 2012 budget was passed to reduce the health budget deficit to €5.5 billion and the planned deficit for 2013 was €5.1 billion; in 2010 the national ceiling for SHI expenditure (*objectif national des dépenses d'assurance maladie*) was met for the first time since 1997.
- The share of tobacco tax revenues earmarked for health was increased to 98.75% with effect from 2009 (2007); the share of capital gains tax revenues earmarked for health was increased from 12.3% to 13.5% (2011); a new tax on beer was introduced and will be earmarked for health, generating an expected €480 million (2013); the new social security contribution introduced in 2009 (*forfait social sur l'épargne salariale*) was increased from 2% in 2009 to 4% in 2010, 6% in 2011, 8% in January 2012 and 20% in August 2012; a percentage of these revenues has been earmarked for health since 2010; an increase in the earmarked tax for

**France: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**France: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

funding social security was implemented for individuals with annual earnings of over €150 000 (2013).

- To meet EU fiscal targets, the government's deficit plan proposed an additional allocation of taxes to social security in 2012 to be partly financed by reducing tax shelters for payroll taxes earmarked for social security; reductions in health expenditure of €2.4 billion planned for 2013 will be divided between ambulatory care (€1.75 billion) and hospital care (€0.65 billion) and are to be achieved mainly through lower prices for drugs and medical devices in ambulatory and hospital care (€1 billion) and by eliminating inappropriate and unnecessary care.
- From 2013, SHI contributions would be increased for self-employed people with annual earnings above a certain threshold and, under certain conditions, for people who employ domestic help and elected local officials. In addition, from 2013, employers will have to pay contributions (*forfait social*) on a portion of severance paid to employees in the context of employment termination by mutual consent.

## Changes to health coverage

### Population (entitlement)

- *Extended free entitlement to statutory coverage (CMU) and VHI (CMU-C) to individuals with low incomes eligible for income support (2009).*

### The benefits package

- *Some drugs with low therapeutic value de-listed based on effectiveness criteria (2010, 2011).*
- *Introduction of full coverage for termination of pregnancy (2013).*

### User charges

- *Penalty (co-insurance) for patients who do not follow an agreed medical pathway increased from 40% to 70% (2009).*
- *Co-insurance rates for less effective drugs increased from 65% to 70% (2010).*
- *Co-payment for inpatient stays increased from €16 to €18 per day (2010).*
- *Co-insurance rates for medical devices increased from 35% to 40% and the threshold for expensive care subject to an €18 deductible was increased from €91 to €120 (2011).*
- *The €30 deductible for beneficiaries of statutory medical assistance for undocumented migrants (aide médicale d'etat), introduced in 2011, was abolished (2012).*

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- Pharmacist remuneration made independent of sales volume to encourage the dispensing of cheaper alternatives (2011).
- Reduction of prices for drugs and medical devices (2013).

### *Salaries and motivation of health sector workers*

- Pharmacists' incomes were made independent of sales volume (2011).
- *Pay for performance for GPs was introduced on a voluntary basis in 2009 and generalized and expanded as part of the 2012 agreement between SHI and GPs. It was also included in the 2012 SHI agreement with cardiologists.*
- FFS performed by certain health professionals such as radiologists and pathologists were decreased (2011).

### *Payment to providers*

- Reduction of official tariffs for laboratory and other diagnostic tests and services (2011, 2012, 2013).

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- The Health Reform Act created the National Agency to Support the Performance of Health and Social Care Organizations and Services (Agence nationale d'appui à la performance des établissements de santé et médico-sociaux) with the mission of helping health care facilities and social care providers to modernize their management, optimize their real estate assets and to monitor and improve their performance in order to control spending (2009).
- Introduction of a reform to support the pooled procurement of hospital supplies (2011).
- Tackling of fraud by the SHI funds planned (ongoing from 2008).

### *Provider infrastructure and capital investment*

- Financed largely through borrowing, €10 billion was allocated to a five-year hospital sector investment plan (2008–2012), called Hôpital 2012. The aim was to maintain the previous level of hospital investment in order to support regional planning goals, the development of information technology systems and the updating of safety standards. The first tranche of €2.2 billion was spent in the first three years.
- Planned to spend €354 million on capital investments in the hospital sector, with a third of the funds dedicated to improving information systems in order to improve efficiency (2013).

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- The new Finance Law planned to achieve efficiency savings by shifting care from hospitals to primary and community care settings (2013). Incentives have been put into place to encourage hospitalization at home and day surgery.
- Economic evaluations within the HTA became mandatory from October 2013 (2012).
- Introduction of care pathways for chronic diseases (chronic obstructive pulmonary disease, Parkinson's disease, chronic renal failure, chronic heart failure) (2012); plans to pilot a new care pathway for older people (2013–2014).

*Waiting times*

- Introduction of a new system of accreditation for laboratory testing and volume restrictions, which may increase waiting times for diagnostic services (2009).

*Health promotion and prevention*

- New or increased taxes on tobacco, alcohol and beverages containing sugar (2011, 2012, 2013).



## Economic trends

- Georgia's economy rapidly recovered from its contraction in real per capita GDP in 2009. While the size of government expenditure relative to GDP has been decreasing since 2009, health as a share of government spending has remained stable, albeit at a very low level relative to other European countries (Georgia: Fig. 1).
- The majority of health spending is OOP (64.9% in 2011); OOP expenditure per capita continued to grow during the crisis until 2011 when it declined by 2.7%. In 2011 public per capita spending declined by 17.6% (Georgia: Fig. 2).

## Policy responses

### Changes to public funding for the health system

- *The health budget fell by 14% in 2011 through political decisions to prioritize other sectors.*
- *The almost doubling of the health budget in 2013 reflects the social priorities of the new government.*

### Changes to health coverage

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

- No response reported.

#### *User charges*

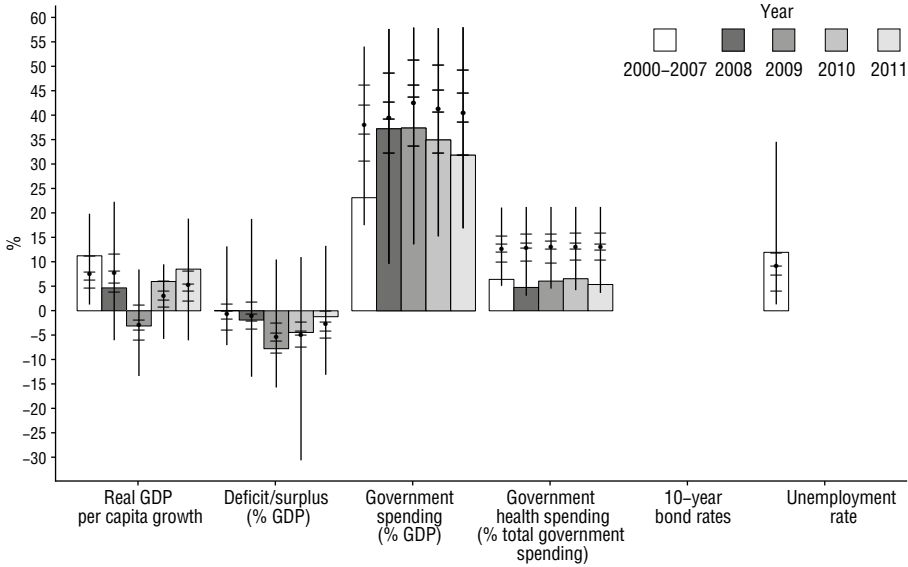
- No response reported.

### Changes to health service planning, purchasing and delivery

#### *Prices of medical goods*

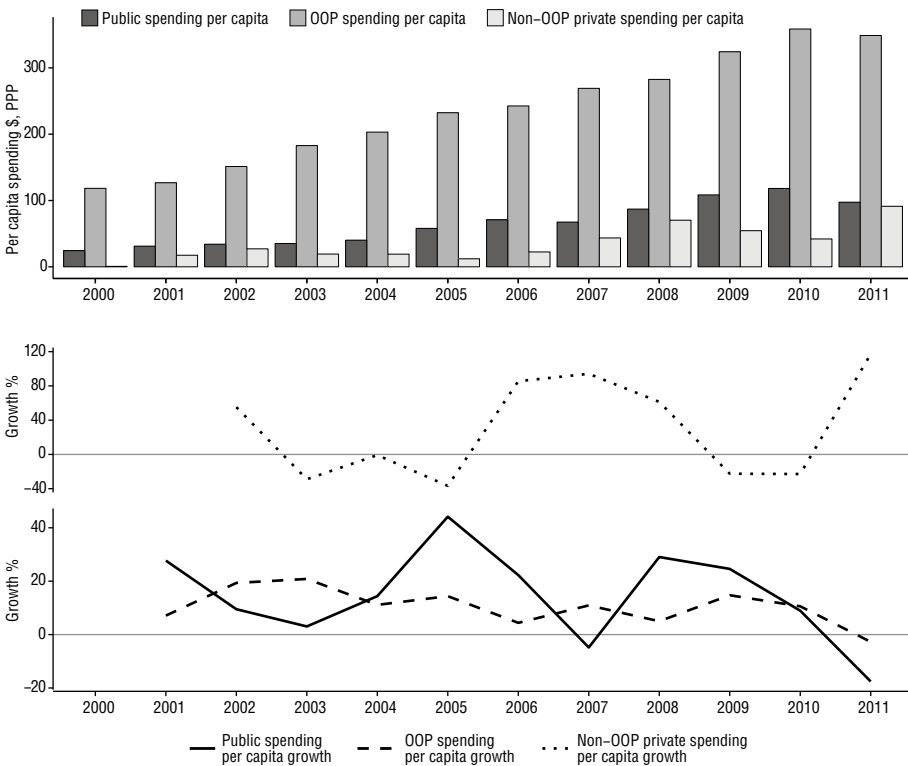
- *Introduction of market entry barriers and capital requirements for pharmacies (2009).*

**Georgia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Georgia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*Salaries and motivation of health sector workers*

- No response reported.

*Payment to providers*

- No response reported.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

*Provider infrastructure and capital investment*

- *The Hospital Development Plan called for the complete replacement of existing hospital infrastructure within a three-year period (2007–2009), by transferring full ownership rights from the state to the private sector through a tendering process. However, as a result of war in 2008 and the global financial crisis, investors and, primarily, developers faced liquidity problems, negatively impacting their contractual obligations under this programme. As a result, implementation stalled. The government subsequently resolved this issue by identifying new investors, resulting in the construction of a large number of hospitals.*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- No response reported.

# Germany

*Klaus-Dirk Henke and Wilm Quentin*

## Economic trends

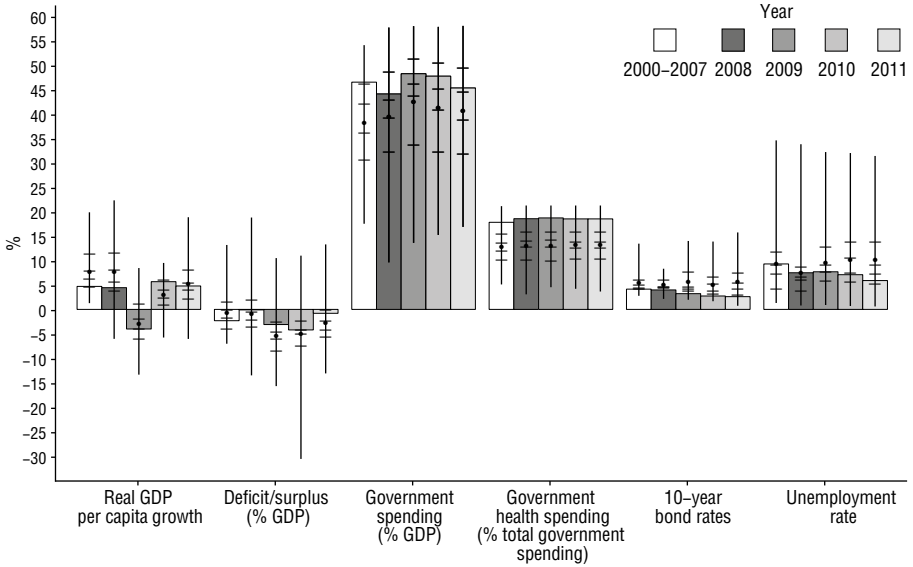
- Real per capita GDP in Germany declined in 2009 but otherwise the country has been largely unaffected by the crisis.
- Ten-year bond rates have dropped and are among the lowest in Europe.
- Unemployment has been decreasing since 2008, reaching 5.9% in 2011.
- Health as a share of government spending was in the top quintile of European countries from 2008 to 2011. Nevertheless, per capita public spending declined by 0.5% in 2011 (Germany: Fig. 1).
- Germany Fig 2 gives the trends in per capita spending on health.

## Policy responses

### Changes to public funding for the health system

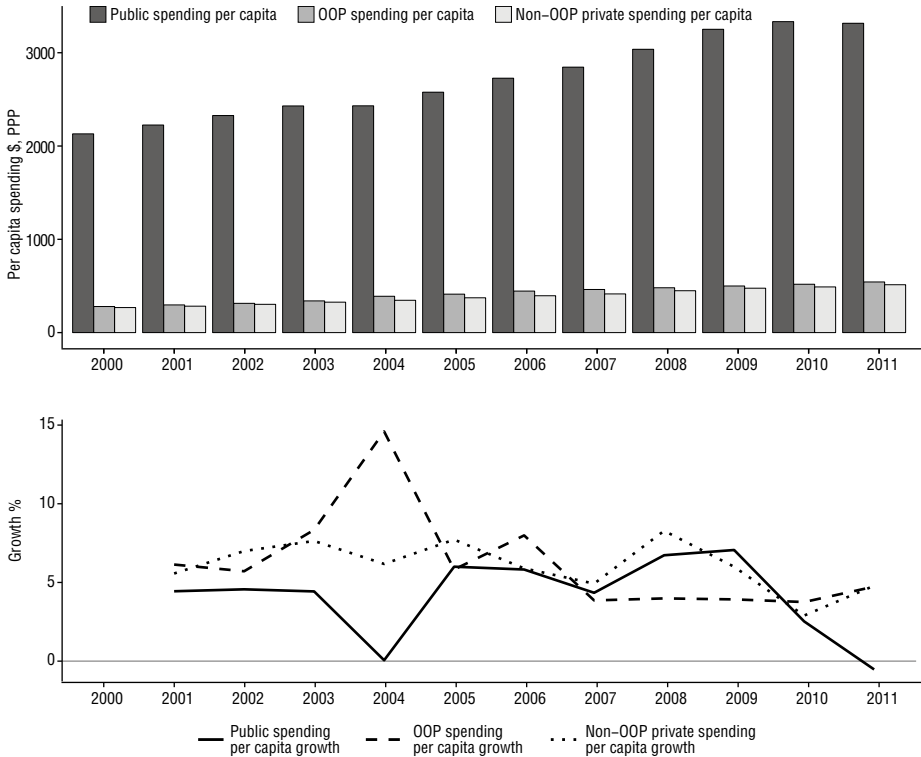
- In 2009 the revenue of the Central Health Fund fell short of predicted revenue by €2.5 billion.
- The Central Health Fund was able to accumulate reserves of €12.7 billion between 2009 and 2012 (in addition to sickness fund reserves of €14 billion in 2012) as a result of tax transfers and a very stable job market.
- The federal government reduced the national SHI contribution rate from 15.5% to 14.9% of wages from mid-2009 to the end of 2010, with the difference (0.6%) funded from the federal government budget (mainly tax revenue); the SHI contribution rate was raised back to 15.5% at the beginning of 2011.
- The federal government increased its tax subsidy to the Central Health Fund to €7.2 billion to compensate for a reduction in the SHI contribution rate (2009).
- The tax subsidy was increased in 2010 (to 15.7 billion), was maintained in 2011 (to €15.1 billion) and lowered in 2012 (€14 billion) and 2013 (€11.5 billion).
- *Sickness funds were allowed to charge flat-rate additional premiums (in addition to income-related contributions) (2009).*
- *Some sickness funds introduced additional premiums but by the end of 2012 only one sickness fund still charged additional premiums.*

**Germany: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Germany: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health coverage

### *Population (entitlement)*

- No response reported.

### *The benefits package*

- *New legislation (in effect since 2011) subjects all new pharmaceutical products (automatically covered upon market introduction but at a rebated price) to evaluation of their additional therapeutic benefit; new drugs that do not demonstrate additional benefit are assigned to a reference price group after six months; prices of drugs with additional benefit are negotiated based on the degree of benefit and are applied from the 13th month after market introduction.*

### *User charges*

- *Quarterly co-payment of €10 for GP and outpatient specialist visits abolished because of the large surpluses accumulated by the SHI system (2012).*

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- No response reported.

### *Salaries and motivation of health sector workers*

- Adjustments to the reimbursement of ambulatory physicians were frozen (2011, 2012), but an additional €1 billion was negotiated in 2011.

### *Payment to providers*

- *Reimbursement of psychiatric hospitals under a DRG-like system. The reimbursement rates are updated annually (by way of negotiations) (2013).*

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

### *Provider infrastructure and capital investment*

- No response reported.

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

### *Waiting times*

- No response reported.

### *Health promotion and prevention*

- No response reported.

# Greece

*Charalampos Economou and Daphne Kaitelidou*

## Economic trends

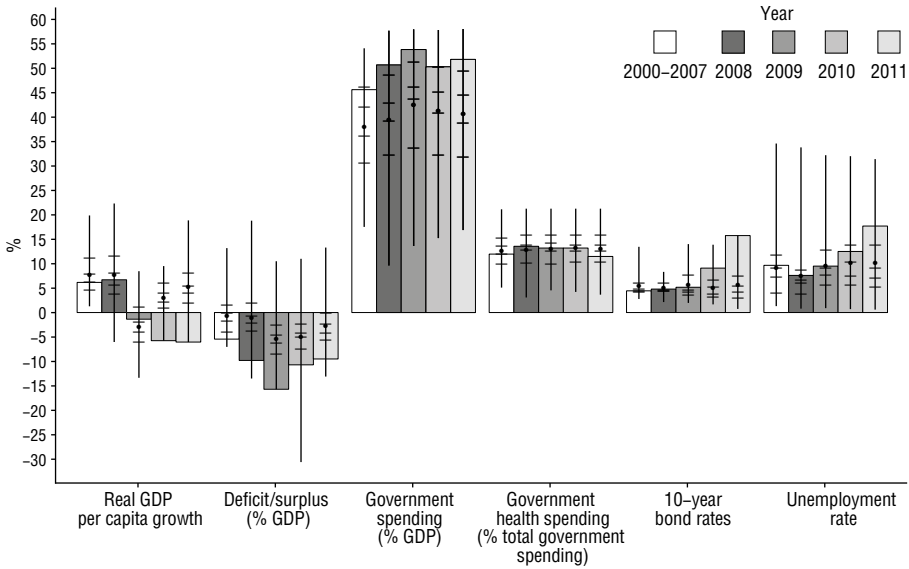
- Real GDP per capita growth was negative in 2009 and the lowest in the European region in 2010 (-5.8%) and 2011 (-6.0%). In 2009, Greece had the largest budget deficit in the European region and has since reduced government spending as a share of its economy.
- Unemployment has been increasing sharply since the onset of the crisis.
- Ten-year bond rates have increased throughout the crisis and were the highest in Europe in 2011. Beginning in 2010, Greece received bailout funds from the IMF and Eurozone countries.
- Health spending as a share of GDP, which had been below average even before 2008, was reduced in 2011. Per capita OOP expenditure declined in 2011 by 37.0%, a notable shift in the trend (Greece: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

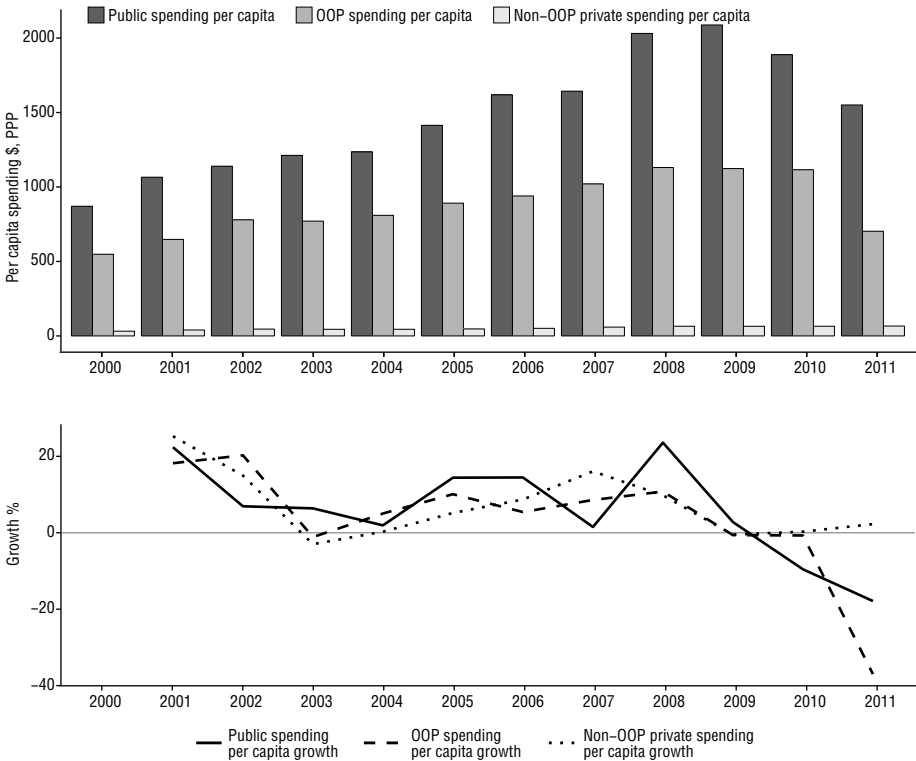
- MoU bailout stipulations required public spending on health to be cut by 0.5% of GDP in 2011 and to be kept below 6% of GDP in 2012; as a result, the 2011 health budget decreased by €1.9 billion; between 2009 and 2012, public spending on health fell by 25.2% (€4 billion).
- The MoU stipulated a reduction in government transfers to social health insurance for civil servants, which changed from being an open-ended commitment to cover any expenditure exceeding civil servants' own contributions (2.55% of gross earnings) to a fixed contribution rate of 5.1% of gross earnings (2011).
- The Public Investment Programme provided €65 million to fund policies implemented by the Ministry of Health in 2012 and €45 million for 2013.
- Contributions paid by retired civil servants were increased from 2.55% to 4% (2013).

**Greece: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Greece: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



## Changes to health coverage

### *Population (entitlement)*

- People with a low income or who are uninsured will have free access to treatment in designated public hospitals and to generic outpatient prescription drugs from 2014 (2011).

### *The benefits package*

- Reimbursement claims for hospital care must be submitted within two months (2010).
- A national benefits package was established (2011).
- A positive list of drugs was reintroduced (abolished in 2006), with a focus on generic drugs (2011).
- Some previously covered services were excluded (e.g. polymerase chain reaction and thrombophilia tests) and cover restricted for others (childbirth, air therapy, balneotherapy, thalassaemia, logotherapy and nephropathy) mainly on the basis of their high cost (MoU 2012).
- A new negative list of medicines was created based on similar lists in Spain and Italy; the list should be updated twice a year, shifting many medicines to over-the-counter status (2012).

### *User charges*

- Introduction of an exemption from user charges in public facilities for people in vulnerable groups and the addition of people with diabetes and people requiring organ transplants to the list of vulnerable groups (2011).
- User charges for outpatient visits in public hospitals and health centres increased from €3 to €5 (2011).
- Introduction of a new co-payment of €25 per admission to a public hospital (revoked in 2014) and an additional €1 per NHS prescription in outpatient and inpatient settings from 2014 (2012).
- User charges for diagnostic tests in public hospitals abolished (2012).
- Co-insurance rates for drugs for specific diseases increased from 10% to 25% (rheumatoid arthritis, psoriatic arthritis, lupus, vasculitis, spondyloarthritis, scleroderma, chronic obstructive pulmonary disease, pituitary adenomas, osteoporosis, Paget's disease, Crohn's disease, cirrhosis), from 0% to 10% (Alzheimer's disease, dementia, epilepsy, angiopathy) and from 0% to 25% (pulmonary hypertension); patients requiring haemodialysis will no longer be exempt from all prescription drug user charges, just from those related to their condition (2012).

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- Introduction of an electronic procurement method (2009).
- A price observatory (Observer net) was created to record minimum prices of medical supplies and impose the lowest price in all hospitals (2009).
- Generic prices capped at 60% of the original (2011).
- Reduction of the reimbursable price of drugs by up to 70% (2012).
- Introduction of reference pricing for drugs on the positive list (2012).
- VAT on pharmaceuticals reduced from 11% to 6.5% (2011).
- Responsibility for drug pricing transferred from the General Secretariat of Commerce to the National Drug Organization and all other aspects of pharmaceutical policy to the Ministry of Health (2012).
- Introduction of a new rule specifying that 50% of medicines used in public hospitals should be generics (2011).
- Introduction of a new e-prescription system (2010).
- Development of new prescribing guidelines (2012).

### *Salaries and motivation of health sector workers*

- Health sector workers' salaries cut by 20% (2010).
- Almost all health sector staff subsidies and productivity bonuses removed (2011).
- Non-renewal of contracts for temporary staff employed on fixed-term contracts and limited recruitment to replace retirees.

### *Payment to providers*

- Implementation of a reduction of 15–20% in pharmacists' profit. Measures were also introduced to liberalize the pharmacy market: more than one pharmacist can work at the same pharmacy; pharmacies can be established in closer proximity to each other; hours of business were extended; and a decrease in the population threshold for setting up a pharmacy was implemented (2011).
- A hard budget ceiling was set for pharmaceutical expenditure at €2.88 billion, with a clawback from pharmaceutical companies implemented if expenditure exceeds this ceiling (2012).
- Introduction of a new payment system for hospitals based on DRGs (2013).

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Transfer and integration of the health divisions of the main social insurance funds into a new organization, the EOPYY, which would act as the health system's purchaser of primary, secondary and tertiary services (2011).
- Introduction of a centralized procurement procedure for medical products, with fines of up to €50 000 if the approved budget deviates from the contract (2011).
- The new government enacted a law to establish a new architecture for municipalities and regions (known as the Kallikratis Plan) (2010). Under the reorganization, regional health authorities are expected to play a much greater role in managing and organizing the human resources of the NHS. However, to date the Kallikratis Plan has not managed to fulfil these expectations.

*Provider infrastructure and capital investment*

- Development of a national Health and Welfare Map (since 2010). This is a data and index system designed to: map and record citizens' health status; and assess the adequacy, effectiveness and efficiency of health services.
- Merging of hospitals resulted in a reduction in the number of hospital beds by 18% (2011). However, operating expenditures (e.g. consumables, overheads, security, catering) showed a considerable increase in many hospitals; the immediate causes are not known.
- Hospitals owned by social health insurance funds and the NHS hospitals were merged, putting them all under the ownership of the latter (2011).
- New measures in the 2011 Health Law allowed the expansion of private clinics to build new infrastructure; develop new departments, units and laboratories; and to increase their stock of hospital beds, within certain defined limits in growth rates.
- The scope of the electronic prescription system was expanded to diagnostic examinations and inpatient care (since 2011). The main insurance funds are obliged to use the system.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- The EOPYY was made the country's main body responsible for coordinating primary care, regulating contracting with health care providers and setting quality and efficiency standards, with the broader

goal of alleviating pressure on ambulatory and emergency care in public hospitals (2011).

- Introduction of compulsory e-prescribing (2012).
- Introduction of prescribing by active substance rather than brand, to promote the use of generics (2012).

#### *Waiting times*

- No response reported.

#### *Health promotion and prevention*

- *Health promotion initiatives in cardiovascular diseases, cancer, obesity, nutrition, oral health, and maternal and child health (2008–2012).*
- *Smoking ban in public places (2010) but poorly enforced.*

# Hungary

*Csaba Dózsa and Szabolcs Szigeti*

## Economic trends

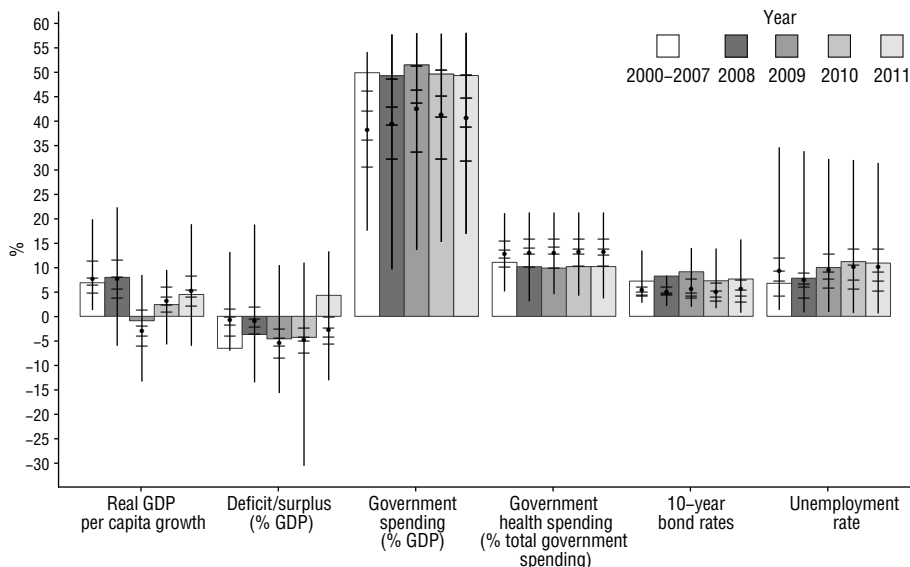
- Real per capita GDP declined slightly in 2009; since then Hungary's economic growth has been below the European mean.
- Unemployment rates have been slightly above the European mean from 2008 to 2011.
- Ten-year bond rates are high relative to other European countries.
- Government health spending as a share of the total budget has remained constant. Per capita expenditure growth for public and private sources has been positive throughout the 2008 to 2011 period (Hungary: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

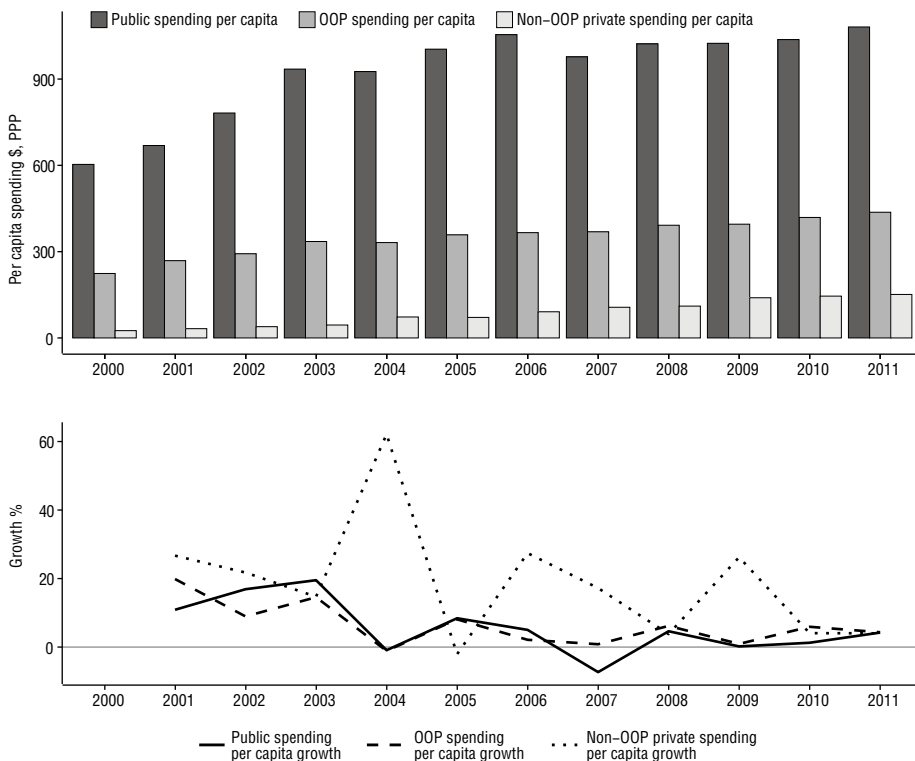
- *The new government announced it would increase public spending on health (2010) but the centrally set SHI budget did not change much nominally between 2008 and 2012, resulting in a decline in real terms.*
- SHI contributions paid by employers were reduced from 5% to 2% between 2008 and 2011 and to compensate SHI, government transfers on behalf of non-contributing persons increased from HUF 4500 to HUF 9300 per person, falling to HUF 5850 in 2012.
- *Tax transfers as a share of the SHI budget rose in 2009 and exceeded 50% for the first time in 2010, before reaching an estimated 60% in 2011 and remaining above an estimated 50% in 2012.*
- The itemized health contribution (a tax of HUF 1950 per month per employee paid by employers) was abolished (2010).
- *A new tax earmarked for health was levied on food products high in salt, sugar or carbohydrates (2011).*
- The employer social security contribution (which includes the SHI contribution) was renamed “social contribution tax” (2012).
- To compensate SHI for reduced revenues, the employee contribution rate was increased by one percentage point and the base for the proportional health care tax levied on non-wage-related income was broadened (2011).

**Hungary: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Hungary: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

- *SHI revenue from taxes on drug company turnover on covered products increased by more than 20%, which helped to avoid further increases in SHI contribution rates and decreased tax transfers (2012).*
- *A new tax earmarked for health was levied on statutory car insurance premiums (2012).*
- *Greater use of EU grants, particularly for infrastructure improvement, are expected to lead to a one-off increase in public spending on health in the years from 2013 onwards.*

## **Changes to health coverage**

### *Population (entitlement)*

- No response reported.

### *The benefits package*

- Reduction of temporary sick leave benefits from 45 to 30 days for people without insurance and reimbursement rates from 70% (60% for people covered for less than two years) to 60% and 50%, respectively (2009).
- *HTA introduced for all medical technologies (previously only applied to innovative drugs) (2010).*
- Reduction of the maximum daily benefit from €38 to €19 and abolished payment of benefits to insurers for 30 days after losing a job (2011).
- Disability pensions for people under retirement age replaced by health insurance benefits either in the form of rehabilitation benefit or of disability benefit (2012).

### *User charges*

- *User charges abolished for GP visits, dentist visits, outpatient visits, outpatient rehabilitation, not having the correct paperwork in outpatient care (if admittance letter is needed), inappropriate use of inpatient beds and inpatient daily charge (2008).*

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- *Introduction of new rewards for pharmacies switching to therapeutically equivalent substitutes (2011).*
- *Introduction of new financial incentives to reward doctors for prescribing cheaper substitutes (therapeutically equivalent) (2010).*
- *Introduction of a blind bidding system for reference pricing (2011); products with bids 5% more expensive are penalized with a 15% lower reimbursement rate.*

### Salaries and motivation of health sector workers

- *Salaries of physicians and nurses working in inpatient and outpatient care increased (2011).*
- *Capitation payments for GPs increased (2011).*
- *New financial incentives (via a government scholarship programme) for young physicians on residencies and for specialist pharmacology trainees for them to remain in the country once their training is completed.*

### Payment to providers

- *Raised financing multipliers (weighting factors for homogeneous disease groups) for inpatient rehabilitation (2008).*
- *The Health Insurance Fund administration entitled to abrogate a financing contract if quality or other criteria are not met (2008).*

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- *The Ministry of Human Resources established by fusing several former ministries in order to improve coordination between health care, social care, education, culture and sport, and to achieve a more economical mode of operation. The institutes connected to the former Ministry of Health were merged into one new institute, the National Institute for Quality and Organizational Development in Health Care and Medicines (2010). This institute was commissioned with the supervision of nationalized hospital care (2012).*

### Provider infrastructure and capital investment

- *Replaced annually approved government infrastructure development programmes with the 2007–2013 Social Infrastructure Operational Programme funded (predominantly) by the EU. This was one of the most important health infrastructure development projects of the last 60 years; HUF 70 billion was granted for health care infrastructure development (2011).*
- *Implementation of major downsizing of the inpatient health provider system (2007 and 2012). The number of short-term care beds decreased by 5% in 2012 (around 2500 beds).*
- *The Ministry for Human Resources nationalized all hospitals by taking over the ownership rights from local governments (2012). In 2013, local governments could decide whether to maintain ownership of outpatient care providers or to also hand over ownership of these structures to central government. It is expected that the government will reduce the running cost of the providers and increase allocative efficiency by reorganizing the capacity of the providers.*



*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *The health system was reorganized into eight regions in order to improve care coordination and provide health services close to the patients' place of residence, specialized interventions and services in regional centres and to change the referral system (2012). Free choice of providers remains only within the region.*

*Waiting times*

- *The National Health Insurance Fund administration introduced a transparent online waiting list registry to minimize regional differences in waiting times, which had been increasing since 2006 (2012).*

*Health promotion and prevention*

- *Public health taxes on “unhealthy food” (2011).*
- *Smoking ban in public places, restaurants, bars and workplaces (2012).*
- *Annual increases in excise taxes on tobacco and alcohol (since 2005).*

# Iceland

*Sigrún Gunnarsdóttir and Thorbjörn Jónsson*

## Economic trends

- In 2008, Iceland had the largest budget deficit as a share of GDP in the European region; budget deficits have remained large each year through 2011. After negative real per capita GDP growth in 2009 and 2010, Iceland's economy returned to positive growth in 2011.
- Although unemployment rates are higher than before the crisis, they are below the European mean.
- The health share of government expenditure has remained higher than it was in 2008 and is above the European average. Nevertheless, public per capita expenditure on health decreased by 3.0% in 2009 and 10.4% in 2010. In 2010, OOP spending grew by only 0.1% (Iceland: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- The health budget experienced annual cuts of 5% following the crisis; the government planned to increase the health budget from 2012 onwards.

### Changes to health coverage

#### *Population (entitlement)*

- Extended free access to dental care for households with low income (2009).

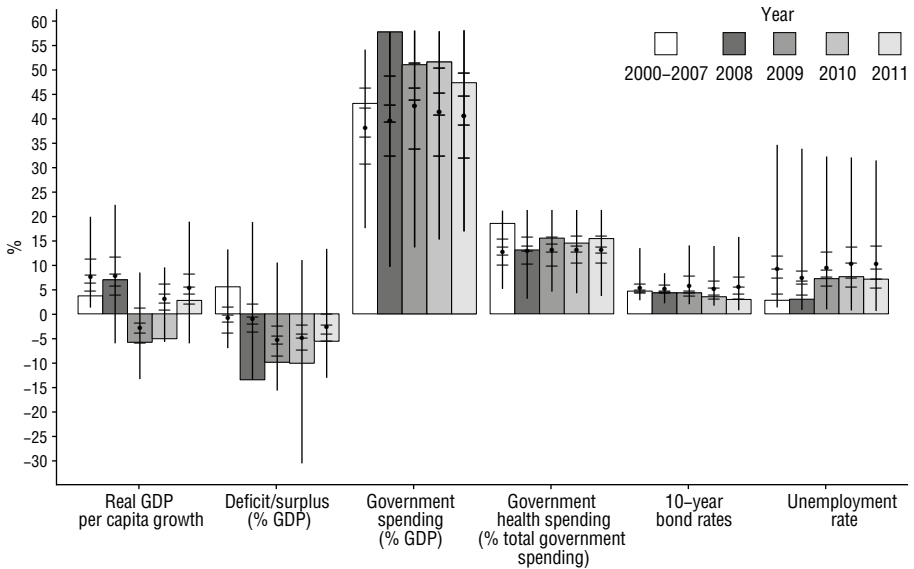
#### *The benefits package*

- *A rehabilitation fund was set up to prevent employees on extended sick leave from losing their jobs (2008).*

#### *User charges*

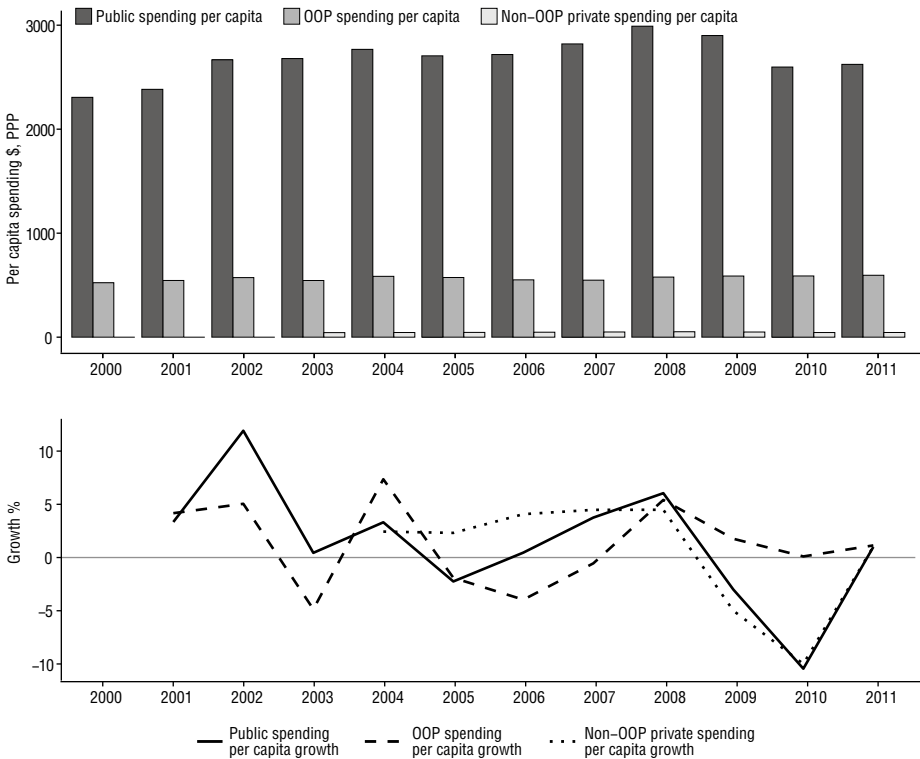
- Physicians in ambulatory care increased user charges, resulting in an increase of 5–10% in user charges for this care and in the patient share of ambulatory care costs (2009–2011). This may explain why household expenditure on health care services rose from ISK 27.9 million in 2008 to ISK 28.9 million in 2011.

**Iceland: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: IMF; Other indicators: WHO Health for All.

**Iceland: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- *Introduction of new prescribing rules (generics prescribed before trying more expensive alternatives); if rules are not followed, patients must pay the full cost of the drug (2009).*

### *Salaries and motivation of health sector workers*

- Cuts to overtime rates and night shifts, and longer shifts with fewer staff implemented to reduce health worker salary bills in individual health care organizations (2009).
- Staff cuts of approximately 10% at the National University Hospital (2007–2010).
- Hiring of young professionals to train as family doctors (since 2010).

### *Payment to providers*

- No response reported.

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Ministry of Health and Ministry of Social Affairs merged to reduce administrative costs (2008).
- Directorate of Health and the Public Health Institute merged (2011).

### *Provider infrastructure and capital investment*

- *Decision to build a smaller and less-expensive new University Hospital than had been originally planned before the crisis (2009). In 2012, Reykjavik City made a decision to facilitate the continuing work on the new hospital design and preparation to start building in 2014.*
- Primary health centres merged to reduce, for example, the number of rural health centres from 20 to 12 between 2007 and 2011.
- Introduction of a merger of small hospitals and primary health care centres in rural areas (2010 and 2011), which was minimized following strong objections from local citizens and politicians.
- *A relatively small hospital in the capital area was closed and its services moved to other hospitals in the area (2011).*

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

### *Waiting times*

- No response reported.

*Health promotion and prevention*

- *A range of national and municipal programmes promoting the well-being of young people and families (since 2008).*

# Ireland

*Anne Nolan and Steve Thomas*

## Economic trends

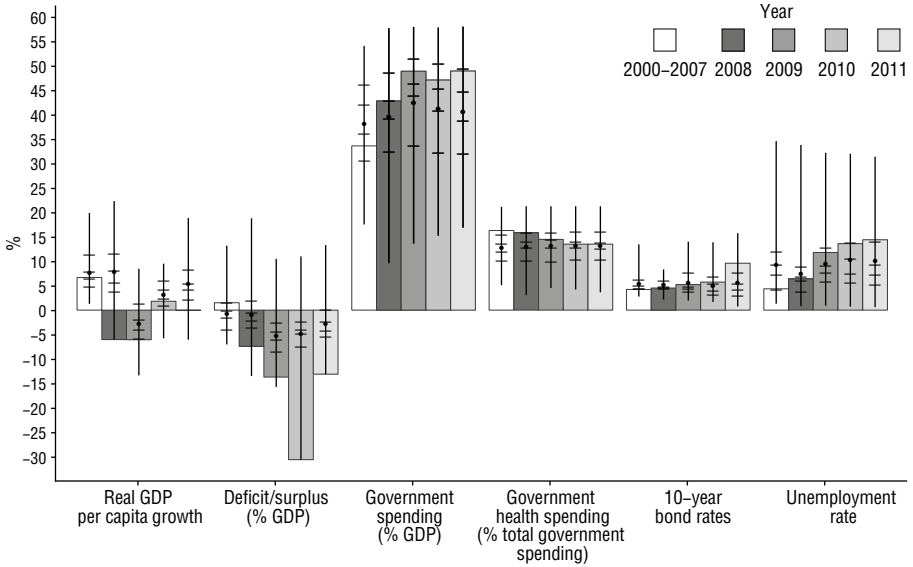
- Ireland's economy contracted in 2008 and 2009 and has not returned to pre-crisis levels. In 2010, a government bailout of the banking sector increased the budget deficit to over 30% of GDP.
- Concern over the health of the Irish economy also caused 10-year bond rates and, therefore, the cost of borrowing to increase substantially by 2011.
- The unemployment rate has risen each year of the crisis and while it was previously below the European average, by 2011 unemployment was in the highest quintile.
- Government spending has decreased since 2009 as a share of GDP, as has its health spending priority, both of which are near the European average.
- While public per capita spending on health had grown consistently prior to the crisis, the level of public spending per capita decreased in 2009 and 2010; however, public expenditure continues to make up the majority of total health spending. Per capita OOP expenditure decreased markedly by 14.4% in 2009. Non-OOP private expenditure per capita has continued to grow every year since 2004 (Ireland: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

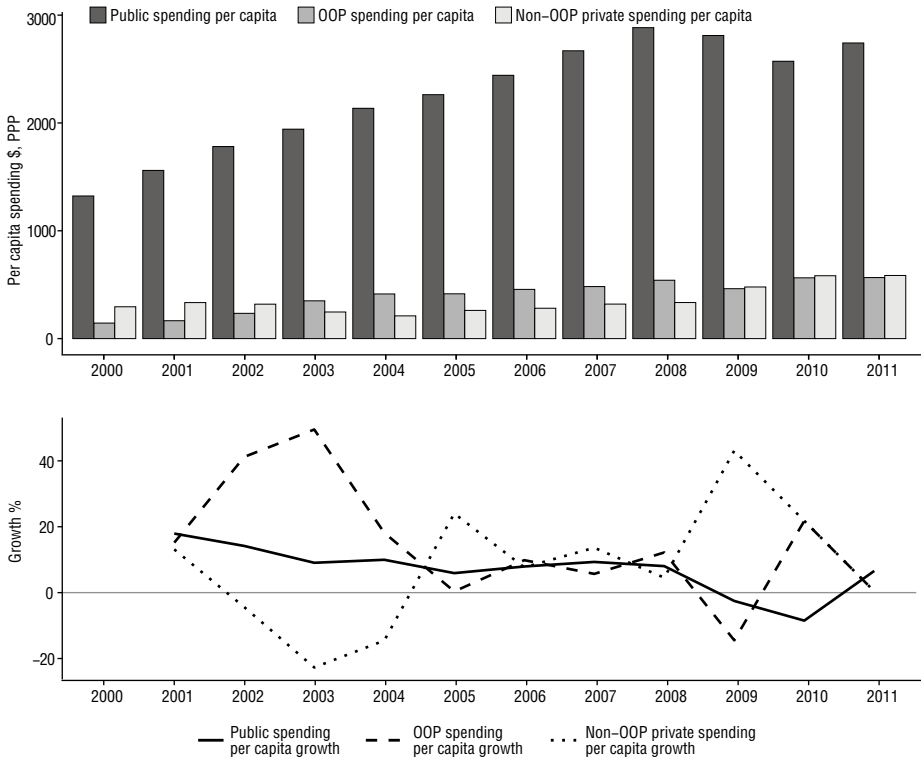
- The health budget increased by 1% in 2009 but experienced a substantial cut of €1.8 billion in the following three years.
- In 2012, there were budget efficiency savings in mental health, childcare and disability services (€50 million). Additional money was allocated for specific projects (mental health in 2011 and 2012 and primary care in 2012) but much of it was, in fact, used to provide normal services.
- The health levy, a surrogate income tax, was doubled to 4% on all earnings up to €75 036 per year and raised to 5% on earnings over this amount and the threshold for payment was reduced (2009); the health levy was abolished and replaced by the Universal Social Charge (2011); the lower exemption threshold for the Universal Social Charge was raised from €4004 to €10 036 (2012).

**Ireland: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Ireland: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

- Tax relief for private nursing homes and hospitals was intended to be abolished as part of a broader policy of abolishing property-related tax relief, but no end date was named.

## Changes to health coverage

### *Population (entitlement)*

- Automatic entitlement to free publicly financed health care (medical cards) abolished for the wealthiest people aged over 70, and means testing was reintroduced. This affected around 3.4% of people aged over 70 (2009).
- Plans to make GP visit cards universally available postponed (2012).
- Government announced its intention to restrict access to medical cards for the remainder of the population through revised criteria for eligibility, including reduced income thresholds for medical cards for those over 70 years (2013).

### *The benefits package*

- Dental care benefits for medical card holders reduced and dental care and ophthalmic benefits for those not holding medical cards reduced (2010).
- Aural benefits for people not holding medical cards reduced (2012).

### *User charges*

- People not holding medical card:
  - increase in user charges for emergency department visits without a referral letter (from €66 to €100), inpatient stays in public hospitals (to €75 per day, capped at 10 days a year);
  - increase in the monthly deductible for outpatient prescriptions (to €100), reduced tax relief on unreimbursed medical expenses from the marginal to the standard rate of tax (20%) (2009);
  - further increases in the monthly deductible for outpatient prescriptions to €120 (2010), €132 (2012) and €144 (2013); and
  - increase in the charge for inpatient stays in public hospitals to €80 per day, capped at 10 days a year (2013);
  - increase in user charges for private beds in public hospitals for those not holding medical cards were announced but not implemented (2012).
- Medical card holders:
  - a user charge per prescription introduced of €0.50 (capped at €10 per family per month) (2010); and
  - further increases in the prescription user charge to €1.50 (capped at €19.50 per family per month) (2013).



- Plans to increase the cap on nursing home charges (from 15% to 22% of post-death assets) announced (2013).

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- Deals with pharmaceutical companies were renegotiated (from 2010); a new agreement announced savings in excess of €400 million in the price of prescribed drugs over the following three years (2012), but as this deal also allowed access to new (often very expensive) drugs, at a cost of €70 million annually for three years, the net savings were in fact €190 million.
- Legislation introducing a system of reference pricing and generic substitution signed into law (2013).
- New rules allow international prices to be considered when setting national prices.

### *Salaries and motivation of health sector workers*

- Policies over the period 2009–2013 included a moratorium on recruitment and promotion, non-replacement of staff on leave, reduced agency and locum staffing, ending of temporary contracts, staff transfers, voluntary redundancy, and cutbacks in education and training. Moreover, the Health Services Executive shed 10 000 staff members between March 2009 and November 2012, with an additional gross reduction of 4000 full-time equivalent positions required if 2013 employment ceiling targets are to be met.
- Payment reductions have included: lower fees paid to contracted GPs and other health professionals (beginning in 2010), producing estimated savings of €659 million. From October 2012, starting salaries for new entrant consultant medical staff cut by 30%. In 2013, the health service would hire 1000 graduate nurses and midwives at around 80% of the existing pay rate, a move designed to mitigate the current dependency on agency staff and overtime pay.
- Currently Ireland is heavily reliant on foreign trained doctors to staff the health system. Since 2011 an active recruitment drive has replaced passive migration of foreign trained doctors to Ireland.
- Reduction of all professional fees by 8% and pharmacy fees by 24–34% (2009); introduction of further cuts in fees of 5% for health professionals (2010 and 2011); further reductions in professional fees for health service providers (2013). It is estimated that pay-related savings will reach €308 million in 2013.

*Payment to providers*

- From 2008, annual fee to GPs who treat medical card holders reduced.
- From 2009, reduction of 8% on all professional fees and cut to pharmacy fees of 24–34%. Further cuts in fees of 5% for health professionals were introduced in 2010 and 2011. In 2013 budget, professional fees for health services providers were to be further reduced. It is estimated that pay-related savings will reach €308 million in 2013.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- HSE commitment in 2009 to reduce administrative, management and advertising costs by at least 3%.
- Cuts in administrative spending introduced in 2010 budget, including reducing HSE staff by 6000 (€300 million) plus additional efficiencies in the HSE (€90 million).
- Cuts in administration (€43 million) proposed in 2011 budget.
- Administrative savings in the Department of Health were to total €20 million.

*Provider infrastructure and capital investment*

- Measures to provide more services with fewer resources: hospital day care increased by 5% in the first six months of 2009 relative to 2008 and above the 2009 target; outpatient appointments increased by 3% between the first six months of 2008 and 2009 and the number of new outpatient attendances increased by 6% in the same period; hospital capacity reduced by 519 beds between January and July 2009.
- The approval (subject to planning permission) for a new National Children's Hospital at the expected cost of €500 million was announced in November 2012. It is planned to be completed by 2018 (at the latest) and will merge the three existing children's hospitals.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Since 2008–2009, 31 clinical care programmes have been in place that utilize a model of care devised for improving the quality of cancer care; this model is now being applied to all diseases and conditions in all health care settings. Many of the efficiencies gained in 2012 are attributed to service improvements brought about by the clinical care programmes.

*Waiting times*

- Between January and September 2012, the number of people waiting on trolleys in emergency departments fell by 24%, the number of adults

waiting for elective treatment in public hospitals fell by 86% (waits over 12 months), 92% (waits over 9 months), 44% (waits over 6 months) and around 33% (waits over 3 months), reflecting political priority to reduce waiting times by increasing hospital activity through clinical care programmes, which had been implemented since 2010; however, there are 388 438 people waiting for outpatient appointments, waiting times for community services (e.g. physiotherapy) have increased and in 2012 there were 2.5 million fewer home-help hours provided than in 2008.

#### *Health promotion and prevention*

- Between 2005 and 2010, there was no designated budget for public health and many health promotion staff were redeployed to primary care and other services. The public health services that exist are very narrow, with a strong focus on immunization and some lifestyle-related initiatives. Public health and health promotion staff were categorized as population health staff and have seen a 20% reduction in numbers from 544 (March 2009) to 434 (November 2012). Plans for a new public health directorate within the HSE have been announced but no details are available as to its role or the extent of its resources.

# Israel

*Bruce Rosen and Amir Shmueli*

## **Economic trends**

- Israel's main indicators show the country largely unaffected by the crisis. After no growth in real per capita GDP in 2008 (-0.4%), the country has achieved above-average growth rates and a decline in unemployment. Although the size of government expenditure has decreased slightly relative to GDP since 2008, health spending as a share of government expenditure has risen but is still below the European mean.
- Public spending makes up the majority of health spending and, despite a slowdown in 2009, has continued to exhibit positive growth. Per capita non-OOP private expenditure decreased in 2009 (Israel: Figs 1 and 2).

## **Policy responses**

### **Changes to public funding for the health system**

- No response reported.

### **Changes to health coverage**

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

- No response reported.

#### *User charges*

- No response reported.

### **Changes to health service planning, purchasing and delivery**

#### *Prices of medical goods*

- No response reported.

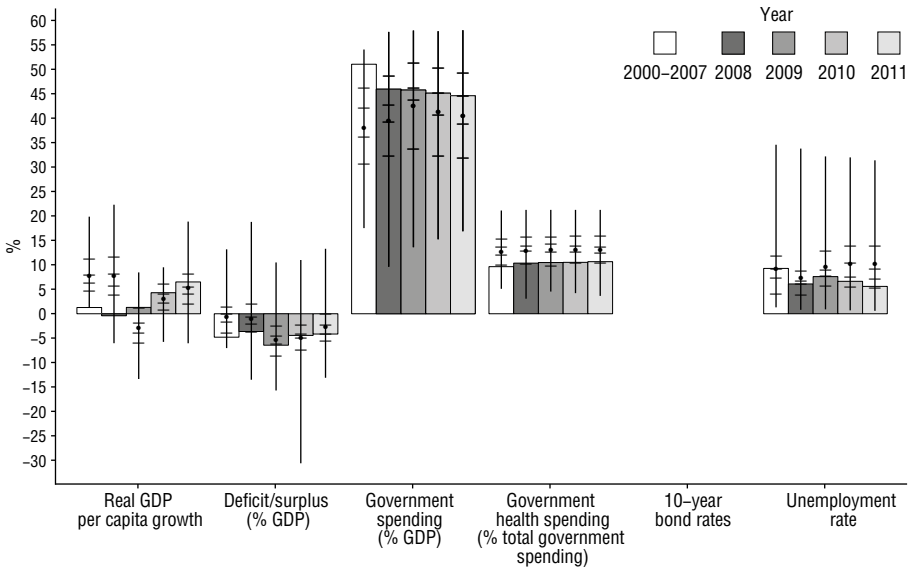
#### *Salaries and motivation of health sector workers*

- No response reported.

#### *Payment to providers*

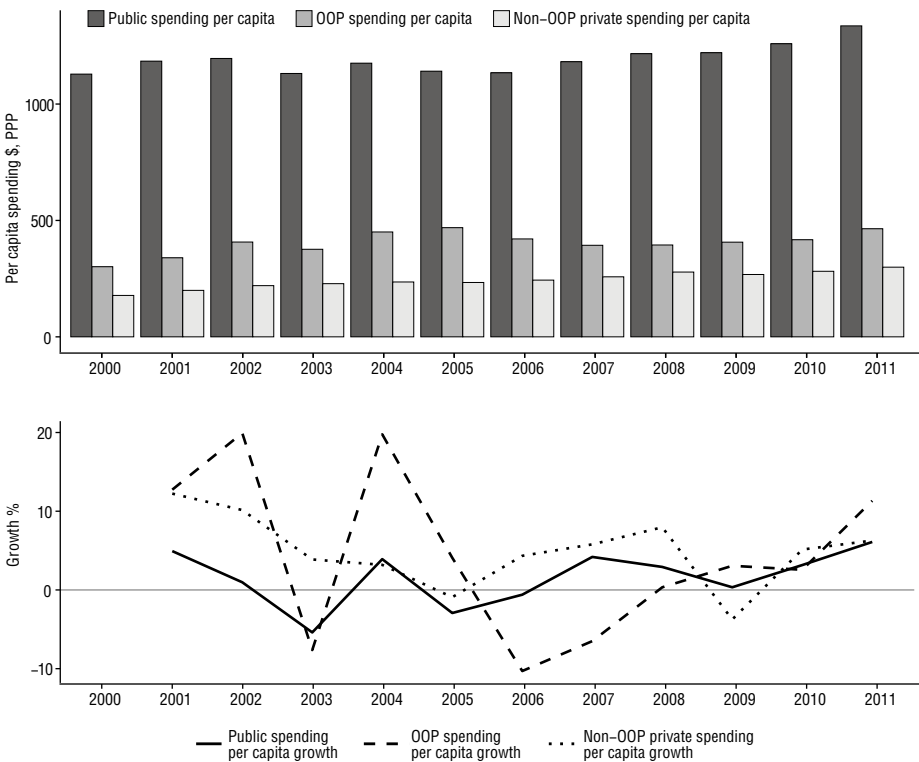
- No response reported.

**Israel: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Israel: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

*Provider infrastructure and capital investment*

- No response reported.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- No response reported.

## Economic trends

- Italy's real per capita GDP has been below the European average throughout the crisis period and growth was negative in both 2009 and 2010; real per capita GDP returned to low levels of growth in 2011. Italy has run a budget deficit in every year, including the years prior to the crisis.
- Health spending as a share of government expenditure has remained constant and above the European mean. Growth of per capita public and OOP expenditure on health were negative in 2010 but resumed positive growth in 2011 (Italy: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- Extensive cuts to the health budget took place under the Financial Law (2011); further cuts (totalling €2.5 billion) were planned for 2012 to 2014 (2012).
- The government allocated additional resources to the health sector (€1.1 million in 2010, €400 million in 2011 and €300 million in 2012) as part of an central–regional government agreement to increase funding for the NHS, long-term care and social policy and to finance investments in public sanitary infrastructure (2010).

### Changes to health coverage

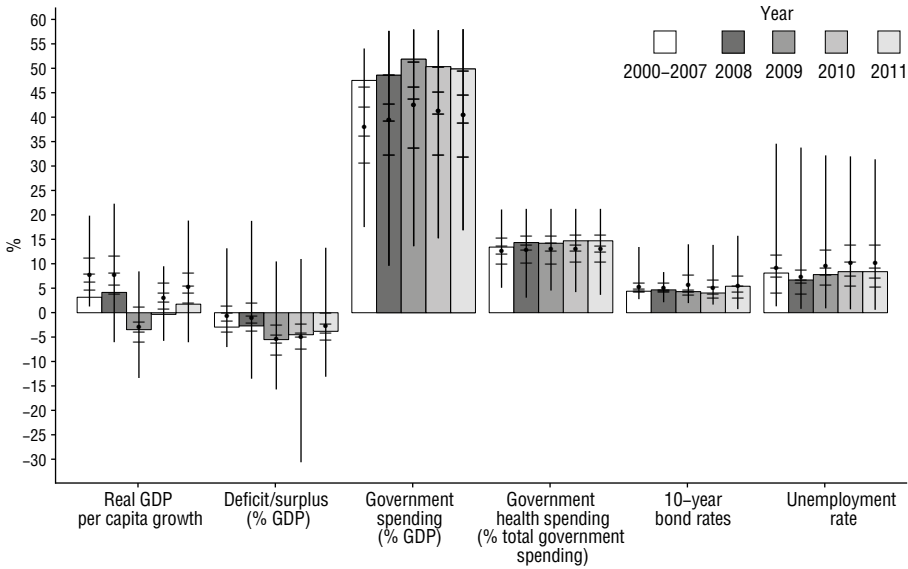
#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

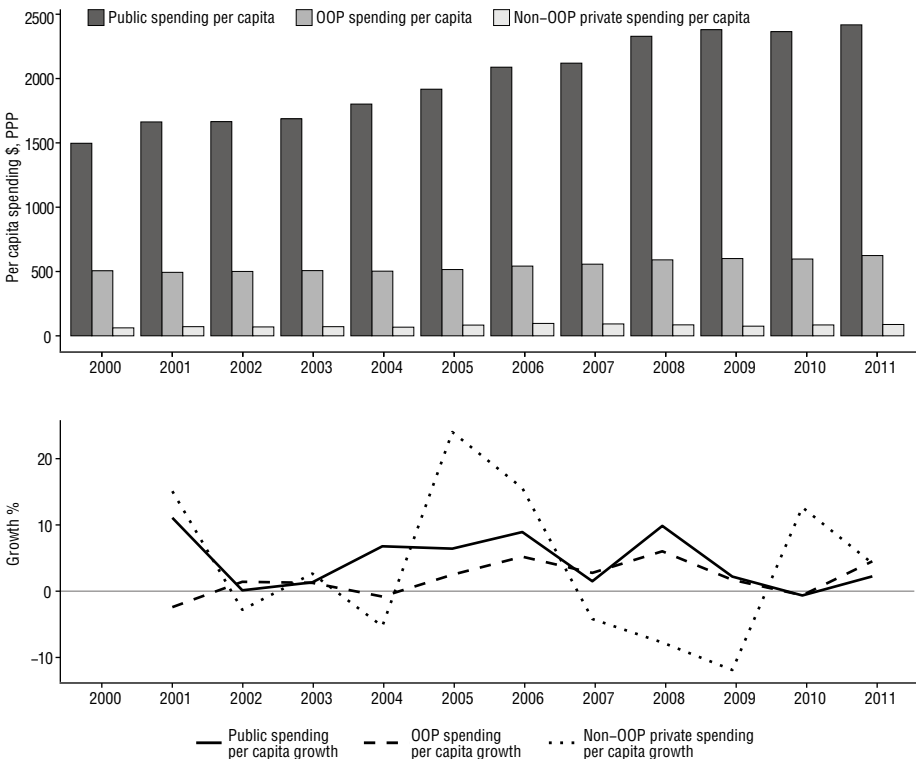
- *Some regions reclassified drugs covered by the NHS (de-listing, price renegotiation within regional drug reference lists and setting maximum reimbursement limits when equivalent drugs become available); the main criteria for reclassification are clinical and cost–effectiveness, disease prevalence, drug's toxicity and drug's acceptance by patients) (since 2008).*
- Proposed adding services to the benefits package (treatment for 110 new rare diseases, chronic obstructive pulmonary disease, chronic osteomyelitis,

**Italy: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Italy: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



chronic renal pathology, compulsive gambling, epidural anaesthesia) (proposed in 2012 but not yet implemented).

#### *User charges*

- By 2011 the number of regions applying co-payments for outpatient prescriptions had risen to 16 (up from 12 in 2010).
- User charges for outpatient specialist visits and outpatient diagnostic services (introduced for one fiscal year in 2007) abolished (2008) and later reintroduced and increased (a minimum charge of €10) (2011).
- User charges increased for non-urgent treatment in emergency departments (to a minimum charge of €25), with regions free to set the actual amounts charged (2011).
- Most regions applied user charges based on household income.

### **Changes to health service planning, purchasing and delivery**

#### *Prices of medical goods*

- *Reduction of the value of public contracts for medical goods (excluding pharmaceuticals) by 5% and allowed contracts to be withdrawn where the price in one region is over 20% of the reference price (2012).*
- *Medical devices budget capped at 4.8% of NHS spending (2013, lowered to 4.4% from 2014).*

#### *Salaries and motivation of health sector workers*

- *No update or adjustment to salaries of public health care workers (2010 onwards).*
- *In regions with financial deficits, a limit of 5–10% of total health care work is placed on new recruitment numbers (2008 onwards).*
- *In some regions, incentives for early retirement introduced (2008 onwards).*
- Health care personnel expenditure (salaries etc.) for 2013–2015 cut by 1.4% (compared with 2004 levels).

#### *Payment to providers*

- *Introduction of more stringent quasi-market contracts with private providers in some regions (2008). For example, regions with deficits introduced more informed commissioning of private providers and budget allocations were strictly defined (see below).*
- *Performance measurement introduced and linked to payment of providers as a cost-containment measure (2010).*

- Reduction of NHS spending on public services contracts by 10% compared with 2012 (2013).
- *Mandated public hospitals to make purchasing requests through the National Purchasing Agency for Medical Goods and Services (2012).*
- Expenditure on medical devices reduced leading to reductions in Ministry of Health spending:
  - reduction of €22 million in 2013 (Health Ministry's budget planned for 2013 was €278 million);
  - reduction of €30 million in 2014;
  - reduction of €35 million projected for 2015.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

*Provider infrastructure and capital investment*

- The government imposed a reduction in the number of hospital beds: 3.7 beds per 1000 population (down from 4 beds per 1000), of which 0.7 are for rehabilitation and long-term care (2012). It also imposed a reduction of the hospitalization rate from 180 per 1000 inhabitants to 160, 25% of which should be in day hospitals (2012). All targets were to be achieved by 30 November 2012.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- The government sought to improve coordination of care by requesting the development of GP group practices, integration between hospital and primary care services and adoption of policies aimed at shifting patients from inpatient hospital care to day-hospital care or to community/home care (2012).

*Waiting times*

- *Introduction of a range of policies to improve timely access to services, including the introduction of priority groups and specific diagnostic–therapeutic pathways with the involvement of GPs, volume controls for outpatient care by priority group, increased capacity through agreements with NHS providers, identifying facilities with guaranteed maximum waiting times, direct purchasing of extra visits and tests from private providers by local health units, activating central booking centres, penalties for patients who do not keep appointments and making user charges payable prior to accessing care (introduced with the National Health Plan (Piano Sanitario Nazionale)*

*2006–2008 and further defined by National Plan for the Management of Waiting Lists (Piano Nazionale Gestione Liste d'Attesa) 2010–2012).*

*Health promotion and prevention*

- Minimum age for purchasing tobacco and alcohol raised to 18 (2012).

# Kazakhstan

*Ninel Kadyrova and Tata Chanturidze*

## Economic trends

- Although real per capita GDP growth slowed in 2008 and was slightly negative in 2009, Kazakhstan has been largely unaffected by the crisis.
- Against the European trend, the unemployment rate has been decreasing.
- Total government spending on health is among the lowest in the European region although there was a government budget surplus in every year of the 2008 to 2011 period. Public per capita health spending, which had grown every year with the exception of 2007, decreased slightly in 2011 (Kazakhstan: Fig. 1).

## Policy responses

Kazakhstan Fig 2 gives the trends in per capita spending on health.

### Changes to public funding for the health system

- Public spending on health more than doubled between 2007 and 2011.

### Changes to health coverage

#### *Population (entitlement)*

- No response reported.

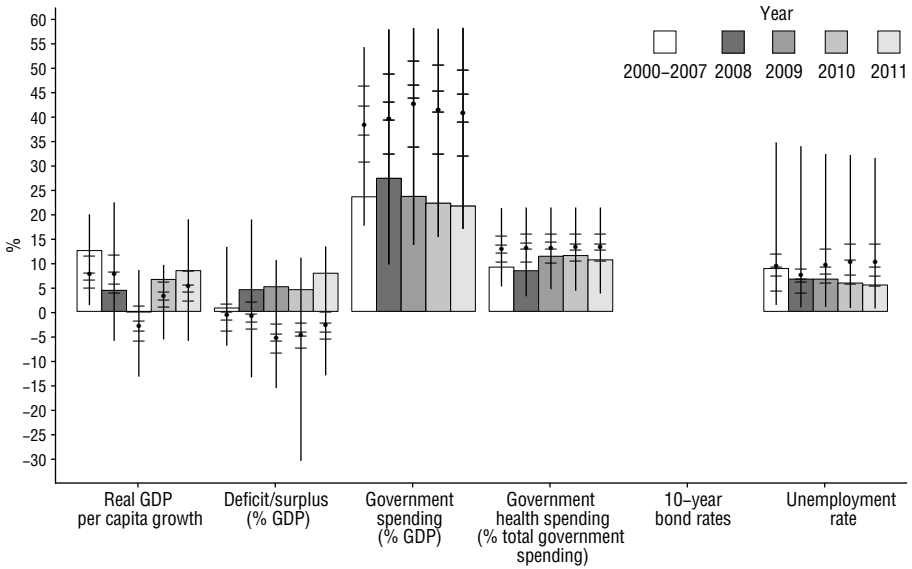
#### *The benefits package*

- *Highly specialized medical services, diagnostic care and screening added to the benefits package (2008–2012).*
- *List of benefit population entitled to outpatient prescription medicines free of charge expanded (2011 onwards).*
- *The essential list of drugs replaced with a formulary system based on cost–effectiveness criteria (2010).*

#### *User charges*

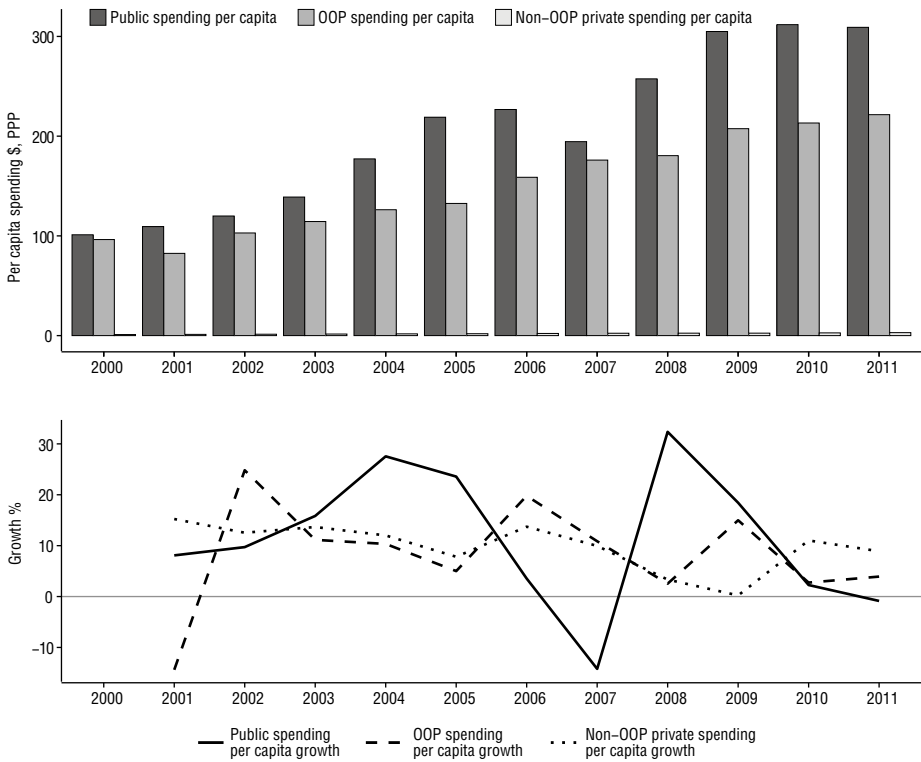
- No response reported.

**Kazakhstan: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Kazakhstan: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- *Introduction of monitoring of drug retail prices and thresholds for pharmaceuticals (2010).*
- *Set up a new drug information centre to give health professionals and patients information on rational drug use (2009).*

### Salaries and motivation of health sector workers

- No response reported.

### Payment to providers

- No response reported.

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- *Reintroduction of centralized procurement of drugs (2009).*

### Provider infrastructure and capital investment

- *Capital expenditure increased from KZT 82.8 billion in 2007 to KZT 145.1 billion in 2008 and was reduced to KZT 94.5 billion in 2010 and to KZT 90.4 billion in 2011.*
- *As part of the “Construction of 100 schools and 100 hospitals” programme, 61 hospitals were built between 2008 and 2012. Two outpatient facilities as part of the “Construction of 350 PHC facilities” project, which started in 2011.*
- *Health care delivery network was restructured with the transformation of health facilities into public enterprises (2009 onwards).*

### Priority setting or protocols to change access to treatments, coordination of care and patterns of use

- *Development of clinical practice guidelines (2007–2008) and upgraded of these in accordance with international principles (2011 onwards).*

### Waiting times

- *Introduction of a web portal for planned hospitalizations (2010).*

### Health promotion and prevention

- No response reported.

# Kyrgyzstan

*Baktygul Akkaziya*

## **Economic trends**

- The economy in Kyrgyzstan was largely unaffected by the crisis, although real per capita GDP did contract in 2010.
- Unemployment rates remained low between 2008 and 2011.
- Government spending as a share of GDP is below the European mean, although it increased between 2008 and 2011; the level of health spending fell below the European mean in 2010 and 2011.
- Although OOP payments were the dominant source of health financing in the early 2000s, the government became the main financer of health care in 2006. Per capita OOP expenditure declined in 2010 and 2011 (Kyrgyzstan: Figs 1 and 2).

## **Policy responses**

### **Changes to public funding for the health system**

- Public spending on health increased by 37% in real terms between 2010 and 2012.

### **Changes to health coverage**

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

- No response reported.

#### *User charges*

- No response reported.

### **Changes to health service planning, purchasing and delivery**

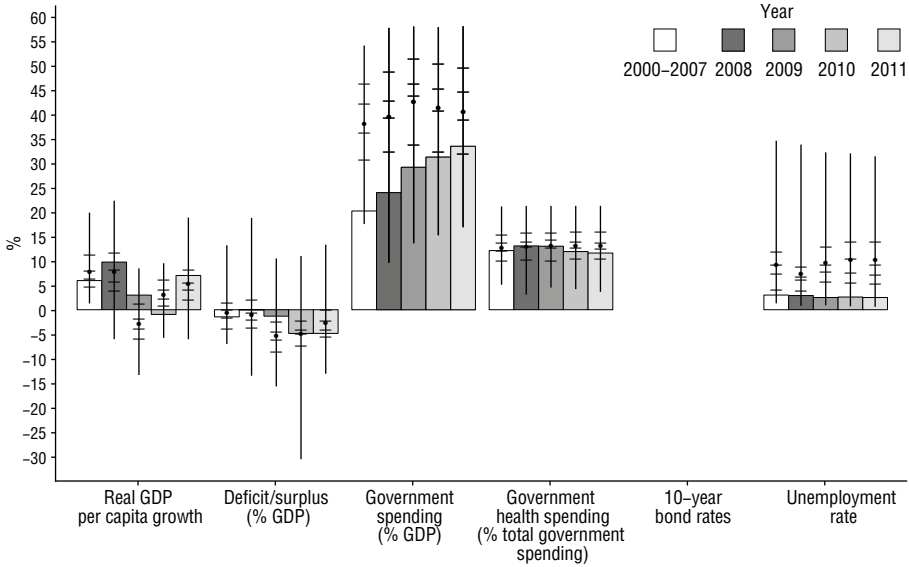
#### *Prices of medical goods*

- No response reported.

#### *Salaries and motivation of health sector workers*

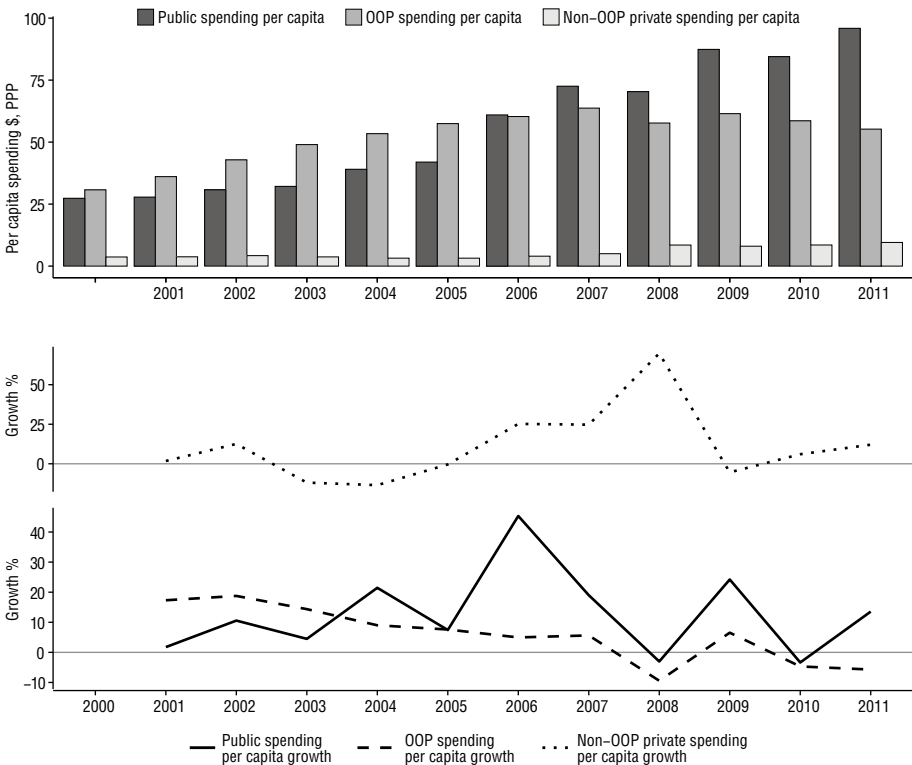
- No response reported.

**Kyrgyzstan: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Kyrgyzstan: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



*Payment to providers*

- No response reported.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- *Number of staff in the Ministry of Health reduced by 5% (2011).*

*Provider infrastructure and capital investment*

- No response reported.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- No response reported.

# Latvia

*Uldis Mitenbergs and Maris Taube*

## **Economic trends**

- Latvia's real per capita GDP contracted sharply in 2009 and stagnated in 2010, although it made a strong recovery in 2011.
- The unemployment rate, which had been near the European mean, more than doubled in 2009 to 16.9% and had not recovered by 2011.
- Ten-year bond rates increased dramatically in 2009, although by 2011 they had returned to the European mean.
- The size of government expenditure relative to GDP increased in 2008 and 2009 but decreased in 2011; health spending as a share of government spending has remained constant throughout the crisis. Per capita health spending decreased in 2009 for all sources of financing. In 2011, public per capita spending declined by 2.3% while private sources of funding had positive growth (Latvia: Fig. 1).
- Latvia Fig 2 gives the trends in per capita spending on health.

## **Policy responses**

### **Changes to public funding for the health system**

- The Ministry of Health's budget fell by 12.6% in 2009, remained stable from 2010 to 2012 and was expected to be cut substantially (to 2.9% of GDP) in 2013 (since 2011, the Ministry of Health budget no longer includes EU funds for health care institutions not under its direct supervision, which have been moved to the Ministry of Finance).
- Social insurance tax increased from 33.09% to 35.09% (2011).
- Taxes on alcohol and tobacco increased (these taxes are not earmarked for health) (2009).

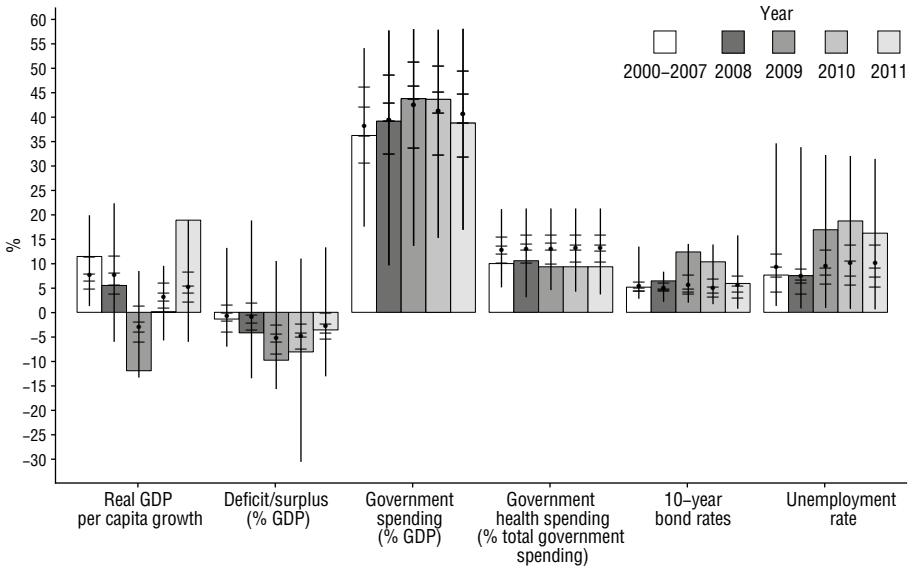
### *Population (entitlement)*

- The Ministry of Health plans to change the basis for entitlement from residence to insurance status (2012).

### *The benefits package*

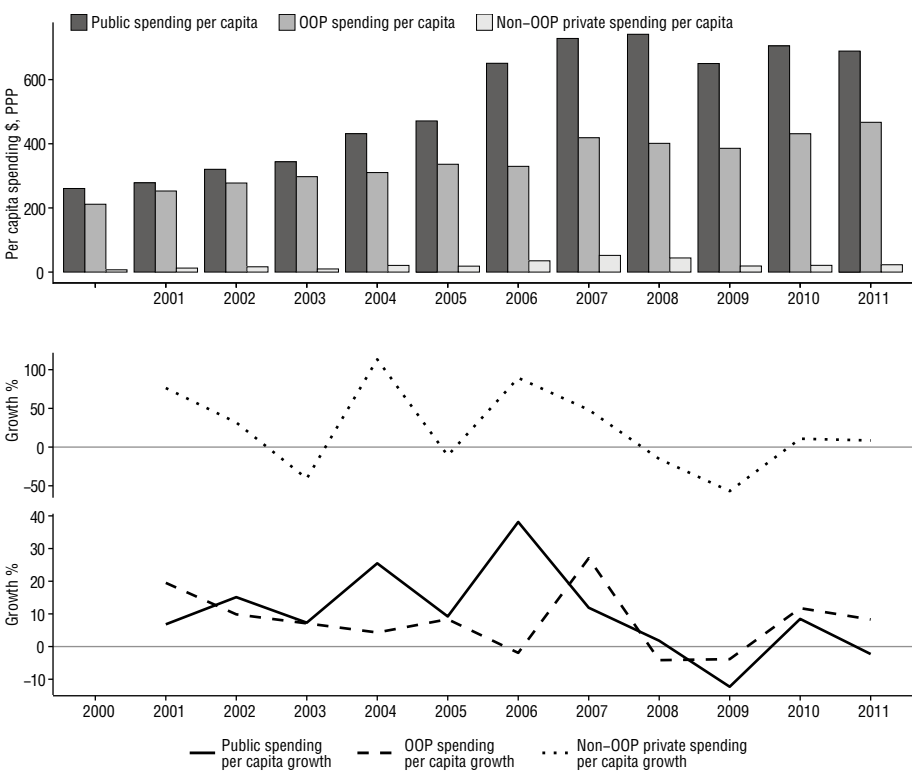
- Home care added to the benefits package (2009).

**Latvia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Latvia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*User charges*

- Co-insurance rates for drugs for some conditions (mainly cardiovascular diseases) increased from 25% to 50% or from 10% to 25% (2009); the 50% rate was lowered to 25% in 2010.
- Introduction of new exemptions from user charges for households with an income below LVL 120 per family member per month, while households with an income below LVL 150 per family member per month became eligible for a 50% reduction in user charges (2009).
- Increase in co-payments for physician and outpatient department visits and inpatient stays (2009).
- Increase in the cap on OOP payments for an inpatient stay and for a year (from LVL 80 and LVL 150 to LVL 250 and LVL 400, respectively) (2009).
- Introduction of a co-payment of up to LVL 30 for inpatient surgical interventions and increased co-payments for various diagnostic services (up to LVL 25, but not for prescribed laboratory tests) (2009).
- Modification of the reference pricing system so that patients purchasing any but the cheapest drug in a group must pay the full price as OOP payment (2012).
- From 2012, only households with an income below LVL 90 per family member per month would be exempt from user charges (2012).

**Changes to health service planning, purchasing and delivery***Prices of medical goods*

- Introduction of a pay-back system if the NHS drug budget is exceeded, with €5.6 million paid back to the NHS in 2011.
- *Expanded reference price groups to include more drugs and reduced the number of products in a group for List A drugs (interchangeable products) to one (the cheapest) (2012).*
- Prescriptions for new patients must specify the active ingredient (2012).
- Pharmacists must dispense the cheapest drug in a reference group (2012).

*Salaries and motivation of health sector workers*

- An average 20% reduction occurred in the salaries of all health workers in 2009 and a fall in overall average monthly remuneration of health sector workers by 3% between 2009 and 2010, with slight increase in 2011.

*Payment to providers*

- Increased day-care payment rate in order to shift patients away from inpatient care (2009).

- A combination of per diem fees and activity-based payments was replaced by global budgets to pay for hospital care (2010).
- *Introduction of a DRG-based hospital payment system planned for 2014.*

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Reduction of the number of employees of the Ministry of Health and its agencies by 55% between 2009 and 2012.
- Numerous agencies closed, including the State Agency of Health Statistics and Medical Technologies, the State Centre of Medical and Professional Education and the Public Health Agency (2009).
- Various agencies were reorganized: the Health Payment Centre was established in 2009 and, in 2011, merged with the Centre of Health Economics under the umbrella of the Latvian NHS.

*Provider infrastructure and capital investment*

- The State Emergency Medical Service was established in order to gradually take over emergency medicine functions from medicare institutions, centralize the emergency system (provision of emergency care services used to be decentralized across 39 municipalities) and save administrative costs (2009).
- The number of hospitals providing inpatient care decreased from 88 in 2008 to 67 in 2010; the number of hospital beds decreased from 746 to 532 per 100 000 inhabitants between 2008 and 2010. At the same time, the number of the NHS-contracted hospitals decreased from 79 to 39.
- Most specialized hospitals were closed or transformed into day-care and outpatient institutions; several local hospitals were downgraded to low intensity “care hospitals” (catering for patients after discharge from acute care hospitals) (2009 onwards). Some hospitals were still left with excess infrastructure.
- *A pilot e-health system commenced in 2012. The full system will include e-receipts, e-health records, e-bookings, e-referrals and an e-portal and is expected to be implemented in 2014.*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Introduction of a programme to increase responsibilities and duties of family doctors, including increased support of the provision of medical care at home (2009).
- Social Safety Net resources used to support the introduction of home care services for the chronically ill, development of day-care centres for the

mentally ill, hiring additional nurses at primary health care facilities and development of a family physician advisory telephone service (since 2009).

- Several local hospitals downgraded to low intensity “care hospitals” (2009).
- *The NHS took over responsibility for developing clinical guidelines and published 11 (2012).*

#### *Waiting times*

- No response reported.

#### *Health promotion and prevention*

- *Early cervical and breast cancer detection programme established (2009).*
- *Dissolution of the Public Health Agency (2009) and its replacement by the Centre for Disease Prevention and Control (2012).*

# Lithuania

*Gintaras Kacevičius and Skirmante Sauliune*

## Economic trends

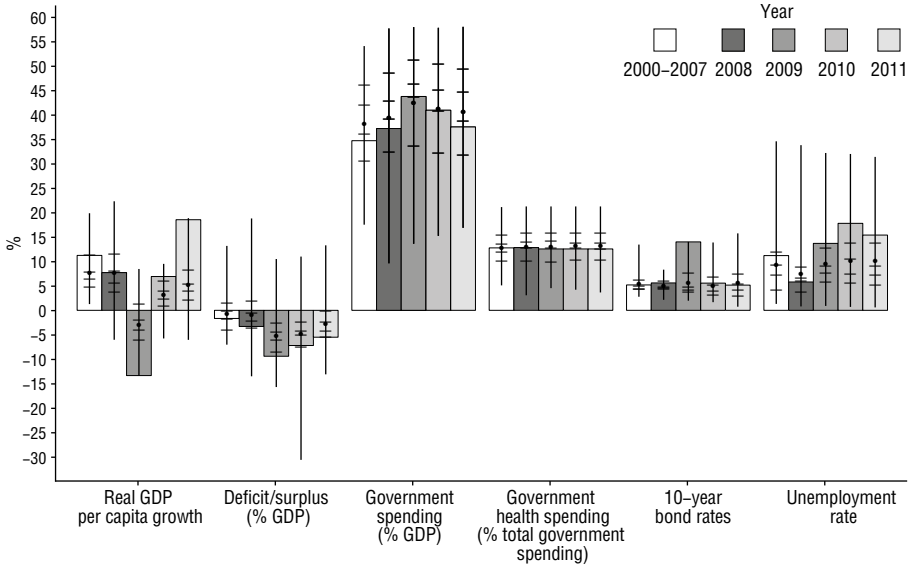
- Lithuania's real per capita GDP contracted sharply in 2009 by 13.4% but recovered the following year.
- The unemployment rate increased and remained above the European mean even after the economic recovery.
- The cost of borrowing increased substantially in 2009 but 10-year bond rates returned to mean European levels by the following year.
- Despite an increase in the size of government spending relative to GDP in 2009, health spending has remained constant as a share of government spending, close to the European mean. OOP expenditure per capita declined slightly in 2009 by 3.4% but in 2011 increased by 10.0% (Lithuania: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

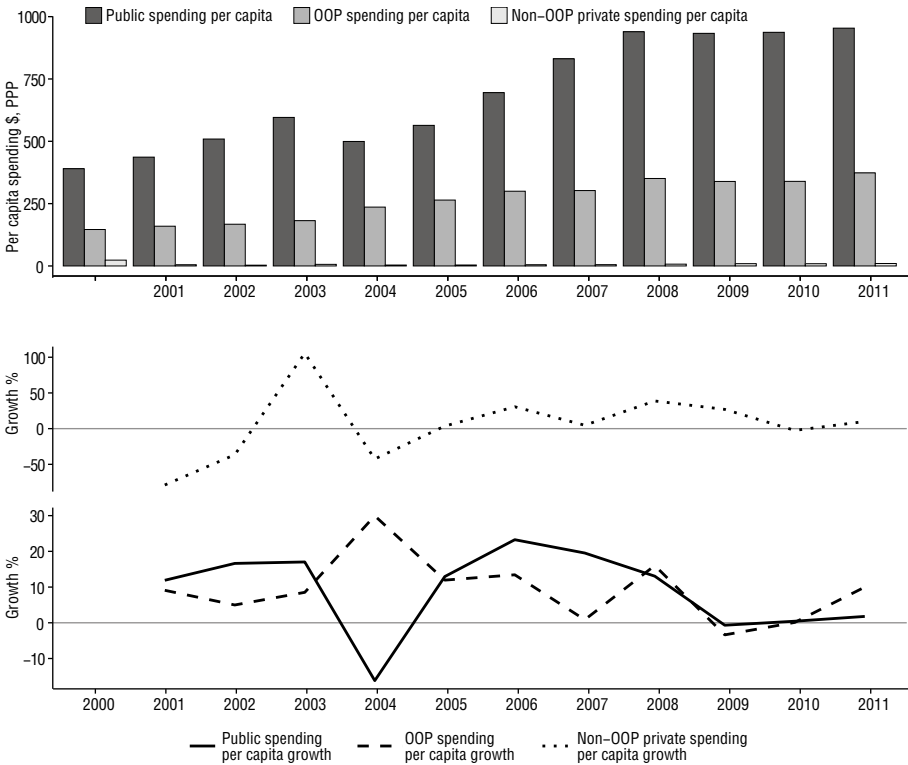
- The state budget for health, including contributions to SHI, increased between 2008 and 2011; health was the only public sector to receive increased funding in 2009.
- In comparison to 2008, SHI revenues fell by 20% in 2009 and by further 23% in 2010 as a result of higher unemployment and lower salaries, but began to rise again from 2011; SHI spending fell by 5% between 2008 and 2010 but recovered in 2011.
- *A tax reform was introduced to separate SHI contributions from personal income tax (2009); the SHI contribution was set at 9% of gross earnings or income for employees and some groups of self-employed people and 9% of the official minimum monthly salary for the rest self-employed and other groups; collection agents (the Social Insurance Fund and the State Tax Office) were forced to increase their effectiveness in enforcing payment of contributions or face penalties; the overall social security contribution rate was increased from 26% in 2006 to 35% in 2012.*

**Lithuania: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Lithuania: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



## Changes to health coverage

### *Population (entitlement)*

- *Changed contribution rules to extend statutory coverage (2009) for the self-employed and those in other forms of employment (sportsmen, those receiving income from copyright, business owners, agricultural workers, etc.) and improved tax collection mechanisms.*

### *The benefits package*

- Reduction of the reimbursement rate for temporary sick leave benefits from 85% of wages to 40% of wages in the first seven days and 80% after the eighth day (2009).
- Introduction of a new version of the catalogue of pharmaceuticals reimbursed by SHI (positive list for drugs) (2009) based on expanded reference pricing and more strict requirements for generic pricing.

### *User charges*

- Introduction of the option for patients to choose drugs with lower user charges (2009).

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- First-line generics to be priced 30% below the original in order to be covered and second- and third-line generics to be priced at least 10% less than the first-line generic (2009).
- *Introduction of price-volume agreements with producers (2009–2010).*
- The reference price to be set based on the average of an expanded group of eight European countries minus 5% (2009–2010).
- Drugs to be prescribed based on active ingredient (2009).
- Patients allowed to choose the drug with the lowest user charge (2009).

### *Salaries and motivation of health sector workers*

- Health sector worker salaries decreased by 13% between 2008 and 2010, with gradual recovery to 2009 levels in 2011 and moderate increase in 2012.

### *Payment to providers*

- Reduction of health service reimbursement tariffs by 11% in 2009 and by a further 8% in 2010. The tariffs subsequently increased but by the end of 2012 they were still 9% lower than in 2008.

- *Adjusted payment mechanisms in order to incentivize hospitals to provide more outpatient and day care instead of inpatient services (2009).*
- *After a preparation phase (2009–2011), national case-based payment for hospitals replaced with a DRG system (2012).*

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- *Restructuring of the Ministry of Health and institutions accountable to it included merger of seven public health institutions (2009–2010).*

*Provider infrastructure and capital investment*

- *Reorganization of the network of medical institutions into municipal, regional and national levels (2009). Hospital mergers into larger legal entities reduced the number of hospitals by 25% (from 81 to 61) (2009–2012). The primary goal was to reduce the volume of inpatient services while directing available funds to primary, outpatient and day care.*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Primary care, outpatient care and day care were prioritized to reduce inpatient admissions. This is long-term policy with stepped up implementation since 2007 using financial incentives and payment mechanisms.*

*Waiting times*

- *No response reported.*

*Health promotion and prevention*

- *Increased financing for priority preventive services (e.g. cardiovascular diseases) and cancer (breast, cervical, colon) screening programmes (2011 and 2012).*

# The former Yugoslav Republic of Macedonia

*Fimka Tozija*

## Economic trends

- Real GDP did not contract after 2008, although economic growth slowed through 2011.
- Although unemployment rates have been decreasing, they have remained the highest in the European region.
- Public per capita health expenditure growth was 0.6% in 2009 and negative in 2010. Growth in OOP expenditure remained positive throughout the 2008 to 2011 period (The former Yugoslav Republic of Macedonia: Figs. 1 and 2).

## Policy responses

### Changes to public funding for the health system

- The health budget increased in 2010 and 2011 and was reduced in 2012.
- The SHI contribution rate was reduced from 9.2% to 7.5% (2009); it was supposed to fall to 6% in 2011 but this change was not implemented.

### Changes to health coverage

#### *Population (entitlement)*

- Statutory coverage of essential services (preventive check-ups, immunization, drugs on the positive list, treatment for a range of communicable diseases) extended to all citizens (to be financed from the central government budget) (2009).

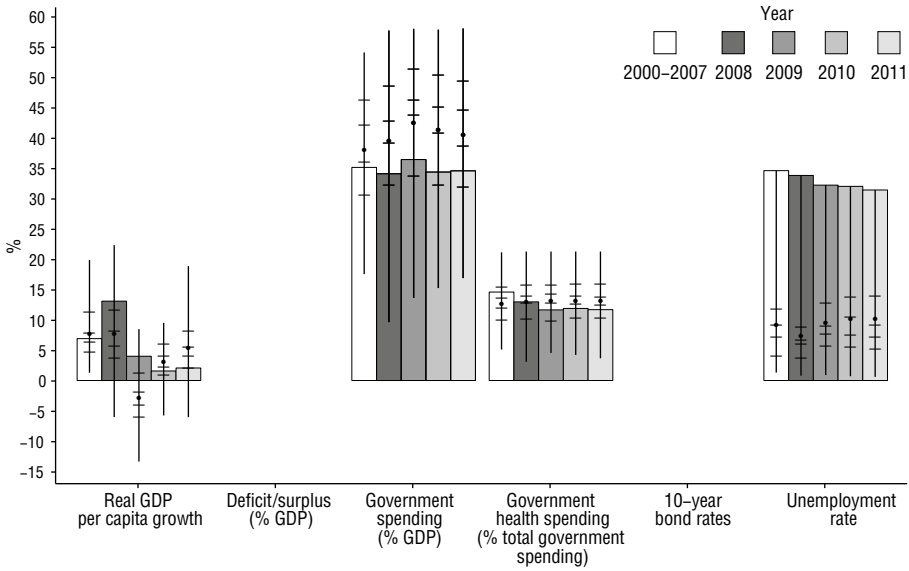
#### *The benefits package*

- Introduction of free check-ups for people in remote areas (2011–2012).
- Introduction of an annual limit on patients treated abroad (2012).

#### *User charges*

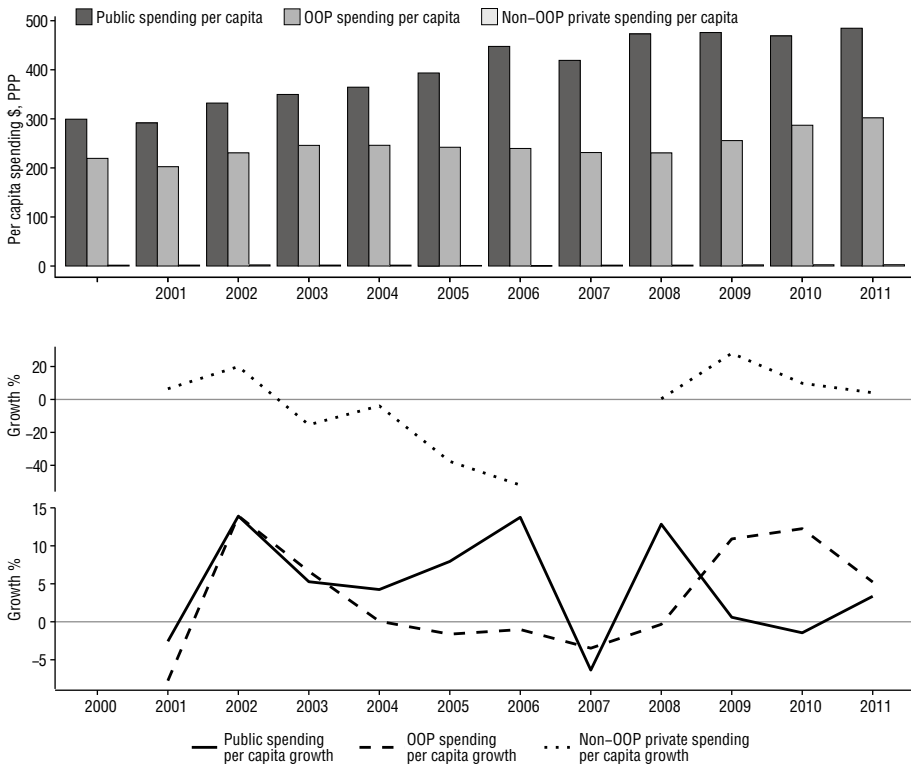
- No response reported.

**The former Yugoslav Republic of Macedonia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; Other indicators: WHO Health for All.

**The former Yugoslav Republic of Macedonia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- SHI introduced reference prices for drugs on a positive list based on drug prices in Bulgaria, Croatia, Serbia and Slovenia (2010).

### *Salaries and motivation of health sector workers*

- Additional personnel recruitment (200 doctors, 60 nurses, 20 radiography and laboratory technicians) approved in response to migration issues (2011).

### *Payment to providers*

- Health Insurance Fund introduced reference prices for health services (2009). The total value of contracts with health organizations in 2011 increased by 8.5% compared with 2010.

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

### *Provider infrastructure and capital investment*

- Increases in the quality of health services were sought by reorganizing emergency medical services, upgrading medical equipment, establishing a committee dedicated to the improvement of the health sector, and implementing an integrated health management information system and electronic health card (2010–2012).

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- The Ministry of Health and professional associations developed 240 evidence-based medicine clinical guidelines (2012) and health institutions are developing clinical pathways.

### *Waiting times*

- No response reported.

### *Health promotion and prevention*

- Adoption of 17 public health programmes (2012).
- Reduction by 38% to preventive health programmes budget (2012).

# Malta

*Natasha Azzopardi Muscat*

## Economic trends

- Malta's real per capita GDP growth slowed in 2009; however by 2011, economic growth was below the European mean.
- Unemployment rates have not changed significantly during the 2008 to 2011 period.
- Health spending as a share of the government budget has increased since 2008. There was a slowdown in growth of OOP expenditure in 2009 (Malta: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- *The health budget continued to increase between 2008 and 2012.*

### Changes to health coverage

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

- *Services added to the benefits package based on HTA (e.g. deep brain stimulation 2010, new cancer medicines 2009 onwards).*

#### *User charges*

- No response reported.

### Changes to health service planning, purchasing and delivery

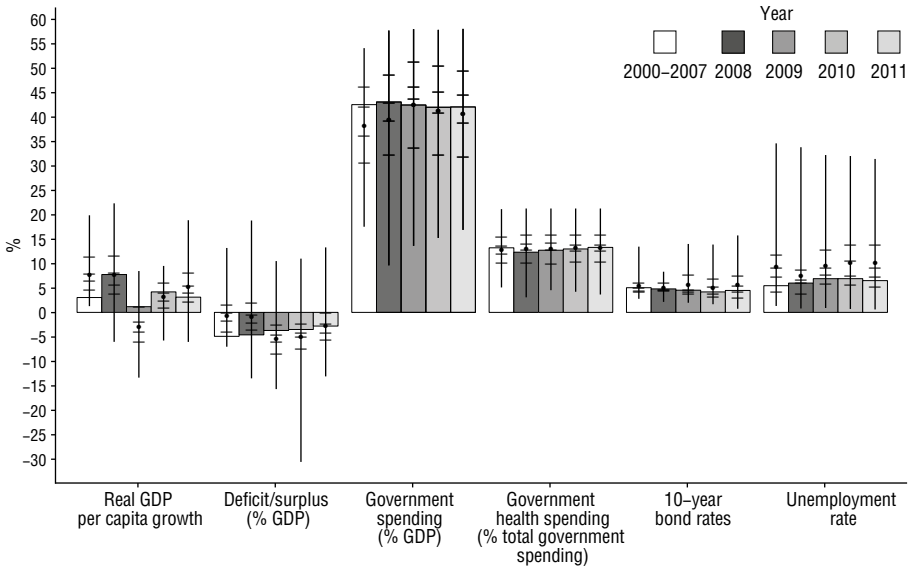
#### *Prices of medical goods*

- *A legal framework established to set a maximum reference price at the time of deciding to include a drug in the formulary (2009).*

#### *Salaries and motivation of health sector workers*

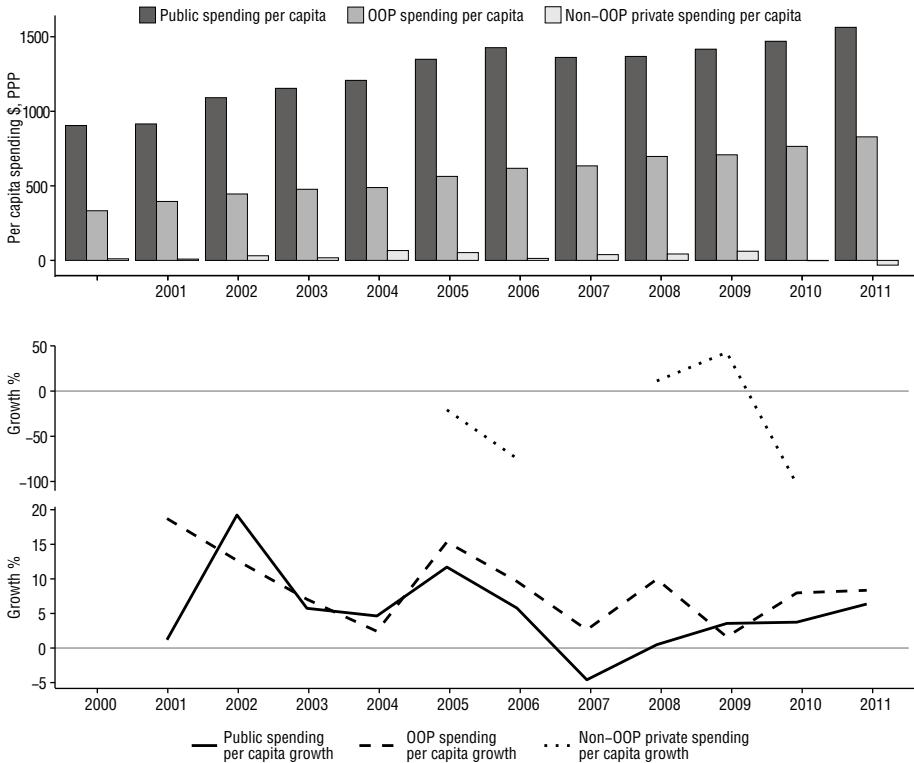
- No cuts reported. Salary increases negotiated for health care workers in 2012–2013.

**Malta: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Malta: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*Payment to providers*

- No response reported.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

*Provider infrastructure and capital investment*

- No response reported.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Some initiatives undertaken to improve access to diagnostic investigations for primary care doctors (2010 onwards).*

*Waiting times*

- *Introduction of outsourcing to the private sector to reduce long waiting times (e.g. for cataract surgery and knee arthroscopy) (2011).*

*Health promotion and prevention*

- *National Cancer Plan launched (2011).*
- *National Strategy on Healthy Weight for Life (2012).*



# The Republic of Moldova

*Valeriu Sava*

## Economic trends

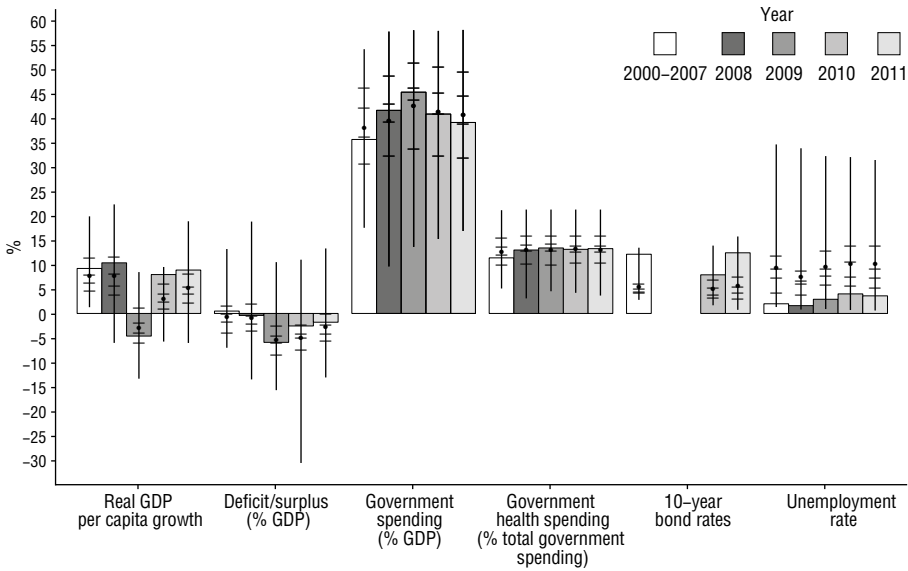
- The Republic of Moldova's real per capita GDP growth quickly recovered from a contraction in 2009 and in 2010 and 2011 was among the highest in the European region. The budget deficit, while increasing in 2009, was below the European mean in 2010 and 2011.
- Unemployment rates have consistently been below the European mean from 2008 through 2011.
- Ten-year bond rates remain high relative to other European countries.
- While the size of government expenditure relative to GDP declined after 2009, the level of health spending remained stable, close to the European region mean. This decline in the overall size of government expenditure meant that public per capita health spending declined in 2010 by 4.3%; however, OOP expenditure has continued to increase (Republic of Moldova: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

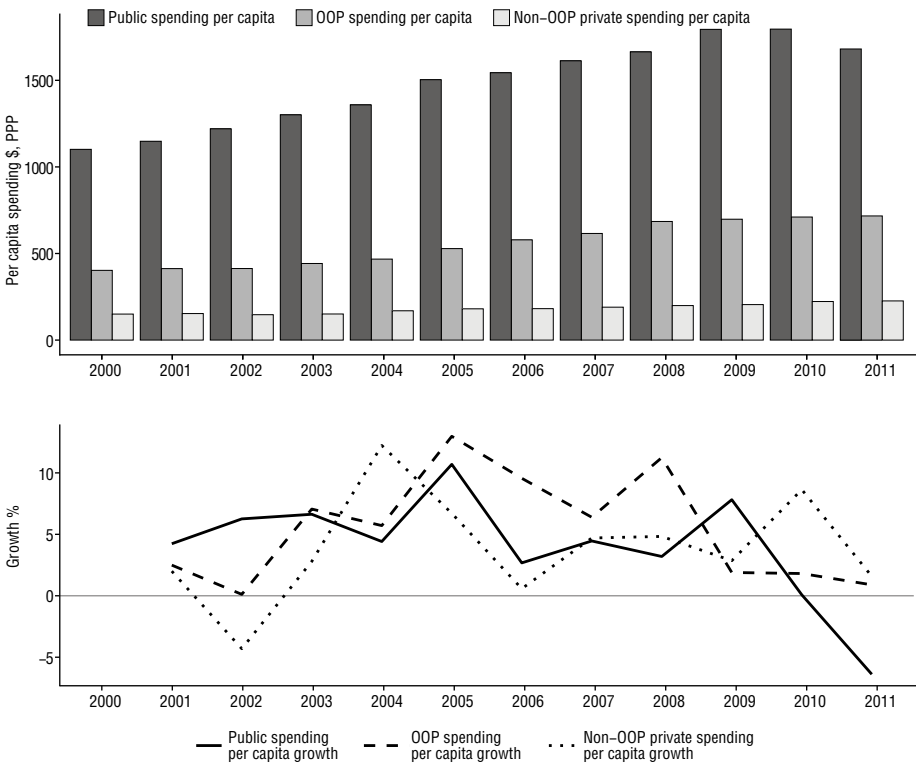
- Public spending on health fell in 2009 but remained stable in 2010 and 2011.
- The government health budget increased slightly from 2010 to 2012.
- The mandatory health insurance (SHI) budget grew in 2010 and 2011 and was expected to grow in 2012 but in July the Law on Mandatory Health Insurance was revised to approve a deficit of around € 5.3 million, which was financed using SHI reserves.
- Transfers from the state budget to SHI increased by 7% to compensate for falling SHI revenues from payroll tax (2010); transfers from the state budget to SHI on behalf of non-contributing people fell, as a share of SHI revenues, from 56.3% in 2010 to 54.5% in 2011 and 52.8% in 2012;
- The discount for people self-purchasing SHI cover was increased from 50% to 75% of the flat-rate contribution for poorer people and for socially disadvantaged self-employed people, mostly from the agricultural sector (since 2010); the deadline for yearly contribution payment was postponed from 31 March to 31 October (in 2011 and 2012).

**Moldova, Republic of: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; 10-year bond rates: IMF; Other indicators: WHO Health for All.

**Moldova, Republic of: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

- The flat-rate contribution for self-insured people decreased by 6.1% in 2010, and rose by 11.9% in 2011 and 7.6% in 2012.
- The enrolment of self-insured people increased by 30% in 2010 and 57% in 2011, but decreased by 1.7% in 2012.
- *The Ministry of Health launched three public–private partnership projects to develop oncology radiotherapy services and imaging and dialysis services (2011–2012).*

## Changes to health coverage

### Population (entitlement)

- *Introduction of automatic subsidized entitlement to statutory coverage for households eligible for social benefits, mothers of four or more children and full-time doctoral students.*
- *Extended coverage funded by previously accumulated SHI reserves (2009) and by extra transfers from the central government budget (2010).*

### The benefits package

- *Funding for primary care prioritized and the range of drugs covered by SHI expanded (2009).*
- *Benefits for the uninsured expanded to include emergency care and full cover of primary care, including outpatient prescription drugs (previously only primary care visits were covered) (2009), although outpatient prescription drug benefits were removed in 2011.*
- *The network of pharmacies contracted by the national health insurance fund increased from 384 (2010) to 428 (2011) and 517 (2012).*
- Coverage of reimbursable drugs has fallen since 2010 as the coverage extension mandated in 2009 was not supported by additional funding (2011). However, the spending on subsidized drugs, and the number of prescriptions paid from SHI fund increased in 2011 and 2012.

### User charges

- No response reported.

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- Introduction of new rules on approval and registration of producer prices (2012).
- New rules indicate only prescribed drugs with one active ingredient will be covered (2012).

*Salaries and motivation of health sector workers*

- No response reported.

*Payment to providers*

- *Development of performance assessment and results-based financing aimed at medical personnel motivation, quality improvement and resource efficiency (2009).*
- *The Ministry of Health decided to shift to DRG payment for hospital services contracted within SHI (previously payment was by tariffs with caps on overheads and running costs adjusted for the rate of inflation and historic revenue and spending). Nine pilot hospitals were contracted and paid by DRGs in 2012, followed by an expansion in 2013.*

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- *Between 2010 and 2012, the Ministry of Health changed its organizational chart three times, with the aim of reducing administrative costs. In December 2012, the government approved a Ministry of Health initiative to reorganize medical institutions at the national level by introducing common management in order to reduce administrative costs and duplication in logistics and non-clinical services. This was met with resistance from some groups of politicians, professionals (institution staff) and part of the population, provoking debate in the mass media.*

*Provider infrastructure and capital investment*

- Reviewed and put on hold investment plans for costly equipment (2009).
- Parliament adopted a law which introduced a “fund for development and modernization of public health providers” within the SHI framework (2010). The fund has maintained and even increased resources for capital investment, procurement of modern and expensive equipment, sanitary transport and information technology in the health sector, despite wider restrictions imposed by the Ministry of Finance. The rate of disbursement of resources to the fund increased in 2012, resulting in an increase in the number of medical institutions.
- In March 2012, the Ministry of Health announced its commitment to launch a reorganization of the public hospitals network based on the National Hospital Master Plan, which aimed to enhance efficiency, access and quality of services. However, implementation of the plan is still pending, and the Ministry of Health is in the process of choosing the model, based on the piloting results of a “zonal” hospital, carried out with World Bank technical assistance.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Funding of emergency and primary health care prioritized (more than 38% of the SHI funds in total) and the list of compensated medications was extended as part of a plan to combat and mitigate the effects of the crisis on health (2009–2011).
- The Ministry of Health approved the 2012–2014 Health Policy Roadmap, which includes the decentralization of primary health care, regionalization of specialized and highly specialized care, introduction of a quality management system in all health institutions, better targeting of state subsidies, and increases in the efficiency of health funds utilization. However, implementation has been slow.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- *Increased population immunization coverage (2011, 2012).*
- *Institution of measures to promote health lifestyle and health education (2011, 2012).*

# Montenegro

*Ratka Knežević*

## Economic trends

- After an above-average contraction of real per capita GDP in 2009, Montenegro experienced modest growth in 2010 and 2011.
- The unemployment rate, already high prior to the crisis, remained well above the European mean through 2011.
- Public per capita health expenditure decreased sharply in 2010 by 11.0%, while private expenditure growth accelerated. However, the increase in private expenditure was not large enough to offset the decrease in public expenditure (Montenegro: Fig. 1).
- Montenegro Fig 2 gives the trends in per capita spending on health.

## Policy responses

### Changes to public funding for the health system

- Since 2010, the Ministry of Finance has set a budget for health to control spending.
- A planned decrease in the SHI contribution rate from 13.5% in 2007 to 9% of the gross salary of the employee in 2010 was scaled down to 12.3% in 2010.
- The SHI contribute rate for pensioners was cut from 19% to 1% (2010).
- SHI spending fell in 2011 and in 2012 remained below the 2010 level.
- The overall SHI contribution rate was increased from 32% to 33.8%, with the employer share falling from 14.5% to 9.8% and the employee share rising from 17.5% to 24% (2010).
- Taxes on tobacco and tobacco products were increased (2011 and 2012).

### Changes to health coverage

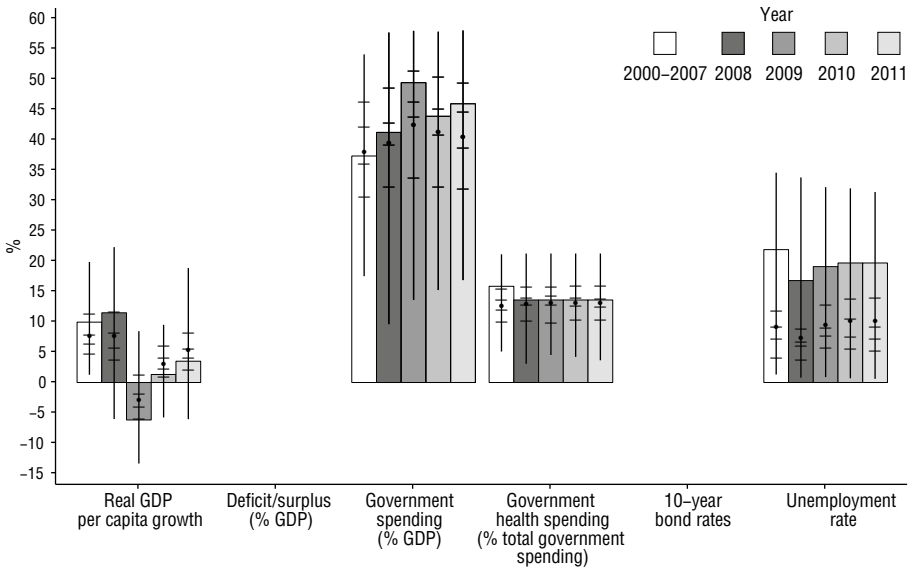
#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

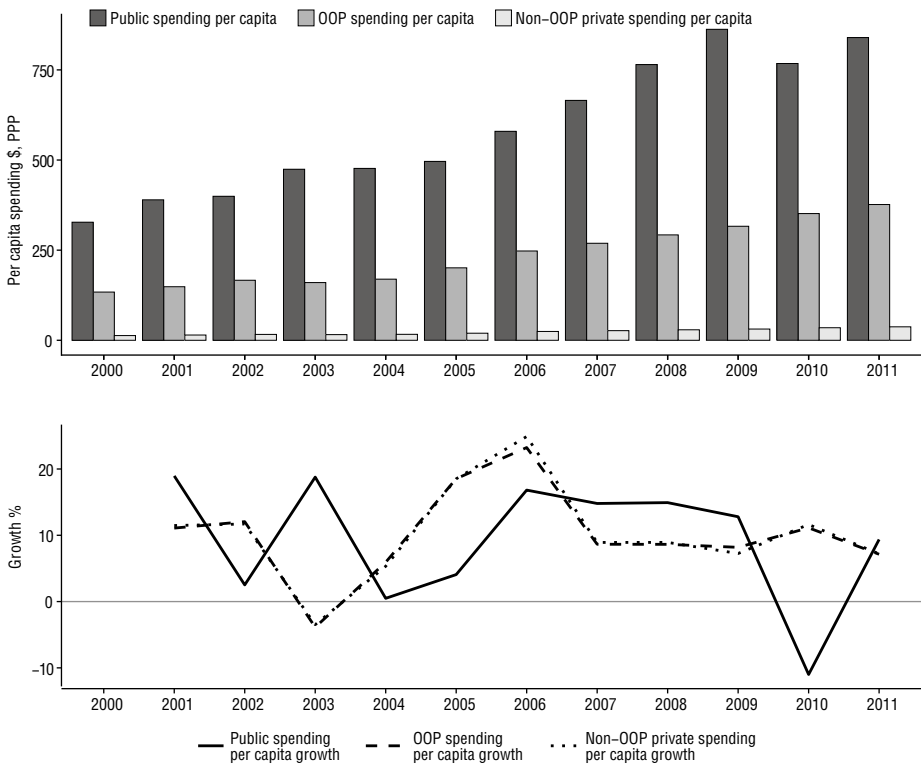
- *Coverage expanded for children and students under 26 years, patients with mental health problems and other chronic conditions (2008).*
- *Access to publicly financed dental care expanded (2012).*

**Montenegro: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Montenegro: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*User charges*

- No response reported.

**Changes to health service planning, purchasing and delivery***Prices of medical goods*

- Improvements in drug procurement through revising existing list of reimbursed medicines (new list since 2012).
- Strengthened prescription monitoring systems since 2010.

*Salaries and motivation of health sector workers*

- Abolition of some health care workers' pay-related benefits (2010).

*Payment to providers*

- No response reported.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

*Provider infrastructure and capital investment*

- Funds for construction of facilities and procurement of equipment of high technological value allocated from the state budget from 2010 onwards; implementation was delayed for the procurement of medical equipment, which continued to be financed through the health insurance fund.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Development of new and the revision of existing guidelines in order to include different areas of medicine and health care (2011).*
- *Establishment of a commission for HTA (2010).*

*Waiting times*

- *In attempt to reduce long waiting lists and waiting times, the Health Insurance Fund was permitted to contract private health care providers to provide specific services (e.g. in vitro fertilization, cardiology, internal medicine, ophthalmology, radiography and ultrasound diagnostics and hyperbaric oxygen therapy) (2010).*

*Health promotion and prevention*

- Excise duties on tobacco and alcohol (2011).



# The Netherlands

*Ronald Batenburg and Paul Poortvliet*

## Economic trends

- Real per capita GDP in the Netherlands declined in 2009 by 4.5% and returned to modest growth in 2010. The budget deficit increased in 2009 as government spending, already high for the European region relative to the size of its economy, was maintained.
- Unemployment has remained low since 2008 but started to increase in 2010 among younger age groups as a result of low labour market mobility.
- Ten-year bond rates have decreased between 2008 and 2011. The total household mortgage debt in the Netherlands remains exceptionally high compared with EU levels.
- Health spending as a share of government spending is above the European mean and public per capita health care spending did not decline during the crisis. OOP expenditure per capita decreased in 2009 by 9.9% (the Netherlands: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- The health budget increased by 13% between 2008 and 2011. In 2013, the Minister of Health, Welfare and Sport (Ministry of Health) reached an agreement with insurers and health care providers to limit annual growth in hospital and primary care expenditure to 1.5% in 2014 and 1% in 2015–2017.
- The ceiling on SHI contributions was raised from €50 064 to €50 853 (2012); SHI contributions were increased from 5% to 5.56% for employees and from 7.1% to 7.5% for employers (2013).

### Changes to health coverage

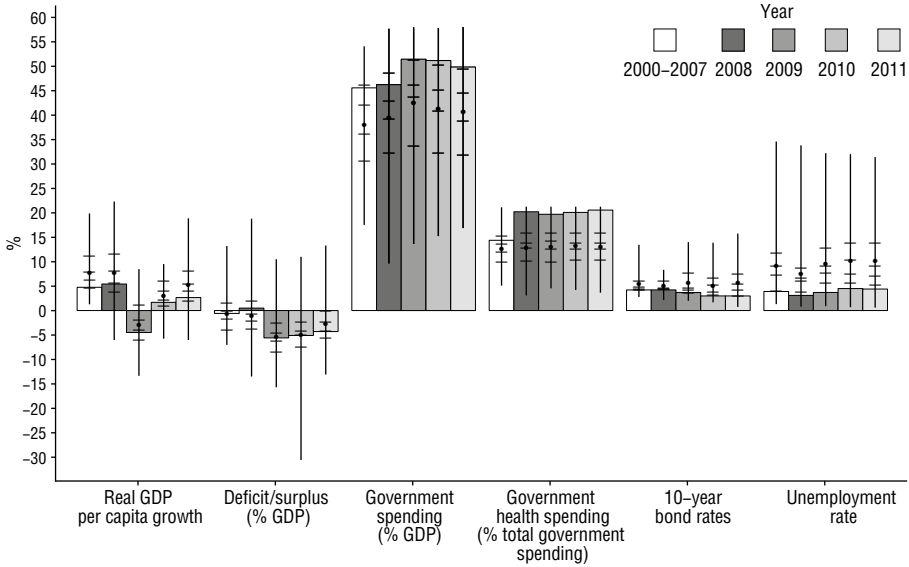
#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

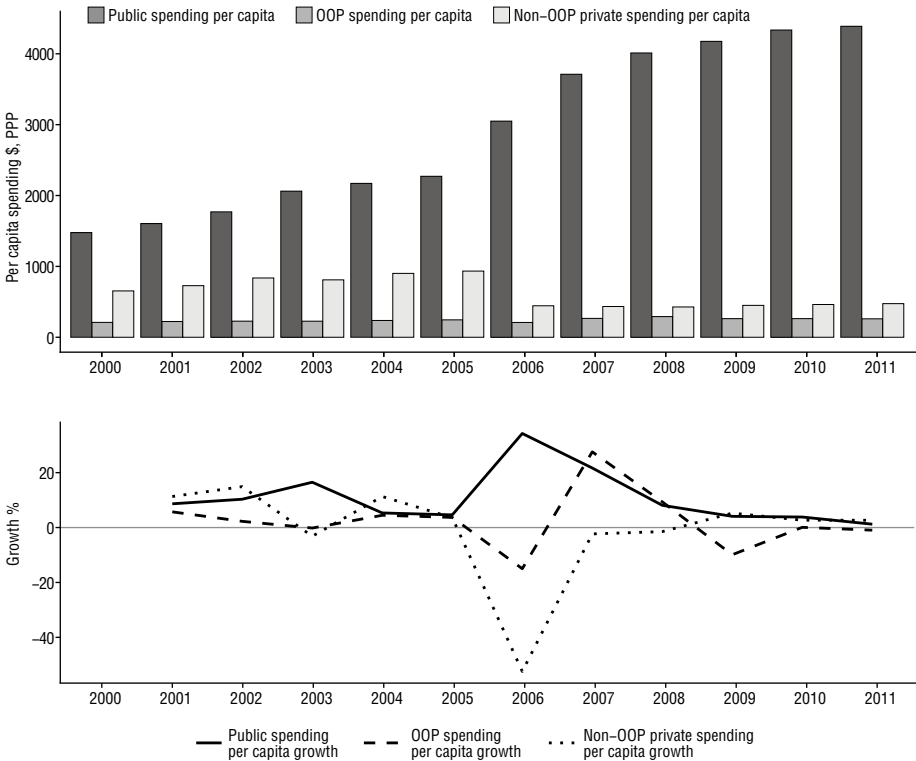
- *In 2007, coverage for “light” long-term care provided in nursing homes was transferred from the Medical Expenses Act to the Social Support Act.*

**The Netherlands: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**The Netherlands: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*More long-term care is now provided by ambulant home care and social workers, or family caregivers. Those in need of long-term care were enabled to “purchase” their care according to their specific demands, and as much as possible through local providers. Since 2013, municipality employees in some regions discuss health care needs and potential providers with people who need long-term care, in order to customize care and save costs.*

- *Dietary advice was removed from the standard benefits package in 2011; in 2014, three hours of dietary advice was reincluded in the standard benefits package following calls to reconsider this decision.*
- *Since 2011, dental care for persons between 18 and 21 years of age is no longer reimbursed; dental care for persons aged 21 and older had been excluded since 2006.*
- *A proposal to restrict access to mental health care was dropped following strong opposition (2012); coverage of in vitro fertilization and physiotherapy was restricted (2013).*
- *Since 2008, several medicines, treatments and (walking) aids have been removed from the standard benefits package. Examples of limitation of coverage in medicines are sleeping pills (benzodiazepines), gastric acid blockers, statins (lipid-lowering medication), contraceptive pills and antidepressants. These medicines are only reimbursed in severe cases or for long-term use.*

#### *User charges*

- *Increases in co-payments for some health services (physiotherapy and dietician care) (2010).*
- *Increase in the annual deductible that all adult insured people have to pay from €220 to €350 (2013).*
- *Introduction of a new co-insurance rate of 25% for hearing aids (2013).*
- *Co-insurance for psychology services abolished (2013).*

### **Changes to health service planning, purchasing and delivery**

#### *Prices of medical goods*

- *Introduction of policies giving health insurers the lead in purchasing care at competitive prices was accelerated (2010), for example health insurers benchmark hospitals according to their expenses on medical goods and advise them on cost-saving (e.g. through procurement by collective bargaining with suppliers, procuring from countries such as China, and the use of (electronic) auctioning). In 2013 an initiative was started to monitor surplus of medical*

*good such as bandages and out-of-date medication particularly in care homes and ambulatory care.*

#### *Salaries and motivation of health sector workers*

- An agreement on specialists' salaries was reached in 2012, increasing the average annual salary by around 17% to €300 000.
- Provider compensation for annual salary adjustments was reduced (2013); however, salary increases are still possible.

#### *Payment to providers*

- *Price reductions received from pharmaceutical companies (bonuses) were removed as part of wider changes to purchasing by SHI funds (2010). Pharmacists now only receive a pre-defined fee for each service (from the government).*
- A new ex-post payment enforcement mechanism was included for overruns for provision of acute care by providers of inpatient care (hospitals and mental health institutions) with the aim of lowering growth in volume to 2.5% per year (2012). In 2013, the rate of growth was set at 1.5% (2.5% for GPs) in 2014 and 1% (2.5% for GPs) in 2015, 2016 and 2017.

#### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Since the reform in 2006, the role of the Ministry of Health within the health care system is to be “lean and mean” (i.e. ensuring the key performance of the health care system). Although the Ministry of Health is limited to interventions in case of market failures, the primary goal of the Ministry is to ensure the accessibility, quality and cost-efficiency of health care for all citizens. Driven by the goal of reducing the government deficit, the Ministry of Health is forced to keep overhead costs as low as possible and cut budgets where possible.

#### *Provider infrastructure and capital investment*

- From 2010, the private market was further stimulated to invest in the health care sector through the introduction of a system of regulated profit creation.
- The Ministry of Health and hospital boards decided that hospitals should be more specialized and will serve larger areas for certain specialties, in order to improve the quality and reduce costs through increased volumes of provided care (2011).
- *The Minister of Health sent a proposal to the parliament on new legislation with respect to private health care investments (2013). The new legislation will make it easier for private investors to invest in hospitals, but with strict conditions.*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- Many nationally financed health prevention campaigns halted because of budget deficits (2011). A number of initiatives were (re)launched, such as the stop-smoking campaigns in 2013, and a long-term screening programme on bowel cancer in 2014.

# Norway

*Anne Karin Lindahl and Jon Magnussen*

## Economic trends

- Norway's real per capita GDP contracted in 2009, but returned to growth above the European mean the following year. Norway had budget surpluses throughout the 2008 to 2011 period.
- The unemployment rate remains low.
- Ten-year bond rates have declined and were among the lowest in Europe during the crisis.
- Norway's health spending as a share of government expenditure has been stable since 2008. In 2010, there was a decline in per capita OOP expenditure by 5.5% (Norway: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- *The health budget increased as a result of substantial oil revenues and high employment rates; however, growth in total and public spending on health has declined and there was a small reduction in aggregate real spending between 2009 and 2011, which cannot be directly linked to the crisis.*
- *Municipal budgets were increased to compensate them for higher hospital costs (financed mainly by cuts in hospital budgets).*

### Changes to health coverage

#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

- No response reported.

#### *User charges*

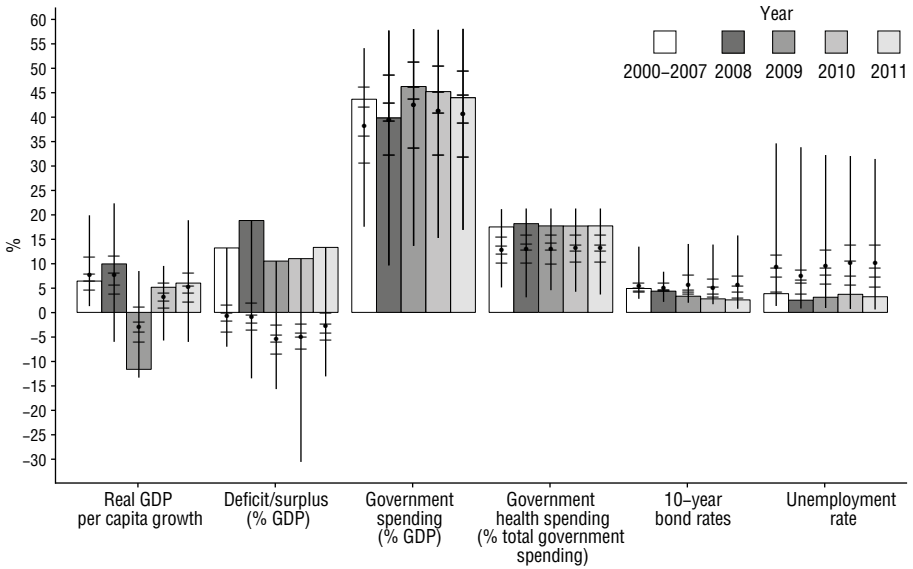
- No response reported.

### Changes to health service planning, purchasing and delivery

#### *Prices of medical goods*

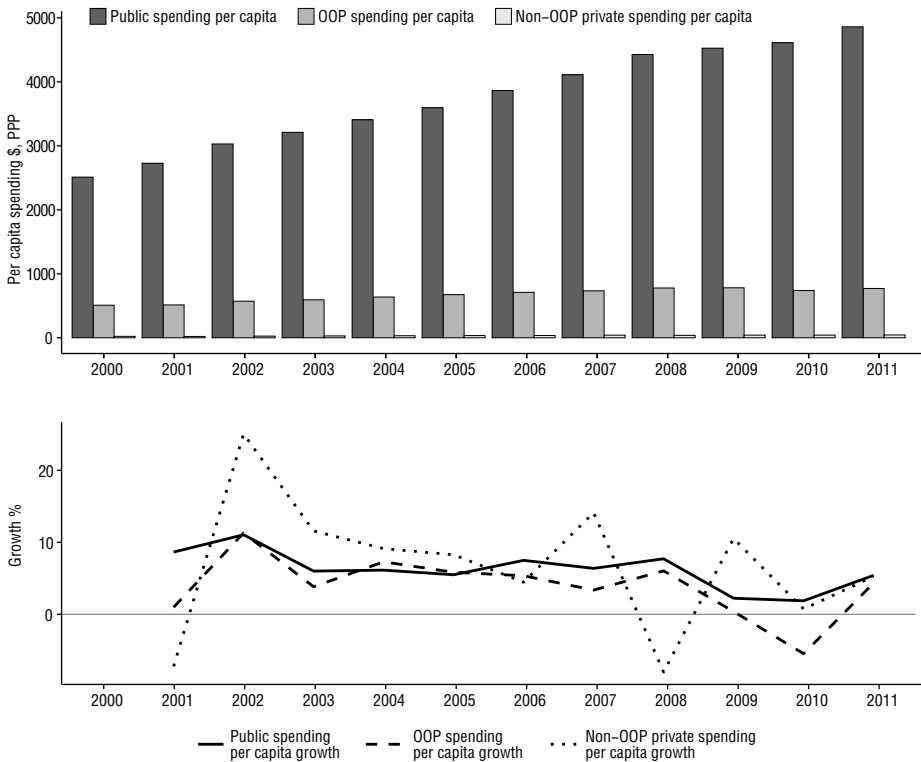
- No response reported.

**Norway: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: IMF; Other indicators: WHO Health for All.

**Norway: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

### *Salaries and motivation of health sector workers*

- No response reported.

### *Payment to providers*

- *As part of the coordination reform, increased financial responsibility was given to the municipalities and there has been a shift in funding from hospitals to municipalities (since 2012).*

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

### *Provider infrastructure and capital investment*

- *Introduction of a coordination reform to shift resources from specialist to primary care and prevention (measures implemented from 2012).*

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Introduction of measures to improve coordination of care and reduce use of hospital services (e.g. agreements between hospitals and municipalities regarding handling of patients with chronic diseases and patients who no longer need hospital treatment), as part of the coordination reform (since 2012).*
- *Mini-HTAs were carried out by the regional health authorities to slow down the implementation of new and undocumented technologies (since 2013).*

### *Waiting times*

- No response reported.

### *Health promotion and prevention*

- *Strengthened role for municipalities in health promotion and prevention activities (2012).*



# Poland

*Adam Kozierekiewicz and Christoph Sowada*

## Economic trends

- Poland's real per capita GDP growth slowed in 2009, but the economy did not experience a contraction comparable to other European countries and GDP growth picked up again in 2010.
- Unemployment rates did increase in 2009 to 11.9% and did not decline through 2011.
- Poland's health spending as a share of government expenditure is low compared with the European region. Per capita public expenditure on health slowed in 2010 but growth remained positive, while OOP expenditure declined slightly, by 1.9% (Poland: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- Central government health spending remained stable between 2009 and 2013; local government health (investment) spending rose because of significant investment financed through EU funds.
- Between 2008 and 2013, SHI expenditure grew at a slower rate than in previous years because of lower GDP growth and so lower SHI revenues.

### Changes to health coverage

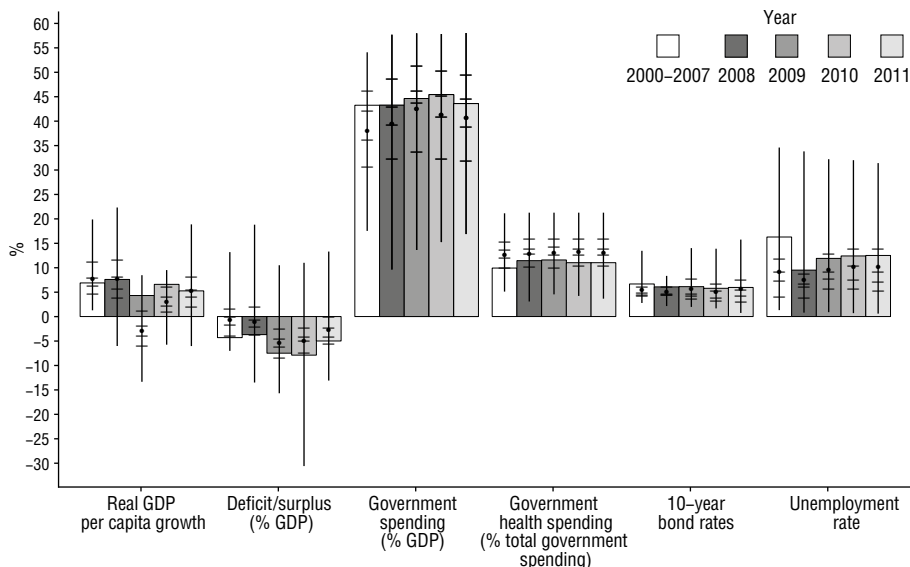
#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

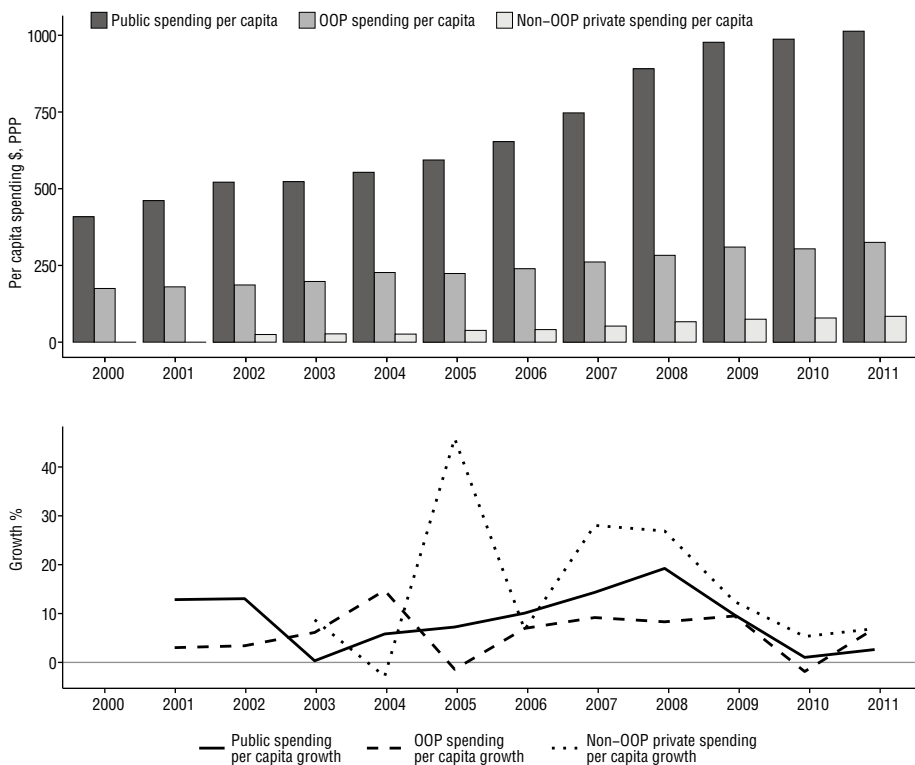
- *A new drug reimbursement law (2011) introduced a more transparent system for making reimbursement decisions, with the option of individual risk-sharing agreements based on the drug's effectiveness, turnover or discounts.*
- *The number of covered drugs (including the same drug in various forms, old drugs) was reduced from 2112 to 732 between December 2011 and December 2012.*
- *Positive drug lists are now updated every two months to improve availability (2011).*
- *Providers must verify (using an electronic database) if patients are entitled to reimbursement before prescribing reimbursable drugs (2012, 2013).*

**Poland: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Poland: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

### User charges

- No response reported.

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- *A new law capped SHI spending on drugs at 17% of the SHI budget and introduced a pay-back system for exceeding the budget (2011).*
- *A maximum margin for drugs sold by wholesalers and pharmacies was established, with fixed pharmacy prices for covered drugs; discounts between wholesalers and pharmacies were abolished and promoting pharmacies was prohibited (2011).*

### Salaries and motivation of health sector workers

- *There was a dynamic rise in pay in some medical specialties (e.g. cardiology, ophthalmology) and stagnation in other fields (mainly from the introduction of DRGs in 2008 leading to differences in pricing of various services).*

### Payment to providers

- *A DRG-type payment system was implemented for some specialist ambulatory services with the goal of shifting less severe cases from inpatient to outpatient care and thus avoiding unnecessary hospitalizations and costs (2011).*
- *Further changes in the hospital DRG system promoted day care in place of hospital admissions (mainly elimination of certain procedures from DRG grouping algorithms for inpatient care episodes) (2013).*
- *Prices for several (previously overpaid) services were reduced, such as invasive cardiology interventions and cataract surgery (2013).*

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- *Decentralization of the National Health Fund was proposed (it was centralized in 2003) in response to widespread criticism of its functioning (various proposals in recent years).*
- *Institutionalization of costing of health care services and systematic monitoring of health care quality indicators were proposed but are poorly developed at present (2012).*

### Provider infrastructure and capital investment

- *Financial assistance offered to local governments that decided to change the legal form of hospitals from autonomous public entities into commercial code companies (2009).*
- *The responsibility for negative financial results of hospitals to local governments was strengthened (2011); local governments should (from 2013)*

*either cover the debts or require hospitals to be transformed into commercial code companies (financial support provided by the state if the transformation is completed by the end of 2013).*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *The Ministry of Health initiated conceptualization of a project on coordinated care (to develop contracts with GP fund holders, networks of outpatient clinics and outpatient–inpatients conglomerates; with a choice of “coordinator” for the patient) (2009).*

*Waiting times*

- Reported increase of waiting times for some health services (2013).

*Health promotion and prevention*

- No response reported.

# Portugal

*Leonor Bacelar-Nicolau, Patrícia Barbosa and Constantino Sakellarides*

## Economic trends

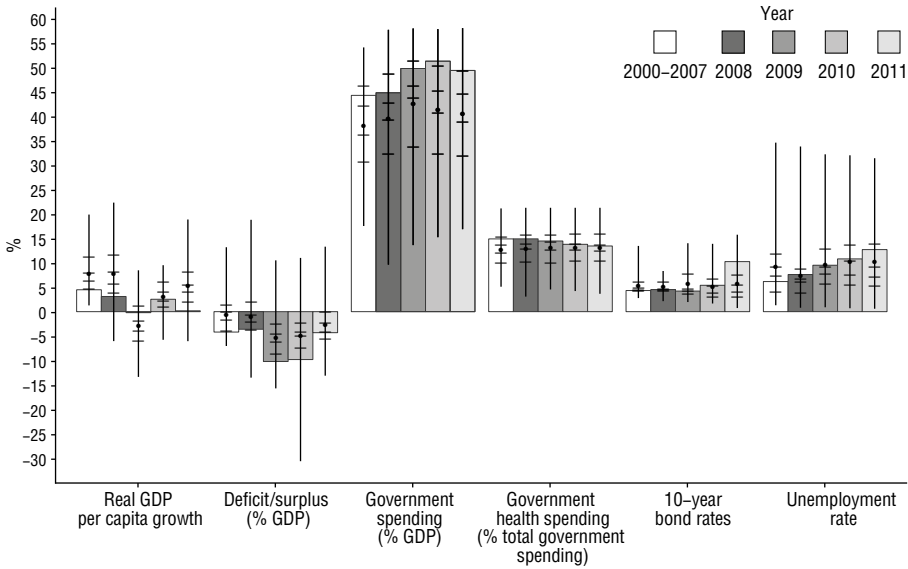
- Portugal's real per capita GDP, which prior to the crisis was below the European mean, contracted in 2009 and failed to make a sustained recovery by 2011. The budget deficit increased markedly in 2009.
- The unemployment rate has risen since 2008, and by 2011 was above the European mean.
- In 2011, 10-year bond rates increased substantially to over 10%; unable to borrow on international markets, the government subsequently requested a bailout package from the IMF and the EU, which required austerity measures to be put in place.
- The size of government expenditure has decreased during the crisis, as has the priority for health spending. Public per capita spending on health did not grow in 2010 and declined in 2011 by 6.4%. Growth in OOP expenditure has remained relatively stable (Portugal: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

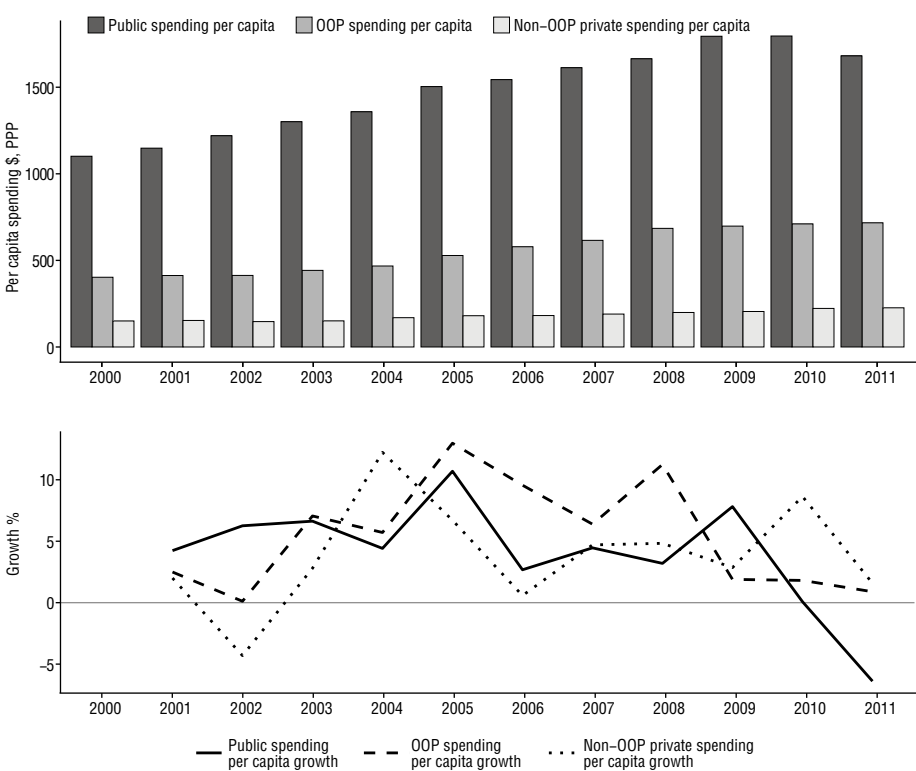
- Public spending on health fell by 6.2% in 2011 and 6.7% in 2012 but remained stable in 2013.
- The government's comprehensive reform package was expected to generate savings of €700 million in 2011 and €200 million in 2012 (the latter by cutting operational costs by 10%).
- A special allocation of €2 billion was made to reduce the NHS deficit by two-thirds (2012); legislation was passed to limit the NHS deficit in future (2012).
- The government introduced MoU-stipulated changes to ADSE (covering public sector workers), including an annual increase of 0.1 percentage points in the contribution of pensioners (currently 1.3%) to match the 1.5% contribution of civil servants (2011).
- Tax relief for private health spending was abolished for people in the top two income brackets and reduced from 30% to 10% of total personal private expenditure for everyone else (2012).

**Portugal: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Portugal: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

- The cost to all levels of government of ADSE and the other subfunds (for the armed forces and for the police service) was reduced by 30% in 2012 and by a further 20% in 2013, with these subsystem funds becoming self-financing by 2016.
- Government costs to be reduced by lowering the employer contribution rate to 1.25% in 2013 and by adjusting the scope of health benefits.

## **Changes to health coverage**

### *Population (entitlement)*

- The ADSE was made optional for all civil servants (2011).

### *The benefits package*

- Plans to introduce a minimum benefits package (MoU 2011).

### *User charges*

- Introduction of user charges for antidepressants, antipsychotic drugs and other drugs associated with the treatment of serious mental illnesses such as schizophrenia, dementia, autism and bipolar disorder; a 5–10% co-insurance was officially opposed by the Order of Medical Doctors (2010).
- Introduction of an exemption from user charges for people registered as unemployed and their dependants (2011).
- Exemption from all user charges extended to children aged 12 years or younger, pregnant women, transplant recipients, people with a disability status of over 60%, military and ex-military (the latter with permanent disability) and fire service workers (2011).
- Exemption from primary care user charges extended to fire service workers; active blood donors; people who donate cells, tissue or organs; people with chronic conditions; and public health services (2011).
- Introduction of user charges for over-the-counter drugs such as paracetamol, antacids and antiviral drugs (2011).
- User charges increased for vaccines for yellow fever, Japanese encephalitis, typhoid, meningitis and rabies tetravalent (from under €1 to €50–100 per vaccine), medical certificates (from under €1 to €20), statements certifying incapacity (from under €1 to €50) and statements certifying disability required by disabled people for access to fiscal benefits (from under €1 to €100) (2011).

- User charges increased for use of hospital emergency departments (from €3–10 to €10–20); basic emergency, medical–surgical and multipurpose emergency (from €8.60 to €15, €17.50 and €20, respectively); primary care services (from €0–5 to up to €10); permanent or extended services (from €3.80 to €10); GP visits (from €2.25 to €5); nursing services; vaccines not included in the national vaccination plan; and diagnostic and therapeutic services (2011).
- Introduction of indexing for user charges so that they rise in line with inflation and revenue from user charges to increase by €150 million in 2012 and €50 million in 2013 (2011).
- Income-based household exemption from user charges restricted by raising the eligibility threshold from a monthly income of less than €485 to €628 (2011).
- From 2013, user charges for all hospital services are to increase by 2.8% (matching inflation) (2012).
- Incentives created to enforce payment of NHS user charges.

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- Steps taken to remove barriers to entry for generics (2011).
- Reduction of prices for covered drugs (6%), biologicals (7.5%), supplementary diagnostic tests (5%), medical imaging (3%) and test strips for diabetics (10%); generic drugs priced high in comparison to international prices should be at least 35% lower than the original; the price of first-line generic drugs capped at 60% of the original, later 50%; original prices to be automatically reduced when patents expire (2011).
- Steps taken to reduce spending on privately provided imaging, laboratory tests and rehabilitation by renegotiating existing contracts and lowering tariffs (2011).
- *A new agreement set up between the Ministry of Health and the Association of Pharmaceutical Producers (2012).*
- Drug pricing system revised to include three countries of comparable GDP and countries with the lowest prices in Europe; first applied in the ambulatory sector and then extended to hospitals (2012).
- Pharmacy margins changed from a constant percentage mark-up to regressive margins and fixed fees.
- Introduction of new rules making INN prescribing mandatory (2012).



- E-prescribing now mandatory for publicly covered drugs (2011).
- Introduction of new support for prescribing guidelines (2011).
- Increased monitoring and feedback (2011).

*Salaries and motivation of health sector workers*

- Introduction of a freezes on salaries, promotions and recruitment of new staff (2010).
- Reduction of some claimable expenses such as travel, meal subsidies and overtime (2010).
- Abolition of the two annual bonuses of a month's salary (2012).
- Adoption of more flexible working schedules and reduction of overtime payments by 10% (2012) and a further 10% (2013).
- Agreement reached between unions and the Ministry of Health establishing better working conditions for doctors entering the NHS (2012).
- The two Portuguese medical unions called a two day medical strike in July 2012. After the strike an agreement between the unions and the Ministry of Health established better working conditions for doctors entering the NHS.

*Payment to providers*

- Moved to per capita payment for hospitals (2011).
- The Ministry of Health has been investing in substantially improving the capacity of its central purchasing agency; real effects are not yet visible.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Scheduled the Office of the High Commissioner for Health for closure.
- A centralized purchasing authority was created (SPMS) and steps taken to make generic drugs available more quickly.

*Provider infrastructure and capital investment*

- Reorganization and rationalization of the hospital network, including mergers and closures, to reduce hospital operational costs by 15% from 2011 to 2013, compared with 2010.
- Introduction of a target to save 5% on current expenditure costs in every department/medical service, excluding personnel costs (2011).
- Efforts to increase competition among private providers to the NHS and reduce expenditure by 10% in 2011 and another 10% in 2012. In 2011, a reduction of 10.4% was observed, but 2012 figures are not yet available.

This relates to areas of service provision such as dialysis and the pharmacy sector, which have seen renegotiation of prices and contracted conditions in order to reduce public expenditure.

- Required by the MoU to “assess compliance with European competition rules of the provision of services in the private health care sector and guarantee increasing competition among private providers” and “reinforce the centralized monitoring of PPP [public–private provider] contracts by the Treasury in cooperation with the ACSS” (target for second quarter of 2012).
- Required by the MoU to “set mechanisms to ensure a more balanced distribution of GPs across the country” (originally meant for fourth quarter of 2011, then first quarter of 2012, then moved to “ongoing” as it has been delayed).
- Aim to improve accessibility of primary health care services by “cleaning” GP’s lists of “non-users” and extending the size of GPs’ lists (from current average of 1550 patients/GP, to 1900 patients/GP)

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- Introduction of measures in health information systems to prevent the prescribing of diagnostic tests that offer no benefit to patients and a financial penalty for inappropriate use of drugs (2010).
- Increased the number of patients in the list of each GP, from 1500 to 1900, which was possible because of working hours changes.
- Production of a large number of clinical guidelines for improving quality in health care (since 2011). Evaluation of their impact is in a very early stage.
- Introduction of feedback on prescribing patterns for physicians (since 2011).
- A benchmark system set up for hospital performance (2012).

*Waiting times*

- No response reported.

*Health promotion and prevention*

- Taxes on tobacco increased (2011).
- Health Plan 2012–2016 expands existing priority programmes on HIV, cardiovascular diseases, cancer and mental health and introduces new programmes on diabetes, tobacco consumption, healthy diet, respiratory diseases and stroke.

# Romania

*Adriana Galan and Victor Olsavszky*

## Economic trends

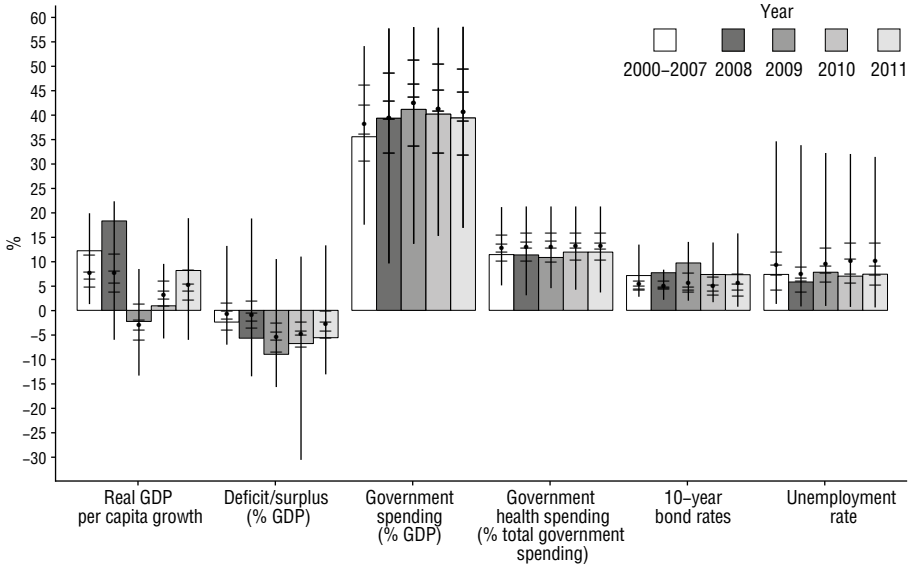
- After high real per capita GDP growth in 2008, Romania's economy contracted in 2009 and stagnated in 2010; in 2011, growth was above the European mean.
- Ten-year bond rates remain high relative to the European region.
- Despite a slight reduction in the size of government expenditure relative to the economy since 2009, the country's health spending priority has slightly increased, although it remains below the European mean. Total health expenditure per capita is dominated by public spending, which contracted in 2009, but returned to modest growth in 2010; growth in OOP expenditure per capita has slowed (Romania: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

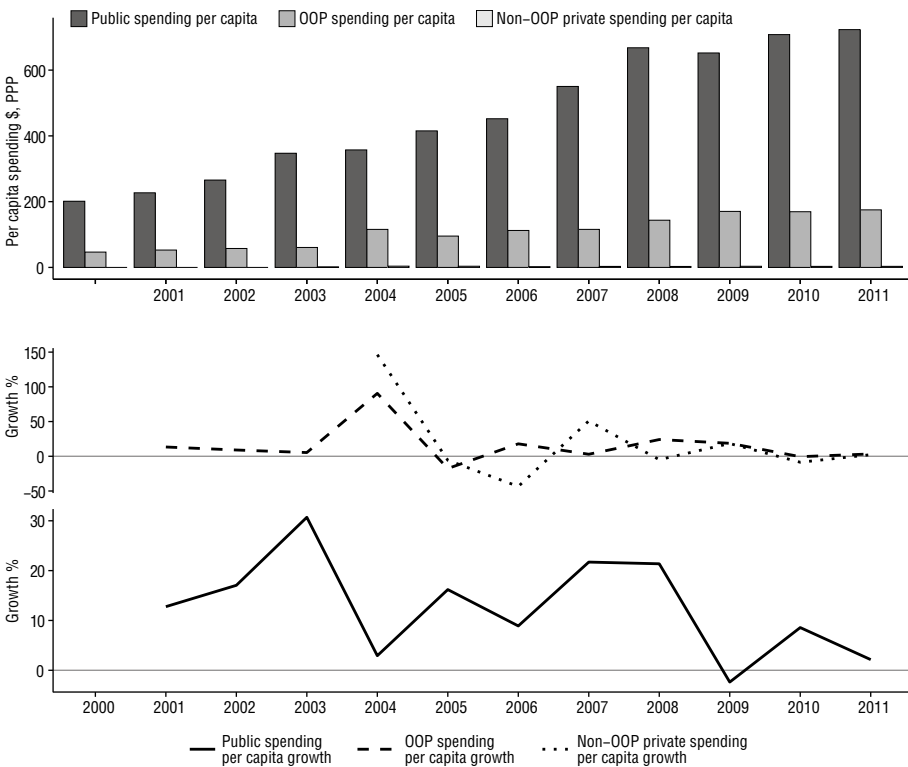
- Public spending on health fell between 2007 and 2009 and recovered in subsequent years.
- The Ministry of Health budget fell between 2008 and 2011 and grew in 2012.
- The health sector was protected in comparison with other public sectors, and national programmes for cancer, diabetes, HIV/AIDS and tuberculosis were protected to ensure continuity.
- SHI revenues fell because of higher unemployment and lower salaries in 2009 and SHI deficits grew.
- Government transfers to SHI amounted to about 24% of the total health budget in 2010, 12% in 2011 and 10% in 2012.
- *Government announced plans to generate additional revenue through more effective collection, reducing the number of exemptions from SHI contribution and improved management (2010).*
- *SHI contributions were extended to pensioners with an income of over RON 740 per month (5.5%), including Romanian pensioners resident in other EU Member States (2011).*

**Romania: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Romania: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health coverage

### *Population (entitlement)*

- No response reported.

### *The benefits package*

- The number of covered visits to a GP for the same condition capped at five (2010) and then reduced to three (2011).
- Any additional visits must be paid for OOP by the patient.
- Removal of drugs of limited therapeutic benefit from statutory coverage (2011).
- Some branded drugs replaced with generic drugs in the list of drugs used in national health programmes (2011).

### *User charges*

- *Introduction of exemptions from user charges for children, veterans and retired persons with monthly incomes of less than RON 700 (2011).*
- *New user charges were planned for 2011 but implementation of new primary care user charges (RON 5 for a GP visit, RON 15 for a GP home visit) has been postponed several times.*
- *Introduction of new user charges for hospital care (RON 10 per day in hospital and RON 50 for hospitalization of more than one day, capped at RON 600 per individual per year).*
- *From 2013, a new co-payment of RON 5–10 (hospitals can set their own rate of not more than RON 10) is to be paid on discharge from hospital.*

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- *Introduction of a new e-prescription system (2012).*
- Introduction of tighter prescribing controls (2011).
- Under pressure from drug companies and wholesalers, the Ministry of Health updated prices to reflect the new exchange rate (which had worsened because of inflation), leading to an increase in prices (2009).
- *Introduction of a clawback mechanism using a sliding scale based on total sales (2010).*
- SHI modified reference pricing introduced to encourage prescribing of cheaper drugs (2011).

### *Salaries and motivation of health sector workers*

- Salary reductions of hospital physicians and other hospital personnel by 25% (2010), which subsequently rose again to 2010 levels in 2012.
- Recruitment freeze across all public sectors, including the health sector (since 2010).
- In 2009–2011, the point value base on which GPs are reimbursed decreased as per the framework contract, which stipulated that any fluctuation in the income of the Health Insurance Fund can be reflected in the payment level of the primary care. Funding improved in 2012, increasing by 15% compared with the previous year through an increase in the value of points awarded for services rendered.
- *A new system of GP payment (reducing the per capita component of GP revenue in favour of FFS linked with some performance evaluation) and a limitation of number of hours worked per week was proposed as part of a revised GP framework contract in 2010; it was rejected by GPs and was revised in 2011. The framework contract for 2011–2012 changed the structure of GP payment: 50% per capita (70% in 2010) and 50% FFS (30% in 2010).*

### *Payment to providers*

- The Ministry of Health adopted a new classification of hospitals into five categories; the financing of hospitals depends on their classification (2011).

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- *Increased accountability in the management of hospitals transferred to local government as part of an ongoing process of decentralization (2011).*
- A plan announced to integrate the Health Insurance House of Transport Workers into the National Health Insurance House (2012). The hospitals owned by the Ministry of Transportation (mainly by the railway) will be subordinated to local authorities.
- *The Ministry of Health plans to centralize the procurement of drugs and medical devices for hospitals in its network (2013).*

### *Provider infrastructure and capital investment*

- *Introduction of new patient electronic record information system and an “insurer card” planned in order to increase efficiency and reduce bureaucracy (2010). In 2013, the electronic insurer card and electronic prescription became compulsory after a pilot project in one county in 2012.*
- *The Ministry of Health announced the merger of 111 hospitals, with 69 hospitals set to be converted into nursing homes for the elderly (2011).*

- A plan to build about eight new hospitals was abandoned and purchasing of equipment reduced. Infrastructure and capital investment were focused only on some priority areas such as oncology and emergency services, along with hospital repairs (2012).
- The Ministry of Health ordered the number of beds funded by the Health Insurance Fund to be decreased by 2512 in 2013 compared with 2012 (from 125 639 in to 123 127).
- *There have been several private investments in the hospital sector:*
  - *external loans from the International Bank for Reconstruction and Development and the European Investment Bank for rehabilitation of hospitals, obstetrics and neonatology services and procurement of medical equipment (2010 onwards);*
  - *eight new private hospitals were opened with an investment of €131 million (2011); and*
  - *private investment in the health sector was €100 million in 2012.*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- A review of the Health Insurance Fund decreased the duration of hospitalization in certain groups of diseases and procedures (2011).

*Waiting times*

- No response reported.

*Health promotion and prevention*

- Excise taxes for tobacco and beer increased by 14% and 10%, respectively (2013).
- Enhanced training programme for doctors in breast, cervical and colon cancer screening (2010–2013).
- New screening programme for cervical cancer (2012).

# The Russian Federation

*Elena Potapchik*

## Economic trends

- After high growth in 2008, The Russian Federation's real GDP per capita contracted in 2009 but recovered in 2010 and 2011 with growth rates above the European mean.
- The unemployment rate increased in 2009 but remains low compared with other European countries.
- Although the size of government spending relative to GDP saw a reduction in 2010 and 2011, health spending as a share of government expenditure remained largely stable, although at levels below the European mean. In 2010, as public per capita health expenditure declined by 3.3%, OOP expenditure per capita increased by 47.6% compared with 2009 (Russian Federation: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- *Public spending on health increased slightly in 2009, fell sharply in 2010 but increased slightly in 2011 and should continue to grow in current prices from 2012 to 2014; however, federal budget expenditures are expected to fall because of reduced spending on the National Priority Project – Health and other programmes, while spending by the regions and SHI is expected to increase.*
- *SHI contributions paid by employers were increased from 3.1% of payroll in 2009–2010 to 5.1% in 2011 (2009).*
- *The additional revenue generated was to be spent on specific projects (e.g. capital investment, standardization of care and development of information technology) but from 2013 will not be assigned to specific projects.*
- *A new SHI law established a uniform formula for calculating budget transfers to cover SHI contributions for non-contributing people, a move intended to integrate revenue streams.*

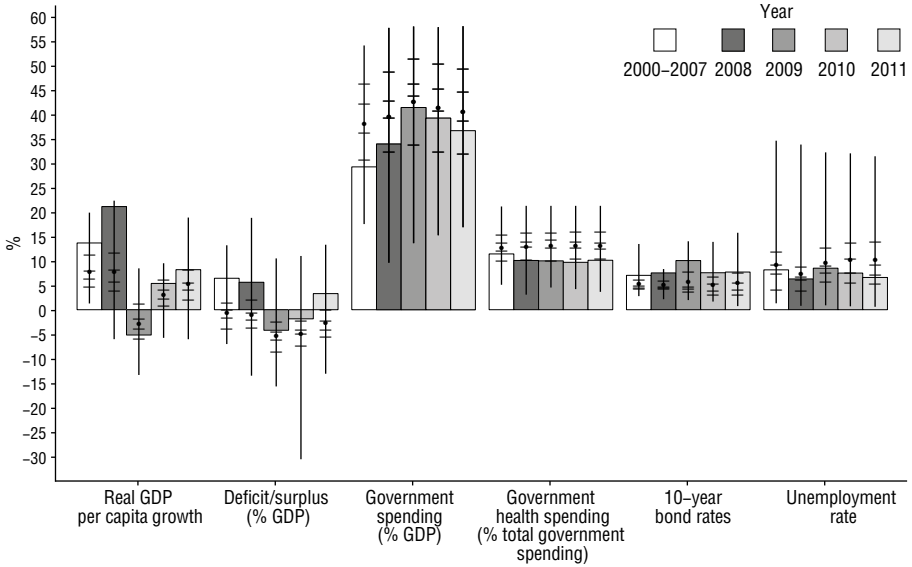
### Changes to health coverage

#### *Population (entitlement)*

- *Extended statutory coverage to resident foreigners, temporary residents and stateless persons; previously only citizens were covered (2011), although this was subsequently reversed (2012, 2013).*

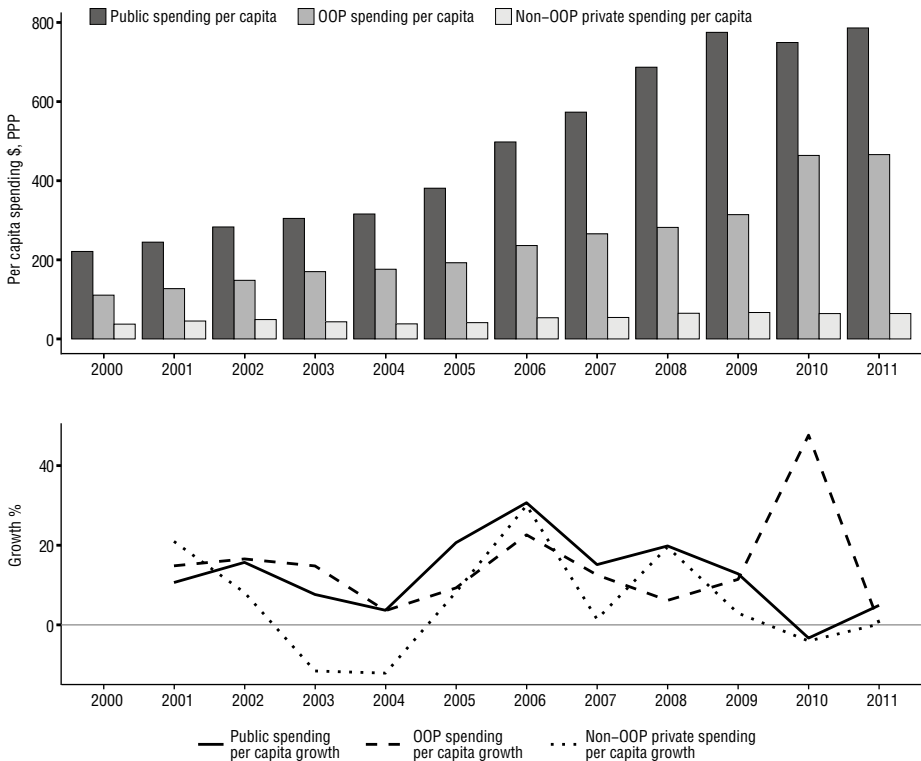


**Russian Federation: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; 10-year bond rates: IMF; Other indicators: WHO Health for All.

**Russian Federation: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

### The benefits package

- No changes reported.

### User charges

- *A new law clarified the conditions under which public providers can charge for health services and permits the introduction of user charges for services provided on an anonymous basis, provided to foreigners and provided at the patient's request (2012).*

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- *Introduction of a new Drug Provision Strategy to 2025 to ensure rational drug use and improve the advanced vocational training of medical and pharmaceutical staff (2012).*
- *Introduction of rules on registration of producer prices (2010); the government's new Drug Provision Strategy to 2025 aims to improve the price regulation of covered drugs (2012).*
- *Introduction of rules on maximum wholesale and retail mark-ups (2010).*

### Salaries and motivation of health sector workers

- *Introduction of new payroll system linking pay with work performance for public health sector workers (2008), with 50% implementation rate by 2011.*
- *Large salary increases planned (around 150%) for physicians and nurses; to be implemented by 2018.*

### Payment to providers

- *Approved a new list of recommended payment methods to be used for paying providers working under public financing for the period 2014–2015. Methods considered ineffective (such as payment by the number of bed-days spent in hospital) were excluded (2013).*

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- *The Ministry of Health and Social Development was reorganized, separating the Ministry of Health from the unified Ministry (2012).*
- *Implementation of a new mandatory health insurance (SHI) law which changed the role and functions of health insurance companies working within the SHI system, as well as regulation of their financial activities (2011). The federal SHI Fund became the sole insurer and insurance companies now perform only part of the insurer function. New requirements regarding financial activities of insurance companies were introduced: authorized*

*capital should be substantially increased, no longer allowed to hold reserves, administrative costs standardized and set centrally (1–2% of funds received on per capita basis from the territorial compulsory health insurance funds).*

*Provider infrastructure and capital investment*

- *Allocation of federal and regional budget funds to the development of the infrastructure of the medical facility network, including building and equipping regional vascular centres, traumatology centres, health centres and perinatal centres, and equipping facilities for blood services (2010–2012).*
- *Allocation of RUB 460 billion (US\$15 billion) of public funds towards capital investment (building and renovation, purchasing of medical equipment, RUB 300 billion), information systems development (RUB 24 billion) and implementation of medical standards (RUB 136 billion) (2011–2012).*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *A new law specifies procedures and pathways for care that is free at the point of use (2012). Primary and preventive care were prioritized.*

*Waiting times*

- *Introduction of a new legal requirement for regions to define regional waiting times (2011).*

*Health promotion and prevention*

- *Excise taxes on alcohol and tobacco increased and set to increase further (since 2007).*

# Serbia

*Vukasin Radulovic*

## **Economic trends**

- Serbia's real GDP per capita contracted in 2009 by 4.1%. The deficit as a share of GDP has increased every year between 2007 and 2011.
- Unemployment has been high relative to the European mean and increased between 2008 and 2011.
- Public expenditure on health as a share of total government expenditure has remained relatively stable since 2008. (Serbia: Figs 1 and 2).

## **Policy responses**

### **Changes to public funding for the health system**

- The SHI budget fell by about 10% between 2008 and 2012.

### **Changes to health coverage**

#### *Population (entitlement)*

- Simplification of statutory coverage procedures for vulnerable groups (2010).
- Statutory coverage made more accessible for children whose parents were not covered because of job loss (2012).

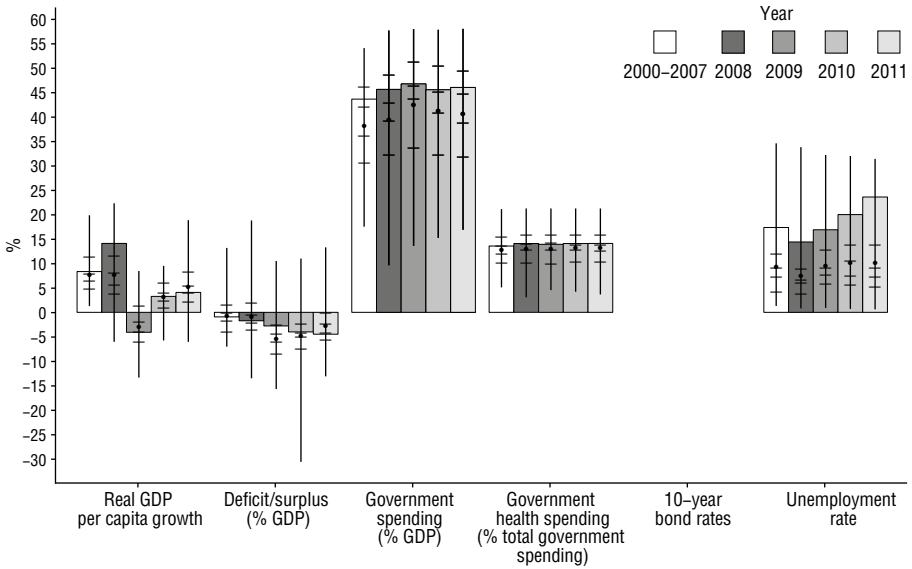
#### *The benefits package*

- Creation of a positive list for drugs, generating savings that enabled 300 new drugs and 40 new groups from the Anatomical Therapeutic Chemical Classification to be added (2010–2012).
- Creation of a positive list for drugs (2010–2012).
- Creation of a special fund for treatment of rare diseases (2012).
- Decisions about allocating resources for rare diseases moved to an independent national committee (2012).

#### *User charges*

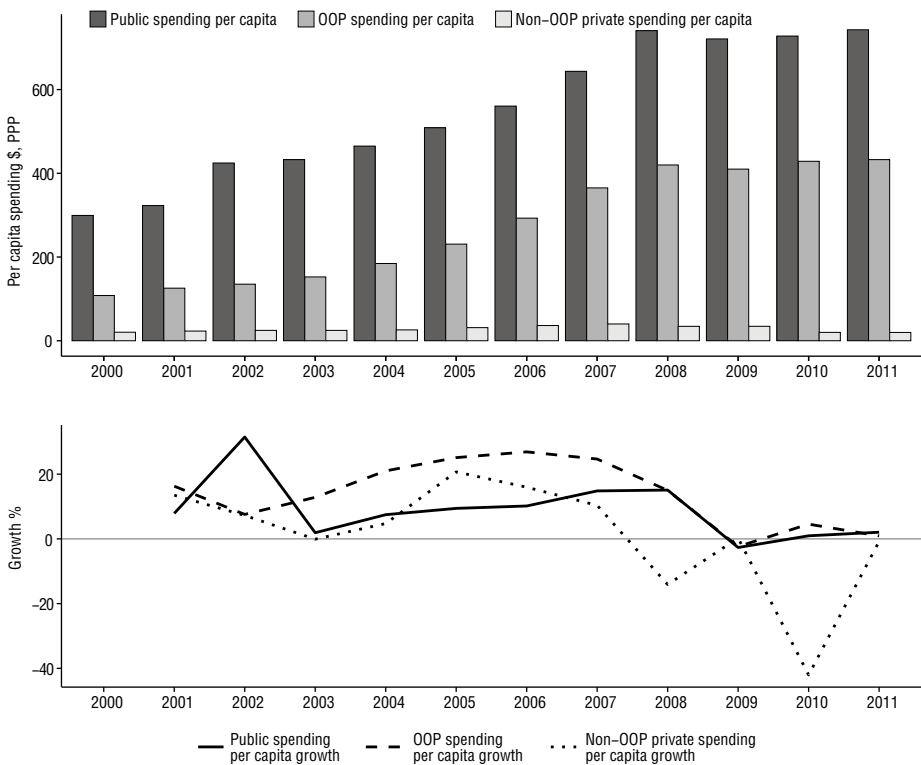
- Although it was widely discussed, user charges for services and prescriptions were not increased.

**Serbia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Serbia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- Producers waived the cost of 10% of total sales in response to a request from SHI (2011–2012).

### *Salaries and motivation of health sector workers*

- Lower remuneration in contracts for house-keeping and information technology support workers in health care organizations (2010).

### *Payment to providers*

- *Introduction of a capitation formula in primary care (2012). This is the first step in which it is planned to reallocate not more than 2% of salary among teams. It represents a paradigm shift from line internal budgets towards performance based payments.*

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- *Reduction of the number of employees at the Serbian Health Insurance Fund by 11% over a period of two years, using social programmes and regular retirement schemes.*

### *Provider infrastructure and capital investment*

- *Continued implementing several e-health infrastructure projects including national electronic health records (2012).*

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

### *Waiting times*

- No response reported.

### *Health promotion and prevention*

- *New screening programmes on cervical and breast cancer, diabetes and hypertension (2013).*

# Slovakia

*Karol Morvay and Tomáš Szalay*

## Economic trends

- Slovakia's economy contracted in 2009, and in 2010 and 2011 returned to growth rates below the European mean. Deficit levels relative to GDP increased in 2009, although they were lower as government spending relative to GDP declined in 2010 and 2011.
- Unemployment rates were above the European mean throughout the 2008 to 2011 period.
- While the size of government expenditure has reduced since 2009, the priority for health spending remained stable from 2009 to 2011, slightly above the European mean. This meant that public per capita health spending slowed in 2009 and declined in 2010 and 2011 by 0.4 and 1.5%, respectively. OOP expenditure per capita also slowed in 2010 and 2011 (Slovakia: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- SHI revenue growth slowed from 12.5% in 2008 to an average of 3.3% per year between 2009 and 2011.
- Government transfers to SHI on behalf of non-contributing people rose from 4% of the average wage in 2005 to 4.9% in 2009 and were gradually reduced to 4.25% in 2013; SHI contributions were extended to dividends (2011).
- *The government transferred €50 million from the state budget to SHI by temporarily increasing the contribution rate for government employees from 4% to 4.33% (2012); the maximum assessment for SHI contributions was increased three times, to five times the average wage, and SHI contributions were extended to part-time contracts (2012).*

### Changes to health coverage

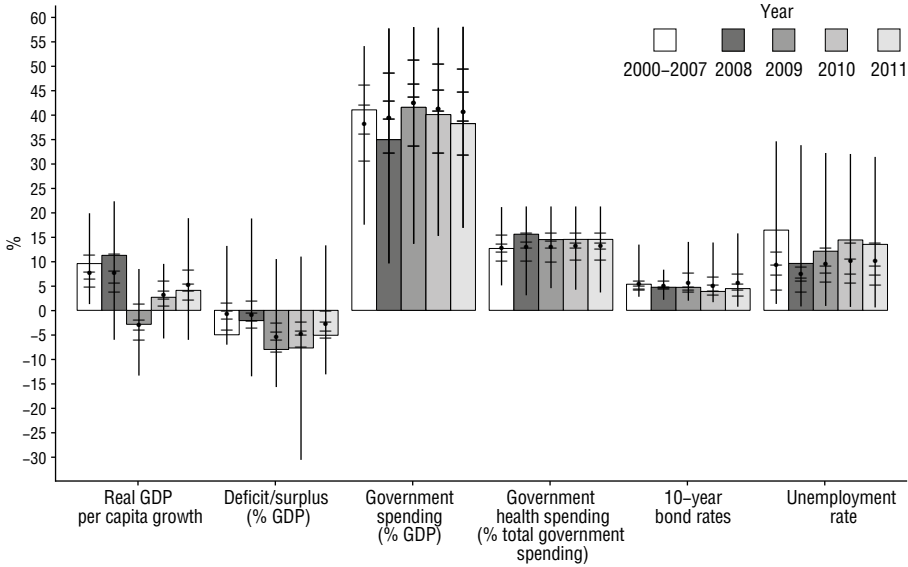
#### *Population (entitlement)*

- No response reported.

#### *The benefits package*

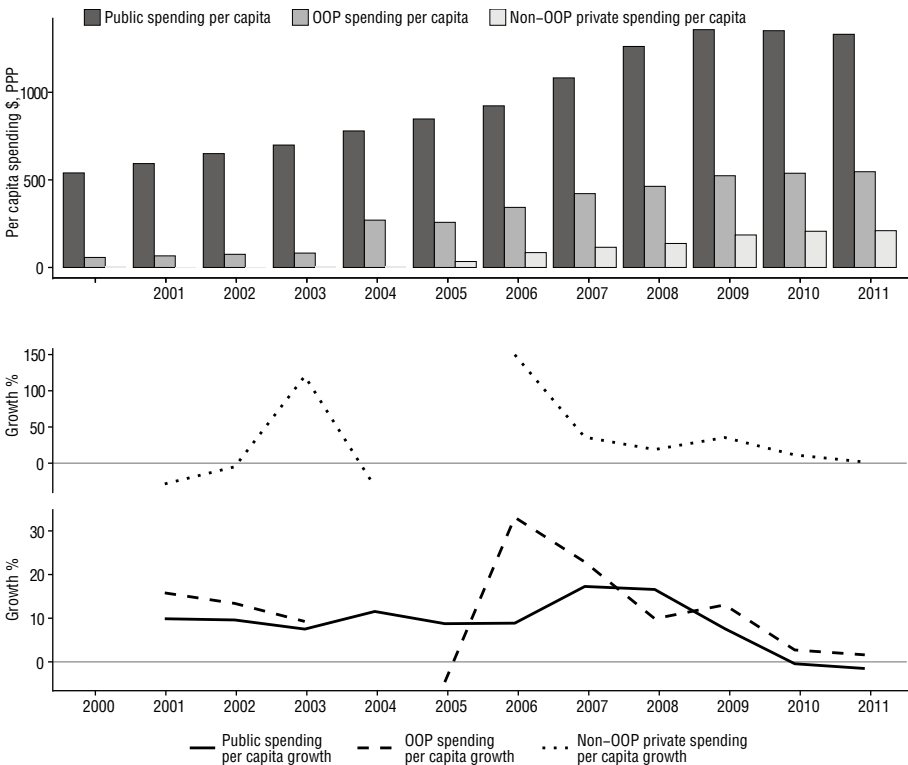
- No response reported.

**Slovakia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Slovakia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



### *User charges*

- Introduction of an annual cap on OOP payments for drugs for vulnerable groups (€30 for disabled or older people, €45 for people with low income) (2011).

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- *Introduction of reference pricing (2009–2010)* and subsequent adoption of stricter benchmarking for drug pricing, making its reference pricing the second lowest in the EU (2011).

### *Salaries and motivation of health sector workers*

- *Increase in salaries of nurses and hospital physicians through the setting of national minimum wages (2011) (but increase in nurses' salaries is currently being challenged in the Constitutional Court by the Slovak Chamber of Physicians).*

### *Payment to providers*

- *Started work on DRG implementation in 2011 in order to increase efficiency but the project was postponed to 2016.*
- *Introduction of mandatory publication of contracts in the public sector to allow better monitoring and public inspection of procurement of goods and services in the health system (2011).*

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Two state-owned health insurance companies (Common Health Insurance Company and General Health Insurance Company) merged (2010). The aim was to address an acute lack of funding leading to delayed payments to pharmacies and providers. The merger secured €65 million from the state budget and another approximately €33 million from the financial reserves of the Common Health Insurance Company.
- Introduction of a formula for the calculation of the limit of health insurance companies' administrative costs (2011).
- Health insurance companies reduced the number of their staff by 10% between 2010 and 2011.

### *Provider infrastructure and capital investment*

- Reduction (by up to 10%) of hospital beds by the largest health insurance company, the state-owned VŠZP (2011). The optimization of the hospital care network was designed to promote facilities with better quality outcomes, to enhance effectiveness and to support day surgery.

- Indebted hospitals were bailed-out by the state budget by a total amount of €300 million (2011). This was not followed by the transformation of hospitals into joint-stock companies as had been planned because of financial pressure caused by the crisis and pressure from medical unions.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Referrals from GPs to specialists abolished (2011).*

*Waiting times*

- List of procedures that require an official waiting list extended to make waiting times more transparent (2011).

*Health promotion and prevention*

- No response reported.

# Slovenia

*Tit Albreht, Eva Turk and Valentina Prevolnik-Rupel*

## Economic trends

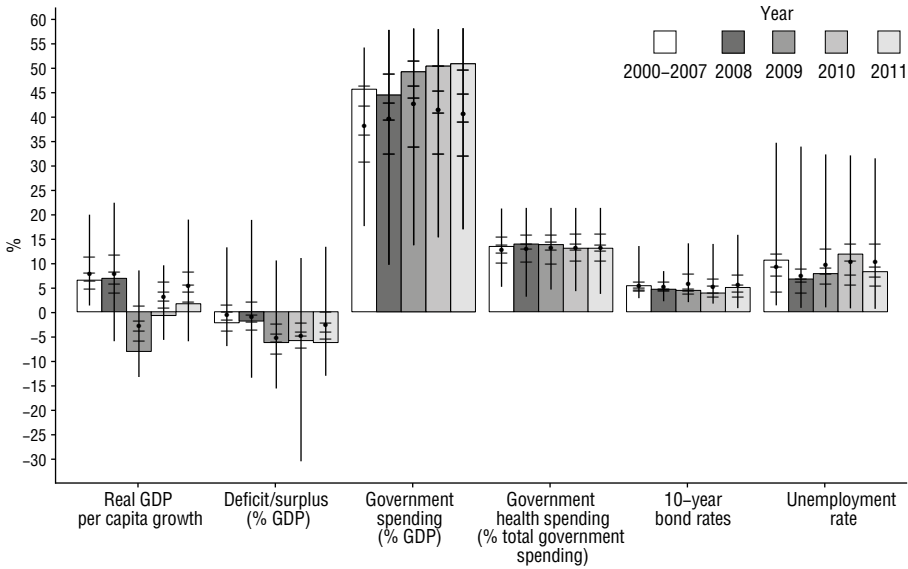
- Slovenia's real per capita GDP contracted in 2009 and 2010, and although positive, its 2011 growth remained in the bottom quintile of the European region. Budget deficits in 2009, 2010 and 2011 were well above the average annual deficit for Slovenia in the pre-crisis period.
- The unemployment rate peaked in 2010 at 14.4%.
- Ten-year bond rates remained below the European region mean between 2008 and 2011.
- While the health share of government spending decreased after 2008, it is still close to the European mean. Public spending per capita on health decreased in 2010 by 4.1%. OOP expenditure slowed in 2010 but continued to have positive growth through 2011 (Slovenia: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

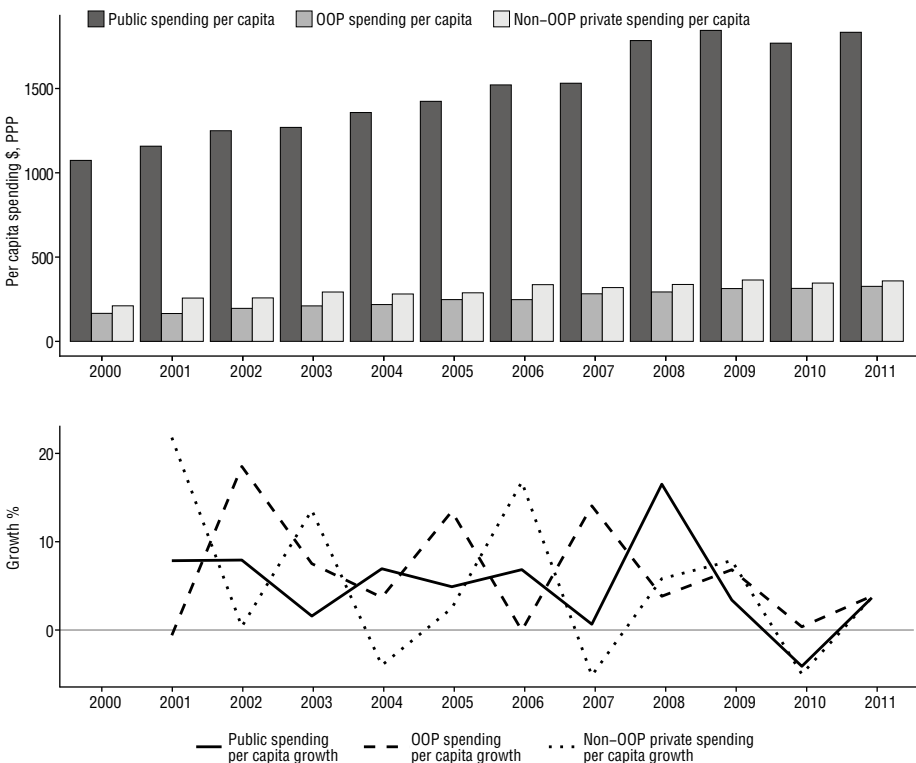
- The Ministry of Health budget fell between 2008 and 2011, as did municipality spending on health, leading to a decline in capital investment.
- SHI took steps to improve revenue collection through more intensive cooperation with the tax administration and extending social security contributions to new groups (e.g. self-employed entrepreneurs and corporate partners) (2009).
- SHI revenues fell because of higher unemployment and SHI reserves were depleted between 2008 and 2011; SHI experienced a small deficit in 2010 in spite of making substantial savings through improved revenue collection in 2009 and 2010.
- The deficit persisted in 2011 and was expected to increase to almost €100 million in 2012 because of lower employment and a reduced possibility of levying contributions on other sources of income, but cuts to pharmaceutical prices lowered the deficit to around €56 million.
- The government introduced legislation to control public spending (2012).
- Plans to extend the levy base for SHI contributions from wages to all income remain controversial and are unlikely to be accepted by small

**Slovenia: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Slovenia: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

businesses, but in accordance with the Law on Balancing Public Finances, SHI contributions are now levied on short-term and part-time contracts and on freelance writer contracts (2012).

## Changes to health coverage

### *Population (entitlement)*

- Entitlement to free statutory coverage restricted by changing the basis for entitlement from the minimum wage to receiving social benefits (2012).

### *The benefits package*

- Revision of the SHI drug lists (2009).

### *User charges*

- Co-insurance rates increased from 5% to 10% (transplants, major surgery, treatment abroad, intensive care, radiotherapy, dialysis and other major diagnostic, therapeutic and rehabilitation tasks), 15% to 20% (in vitro fertilization, infertility, sterilization and pregnancy termination; orthopaedic; orthotic, hearing and other aids; outpatient, inpatient and spa services; nonmedical care in hospitals and spas; some services in primary care) and 25% to 30% (all treatment for occupational injury, some drugs) (2009).
- Reduction of temporary sickness leave benefits from 100% to 90% (for occupational illness and injury, transplants, blood donation), from 90% to 80% (sickness) and from 80% to 70% (non-work injury and accompanying dependants when ill).
- Partly as a result of these reforms, OOP payments rose from 12.5% of total health expenditure in 2008 to 13.7% in 2011.

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- *SHI reduced drug prices through negotiation with suppliers and reduced the price of dialysis (2009).*
- *Introduction of therapeutic groups for reference pricing (2012).*
- *Provision of information to the public regarding rational use of medicines and of training in rational prescribing for physicians (2009).*

### *Salaries and motivation of health sector workers*

- No inflation-related increases applied to public sector salaries in 2009 and less than inflation rate increase to such salaries applied in 2010.
- Allowance for above-average performance abolished (2009).

- Moratorium on new employment and compulsory retirement introduced for health workers meeting the criteria (2012).
- Limits imposed on temporary employment and contractual part-time work (2012).
- Effective reduction of health workers' salaries by 5–15% through the measures outlined above.
- Reduction of on-call service payments by 5% (2011).

#### *Payment to providers*

- The Health Insurance Institute of Slovenia reduced the price of health services (generally) by 2.5%, additionally reduced expenditure on tertiary services by 5% and implemented penalties for health care providers related to breach of the contract between the fund and the provider (2009). Further reductions were made in 2010.
- The Health Insurance Institute reduced the costs of administrative staff for providers and the costs of tertiary services, outpatient psychiatric care, positron emission tomography, computed tomography and expensive medicines used in hospitals only (2011). The total effect of these measures was a saving of €12.5 million in 2011 and it was estimated to be a further €11.1 million in 2012.
- Payments to providers were reduced by 3% across the board regardless of previous signed prices in annual contracts; in the same year, the reduction of prices in contracts with the Health Insurance Institute eventually reached 8%, with contracts to hospitals automatically reducing payments by 5% (2012). These moves pushed hospitals further into deficit.

#### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Selective reduction of material and direct costs by the Health Insurance Institute (2009), without undergoing restructuring or any significant reduction in the number of employees or budgets.

#### *Provider infrastructure and capital investment*

- Investments were stopped or reduced as a result of central budget cuts (2008 and 2011) (but some previously planned investments in emergency services were continued).

#### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *Introduction of new protocols for care of patients with chronic conditions in primary care, which included the introduction of additional nurses tasked with preventive activities into the primary care team (2011). The aim was*

*to reduce the burden of preventive activities on family physicians, decrease the number of referrals to the secondary level and reduce the cost of primary care.*

*Waiting times*

- Provision of extra funds to lower waiting times (2010).

*Health promotion and prevention*

- Alcohol and tobacco excise taxes increased (2013).
- New excise taxes on soft drinks (2013).

# Spain

*Enrique Bernal-Delgado, Sandra García-Armesto and José Ramón Repullo*

## Economic trends

- Spain's real per capita GDP contracted in 2009 and 2010, and although positive, its 2011 growth remained in the bottom quintile of the European region. The budget deficit increased in 2009 and remained high through 2011.
- The unemployment rate, which was previously above the European mean, increased sharply after 2008 and reached 21.6% by 2011.
- While 10-year bond rates were close to the European average until 2011, the gap increased substantially in the following years.
- Health spending as a share of government expenditure remained fairly stable through 2011, although per capita public spending on health did decrease in 2010 and 2011 by 2.0% and 1.3%, respectively. OOP expenditure per capita had slightly positive growth in 2010 and 2011 (Spain: Figs 1 and 2).

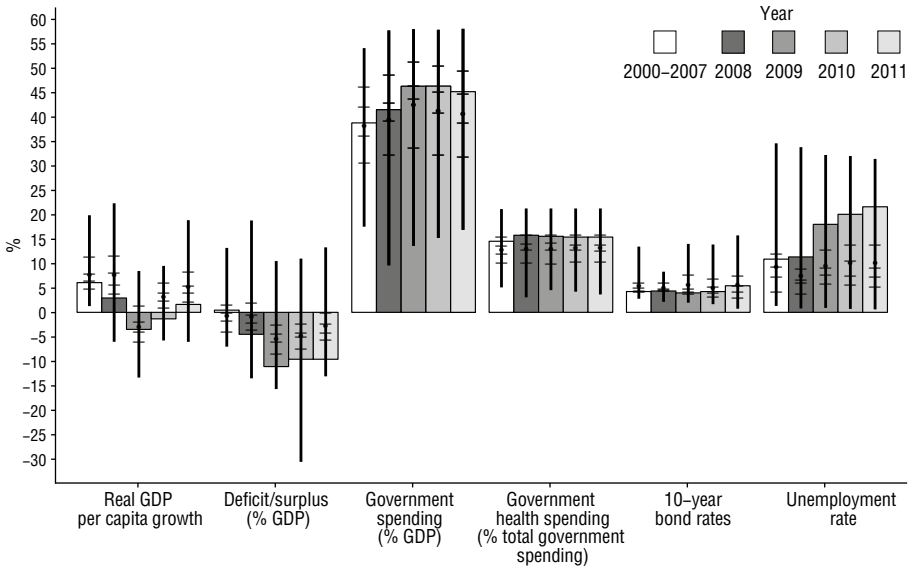
## Policy responses

### Changes to public funding for the health system

- Regional health budgets grew between 2007 and 2010 and declined in 2011 (by 3.9% on average).
- The regions (autonomous communities), which are responsible for setting health budgets, have come under increasing pressure to cut spending, especially since 2011 when the government introduced a constitutional commitment to stick to EU deficit targets and enforced the repayment of sovereign debt as a priority over other areas of government spending.
- The Ministry of Finance introduced a cap on deficits for the regions (1.5% in 2012 and 0.7% in 2013; in 2011 the average deficit was 3.3%) (2011).
- To help the regions, the central government created a bailout fund to provide them with support conditional on the submission of a plan to reduce spending (including health), increase revenue and achieve deficit targets.

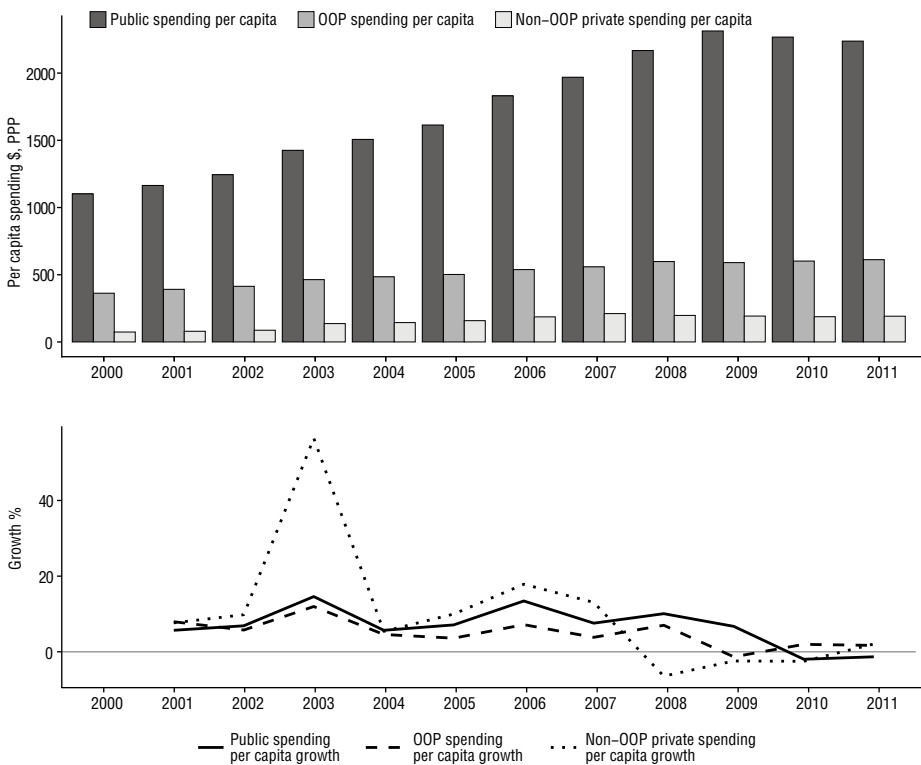


**Spain: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Spain: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health coverage

### *Population (entitlement)*

- The basis for entitlement to statutory coverage changed from residence to insurance status covering workers contributing to the social security system, pensioners who have made sufficient contributions, people receiving unemployment benefits, unemployed persons no longer entitled to benefits but registered as seeking employment, dependants (spouses not entitled in their own right, children up to age 26 or with a 65% level of disability and children over 26 who have never worked).
- People no longer eligible for statutory coverage included those who do not fall into the groups above and who are not EU nationals or have annual incomes above €100 000.
- Adult non-EU nationals and adult unregistered migrants are now only entitled to emergency care and maternity care.
- All persons under 18 years of age are covered, regardless of nationality or residence status.
- Those no longer entitled can obtain coverage by paying an annual flat-rate premium of €710 (under 65 years of age) or €1900 (65 years and older) (2012).

### *The benefits package*

- The statutory benefits package was restructured in three categories: basic, supplementary (includes drugs, orthoprosthesis and dietary products) and “accessory” (not yet clearly defined). Such categories display a gradient of public coverage in that the basic package is 100% publicly funded while supplementary and accessory baskets are subject to user charges (2012).
- A network of HTA agencies was set up to review and streamline the benefits package (2012).
- Statutory coverage was removed for 417 commonly prescribed drugs for the treatment of minor conditions (mainly antacids and proton-pump inhibitors) (2012).

### *User charges*

- Introduction of co-payment for services within the supplementary and accessory baskets (e.g. prescriptions of drugs, non-emergency transport, prostheses and appliances, dietetics) (2012).
- For prescription drugs, introduction of new income-based co-insurance rates with monthly or annual caps on OOP payments (60% of the retail price when annual income is over €100 000, 50% when income is €18 000–100 000,

40% when income is below €18 000 and 10% for pensioners with incomes below €100 000 and for those needing drugs for chronic conditions) (2012).

- Introduction of a monthly cap on OOP payments for prescription drugs (€8.14 for pensioners with incomes below €18 000, €18.32 for pensioners with incomes of €18 000–100 000 and €61.08 for pensioners with incomes over €100 000) and exemption from user charges for people receiving social integration subsidies, people with tax-exempt pensions, unemployed people who are no longer eligible for unemployment benefits and people experiencing occupational injury and illness (2012).
- Similar rates applied to orthoprosthetic and dietary products and non-urgent transportation (2012).
- Some regions (Catalonia in 2012, Madrid in 2013) introduced an additional co-payment of €1 per prescription (with some exemptions), a measure that is currently suspended pending a challenge in the Constitutional Court.

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- Introduction of new rules to ensure pack sizes comply with dose and length of usual treatment (2012).
- Retailers must dispense the cheapest alternative (2012).
- Implementation of mandatory INN prescribing (2012).

### *Salaries and motivation of health sector workers*

- At national level, reduction of public sector worker salaries by 7.14% (2012).
- Suspension of one of health workers' bonus payments (Christmas bonus) so reducing annual payments from 14 to 13 (2012).
- Reductions in holiday and other benefits such as sick leave (2012).
- Increase in the number of statutory working hours from 35 to 37.5 hours per week.
- At regional level, measures included not replacing retiring staff, restrictions on salary supplements (for teaching, afternoon activity, overtime), freezing professional career incentives and abolishing or suspending pay-for-performance incentive schemes.

### *Payment to providers*

- Delaying payments to providers of medical goods has become a common strategy for public administrations. This has mainly affected pharmacies

that are to be reimbursed the difference between retail price and patient co-payment for prescriptions; the pharmaceutical industry providing drugs directly to hospital pharmacies; as well as the medical goods and devices industry that services primary health centres and hospitals. Delays have ranged from 6 to 12 months, cumulating a debt that, for small business such as pharmacies, amounted to risk of default. In 2012, the central government implemented a specific fund for public administrations to borrow money to meet their pending debts with private providers.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Creation of a national centralized purchasing platform for medical goods aimed at fostering economies of scale (2012).

*Provider infrastructure and capital investment*

- Implementation of the following changes in provider structure at the regional level (2010 onwards in Catalonia; 2011 and 2012 onwards in the other regions):
  - total or partial closure of facilities (both primary care and hospitals);
  - plans for intensive implementation of private partnerships in the form of cession of full exploitation rights of hospitals and primary care centres to private insurers (notably in Madrid); and
  - further externalization of certain clinical and complementary services, often centralizing the provision for a given area.
- Regarding capital investment, based on estimated budgets there has been a 16.5% reduction in investment in 2011 compared with 2010 and figures for 2012 show an additional 35.3% reduction in investment.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- At the regional level, revised service hours are intended to eliminate evening and overnight walk-in services in urban areas and emergency wards in rural areas (Catalonia in 2010; other regions 2012 onwards).

*Waiting times*

- *Criteria established for regions to regulate maximum waiting times for surgical procedures through Royal Decree 1039/2011 (2011). Enforcement still pending in many parts of the country at the beginning of 2013.*

*Health promotion and prevention*

- Sharp increases in tobacco taxes (2011 and 2012).

# Sweden

*Anders Anell and Fredrik Lennartsson*

## **Economic trends**

- Sweden's real per capita GDP contracted in 2009 by 6.0% but returned to positive growth in 2010. Government spending as a share of GDP remained well above the European mean through 2011.
- Ten-year bond rates declined through the 2008 to 2011 period.
- Health spending as a share of government expenditure was relatively unchanged from 2008 to 2011. Per capita health expenditure growth patterns diverged in 2010 for public and OOP sources of funds, with public expenditure slowing and OOP expenditure accelerating; expenditure growth rates converged again in 2011 (Sweden: Figs 1 and 2).

## **Policy responses**

### **Changes to public funding for the health system**

- Health spending did not slow down in response to the crisis.
- The central government increased its funding for local governments (including county councils, who spend most of their revenue on health) to compensate for reduced local tax revenues and prevent redundancies among public sector workers (2009, 2010) and introduced a permanent annual increase (2011).

### **Changes to health coverage**

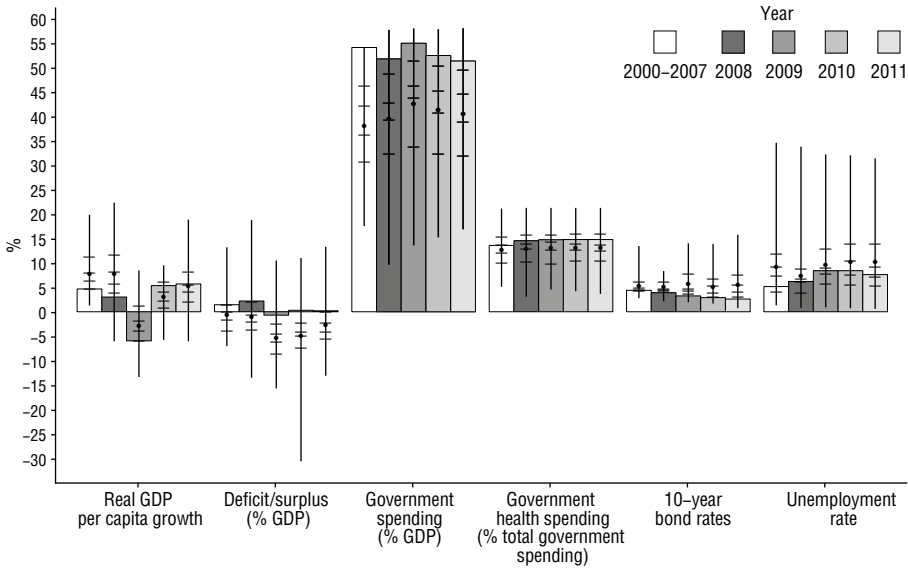
#### *Population (entitlement)*

- *Undocumented migrants given the same entitlement to subsidized health care as asylum-seeking migrants.*
- *Adult asylum seekers given entitlement to emergency care, maternity care, care when seeking termination of pregnancy and advice on contraception.*
- *Children of asylum seekers given the same entitlement to health care as resident children (2013).*

#### *The benefits package*

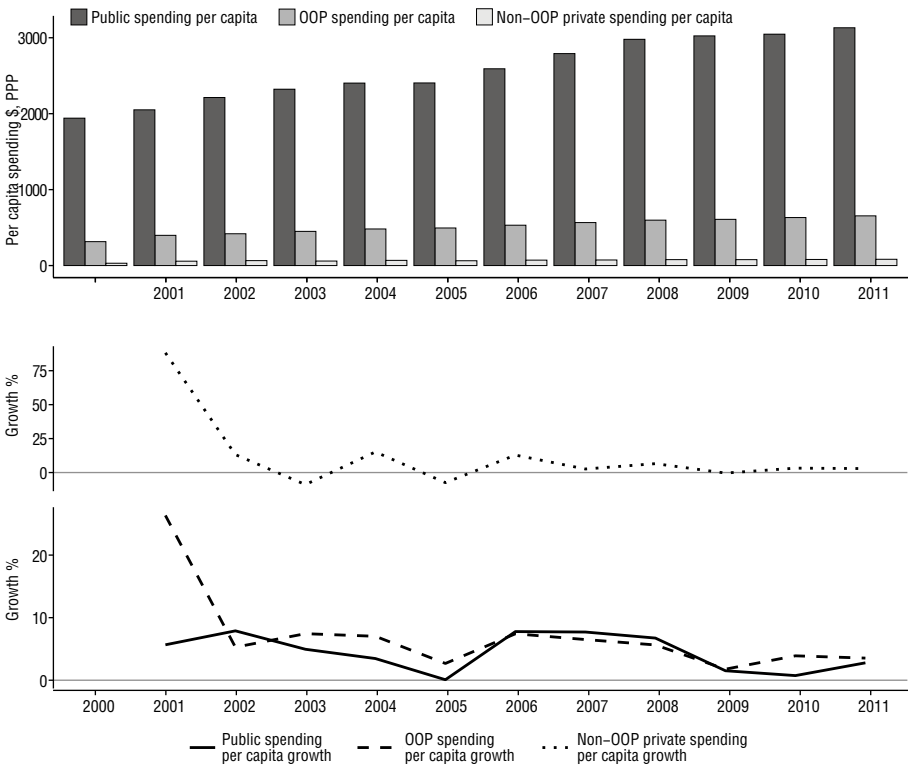
- No response reported.

**Sweden: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**Sweden: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

### User charges

- *Cap on OOP payments in a 12-month period increased from SEK 900 to SEK 1100 for health services and from SEK 1800 to SEK 2200 for prescription drugs; from 2013 increases in OOP payment cap are linked to the national index of prices and earnings (2012).*

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- No response reported.

### Salaries and motivation of health sector workers

- *Employment freeze in hospital sector (in some county councils) through not replacing retiring staff or covering for staff on sick leave (2012).*

### Payment to providers

- No response reported.

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- *There is an ongoing discussion on how to organize the national authorities. One report published in 2012 suggested a new structure with clearer responsibilities and fewer authorities.*

### Provider infrastructure and capital investment

- No response reported.

### Priority setting or protocols to change access to treatments, coordination of care and patterns of use

- No response reported.

### Waiting times

- *The waiting time guarantee introduced in 2005 was enshrined in legislation (Health Care Act 2010), giving patients the right to seek care from an alternative provider at no extra cost if they are not treated within the guaranteed time and strengthening their rights to a second opinion and coordinated multidisciplinary care (2010).*
- *Introduction of mandatory patient choice of primary care provider and freedom of establishment for accredited private providers across all counties to improve access to primary care and extend opening times (2010).*

### Health promotion and prevention

- *Introduction of national guidelines in preventing smoking and alcohol consumption and for promoting good diet and exercise (2011).*
- *Several county council initiatives with financial incentives to foster preventive actions within primary care.*

# Switzerland

*Alberto Holly and Philippe Lehmann*

## Economic trends

- Switzerland's real GDP per capita contracted in 2009 but to a lesser extent than the mean contraction in the European region in that year.
- Ten-year bond rates are the lowest in the European region.
- While government spending relative to GDP is low compared with other European countries, priority for health spending is among the highest in Europe. In 2008, there was acceleration in public per capita expenditure growth to 18.5%; at the same time, OOP expenditure decreased by 12.4% (Switzerland: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- *The health budget at the national level was cut.*
- *The annual rate of increase in SHI expenditure fell from 4.2% (1996–2001) to 3.2% (2001–2006) and 2.1% (2006–2011).*
- This reform aimed to prevent insurers from increasing premiums to compensate for investment losses, as occurred in 2010.
- *Federal and canton government subsidies for health insurance premiums for individuals with low income and families (available since 1996 and stable between 2005 and 2008) were increased (2009).*
- The government introduced new rules for health insurer minimum reserves, which are now set in relation to enrollee risk profiles rather than premium income (2012).
- *The annual rate of increase in SHI premiums fell from 6–9% (2000–2005) to 0–2% (2012–2013), mainly as a result of cost-containment measures.*

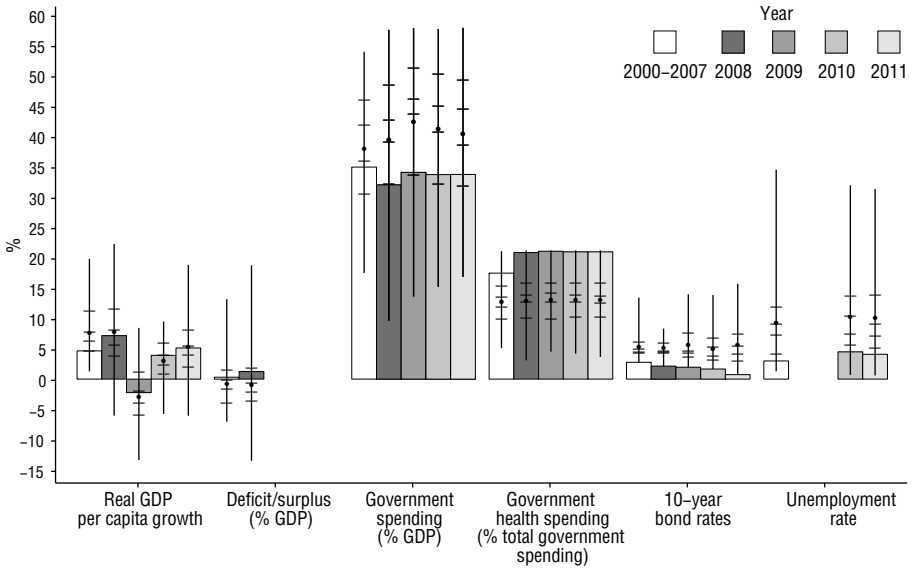
### Changes to health coverage

#### *Population (entitlement)*

- *Clarified entitlement of undocumented migrants: these persons are entitled to statutory coverage and subsidized premiums (2011).*

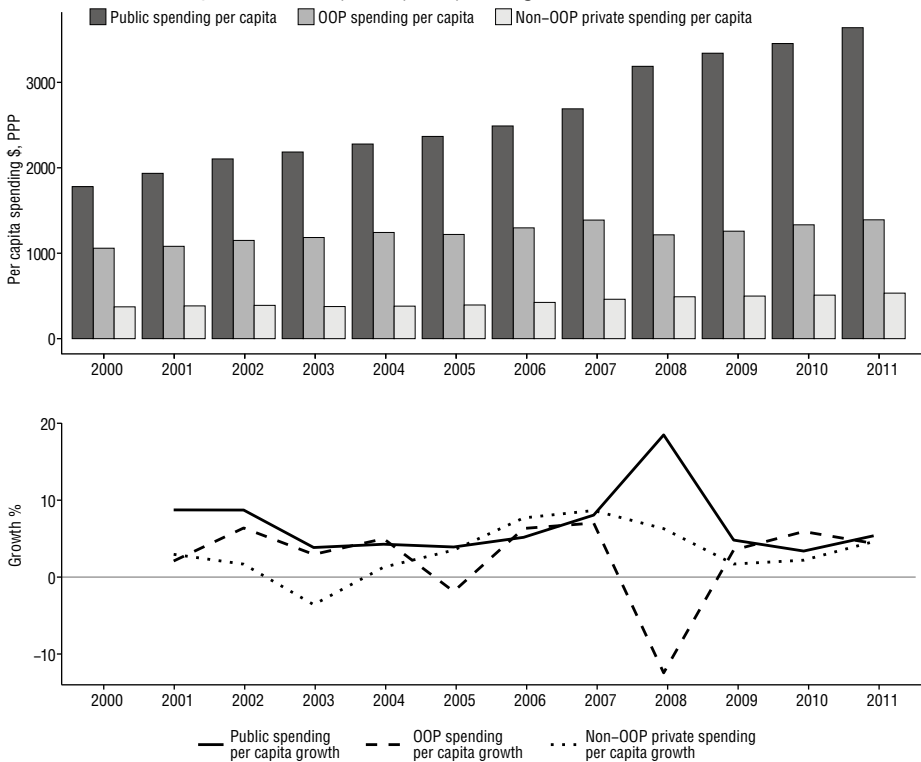


**Switzerland: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; 10-year bond rates: IMF; Other indicators: WHO Health for All.

**Switzerland: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

### The benefits package

- *Removal of eyeglasses from statutory coverage in 2011; reintroduced for children only following pressure from parliament (2012).*
- *New decision criteria for statutory coverage of very expensive treatments, particularly new cancer drugs, introduced by the Supreme Court: health outcomes (survival time in months) and the size of patient groups needing expensive treatment will be taken into account (2011, 2012).*

### User charges

- No response reported.

## Changes to health service planning, purchasing and delivery

### Prices of medical goods

- *The Federal Council reduced prescription drug prices by applying an exchange rate of CHF 1.29/€ instead of CHF 1.58/€ to many drugs (2012).*

### Salaries and motivation of health sector workers

- No response reported.

### Payment to providers

- *Payments for laboratory tests in primary care medical offices were reduced by 10% (2007). This provoked a strong reaction from primary physicians in the form of an initiative call for, among others, support of training, setting up practices and purchasing equipment, and securing incomes of primary care physicians. As primary care physicians were not satisfied with the measures proposed in response to these demands by the Swiss Government in its “Master Plan for Primary Care and Family Medicine”, the initiative was maintained and a popular vote may take place in 2014 or 2015.*
- *Introduction of a DRG-based payment system for hospital care at the national level replacing per diem payments and global budgets (2012).*

### Overhead costs: restructuring the Ministry of Health and purchasing agencies

- Growth in personnel costs of health administration (both at the national and cantonal levels) was frozen or cut (up to 10%) since 2008.

### Provider infrastructure and capital investment

- *Some investments blocked or postponed.*
- *Investment costs included in DRG costing (2012).*

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- *In mid-2012, legislation on “managed care models” introducing a greater coordination of care (coordination between providers, obligations on insurers to offer “integrated care plans” with gatekeeping and reduced co-payments compared with standard plans) was rejected in a referendum.*

*Waiting times*

- No response reported.

*Health promotion and prevention*

- *Draft on health promotion, disease prevention and screening programmes rejected by parliament (2012).*

# Tajikistan

*Ghafur Khodjamurodov*

## Economic trends

- Tajikistan's real per capita GDP growth slowed in 2009, although it remained above the European region mean growth rate. Government spending as a share of GDP, as well as health spending as a share of total government spending are both low compared with other European countries.
- Public per capita health expenditure continued to exhibit strong growth through the 2008 to 2011 period. OOP expenditure per capita declined in 2011 by 4.9% (Tajikistan: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- The health budget increased between 2008 and 2013.

### Changes to health coverage

#### *Population (entitlement)*

- *The Ministry of Health conducted a national campaign to ensure all disabled people, particularly children, benefit from free statutory coverage (2012).*
- *Introduction of the health caravan scheme to improve access to treatment in rural areas (2009).*

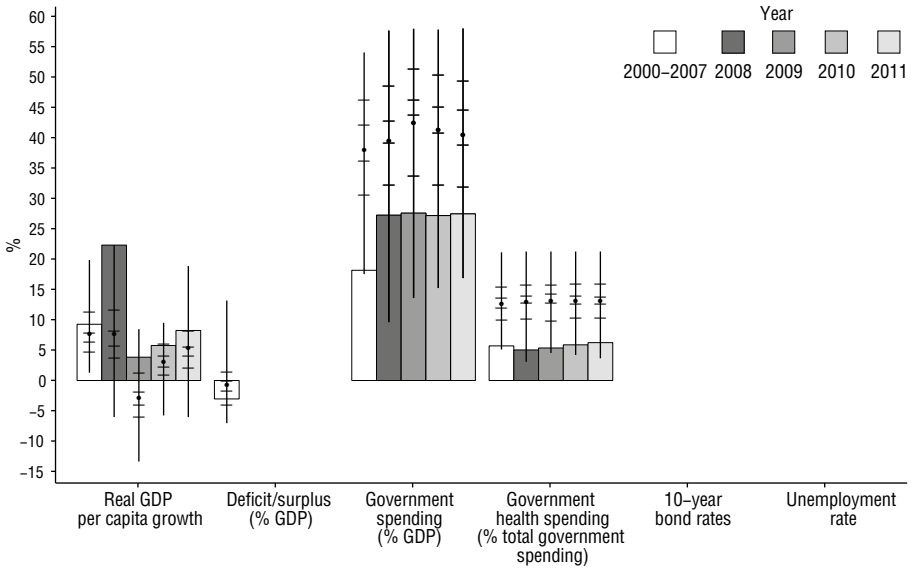
#### *The benefits package*

- No responses reported.

#### *User charges*

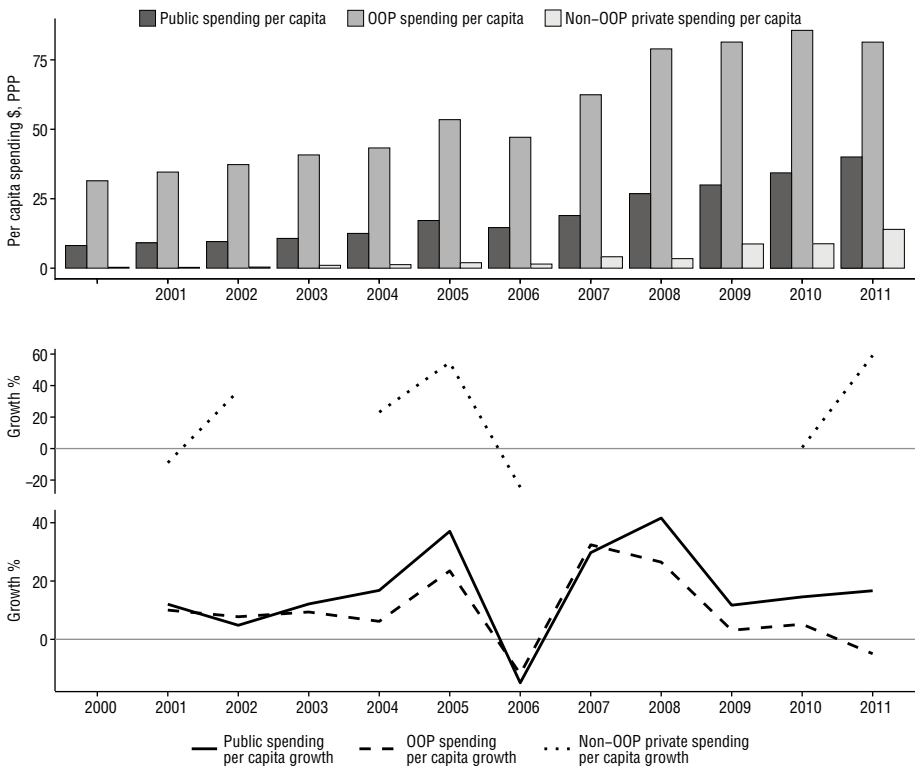
- *Introduction of exemptions from new user charges based on social status and health status (2008).*
- *Introduction of user charges for diagnostic and consultative services provided by large health care facilities in urbanized areas (capital city, provinces and big cities) (2008).*
- *The Ministry of Health approved a list of free prescription medicines based on the essential medicines list for certain categories of citizen as approved by the government (e.g. invalids, war veterans) (2012).*

**Tajikistan: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Tajikistan: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

## Changes to health service planning, purchasing and delivery

### *Prices of medical goods*

- Reduction of VAT on pharmaceuticals from 18% to 5% has been discussed.

### *Salaries and motivation of health sector workers*

- *Increases in health sector worker salaries occurred from 2007 onwards: 30–40% increase in 2012.*

### *Payment to providers*

- *Approval of a government decree to introduce user fees for some consultative and diagnostic services with exemptions from payment for certain categories of citizen (2008).*

### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- Reduction of the number of staff in the Ministry of Health by 10% (2012).

### *Provider infrastructure and capital investment*

- No responses reported.

### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No responses reported.

### *Waiting times*

- No response reported

### *Health promotion and prevention*

- *A new Strategy for the Prevention and Control of Non-infectious Diseases and Trauma in the Republic of Tajikistan for 2013–2020 was approved by Government Decree 676, dated 3 December 2012.*

# Turkey

*Salih Mollahaliloglu and Mehtap Tatar*

## Economic trends

- Real per capita GDP in Turkey declined in 2009 by 4.0%, although growth surpassed pre-crisis levels the following year. The budget deficit in 2009 increased to 7% of GDP, as the government share of GDP increased.
- The unemployment rate increased in 2009, but has since returned to European mean levels.
- Health spending as a share of government expenditure remained stable between 2008 and 2011. Although OOP expenditure per capita decreased slightly in 2009 by 1.8%, public expenditure per capita increased throughout the 2008 to 2011 period (Turkey: Figs 1 and 2).

## Policy responses

### Changes to public funding for the health system

- The budget of the Ministry of Health increased between 2008 and 2011.
- *Payment of SHI contributions for government employees and their dependants was transferred from the Ministry of Finance to the Social Security Institution (2010); expenditure for Green Card holders was transferred from the Ministry of Health to the Social Security Institution (2012).*

### Population (entitlement)

- No response reported.

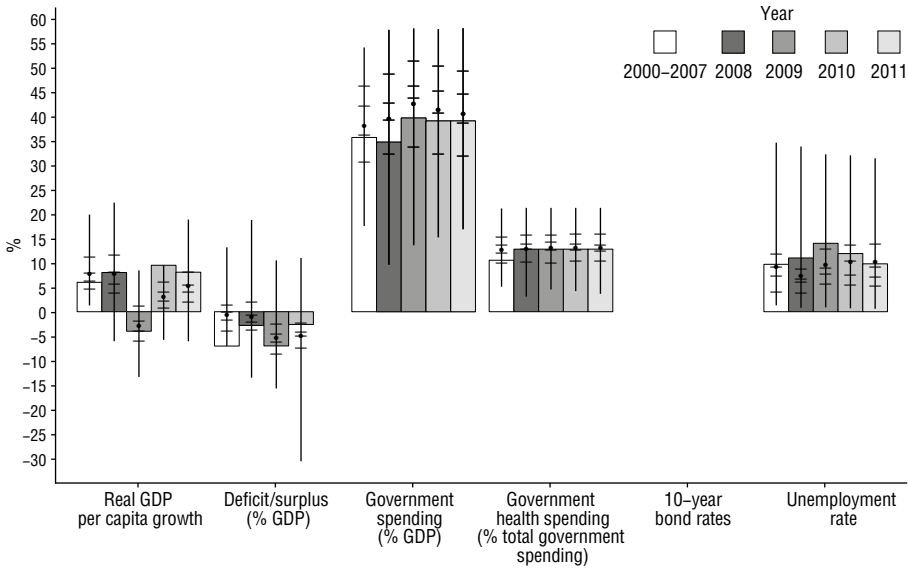
### The benefits package

- No response reported.

### User charges

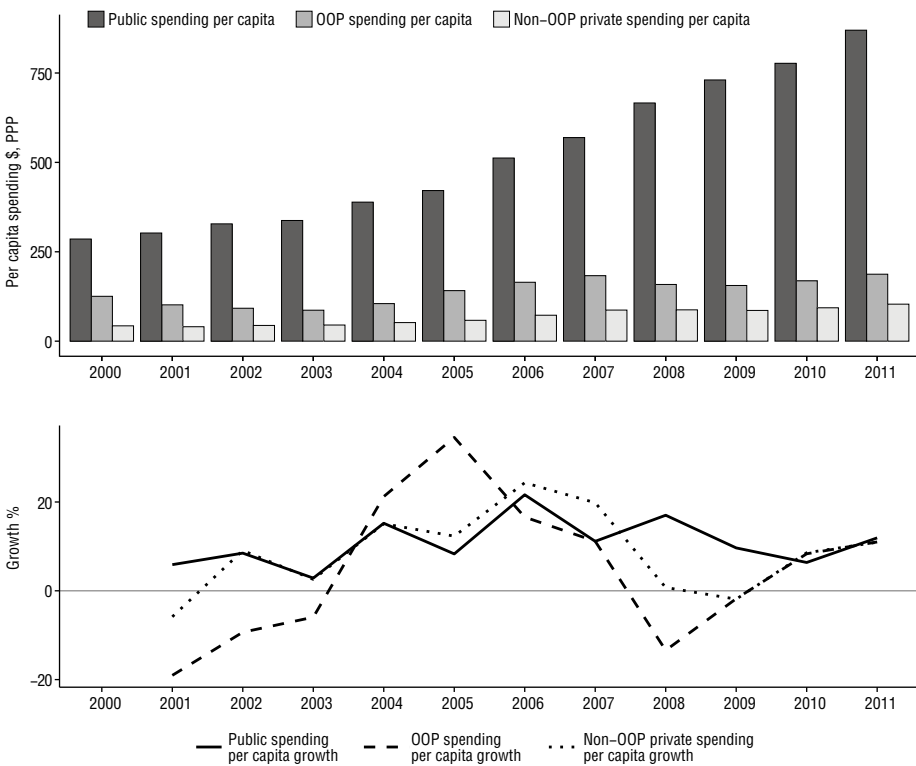
- *Reimbursement rate for branded drugs without a generic option increased (from 32.5% to 41% of the ex-factory price) (2011).*
- *Reduction of the reimbursement rate for drugs in the reference price system from 15% to 10% of the price of the cheapest drug (2011).*
- *Reduction of the reimbursement rate for branded drugs with a generic option (from 28% to 20.5%) and for generics (from 28% to 20.5%) (2011).*
- *Introduction of a new co-payment for prescriptions (TL 3 for up to three items and TL 1 for each additional item) (2012).*

**Turkey: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; Other indicators: WHO Health for All.

**Turkey: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



- *Co-payments abolished for outpatient visits for primary care (2008); reduced user charges for specialist visits (from TL 8 to TL 5) and visits to private facilities (from TL 15 to TL 12) (2012).*

### **Changes to health service planning, purchasing and delivery**

#### *Prices of medical goods*

- *Capped generic prices at 60% of the original (previously 80%) (2011).*

#### *Salaries and motivation of health sector workers*

- No response reported.

#### *Payment to providers*

- No response reported.

#### *Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- No response reported.

#### *Provider infrastructure and capital investment*

- *Introduction of an e-prescription system whereby only electronic prescriptions will be reimbursed by the Social Security Institution (2013).*

#### *Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- No response reported.

#### *Waiting times*

- No response reported.

#### *Health promotion and prevention*

- No response reported.

# Ukraine

*Valeria Lekhan and Mariia Telishevska*

## **Economic trends**

- Ukraine's real per capita GDP contracted sharply in 2009 by 13.3%, the largest decline in the European region; in 2010 and 2011 growth was above the European mean. The deficit increased in 2009 and 2010 relative to GDP as government spending relative to GDP increased.
- Health spending as a share of government expenditure has been stable since 2009. Public per capita health expenditure declined by 2.8% in 2009, increased by 9.1% in 2010, and decreased again slightly in 2011. OOP expenditure per capita continued to increase during this time (Ukraine: Figs 1 and 2).

## **Policy responses**

### **Changes to public funding for the health system**

- Public spending on health fell in 2009.
- The government adopted an anti-crisis programme 2010–2014, which led to increased public spending on health from 2010 to 2012.

### *Population (entitlement)*

- No response reported.

### *The benefits package*

- No response reported.

### *User charges*

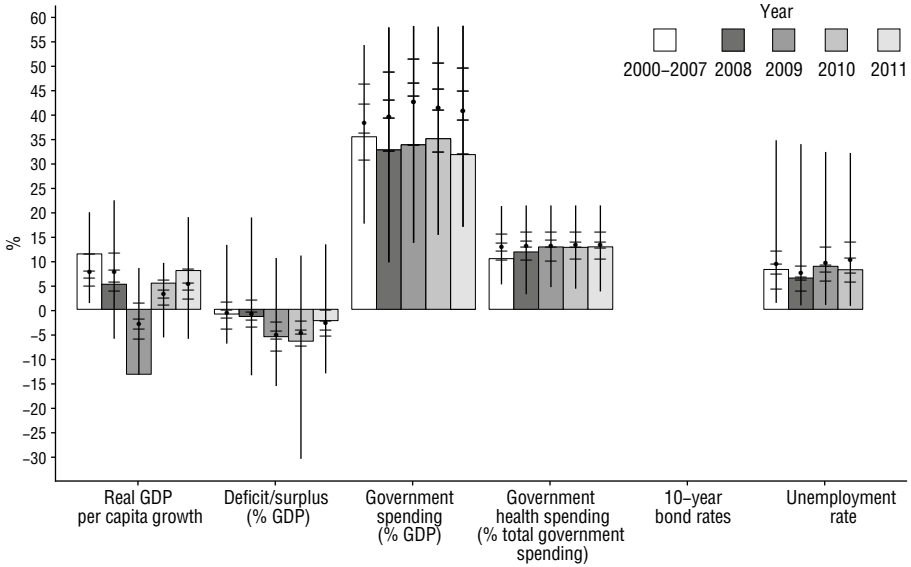
- No response reported.

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

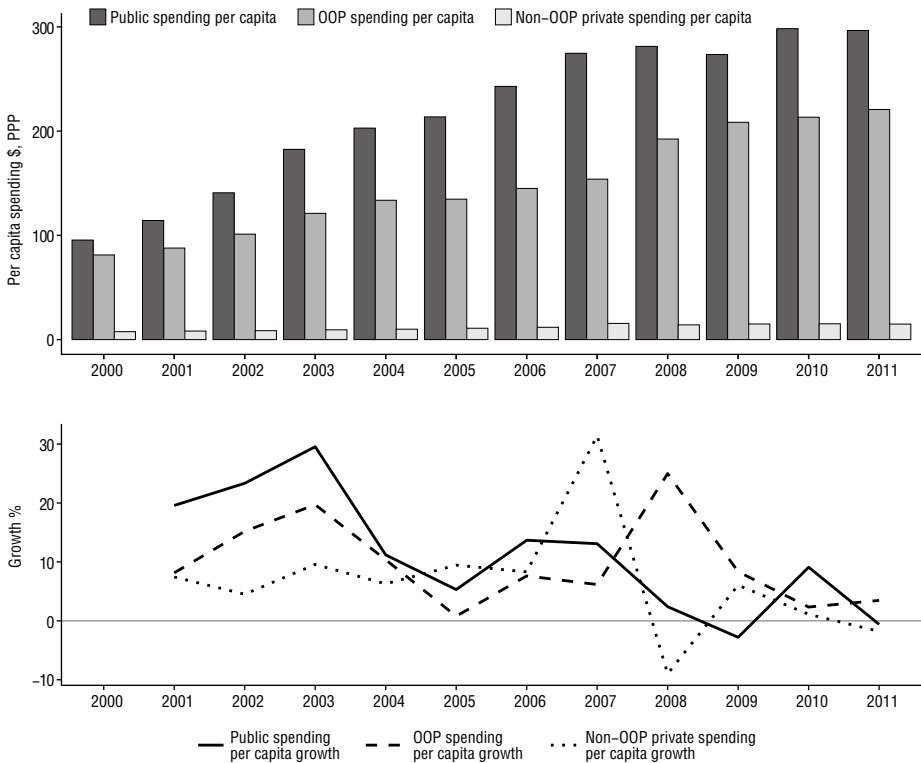
- The government set supplier price controls for goods on the essential drugs and medical products list (2008) but subsequently changed to a softer price control (a formula that accounts for currency fluctuations) (2009).
- In April 2012, the government launched a pilot project across Ukraine to control the price of antihypertensive drugs for the whole of 2013 using reference pricing mechanisms and reimbursement of the costs from public budgets. This project cut the price of these drugs by 12% by the end of 2012.

**Ukraine: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: World Bank; Other indicators: WHO Health for All.

**Ukraine: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.

*Salaries and motivation of health sector workers*

- *Salaries for doctors and nurses increased by 10–30% (2010).*
- *Health sector salaries increased on average by 9% (2011) and 21% (2012).*
- *Average salary increases of 34% for primary care doctors and nurses working in pilot regions (2012).*

*Payment to providers*

- To reduce fragmentation, pooling of financial resources committed to rural health care facilities shifted to the municipal (raion) level (second level of administrative division, below the regions (oblasts)) from the community level, although no additional monies were allocated (2011).
- Pooling of financial flows to fund primary health care were shifted to the municipal/raion level and flows to fund secondary, tertiary and emergency care to the oblast level to reduce fragmentation (thereby improving efficiency) and improve stability (2012).
- Introduction of per capita funding of primary health care and budget funding according to an abridged economic classification of operating and capital expenditure only, in pilot regions (2012).

*Overhead costs: restructuring the Ministry of Health and purchasing agencies*

- The State Sanitary-Epidemiological Service was moved from under the Ministry of Health and began to operate as a separate central executive authority (2013). As a result, the number of territorial structural units of the Service was halved (to 400) and staff numbers decreased by 43% (from 52 944 to 29 996).

*Provider infrastructure and capital investment*

- The government adopted an anti-crisis programme in 2009 entitled *Overcoming the Impact of the Global Financial Crisis and Ongoing Development 2010–2014*. One aim was to ensure the provision of high-quality medical services by optimizing the network of health care facilities (2008). However, the programme was not implemented. In 2009, the number of medical facilities had not changed and the number of beds had decreased by 7% through restructuring initiated by local authorities that did not have sufficient funds for the maintenance of health facilities. The number of small rural hospitals decreased by 50% as they changed their profile to ambulatory clinics. The functions most affected were fixed capital expenditure (reduction of real expenditure by 22.4%; US dollar equivalent 40.7%), inpatient care (13% and 33.6%, respectively), prevention services (9% and 30.3%, respectively) and provision of drugs (by 2.5% and 25.5%, respectively).

- Government expenditure on all key functions of the health care system (except management functions) increased in nominal terms and in dollar equivalent (2010 compared with 2009): overall expenditure went up by 16–18%; government expenditure by 19–21%. There was 28% growth in capital expenditure, mainly for government investment.
- Compared with 2010, the number of hospitals was reduced by 9% in 2011 and 14.3% in 2012 (by closing low-capacity facilities, which perform mainly social functions) and the number of beds by 3.4% and 6.2%, respectively.
- At the regional level, rural district hospitals and primary care outpatient clinics were reorganized. In some of the pilot regions, local authorities decided to convert outpatient units of these hospitals into territorial social services centres (2010–2012).
- The government adopted a programme of economic reforms for 2010–2014, Prosperous Society, Competitive Economy, Effective State, which envisaged a reform of health care system in Ukraine (2010). In 2011, a pilot project was launched. The reforms intend to change the budgetary model of the health system in order to eventually transition Ukraine's health system to an SHI model. Part of the Programme aimed to redefine the structure of health service delivery towards a primary health care-focused model, restructuring the hospital care system (organizing hospital regions containing an acute care hospital, chronic care hospital, nursing hospital and hospice), and formation of a unified state emergency medical service. It was planned to extend the programme to the whole of Ukraine in 2014.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

- The Ministry of Health introduced monitoring of adherence to protocols (2009); non-adherence was not penalized and the policy, therefore, had no effect on clinical practice.
- The 2010–2014 anti-crisis programme prioritized modernization of primary and emergency health care and differentiation of secondary health care facilities depending on the intensity of treatment and care. Legislation was adopted to determine the scope of competence of primary health care providers and to provide guidelines on organization of medical service and referral of patients to secondary (specialized) and tertiary (highly specialized) health care facilities (2011); these were piloted.

*Waiting times*

- No response reported.

*Health promotion and prevention*

- Advertising ban on tobacco and alcohol (2008 and 2012).
- Extension of smoking ban indoors in government buildings places, restaurants, cafes and bars.
- Excise taxes on alcohol increased by 11% and on cigarettes by 7.5% (2013).
- Priority funding given to programmes combatting tuberculosis and promoting immunization (2009).

# United Kingdom

*England: John Appleby and Seán Boyle*

*Northern Ireland: Pat McGregor and Ciaran O'Neill*

*Scotland: Shelley Farrar and David Steel*

*Wales: Marcus Longley and Ceri Philips*

There are differences between the countries of the United Kingdom in terms of some health policies and these are covered separately when relevant.

## Economic trends

- Real per capita GDP in the United Kingdom contracted in 2009 by 4.6%; growth was below average in 2010 and 2011. The budget deficit increased sharply in 2009 to 11.4% of GDP; the deficit was smaller in 2010 and 2011 as government spending as a share of GDP declined.
- Unemployment increased between 2008 and 2011 but is still below the European mean.
- Ten-year bond rates declined from 2008 to 2011.
- Health spending as a share of government expenditure has been stable despite reductions in the size of government expenditure. This has meant a slowdown in public per capita growth in 2010 and negative growth in 2011 of 3.9% (United Kingdom: Fig. 1).
- United Kingdom Fig 2 gives the overall trends in per capita spending on health.

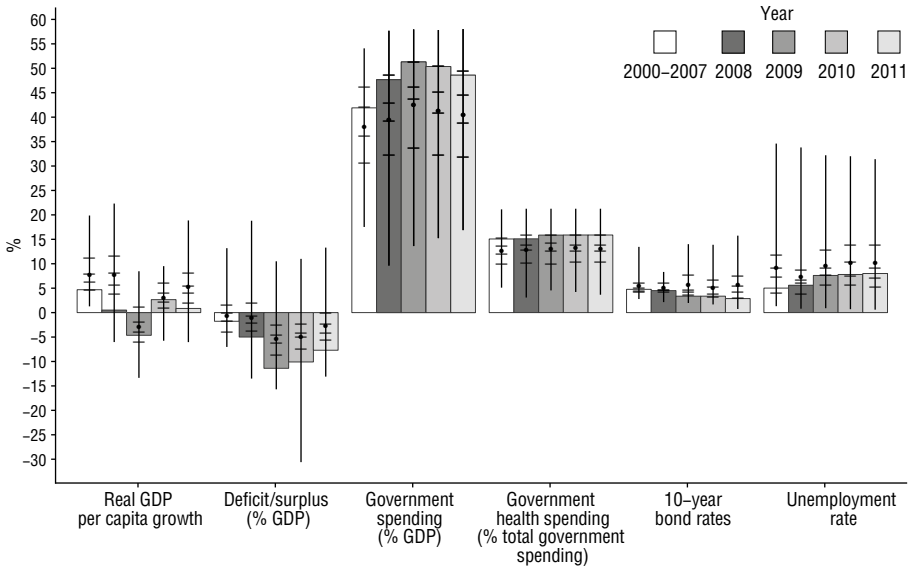
## Policy responses

### Changes to public funding for the health system

#### *England*

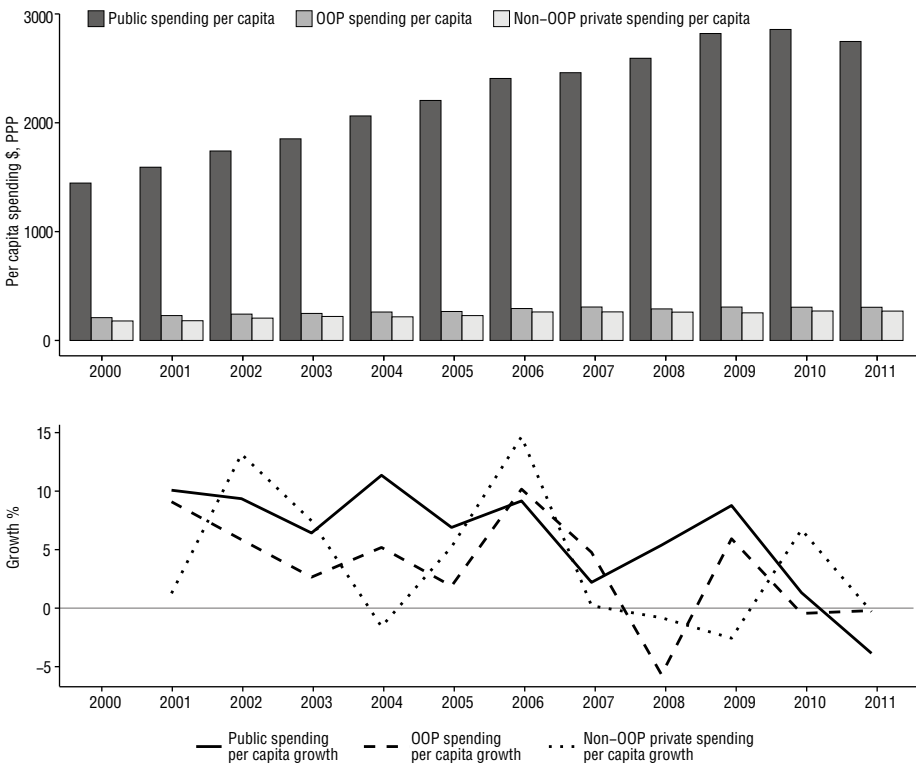
- The Department of Health's 2010 Spending Round settlement for the NHS provided an average 0.1% real-term increase per annum over the four years to 2014–2015 and a requirement to find productivity improvements to the value of around £5 billion a year to 2014–2015 to meet increased demand and improve service quality (2010).
- However, the government required the NHS to underspend against budget, leading to a surplus of £1.9 billion in 2010–2011 and £2.1 billion in 2011–2012 (around 2% of NHS revenue).
- NHS spending in real terms (at 2010–2011 prices) fell slightly from 2009–2010 to 2010–2011 and is forecast to increase slightly by 2014–2015.

**United Kingdom: Fig. 1** Economic and fiscal indicators 2000–2007 and 2008–2011



Notes: Deficit/surplus: Eurostat; 10-year bond rates: European Central Bank; Other indicators: WHO Health for All.

**United Kingdom: Fig. 2** Trends in per capita spending on health, 2000–2011



Note: Spending calculated from WHO Health for All.



### ***Northern Ireland***

- Gross public spending on health grew by about 15% in the two years from 2007–2008, followed by a sharp contraction of 13% in 2010–2011 (*partly due to a reduction in the block grant from the United Kingdom Government and partly a political decision by the Northern Ireland Executive not to finance necessary increased expenditure on water infrastructure through property taxes*), a small increase of 3% in 2011–2012 and small annual increases to 2014–2015; savings of £118.2 million were to be made in 2008–2009 increasing to £232.8 million and £344.0 million, respectively, in the following two years (through specific projects ranging from the purchasing of drugs to reducing energy consumption through technical improvements).

### ***Scotland***

- The health budget has been constrained since 2009; small cash increases occurred but there were decreases in real terms; projected decreases in real terms of 2.8% between 2011–2012 and 2014–2015. However, health has been more protected than other public sectors and the government has tried to protect frontline health services through efficiency savings (retained for reinvestment) and productivity improvements (for which annual targets of 2% were set for 2008–2011 and 3% subsequently).
- The NHS in Scotland has so far achieved these targets and maintained overall financial balance.

### ***Wales***

- The health budget in Wales has been subjected to greater pressure than that in the other United Kingdom nations; following real terms increases ranging from 1.5% to 4% between 2006–2007 and 2009–2010, the real terms increase in 2010–2011 was below 0.2% and the budget for 2013–2014 is projected to be lower than in the previous year.
- Health boards received additional funds from the Welsh Government in 2012–2013 to help them to stay in balance and have tried to meet budgetary targets through higher productivity, reduced capital spending and short-term use of reserves.

### *Population (entitlement)*

- No response reported.

### *The benefits package*

#### ***Northern Ireland***

- *Introduction of a publicly funded bowel cancer screening service for people aged 60–69 years (2010).*

### User charges

#### **England**

- England abandoned a policy to expand the list of chronic conditions exempt from user charges for prescription drugs (the list has not been updated since the 1960s).

#### **Northern Ireland**

- *User charges for prescription drugs abolished (2010).*

#### **Scotland**

- *The Scottish Government reaffirmed its commitment to providing universal access in spite of recommendations from an Independent Budget Review Panel to reconsider the case for free or universal subsidized services such as free personal and nursing care and free prescriptions (2010). The process of phasing out user charges for prescription drugs was completed in 2011.*

## **Changes to health service planning, purchasing and delivery**

### *Prices of medical goods*

- Pharmaceutical products included in broader reforms to NHS procurement (2012).

### *Salaries and motivation of health sector workers*

#### **England and Northern Ireland**

- Imposition of a two-year (2011–2012 and 2012–2013) public sector pay freeze, to be followed by a further cap of 1% per year (for 2014–2015).
- Overall reduction in full-time equivalent NHS staffing levels in England of 2.8% (2010–2012) mainly affecting managerial staff (18% reduction).

#### **Scotland**

- A pay freeze for staff earning more than £21 000 in 2011–2012 and 2012–2013.
- A 1% cap on basic pay increases for staff earning less than £80 000, with no increase for those above this level (2013 and 2014).
- No compulsory redundancies but increased use of voluntary severance packages (2011 and 2012).

#### **Wales**

- No increases in most public health sector staff salaries (2011).
- Reductions in employers' pension contributions.
- Reduction in the total number of health service staff by just under 1% (2010 and 2011).

*Payment to providers****England***

- Payments to acute hospital providers through payment by results tariffs were frozen in real terms in 2010–2011 and set at 1.8% below inflation in 2011–2012 and 2012–2013. This translates into a cut in real terms of just under 4% overall. Further real cuts in 2013–2014 and 2014–2015 imply a real reduction since 2010–2011 of nearly 7%.
- The Department of Health announced new measures in 2012 to make procurement of goods and services more effective. The Department estimates this will produce savings of £1.2 billion by 2016.

***Northern Ireland***

- Efficiency savings from 2008–2009 to 2010–2011 in the Department of Health, Social Services and Public Safety were implemented by cutting the budgets of the health trusts that provide care by 2.5% in the first year, rising to 3.5% in the final year.

*Overhead costs: restructuring the Ministry of Health and purchasing agencies****England***

- The Treasury's Spending Review in 2010 indicated the administration budget of the Department of Health would be reduced by 33% between 2010–2011 and 2014–2015, from £5.1 billion to £3.7 billion in real terms. For the first time this sum included the budgets of arm's-length bodies. Government is in the process of reducing the number of arm's-length bodies, mainly transferring their functions elsewhere. The goal was to reduce the number from 18 to a maximum of 10 by 2014.
- *All regional management bodies and local commissioning organizations (primary care trusts) were replaced with as many if not more bodies with similar functions (2013).*

***Northern Ireland***

- Administration cost limits were set in the first budget of the devolved government; the Department of Health, Social Services and Public Safety limit was to steadily reduce costs from £42.6 million in 2007–2008 to £40.4 million in 2010–2011. The pressure to reduce administration costs has been maintained in the second budget, which covers up to 2014–2015.

***Scotland***

- Health directorates are included in the Scottish Government's drive to reduce administration costs by 25% between 2010–2011 and 2014–2015.
- A national target was set of reducing by 25% the number of senior managers in the NHS by 2015 (2010).

***Wales***

- Pressures to reduce the cost of central administration and policy have continued as part of a government-wide policy, with significant constraints on central budgets and workforce. Figures which relate to health and social care are not yet available.

*Provider infrastructure and capital investment****England***

- Capital spending has fallen in real terms from £5.2 billion in 2009–2010 to £3.8 billion in 2011–2012, and is planned to be £4.3 billion in 2014–2015.
- The government announced plans to release public land to build up to 100 000 new homes (2011). As part of this initiative, the Department of Health encouraged NHS bodies to sell off unused land and buildings. In 2012 almost 600 hectares of NHS land and buildings were designated as likely for future disposal.

***Northern Ireland***

- The capital expenditure for the Department of Health, Social Services and Public Safety proposed in the first budget (2008–2011) was £202.8 million on average per annum; that for the second (2011–2015) was £212.8 million. Gross capital expenditure by the Health and Social Care Board has fallen from £4.2 million in 2009–2010 to £2.7 million in 2011–2012.
- *The government launched a policy that puts greater emphasis on primary and social care and less on hospital provision, with the aim of ensuring sustainability and realizing value for money (2011).*
- *Closure of health board residential homes was proposed (2013). This was met with great resistance.*

***Scotland***

- In 2011–2012, the capital budget was reduced by 15% and is forecast to fall by around 50% between 2011 and 2015. This is expected to be more than offset by substantial revenue-financed investment involving private finance, which should allow the programme of modernization to continue, thereby releasing future revenue savings (including tackling backlog maintenance estimated at over £1 billion in 2011). Five of ten current large NHS projects (over £50 million) are being funded through the non-profit distributing model of public–private partnership financing. Some NHS boards have also transferred funding from revenue (£7.8 million) to capital budgets in 2011–2012 to fund capital spending and the maintenance backlog.

### *Wales*

- The capital budget for 2013–2014 (£0.244 billion) is 6.9% below that for 2012–2013 in cash terms.
- All of Wales's seven local health boards are engaged in a major process of service reconfiguration (hospital and community services), starting in 2012 and expected to be completed in 2013.

*Priority setting or protocols to change access to treatments, coordination of care and patterns of use*

### *England*

- Local responses to the £5 billion per annum productivity challenge included a large variety of attempts to generate improved value and/or cash savings for reinvestment in higher value activities. These include “demand management” initiatives to avoid hospital admissions through to freezes on recruitment. Increasing pressure is also emerging for large-scale reorganization of secondary care services in major cities.

### *Northern Ireland*

- In response to the rising suicide rate among men, the Department of Health, Social Services and Public Safety developed a strategy to prevent suicide, Protect Life, which stresses the early identification of clusters and monitoring of policy effectiveness in addition to information dissemination (2006, refreshed 2012).

### *Scotland*

- *The Healthcare Quality Strategy for NHS Scotland (2010) stated that it will help to address the challenges posed by the current economic climate, which brings with it significant financial constraints, by improving quality.*

*Waiting times*

### *England*

- Slight relaxation of the emergency department target for the percentage of patients allowed to wait longer than four hours from 2% to 5% (2010).

### *Northern Ireland*

- Waiting time targets for day cases have been maintained.

### *Scotland*

- Introduction of a new, lower waiting time guarantee of 12 weeks (2012).

### *Wales*

- The government is increasing access hours in primary care to ensure more evening and Saturday GP appointments (2014).

## Health promotion and prevention

### **England**

- *Responsibility for public health shifted from the NHS to local government, together with a budget for this purpose, set at £5.45 billion for two years (2013–2015).*

### **Northern Ireland**

- *A Public Health Agency was established in 2009; it has had steady increases in its annual budget from £42.8 million in 2010 to £50.7 million in 2012.*









The financial and economic crisis has had a visible but varied impact on many health systems in Europe, eliciting a wide range of responses from governments faced with increased financial and other pressures. This book maps health system responses by country, providing a detailed analysis of policy changes in nine countries and shorter overviews of policy responses in 47 countries. It draws on a large study involving over one hundred health system experts and academic researchers across Europe.

Focusing on policy responses in three areas – public funding of the health system, health coverage and health service planning, purchasing and delivery – this book gives policy-makers, researchers and others valuable, systematic information about national contexts of particular interest to them, ranging from countries operating under the fiscal and structural conditions of international bailout agreements to those that, while less severely affected by the crisis, still have had to operate in a climate of diminished public sector spending since 2008.

Along with a companion volume that analyses the impact of the crisis across countries, this book is part of a wider initiative to monitor the effects of the crisis on health systems and health, to identify those policies most likely to sustain the performance of health systems facing fiscal pressure and to gain insight into the political economy of implementing reforms in a crisis.

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