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# HEALTH CARE FINANCING IN THE CONTEXT OF SOCIAL SECURITY

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Authors:

Sarah Thomson  
Thomas Foubister  
Professor Elias Mossialos  
LSE Health and Social Care (J413)  
London School of Economics  
Houghton Street  
London WC2A 2AE

Tel. 020 7955 7564

Fax 020 7955 6803

Email [e.a.mossialos@lse.ac.uk](mailto:e.a.mossialos@lse.ac.uk)

Administrator:

Christa Kammerhofer-Schlegel  
Policy Department Economy and Science  
DG Internal Policies  
European Parliament  
Rue Wiertz 60  
B-1047 Brussels  
E-mail: [christa.kammerhofer@europarl.europa.eu](mailto:christa.kammerhofer@europarl.europa.eu)

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E-mail: [poldep-esc@europarl.europa.eu](mailto:poldep-esc@europarl.europa.eu).

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## **Note on the text**

We have sometimes found it necessary to distinguish between the member states that were part of the European Union prior to 1 May 2004 and those that have joined since that date. We refer to the former as ‘older’ member states and the latter as ‘newer’ member states.

## List of abbreviations

<b>AME</b>	<i>Aide Médicale d'État</i>
<b>AT</b>	Austria
<b>AWBZ</b>	<i>Algemene Wet Bijzondere Ziektekosten</i> (Exceptional Medical Expenses Act)
<b>BE</b>	Belgium
<b>BG</b>	Bulgaria
<b>CMU</b>	<i>Couverture Maladie Universelle</i>
<b>CMU-C</b>	<i>Couverture Maladie Universelle Complémentaire</i>
<b>CSG</b>	<i>Contribution Sociale Généralisée</i>
<b>CY</b>	Cyprus
<b>CZ</b>	Czech Republic
<b>DE</b>	Germany
<b>DHIF</b>	District Health Insurance Fund
<b>DK</b>	Denmark
<b>DKK</b>	Danish <i>kroner</i>
<b>DMP</b>	disease management programme
<b>DRG</b>	diagnosis-related group
<b>DTC</b>	diagnosis treatment combination
<b>ECJ</b>	European Court of Justice
<b>EE</b>	Estonia
<b>EHIF</b>	Estonian Health Insurance Fund
<b>EL</b>	Greece
<b>EOHSP</b>	European Observatory on Health Systems and Policies
<b>ES</b>	Spain
<b>EU</b>	European Union
<b>FFS</b>	fee for service
<b>FI</b>	Finland
<b>FR</b>	France
<b>GDP</b>	gross domestic product
<b>GHIF</b>	General Health Insurance Fund
<b>GP</b>	general practitioner
<b>HAS</b>	<i>Haute Autorité de Santé</i>
<b>HIIS</b>	Health Insurance Institute of Slovenia
<b>HiT</b>	Health System in Transition
<b>HRG</b>	health resource group
<b>HSE</b>	Health Service Executive
<b>HTA</b>	health technology assessment
<b>HU</b>	Hungary
<b>IE</b>	Ireland
<b>IQWiG</b>	Institute for Quality and Efficiency
<b>IRAP</b>	<i>Imposta regionale sulle attività produttive</i>
<b>IT</b>	Italy
<b>LFN</b>	Pharmaceutical Benefits Board

<b>LT</b>	Lithuania
<b>LU</b>	Luxembourg
<b>LV</b>	Latvia
<b>MISSOC</b>	Mutual Information System on Social Protection in the Member States of the European Union
<b>MOF</b>	Ministry of Finance
<b>MOH</b>	Ministry of Health
<b>MSA</b>	medical savings account
<b>MT</b>	Malta
<b>NGO</b>	non-governmental organisation
<b>NHI</b>	National Health Insurance
<b>NHIF</b>	National Health Insurance Fund
<b>NHIS</b>	National Health Insurance Scheme
<b>NHS</b>	National Health Service (UK) or National Health System (Greece, Italy, Portugal, Spain)
<b>NIC</b>	National Insurance contribution
<b>NICE</b>	National Institute for Health and Clinical Excellence
<b>NL</b>	Netherlands
<b>NTPF</b>	National Treatment Purchase Fund
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>ONDAM</b>	<i>Objectif National de Dépenses d'Assurance Maladie</i>
<b>OOPP</b>	out of pocket payment
<b>PBC</b>	practice-based commissioning
<b>PbR</b>	Payment by Results
<b>PCT</b>	primary care trust
<b>PHI</b>	private health insurance
<b>PL</b>	Poland
<b>PPS</b>	Purchasing power standards
<b>PRP</b>	performance-related pay
<b>PT</b>	Portugal
<b>RHIF</b>	Regional Health Insurance Fund
<b>RO</b>	Romania
<b>RSZ-ONSS</b>	National Office for Social Security
<b>SE</b>	Sweden
<b>SEK</b>	Swedish <i>kroner</i>
<b>SI</b>	Slovenia
<b>SK</b>	Slovakia
<b>SSN</b>	<i>Servizio Sanitario Nazionale</i>
<b>UK</b>	United Kingdom
<b>UK-ENG</b>	England
<b>UNCAM</b>	<i>Union Nationale des Caisses d'Assurance Maladie</i>
<b>UNOCAM</b>	<i>Union Nationale des Organismes Complémentaires d'Assurance Maladie</i>
<b>US</b>	United States
<b>VAT</b>	valued-added tax
<b>WHO</b>	World Health Organization
<b>ZVW</b>	<i>Zorgverzekeringswet</i> (Health Insurance Act)

## **EXECUTIVE SUMMARY**

### **Introduction**

Health systems in the European Union perform a vital social security function. They mitigate both health and financial risks and make a major contribution to social and economic welfare. In light of various cost pressures, the Council of the European Union has articulated the challenge facing the member states as the need to secure the financial sustainability of their health systems without undermining the values these share: universal coverage, solidarity in financing, equity of access and the provision of high quality health care (Council of the European Union 2006).

Our aim in this report is to contribute to addressing this challenge by examining how strengthening the design of health care financing can help to secure health system sustainability. The report begins by clarifying the nature of the sustainability problem (Section 1). It then explores the adequacy of current financing arrangements and recent financing reforms in respect of their ability to secure sustainability (Sections 2 and 3). Finally, it offers some practical suggestions as to the best way forward.

### **The problem of sustainability**

The problem of sustainability presents itself as an accounting problem, where health system revenue is insufficient to meet health system obligations. Two notions are often confused: economic sustainability and fiscal sustainability.

#### ***Economic sustainability***

Economic sustainability refers to growth in health spending as a proportion of gross domestic product (GDP). Spending on health is economically sustainable up to the point at which the social cost of health spending exceeds the value produced by that spending. If health spending sufficiently threatens other valued areas of economic activity, health spending may come to be seen as economically unsustainable.

Growth in health spending is more likely to threaten other areas of economic activity in an economy that is stagnant or shrinking than it is in an economy that is growing. The general consensus, however, is that for the foreseeable future GDP will grow in the European Union at a rate high enough for health spending and other areas of the economy to grow (Economic Policy Committee 2001; Economic Policy Committee and European Commission 2006).

#### ***Fiscal sustainability***

Concern regarding the fiscal sustainability of a health system relates specifically to public expenditure on health care. A health system may be economically sustainable and yet fiscally unsustainable if public revenue is insufficient to meet public expenditure.

There are three broad approaches to addressing the problem of fiscal sustainability: increase public revenue to the point at which health system obligations can be met; lessen those obligations to the point at which they can be met from existing (or projected) revenue; and improve the capacity of the health system to convert resources into value.

Efforts to increase public revenue face technical obstacles such as institutional capacity, concerns regarding the threat such efforts may present to labour markets, and political obstacles such as the unwillingness of part of the population to continue to subsidise equal access to health care for others. Lessening health system obligations through coverage reduction (de-listing benefits, expanding cost sharing, excluding population groups) may help to secure fiscal sustainability, but will undermine the four values listed by the Council of the European Union.

Furthermore, encouraging private financing of health care may exacerbate problems of economic sustainability due to the lower value for money that private markets are able to achieve vis-à-vis public systems.

Improving the ability of health systems to generate value can focus on the reform of service delivery or on the reform of financing systems (although the two are related). Reform over the past two decades has focused on the former. In this report we focus on the latter route to securing sustainability. We argue that improving value through health financing system design should be at the forefront of efforts to secure health system sustainability. But we also note that the problem of fiscal sustainability is a political problem, one that pertains to what has been called the ‘political economy of sharing’ (Reinhardt et al. 2004). Effort to secure population commitment to the four values must accompany any attempt at technical reform to enhance value.

## **Health care financing in the European Union**

Health financing policy encompasses a range of functions: collection of funds for health care, pooling funds (and therefore risks) across time and across the population, and purchasing health services (Kutzin 2001). It also encompasses policies relating to coverage, benefits and cost sharing (user charges). The way in which each of these functions and policies is carried out or applied can have a significant bearing on policy goals such as financial protection, equity in finance, equity of access, transparency and accountability, rewarding good quality care, providing incentives for efficiency in service organisation and delivery, and promoting administrative efficiency<sup>(1)</sup>.

### ***Collecting funds***

All member states use a range of contribution mechanisms to finance health care: public (tax and social insurance contributions) and private (private health insurance, MSAs<sup>(2)</sup>) and out of pocket payments in the form of direct payments for services not covered by the statutory benefits package, cost sharing (user charges) for services covered by the benefits package and informal payments). A major change since the early 1990s has been the shift from tax to social insurance as the dominant contribution mechanism in many of the newer member states of central and Eastern Europe.

Public expenditure on health dominates in every country except Cyprus, although it has fallen, as a proportion of total expenditure on health, in many member states since 1996. Private expenditure is largely generated by out of pocket payments, which have risen as a proportion of total health care expenditure since 1996, but still account for less than a third of total expenditure in most member states. In 1996 private health insurance was non-existent or made only a very small contribution to total expenditure on health in most of the newer member states and in several of the older member states. While it has grown as a proportion of total expenditure on health in many member states, in most it still accounts for well under 5%. However, its effect on the wider health system may be significant, even in member states where it plays a minor role.

### ***Pooling funds***

Pooling (the accumulation of prepaid funds on behalf of a population) allows the contributions of healthy individuals to be used to cover the costs of those who need health care. It is an essential means of ensuring equity of access to health care. In general, the larger the pool and the fewer in number, the greater the potential for equity of access and administrative efficiency.

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<sup>1</sup> These are the health financing policy goals adopted by the World Health Organization.

<sup>2</sup> Although none currently uses MSAs on a statutory basis.



In most member states, all publicly-collected funds for health care are pooled nationally, which means there is a single pool. The exceptions are member states in which local taxes are used to finance health care and those in which individual health insurance funds are responsible for collecting their own social insurance contributions. In both cases, systems are usually in place to re-allocate resources to compensate poorer regions with smaller tax bases or to compensate funds with poorer members and/or members at higher risk of ill health. Competition among pooling agents (usually also purchasing agents) is relatively rare in EU health systems (see below).

### ***Purchasing health services***

Purchasing refers to the transfer of pooled funds to providers on behalf of a population. The way in which services are purchased is central to ensuring efficiency in service delivery and quality of care. It may also affect equity of access to health care and administrative efficiency and is likely to have a major effect on ability to control costs and financial sustainability. Key issues involve market structure and purchasing mechanisms (for example, contracting, provider payment and monitoring).

Where health care is financed mainly through social insurance contributions, the relationship between purchaser (health insurance fund) and provider has traditionally been contractual. In member states where health care is financed mainly through tax, the purchasing function is usually devolved to territorial entities (regional or local health authorities or specially-created purchasing organisation such as Primary Care Trusts in England). Purchaser-provider splits have been introduced throughout England, Italy and Portugal and in some regions of Spain and Sweden.

Competition among purchasers is relatively rare in EU health systems. It exists in Belgium and during the 1990s it was introduced in the Czech Republic and Slovakia and extended to the whole population in Germany and the Netherlands. Allowing health insurance funds to compete for members gives them incentives to attract favourable 'risks' (that is, people with a relatively low average risk of ill health) and avoid covering high risk individuals, which may affect equity of access to health care. Risk adjustment mechanisms aim to address this by compensating health insurance funds for high risk members. However, risk adjustment is technically and politically challenging and often incurs high transaction costs. A recent review concluded that most risk adjustment mechanisms in the Europe fail to prevent risk selection, and that the benefits of competition were therefore likely to be outweighed by the costs (van de Ven et al. 2007).

In EU health systems, primary care providers are most commonly paid through a combination of capitation and fee for service. Where health care is financed mainly through social insurance contributions, specialists are more likely to be paid on a fee for service basis, whereas in predominantly tax-financed health systems, specialists are often salaried employees. Hospitals are most commonly allocated budgets, but case-based payment is increasingly used either to define budgets or as a retrospective form of payment (with or without a cap on payments).

### ***Coverage, benefits and cost sharing***

Residence in a country is the most common basis for entitlement to health care in the European Union, resulting in universal or near universal (98-99%) population coverage in most member states; the main exception is Germany, where statutory coverage is around 88%. EU health systems provide broadly comprehensive benefits, usually covering preventive and public health services, primary care, ambulatory and inpatient specialist care, prescription drugs, mental health care, dental care, rehabilitation, home care and nursing home care. Across member states there is some variation in the range of benefits covered and the extent of cost sharing required. In some member states there may be a gap between what is 'officially' covered and what is actually available in practice.

All member states impose cost sharing for services covered by the benefits package, most commonly to outpatient prescription drugs and dental care. In some member states, the prevalence of informal payments to supplement or in lieu of formal cost sharing has posed a challenge to health reforms (Balabanova and McKee 2002; Lewis 2002; Murthy and Mossialos 2003; Allin et al. 2006).

### **Which financing reforms are most likely to enhance sustainability?**

Many who draw attention to the gap between what we currently spend on health care and other forms of social security and what we may need to spend in future conclude that the only way of bridging this gap is to increase reliance on private finance (Bramley-Harker et al. 2006). We question the validity of this approach. Private financing undermines health system values and presents poor value in comparison to publicly-financed health care. In what follows we summarise some of the key findings of Section 3.

**Centralised systems of collecting funds** seem better able to enforce collection (in contexts where this is an issue) and may therefore be better at generating revenue than systems in which individual health insurance funds collect contributions. In part, however, this reflects the nature of the collection agent – tax agencies may be more difficult to evade (with impunity) than health insurance funds. Centralised contribution rate setting may be resisted where funds have traditionally had the right to set their own rates, but it is not impossible, as recent Germany reforms show. It is an important step towards ensuring equity and may lower the transaction costs associated with risk adjustment, as the risk adjustment mechanism no longer has to compensate for different contribution rates. It may also help to address resistance to risk adjustment on the part of health insurance funds.

Some of the older member states have taken steps to boost public revenue by **broadening revenue bases** linked to employment. Both France and Germany have increased their reliance on non-earnings-related income through tax allocations, a move that is likely to contribute to fiscal sustainability in the context of rising unemployment, growing informal economies, growing self employment, concerns about international competitiveness and changing dependency ratios. In contrast, during the 1990s, many of the newer member states of central and eastern Europe moved away from tax financing and introduced employment-related social insurance contributions. Unfortunately, the economic and fiscal context in many of these countries is particularly unsuited to employment-based insurance due to high levels of informal economic activity and unemployment. Consequently, governments have usually continued to rely on tax allocations to generate sufficient revenue. In some cases, this has been seen as a failure of the social insurance ‘system’. However, it should probably be seen as an advantage. The potential benefits of creating new purchasing entities at arm’s length from government and from providers can be maintained, even if tax financing continues. In fact, finding ways to safeguard tax allocations when new contribution mechanisms are introduced might be essential to ensuring sufficient revenue and to addressing some of the limitations of employment-based social insurance.

The clear trend towards creating a **national pool** of publicly-generated health care resources witnessed in newer and older member states is a welcome one. A single pool of health risks is the basis for equity of access to health care. It also enhances efficiency by counteracting uncertainty around the risk of ill health and its associated financial risk. In addition, minimising duplication of pooling may improve administrative efficiency.

Another welcome trend related to pooling is the move away from allocating pooled resources (to health insurance funds or to territorial ‘purchasers’) based on historical precedent, political negotiation or simple capitation towards **strategic resource allocation** based on risk-adjusted capitation.

This move can address some of the inequalities associated with local taxation or collection by individual health insurance funds and is a major step to ensuring that resources match needs and that access to health care is equitable.

Some newer and older member states have introduced **competition among purchasers** (health insurance funds). This may seem like a good way to stimulate active purchasing. In practice, however, the costs of this form of competition may outweigh the benefits due to the incentives to select risks it creates. Evidence from Belgium, France and Germany shows how risk adjustment mechanisms may weaken these incentives, but fail to eliminate them (van de Ven et al. 2007).

The move away from passive reimbursement of providers towards **strategic purchasing** of services also represents a step towards matching resources to needs and ensuring value for money. Health care providers are ultimately responsible for generating a large proportion of health care expenditure, so ensuring that their services are delivered equitably, at an appropriate level of quality and for an appropriate cost is central to securing both economic and fiscal sustainability. However, in many member states reform of purchasing has been under developed. In some cases, purchasing agents have not been given sufficient incentives or tools to attempt strategic purchasing. With regard to provider payment, the move away from pure fee for service reimbursement towards more sophisticated, blended payment systems that account for volume and quality is promising. Again, however, reforms have not always been implemented appropriately and more needs to be done, particularly in terms of linking payment to performance in terms of quality and health outcomes.

Several countries have made efforts to expand **population coverage**. Consequently, most member states now provide universal coverage. However, the scope and depth of coverage are as important as universality, and the trend in some countries to lower scope and depth undermines financial protection. Efforts to define the scope and depth of coverage should be systematic and evidence based to ensure value for money. Health technology assessment is beginning to be used more widely to assist in reimbursement decisions and defining benefits. However, its application is still limited in many member states. In some cases this is due to financial and technical constraints. In others, implementation is limited by political constraints such as opposition from patient groups, providers and product (usually pharmaceutical) manufacturers.

**Cost sharing** has been introduced and expanded in many member states and reduced in others. Although cost it may be used to encourage cost-effective patterns of use, overall there is little evidence of efficiency gains and, where it is used to curb direct access to specialists, there is some evidence of increased inequalities in access to specialist care (as those who can afford the user charges have better access). There is no evidence to show that cost sharing leads to long-term expenditure control in the pharmaceutical or other health sectors. Additionally, due to the information asymmetry inherent in the doctor-patient relationship, patients may not be best placed to ‘purchase’ the most cost-effective care. Given that the bulk of health care expenditure (including pharmaceutical expenditure) is generated by providers, efforts should focus on encouraging rational prescribing and cost-effective provision of treatment. One lesson from the reform experience is that cost sharing policy should be carefully designed to minimise barriers to access. In practice, this means providing exemptions for poorer people and people suffering from chronic or life-threatening illnesses. With careful design, cost sharing can also be used to ensure value for money.

Markets for **private health insurance** in EU health systems generally serve richer and better educated groups and present barriers to access for older and unhealthier people. They are also often fragmented, resulting in weak purchasing power. Due to the fact that many of them exist to increase consumer choice (or to reimburse cost sharing), insurers have limited incentives to engage in strategic purchasing and link provider pay to performance. However, they may have strong incentives to select risks, to the detriment of equity and efficiency.

In general, private systems incur substantially higher transaction costs than public systems and may therefore be accused of lowering administrative efficiency.

Overall, we identify two broad reform trends. First, member states have made significant attempts to promote equity of access to health care – by expanding coverage, increasing regulation of private health insurance, improving the design of cost sharing and making the allocation of resources more strategic. Second, there is a new emphasis on ensuring quality of care and value for money – for example, through increased use of HTA, efforts to encourage strategic purchasing and provider payment reforms that link pay to performance. While cost containment remains an important issue, in many member states policy makers are no longer willing to sacrifice equity, quality or efficiency for the sake of curbing expenditure growth. Several of the reforms introduced more recently are in part an attempt to undo the negative effects of prioritising cost containment over health financing policy goals.

### **Is there an optimal way of financing health care?**

We argue that public finance is superior to private finance. This is not surprising given the need to secure sustainability without undermining values such as equity in finance or equity of access to health care. However, our argument is based on efficiency grounds too. Publicly-generated finance contributes to efficiency and equity by providing protection from financial risk and by detaching payment from risk of ill health. In contrast, private contribution mechanisms involve limited or no pooling of risks and usually link payment to risk of ill health and ability to pay. Public finance is also superior in its ability to ensure value for money which, as we have argued, is central to securing both economic and fiscal sustainability. Overall, the experience of the United States suggests that increasing reliance on private finance may exacerbate health care expenditure growth, perhaps due to the weak purchasing power of private insurers and individuals against providers. Among the older member states of the European Union, those that have relied more heavily on private finance, either through private health insurance or through higher levels of cost sharing, are also those that tend to spend more on health care as a proportion of GDP (notably, Austria, Belgium, France, Germany and the Netherlands).

Of course, public finance is not without its problems. Where social insurance contributions dominate, there are likely to be concerns about the high cost of labour and the difficulty of generating sufficient revenue as informal economies and self employment grow, and as population ageing leads to shifts in dependency ratios. Concerns may also focus on generating sufficient revenue where capacity to enforce tax and contribution collection is weak. The reluctance of certain groups to pay collectively for social goods and to subsidise the costs of care for others may exacerbate resistance to paying higher taxes or contributions. However, these problems can be addressed – for example, by broadening the revenue base to capture non-employment-based income, by investing in efforts to strengthen public sector capacity, and by making the social and economic case for collective financing. Equity in finance may be compromised if health systems become increasingly dependent on consumption taxes (VAT), if ceilings on contributions are lowered, or if tax and contribution evasion is rife. On balance, however, these concerns are outweighed by gains in terms of equity of access to health care.

In some countries, public sector resource allocation has contributed to inequalities in access, while purchasing has been non-existent or weak. Nevertheless, there are few cases in which private health insurers have been able to demonstrate better purchasing skills (in part due to their need to enhance consumer choice).

In determining an optimal way of financing health care we might ask what type of financing system is best placed to adjust to changing priorities. In recent years there has been increased demand for some types of health services, notably mental health care, long-term care and care of chronic illnesses.

Demand for these services, and for integrated forms of delivering care, is likely to grow as populations age. The type of financing system best able to respond to shifts in demand is one with the ability to enhance pooling, co-ordinate and direct strategic resource allocation, match resources to need, shape the nature of supply and create incentives to enhance provider responsiveness. We suggest that systems based on public finance stand a much greater chance of rising to this challenge than alternatives such as private health insurance.

### **Policy recommendations**

Reforms that aim to secure the economic and fiscal sustainability of health care financing in the context of social security should focus on ensuring equity of access and value for money. Our recommendations are based on the analysis of health financing arrangements and reforms in Section 2 and Section 3. We should point out that evidence about the impact of some arrangements and reforms is lacking, so we cannot be sure of all outcomes. Nor can we be sure whether a reform will have the same effect in different countries. With this caveat in mind, we make the following recommendations.

- The starting point for any reform should be careful analysis of the existing health (financing) system to identify weaknesses or problem areas, combined with understanding of the contextual factors that may contribute to or impede successful reform.
- Policy makers may find it worthwhile to try to communicate the aims and underlying rationale for reforms to the wider public.
- Policy makers should consider the whole range of health financing functions and policies, rather than focusing on collection alone (contribution mechanisms).
- Find ways to enforce collection to ensure sufficient revenue and to restore confidence in the health financing system.
- Health systems predominantly financed through employment-based social insurance contributions may benefit from broadening the revenue base to include non-earnings-related income.
- In addition to contributing to efficiency and equity, enhancing pooling by lowering the number of pools or (better still) creating a single, national pool can facilitate strategic direction and co-ordination throughout the health system.
- Limit reliance on private finance (private health insurance, MSAs, user charges) and ensure that there are clear boundaries between public and private finance so that private finance does not draw on public resources or distort public resource allocation and priorities.
- If user charges are imposed, pay careful attention to the design of cost sharing policy, which should be systematic and evidence based.
- Avoid introducing MSAs as they do not involve any pooling across groups of people. They also suffer from many of the limitations of user charges.

- Tackling informal payments is central to increasing public confidence in the health system. Informal payments may present a major challenge to successful implementation of other reforms.
- Encourage strategic resource allocation to ensure that health resources match health needs.
- Encourage greater use of HTA, particularly in decisions about reimbursement and in defining the benefits package, but also in improving clinical performance.
- Design purchasing and provider payment systems to create incentives for efficiency, quality and productivity.
- Encourage administrative efficiency by minimising duplication of functions and tasks.
- Avoid confusing efficiency with expenditure control. Spending on health care should not be unconditional – rather, it should always demonstrate value for money.

## INTRODUCTION

Health systems in the European Union (EU) form an important component of the wider apparatus of social security. By preventing and treating ill health and covering its associated – and often catastrophic – costs, they mitigate both health risks and financial risks and make a major contribution to social and economic welfare.

In June 2006 the Council of the European Union issued a ‘Statement on Common Values and Principles’ which set out the values and principles underpinning all the health systems of the European Union (Council of the European Union 2006). The values listed are universal coverage, solidarity in financing, equity of access and the provision of high quality health care. We shall refer to these below as ‘the four values’. The Council’s motivation in issuing this document was its concern regarding the likelihood that these values will be preserved into the future. The document identifies two threats.

**The first threat** relates to the present uncertainty around the full reach of the European Union’s Internal Market rules. Recent rulings from the European Court of Justice (ECJ) concerning the right to receive treatment in other member states, the attempt to include health care in the proposed Services Directive (European Commission 2007), and the growing complexity of the public-private mix in health care (Thomson and Mossialos 2007) have all contributed to making the non-applicability of Internal Market rules to public health systems (as provided for by the Treaty of the European Union) less clear-cut. The concern here is that the operation of the Internal Market may be inimical to the values associated with health care, and that encroachment of the Internal Market into health care might work to undermine those values (McKee et al. 2002; Mossialos and McKee 2002; Mossialos et al. 2002; Hervey 2007).

**The second threat** – and the rationale for this report – is that posed by two potential cost drivers: population ageing and innovation in health technology. The threat is usually presented as follows. (a) Older people account for a large proportion of health care spending. As the share of older people in the population grows (and the share comprised of working-age people, whose financial contributions fund the bulk of health care, diminishes), so the level of demand for health care will come to exceed the capacity of health systems to meet it. (b) New technologies are cost-increasing. This is because they allow things to be done that could not be done before. Even where a new technology substitutes for an older, more expensive one, the result is likely to be increased use, again leading to higher costs. (c) If older people are the principal beneficiaries of innovation, the cost problem is compounded.

The Council of the European Union states that in light of this latter threat, the challenge now facing the member states is to secure the ‘financial sustainability’ of their health systems without undermining the four values listed above. **Our aim in this report is to contribute to addressing this challenge by exploring how the design of health care financing systems can help to secure health system sustainability.**

In what follows, we suggest that there is no ‘magic bullet’ solution to the problem of health system sustainability – at least not if a key requirement is that the four values be preserved. Although there are practical measures that the member states can take to help secure the financial sustainability of their health systems – and it is those relating to financing system design which are the topic of this report – the question of sustainability is, in the end, a social question pertaining to the values we hold, rather than a technical question amenable to a simple fix. A key message of the report, therefore, is that whatever steps member states take to secure sustainability, it is important that they place equal emphasis on securing population commitment to the four values. For in the absence of such commitment the governing force of these values will certainly diminish, and with it the vital social security function that health systems perform.

The report is organised as follows. In Section 1 we clarify the nature of the sustainability problem and describe and discuss the principal approaches that can be taken to address the problem. This section also gives details of fiscal context and health-related spending trends. In Section 2 we set out our conceptual framework for the description and analysis of health care financing systems, and provide an overview of how health care is financed in the European Union. Section 3 describes financing system reforms, and assesses their adequacy in respect of the objective of securing sustainability without undermining the four values. Section 4 brings out the main points of the analysis and offers some policy recommendations. The Annex provides descriptions of the financing systems of each of the 27 member states.

The information and analysis presented in this report are based on a comprehensive review of the literature, including a review of statistical data. Statistical data were obtained from the World Health Organization Health For all Database and National Health Accounts, and OECD Health Data 2007. Non-statistical data were identified through Internet searches and through the following sources and databases: Health System in Transition (HiT) reports produced by the European Observatory on Health Systems and Policies (EOHSP); Health Policy Monitor; PubMed; Mutual Information System on Social Protection in the Member States of the European Union (MISSOC); International Bibliography of the Social Sciences; and EconLit.



## **1. THE PROBLEM OF SUSTAINABILITY**

### **1.1. Distinguishing economic and fiscal sustainability**

The word ‘sustainability’ has become something of a keyword in health policy debate – as it has been for some time now in social security policy debate generally. Yet the word’s meaning (we take this to encompass the nature of the problem to which the word refers) is rarely made explicit. The likely reason for this is that the meaning of ‘sustainability’ is assumed to be self-evident. This self-evident meaning can be formulated as follows: the presence of an imbalance between the obligations that a health system has in respect of entitlements and instituted rights, on the one hand, and the health system’s ability to meet those obligations on a continuing basis on the other.

Although this formulation is accurate, it is inadequate. It tells us only how the problem of sustainability manifests itself – namely, as a problem in accounting. It does not tell us anything about the nature of the problem itself. In what follows we aim to provide a more complete understanding of the problem. We begin by distinguishing two notions which are often insufficiently distinguished: economic sustainability and fiscal sustainability.

#### **1.1.1. Economic sustainability**

Concern regarding the economic sustainability of any health system relates to the level and rate of growth of health spending. We should be concerned about this because spending on health care has an opportunity cost. Every Euro spent on health care represents one Euro less to spend on other valued areas of economic activity – education, national defence, housing, leisure and so on. The more we spend on health care, the less we have to spend elsewhere.

How much of a nation’s resources we choose to allocate to health care will depend on how much value we attach to health care – or more specifically, to the benefits that health care produces – relative to the value we attach to the benefits produced by other areas of economic activity. We attach a high value to health care. We are willing to (and do) give up a good deal in the interest of maintaining a good health system. However, that we place such a high value on health care does not mean that we are willing to give up everything. When non-health spending is sufficiently threatened by health spending, the value that we attach to other areas of economic activity will begin to rise relative to the value we attach to health care. So long as the value produced by health care exceeds its opportunity cost, growth in health spending is economically sustainable (value in excess of cost can be seen as a measure of economic sustainability). Once the opportunity cost of health spending is too high, health spending becomes economically unsustainable.

In a stagnant or a shrinking economy, growth in health spending as a proportion of GDP would be likely sufficiently to threaten other valued areas of economic activity and to raise legitimate concern regarding economic sustainability. But under circumstances of economic growth, health spending can grow at a rate higher than economic growth as a whole (that is, so as to consume an ever-greater proportion of GDP) without necessarily causing other areas of economic activity to shrink. That is to say, health spending can grow and visits to the cinema can grow too, but the latter would not be as numerous as they would have been in the absence of growth in health spending.

Thus, for example, actuaries working for the United States government have projected that even though total spending on health care in the United States will account for over 18% of GDP in 2013 (up from 15% in 2005), non-health GDP in absolute real dollars will still be about 16% higher in 2013 than in 2003 (Heffler et al. 2004; Reinhardt et al. 2004).

Similarly, projections for the European Union show that rising health care spending (incorporating growth attributed to population ageing) will not be problematic so long as GDP in the EU member states continues to grow (Economic Policy Committee 2001; Economic Policy Committee and European Commission 2006)<sup>3</sup>. Regarding the United States and the European Union then, the general assessment is that current rates of growth in health-related spending are likely to be economically sustainable, barring prolonged recession.

### **1.1.2. Fiscal sustainability**

Concern regarding the fiscal sustainability of a health system relates to public expenditure on health care. It does not encompass, therefore, items such as out of pocket spending in private health care markets. The structure of the problem of fiscal sustainability is similar to that outlined above in respect of economic sustainability, even if the underlying causes of the problem are different. Again, spending on health has an opportunity cost. Within the context of a fixed government budget, every Euro spent on health means one Euro less that is available to spend on other areas of government responsibility.

Given a fixed government budget, growth in expenditure on health may therefore crowd out spending on education, national defence and so on. Populations place a high value on health care, but they value these other items too. Fiscal sustainability becomes a problem when the government is unable to meet its health system obligations due to its inability or unwillingness to generate sufficient revenue to meet these obligations, and under circumstances in which it cannot or will not further 'crowd out' other forms of government spending. Despite the structural similarity of the problems of economic sustainability and fiscal sustainability then, it is possible for health spending growth to be economically sustainable, and yet not be fiscally sustainable.

## **1.2. Addressing the fiscal sustainability problem**

There are three broad approaches that are commonly recommended in grappling with the problem of fiscal sustainability. These are (a) increase public revenue to the point where health system obligations can be met; (b) weaken these obligations to the point at which they can be met from existing (or projected) revenue; and (c) improve the capacity of the health system to convert resources into value. We discuss these approaches in turn.

### **1.2.1 Increase revenue**

In so far as health spending is economically sustainable, meeting health system obligations by increasing the quantity of publicly-generated resources that go into health care may be the most appropriate solution to the problem of fiscal sustainability.

Health care can be very good at turning resources into value, and often much better at it than other areas of economic activity. Research from the United States, for instance, which converted health outcomes such as life years gained into monetary values concluded that in respect of some major medical interventions, the value produced was far in excess of the cost of providing these interventions (Cutler and McClellan 2001; Cutler 2004). That is to say, spending on health in the cases studied represented a very good investment and this suggests that it would make good economic sense to continue to channel resources into health care.

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<sup>3</sup> In part, this is due to new research showing that it is proximity to death rather than calendar age that causes higher levels of health spending among older people, and that people dying at older ages incur lower health care costs than those dying when younger (Zweifel et al. 1999; Seshamani and Gray 2004; Zweifel et al. 2004). Consequently, as populations age spending may be delayed to much later in life, leading to over-estimation of future costs.

(This does not mean that higher spending is always better spending, however – these studies looked at particular interventions, and their results do not necessarily apply to all aspects of health care; see below.)

Why do governments not, then, simply generate more revenue to meet their health system obligations and to surmount the problem of fiscal sustainability? There are three obstacles that stand in the way of this approach. **First**, there may be technical difficulties, with governments lacking the capacity to enforce tax collection and compliance. The problem of weak institutional capacity is compounded in countries with a large informal sector (see Figure 1.4) or where a significant proportion of the workforce is self employed. **Second**, if revenue for health care financing is linked to employment, as it is in the United States and in many of the EU member states, increasing public revenue may be seen as jeopardising domestic labour market security and the international competitiveness of the economy.

**Third**, raising additional revenue for health care may be politically difficult if people are increasingly reluctant to pay for health care (and other social goods) on a collective basis – that is to say, if there is reluctance among a sufficiently large or important segment of the population to further subsidise the health care of others. The health sector has thus far, in all member states of the European Union, been relatively well protected from the emerging ‘prudential fatigue’ (Offer 2003) which has affected other areas of the social security system. This may be because of the nature of the universal stake in health care. But health care should not be thought immune from the effects of prudential fatigue.

### 1.2.2 Weaken health system obligations

The way to weaken the obligations that a health system has, and through this to bring expenditure back in line with revenue, is to reduce coverage. This is the approach most commonly advocated for addressing the problem of health system sustainability. One potential obstacle to pursuing this course of action is that once a health system (and wider social security apparatus) is in place, certain interests are created and become entrenched, and these will inevitably resist this type of reform (Pierson 1998). Thus populations that are accustomed to a relatively generous level of cover, regardless of how they might feel about having to fund this, may resist any weakening of public entitlements. Coverage reduction, when it takes place, is therefore likely to take place only incrementally. How can coverage be reduced?

**Four dimensions of coverage** are relevant here. These are coverage of non-clinical quality (amenities, timeliness of access and so on), system inclusiveness (the proportion of the population to which coverage is extended), depth of coverage (the proportion of the benefit cost covered), and scope of coverage (the range of benefits covered). Many health systems already ‘ration out’ **non-clinical quality**, but there is usually potential for further reduction of coverage here. There comes a point, however, when reduction in the coverage of non-clinical quality will have an adverse impact on clinical quality, and this should strenuously be avoided.

Governments can lower **system inclusiveness** by instituting means-tested access to cover, by excluding certain groups from coverage or by allowing individuals to ‘opt out’. Although these approaches may seem reasonable, they too can have adverse effects on the publicly-financed part of the health system. If the rich are excluded, and if only the poor have access to public coverage on a means-tested basis, this can lead to reduced quality for those using the public system (often the ‘voice’ of richer groups is necessary to sustain adequate standards of public provision).

If opting out is allowed, then it is likely to be richer and/or healthier people who exercise this right, leading to the public system not only losing the important ‘voice’ these people are able to exercise, but also to its being ‘burdened’ with individuals who are high cost (and who may have chosen to remain in the public system for precisely this reason, private insurance being unavailable to them or too expensive for them).

Furthermore, the various market failures that characterise health care markets, in particular information-related problems, mean that those forced to rely on private markets may be placed at risk.

**Depth of coverage** can be reduced by introducing or expanding ‘user charges’ and other forms of cost sharing for covered services. This directly shifts part of the cost of cover to individuals and, in particular, to those who are in ill health (for this reason, user charges are often referred to as a ‘tax on the ill’). It is often argued that having to pay part of the cost of health care out of pocket will ensure that individuals use health care appropriately, leading them to forego care that is not of sufficient value as to justify the cost. There is compelling evidence from the United States to show that individuals do indeed ‘consume’ less health care where user charges are imposed. But the same evidence shows that user charges cause people to forego not only inappropriate care, but appropriate care too (Manning et al. 1987; Newhouse and The Insurance Experiment Group 1993). Cost sharing is therefore a blunt policy tool that may have a detrimental effect on health status, and it is one which is likely to disproportionately affect poorer people.

**Scope of coverage** can be reduced by excluding (or de-listing) certain benefits – either by removing items from the benefits package (for example, adult dental care has been widely de-listed) or by not including new items as these become available. Excluding services from coverage acts to shift these to the private market, where access is determined on the basis of ability to pay.

With regard to the challenge posed by the Council of the European Union, it will be clear that the coverage reduction solution is in reality no solution at all. Coverage reduction erodes universality, financial solidarity and equity of access, partly because it reduces coverage on an inequitable basis or with inequitable effects, and partly because it fosters reliance on private financing. Coverage reduction also affects the uniform provision of high quality health care, with those without the ability to pay having either to forego care, or to access care whose quality may not be of the desired uniform standard.

This is not to say that coverage reduction does not have any role to play in making health systems more effective and efficient. Thus, for instance, the four values would not be undermined were benefits that are not cost effective to be removed from or not introduced into the benefits package (in the case of non-cost effective benefits, the cost to society of providing these is in excess of the value that they produce, and the resources expended on these would be better spent elsewhere).

If cost sharing is to have a role, this should be limited to encouraging the use of high-value services and penalising the use of low-value or non-cost effective services whose poor value is beyond doubt. This approach to the use of cost sharing, where cost sharing is used to guide patients (and providers) towards higher value services and away from low value ones, is sometimes referred to as ‘value-based cost sharing’ or ‘value-based insurance’ (Braithwaite and Rosen 2007; Bach 2008). Value-based approaches should, however, be introduced with caution, as they can lead to administrative complexity (in particular, where patient characteristics have to be taken into account in determining what is of high or low value), and because there remains much uncertainty around the value attached to many interventions.

Generally-speaking then, coverage reduction is an inappropriate mechanism for addressing the problem of fiscal sustainability because it undermines the four values. Yet there are many in the European Union who suggest that private health insurance could ‘take up the slack’ of reduced public coverage, and who advocate a public system limited to the provision of a decent minimum (even if one substantially above ‘safety net’ provision), with individuals and families being given responsibility for making up the difference through the purchase of private health insurance.

This model no doubt holds a powerful attraction for governments keen to address the problem of fiscal sustainability by getting health spending off its ‘books’. To implement it would also meet objections to the subsidisation of the health care of others that come from those suffering ‘prudential fatigue’. Let us put aside for the moment the fact that systems of private health insurance undermine the four values. Alternatively, let us assume that governments will provide private health insurance to those without the ability to pay (as is the case in France, where those below a certain income level are provided with private health insurance by the government to cover the cost of user charges). In an ‘ideal’ market for health care, private financing would make good economic sense. People would trade off health care against other goods and services, and their spending choices would reflect their preferences, leading to the efficient outcome. By definition, health spending would be economically sustainable, as spending decisions would automatically adjust to reflect the value that individuals place on health care vis-à-vis other goods and services, given their budget constraint. However, markets for health care are not ideal.

Health care markets are characterised by significant market failures which work against the efficient outcome. Many of these market failures are information-related, and concern knowledge imbalances in the relation between doctor and patient, between doctor and payer, and between purchasers of insurance and insurance companies. The consequence of these market failures is that health systems based on private financing, or which accord private financing a major role, are simply not as good at converting resources into value – they are not as efficient – as public systems.

Thus higher private spending does not secure proportionate health gain, for instance. An increased reliance on private financing is more likely to increase the rate of expenditure growth and, given market failures, may actually exacerbate the problem of economic sustainability – particularly when we consider the absence of a global budget cap, the fragmented structure of private insurance markets, and information problems that limit individuals’ (and insurers’) power in relation to providers. And where private financing does buy a better quality of service, this is often at a cost that may be inflated by the superior bargaining power of providers.

Furthermore, the brake on ‘flat-of-the-curve’ medicine (Fuchs 2004) – where patients are willing to receive, and providers to provide, health care that offers any benefit whatsoever regardless of the cost of providing this benefit – and on the provision of non-cost effective interventions is far weaker in private markets than in public systems. Taken together, these features also suggest that private markets will be less well-placed vis-à-vis public systems to adapt to changing priorities as populations age – for example, with increased demand for mental health care, long-term care, care for chronic illness, and with the need for more integrated service provision generally.

The clearest instance of such a picture comes, of course, from the United States, where the level of private spending on health is significantly higher than in any EU member state (54.9% in 2005, versus an EU average of 26.9%) (World Health Organization 2007). In return for this higher level of private spending we find levels of avoidable mortality that are higher than in any western European member state (see Table 1.1), levels of total spending on health that are unrivalled internationally, and levels of financial protection from the risk of ill health that are lower than in many older and newer member states (see Table 3.6).

In addition, one in three US adults under the age of 65 has no health insurance coverage or only sporadic or inadequate coverage (Schoen et al. 2005). Coverage reduction may present a solution to the problem of fiscal sustainability, but it risks compounding the problem of economic sustainability. This risk, indeed, is one of the two major rationales for the emergence of public health systems. The other is that we see health care as somehow special – in the sense that it should not be considered as simply another consumer good or service.

Even in the absence of market failures, people think that access to health care is not something that should depend upon ability to pay, and that there is something in the nature of health care that demands a more egalitarian distribution than would be appropriate in other sectors. It is precisely these equity concerns that the four values capture, and that any significant increase in the use of private financing in EU health systems would threaten.

### **1.2.3 Improve the health system's capacity to create value**

If it were possible to get more value from the same resources, the problem of fiscal sustainability might be ameliorated. Furthermore, if populations can (justifiably) be persuaded that the health system is effective at producing value, it would be easier to protect against the effects of 'prudential fatigue' and the obstacle that this places in the way of increasing revenue.

We stated above that health systems are good at producing value. We cited research that has looked at the benefits relative to cost of particular interventions. And we might also have noted research showing that health spending can itself make a contribution to economic growth (Commission on Macroeconomics and Health 2001; Suhrcke et al. 2005; Suhrcke et al. 2006). But there is nevertheless also a good deal of waste in health spending. Thus there is no immediate correlation between higher spending on health and higher levels of value (however measured – in terms of health outcomes, for instance).

For example, studies from the United States show that there is considerable variation in health spending across the country by the principal public component of the US health system (Medicare) (reflecting higher rates of hospitalisation and more intensive physician services), but that this extra spending has no discernable impact on access to care, on quality of care, or on health outcomes (in fact, health outcomes may even be worse in higher spending areas as a direct consequence of this higher spending) (Fisher et al. 2003; Fisher et al. 2003).

A similar picture emerges when looking at cross-country comparisons. When we look at major measures of health system performance such as deaths that are potentially preventable with timely and appropriate medical care ('avoidable mortality')<sup>(4)</sup>, for instance, we see once again that there is no consistent relationship with health care expenditure (Nolte and McKee 2003; Nolte and McKee 2004). Table 1.1 shows that in 2002-03, levels of avoidable mortality were much higher in the United States (109.65) than in Western Europe (88.18 on average), despite significantly higher levels of health care expenditure in the United States (accounting for 15% of GDP in 2005, versus 8%, on average, in the European Union) (World Health Organization 2007; Nolte and McKee 2008). Discrepancies are also seen within the European Union: France and Germany both spend similar proportions of GDP on health (around 10%), but achieve very different outcomes in terms of avoidable mortality, while Spain and Greece, which spend much less on health care than Germany (around 8% of GDP), do a much better job of avoiding mortality. Similarly, levels of avoidable mortality do not always reflect levels of spending in the newer member states either (Newey et al. 2004).

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<sup>4</sup> The concept of avoidable mortality permits comparison of health systems in terms of their relative impact on health and can be used to identify which health systems perform less well and why.

**Table 1.1 14 OECD countries ranked by level of age-standardised mortality from causes amenable to health care, 1997-98 and 2002-03**

Country	Amenable mortality (SDR, ages 0-74, per 100,000)		Rank in 1997-98	Rank in 2002-03	Change in rank
	1997-98	2002-03			
France	75.62	64.79	1	1	-
Spain	84.26	73.83	2	2	-
Sweden	88.44	82.09	3	5	-2
Italy	88.77	74.00	4	3	+1
Netherlands	96.89	81.86	5	4	+1
Greece	97.27	84.31	6	6	-
Germany	106.18	90.13	7	8	-1
Austria	108.92	84.48	8	7	+1
Denmark	113.01	100.84	9	10	-1
United States	114.74	109.65	10	14	-4
Finland	116.22	93.34	11	9	+2
Portugal	128.39	104.31	12	13	-1
United Kingdom	129.96	102.81	13	11	+2
Ireland	134.36	103.42	14	12	+2

Source: adapted from (Nolte and McKee 2008)

Note: Amenable mortality is deaths before age 75 that are potentially preventable with timely and appropriate medical care. SDR = standardised death rate. Denmark 2000-01; Sweden 2001-02; United States 2002.

It is sometimes said that health systems are in ‘a state of permanent reform’. This suggestion relates in part to the continuing attempt by governments to find ways of improving the capacity of health systems to turn resources into value. **Reform over the past two decades has focused in particular on service delivery**, with initiatives including providing care that had formerly been provided in a hospital setting in outpatient or primary care settings, increased investment in preventive care and health promotion, the development of agencies to assess the cost-effectiveness of pharmaceuticals and other medical technologies (health technology assessment or HTA), and the provision of practice guidelines to medical professionals.

To a lesser extent, **the design of health care financing systems has also been a focus of reform efforts** geared towards enhancing value. In the main, reform has taken place in the area of provider payment, as changes here can help to secure reform in the area of service delivery (if policy makers want services to be delivered in a different way, then changing the way that providers are paid can help achieve this goal). But reform of health system financing need not be restricted to provider payment. There is yet scope for strengthening the insurance apparatus as a whole, and many countries have implemented reforms across this wider arena.

Just as with efforts to increase revenue for health care, efforts at reform aimed at increasing value for money encounter obstacles. Again, there are interested parties who stand to lose from change – for example, medical professionals who stand to lose income or face extra risk from a change in the method of payment, and patients who would suffer as individuals from the decision of a HTA agency not to cover a new but non-cost-effective drug. Perhaps the most significant obstacle, however, relates to information problems regarding all aspects of health systems, from the cost-effectiveness of any given intervention to the appropriate number of diagnostic tests to perform, to the problem of unintended consequences in the reorganisation of service delivery.

Yet this route to fiscal sustainability is a promising one. It may not be a perfect solution, but it should nonetheless figure in (and indeed lead) any effort to secure the sustainability of a health system – even if populations are willing to divert more resources into health care, and especially if governments decide to pursue the coverage reduction route. This report focuses on the reform of health financing system design geared towards this end.

### **1.3. Fiscal sustainability: a political problem**

Economic sustainability is not the problem that the health systems of the European Union are having to grapple with – although it might become one if the role of private financing is significantly increased. The problem is rather one of fiscal sustainability. On the surface, the problem is an accounting problem. But what underlies this accounting problem are factors such as poor institutional capacity, ‘prudential fatigue’, and the fact that although health systems produce value, they also generate waste. There is much work to be done if the arguments from prudential fatigue are to be protected against and the four values preserved. Indeed, the problem of health system sustainability would scarcely constitute a problem at all if we were content simply to jettison these values. Sustainability is a problem – and something that is worth securing – precisely because these values are important ones with broad support.

The problem of fiscal sustainability is therefore ultimately a problem pertaining to the values we hold. It is not a simple technical problem, but rather a problem in the ethics of distribution or, as one group of commentators has put it, a problem in the ‘political economy of sharing’ (Reinhardt et al. 2004).

### **1.4. Health care expenditure in context**

This section briefly reviews the economic and fiscal context underlying health systems in the European Union. Looking at these contextual factors can indicate the degree of fiscal pressure on government budgets in some countries, which may explain low levels of spending on health in some countries and suggest limited ‘space’ for increasing expenditure on health in future. The section then reviews trends in health care expenditure in the 27 member states.

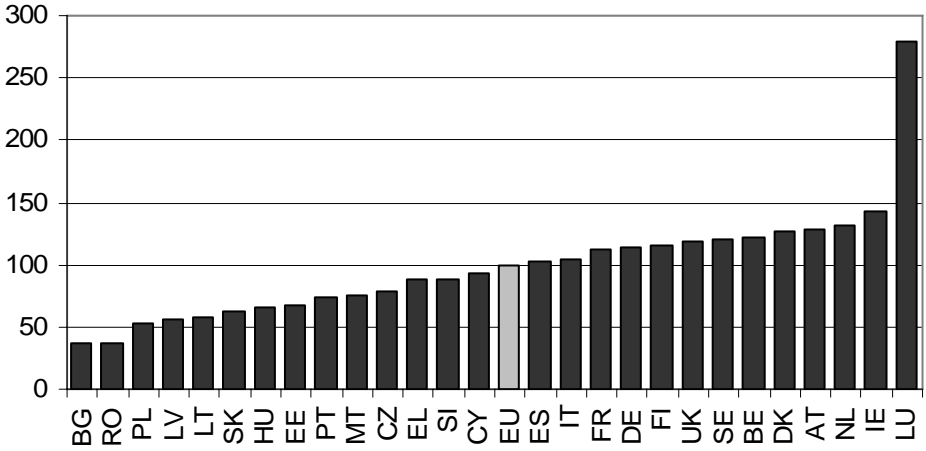
#### **1.4.1 Economic and fiscal context**

Levels of national wealth vary substantially in the European Union, with Luxembourg at one extreme and Bulgaria and Romania at the other. Figure 1.2 shows a clear dividing line between above average income levels in older member states and below average income levels in newer member states. However, per capita income levels have grown steadily in all member states in the last 10 years (see the Appendix) and growth has been particularly steep in many of the newer member states.

Where unemployment is concerned, the picture is more mixed, with relatively high and increasing levels in several richer member states such as Belgium, Germany and France and quite steep falls in the Baltic member states, Bulgaria, Spain, Greece, Slovakia and Poland (Figure 1.3). Fall in unemployment may benefit the health system by increasing the employment-based revenue available for health care, lowering the amount of public expenditure on unemployment benefits and, potentially, improving health status.

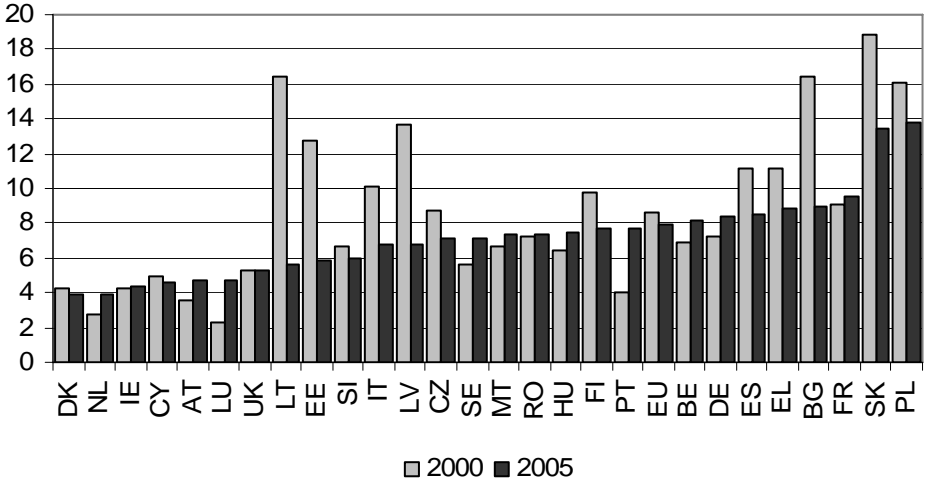


**Figure 1.2 GDP per capita in purchasing power standards (PPS) in the European Union, 2006 (EU = 100)**



Source: Eurostat 2007 (Eurostat 2007)

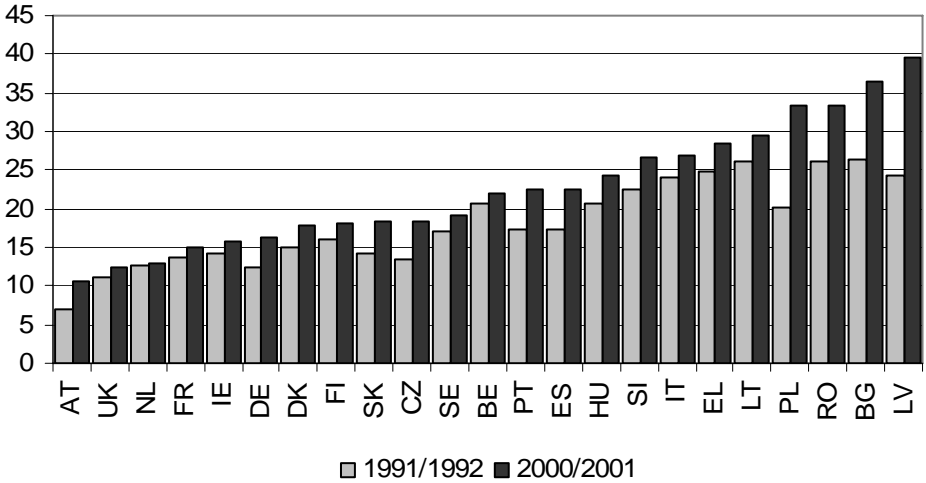
**Figure 1.3 Harmonised unemployment rates +/- 25 years, annual average in the European Union, 2000 and 2005**



Source: Eurostat 2007 (Eurostat 2007)

However, in spite of falling unemployment in many of the newer member states, these countries face fiscal constraints due to the relatively large size of their informal economies (see Figure 1.4). Where a significant proportion of the population does not participate in the formal sector, it may be difficult to generate sufficient funds for health and other social sectors, particularly through wage-based social insurance contributions from employers and/or employees. The available data show that the size of the informal economy has increased over time in all member states. In some countries it may also be difficult to enforce the collection of funds from self-employed people.

**Figure 1.4 Size of the informal economy as a proportion of GDP in the European Union, 1991/1992 and 2001/2002\***



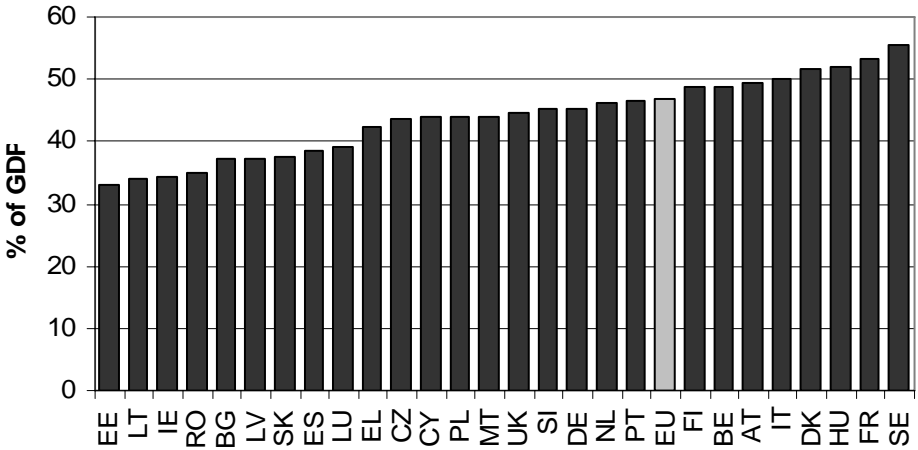
Source: Schneider 2002 (Schneider 2002)

Note: no data for Cyprus, Malta and Luxembourg

\* 1990-1993 and 2000/2001 for the newer member states

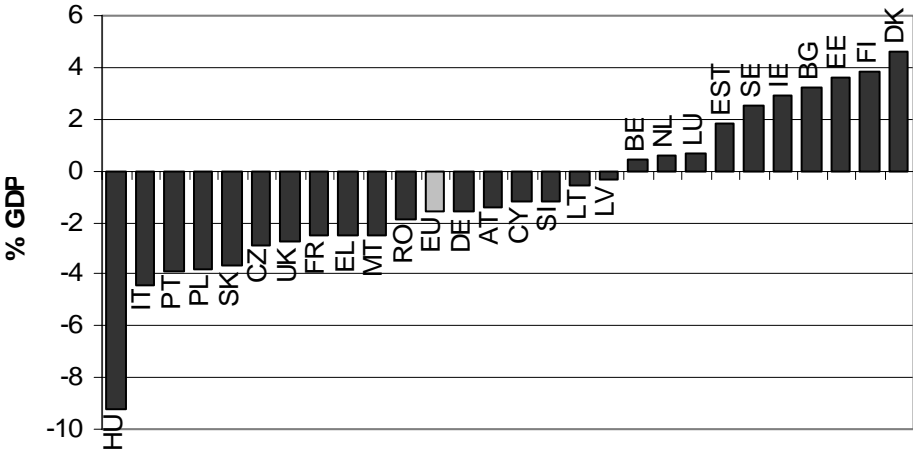
Government capacity to spend resources on health care and other forms of social security is affected by the size of the public sector, which is much larger in Sweden and France than in Estonia and Lithuania (see Figure 1.5). In general, government spending tends to be lower, as a proportion of GDP, in newer member states than in older ones. However, there are richer and poorer member states with public sectors of a similar size (for example, Cyprus, Poland, the United Kingdom and Germany) and outliers on either side (for example, Ireland and Hungary). Government capacity to spend may be constrained by the size of budget deficits, which is substantial in some member states (see Figure 1.6), but again, Hungary appears to be an outlier.

**Figure 1.5 General government expenditure as a percentage of GDP, 2006**



Source: Eurostat 2007 (Eurostat 2007)

**Figure 1.6 Public balance: net borrowing/lending of consolidated general government sector as a percentage of GDP, 2006**

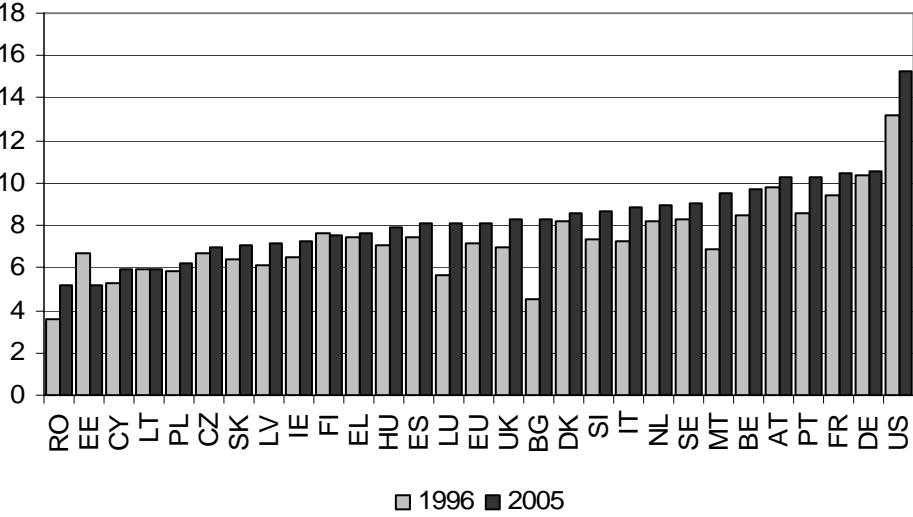


Source: Eurostat 2007 (Eurostat 2007)

**1.4.2 Health care expenditure trends**

Spending on health varies considerably by country, ranging from around 5% of GDP in Romania to just over 10% in Austria, Portugal, France and Germany (see Figure 1.7). Not surprisingly, it tends to be higher, as a proportion of GDP, among richer member states. But even the highest spending countries do not come close to the level of health care expenditure in the United States (13.2% of GDP in 1996, rising to 15.3% in 2005) (World Health Organization 2007). In the last ten years expenditure on health as a proportion of GDP has risen in all member states except Estonia, Finland and Lithuania.

**Figure 1.7 Total expenditure on health as a proportion of GDP in the European Union, 1996 and 2005**



Source: WHO 2007 (World Health Organization 2007)

Tables 1.2a and 1.2b take a longer view, showing the rate of changes in spending on health in European Union OECD countries and the United States from the 1970s to 2004, both as a proportion of GDP and in national currency units.

During this time, health care expenditure as a proportion of GDP more than doubled in several countries and almost trebled in Portugal but did not change in Denmark and grew by only a third in countries such as Finland, the Netherlands and Sweden (see Table 1.2a). Most countries experienced the fastest growth during the 1970s, followed by the 1990s, with slower rates of growth in other decades, particularly during the 1980s, although this may be attributed to high rates of economic growth pushing up GDP. Looking at health care expenditure changes in terms of real prices (rather than as a proportion of GDP) confirms that expenditure growth was highest during the 1970s and 1990s, but has actually been slowest in the years since 2000 for most countries (see Table 1.2b). A note of caution with regard to interpreting these data: in some countries what is classified as health spending may have changed over time – for example, long-term care may be excluded from health spending in older figures – which hinders accurate comparison over time and across countries.

**Table 1.2a Changes in health care expenditure as a proportion of GDP in selected countries, 1970-2004**

	% growth 1970- 1980	% growth 1980- 1990	% growth 1990- 2000	% growth 2000- 2004
Austria	44.2	-6.7	34.3	2.1
Belgium	61.5	14.3	19.4	17.4
Denmark	-	-6.7	0.0	7.2
Finland	12.5	23.8	-14.1	11.9
France	32.1	20.0	9.5	14.1
Germany	40.3	-2.3	21.2	2.9
Greece	8.2	12.1	33.8	1.0
Iceland	31.9	27.4	16.5	10.9
Ireland	62.7	-26.5	3.3	12.7
Italy	-	-	5.2	7.4
Luxembourg	67.7	3.8	7.4	37.9
Netherlands	-	6.9	2.6	16.5
Norway	59.1	10.0	10.4	14.1
Portugal	115.4	10.7	51.6	7.4
Spain	51.4	22.6	10.8	12.5
Sweden	32.4	-7.8	1.2	8.3
Switzerland	34.5	12.2	25.3	11.5
United Kingdom	24.4	7.1	21.7	11.0
United States	25.7	35.2	11.8	15.0

Source: (OECD 2006) Note: rate of growth: **highest** / **second highest** / **third highest** / lowest

Figure 1.8 shows that in most countries, the majority of expenditure on health (as a proportion of GDP) is generated publicly. In member states such as Cyprus, Greece, Poland, Italy, Finland, Denmark and Hungary, levels of public spending appear to be low in comparison to government capacity to spend (Figure 1.5), while the opposite is true of others such as Ireland, Luxembourg, the United Kingdom, Malta and Germany. Figure 1.9 confirms this, suggesting that the former countries accord relatively low priority to the health sector, in terms of public spending on as a proportion of total government spending, whereas the latter countries seem to give health a higher priority.

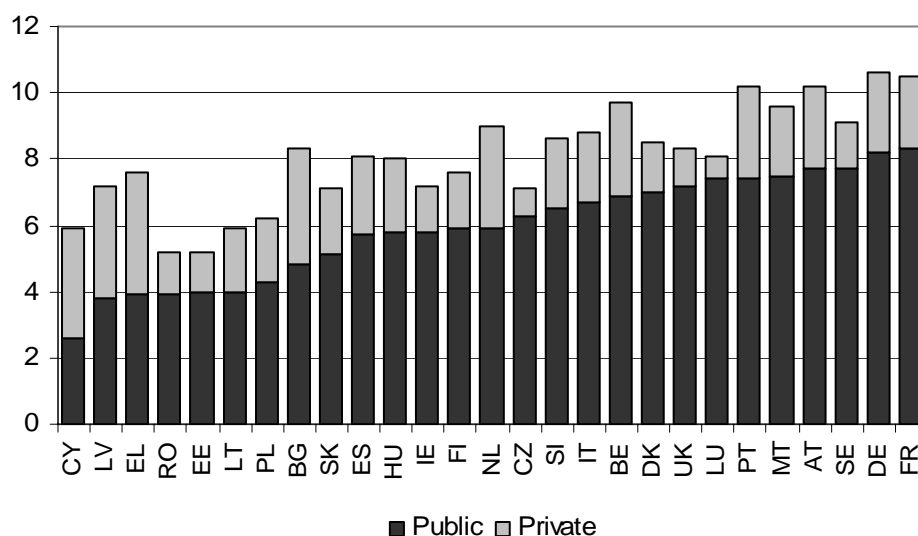
However, at the high end of spectrum, higher levels of spending on health might also reflect inability to control expenditure due to soft budget constraints. In the last ten years public spending on health has actually fallen as a proportion of total government expenditure in Estonia, Lithuania, Slovenia and the Czech Republic.

**Table 1.2b Changes in health care expenditure (in national currency units at 2000 GDP price level) in selected countries, 1970-2004**

	% growth 1970-1980	% growth 1980-1990	% growth 1990-2000	% growth 2000-2004
Austria	105.9	16.7	73.8	8.0
Belgium	123.3	41.1	45.8	22.5
Canada	53.5	65.8	32.4	22.6
Denmark	-	9.0	28.0	12.0
Finland	63.2	65.9	2.7	23.7
France	83.8	53.2	34.5	22.4
Germany	85.1	23.1	65.1	5.4
Greece	71.1	20.2	69.1	20.0
Iceland	146.6	63.3	48.3	25.0
Ireland	160.0	4.3	106.1	39.6
Italy	-	-	22.5	11.1
Luxembourg	116.0	66.9	78.5	54.9
Netherlands	-	32.8	37.4	19.9
Norway	151.2	41.3	58.2	24.2
Portugal	234.1	53.2	99.0	9.6
Spain	116.1	64.5	45.5	26.7
Sweden	59.5	14.9	21.8	18.1
Switzerland	53.2	38.4	39.9	14.7
United Kingdom	52.0	38.4	53.8	23.5
United States	72.2	86.6	53.8	26.9

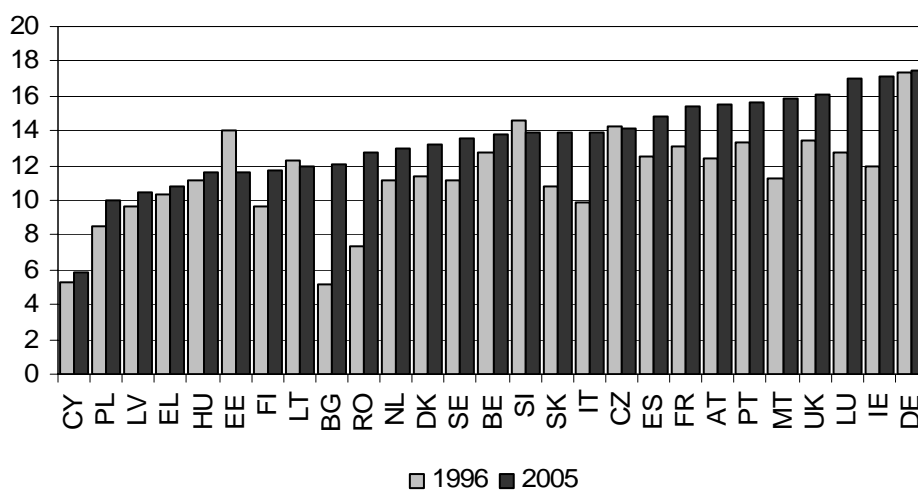
Source: (OECD 2006) Note: rate of growth: highest / second highest / third highest / lowest

**Figure 1.8 Public and private expenditure on health as a % of GDP in the European Union, 2005**



Source: WHO 2007 (World Health Organization 2007)

**Figure 1.9 Public expenditure on health as a % of total government expenditure in the European Union, 1996 and 2005**



Source: WHO 2007 (World Health Organization 2007)

## 2. HEALTH CARE FINANCING IN THE EUROPEAN UNION

### 2.1. Frameworks for analysis

Comparative analysis of health financing requires a framework that facilitates comparison across countries with diverse national contexts. In this section we present two frameworks. The first looks at health financing in terms of functions. The second establishes a set of health financing policy goals.

#### 2.1.1 Health financing functions

Traditional classifications of health systems in different countries often emphasise a single dimension of health financing. For example, it is common to distinguish ‘tax-financed systems’ (labelled ‘Beveridge’ in western Europe and ‘Semashko’ in former Soviet Union countries) from ‘social health insurance systems’ (labelled ‘Bismarck’). However, focusing on the dominant mechanism used to generate funds for health care has limited analytical value for two reasons. First, it fails to capture the multiple functions and different areas of policy encompassed by health financing. Consequently, it may conceal crucial similarities and differences between countries in relation to other important aspects of health financing. Second, it fails to reflect the shift towards mixed models of health financing that has occurred in many countries in the last 20 years (Kutzin 2001; WHO Regional Office for Europe 2006).

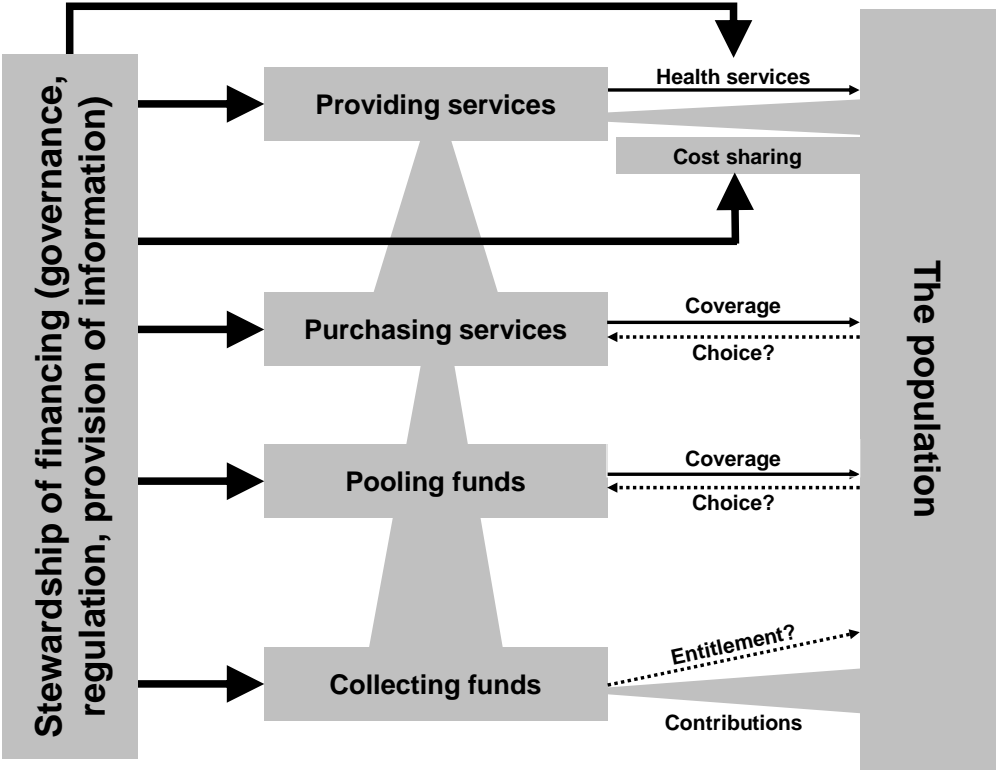
**The framework we employ depicts the full range of health financing functions and policies** (see Figure 2.1) (Kutzin 2001; Mossialos et al. 2002; WHO Regional Office for Europe 2006). Rather than categorising health systems based on a single dimension, it encourages comparison across multiple dimensions. This has three advantages. **First**, the framework can be used to describe the health financing system of any country, regardless of context or ‘category’. In every country, health financing will involve the three functions of collection, pooling and purchasing (see Section 2 for definitions of each function), even if these functions are integrated rather than carried out separately.

**Second**, drawing attention to each function and policy area facilitates analysis of health financing reforms, since reforms may affect specific functions rather than health financing as a whole. For example, the Dutch health insurance reforms introduced in 2006 changed the balance between the two public contribution mechanisms (away from earmarked social insurance contributions levied on wages and towards flat-rate premiums), but did not change the organisation responsible for collecting and pooling funds (a central government agency) or the mechanism used to allocate funds to purchasers. In addition, there have been changes in the nature of the purchasing agencies: formerly public health insurance funds and private insurers now compete on an equal footing as private entities regulated under private law. There have also been changes in policies relating to benefits and cost sharing, with the introduction of voluntary deductibles (Bartholomé and Maarse 2006). Conversely, a French reform in 1998 significantly altered the nature of the dominant contribution mechanism (replacing almost all of the employee social insurance contribution levied on wages with an earmarked tax on income), but did not affect other aspects of health financing (Sandier et al. 2004). Focusing on the full range of functions allows us to identify areas in which health systems face particular challenges and areas in which most may be done to enhance specific health financing policy goals (see below) and financial sustainability.

**Finally**, the framework contributes to evaluation by highlighting aspects that might otherwise be overlooked. For example, private health insurance premiums are not the dominant contribution mechanism in any member state and therefore play a limited role in terms of revenue collection.

However, in some countries private health insurance has a significant impact on the way in which funds are pooled and services are purchased and on policies relating to benefits and cost sharing, with major implications for the achievement of policy goals (Mossialos and Thomson 2004; Thomson and Mossialos 2006). A classification based on a single dimension such as the dominant contribution mechanism would conceal this important effect and might obscure shifts in the public-private financing mix in many countries.

**Figure 2.1 Framework for descriptive analysis of health financing functions**



Source: adapted from Kutzin 2001 (Kutzin 2001) and WHO Regional Office for Europe 2006 (WHO Regional Office for Europe 2006)

**2.1.2 Health financing policy goals**

In this study we refer to a set of financing policy goals developed by WHO based on the health system performance goals established in *The World Health Report 2000* (World Health Organization 2000; WHO Regional Office for Europe 2006). These policy goals closely mirror the values underpinning EU health systems identified by the Council of the European Union (universal coverage, solidarity in financing, equity of access and the provision of high quality health care) and the common principles identified by the European Commission (accessibility, quality and long-term sustainability) (European Commission 2005). The policy goals also provide a basis for the review and analysis of reform options and outcomes.

The goals are as follows:

- promoting universal protection against the financial risks associated with ill health; **financial protection** aims to ensure that people do not become poor as a result of using health care



- promoting a more equitable distribution of the burden of financing the health system; **equity in finance** requires richer people to pay more for health care, as a proportion of their income, than poorer people
- promoting equitable use and provision of services; **equity of access** to health care based on need rather than ability to pay
- improving the **transparency** and **accountability** of the system; for example, ensuring that the entitlements and obligations of the population are well understood by all, addressing the issue of informal payments where relevant, auditing institutions and monitoring and reporting on performance
- rewarding good **quality** care and providing incentives for **efficiency** in service organisation and delivery
- promoting **administrative efficiency** by minimising duplication of responsibility for administering the health financing system and minimising costs that do not contribute to achieving the goals stated above

In our analytical framework we take the view that ensuring fiscal sustainability should be a requirement rather than an objective of health financing policy. We also emphasise the importance of distinguishing between fiscal and economic sustainability. For example, while countries should rightly be concerned about addressing the problem of persistent deficits in the health sector, focusing solely on lowering deficits does not ensure economic sustainability and may draw attention away from the underlying inefficiencies leading to financial imbalance (WHO Regional Office for Europe 2006).

## **2.2. Descriptive analysis of financing arrangements**

This section reviews the way in which health care is financed in the European Union. It describes the way in which funds are collected and pooled and the way in which health services are purchased and paid for. It also describes levels of coverage, the nature of the benefits provided by the publicly-financed system and the extent of patient cost sharing for publicly-covered health services (user charges). Where possible, we provide information on trends in the last 10 years.

### **2.2.1 Collecting funds**

The way in which funds are collected for health care has an important bearing on the policy goals of equity in finance, transparency and accountability. The collection process involves three elements: sources of finance, the contribution mechanisms used to collect funds and the organisations responsible for collecting funds (see Table 4.1). Individuals and corporations are the main source of all funds for health care, although some funds may be channelled through NGOs (non-governmental organisations) and multilateral agencies such as the World Bank.

**Table 2.1 The collection process: sources of finance, contribution mechanisms and collecting organisations**

Sources of finance	Contribution mechanisms	Collection organisations
<ul style="list-style-type: none"> <li>▪ Individuals, households and employees</li> <li>▪ Firms, corporate entities and employers</li> <li>▪ Foreign and domestic NGOs and charities</li> <li>▪ Foreign governments and multilateral agencies</li> </ul>	<p><i>Public</i></p> <ul style="list-style-type: none"> <li>▪ Direct and indirect taxes</li> <li>▪ Compulsory insurance contributions (earmarked taxes)</li> </ul> <p><i>Private</i></p> <ul style="list-style-type: none"> <li>▪ Private insurance premiums</li> <li>▪ Medical savings accounts</li> <li>▪ Out of pocket payments (direct payments or cost sharing/user charges)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Central, regional or local government</li> <li>▪ Independent public body or social security agency (jointly, for all social benefits, or for health benefits alone)</li> <li>▪ Public insurance funds or private non-profit or for-profit insurance funds</li> </ul>

Source: Kutzin 2001 and Mossialos and Dixon 2002

NGO = non-governmental organisation

**2.2.1.1 Contribution mechanisms**

Contribution mechanisms fall into two categories: public and private. **Public contribution mechanisms** (tax and social insurance contributions) are statutory (compulsory)<sup>5</sup> and pool health and financial ‘risks’ over time (pre-payment) and across individuals. From an economic perspective, risk pooling enhances efficiency by counteracting some of the uncertainty associated with both types of risk – for example, we do not always know if or when we will become ill, how severe that illness might be, how much it will cost to treat it and whether we will be in a position to pay for treatment (Barr 2004). Equally importantly, as public contribution mechanisms are based on income, they detach payment from risk of ill health. In other words, they enable access to health care based on need rather than ability to pay. **Private contribution mechanisms** are usually voluntary. Some involve pre-payment (private health insurance and MSAs), others are made at the point of use (out of pocket payments). While private health insurance involves some risk pooling across individuals, out of pocket payments and MSAs do not. Private contribution mechanisms do not usually account for ability to pay (although some forms may exempt high users and/or poorer people) and often link payment to risk (or even actual experience) of ill health. Box 4.1 describes the range of contribution mechanisms used to finance health care.

<sup>5</sup> We refer to the publicly-financed part of the health system as the ‘statutory’ scheme or system to distinguish it from private health insurance. In some cases, the statutory scheme may be operated by private entities under private law, as in the Netherlands.

## Box 2.1 Contribution mechanisms used to finance health care

*Direct taxes* are levied on individuals and corporations (eg income tax, corporate tax, property tax). *Indirect taxes* are levied on the consumption of goods and services (eg value-added tax; VAT). Taxes may be collected by central, regional or local governments. They can accrue to the general government budget or they may be earmarked for specific purposes (eg education or health). The nature of the taxes used to finance health care have a bearing on equity in finance, transparency and accountability. While direct taxes tend to be proportionate or progressive, indirect taxes are often regressive<sup>6</sup>).

*Social insurance contributions* are almost always levied on earnings (wages, salary). In some cases, they may be levied on overall income (income from earnings and capital), such as the French Contribution Sociale Généralisée (CSG), but continue to be channelled through health insurance funds. Contributions may be paid by employees and employers and are usually set as a fixed proportion of income by the government or by individual health insurance funds. Contributions may cover non-contributors such as unemployed people, retired people or non-working dependants. Conversely, the government or other body may make contributions on behalf of non-contributors. All other things being equal, social insurance contributions would be proportionate or mildly regressive due to the fact that they are not levied on savings or capital gains. In practice, there is often a ceiling on how much an individual has to contribute, which increases regressivity.

*Private insurance premiums* are set by individual insurers, almost always as a flat rate per month or year. Premiums may be community rated (the same for all members of a particular insurer or other 'community' eg a geographical area or a business) or risk rated (based on individual or group risk of ill health using factors such as age, sex, occupation and smoking status etc). Private health insurance plays different roles in different contexts (see Table 5.1) and may be provided by commercial (for profit) companies as well public and private non-profit organisations such as statutory health insurance funds and mutual or provident associations. In most cases it is its voluntary nature that distinguishes it from statutory insurance.

*Medical savings accounts* involve compulsory or voluntary contributions by individuals to personalised savings accounts earmarked for health care. They originated in Singapore and are now used in private health insurance markets in the United States (where they are known as health savings accounts) and South Africa. They may be stand-alone accounts or they may be purchased alongside an insurance plan providing cover for catastrophic health expenses (in which case they are a form of cost sharing; see below). Medical savings accounts do not involve risk pooling (except in so far as they are combined with insurance). Consequently, they do not involve any form of cross subsidy from rich to poor, healthy to unhealthy, young to old or working to non-working.

The only example of MSAs in an EU context is in Hungary, where savings accounts that benefit from tax subsidies are used to cover statutory cost sharing or to cover out of pocket payments for services obtained in the private sector.

*Out of pocket payments* take three broad forms: direct payments for services not covered by the statutory benefits package; cost sharing (user charges) for services covered by the benefits package; and informal payments. Direct payments are used to pay for health care not covered by any form of pre-payment, usually for services obtained in the private sector. Cost sharing requires the covered individual to pay part of the cost of care received. It takes a range of forms (see Table 5.4). Statutory cost sharing refers to user charges applied to services included in the publicly-financed benefits package. Informal payments (also known as 'under the table' or 'envelope' payments) are charges for services or supplies that are supposed to be free and are prevalent in several of the newer member states and Greece (Allin et al. 2006). Cost sharing and informal payments lower the depth and therefore the level of financial protection provided by public coverage.

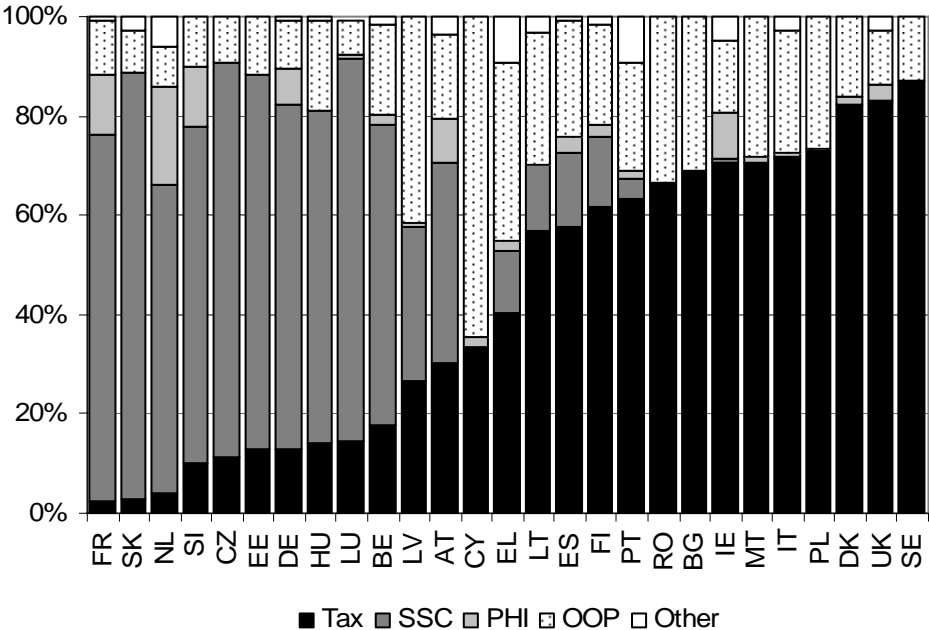
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<sup>6</sup> In public finance terms, a proportionate distribution is one in which a tax requires all income groups to pay the same proportion of their income (a 'flat' tax); a progressive distribution is one in which richer groups pay proportionately more in tax than poorer groups (where income is taxed at marginal rates); and a regressive distribution is one in which poorer groups pay proportionately more in tax than richer groups.

Figures 2.2a and 2.2b show the breakdown of contribution mechanisms in the European Union by country in 1996 and 2005. All member states use a range of contribution mechanisms to finance health care, although none currently uses MSAs on a statutory basis. **The member states fall into three distinct groups. The largest group** is made up of those that finance health care mainly through social insurance contributions (the Czech Republic, France, Luxembourg, Estonia, Slovenia, Germany, Slovakia, Belgium, Hungary, the Netherlands, Romania, Lithuania, Poland and Austria). **The second group** consists of those that finance health care mainly through taxation (the United Kingdom, Sweden, Denmark, Ireland, Malta, Italy, Portugal, Spain and Finland). **The third group** consists of those that still rely most heavily on out of pocket payments (Cyprus, Greece, Latvia and Bulgaria). A major change since 1996 has been the shift from tax to social insurance as the dominant contribution mechanism in Bulgaria, Lithuania, Poland and Romania.

**Public expenditure on health dominates in every country except Cyprus** (see Figure 2.3). Since 1996 public expenditure has fallen (as a proportion of total expenditure on health) in 17 member states, with the largest falls in Belgium, Bulgaria, Estonia, Hungary and Slovakia. 10 member states have experienced increases in public expenditure, with the largest rises in Cyprus, Malta and the United Kingdom.

**Figure 2.2a Breakdown of contribution mechanisms by country, 1996**



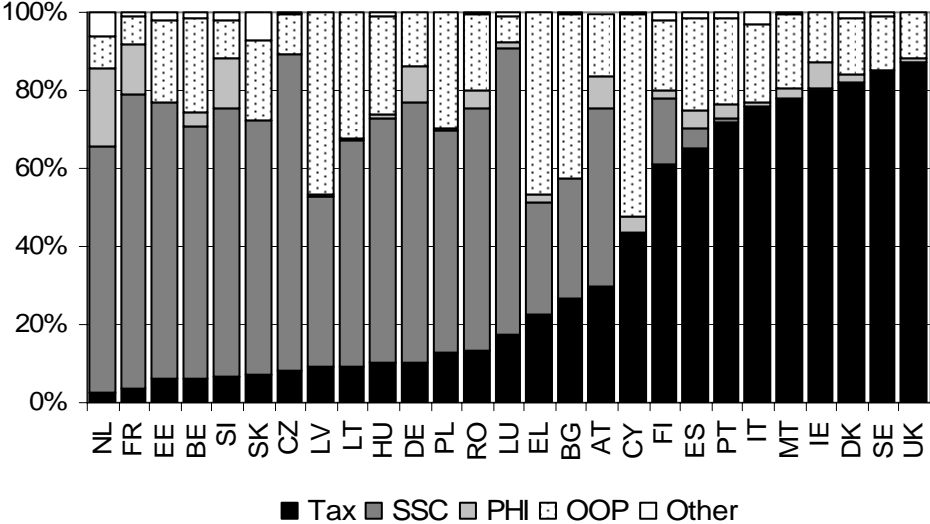
Source: WHO 2007

Note: SSC = social insurance contribution; PHI = private health insurance; OOP = out of pocket payments. SSC refers to all funds channelled through health insurance funds, which may include substantial amounts of tax revenue (see paragraph 50).

A note on the health expenditure data presented in Figures 2.2a and 2.2b: WHO and OECD data classify all funds channelled through health insurance funds as social insurance contributions, even though substantial amounts of tax-based allocations are also often channelled through health insurance funds, either as an explicit strategy of mixed finance or via subsidies for those who do not contribute.

This suggests that some of these systems may be more mixed, in terms of public finance, than the data we present show – in other words, some countries that are currently shown to be mainly financed through social insurance contributions may actually be financed through a mix of contributions and general tax revenue. A further limitation of the way in which these data are presented is that it does not permit observation of shifts in finance towards greater reliance on central tax revenue. For example, since 1998 over a third of the French health insurance scheme’s revenue has come from an earmarked tax on income, but the expenditure data in Figures 2.2a and 2.2b do not register this change. We discuss this issue further in Section 3.

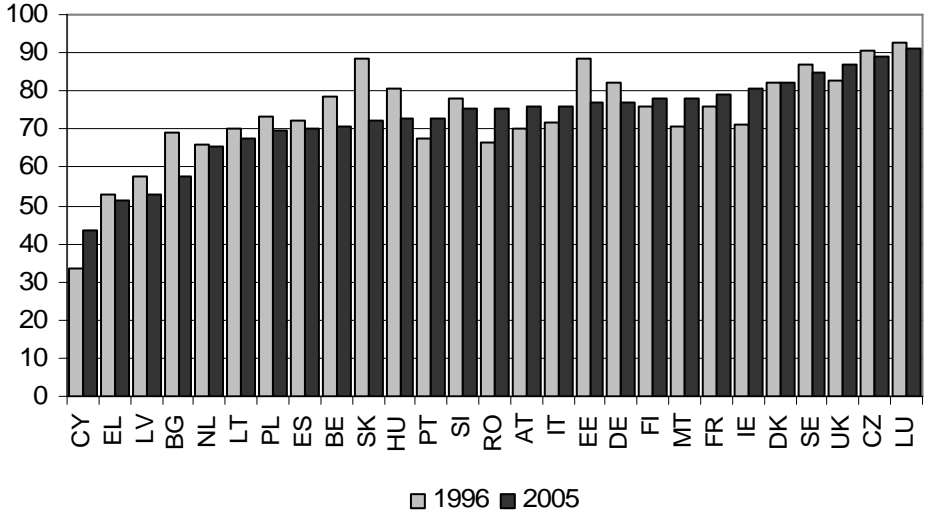
**Figure 2.2b Breakdown of contribution mechanisms by country, 2005**



Source: WHO 2007

Note: SSC = social insurance contribution; PHI = private health insurance; OOP = out of pocket payments. SSC refers to all funds channelled through health insurance funds, which may include substantial amounts of tax revenue (see paragraph 50).

**Figure 2.3 Public expenditure on health as a proportion of total expenditure on health in the European Union (%), 1996 and 2005**



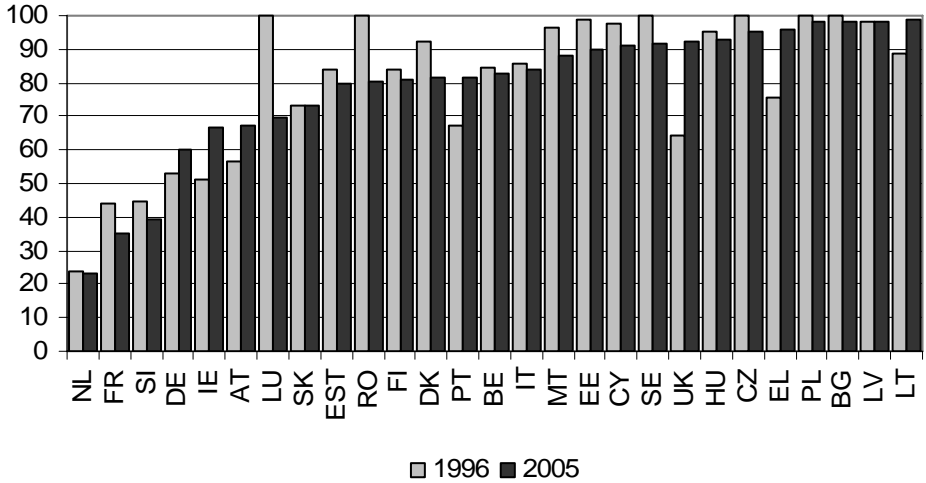
Source: WHO 2007

In every country except France and Slovenia<sup>7</sup>, **private expenditure is largely generated by out of pocket payments** (see Figure 2.4). Out of pocket payments are the second most important contribution mechanism in 18 member states. However, they account for less than a third of total expenditure on health in every member state except Bulgaria, Cyprus, Greece and Latvia (see Figure 2.2b). **Since 1996 they have risen as a proportion of total expenditure on health in 15 countries.**

The rise has been by more than five percentage points in Belgium, Bulgaria, Estonia, Greece, Hungary, Latvia, Lithuania and Slovakia. Significant falls in out of pocket payments as a proportion of total expenditure on health (by more than five percentage points) have taken place in Cyprus, Malta and Romania.

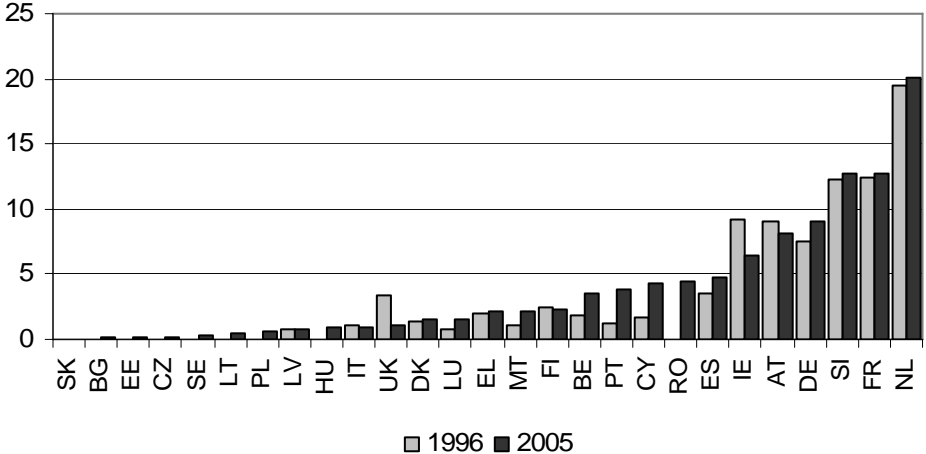
<sup>7</sup> And the Netherlands, prior to the reforms of 2006.

**Figure 2.4 Out of pocket payments as a percentage of private expenditure on health in the European Union, 1996 and 2005**



Source: WHO 2007

**Figure 2.5 Private health insurance as a percentage of total expenditure on health in the European Union, 1996 and 2005**



Source: WHO 2007

Note: The data shown for the Netherlands reflect the role played by private health insurance prior to 2006. In 2006 substitutive private health insurance was abolished, so more recent figures are likely to be substantially lower.

Figure 2.5 shows that in 1996 **private health insurance** was non-existent or made only a very small contribution to total expenditure on health in all the newer member states except Slovenia and in several of the older member states (Italy, Luxembourg, Malta, Portugal and Sweden). Although it is a well-established part of the health system in some member states, notably France, Germany, Ireland, the Netherlands and Slovenia, in other member states it is a more recent development. Since 2000, however, **private health insurance has grown (as a proportion of total expenditure on health) in almost all member states.** The only exceptions to this trend are Austria, Finland, Ireland, Italy, Slovakia and the United Kingdom.

The contribution private health insurance makes to total expenditure on health continues to be modest in most member states, only exceeding 5% in Austria, France, Germany, Ireland, the Netherlands and Slovenia. However, its effect on the wider health system may be significant, even in member states where it plays a minor role (see the next section).

Analysis of **equity in financing health care** in high-income countries in the 1990s found social insurance contributions to be proportionate (France) or moderately regressive (Germany and the Netherlands) (Wagstaff et al. 1992; Wagstaff et al. 1999). This contrasts with predominantly tax-financed health systems, which were found to be progressive (the United Kingdom and Italy), proportionate (Spain), mildly regressive (Denmark and Sweden) and moderately regressive (Finland and Portugal). The analysis found private health insurance to be highly regressive where it plays a significant role and the majority of the population relies on it for coverage (as in the United States and Switzerland). Complementary private health insurance was also regressive, particularly where it is purchased by middle-income groups and therefore covers a relatively large proportion of the population. Where private health insurance is supplementary or substitutive, and therefore mainly purchased by people in higher income groups, the effect on financing is found to be mildly progressive. However, as the benefits provided by private health insurance only accrue to those covered by it and because private health insurance can distort resource allocation in the publicly-financed system (see Section 3), the net effect on equity is likely to be negative. This is particularly likely where richer groups with substitutive private health insurance do not contribute to statutory health insurance. For example, financing from all sources together was regressive in Germany and the Netherlands and pro-rich in its redistributive effect in the Netherlands, which the authors attributed to the dual system of public coverage for lower-earning workers and private coverage for higher earners. Over the course of the 1990s, private health insurance became less progressive in most of the countries studied. Out of pocket payments were found to be the most regressive of all contribution mechanisms.

### 2.2.1.2 Regulation of the collection process

In member states predominantly financed through **central taxes** (Ireland, Malta, Portugal and the United Kingdom), the agency responsible for tax collection passes revenue to the Ministry of Finance, which in turn allocates funds for health care to the Ministry of Health. The size of the budget for health therefore depends on political considerations and the negotiating ability of the Ministry of Health in relation to the Ministry of Finance. The major advantage of such a process is relative control over the amount of national income that is spent on health. In some countries, however, this has led to accusations of under funding (for example, in the United Kingdom during the 1990s) (Robinson 1999).

Where **local taxes** are a major contribution mechanism (Denmark, Finland, Italy, Spain and Sweden), central governments allocate subsidies to local government or local health authorities to account for differences in revenue-raising capacity across regions. The process is usually subject to political negotiation and may not sufficiently compensate poorer regions, promoting regional inequalities in access to health care. Central government subsidies may also be undermined by wider economic conditions.

**Social insurance contributions** are either collected by a central government agency (Belgium, Bulgaria, Estonia, France, Latvia, the Netherlands, Poland and Romania) or by the health insurance funds themselves (Austria, Czech Republic, Germany, Greece, Lithuania, Slovakia and Slovenia). Where multiple health insurance funds collect and retain their own social security contributions (Austria, the Czech Republic, Germany, Greece and Slovakia) there are mechanisms in place that attempt to equalise incomes and/or risks across funds (except in Greece).



The process of fund equalisation may be resented and resisted by health insurance funds and the extent of revenue that is subject to redistribution varies from 60 per cent in the Czech Republic to 85 per cent in Slovakia and 100 per cent in Austria and Germany. Ability to enforce collection of taxes or social insurance contributions can have a significant impact on a country's ability to generate sufficient funds for health care. Some of the newer member states have struggled with this in recent years. Estonia tackled the problem by shifting responsibility for collection from the Estonian Health Insurance Fund to the central government Tax Agency (Jesse et al. 2004).

Except in Germany and Greece, **contribution rates** are set centrally, usually as a fixed proportion for all income groups, although in some member states lower rates apply to different groups (see Table 2.2). Allowing health insurance funds to set their own contribution rates undermines equity in finance and equity of access, particularly if fund membership is largely determined by occupational group (as in Germany until 1996 and in Greece). From 2009 the contribution rate in Germany will be set centrally and from 2011 a new National Health Fund will be responsible for collecting contributions (Bundesministerium für Gesundheit 2007). Setting a ceiling on contributions (the case in most member states) also undermines equity in finance, making contributions regressive rather than proportionate.

### **2.2.2 Pooling funds**

Pooling refers to **the accumulation of prepaid funds on behalf of a population**. It facilitates the pooling of financial risk across the population (or a defined subgroup), allowing the contributions of healthy individuals to be used to cover the costs of those who need health care. It is therefore an essential means of ensuring equity of access to health care. Funds may be pooled by a wide range of public and private agencies (see Table 2.3). Key issues in pooling concern aspects of market structure such as the size and number of pools in a health system and whether or not there is competition among pooling organisations. In general, the larger the pool and the fewer in number, the greater the potential for equity of access and administrative efficiency. The way in which funds are pooled and allocated to purchasers also affects incentives for efficiency in service organisation.

**Table 2.2 Contribution rates, ceilings and distribution between employers and employees in the European Union, 2007**

<b>Country</b>	<b>Contribution rate</b>	<b>Ceiling on contributions</b>	<b>Ratio of contributions (ER:EE)</b>
<b>AT</b>	Varies, mainly 7.5%	Yes	Varies, roughly 50:50
<b>BE</b>	EE/ER: 37.8%; lower rates for CS (7.3%) and SE (19.6%)	EE/ER, CS: no; SE: yes	65.5:34.5; CS: 52:48
<b>BG</b>	6%	No	70:30 (50:50 in 2009)
<b>CY</b>	EE/ER: 12.6%; lower rates for SE (11.6%) and V (10%)	EE/ER: yes	50:50
<b>CZ</b>	EE/ER: 13.5%; for SE only levied on 50% of net income	EE/ER: no; SE: yes	66:33
<b>EE</b>	13%	No	100:0
<b>FR</b>	13.5% (lower ER contribution on low wages); CSG: 5.25% (3.95% on benefits and pensions)	No	94:6
<b>DE</b>	Varies, average almost 15%; uniform rate from 2009	Yes	50:50
<b>EL</b>	Varies, mainly 6.45%	Yes	66:33
<b>HU</b>	15% + ER pays monthly flat rate (€7.72) per employee (pro rata)	No	73:27
<b>LV</b>	Part of personal income tax earmarked for health	No	0:100
<b>LT</b>	3% (ER) and 30% (EE, SE) of personal income tax earmarked for health; F, SMU: 3.5% and 1.5% respectively of minimum wage; other: 10% of average salary	No	100:0
<b>LU</b>	5.4%	Yes	50:50
<b>NL</b>	EE/ER: 6.5%; SE: 4.4%; P: 6.5% of the general old-age pension, 4.4% of any extra pension; aged 18+ pay a nominal premium set by insurers (average €1,106 pa)	Yes	50:50
<b>PL</b>	9%	No	0:100
<b>RO</b>	13.5%	No	52:48
<b>SK</b>	EE/ER, SE: 14% (7% for disabled people)	Yes	71:29
<b>SI</b>	EE/ER, SE: 12.92% of gross wage or sickness benefit; F: 6.36% of pension/disability insurance base	No	51:49

Source: EOHSP HiT reports ([www.observatory.dk](http://www.observatory.dk)) and (MISSOC 2007)

Notes: CS = civil servants; EE = employee; ER = employer; F = farmers; P = pensioners; SE = self-employed; SMU = small land users; V = voluntary insured

### 2.2.2.1 Pooling market structure

In most member states, all publicly-collected funds for health care are pooled nationally, which means there is a single pool (see Table 2.3). The exceptions are member states in which local taxes are used to finance health care and those in which individual health insurance funds are responsible for collecting their own social insurance contributions. In the former, systems are usually in place to re-allocate resources among regions to compensate poorer regions with smaller tax bases. In the latter, the number of pools varies: Slovakia (5), the Czech Republic (9), Austria (21 pools), Greece (>30) and Germany ( $\approx$  290). Again, in these member states (except Greece), efforts are made to re-allocate resources among health insurance funds to compensate funds with poorer members and/or members at higher risk of ill health (for example, older members). The amount of resources subject to re-allocation ranges from 60% in the Czech Republic to 85% in Slovakia and 100% in Austria and Germany. Thus, in Austria and Germany, there is in effect, a single national pool.

The Czech Republic has plans to re-allocate 100% of resources and from 2009 social insurance contributions in Germany will be pooled nationally by a new national health insurance fund. In countries such as Austria, the inefficiency arising from each health insurance fund collecting its own contributions may be outweighed by cultural factors (for example, members having a sense of belonging to a specific fund). Competition between pooling agents (who are also usually purchasing agents, see below) is relatively rare in the European Union (see below).

### 2.2.3 Purchasing services

Purchasing refers to **the transfer of pooled funds to providers on behalf of a population**, allowing individuals to be 'covered'. The way in which services are purchased is central to ensuring efficiency in service organisation and delivery and quality of care. It may also affect equity of access to health care and administrative efficiency and is likely to have a major effect on ability to control costs and financial sustainability. Purchasing may be carried out by a wide range of agencies. Key issues involve market structure and purchasing mechanisms (for example, contracting, provider payment and monitoring).

#### 2.2.3.1 Purchasing market structure

**Where health care is financed mainly through social insurance contributions**, health insurance funds are responsible for purchasing health care from a range of public and/or private providers. In these countries, the relationship between purchaser and provider has traditionally been contractual. In member states **where health care is financed mainly through tax**, the purchasing function is usually devolved to territorial entities (regional or local health authorities or specially-created purchasing organisation such as Primary Care Trusts in England; see Table 2.3). However, in Cyprus, Ireland and Malta, purchasing continues to take place at central level. In Cyprus, Malta, Denmark, Finland and Ireland there is no purchaser-provider split. Purchaser-provider splits have been introduced throughout England, Italy and Portugal and in some regions of Spain and Sweden.

**Competition among purchasers is relatively rare in EU health systems.** It exists in Belgium and during the 1990s it was introduced in the Czech Republic and Slovakia and extended to the whole population in Germany and the Netherlands. Allowing health insurance funds to compete for members gives them incentives to attract favourable 'risks' (that is, people with a relatively low average risk of ill health) and avoid covering high risk individuals, which may affect equity of access to health care.

**Risk adjustment mechanisms** aim to address this by compensating health insurance funds for high risk members. However, risk adjustment is technically and politically challenging and often incurs high transaction costs (Puig-Junoy 1999; van de Ven and Ellis 1999; van de Ven et al. 2003; van de Ven et al. 2007).

**Table 2.3 Collection, pooling and purchasing market structure in the European Union, 2007**

<b>Country</b>	<b>Market structure</b>	<b>Pools (no)</b>	<b>Purchasers (no)</b>	<b>Risk-adjusted (re)allocation (risk factors)</b>
<b>AT</b>	Multiple non-competing occupation-based funds collect, pool and purchase.	Funds (21)	Funds (21)	100% of a fund's resources subject to re-allocation based on contribution revenue per person, expenditure on dependants and pensioners, 'major city factor', location of fund.
<b>BE</b>	Central collection. Competing funds purchase. Free choice of fund (except railway workers).	National (1)	Funds (7)	30% of a fund's budget allocated via capitation adjusted for insurance status (pensioners, disabled, widowers/widows), age, sex, household composition, unemployment rate, income, mortality rate, degree of urbanization and work disability status.
<b>BG</b>	Central collection. Non-competing territorial funds purchase.	National (1)	Regional funds (28)	National fund allocates resources to 28 regional funds based on population size and age, historical allocations and estimates of future health-related needs in the region.
<b>CY</b>	Central collection and pooling. Single purchaser. No purchaser-provider split.	National (1)	Health Insurance Organisation (1)	Ministry of Health plans to allocate funds to the Health Insurance Organisation (reform still not fully implemented).
<b>CZ</b>	Competing funds collect, pool and purchase.	Funds (9)	Health insurance funds (9)	GHIF allocates 60% of funds based on capitation adjusted for the proportion of older people (65+); plans to redistribute 100% using additional risk factors.
<b>DK</b>	Central and local collection. Non-competing territorial purchasers. No purchaser-provider split.	Regions (5) Municipalities (98)	Regions (5) Municipalities (98)	Redistribution between counties and municipalities based on age distribution, number of children in single parent households, number of rented flats, unemployment, education, immigration, social deprivation and proportion of older people.
<b>EE</b>	Central collection and pooling. Non-competing territorial funds purchase.	National (1)	Regional funds (4)	Taxation Agency allocates to the national fund, which allocates to four regional branches via capitation adjusted for age.
<b>FI</b>	Central and local collection and pooling. Non-competing territorial purchasers. No purchaser-provider split.	Municipalities (416)	Municipalities (416)	Central government allocates subsidies to municipalities based on capitation adjusted for age, unemployment and morbidity, with some additional criteria for remote areas and archipelago municipalities. Subsidies account for 25% of municipal health care costs.

<b>Country</b>	<b>Market structure</b>	<b>Pools (no)</b>	<b>Purchasers (no)</b>	<b>Riskadjusted (re)allocation (risk factors)</b>
<b>FR</b>	Central collection and pooling. Non-competing occupation-based funds purchase.	National (1)	Health insurance schemes (3)	Allocation to health insurance schemes based on capitation adjusted for age and sex. The General Scheme covers 85% of the population.
<b>DE</b>	Competing funds collect, pool and purchase.	Funds (>200)	Funds (>200)	Differences in contribution rates due to varying income levels and expenditures are equalised via adjustment for age, sex, disability (100% of a fund's resources). From 2009 funds will be pooled centrally and allocated based on capitation adjusted for age, sex and health risk.
<b>EL</b>	Ministry of Finance and non-competing occupation-based funds collect, pool and purchase.	MOF (1) Funds (>30)	Ministry of Health and funds (>30)	No.
<b>HU</b>	Central collection and pooling. Single fund purchases.	National (1)	National fund (1)	n/a
<b>IE</b>	Central collection and pooling. Single purchaser. No purchaser-provider split.	National (1)	Health Service Executive (1)	n/a
<b>IT</b>	Central and local collection. Non-competing territorial purchasers.	Regions (20)	Regional health authorities (20)	National Solidarity Fund managed by the Ministry of Health allocates to the regions based on regional population size, potential tax base, health care expenditure and non-health care costs.
<b>LV</b>	Central collection and pooling. Single fund purchases.	National (1)	Regional funds (8)	National health insurance fund allocates resources to eight regional funds based on population size and age structure
<b>LT</b>	Single fund collects, pools and purchases.	National (1)	Regional funds (5)	National health insurance fund allocates to five regional funds.
<b>LU</b>	Central collection and pooling. Non-competing occupation-based funds purchase.	National (1)	Funds (9)	The Union of Health Insurance Funds has a risk fund to ensure that the deficits of some funds is covered by the surplus of others.
<b>NL</b>	Central collection and pooling. Competing funds purchase.	National (1)	Funds (19)	100% allocated based on capitation adjusted for age, sex, pharmaceutical consumption and major diagnostic groups.
<b>MT</b>	Central collection, pooling and purchasing. No purchaser-provider split.	National (1)	Ministry of Health (1)	n/a

Country	Market structure	Pools (no)	Purchasers (no)	Risk-adjusted (re)allocation (risk factors)
<b>PL</b>	Central collection and pooling. Single fund purchases.	National (1)	National fund (1)	n/a
<b>PT</b>	Central collection and pooling. Non-competing territorial purchasers.	National (1)	Regional Health Administrations (5)	Ministry of Health allocates to hospitals and regions. Regional primary care budgets based on historical expenditure (40%) and capitation (60%) adjusted for age, sex and a disease burden index based on the regional prevalence of hypertension, diabetes, stress and arthritis.
<b>RO</b>	Central collection and pooling. Non-competing territorial and occupation-based funds purchase.	National (1)	District funds (42) Occupation-based funds (2)	National fund allocates to 42 district funds and 2 occupation-based funds based on a risk-adjusted capitation formula. District funds collect contributions from self-employed people.
<b>SI</b>	Single fund collects, pools and purchases.	National (1)	NHII (1)	n/a
<b>SK</b>	Competing funds collect, pool and purchase.	Funds (6)	Funds (6)	85% of a fund's resources are re-allocated adjusted for age and gender.
<b>ES</b>	Central and local collection and pooling. Non-competing territorial purchasers. Some purchaser-provider splits.	Regions (17) and funds (3)	Regions (17) Funds (3)	Central government allocations to the regions based on capitation adjusted for the population aged 65+ and 'insularity'. Three civil servants' mutual funds financed by central government (70%) and contributions (30%). The NHS covers 95% of the publicly-covered population, the civil servants' funds cover 5%.
<b>SE</b>	Central and local collection and pooling. Non-competing territorial purchasers. Some purchaser-provider splits.	Counties (21) Municipalities (290)	Counties (21) Municipalities (290)	Central government grants allocated based on differences in average per capita health care costs plus age, sex, civil status, occupation, income, housing and groups with a high consumption of health care resources.
<b>UK-ENG</b>	Central collection and pooling. Non-competing territorial purchasers.	National (1)	Primary Care Trusts (152)	Department of Health allocates to PCTs based on a risk-adjusted capitation formula.

Source: EOHSP HiT reports ([www.observatory.dk](http://www.observatory.dk)) and authors' research

Notes: MOH = Ministry of Health; MOF = Ministry of Finance

### 2.2.3.2 Provider payment

Table 2.4 shows the range of methods used to pay different types of health care providers in EU health systems. **Provider payment can be prospective or retrospective.** Prospective payment operates in the form of a budget and may contribute to cost control, depending on whether the budget constraint is 'hard' (resulting in penalties for overspending) or 'soft' (overspending is not penalised). Prospective payment methods include salary, capitation (a fixed fee per patient enrolled with a particular provider or per inhabitant of a specific area) and line-item or global budgets. Retrospective payment is made following the provision of health services and usually takes the form of fee for service (FFS) or its variant case-based payment (fixed fee for service), often referred to as DRGs (diagnosis-related groups).

In EU health systems, primary care providers are most commonly paid through a combination of capitation and fee for service. Where health care is financed mainly through social insurance contributions, specialists are more likely to be paid on a fee for service basis, whereas in predominantly tax-financed health systems, specialists are often salaried employees. Hospitals are most commonly allocated budgets but case-based payment is increasingly used either to define budgets or as a retrospective form of payment (with or without a cap on payments).

### 2.2.4 Coverage, benefits and cost sharing

Policies regarding levels of population coverage, the scope (range) of benefits to be covered by pooled funds and the depth of these benefits (the proportion of benefit cost covered by pooled funds) play a major role in determining the degree of financial protection in a health system and the degree of equity of access to health care. The way in which the benefits package is defined can have an important bearing on efficiency in resource allocation. Benefit and entitlement decisions also affect transparency and accountability. In addition to financial protection, the extent of cost sharing and the design of cost sharing policy (including any exemptions in place) affect equity in finance and equity of access to health care. Increased reliance on cost sharing may undermine financial protection and make health care financing more regressive (that is, it places a greater financial burden on poorer people).

#### 2.2.4.1 Who is covered?

**Residence in a country is the most common basis for entitlement to health care** in the European Union, resulting in universal or near universal population coverage in most member states. The exceptions to universal coverage are Germany (88% public coverage and 10% private coverage), Greece (95% coverage), Austria (98%), Belgium (99%), Luxembourg (99%) and Spain (99%).

The attainment of universal coverage is relatively recent in western European member states predominantly financed through social insurance contributions (for example, Belgium in 1998, France in 2000, the Netherlands in 2006) and the result of a gradual process of extension. In these member states, entitlement to health care often depended on payment of contributions, either by contributors or by the government on behalf of non-contributors. In recent years, however, governments in many of these member states have changed the basis of entitlement from contributions to residence.

In contrast, universal coverage is a central feature of tax-financed member states. Created in 1948, the National Health Service (NHS) in the United Kingdom was the first to achieve universal coverage of comprehensive health services.



In Scandinavian member states, universal coverage was also introduced in the second half of the 20<sup>th</sup> century, followed by the establishment of NHS-type systems in Italy in 1979, Portugal in 1979, Greece in 1983 and Spain in 1986. In Greece, however, the NHS was never been fully implemented and de facto entitlement is through social insurance contributions.

#### **2.2.4.2 Benefits**

Health systems in the European Union provide comprehensive benefits, usually covering preventive and public health services, primary care, ambulatory and inpatient specialist care, prescription drugs, mental health care, dental care, rehabilitation, home care and nursing home care. Across member states **there is some variation in the range of benefits covered and the extent of cost sharing required**. In some member states there may be a gap between what is ‘officially’ covered and what is actually available in practice.

**Benefits can either be defined as benefits packages or undefined.** Defined benefits packages are commonly associated with member states predominantly financed through social security contributions. In tax-financed member states, benefits are not usually explicitly defined. For example, the NHS in the United Kingdom provides ‘comprehensive’ services and the Secretary of State for Health is responsible for providing services to the extent that he or she considers necessary to meet all ‘reasonable requirements’ (Robinson 1999). However, even in member states with ‘defined’ benefits packages, the benefits package usually refers to quite broad categories of services (Polikowski and Santos-Eggimann 2002). In general, levels of ‘explicitness’ also vary among member states, with one study identifying Poland as having the most explicit package and Germany the most vaguely-defined package (Schreyögg et al. 2005).

#### **2.2.4.3 Cost sharing**

**All EU member states impose cost sharing for services covered by the benefits package** (see Table 2.5). Cost sharing is used to ration access to health care by reducing demand for health services and as a means of raising revenue for the health system. It is most commonly applied to outpatient prescription drugs and dental care, but also to ambulatory doctor visits and inpatient care.

Cost sharing takes different forms and is often accompanied by mechanisms to protect the income of some or all individuals. **Protection mechanisms** include: reduced rates, exemptions from charges, discounts for pre-paid charges, annual caps on expenditure (out of pocket maximums), tax subsidies on private expenditure, complementary private health insurance covering statutory user charges, the substitution of private for public prescriptions by doctors and the substitution of generic for brand drugs by doctors and/or pharmacists.

**Table 2.4 Provider payment methods in the European Union, 2007**

<b>Country</b>	<b>Primary care (GPs)</b>	<b>Specialists (ambulatory)</b>	<b>Specialists (in hospital)</b>	<b>Hospitals (acute care)</b>
<b>AT</b>	Allowances (80%) + FFS (contracted), FFS (non-contracted)	Allowances (50%) + FFS (contracted), FFS (non-contracted)	Salary + bonuses	Case-based payment with retrospectively adjusted point values
<b>BE</b>	FFS	FFS	FFS	Global budgets + case-based payment
<b>BG</b>	Capitation + bonuses	FFS	Salary + bonuses	Case-based payment + global budgets
<b>CY</b>	Salary (public), FFS (private)	Salary (public), FFS (private)	Salary	Global budgets
<b>CZ</b>	Age-weighted capitation + FFS	FFS with volume caps	Salary	Global budgets + case-based payment
<b>DK</b>	Capitation + FFS	FFS	FFS	Global budgets + case-based payment
<b>EE</b>	Age-weighted capitation + FFS	FFS	FFS	Case-based payment
<b>FI</b>	Salary + FFS or a mix of salary, capitation + FFS for personal doctors (public), FFS (private)	Salary + FFS (public), FFS (private)	Salary + FFS	Case-based payment
<b>FR</b>	FFS	FFS	Salary	Global budgets + case-based payment
<b>DE</b>	FFS points	FFS points	Salary	Global budgets, case-based payment + per diem
<b>EL</b>	Salary + FFS (public), FFS (private)	Same as primary care	Salary + FFS	Global budgets, per diem + case-based payment
<b>HU</b>	Weighted capitation + adjustments based on provider characteristics	FFS with national cap for provider organisations, but mainly salary for doctors	Salary	Case-based payment
<b>IE</b>	Weighted capitation + FFS	n/a	Salary	Case-based payment
<b>IT</b>	Capitation + FFS + PRP (also for paediatricians)	FFS	Salary	Case-based payment + capitation
<b>LV</b>	Age-weighted capitation + FFS	FFS or case-based payment	Salary + FFS points	Case-based payment, per diem + FFS points
<b>LT</b>	Age-weighted capitation	Case-based payment	Salary	Global budgets + case-based payment

Country	Primary care (GPs)	Specialists (ambulatory)	Specialists (in hospital)	Hospitals (acute care)
<b>LU</b>	FFS	FFS	Mainly FFS	Global budgets + case-based payment + bonuses
<b>NL</b>	Salary	Salary	Salary	Global budgets
<b>MT</b>	Capitation + FFS	n/a	FFS with caps (65%) or salary	Global budgets + case-based payment
<b>PL</b>	Age-weighted capitation	FFS	Salary	Case-based payment
<b>PT</b>	Salary (NHS) + capitation + PRP	Salary (NHS)	Salary (NHS)	Global budgets + case-based payment
<b>RO</b>	Age-weighted capitation + FFS (15%)	FFS (flexible point values)	Salary	Global budgets + case-based payment + FFS
<b>SI</b>	Age-weighted capitation + FFS	FFS with national cap	Salary	Global budgets + case-based payment
<b>SK</b>	Capitation + FFS (50%)	FFS	Salary	Case-based payment
<b>ES</b>	Salary + age-weighted capitation (15%)	Salary	Salary	Global budgets + case-based payment
<b>SE</b>	Salary or capitation + some FFS	Salary	Salary	Global budgets + case-based payment
<b>UK-ENG</b>	Weighted capitation + FFS + PRP	n/a	Salary (NHS)	Global budgets + case-based payment

Source: EOHSP HiT reports ([www.observatory.dk](http://www.observatory.dk)) and authors' research

Note: FFS = fee for service; PRP = performance-related pay

**Table 2.5 Cost sharing for health care in the European Union, 2007**

Country	GP/specialist	Inpatient	Pharmaceuticals	Dental
AT	✓	✓	✓	✓
BE	✓	✓	✓	✓
BU	✓	✓	✓	✓
CY	✓	✓	✓	✓
CZ	x	x	✓	✓
DK	x	x	✓	✓
EE	✓	✓	✓	✓
FI	✓	✓	✓	✓
FR	✓	✓	✓	✓
DE	✓	✓	✓	✓
EL	x	x	✓	✓
HU	✓	✓	✓	✓
IE	✓	✓	✓	✓
IT	x	x	✓	✓
LV	✓	✓	✓	✓
LT	x	x	✓	✓
LU	✓	✓	✓	✓
NL	x	x	✓	✓
MT	✓	✓	✓	✓
PL	x	x	✓	✓
PT	✓	✓	✓	✓
RO	x	x	✓	x
SI	x	x	✓	✓
SK	✓	✓	✓	✓
ES	x	x	✓	✓
SE	✓	✓	✓	✓
UK-ENG	x	x	✓	✓

Source: adapted from Thomson et al 2003 (Thomson et al. 2003)

#### **2.2.4.4 Informal payments**

In some member states, the prevalence of informal payments to supplement or in lieu of formal cost sharing has posed a challenge to health reforms (Balabanova and McKee 2002; Lewis 2002; Murthy and Mossialos 2003; Allin et al. 2006). **Informal payments take a number of forms**, ranging from the *ex ante* cash payment to the *ex post* gift in-kind. At their worst they may be a form of corruption, undermine official payment systems and reduce access to health services (Ensor and Duran-Moreno 2002; Ensor 2004). During the transition from Soviet rule in many of the newer member states, health care staff salaries were low and often delayed. Informal payments allowed staff to remain in facilities and continue providing services during periods of economic difficulty. However, demands for payments also resulted in the exclusion of those unable to pay. The most severely affected were typically poorer and chronically ill people.

### 3. HEALTH CARE FINANCING REFORMS: OPTIONS, TRENDS AND IMPACT

This section reviews options for reform of health financing in EU health systems. It highlights some key reform options relating to collection, pooling, purchasing, coverage, benefits and cost sharing, examines the rationale for and likely outcomes of different options, describes actual reform trends and discusses their impact on policy goals and sustainability.

#### 3.1. Maximising collection and changing the mix of contribution mechanisms

Faced with rising health care costs and reluctance to raise taxes to cover them, policy makers may attempt to find 'new' sources of funds and/or improve their existing system of collection. As we noted in the previous section, health care resources come from two sources, individuals and corporations (although they may be channelled through non-governmental organisations). Consequently, the search for additional funding is really a search for contribution mechanisms that generate revenue more successfully than existing mechanisms or that tap a broader revenue base. In this section we consider efforts to get more out of existing contribution mechanisms, either by lifting the ceiling on contributions or through better enforcement of collection. We then review reforms that aim to broaden the revenue base by changing the mix of contribution mechanisms – first, increasing reliance on social insurance contributions, central tax or local tax, then expanding private finance through private health insurance and cost sharing.

##### 3.1.1 Maximising collection

###### 3.1.1.1 Lifting the ceiling on contributions

Having a ceiling on contributions (a widespread practice in the European Union) limits the amount contributed by richer individuals and lowers equity in finance by making contributions more regressive. Countries such as Estonia and Hungary have abolished contribution ceilings in order to generate more revenue. All other things being equal, this would also have the effect of enhancing equity in finance.

###### 3.1.1.2 Centralising responsibility for collection

Where health insurance funds are responsible for collecting contributions, two problems may arise. **First**, the level of revenue generated may be sub-optimal if health insurance funds are unable to enforce collection. Weak enforcement of collections has been particularly problematic in Estonia and Hungary leading both countries to move responsibility for contribution collection from the national health insurance fund to the central government tax agency (in 1999 in Estonia and in 1998 in Hungary). Hungary has also introduced an online system to verify the contribution status of those using health services.

**Second**, it may be difficult to introduce and enforce risk adjustment at a level that is sufficient to compensate funds with a disproportionate number of high risk members. In Romania, for example, only 25% of the revenue of the 42 district funds and 2 occupation-based funds was subject to re-allocation, leading to inequalities in access to health care. Research found that the occupation-based funds covered different levels of risk from the district funds and consequently had budget surpluses that were nearly a third higher than the surpluses of the district funds and represented 57% of the surplus for the health insurance system as a whole (despite only covering about 10% of the population) (Vladescu et al. 2000). In 2002 the Romanian government took responsibility for collecting contributions from employed people away from the health insurance funds and gave it to the national tax agency, effectively creating a national pool. A national fund allocates resources to the district and occupation-based funds using a risk-adjusted capitation formula, but the district funds continue to collect contributions from self-employed people.

Allowing health insurance funds to set their own contribution rates can also lead to inequalities in access to health care, particularly where fund membership is based on occupation. Funds covering professional groups are likely to have much lower revenue to expenditure ratios than funds covering manual workers and can therefore offer lower contribution rates, which may lower equity in finance and equity of access. During the 1990s the German government introduced competition among funds as a means of forcing contribution rates to converge (see below). Although this was initially successful, over time contribution rates began to diverge again and in 2006 the government announced a major reform: from 2009 contributions will be set by a central government agency (the Federal Insurance Office) and pooled by a new national health insurance fund. Contributions will continue to be collected by individual funds in the short term, but eventually responsibility for collection will move to the national fund. The national fund will also be responsible for allocating resources, which may help to counter resistance to risk adjustment.

A major administrative reform in Denmark in 2007 led to a merging of the 14 counties to form five new regions and lowered the number of municipalities from 275 to 98. The reform also removed the counties' tax-raising powers and shifted responsibility for financing health care from regional and local government to central government. The smaller number of stakeholders, combined with the abolition of local taxes, has strengthened the position of the central government in allocating resources to local level and may therefore contribute to lowering regional inequalities in access to health care.

Reforms that succeed in improving the enforcement of collection contribute to fiscal sustainability by helping to maximise revenue for the health system. They may also enhance both fiscal and political sustainability if they increase public trust in the health system, which may in turn enhance willingness to contribute.

### **3.1.2 Changing the mix of contribution mechanisms**

#### **3.1.2.1 Increasing reliance on social insurance contributions**

During the 1990s, all of the newer central and eastern European member states introduced earmarked social insurance contributions levied on earnings (Hungary in 1990, Estonia in 1992, the Czech Republic and Slovenia in 1993, Slovakia in 1994, Lithuania in 1997, Latvia in 1998 and Bulgaria, Poland and Romania in 1999). They did so for a mixture of political and economic reasons: to mark the transition to independence; to return to the system in place prior to Soviet rule; to increase transparency and accountability by creating new institutions at arm's length from government and establishing a clearer link between contributions and benefits; to facilitate a purchaser-provider split; to foster privatisation in health care supply; to permit private finance to play a larger role; and to mobilise additional revenue by broadening the revenue base (Preker et al. 2002). International institutions played a significant role in the policy debates that took place at that time and may have influenced the direction of debate in some countries (Ensor and Thompson 1998).

The impact of these reforms has been mixed. Figures 2.2a and 2.2b suggest that social insurance contributions have supplanted rather than supplemented tax-based allocations for health care; they show that the proportion of total expenditure on health generated through tax has fallen dramatically in some countries. However, as we noted in Section 2, the way in which WHO and OECD health expenditure data are presented does not permit detailed analysis of shifts in financing when funds are channelled through health insurance funds. As all funds channelled through health insurance funds are classified as social insurance contributions, we are unable accurately to determine how much of this funding genuinely comes from social insurance contributions and how much actually comes from general tax revenue.

In many of these countries, social insurance contributions have not generated sufficient revenue, so general tax revenue has continued to play an important part in financing health care, either as an explicit strategy of mixed finance or via subsidies for those who do not contribute. While total spending on health has generally increased in these countries (as in most other member states), the increase often comes from higher levels of private spending rather than higher levels of public spending.

Turning to social insurance contributions does not seem to have raised levels of financial protection, mainly because it has not prevented out of pocket payments from rising. In fact, most of the newer member states that took this path have deliberately introduced and increased cost sharing in the last ten years, mainly to generate further revenue. International comparisons of equity in finance in the early and mid 1990s found social insurance contributions to be proportionate (France) or moderately regressive (Germany and the Netherlands) (Wagstaff et al. 1992; Wagstaff et al. 1999). Based on this analysis it is plausible to suggest that increasing reliance on social insurance contributions would lower equity in finance, in comparison to tax-based allocations. Some might have been concerned about the impact of a contributions-based system on equity of access to health care. However, in many of the newer member states, contribution status has not been enforced as a means of accessing services, so entitlement is deliberately or de facto universal. The shift to social insurance contributions aimed to enhance transparency and accountability, but it is questionable whether either of these goals has been met. While there may be greater clarity about entitlement to benefits in theory, in practice the limited availability of some health services and the prevalence of informal payments have combined to thwart reform efforts (see below).

Increasing reliance on social insurance contributions seems unlikely to contribute to fiscal sustainability. In the context of the newer member states, this is largely due to an economic and fiscal context characterised by labour market conditions particularly unsuited to employment-based contributions. Between 1990 and 1997, GDP declined in real terms in many countries, leading to lower wages and greater income inequality. At the same time, high levels of unemployment narrowed the wage base; contribution rates were often lower for self-employed people and agricultural workers (and, if based on self-declared income, revenue was likely to be low); and chronic deficits limited the extent of state budget transfers or transfers from unemployment and pension funds to cover the contributions of civil servants and the non-working population. Added to this, the size of the informal economy, combined with weak powers of tax enforcement, resulted in widespread evasion of taxes and contributions. Health insurance funds in some member states experienced near bankruptcy (Deppe and Oreskovic 1996). The situation has improved since 2000, with levels of unemployment falling rapidly in several member states (see Figure 1.3). But lower unemployment may be offset by substantial growth in the size of the informal economy (see Figure 1.4).

One lesson from this experience might be that the potential benefits of introducing social insurance contributions – for example, the creation of new purchasing entities at arm's length from government and providers – can be maintained even when tax revenue is used to finance health care. In fact, finding ways to safeguard tax-based allocations when new contributions mechanisms are introduced might be essential both to ensure sufficient revenue for the social insurance 'system' and to address some of its weaknesses in terms of heavy reliance on employment-based contributions and so on. This is a lesson that applies equally to the western European member states that are predominantly financed through social insurance contributions. Of course, the economic and fiscal context has not been so problematic in these countries. Nevertheless, the wisdom of continuing to rely almost exclusively on employment-based contributions is called into question by rising unemployment, growing informal economies, concerns about international competitiveness and changing dependency ratios.

In the light of these contextual changes, it seems unlikely that any country would now seriously consider moving towards a more employment-based system of financing health care. Some of the countries that already have them – for example, France and Germany – have struggled with major deficits for several years. In the past, reforms put in place to secure sustainability in France have not met with much success (for example, the institution of a ceiling on national health expenditure), so it remains to be seen whether changes introduced by the current administration will fare any better. Sustainability is also an issue in Germany, but it is too early to say whether the reforms introduced in 2006 will have their desired effect.

### 3.1.2.2 Increasing reliance on central tax

Tax contributes to health financing in many health systems predominantly financed through social insurance contributions (see Figure 2.2b). In some, the problem of large health sector deficits has encouraged policy makers to broaden the revenue base, resulting in greater reliance on tax. In 1998 the French government replaced most of the employee contribution levied on wages with a tax levied on income (the contribution sociale générale (CSG) introduced in 1990 to finance social security). In 2000 the CSG accounted for 34.6% of the health insurance schemes' revenue (Sandier et al. 2004)<sup>8</sup>. In 2006 the German government accepted for the first time the principle of tax transfers to the health insurance funds to cover the contributions of children (Lisac 2006). In 2006 the Dutch government also introduced a degree of tax financing through tax subsidies (a system of tax credits, see below) (World Health Organization 2007).

Some mainly tax-financed health systems have also increased their reliance on central tax. For example, the Latvian health system was previously financed through an earmarked share of income tax, but since 2004 it has relied entirely on un-earmarked general taxation. The Danish administrative reforms of 2007 gave the central government responsibility for financing health care (taking it away from counties and municipalities) (Vrangbaek 2008 forthcoming). A new system of centrally-collected tax (set at 8% of taxable income and earmarked for health) replaces a mixture of progressive central income taxes and proportionate county and municipal income and property taxes. The Danish reform may have lowered equity in financing health care, but by increasing central government control over resource allocation, it may have strengthened equity of access.

In the context of health systems predominantly financed through social insurance contributions, greater use of central tax may increase financial protection and equity of access, particularly if tax-based allocations are used to reduce cost sharing or to finance care for non-contributors such as unemployed people and dependants. Its effect on equity in finance depends on the mix of taxes used to pay for health care. While income tax is generally progressive, two trends suggest that tax-based allocations may not always enhance equity in finance: the shift to 'flat' taxes and greater use of indirect taxes such as VAT (value-added tax or sales tax).

Estonia, Latvia, Lithuania, Slovakia and Romania have all introduced a flat (single) rate for personal and corporate income tax – the Baltic states in the mid 1990s and the others since 2004 (Keen et al. 2006). Recent analysis by the International Monetary Fund found that in most countries the introduction of a flat income tax rate lowered revenue from income tax as a proportion of GDP, increased the share of indirect taxes in total tax revenue and did not resolve the challenge of taxing capital income (Keen et al. 2006). The distributional effects were complex.

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<sup>8</sup> As it is channelled through the health insurance scheme it is shown as a social insurance contribution in international databases.



The analysis did not find that flat taxes were unambiguously regressive, and in some cases they may have increased progressivity, possibly through the impact on compliance. However, the authors emphasise that any evidence of progressivity may have been overstated due to the particular measures used.

A shift towards increased use of indirect taxes to finance health care might be more worrying. OECD data show that the share of VAT as a proportion of total taxation has increased strongly in most countries since the mid 1980s (rising from an average of 15.4% in 1980 to 18.9% in 2005), while the combined share of personal and corporate income tax has fallen slightly. Among EU member states, rises have been particularly high in the Czech Republic, Greece, Hungary, Ireland, Luxembourg, the Netherlands, Portugal, Slovakia, Spain, Sweden and the United Kingdom. Such a shift clearly increases income inequality, not just because indirect taxes are usually set as a single rate and their effect is therefore regressive, but also because they do not tax savings, which tends to benefit richer people (OECD 2007). Although some argue that indirect taxes (and particularly VAT) are easier to collect than direct taxes, the OECD notes that the recent spread of VAT scams ('carousel fraud')<sup>9</sup> has substantially weakened this argument (OECD 2007). In 2004 carousel fraud cost the UK government between £1.1 and £1.9 billion (BBC 2006). However, the OECD data also show that, on average, across OECD countries, the shift in the balance of taxation since 1965 has been towards direct taxes rather than indirect taxes (OECD 2007). This is mainly because the growth in the revenue share of general consumption taxes (largely driven by the growth of VAT), has typically been more than outweighed by the reduction in the share of excise duties and other taxes on specific goods and services (OECD 2007).

In spite of these concerns, increasing reliance on central tax seems inevitable in the future, particularly in the face of demographic changes which mean that fewer working age people are likely to be supporting a larger number of non-working people. Tax financing may not be as transparent as social insurance contributions. It may also be politically unpopular and problematic, for some member states, in the context of meeting Eurozone requirements. Nevertheless, it may be an essential strategy in ensuring fiscal sustainability and has the potential to enhance equity in finance to the extent that it is generated through progressive income taxes rather than through regressive taxes on consumption such as VAT.

### **3.1.2.3 Increasing reliance on local tax**

Some predominantly tax-financed health systems have increased their reliance on local tax (Sweden in the 1980s and 1990s, Finland in the 1990s, Italy in 1997-2001 and Spain in 2001). In Italy and Spain, the reforms were part of a broader political shift towards federalism (and in the Spanish case part of a deliberate strategy to address unequal levels of regional autonomy). In contrast, in Finland the economic recession of the early 1990s led to a gradual reduction in the size of the central government subsidy for health, from 36% of the total health budget in 1990 to 20% in 2004 (Vuorenkoski 2007 forthcoming). One consequence of this was to increase reliance on locally-raised tax and cost sharing (Järvelin 2002). In Sweden local taxes have increased from about 62% of total spending on health in 1980 to about 72% in 2003 (Glenngård et al. 2005).

Increased reliance on local tax may lower equity in finance as local taxes tend to be less progressive than centrally-raised taxes. The impact on equity of access to health care can also be negative, but much depends on the existence and characteristics of processes to re-allocate resources among regions. For technical or political reasons the process does not always sufficiently compensate poorer regions, perpetuating regional inequalities in access to health care.

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<sup>9</sup> Carousel fraud (also known as MTIC VAT fraud) occurs where people obtain VAT registration to acquire goods such as chips and mobile phones VAT-free from other member states then sell on the goods at VAT inclusive prices and disappear without paying the VAT paid by their customers to the tax authorities.

Recent financing reforms in Italy aimed to address this imbalance, but the potential for regional inequity remains because richer regions are better able raise revenue for health (Donatini et al. 2007 forthcoming). In Spain, however, the new model for financing health care introduced in 2001 was seen as lowering regional inequalities as it introduced a formula-based mechanism to allocate central tax subsidies to the regions, replacing a system based on historical precedent and political negotiation (Durán et al. 2006). Concern for regional inequalities in health care expenditure has sparked debates in Finland in the last five years (Vuorenkoski 2007 forthcoming) and was a key factor behind the Danish administrative reforms of 2007, which significantly lowered the number of counties and municipalities and abolished local tax financing of health care.

In theory, local taxes may be more transparent than central taxes and local politicians more responsive to local needs and more easily held to account than their national counterparts (partly because health often accounts for a large proportion of the local budget). In practice, these potential advantages can be undermined by inertia where local politicians are unwilling to make necessary but unpopular changes. Some policy makers favour decentralization in the hope that it will lower the likelihood of blame for mistakes falling at the feet of national politicians. This expectation seems naïve. The central government is still likely to be blamed for perceived ills, not least because it usually plays an important role in setting standards for quality. At the same time, it may no longer have the levers to remedy the situation, depending on the power and autonomy of regions in relation to the centre. In Italy, for example, national efforts to improve health system performance have been held back by the central government's limited ability to obtain reliable data from the regions (Donatini et al. 2007 forthcoming). Similar tensions played a role in the Danish administrative reforms.

#### **3.1.2.4 Expanding private finance through private health insurance**

Policy makers may consider introducing or expanding private health insurance for several reasons: to limit public expenditure by shifting costs to private insurers and individuals, to increase consumer choice, to stimulate private provision of health care, to encourage competition between public and private insurers and to encourage greater self reliance among richer people. In the context of concerns for fiscal sustainability, relieving pressure on public budgets is likely to be a key motivating factor underlying efforts to expand private health insurance.

Private health insurance plays different roles in different member states (see Table 3.1) (Mossialos and Thomson 2002; Mossialos and Thomson 2004). It substitutes for publicly-financed cover where groups of people are either excluded from the statutory system or allowed to opt out of it and purchase private cover instead. It can complement the statutory system either by covering services excluded from the publicly-financed benefits package or by covering statutory cost sharing requirements. Most often, it supplements publicly-financed cover by providing people with faster access to care or access to care in the private sector. In many members states, private health insurance plays a mixed complementary and supplementary role.

**Understanding the role or roles private health insurance plays** in each member state is important for three reasons. **First**, the role a particular market plays influences the size of the market, both in terms of contribution to total expenditure on health care and population coverage). As Figure 2.5 shows, substitutive markets in Germany and the Netherlands (prior to 2006) and complementary markets covering statutory cost sharing in France and Slovenia were the largest in terms of spending on health care. Complementary markets covering statutory cost sharing also tend to cover more people. For example, this type of market covers over 30% of the Danish population, almost 50% of the Irish population (in a mixed complementary and supplementary market), 74% of the Slovenian population and over 90% of the French population (Albrecht et al. 2002; Mossialos and Thomson 2004).

In contrast, supplementary markets usually only cover around 10% of the population in the older member states and 0-2% of the population in the newer member states (Mossialos and Thomson 2004; Thomson et al. 2008 forthcoming).

**Table 3.1 Market roles of private health insurance**

Market role	Driver of market development	Nature of cover	EU examples
Substitutive	Public system inclusiveness (the proportion of the population to which coverage is extended)	Covers population groups excluded from or allowed to opt out of the public system	Germany since 1970, the Netherlands prior to 2006
Complementary (services)	Scope of benefits covered by the public system	Covers services excluded from the public system	Many member states (often covers dental care and complementary and alternative treatment)
Complementary (user charges)	Depth of public coverage (the proportion of the benefit cost met by the public system)	Covers statutory cost sharing	France, Belgium, Denmark, Slovenia, Ireland, Belgium, Latvia, Portugal, Italy, Luxembourg
Supplementary	Consumer satisfaction (perceptions about the quality of publicly-financed care)	Covers faster access and enhanced consumer choice	The United Kingdom, Ireland and most other member states

*Source: adapted from (Mossialos and Thomson 2002; Foubister et al. 2006)*

**Second**, when thinking of the potential for expanding private finance through private health insurance, it is important to bear in mind the ways in which private health insurance can affect the publicly-financed part of the health system. Understanding market role may tell us something of these likely effects.

A **third** (and related) reason: the Internal Market framework for regulation of non-life insurance in the European Union – the Third Non-Life Insurance Directive – permits price and product regulation of markets that constitute a ‘complete or partial alternative’ to statutory health insurance, but allows only financial regulation (for example, regulation of solvency levels) in other markets (European Communities 1992). ‘Complete or partial alternative’ is usually taken to mean substitutive markets, but some have argued that it might also apply to complementary markets (Thomson and Mossialos 2007; Thomson and Mossialos 2007). Under these Internal Market rules, the scope for government intervention in non-substitutive markets for private health insurance is extremely limited. In some member states, differential treatment of insurers has been outlawed by the European Commission (Belgium, France and Germany), while regulations intended to ensure equity of access to health care – for example, risk equalisation schemes, open enrolment and community rating – have been challenged by private insurers in national courts (Belgium, Ireland and Slovenia) and in the European Court of Justice (Ireland and the Netherlands) (Thomson and Mossialos 2007). The Directive was introduced at a time when the boundaries between economic activity and social security were relatively clear.

However, these boundaries are becoming increasingly blurred in many member states, particularly since social security is no longer the preserve of publicly-financed statutory institutions. As governments look to private health insurance to relieve pressure on public budgets, uncertainty and unease about the Directive's scope and impact may grow.

During the 1990s, the central and eastern European member states all passed legislation allowing, for the first time, the development of markets for private health insurance. However, with the notable exception of Slovenia, market development has been marginal.

In the older member states, the public policy trend has been to move away from fiscal support of private health insurance in general (for example, through tax subsidies) and to abolish (the Netherlands) or restrict substitutive cover (Germany). In spite of this, some markets experienced growth between 1996 and 2005 (Belgium, Denmark, France, Germany, Greece, the Netherlands, Luxembourg, Portugal and Spain), but others have experienced decline (Italy, Ireland, Austria and the United Kingdom). The following paragraphs outline the implications of increasing reliance on private health insurance based on the roles outlined in Table 3.1.

### *A greater role for substitutive private health insurance*

Policy makers in some countries have considered allowing people to opt out of the statutory system or simply excluding people from statutory cover. One rationale for this might be to allow the government to spend its limited public funds on poorer people, encouraging richer people to look after their own health care needs. In practice, however, member states' experience of creating a market for substitutive private health insurance, either through opting out or exclusion, has been problematic, leading to abolition of the substitutive market in the Netherlands in 2006 and efforts to restrict its growth in Germany since 1994 (Thomson and Mossialos 2006).

Reforms in Germany in 1970 and 1989 created the current situation in which higher earners are allowed to opt in to the statutory system. The earlier reforms were intended to make financial protection available to white collar workers, who had not previously been eligible for statutory cover. Most high earners take advantage of this opportunity, choosing statutory cover because it is free for dependants or perhaps because the decision to opt for private cover has been irreversible for those aged 65 and over (since 1994) and for those aged 55 and over (since 2000) (Thomson et al. 2002; Busse and Riesberg 2004). Private insurers focus on attracting low risk individuals to purchase private cover. Over time the health insurance 'market' has become segmented, with the statutory scheme covering a disproportionate concentration of high risk individuals (for example, older people and people in poor health) (see Table 5.2). This has placed a heavy burden on the statutory scheme and contributed to its deficits (Busse and Wörz 2004). The privately insured also seem to have better access to outpatient specialist care, probably because doctors can charge higher rates to privately insured patients, giving them an incentive to prioritise these individuals and contributing to cost inflation in the health sector as a whole (Busse and Riesberg 2004). As a result of these and other problems, including high premium increases for older people in the private market and the difficulty of switching from one private insurer to another, some have proposed abolishing the dual system of public and private coverage. These proposals have always been fiercely opposed by private insurers, requiring the government to maintain the status quo, but with increasingly heavy intervention to protect the statutory scheme's finances, to discourage people from leaving the statutory scheme, to ensure access for older people forced to rely on private health insurance and (since 2006) to facilitate switching.

**Table 3.2 Comparison of health status and access to health care among privately and publicly insured people in Germany, 2001-2005**

Prevalence of	Publicly insured (%)	Privately insured (%)
People aged 65+	22.0	11.0
Chronic disease*	23.0	11.5
Self-reported poor health*	21.5	9.0
GP contact*	81.0	55.0
Outpatient specialist contact	47.0	45.0
Difficulties in paying for outpatient prescription drugs*	26.0	7.0

Source: people aged 65+ (Schneider 2003), all other (Mielck and Helmert 2006)

\* Statistically significant after controlling for differences in age, gender and income.

The Netherlands has faced similar issues with its market for substitutive private health insurance (Thomson and Mossialos 2006). In 1986 it prevented opting out of the statutory scheme and instead excluded higher earners and their dependants (37% of the population) from statutory cover. Eventually, however, the levels of regulation required to ensure access to private health insurance and to compensate the statutory scheme for covering a disproportionate number of high risks were found to be too unwieldy. Some of the regulations had also generated controversy in terms of Internal Market legislation and competition rules. In 2006 the government abolished the need for substitutive private health insurance by extending statutory coverage to the whole population.

Introducing substitutive private health insurance seems highly unlikely to relieve pressure on public budgets or contribute to health financing policy goals. In both Germany and the Netherlands the loss of contributions from richer individuals has lowered equity in finance, making the statutory scheme extremely regressive (Wagstaff et al. 1992; Wagstaff et al. 1999). At the same time, the strain of providing benefits to a large proportion of high risk individuals and non-contributing individuals clearly threatens fiscal sustainability. Excluding people from statutory cover, even if they are higher earners, jeopardises financial protection, particularly for older and unhealthier people who may find private cover unaffordable (or may even be refused private cover). Regulation to ensure equity of access to health care is possible but requires considerable technical capacity and may be politically difficult to enforce. The Chilean experience of opting out demonstrates some of the problems facing regulators in a middle-income country context. Researchers suggest that attempts to reform the system have been blocked by the private health insurance lobby, resulting in low levels of consumer protection for those within the private health insurance market (Barrientos and Lloyd-Sherlock 2000; Bitran et al. 2000; Jost 2000; Sapelli 2004). Within the European Union, regulation can be contested under Internal Market and competition rules, even in substitutive markets.

#### ***A greater role for complementary private health insurance (services)***

Encouraging complementary private health insurance to cover services excluded from the publicly-financed benefits package may be regarded by policy makers as a way of curbing public expenditure on health, particularly if the level of publicly-financed benefits can be restricted. Ideally, the benefits package would be systematically streamlined using explicit criteria and health technology assessment, leaving private insurers to cover less (cost)-effective services. In practice, however, this type of market can be difficult to establish. First, governments find it easier to exclude whole areas of service from the benefits package – most commonly, dental care – rather than systematically ‘de-listing’ services.

Second, insurers may be reluctant to develop a market covering services such as prescription drugs due to fears about ‘adverse selection’ (the possibility that only high risks will want to buy cover). Arguably, the complementary market covering outpatient prescription drugs in Canada only works because cover is predominantly and almost universally purchased by employers on behalf of employees, so the system is de facto semi-compulsory, covering over two-thirds of the population (Marchildon 2005). Within the European Union, complementary markets are widespread among the older member states, but mainly cover dental care and complementary and alternative treatment. While they provide some financial protection, where dental care is concerned, they also raise questions about equity in financing and accessing dental care.

### ***A greater role for complementary private health insurance (user charges)***

Encouraging complementary private health insurance covering user charges may be an attractive option for policy makers who want to limit public expenditure by expanding statutory cost sharing.

At first glance, the experience of France and Slovenia, the two largest markets for this type of private cover, seems positive. In both countries, complementary cover of statutory cost sharing is more or less universal (over 90% in France and over 98% in Slovenia), which means that the burden of statutory cost sharing is distributed across the whole population. This may counteract the regressive nature of any out of pocket expenditure. However, closer examination shows how this form of private cover lowers equity in finance and presents barriers to accessing publicly-financed health care.

At the end of the 1990s, complementary private health insurance covered 85% of the French population. It exacerbated inequalities in access to health care because those who did not have this type of cover were more likely to be older people, teenagers, unskilled workers, unemployed and from ethnic minority groups. They also had fewer doctor visits, on average (1.1 visits in a three month period), than those with private cover (1.5 visits) (Breuil-Genier 2000). In 2000 the government introduced free complementary cover for people with very low incomes (CMU) (Sandier et al. 2004). However, take-up of free cover has not been universal among those eligible for it, partly due to the problems of making the policy known to certain vulnerable groups – for example, homeless people. Thus, the equity concerns generated by complementary private health insurance have only partly been addressed by government intervention, but have added to public spending on health. In 2006 the French government introduced exemptions from paying insurance premium tax for insurers who agree to abide by certain rules intended to promote access to health care (for example, offering open enrolment and community-rated premiums) (Sécurité Sociale 2008).

In Slovenia the government uses statutory cost sharing to maintain fiscal balance in the health system. Cost sharing levels are set annually in light of the amount of publicly-generated revenue and have risen over time to the legally-specified maximum (see Table 5.3). This is one reason for the near-universal purchasing of complementary private health insurance (by 74% of the population and 98% of those eligible for cost sharing). Such high levels of population coverage may also be helped by a stringent regulatory framework introduced in 2000 following the government’s declaration of complementary private health insurance to be in the public interest. The regulations were tightened even further in 2005, with the introduction of a risk equalisation scheme. The scheme was subsequently challenged in the Slovenian High Court (by two of the three private insurers in the market, including the mutual association Vzajemna). Although the High Court found in favour of the government, the European Commission has now accused the regulations of infringing Internal Market legislation (Van Hulle 2007).

In the meantime, private insurers continue to select risks (MGEN 2006) and there is anecdotal evidence to suggest that providers may refuse publicly-financed treatment to those without private cover in case they cannot afford to pay the high level of statutory user charges required.

Although complementary private health insurance seems preferable to out of pocket payments, in so far as it involves pre-payment and some pooling of risks, international analysis has found it to be regressive in financing health care, particularly where it covers a relatively large proportion of the population. It is most likely to present barriers to access for people who are not eligible for exemptions from statutory cost sharing but cannot afford the premiums charged by private insurers. The French and Slovenian experience suggests that government intervention on equity grounds may be not be entirely effective, may be subject to legal challenge and may add to public spending.

**Table 3.3 Changes in the level of statutory reimbursement in Slovenia, 1993-1996**

Services	Coverage	1993	1995	1996
Health care for children and adolescents; family planning and contraception, antenatal and maternity care; prevention, diagnosis and treatment of communicable disease; treatment and rehabilitation of occupational diseases or injuries, malignant diseases, muscular or muscular nerve diseases, mental diseases, epilepsy, haemophilia, paraplegia, quadriplegia and cerebral palsy, as well as advanced diabetes, multiple sclerosis and psoriasis.	100%	100%	100%	100%
Organ transplantation and the most demanding surgery, treatment abroad, intensive therapy, radiotherapy, dialysis and other very demanding interventions.	At least 95%	99%	96%	95%
Treatment of reduced fertility, artificial insemination, sterilisation and abortion; specialist surgery; the non-medical portion of care and spa treatment in continuation of hospital treatment except for non-occupational injuries; the treatment of oral and dental conditions, orthopaedics, orthodontics and hearing and other aids and appliances.	At least 85%	95% / 85%*	88% / 85%*	85%
Drug on the positive list and specialist, hospital and spa treatment of non-work-related injuries.	At least 75%	80%	75%	75%
Non-emergency ambulance transport and medical and spa treatment that is not a continuation of hospital treatment.	Maximum of 60%	60%	40%	40%
Ophthalmologic devices and adult orthodontic treatment and drugs on the intermediate list.	Maximum of 50%	45%	38% / 25%**	25%

Source: (Milenkovic Kramer 2006)

Note: the 2007 levels are the same as the 1996 levels.

\* Non-occupational injuries, oral and dental conditions, orthopaedics, orthodontics and hearing and other aids and appliances

\*\* Ophthalmologic devices and adult orthodontic treatment

### *A greater role for supplementary private health insurance*

In the absence of government efforts to encourage a specific role for private health insurance, the type of market most likely to emerge is a supplementary market offering faster access to care, often through private providers. This has been the experience of many of the newer member states, where governments have introduced regulation permitting private health insurance, but markets have either not developed or play a small supplementary role.

Supplementary private health insurance is the least likely to contribute to health financing policy goals since it provides limited financial protection (usually focusing on elective surgical procedures), is largely purchased by richer and better-educated individuals (Mossialos and Thomson 2004) and may skew equity of access to health care. For example, an international study based on data from the mid 1990s found that the degree and distribution of private health insurance lowered equity in the use of doctors, although in most countries the effect was fairly small (van Doorslaer et al. 2002). However, the negative effect of private health insurance on equity in the use of specialists was very high in Ireland and the United Kingdom and evident, to a lesser extent, in Spain, Belgium, Denmark, Austria, Canada and Italy. A subsequent study based on data from 2000 found that specialist visits favoured richer groups in every country included in the analysis and were particularly pro-rich in Portugal, Finland, Ireland and Italy, all countries in which supplementary private health insurance and direct out of pocket payments play a role in providing access to specialists (van Doorslaer et al. 2006)<sup>10</sup>.

In terms of sustainability, supplementary private health insurance may have mixed implications. On the one hand, it may contribute to political sustainability if it provides richer people with access to privately provided care, particularly in health systems where waiting times are an issue and there is no possibility of opting out – for example, Ireland and the United Kingdom. On the other hand, its impact on fiscal sustainability is uncertain and depends, to a large extent, on whether or not there are clear boundaries between the public and private sectors. Where doctors can work in both sectors, supplementary cover may create incentives for providers to stimulate demand for private services, perhaps by developing waiting lists. If providers then spend disproportionate time treating private patients, public resource allocation may be distorted in favour of richer people (as seen in the previous paragraph). Conversely, allowing doctors to boost their incomes by practising privately may compensate for lower salaries in the public sector. There is very little research in this area, but some evidence from the United Kingdom suggests that the adverse effects may outweigh any benefits (Yates 1995).

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<sup>10</sup> The later analysis found that pro-rich inequity in the use of specialists had fallen in the United Kingdom. This might reflect a strong shift in the nature of demand for supplementary private health insurance. Since 1996 the share of individuals buying private cover has fallen (from 4.4% of the population in 1996 to 3.3 in 2003), while the share of employer-based groups buying private cover has risen (from 7.1% in 1996 to 7.9% in 2003). As groups tend to cover healthier individuals, it is possible that this has contributed to lower private demand for specialist care.



### ***Summary of implications of expanding private health insurance for health financing policy goals and sustainability***

Overall, there is no evidence to suggest that expanding private health insurance will contribute to any form of sustainability. Politically, encouraging private health insurance may appeal to some groups, but the negative impact of private health insurance on health financing policy goals is sufficiently evident to dissuade many policy makers – and probably most voters – from pursuing this option. **First**, the EU experience shows how policy makers struggle to ensure that private health insurance provides financial protection in substitutive and complementary markets. Private health insurance also lowers equity in financing and presents barriers to equitable access.

**Second**, where private health insurance is purchased voluntarily, private insurers may be subject to much less public scrutiny than their public counterparts. This means that they are generally less accountable and their operations are often less transparent. For example, they may not be required to publish any information beyond annual accounts. In fact, in many markets, the way in which private health insurance benefits are designed and marketed – particularly where they are highly differentiated – prevents value-for-money comparisons and undermines price competition (Office of Fair Trading 1996; Office of Fair Trading 1998; Organisation for Economic Co-operation and Development 2004). This has given rise to concerns for consumer protection voiced by independent competition authorities and consumer associations alike (Mossialos and Thomson 2004; Organisation for Economic Co-operation and Development 2004). The Internal Market framework for regulating private health insurance is based on the premise that ensuring insurer solvency is sufficient to protect consumers in most types of market. However, this is not always the case and the European Commission should take a lead in monitoring anti-competitive behaviour by insurers.

**Third**, the potential for private health insurance to reward good quality care and provide incentives for efficiency in service organisation and delivery is limited by weak purchasing power in many member states. Although there are some notable exceptions (mainly in the United Kingdom), ‘purchasing’ is generally fragmented and private insurers simply reimburse providers (often on a fee for service basis) without attempting to link payment to quality, outcomes or service volumes. In part this reflects the need to allow patients a greater degree of choice in comparison to the statutory scheme. In some markets it may also reflect the ability to generate surpluses through risk selection (‘cream skimming’) rather than through efficient operation.

Weak purchasing power, inflationary provider payment methods and low levels of administrative efficiency (due to the high transaction costs associated with fragmentation, marketing, benefit design and assessing claims) suggest that private health insurance is much more likely to jeopardise economic sustainability than publicly-financed health care. This is clearly demonstrated in the United States, where the publicly-financed scheme for older or disabled people, Medicare, has successfully provided a basic level of cover for an expensive sub-group of the population and held expenditure growth below levels experienced by private insurers (Boccuti and Moon 2003). Researchers attribute this to Medicare’s superior purchasing power – in particular its centralised system of price-setting for paying providers.

The expectation that private health insurance will ensure fiscal sustainability by relieving pressure on public budgets is likely to be unrealistic, and not just in the case of substitutive markets. In the older member states, there have been very few efforts to encourage private health insurance in recent years. In fact, tax incentives to take up private health insurance have been lowered or abolished in Austria, Greece, Ireland, Italy, Spain and the United Kingdom; Portugal is the only member state to have increased them (Mossialos and Thomson 2004). Governments in some of the newer states have hoped to create markets for private health insurance, but with the notable exception of Slovenia, market development has been extremely slow (see Table 4.4).

Gaps in public coverage alone do not seem to be sufficient to stimulate market growth in these countries, perhaps due to problems of affordability, lack of trust in insurance markets, strong beliefs in statutory provision and the prevalence of informal payments (Thomson et al. 2008 forthcoming). Inadequate regulation, limited private infrastructure and lack of insurance know-how may also play a role. Ultimately, however, policy makers cannot rely on private health insurance to secure sustainability due to the clear trade-off between expanding private health insurance and lowering equity in the health system as a whole.

### **3.1.2.5 Expanding private finance through cost sharing**

Expanding cost sharing may also seem attractive to policy makers concerned about rising levels of health care expenditure. Economic arguments in favour of cost sharing focus on the ability of user charges to lower demand for health care in the context of health insurance. Full insurance, some economists argue, leads to over use ('moral hazard'), which is inefficient (Pauly 1969). From a purely economic perspective, any reduction in the use of health care due to cost sharing enhances efficiency, regardless of the impact on health status. Other economists have questioned the relevance of this interpretation of efficiency for health policy (Evans 1984; Evans and Barer 1995). They suggest that efficiency in health care should be measured against some external criterion such as health gain – in other words, a policy should not be seen as resulting in an efficient outcome if, for example, it lowers health status.

Non-economists often argue that cost sharing will contribute to cost control. This argument is based on the assumption that rational consumers will forego the care that is of least value to them first – for example, unnecessary or ineffective care. Consequently, the argument goes, cost sharing will lower expenditure without harming health status, particularly if exemptions are in place for poorer people. However, internationally, there is no evidence that cost sharing leads to long-term cost control. For example, studies of the impact of cost sharing for prescription drugs (including reference pricing) show that prescription charges fail to achieve large or long-term reductions in total expenditure on prescription drugs and may lead to increased use of other, more expensive forms of health care such as visits to an emergency department (Tamblyn et al. 2001; Lexchin and Grootendorst 2004). Consequently, the introduction of cost sharing for some services may cause total expenditure on health to rise rather than fall.

The cost control argument is also undermined by evidence showing that most patients are not very sensitive to changes in the out of pocket price of health services in general and prescription drugs in particular. This is not surprising when we consider the pivotal role of doctors in prescribing drugs. But it has important implications for policy because it suggests that the main effect of cost sharing is to shift costs to patients.

As Table 3.4 shows, cost sharing comes in different forms and is associated with different incentives. Within the European Union it is universally applied to outpatient prescription drugs and dental care and widely applied to outpatient and inpatient care (see Table 2.5). Its impact on health financing goals will depend both on the form of cost sharing used and the extent of protection mechanisms in place (see Table 3.5). Public policy towards cost sharing in the European Union has been mixed.

Formal cost sharing was non-existent or very limited in many of the newer member states prior to independence from Soviet rule, but subsequently introduced as a means of raising revenue for health care. In recent years, several older and newer member states have extended cost sharing, among them Austria, the Czech Republic, Estonia, France, Germany, Hungary, the Netherlands and Romania.

In France and Germany changes in the cost sharing regime have been used to direct patients towards more cost-effective patterns of use – for example, co-payments are now lower for those who obtain a general practitioner’s referral to a specialist and higher for those who see a specialist without referral (Dourgnon 2005; Riesberg 2005). The aim has been to control expenditure and improve equity.

Some member states have introduced reforms to limit cost sharing or its impact. In Finland, for example, concerns about significant rises in cost sharing and the lack of any exemptions led to the introduction of an annual ceiling in 2001 (Vuorenkoski 2007 forthcoming). In 2000 the French government introduced free complementary private health insurance for people with low incomes (CMU-C) (Sandier et al. 2004). In 2003 the Austrian government abolished user charges for outpatient clinic care introduced in 2001. The charges had been opposed by the public and had also been costly to implement (Hofmarcher and Rack 2006). In the same year the Italian government abolished prescription charges, but then allowed the regions to re-introduce it on a voluntary basis and solely for the purposes of containing expenditure (Donatini et al. 2007 forthcoming). The ceiling on cost sharing per outpatient specialist referral has fallen over the years; a government attempt to increase it in 2007 was abandoned due to public outcry. In 2004 Estonia abolished cost sharing for primary care, followed by Slovakia (cost sharing for primary and inpatient care) in 2006 (Habicht et al. 2006; Verhoeven et al. 2007). In the same year the Irish government expanded eligibility for free primary care (McDaid and Wiley 2008 forthcoming). In 2007 Wales abolished prescription charges and Scotland announced its plans to abolish them by 2011. The Dutch government also abolished the no claims bonuses introduced in 2006 to reward those who did not make any claim on the statutory health insurance scheme in a given year (Busse and Schlette 2007). The bonuses were found to be non-cost-effective, which may be of interest to policy makers currently planning to introduce no claims bonuses in Germany.

**Table 3.4 Direct and indirect forms of cost sharing and their incentives**

<b>Form</b>	<b>Definition</b>	<b>Patient incentives (prescription charges)</b>
<b>Direct</b>		
Co-payment	The user pays a fixed fee (flat rate) per item or service.	The patient may decrease the volume of drugs consumed or may decrease the number of prescriptions filled while increasing the size of each prescription. The patient has no incentive to consume cheaper drugs unless co-payments are lower for these drugs.
Co-insurance	The user pays a fixed proportion of the total cost, with the insurer paying the remaining proportion.	The patient may decrease the volume of drugs consumed and may only request a larger pack size if this produces savings. The patient has an incentive to consume cheaper therapeutic medications.
Deductible	The user bears a fixed quantity of the costs, with any excess borne by the insurer; deductibles can apply to specific cases or to a period of time.	When patients are not close to the deductible level, they may decrease the volume of drugs consumed and/or switch to cheaper therapeutic alternatives. As they near the deductible limit, they have an incentive to consume more drugs and more expensive drugs to push themselves over the deductible.
<b>Indirect</b>		
Reference pricing	A reference price refers to the maximum price for a group of equal or similar drugs that the insurer will reimburse the user. If the user chooses a drug that costs more than the reference price, he or she must pay the difference.	The patient is likely to decrease his or her consumption of drugs that are priced above the reference price and switch to alternative drugs priced at or below the reference price.
Balance billing	The user pays the difference between the maximum reimbursement rate and the fee charged by the provider (where providers are allowed to charge above the official reimbursement rate).	
<b>Differential charges</b>		The patient has an incentive to switch from brand-name to generic drugs and from non-preferred to preferred drugs.
Multi-tier formularies	Typically, these contain two or three tiers. The first tier consists of generic drugs, which have the lowest co-payment. The second and third tiers generally comprise brand-name drugs, which can be split into preferred and non-preferred drugs (where non-preferred drugs are the most expensive in the tier). Multi-tier formularies are most commonly used in the United States.	

*Source: adapted from (Gemmill et al. 2007 forthcoming)*

**Table 3.5 Cost sharing protection mechanisms**

<b>Examples</b>
Reduced rates
Exemptions
Discounts for pre-paid charges
Annual caps on expenditure (out-of-pocket maximum)
Tax subsidies on expenditure
Complementary private health insurance covering cost sharing
Substitution of private for public prescriptions by doctors
Substitution of generic for brand drugs by doctors and/or pharmacists

*Source: (Thomson and Mossialos 2004)*

Between 1996 and 2005 out of pocket spending rose, as a proportion of total expenditure on health, in 15 member states. The rise was by more than five percentage points in Belgium, Bulgaria, Estonia, Greece, Hungary, Latvia, Lithuania and Slovakia. In some member states the rise may be attributed to greater reliance on cost sharing, in others it may have been driven by an increase in direct and/or informal payments. This is a worrying trend, particularly when we consider the negative impact of cost sharing on financial protection and equity in financing and accessing health care.

Cost sharing and informal payments undermine the degree of financial protection afforded to individuals by limiting the depth of any publicly-financed coverage. The absence of financial protection can be demonstrated by measuring the proportion of households who report ‘catastrophic’ levels of health expenditure in a given period. The threshold for catastrophic expenditure varies across studies from 5% to 40% of household income (Berki 1986; Wyszewianski 1986; Xu et al. 2003). In Table 3.6 it is set at the relatively high threshold of 40% of household income for a range of member states and the United States in the late 1990s. In general, levels of catastrophic expenditure are lower in most EU member states than in the United States, but high in a handful of member states. The countries shown in italics are those in which out of pocket payments have risen since 1996 and in which catastrophic levels of spending on health are therefore likely to have increased since the current data were compiled. This has been the case in Estonia, for example; by 2002 the proportion of households facing catastrophic spending levels had increased by a factor of five from 0.31% to 1.6% (Habicht et al. 2006). The zero levels of catastrophic health expenditure seen in the Czech Republic may reflect relatively low levels of cost sharing, while the zero levels shown for Slovakia probably reflect the fact that they are based on older data (from 1993) that pre-date the introduction of cost sharing.

In terms of equity in finance, international analysis finds out of pocket payments (including cost sharing) to be the most regressive form of finance for health care, although they are less regressive in countries where people with low incomes are covered by the statutory scheme and are exempt from cost sharing on the grounds of income, age or health status (Wagstaff et al. 1992; Wagstaff et al. 1999). There is also strong international evidence of their negative impact on equity of access to health care, even where efforts are made to protect the incomes of poorer people (Manning et al. 1987; Rice and Morrison 1994; Lexchin and Grootendorst 2004).

**Table 3.6 Percentage of households with catastrophic health expenditure due to out of pocket payments, selected countries**

Country	% of households with catastrophic expenditure	Lower uncertainty interval (80%)	Upper uncertainty interval (80%)	Year
<b>Czech Republic</b>	0.00	0.00	0.00	1999
<b>Slovakia</b>	0.00	0.00	0.00	1993
France	0.00	0.00	0.02	1995
<b>Germany</b>	0.03	0.02	0.04	1993
<b>United Kingdom</b>	0.04	0.01	0.07	1999/2000
Slovenia	0.06	0.01	0.12	1997
Denmark	0.07	0.01	0.14	1997
Romania	0.09	0.01	0.17	1994
<b>Belgium</b>	0.09	0.01	0.18	1997/98
<b>Sweden</b>	0.18	0.06	0.42	1996
<b>Hungary</b>	0.20	0.11	0.29	1993
<b>Estonia</b>	0.31	0.13	0.49	1995
Finland	0.44	0.25	0.63	1998
<b>Spain</b>	0.48	0.31	0.64	1996
United States	0.55	0.42	0.69	1997
<b>Lithuania</b>	1.34	1.15	1.54	1999
<b>Bulgaria</b>	2.00	1.77	2.23	2000
<b>Greece</b>	2.17	1.93	2.40	1998
<b>Portugal</b>	2.71	2.42	3.01	1994/95
<b>Latvia</b>	2.75	2.47	3.04	1997/98

Source: (Xu et al. 2003)

Note: catastrophic health expenditure is defined as greater than or equal to 40% of a household's capacity to pay. Household capacity to pay is defined as effective income remaining after basic subsistence needs have been met.

Further analysis of Estonian data on catastrophic spending shows that out of pocket payments by those most at risk of financial hardship were predominantly spent on medicines and that poor households with older members were most vulnerable (Habicht et al. 2006). The findings from Estonia suggest a number of policy implications. First, even though all older people are automatically covered by the statutory health insurance scheme, that coverage does not provide them with sufficient financial protection due to the existence of cost sharing for prescription drugs and the absence of exemptions specifically targeted at this group. Second, as public expenditure on health has fallen, the burden of out of pocket payments has increased and fallen most heavily on poorer households. Third, poorer older people require greater protection against the costs of outpatient prescription drugs, particularly those suffering from chronic conditions. Consequently, policy makers should focus on protecting ill, older people and poor people from the impact of cost sharing and other forms of out of pocket payment.

Although the negative effects of out of pocket payments on financial protection and equity are evident and there is no evidence that they lead to sustained cost control, some still argue that cost sharing can play a role in financing health care – perhaps in creating incentives for more cost-effective use of health services (through differential charges, sometimes known as ‘value-based insurance’) or to counter informal payments. It is too early to say whether the French and German use of cost sharing to encourage GP gatekeeping and moderate demand for specialist care will achieve its dual goals of containing costs and enhancing equity.

However, the Danish experience of this form of differential charging suggests that it may exacerbate inequalities in access to specialists (Olivarius et al. 1990; Olivarius et al. 1994). Other forms of differential charging such as those intended to encourage the use of generic or highly effective drugs and discourage the use of brand-name or less effective drugs may be welcomed for their potential to enhance value for money (so long as they do not affect health status), but evidence from the United States shows that their potential to control costs is limited (Grabowski and Vernon 1992; Hong and Shepherd 1996; Mortimer 1997; Esposito 2002).

Cost sharing has been suggested as a means of countering regressive informal payments, but the central and eastern newer member states have all introduced cost sharing and informal payments continue to exist alongside formal user charges with little evidence of decline (Balabanova and McKee 2002; Allin et al. 2006). Formalising informal payments is only likely to work where governments are able to set clear priorities for public expenditure on health and effectively communicate these priorities to the public, reduce excess capacity, establish decent levels of remuneration for providers and link provider payment to performance and set up information systems to monitor provider payment and out of pocket payments. Of these, focusing on better pay for providers may be the most effective short-term strategy (Lewis 2002), combined, in the longer-term with a focus on strategic purchasing. At the same time, policy makers should note the potential for cost sharing to add to transaction costs (particularly if it involves means testing) and to create new incentives for fraud. Austria and the Netherlands have both abolished some user charges due to the heavy implementation costs they incurred.

As with private health insurance, the evidence suggests that cost sharing is unlikely to contribute to any form of sustainability, not least because of its strong potential to undermine financial protection, equity and health status. Studies showing how the introduction of prescription charges can lead to increased use of more expensive health services and worse health outcomes suggest negative implications for economic and fiscal sustainability. Increased cost sharing may also be associated with political costs, even where efforts are made to exempt high users and poorer people. Such exemptions eventually place a greater burden on the working population, which already makes a substantial contribution to financing health care.

### **3.2. Addressing fragmented pooling**

Efforts to address fragmentation in pooling can potentially lead to substantial equity and efficiency gains. As outlined in the previous section, centralising collection has had the effect of creating a national pool in Germany and Romania and has made pooling less fragmented in Denmark. In other countries, reforms have deliberately or inadvertently lowered the number of pools. For example, in both Estonia (2001) and Poland (2003) 17 regional funds were merged to create a national fund. In the Estonian case, the number of regional branches of the national fund was also lowered from 7 to 4 (2003). In 2003 Lithuania halved the number of regional funds (from 10 to 5). In countries where health insurance funds continue to collect contributions, competition has led to mergers, lowering the number of pools from 27 to 9 in the Czech Republic and from over 1,000 in Germany in 1993 to just under 300 in 2004 (Busse and Riesberg 2004).

Addressing fragmented pooling is likely to contribute significantly to sustainability because a lower number of pools means less need for risk adjustment and may also weaken resistance to risk adjustment. Additionally, a lower number of pools can enhance administrative efficiency and, by strengthening the power of purchasers in relation to providers, may lead to better purchasing. The Dutch reforms of 2006 also created a national pool; the implications of these reforms will be discussed in the following section.

### **3.3. Expanding entitlement to public coverage and defining benefits**

#### **3.3.1 Expanding entitlement**

In some member states, the depth of public coverage has been affected by increases in private finance – either through greater reliance on private health insurance, as in Slovenia, and/or through higher levels of out of pocket payments. In contrast, other member states have taken sometimes quite radical steps to expand entitlement to publicly-financed health care, among them Ireland, France, Belgium and the Netherlands. The following paragraphs discuss the impact of each of these reforms in turn.

By 1991 the Irish government had extended free access to hospital care to the whole population and in 2006 it introduced universal entitlement to primary care, subject to capped cost sharing for richer households (McDaid and Wiley 2008 forthcoming). The reforms have led to two important changes. First, they have improved financial protection, particularly for primary care, which (unlike hospital care) was not well covered by private health insurance.

Second, they have changed the role played by private health insurance. Prior to 1991, around 15% of the population relied on substitutive private health insurance for access to inpatient care, which was only free for those who held a ‘medical card’. Since the 1991 and 2006 reforms have essentially established universal coverage for all health services, private health insurance no longer plays a substitutive role. Instead, it plays a combined supplementary and complementary role, providing faster access to inpatient care and access to private hospitals, plus some cover of statutory cost sharing for inpatient and primary care. Because the market initially played a substitutive role it was (and still is) heavily regulated by the government. Insurers must offer open enrolment, community rated premiums, lifetime cover and minimum benefits and are subject to a risk equalisation scheme (as in Slovenia). The change in role may have significant legal implications. The current regulatory framework has been challenged in the Irish High Court and in the European Court of Justice (ECJ) on the grounds that financial transfers under the risk equalisation scheme would constitute a form of state aid to the dominant insurer Vhi Healthcare, which has quasi-public status (Thomson and Mossialos 2007). The European Commission and the Irish High Court have rejected this argument. The European court case involved broader issues, but the ECJ has not yet issued its ruling. More recently, some aspects of market structure and conduct have been challenged by the European Commission (European Commission 2007). Until the ECJ rules, it will not be clear whether or not the current regulations comply with Internal Market legislation.

In 2000 the French government introduced universal coverage by changing the basis of entitlement from employment to citizenship and by entitling those with incomes below a certain level (1.8% of the population) to free coverage (Sandier et al. 2004; Durand-Zaleski 2007 forthcoming). The reform has fundamentally changed the nature of entitlement to health care in France and has extended the right to statutory financial protection to people who may previously have relied on social assistance for access to health care.

From 2008, the Belgian government will extend full statutory coverage to all self-employed people. Prior to this, self-employed people had been excluded from statutory cover of so-called ‘minor risks’ such as ambulatory care, outpatient prescription drugs, dental care, minor surgery and home care. To finance this, the contribution rate for self-employed people will be increased (currently 19.6% of income versus 37.8% of earnings for employees) (Corens 2007). The Belgian government considered but rejected the option of obliging the self-employed to purchase substitutive private health insurance. This reform creates a single pool for all health risks for the first time and the increased contribution rate for self-employed people may generate additional funds for and enhance equity in financing health care.



The Dutch reform of 2006 has resulted in four key changes. First, it has created universal coverage by abolishing the traditional dividing line between statutory cover for 63% of the population and substitutive private cover for the remaining 37%. For the first time, the whole population is covered by a single health insurance scheme. Second, although the scheme is regarded as statutory, in the sense that it is compulsory, it is operated by private insurers under private rather than social law. Third, the system of income-related contribution plus flat-rate premium remains in place, but the balance between the two elements has shifted: the total income-related contribution rate has fallen from 8.0% to 6.5% and the flat-rate premium has risen from €239-€455 in 2005 to an average of €1,050 in 2006 (Maarse and Bartholomé 2006; World Health Organization 2007). The flat-rate premium is capped, via a tax credit, at 3% of income (World Health Organization 2007).

Fourth, it introduced a no claims bonus (a rebate of up to €255) for those who do not make a claim in the preceding year – an indirect form of cost sharing, as those who do use health services forfeit this rebate (Ministry of Health Welfare and Sport 2007). From 2008, however, the no claims bonus will be replaced by a compulsory deductible of €150 a year – in other words, anyone using health services will have to pay up to €150 a year before the statutory scheme covers their costs.

In the Dutch context, the introduction of universal coverage is most likely to benefit older and chronically ill people and families with children who previously relied on substitutive private health insurance. Young and healthy single people and civil servants may now contribute more, financially, than previously. For the health system *as a whole*, the creation of a single pool is likely to generate additional revenue for the statutory scheme<sup>(11)</sup>, improve financial protection, increase equity in finance<sup>(12)</sup> and enhance the degree of pro-poor redistribution.

However, the reform is likely to have lowered equity in finance among those who were already covered by the statutory scheme and may present financial barriers to access due to the shift in the balance of contribution mechanisms. This is because the income-related component of the total contribution or premium has gone down, while the flat-rate component has gone up – and may increase substantially in future. The average rate of €1050 in 2006 was set below cost by insurers' wanting to attract new members. In 2007 it rose by 9% to €1,142 (Busse and Schlette 2007). Greater reliance on non-income related premiums lowers equity in finance, while greater reliance on cost sharing through deductibles lowers equity in finance and financial protection. It may also lower equity of access to health care.

The government has put in place mechanisms to dampen these negative effects – for example, the income-related tax credit for the flat-rate premium and exemptions from the deductible for people suffering from long-term chronic illnesses. Nevertheless, concerns remain about whether these steps are sufficient to ensure equitable access to health care. There is also concern regarding the position of those who default on payment of the flat-rate premium. Insurers are permitted to terminate the contract of defaulters and some suggest that 500,000 to 800,000 people could become uninsured (Busse and Schlette 2007).

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<sup>11</sup> Although the scheme now covers more people, the risk profile of new members is probably better than the risk profile of existing members, leading to an improvement in the average risk faced by the scheme.

<sup>12</sup> The increase in progressivity due to the influx of contributions from richer households will, however, be attenuated by the contribution ceiling set at around €30,000 per year.

### 3.3.2 Defining benefits

In the last ten years there has been a trend towards defining benefits and towards increasing the explicitness of the benefits package. This trend has sometimes led to a lower level of cover. For example, dental care has often been excluded from public reimbursement, at least for adults, as in Estonia in 2004. At the same time, some member states have expanded coverage of services such as long-term care (among them, Spain and Scotland).

An interesting issue is the extent to which policy makers attempt to define benefits or levels of reimbursement in a way that is systematic (based on explicit criteria) rather than simply excluding services that may seem less necessary or less worthy of public subsidy. One way of doing this is to engage in health technology assessment (HTA). HTA is a multi-disciplinary activity, 'a form of policy research that systematically examines the short- and long-term consequences, in terms of health and resource use, of the application of a health technology, a set of related technologies or a technology related issue' (Henshall and et al 1997).

The criteria typically considered by HTA include safety, efficacy, cost and cost-effectiveness as well as social, organisational, legal and ethical implications (Velasco-Garrido and Busse 2005). HTA can play a key role in ensuring that health systems achieve value for money in spending on health care, particularly if its results are considered in decision-making processes.

Since the 1980s, the following member states have set up agencies to carry out HTA: France (1982), Sweden (1984), the Netherlands (1987), Austria (1990), Spain (1991), Finland (1995), Latvia (1995), the United Kingdom (1996), Denmark (1997), Germany (1998), Hungary (2001) and Belgium (2003) (Velasco-Garrido and Busse 2005). Recently, there has been a move towards standardising approaches to HTA in Europe and EU health ministers have acknowledged that HTA is an area of importance for EU-wide co-operation (Velasco-Garrido and Busse 2005).

Most national HTA agencies play an advisory or regulatory role in the decision-making process. They may make reimbursement or pricing recommendations, they may be responsible for listing and pricing drugs, medical devices and other services or they may simply co-ordinate assessments and produce and disseminate reports and guidelines (Zentner et al. 2005). Responsibilities vary across member states and tend to reflect national priorities such as cost control or improving access (Sorenson et al. 2007). Just because a member state does not have an HTA programme does not mean it does not engage in HTA. Estonia, for example, uses HTA to decide which services should be added to the benefits package (Jesse et al. 2004). In 2002 the rules were clarified and four explicit criteria set out: medical efficacy, cost-effectiveness, appropriateness and compliance with national health policy and the availability of financial resources (Jesse et al. 2004). In practice, however, the last criterion has usually been the most important factor and the lack of capacity and skills in HTA has been cited as an obstacle to further development of the system. In the absence of HTA programmes, some member states make use of assessments from other member states, but adapting these to a different country context may present technical challenges.

Economic evaluation is usually the most controversial aspect of HTA. Several member states use cost-effectiveness analysis to inform decisions about benefits and reimbursement. In general, HTA and cost-effectiveness analysis are most often used in decisions about adding new services to the benefits package and most commonly applied to pharmaceutical products. Very few member states use HTA systematically to identify services that should be excluded from the benefits package (de-listing or disinvestment). Currently, the only member states that systematically use cost-effectiveness analysis to inform disinvestment decisions are Sweden and Italy (Ettelt et al. 2007).

Sweden established a programme to review the cost-effectiveness of existing pharmaceutical benefits in 2002 and Italy set up a scheme to review the cost-effectiveness of the exiting benefits package in 2007. The Netherlands and the United Kingdom are currently considering something similar. Despite the absence of systematic disinvestment programmes, several member states have succeeded in lowering the use of ineffective services, either through exclusion from the benefits package or through practice guidelines recommending and discouraging specific courses of action for treating various conditions.

Greater use of HTA (including economic evaluation), both in reviewing existing benefits and in deciding which new services should be added to the benefits package, would enhance sustainability in three ways. It would contribute to economic sustainability by ensuring that the health system as a whole did not pay for unsafe or ineffective services or services that involve greater costs than benefits. It would contribute to fiscal sustainability by ensuring that public resources were not spent on non-cost-effective services. It might contribute to political sustainability by moving decisions about rationing away from individual physicians towards politicians or technocrats and by demonstrating a commitment to value for money in public resource allocation.

However, an explicitly-defined and wholly cost-effective benefits package is far from being achieved in any member state. In the medium term it may be an admirable but unrealistic policy goal. The use of HTA in practice is often restricted by resource constraints and complicated by ethical, technological and political challenges (Ettelt et al. 2007). Because decisions about cost-effectiveness involve both evidence and values, programmes that attempt to balance population and individual needs require substantial political support. At the same time they must be seen to be both accountable and independent from government, both transparent and free from capture by interest groups. Barriers to more widespread and effective use of HTA to ensure value for money therefore include lack of resources, lack of technical expertise, lack of transparency in the criteria for inclusion or exclusion of services and lack of political will to enforce decisions based on HTA.

### **3.4. From passive reimbursement to strategic purchasing of health services**

The way in which services are purchased is central to ensuring efficiency in service organisation and delivery and quality of care. It may also affect equity of access to health care and administrative efficiency and is likely to have a major effect on ability to control costs. Reforms in many member states have attempted to move from passive reimbursement of providers to active or strategic purchasing. Strategic purchasing ‘aims to increase health system performance through effective allocation of financial resources to providers, which involves three sets of explicit decisions: which interventions should be purchased in response to population needs and wishes, taking into account national health priorities and evidence on cost-effectiveness (see the section on defining benefits, above); how they should be purchased, including contractual mechanisms and payment systems; and from whom, in light of relative levels of quality and efficiency of providers’ (Figueras et al. 2005). The reforms we review in the following paragraphs include: the introduction of a purchaser-provider split, risk-adjusted or needs-based resource allocation, competition among purchasers and changes in methods of paying providers.

#### **3.4.1 Separating purchasing from provision**

In member states predominantly financed through taxation, the purchasing function was historically integrated in the sense that the state owned or employed most providers and simply paid them salaries (individuals) or through budgets (institutions).

Following on from the creation of the 'internal market' in the UK NHS in the 1991, most of these member states introduced similar purchaser-provider splits (the exceptions are Cyprus, Denmark, Finland, Ireland and Malta). In the newer member states this change took place across the board, while in the more decentralised health systems of Italy, Spain and Sweden, purchaser-provider splits were introduced in some but not all regions. The introduction of a purchaser-provider split usually involved the creation of new purchasing organisations: health insurance funds in the newer member states and territorial entities in the older member states. The general aim of the split was to improve efficiency by raising productivity and giving purchasers levers to reward quality. In the newer member states the split was part of a broader project to privatise provision.

The extent to which purchaser-provider splits have improved purchasing is unclear. A key problem in every country has been the lack of expertise or skills in purchasing. None of the new organisations had prior experience of purchasing and all were forced to develop skills on the ground with little help from a limited evidence base. Many purchasers have found it difficult to exert sufficient control over providers and/or have lacked the appropriate tools to do so – for example, the ability to contract selectively rather than being forced to contract collectively all providers in an area.

Fifteen years after the introduction of GP fundholding and seven years after the creation of Primary Care Trusts (PCTs) in England, the purchasing function is still considered to be weak (Lewis et al. 2007), with the contracting process sometimes dominated by financial issues rather than focusing on quality (Healthcare Commission 2005). Not surprisingly, separating purchasing from provision has also increased transaction costs. In addition, PCTs have few levers to control referral to specialist care and, therefore, the volume (and cost) of services provided. The recent shift towards purchasing by general practitioners ('practice-based commissioning') is intended to lower referrals, enhance responsiveness and patient choice and control costs but may actually exacerbate rather than solve some of these purchasing problems faced by PCTs (Maynard and Street 2006). It may also conflict with the UK government's current focus on expanding patient choice of provider.

In member states such as Spain the purchaser-provider split was not fully achieved due to limited implementation and more recently there have been signs of changes in the opposite direction. For example, the regional health authority in Catalonia now directly intervenes in the operational management of health facilities and both public and private providers are more closely involved in regional health planning activities (Durán et al. 2006). In future, co-operation in planning and incentives to provide integrated care may become the norm, particularly for the benefit of patients with chronic illnesses.

### **3.4.2 Strategic resource allocation**

An important means of improving health, enhancing equity of access to health care and securing value for money is to ensure that resource allocation is based on need rather than other factors such as ability to generate revenue or ability to pay. Strategic or needs-based allocation ensures that money is spent where it is needed (and on what is needed) rather than simply where it is generated or accumulated. The trend towards needs-based allocation has taken place in two different contexts. First, in countries where health insurance funds or local governments are responsible for collecting funds or raising taxes for health care, centrally-administered processes ensure some redistribution of resources among funds or regions. Second, where central taxes are allocated to local government or territorial purchasers, central resource allocation can be adjusted to account for variations in population size and need.

In the former context, the move towards needs-based allocation has been hindered by the fact that many health insurance funds do not cover clearly-defined geographical populations, which would facilitate needs assessment, but populations based on occupation. It is compounded by the lack of integration of public health skills in the purchasing function (Figueras et al. 2005). Also, partly due to difficulty in obtaining relevant information and partly because health insurance funds may resent having to redistribute some of their resources, the number of risk factors involved and the proportion of resources subject to re-allocation may be limited (van de Ven et al. 2007). In Belgium only 30% of a fund's resources are re-allocated (but the list of risk factors is long), while in the Czech Republic re-allocation is based solely on the proportion of older people and in Slovakia solely on age and gender. A recent overview of risk adjustment in western European health systems judged the quality of the risk adjustment mechanism to be moderate in Germany, moderate/fair in Belgium and fair in the Netherlands (van de Ven et al. 2007). By the same criteria the quality of the risk adjustment mechanisms in the Czech Republic and Slovakia would be low.

Geographical resource allocation intended to secure equity of access to health care is probably most sophisticated in the United Kingdom where it has been in place since the late 1970s and reviewed and updated several times (Department of Health 2005). In addition to population age and sex structure, the range of socio-economic, mortality and morbidity variables used to measure need for acute and maternity services is shown in Table 3.6.

In 1996 the Swedish government introduced a resource allocation formula to compensate counties and municipalities with lower tax-raising potential (Diderichsen et al. 1997; Glenngård et al. 2005). The redistribution brought about by the formula (from two counties (Stockholm and Uppsala) to the other 19, and from a small number of municipalities) has led to tension between local and national government and among local governments (Glenngård et al. 2005).

The resource allocation formula used in other member states is often much more rudimentary, but in many cases has improved in recent years (Rice and Smith 2002). In Spain, for example, allocations were based entirely on historical precedent and political negotiation, but have now moved towards a formula-based mechanism (Durán et al. 2006). However, in member states where local taxes finance health care, strategic resource allocation formulas do not always succeed in countering regional inequalities in income and health status (Donatini et al. 2007 forthcoming).

The shift from allocation to purchasers based on historical precedent, political negotiation and/or simple capitation to risk-adjusted capitation has considerable potential to enhance equity of access to health care and value for money, particularly if poorer health insurance funds or regions are now more adequately compensated for health needs. While many member states have attempted to move towards strategic resource allocation, there is more that can be done. Some barriers to improving risk adjustment mechanisms and resource allocation formulas are technical: determining risk factors, obtaining relevant information, accounting for quality and services such as mental health care (van de Ven et al. 2007). Others are institutional, political and legal: resistance to redistribution by local governments, strong opposition to increasing the financial risk borne by health insurance funds, the widespread (but inaccurate) perception that risk adjustment penalises efficient health insurance funds and the potential for legal challenges due to Internal Market legislation (for example, two Dutch insurers have taken a case challenging the legality of risk adjustment to the European Court of Justice) (European Court of Justice 2006; Thomson and Mossialos 2007).

### 3.4.3 Competition among purchasers

Introducing (or extending) competition among purchasers in the Czech Republic, Germany, the Netherlands and Slovakia in the early and mid 1990s aimed to create incentives for improved purchasing and greater efficiency and quality in service delivery<sup>13</sup>. In Germany it also aimed to enhance equity by encouraging convergence in contribution rates (Busse 2001).

**Table 3.6 Acute and maternity need variables in the UK resource allocation formula, 2006-2008**

Need variables	Coefficients
Standardised mortality ratio under 75 years	0.070
Proportion of low birth weight babies born	0.013
Standardised birth ratio	0.108
Education	0.008
Proportion of people age 75+ living alone	0.026
Income	0.103
Nervous system morbidity index	0.225
Circulatory morbidity index	0.548
Musculoskeletal morbidity index	0.375

Source: (Department of Health 2005)

In many respects the reforms have not achieved their aims. Contribution rates initially converged in Germany, but over time they began to diverge once more (Gresz et al. 2002; Schut et al. 2003). Evidence from Germany and the Netherlands suggests that younger, healthier and better-educated people are more likely to change fund than others (Zok 1999; Gresz et al. 2002). In part, this may be due to risk selection.

Competition between health insurance funds creates strong incentives for risk selection (where contributions are income-related or community rated). Although explicit risk selection is illegal, it can take place covertly through activities such as internet-only marketing and enrolment, inaccessibility of offices and selective targeting of reminders of a person's right to change fund (Buchner and Wasem 2003). Risk adjustment mechanisms are intended to remove funds' incentives to select risks by compensating them for the level of risk they incur. But as noted above, researchers have recently concluded that even though the quality of the risk adjustment mechanism has improved in Belgium, Germany and the Netherlands, these improvements have not been sufficient to prevent risk selection, which has increased over time (van de Ven et al. 2007).

The reforms' impact on purchasing is also mixed. Although the threat of exit has encouraged funds to raise the quality of their administrative services in Germany and the Netherlands, it has not increased quality of care, either because funds lack the tools necessary for strategic purchasing (for example, selective contracting is not permitted in Germany), or because they do not make use of them (Gresz et al. 2002). In some cases they may have aimed to lower costs through risk selection and collusion instead. Large falls in the number of funds in Germany (from over 1,000 in 1993 to just under 300 in 2004), the Netherlands (from over 100 in 1990 to 22 in 2006) and the Czech Republic (from 27 in 1993 to 9 in 2007) (Busse and Riesberg 2004) have limited consumer choice to some extent, but may have improved purchasing power.

<sup>13</sup> Competition among health insurance funds is a long-standing feature of the Belgian health system.

In the Netherlands all the funds belong to one of seven conglomerates and recent mergers mean that two of these now cover over 50% of the population (World Health Organization 2007). Also, the abolition of price competition in Germany with effect from 2009 (when a national contribution rate will be set centrally) may encourage funds to compete on quality.

Overall, the higher transaction costs incurred by individuals and the health system due to a competitive insurance market, coupled with the negative effects on equity (due to risk selection), do not yet seem to be outweighed by improved purchasing. Policy makers should focus on addressing the weaknesses in risk adjustment, as without good risk adjustment the disadvantages of fund competition may outweigh the advantages (van de Ven et al. 2007). Unfortunately, the equity-efficiency trade-off may not be easily addressed as the same factors that encourage or facilitate strategic purchasing (high levels of competition, greater financial risk borne by funds, selective contracting, integration with providers) can also encourage or facilitate risk selection.

#### **3.4.4 Reform of provider payment**

The way in which providers are paid can have a major impact on efficiency in service delivery and quality of care. Different forms of provider payment are associated with different incentives (Aas 1995; Barnum et al. 1995; Chaix-Couturier et al. 2000). Prospective payment in the form of budgets (including salaries) assists in financial planning and provides strong incentives for providers to control costs. Under fixed budgets, providers also face substantial financial risk. Consequently, prospective payment may be associated with incentives to under-supply treatment or shift costs to other providers. Retrospective reimbursement provides incentives to increase activity and generates useful information on the use of health services. However, assuming the level of payment is sufficient to cover costs, providers face no financial risk. Retrospective reimbursement may therefore be associated with incentives to over treat and poor cost control. In general, EU health systems have experienced an initial shift towards prospective payment. But the incentives created by prospective payment have sometimes been too powerful, leading to the re-introduction of retrospective reimbursement to increase activity and the use of other tools to ensure quality.

##### **3.4.4.1 Ambulatory care**

In western European health systems mainly financed through social insurance contributions, ambulatory care providers (those working outside hospitals) have traditionally been paid on a fee for service basis, with rates negotiated collectively by payer and provider associations. With the exception of Germany, reforms in these countries have been limited. During the 1980s the German government introduced a system of fixed budgets for the ambulatory sector, in which the fee for each service is adjusted downwards as activity levels increase. The reform served to increase activity, particularly in the area of diagnostic tests, but had little effect on cost control and lowered innovation (Schwartz and Busse 1996). From 2007, payment of ambulatory care will be linked to levels of patient morbidity (Busse and Riesberg 2004).

##### **3.4.4.2 Primary care**

In other member states, reform of primary care provider payment has taken place in two stages: first, a move away from payment by salary towards fee for service payment (some of the newer member states) or payment based on capitation; and second, the extension or introduction of fee for service payments in addition to capitation to stimulate the provision of preventive care and (in some more recent cases) reward good performance. Some of the member states that initially moved from salary to fee for service (for example, the Czech Republic), have subsequently opted for capitation (Rokosová et al. 2005).

Consequently, capitation is now the main method of paying primary care providers in most member states (see Table 4.4) and in many it is supplemented by fee for service payments. However, reforms have not always gone beyond the first stage. For example, the Lithuanian government has attempted to supplement age-weighted capitation with fee for service to encourage preventive care and counter the high rate of referrals from primary to secondary care, but its proposals have yet to be implemented, partly due to concerns about cost increases and partly due to lack of political will to push through reforms (Cerniauskas et al. 2000).

Purchasers in a few member states have made more concerted efforts to link pay to performance – not just in terms of structure and process, but also in terms of outcomes. A notable example is the Quality and Outcomes Framework established in England in 2004 as part of a new contract between the government and general practitioners. Implementation of the framework has been controversial as many of the performance targets were met by most general practitioners in the first year, leading to fears that the increase in general practitioners' income would be substantially higher than the projected 30% (White 2006). Concerns have also been raised about: the impact of the framework on the provision of services not associated with financial incentives, incentives for GPs to discourage enrolment of patients who adversely affect the performance measures, GPs' reluctance to set up practice in a disadvantaged area and the risk of misrepresentation of patient experiences (Smith and York 2004).

#### **3.4.4.3 Inpatient care**

Payment of hospitals has moved from per diem or line item budgets to global budgets and then again to case-based payment (mainly through variants of diagnosis-related groups; DRGs). Table 2.4 shows that case-based payment is now almost universally used across both older and newer member states. The goals underlying the introduction of DRGs in the European Union vary among member states. Some aim to lower waiting times, increase activity, stimulate provider competition and facilitate patient choice of hospital, while others aim to control costs, improve transparency in hospital financing and harmonise payment systems for public and private providers (Ettelt et al. 2006).

Hungary was one of the first member states to introduce DRGs, beginning with a pilot in 1987 and country-wide implementation in 1993 (Schneider 2007). The length and evolution of its DRG system may serve as a guide to other member states. In the last decade it has revised its system several times to address growth in readmission rates and upcoding ('DRG creep'). More recently, it has also re-introduced volume control through budget caps, facilitating substantial decreases in average lengths of stay and inpatient spending on acute care (Schneider 2007).

Research into the impact of DRGs in the European Union confirms the Hungarian experience. It suggests that DRGs may lead to increased levels of activity in the short term (Dismuke and Sena 1999; Louis et al. 1999; Mikkola et al. 2001), but also result in cost shifting (Jonsson 1996), cream skimming (Bibbee and Padrinin 2006) and up-coding (Charpentier and Samuelson 1999; Louis et al. 1999; Rogers et al. 2005; Bibbee and Padrinin 2006). In some member states, the growth in readmission rates following the introduction of case-based payment has led researchers to suggest that quality has been compromised (Louis et al. 1999; Kjerstad 2003). An international study also found that the adoption of DRGs led to slower quality gains with regard to mortality from surgical and medical errors (Forgione et al 2004). Overall, a recent review has concluded that the advantages of DRGs in terms of generating valuable information on costs and case mix and encouraging cost control per diagnosis may be undermined by incentives for cream skimming, up coding, cost shifting and quality skimping (Busse et al. 2006).



## 4. CONCLUSIONS AND POLICY RECOMMENDATIONS

This section draws on the information presented in Section 2 and Section 3 to address the broad questions of whether sustainability can be secured without compromising (and if possible, at the same time enhancing) health system values and policy goals and, if so, what sort of health financing system is best placed to secure it. It sets out a range of health financing policy options available for addressing sustainability and makes some recommendations for policy makers.

### 4.1. Which reforms are most likely to enhance sustainability?

Many who draw attention to the gap between what we currently spend on health care and other forms of social security and what we may need to spend in future conclude that the only way of bridging this gap is to increase reliance on private finance (Bramley-Harker et al. 2006). They may acknowledge the shortcomings of private finance, but will argue that increasing private finance is inevitable if health systems are to be sustained in the face of future cost pressures.

We question the validity of this approach. In our view, two conditions are essential for securing the economic and fiscal sustainability of a health system. **First**, the health system must generate sufficient revenue to tackle its burden of disease and improve population health. This is both an economic and a fiscal concern. If a health system cannot raise enough revenue to improve health it may fail in its *raison d'être* as well as in its (secondary) role of providing the economy with a healthy workforce. **Second**, the health system should ensure that it provides value for money: the benefits of health care must outweigh the costs to society. Again, this is both an economic and a fiscal concern. Resources spent on health care cannot be spent on other goods and services – there is an ‘opportunity cost’ – so higher spending on health care should bring tangible benefits. Where it is difficult to generate more public funds for health care, policy makers will need to find ways to spend existing resources appropriately. We argue that equity is central to achieving both conditions; if spending on health care is to maximise health gain, policy makers should ensure that health resources match health needs (rather than ability to pay for health care).

In Section 1 we suggested three potential responses intended to secure fiscal sustainability: make the most of existing resources by ensuring that expenditure achieves value for money; increase the level of publicly-generated resources for health care; or lessen the health system’s obligations until they can be met within the current budget constraint. Our analysis highlights the importance of paying attention to the design of health care financing. It shows how the way in which we finance health care has a strong influence on the health system’s ability to secure financial sustainability. Importantly, while the first two responses also contribute to securing economic sustainability, the third response is likely to undermine it. Here, we summarise some of the key points raised in Section 3 and discuss how different reforms might contribute to economic and fiscal sustainability. We then consider what sort of health financing system is best placed to address sustainability concerns.

Section 3 analysed health financing-related reforms in the following areas:

- generating more revenue by maximising the collection of publicly-generated funds – for example, by lifting the ceiling on social insurance contributions and/or by centralising responsibility for the collection of taxes and social insurance contributions
- changing the mix of contribution mechanisms – for example, by increasing reliance on social insurance contributions, central tax or local tax or by expanding private finance through private health insurance and cost sharing
- addressing fragmented pooling by lowering the number of pools and, in some cases, creating a single, national pool

- restricting or expanding entitlement to public coverage and/or attempt to ‘define’ benefits (often through the use of health technology assessment; HTA)
- moving from passive reimbursement of providers to active purchasing of health services – for example, by separating purchasing from provision, by introducing strategic resource allocation or competition among purchasers and/or by reforming provider payment

Centralised systems of collecting funds seem better able to enforce collection (in contexts where this is an issue) and may therefore be better at generating revenue than systems in which individual health insurance funds collect contributions. In part, however, this reflects the nature of the collection agent – tax agencies may be more difficult to evade (with impunity) than health insurance funds. Centralised contribution rate setting may be resisted where funds have traditionally had the right to set their own rates, but it is not impossible, as recent German reforms show. It is an important step towards ensuring equity and may lower the transaction costs associated with risk adjustment, as the risk adjustment mechanism no longer has to compensate for different contribution rates. It may also help to address resistance to risk adjustment on the part of health insurance funds.

Some of the older member states have taken steps to boost public revenue by broadening revenue bases linked to employment. Both France and Germany have increased their reliance on non-earnings-related income through tax allocations, a move that is likely to contribute to fiscal sustainability in the context of rising unemployment, growing informal economies, growing self employment, concerns about international competitiveness and changing dependency ratios. In contrast, during the 1990s, many of the newer member states of central and eastern Europe moved away from tax financing and introduced employment-related social insurance contributions. Unfortunately, the economic and fiscal context in many of these countries is particularly unsuited to employment-based insurance due to high levels of informal economic activity and unemployment. Consequently, governments have usually continued to rely on tax allocations to generate sufficient revenue. In some cases, this has been seen as a failure of the social insurance ‘system’. However, it should probably be seen as an advantage. The potential benefits of creating new purchasing entities at arm’s length from government and from providers can be maintained, even if tax financing continues. In fact, finding ways to safeguard tax allocations when new contribution mechanisms are introduced might be essential to ensuring sufficient revenue and to addressing some of the limitations of employment-based social insurance.

The clear trend towards creating a national pool of publicly-generated health care resources witnessed in newer and older member states is a welcome one. A single pool of health risks is the basis for equity of access to health care. It also enhances efficiency by counteracting uncertainty around the risk of ill health and its associated financial risk. In addition, minimising duplication of pooling may improve administrative efficiency.

Another welcome trend related to pooling is the move away from allocating pooled resources (to health insurance funds or to territorial ‘purchasers’) based on historical precedent, political negotiation or simple capitation towards strategic resource allocation based on risk-adjusted capitation. This move can address some of the inequalities associated with local taxation or collection by individual health insurance funds and is a major step to ensuring that resources match needs and that access to health care is equitable. However, strategic resource allocation is not a straightforward process. It is resource intensive, often presents technical and political challenges, and may not be sufficient to address regional inequalities in access to health care or prevent risk selection by health insurance funds.

Both newer and older member states have introduced competition among purchasers (health insurance funds). This may seem like a good way to stimulate active purchasing. In practice, however, the costs of this form of competition may outweigh the benefits due to the incentives to select risks it creates. Evidence from Belgium, France and Germany shows how risk adjustment mechanisms may weaken these incentives, but fail to eliminate them (van de Ven et al. 2007).

The move away from passive reimbursement of providers towards strategic purchasing of services also represents a step towards matching resources to needs and ensuring value for money. Health care providers are ultimately responsible for generating a large proportion of health care expenditure, so ensuring that their services are delivered equitably, at an appropriate level of quality and for an appropriate cost is central to securing both economic and fiscal sustainability. However, in many member states reform of purchasing has been under developed. In some cases, purchasing agents have not been given sufficient incentives or tools to attempt strategic purchasing. With regard to provider payment, the move away from pure fee for service reimbursement towards more sophisticated, blended payment systems that account for volume and quality is promising. Again, however, reforms have not always been implemented appropriately and more needs to be done, particularly in terms of linking payment to performance in terms of quality and health outcomes.

Several countries have made efforts to expand population coverage. Consequently, most member states now provide universal coverage. However, the scope and depth of coverage are as important as universality, and the trend in some countries to lower scope and depth undermines financial protection. Efforts to define the scope and depth of coverage should be systematic and evidence based to ensure value for money. Health technology assessment is beginning to be used more widely to assist in reimbursement decisions and defining benefits. However, its application is still limited in many member states. In some cases this is due to financial and technical constraints. In others, implementation is limited by political constraints such as opposition from patient groups, providers and product (usually pharmaceutical) manufacturers.

Cost sharing has been introduced and expanded in many member states and reduced in others. Although it may be used to encourage cost-effective patterns of use, overall there is little evidence of efficiency gains and, where it is used to curb direct access to specialists, there is some evidence of increased inequalities in access to specialist care (as those who can afford the user charges have better access). There is no evidence to show that cost sharing leads to long-term expenditure control in the pharmaceutical or other health sectors. Additionally, due to the information asymmetry inherent in the doctor-patient relationship, patients may not be best placed to 'purchase' the most cost-effective care. Given that the bulk of health care expenditure (including pharmaceutical expenditure) is generated by providers, efforts should focus on encouraging rational prescribing and cost-effective provision of treatment. One lesson from the reform experience is that cost sharing policy should be carefully designed to minimise barriers to access. In practice, this means providing exemptions for poorer people and people suffering from chronic or life-threatening illnesses. With careful design, cost sharing can also be used to ensure value for money.

Markets for private health insurance in EU health systems generally serve richer and better educated groups and present barriers to access for older and unhealthier people. They are also often fragmented, resulting in weak purchasing power. Due to the fact that many of them exist to increase consumer choice (or to reimburse cost sharing), insurers have limited incentives to engage in strategic purchasing and link provider pay to performance. However, they may have strong incentives to select risks, to the detriment of equity and efficiency. In general, private systems incur substantially higher transaction costs than public systems and may therefore be accused of lowering administrative efficiency.

Overall, we identify two broad reform trends: significant efforts to ensure equitable access to health care, particularly in the older member states, and a new emphasis on ensuring quality of care and value for money. Four of the older member states have taken important steps to ensure equitable access to health care by expanding coverage. Belgium and the Netherlands have extended statutory cover to groups previously excluded, while Germany is to make health insurance compulsory for the whole population for the first time from 2009. The French government has changed the basis of entitlement from employment to residence in France and introduced a scheme (CMU) to ensure affordable access to statutory and voluntary cover. In addition, where private health insurance plays an important substitutive and/or complementary role in the health system (for example, Belgium, France, Germany, the Netherlands (prior to 2006) and Slovenia), government intervention in the market has tended to increase in recent years, both to ensure access to health care through access to private health insurance and to prevent any negative financial implications for the statutory health insurance scheme. Increased intervention has taken the form of tighter regulation of the boundary between statutory and private cover (Germany), the introduction of risk equalisation schemes (Germany, Ireland, Slovenia), tax exemptions for insurers offering open enrolment and community rating (France), obligations for insurers to offer open enrolment and community rating (Belgium, Ireland and Slovenia), obligations for insurers to offer minimum benefits (Germany and Ireland) and the provision of subsidised private cover for low-income groups (France). Other efforts to ensure equitable access include attempts to improve the design of cost sharing and attempts to make the allocation of resources more strategic.

In terms of health financing, a new emphasis on ensuring quality of care and value for money is clearly seen in increased use of HTA, efforts to encourage strategic purchasing and provider payment reforms that link pay to performance. Health financing-related reforms have been complemented by reforms aiming to ensure and improve quality in delivery. These have not been covered in this report (which focuses on financing), but key examples include: establishing institutions to develop indicators for measurement and monitoring of health system performance and quality; initiatives to encourage innovative and cost-effective approaches to managing chronic illness and preventive care; efforts to standardise clinical practice and encourage best practice. Many of the reforms that took place in the older member states during the 1990s focused on controlling health care costs (Organisation for Economic Co-operation and Development 1992; Saltman and Figueras 1998; Mossialos and Le Grand 1999; Docteur and Oxley 2003; Oliver and Mossialos 2005). While countries are right to be concerned about addressing the problem of persistent deficits in the health sector, focusing solely on lowering deficits does not ensure economic sustainability because it may draw attention away from the underlying inefficiencies leading to financial imbalance (WHO Regional Office for Europe 2006). Several of the reforms introduced more recently are in part an attempt to undo the negative effects of prioritising cost containment over health financing policy goals.

The reforms reviewed in Section 3 can be divided into three groups: those likely to enhance sustainability, those likely to jeopardise sustainability and those with uncertain implications for sustainability. Reforms likely to enhance sustainability include:

- greater use of central taxes to supplement social insurance contributions (to ensure sufficient revenue)
- strengthening and enforcing the collection of funds (to ensure sufficient revenue)
- enhancing pooling by lowering the number of pools or creating a single, national pool (to ensure that resources are matched to needs)
- strategic resource allocation based on risk-adjusted capitation (to ensure that resources are matched to needs)

- greater use of HTA in reimbursement decisions and defining benefits (to ensure value for money)
- reform of provider payment linking payment to performance in terms of quality and health outcomes (to ensure value for money and to ensure that resources are matched to needs – but see next paragraph)

Reforms with uncertain outcomes for sustainability include:

- increased reliance on local tax (may undermine efforts to match resources to needs and to ensure value for money)
- competition among purchasers (may undermine efforts to match resources to needs and to ensure value for money)
- provider payment reform in primary care (unless carefully designed, may not succeed in matching resources to needs or ensuring value for money)
- using DRGs to pay hospitals (unless carefully designed, may not succeed in matching resources to needs or ensuring value for money)

Reforms likely to jeopardise sustainability include:

- increasing reliance on social insurance contributions (unlikely to ensure sufficient revenue in future)
- expanding private health insurance (unlikely to ensure sufficient revenue or value for money or to match resources to needs; some forms may put pressure on publicly-raised revenue and/or undermine strategic resource allocation)
- introducing MSAs (unlikely to ensure sufficient revenue or value for money or to match resources to needs)
- expanding cost sharing and/or poor design of cost sharing policy (unlikely to ensure sufficient revenue or value for money; likely to have an adverse effect on health outcomes)

#### **4.2. Is there an optimal way of financing health care?**

Based on the evidence presented in Section 3, we argue that public finance is superior to private finance. This is not surprising given the need to secure sustainability without undermining values such as equity in finance or equity of access to health care. However, our argument is based on efficiency grounds too. Publicly-generated finance contributes to efficiency and equity by providing protection from financial risk and by detaching payment from risk of ill health. In contrast, private contribution mechanisms involve limited or no pooling of risks and usually link payment to risk of ill health and ability to pay. Public finance is also superior in its ability to ensure value for money which, as we have argued, is central to securing both economic and fiscal sustainability. Overall, the experience of the United States suggests that increasing reliance on private finance may exacerbate health care expenditure growth, perhaps due to the weak purchasing power of private insurers and individuals against providers. Among the older member states of the European Union, those that have relied more heavily on private finance, either through private health insurance or through higher levels of cost sharing, are also those that tend to spend more on health care as a proportion of GDP (notably, Austria, Belgium, France, Germany and the Netherlands).

Of course, public finance is not without its problems. Where social insurance contributions dominate, there are likely to be concerns about the high cost of labour and the difficulty of generating sufficient revenue as informal economies and self employment grow, and as population ageing leads to shifts in dependency ratios. Concerns may also focus on generating sufficient revenue where capacity to enforce tax and contribution collection is weak. Prudential fatigue – the reluctance of certain groups to pay collectively for social goods and to subsidise the costs of care for others – may exacerbate resistance to paying higher taxes or contributions. However, these problems can be addressed – for example, by broadening the revenue base to capture non-employment-based income, by investing in efforts to strengthen public sector capacity, and by making the social and economic case for collective financing. Equity in finance may be compromised if health systems become increasingly dependent on consumption taxes (VAT), if ceilings on contributions are lowered, or if tax and contribution evasion is rife. On balance, however, these concerns are outweighed by gains in terms of equity of access to health care. In some countries, public sector resource allocation has contributed to inequalities in access, while purchasing has been non-existent or weak. Nevertheless, there are few cases in which private health insurers have been able to demonstrate better purchasing skills (in part due to their need to enhance consumer choice).

In determining an optimal way of financing health care we might ask what type of financing system is best placed to adjust to changing priorities. In recent years there has been increased demand for some types of health services, notably mental health care, long-term care and care of chronic illnesses. Demand for these services, and for integrated forms of delivering care, is likely to grow as populations age. The type of financing system best able to respond to shifts in demand is one with the ability to enhance pooling, co-ordinate and direct strategic resource allocation, match resources to need, shape the nature of supply and create incentives to enhance provider responsiveness. We suggest that systems based on public finance stand a much greater chance of rising to this challenge than alternatives such as private health insurance.

### **4.3. Policy recommendations**

Reforms that aim to secure the economic and fiscal sustainability of health care financing in the context of social security should focus on ensuring equity of access and value for money. Our recommendations are based on the analysis of health financing arrangements and reforms in Section 2 and Section 3. We should point out that evidence about the impact of some arrangements and reforms is lacking, so we cannot be sure of all outcomes. Nor can we be sure whether a reform will have the same effect in different countries. With this caveat in mind, we make the following recommendations.

- The starting point for any reform should be careful analysis of the existing health (financing) system to identify weaknesses or problem areas, combined with understanding of the contextual factors that may contribute to or impede successful reform.
- Policy makers may find it worthwhile to try to communicate the aims and underlying rationale for reforms to the wider public.
- Policy makers should consider the whole range of health financing functions and policies, rather than focusing on collection alone (contribution mechanisms).
- Find ways to enforce collection to ensure sufficient revenue and to restore confidence in the health financing system.

- Health systems predominantly financed through employment-based social insurance contributions may benefit from broadening the revenue base to include non-earnings-related income.
- In addition to contributing to efficiency and equity, enhancing pooling by lowering the number of pools or (better still) creating a single, national pool can facilitate strategic direction and co-ordination throughout the health system.
- Limit reliance on private finance (private health insurance, MSAs, user charges). Where private finance plays a role, ensure that there are clear boundaries between public and private finance (for example, by avoiding dual employment of doctors in the public and the private sector, or by preventing people from switching between public and private coverage) so that private finance does not draw on public resources or distort public resource allocation and priorities. Where private health insurance is concerned, ensure that consumers have access to clear comparative information about price and quality. This form of consumer protection is particularly important in the light of restrictions on national regulation of non-substitutive markets due to the Third Non-Life Insurance Directive.
- If user charges are imposed, pay careful attention to the design of cost sharing policy, which should be systematic and evidence based. Financial protection can be preserved by exempting poorer people and people suffering from chronic and life-threatening illnesses. Value for money may be enhanced if user charges are linked to the effectiveness of care and therefore do not apply to services such as primary care, prevention and cost-effective interventions (including drugs) or methods of accessing care.
- Avoid introducing MSAs as they do not involve any pooling across groups of people. They also suffer from many of the limitations of user charges.
- Tackling informal payments is central to increasing public confidence in the health system. Informal payments may present a major challenge to successful implementation of other reforms.
- Encourage strategic resource allocation to ensure that health resources match health needs. Centrally-administered risk-adjusted capitation has emerged as the optimal means of allocating resources to territorial purchasers to prevent inequalities in access to health care. However, risk adjustment mechanisms used to combat risk selection among competing purchasers (health insurance funds) are usually not sophisticated enough to prevent risk selection. Where the risk adjustment mechanism is limited, the benefits of competition will be outweighed by the costs.
- Encourage greater use of HTA, particularly in decisions about reimbursement and in defining the benefits package, but also in improving clinical performance. More attention should be given to using HTA to make decisions about disinvestment (de-listing existing benefits that are not effective or cost-effective), not for the sake of reducing coverage but to ensure value for money. Attention should focus on beneficiaries as well as benefits, by considering which groups are most likely to benefit from a particular intervention.
- Design purchasing and provider payment systems to create incentives for efficiency, quality and productivity. In particular, link provider payment to performance in terms of quality and health outcomes. Also, ensure careful monitoring of payment mechanisms to prevent cost shifting, risk selection and gaming. This is particularly important as countries increase their reliance on DRGs to pay hospitals.

- Encourage administrative efficiency by minimising duplication of functions and tasks.
- Finally, political debates about health system sustainability have tended to focus on how much we need to spend on health care. While this question is relevant, it should be accompanied by others, such as which health services (including drugs) it is actually worthwhile paying for, and how best to pay for them. In future, spending on health care should not be unconditional – rather, it should always demonstrate value for money.



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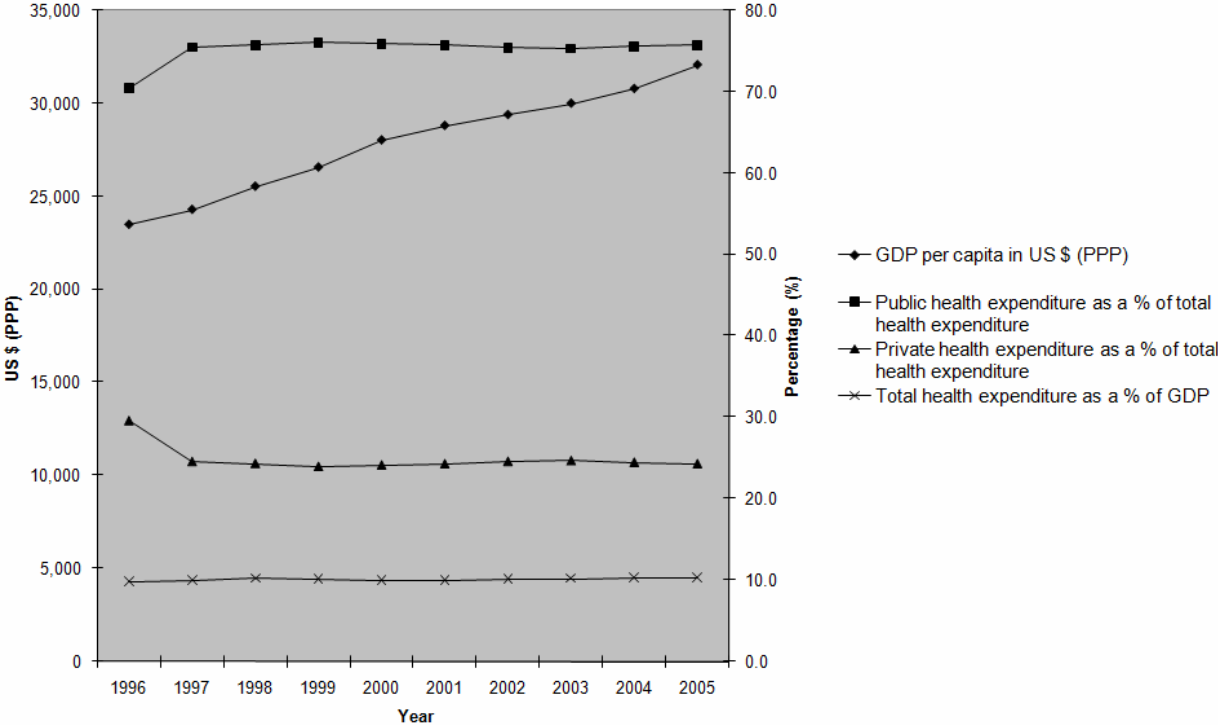
**ANNEX: SUMMARIES OF HEALTH FINANCING BY MEMBER STATE**

**Health care financing in AUSTRIA**

**Health care expenditure**

At just over 10% in 2005, the level of total expenditure on health as a percentage of GDP in Austria is one of the highest in the European Union and has remained stable in the last 10 years (see Figure 1). Public spending on health as a proportion of total expenditure rose sharply from 1996 to 1997 (70.4% to 75.5%), but has remained stable since then.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

**Coverage and benefits**

In 2004 the statutory health insurance scheme covered 98% of the population. Its members have a legal entitlement to a wide range of benefits including outpatient medical treatment, dental treatment (without fixed dentures), psychotherapy, physiotherapy, ergotherapy and speech therapy, medicines and therapeutic aids, medical nursing care, rehabilitation, hospital treatment and stays at spas. Health insurance funds can offer additional voluntary benefits or exemptions from cost sharing. Cost sharing applies to most health services and has increased in recent years, although an outpatient clinic fee introduced in 2001 was withdrawn in 2003 due to the high costs of its implementation and public resistance. Low-income pensioners, children and people with chronic illnesses are exempt from prescription charges (around 12% of the population).

**Collection of funds**

Social insurance contributions levied on earnings accounted for 46% of total expenditure on health care in 2005 (see Figure 2). Contribution rates vary by health insurance fund. Contributions are collected by the 21 health insurance funds.

There is a ceiling on contributions. Tax accounts for just under a third of total expenditure on health, followed by out of pocket payments and private health insurance. A mixture of supplementary and complementary private health insurance covers about a third of the population and mainly provides faster access to providers, superior accommodation in hospital and reimbursement of per diem hospital user charges.

### **Pooling**

Each of the 21 health insurance funds collects contributions. However, each fund's resources are subject to re-allocation based on contribution revenue per person, expenditure on dependants and pensioners, a 'major city factor' and fund location. Thus, there is, in effect, a single national pool for social insurance contributions. Tax revenue (from VAT) is allocated by the central government to the regions (Länder) and is mainly used to pay hospitals.

### **Purchasing health services**

The 21 health insurance funds are responsible for purchasing health care. Patients have free choice of outpatient provider and there is no GP gate-keeping.

### **Provider payment**

Since 1997 public and private non-profit hospitals have been reimbursed through a prospective case-based payments system (the Austrian DRG system) in which the value of points is fixed retrospectively. This system has reduced length of stay but increased admissions. In future payment of hospital outpatient clinics will move from fee for service to case-based reimbursement to provide stronger incentives to shift care to outpatient settings. Contracted physicians are paid a mixture of capitation and fee for service.

### **Key financing-related reforms**

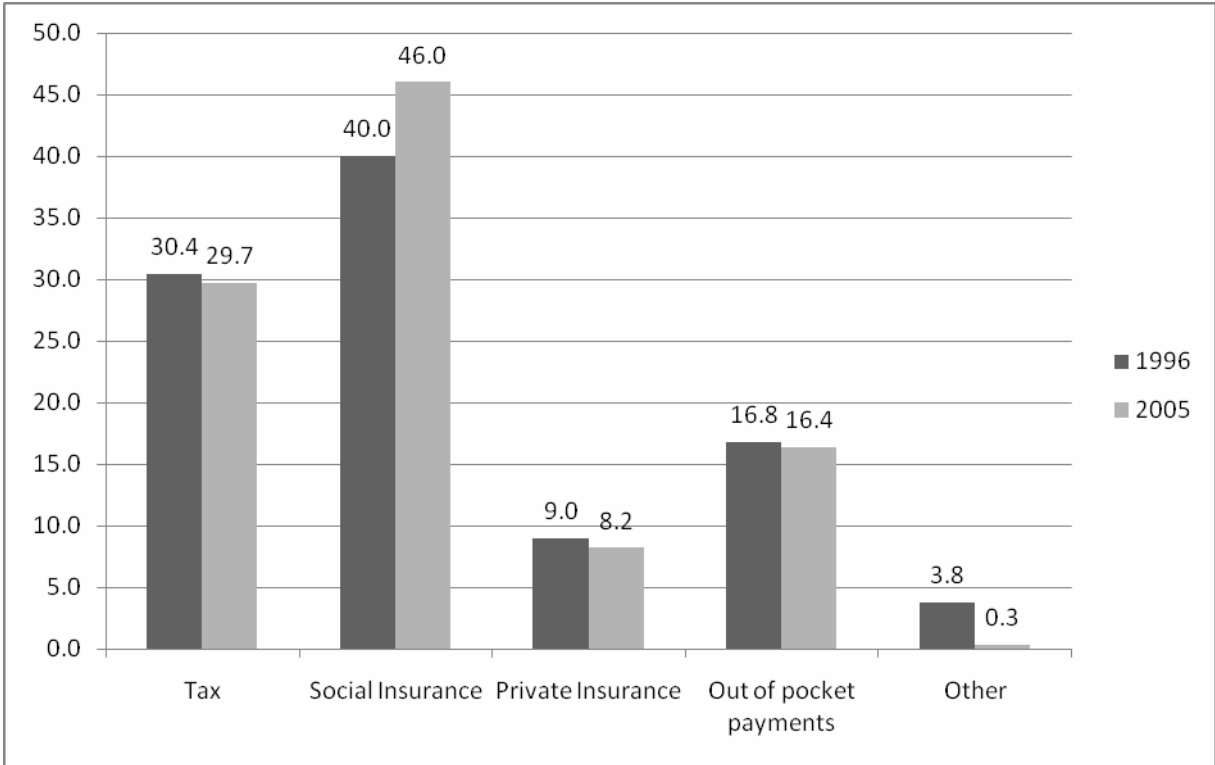
Financing-related reforms have mainly focused on containing costs.

- 1990: introduction of cost sharing for inpatient stays.
- 1997: introduction of case-based payment of hospitals and cost sharing for primary care visits.
- 1998: eligibility for social insurance extended to part-time workers.
- 2000: increase in prescription charges.
- 2001: introduction of user charges in outpatient clinics (abolished in 2003).
- 2003: the contribution rates of salary earners were raised to equal the contribution rates of wage earners; the contribution rate was increased to cover the risk of non-work related accidents; the pensioners' contribution rate was also increased.
- 2005: increase in contribution rates and the ceiling on contributions, increases in tobacco tax, increased cost sharing.

### **Sources**

Hofmarcher, M. and H. Rack (2006). "Austria: health system review." Health Systems in Transition 8(3): 1-247.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



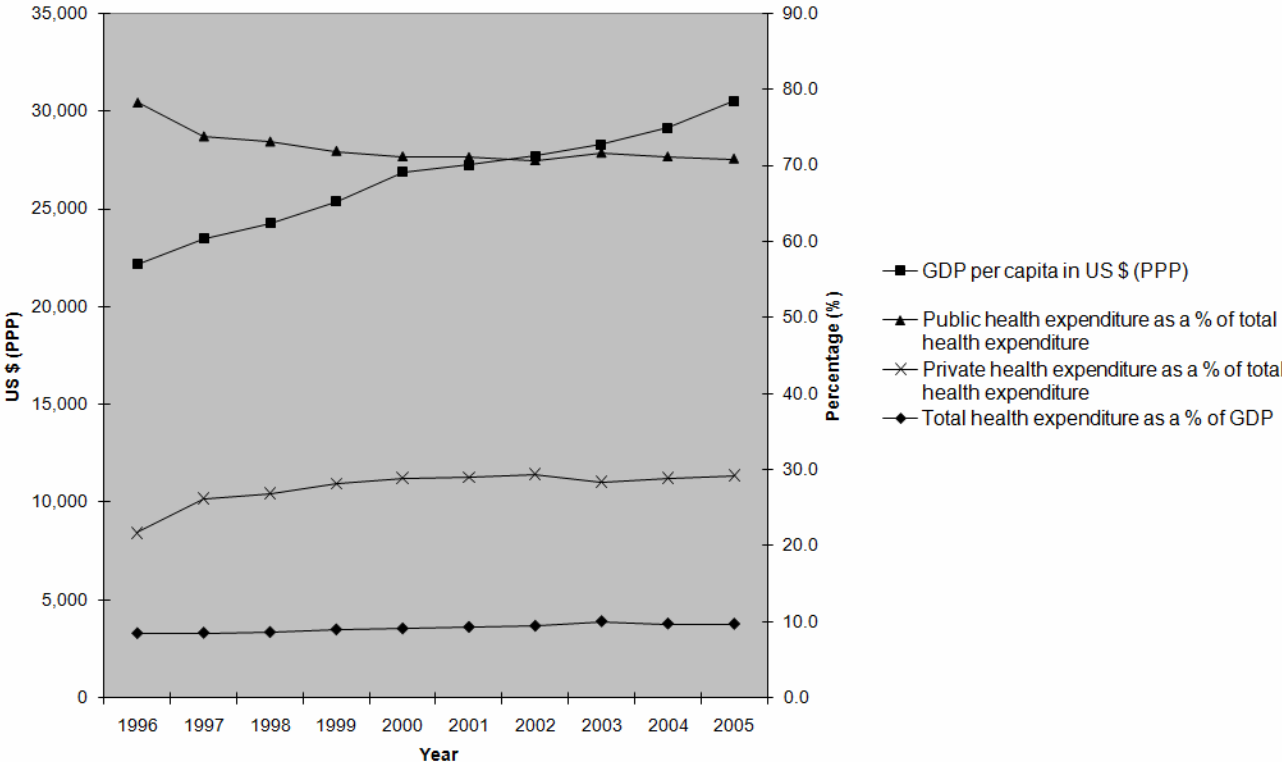
Source: WHO 2007

# Health care financing in BELGIUM

## Health care expenditure

Between 1996 and 2005 total expenditure on health as a proportion of GDP grew from 8.5% to 9.6% (see Figure 1). During this time public spending on health fell as a proportion of total expenditure from 78.3% in 1996 to 70.8% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

## Coverage and benefits

The publicly-financed health insurance scheme covers 99% of the population for ‘major risks’ (specialist and inpatient care and rehabilitation). It covers all except self-employed people for ‘minor risks’ (outpatient care, outpatient prescription drugs and dental care). However, from 2008 cover of minor risks will be extended to self employed people, so almost the whole population will have compulsory publicly-financed cover of outpatient and inpatient care. The benefits package is defined and covers a wide range of services. Cost sharing is applied to most health services, although there are lower rates for those with income below a specified threshold and an annual ceiling on out of pocket payments. Private health insurance plays a mixed complementary and supplementary role, covering the cost of inpatient charges and providing access to better amenities in hospital. It covers about two-thirds of the population, often as an employee fringe benefit.

## **Collection of funds**

The publicly-financed health insurance scheme is mainly financed through the social insurance contributions, with some allocations from the federal government (see Figure 2). Allocations from regional and local governments play a small role. Contribution rates are set centrally as a proportion of income, paid by employees and employers and collected centrally. Publicly-financed health insurance funds compete with commercial insurers to offer private health insurance.

## **Pooling**

Public revenue for health care is pooled centrally by the National Office for Social Security (RSZ-ONSS). Individuals have free choice of health insurance fund. Employees pay their contributions to the RSZ-ONSS, while the self-employed make contributions directly to their health insurance fund, which are then transferred to the RSZ-ONSS. Thirty per cent of the publicly-generated resources are then prospectively allocated to the health insurance funds on the basis of a risk-adjusted capitation formula. The remainder is allocated retrospectively based on each health insurance fund's share of expenditure.

## **Purchasing health services**

Health insurance funds are responsible for purchasing health services for their members. They bear some financial risk for the difference between their budget allocations and actual spending, but their financial accountability for deficits cannot exceed 2% of the total publicly-financed health care budget. Potential deficits are partly funded by a flat-rate premium (about €5 per year) paid by each member to a reserve fund. For outpatient services, patients usually pay the provider directly and then receive reimbursement from their health insurance fund. Provider reimbursement rates are usually based on collective agreements between the health insurance funds as a whole and provider associations.

## **Provider payment**

Most doctors in Belgium are paid on a fee for service basis. Some public health doctors and doctors in university hospitals are salaried employees (fewer than 1% of all clinicians). Hospitals are set global budgets and partly reimbursed through case-based payment (DRGs).

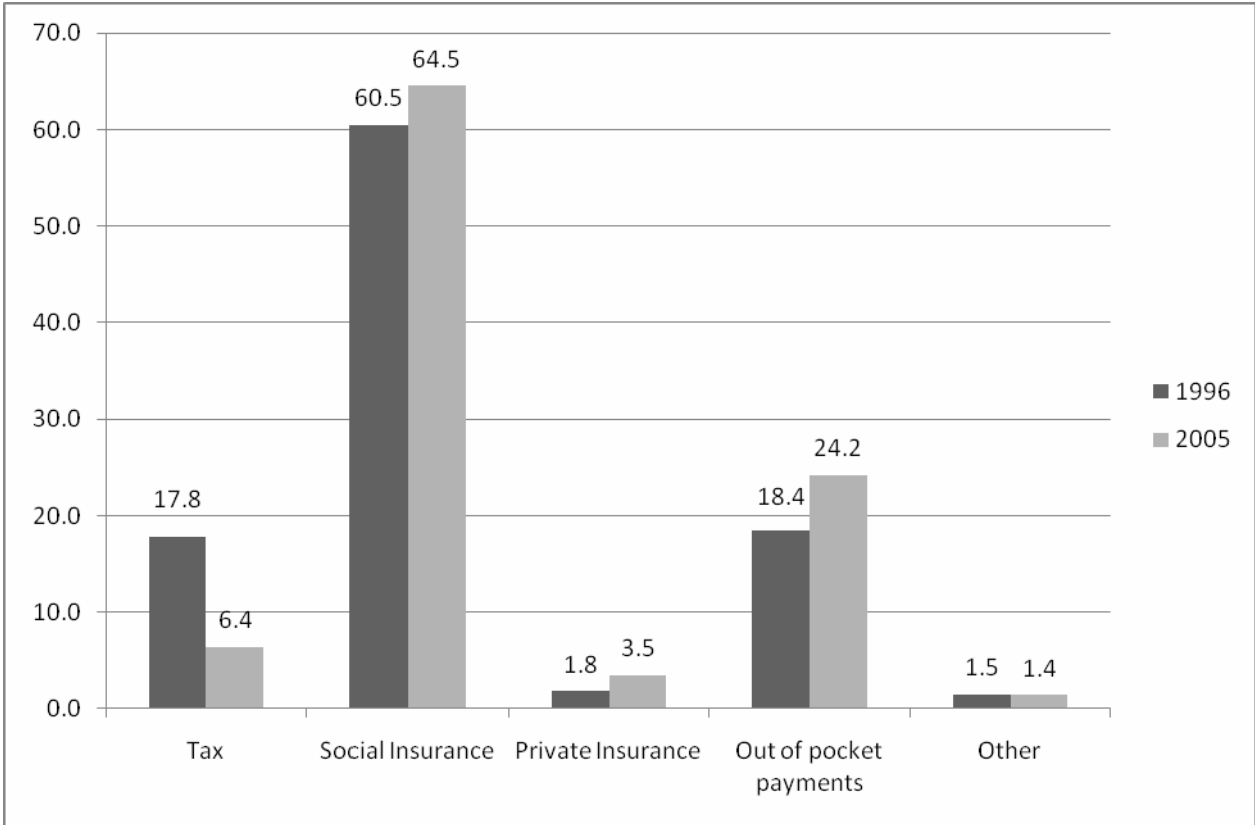
## **Key financing-related reforms**

- 1994: Introduction of case-based payment of hospitals.
- 2001: Extension of the maximum annual ceiling on out of pocket payments to all household and for all cost sharing (€650 for everyone aged under 19 years; €450 for low income households; and based on net family income).
- 2001-2002: Introduction of reference pricing for generic drugs and new regulations regarding the exclusion of pharmaceutical products from public reimbursement.
- 2007: Eligibility for lower cost sharing rates now based exclusively on income status (rather than other indicators of socio-economic status such as being widowed or orphaned).
- 2008: Cover of minor risks extended to self employed people.

## **Source**

Corens D. Health system review: Belgium. *Health Systems in Transition*, 2007; 9(2): 1–172.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



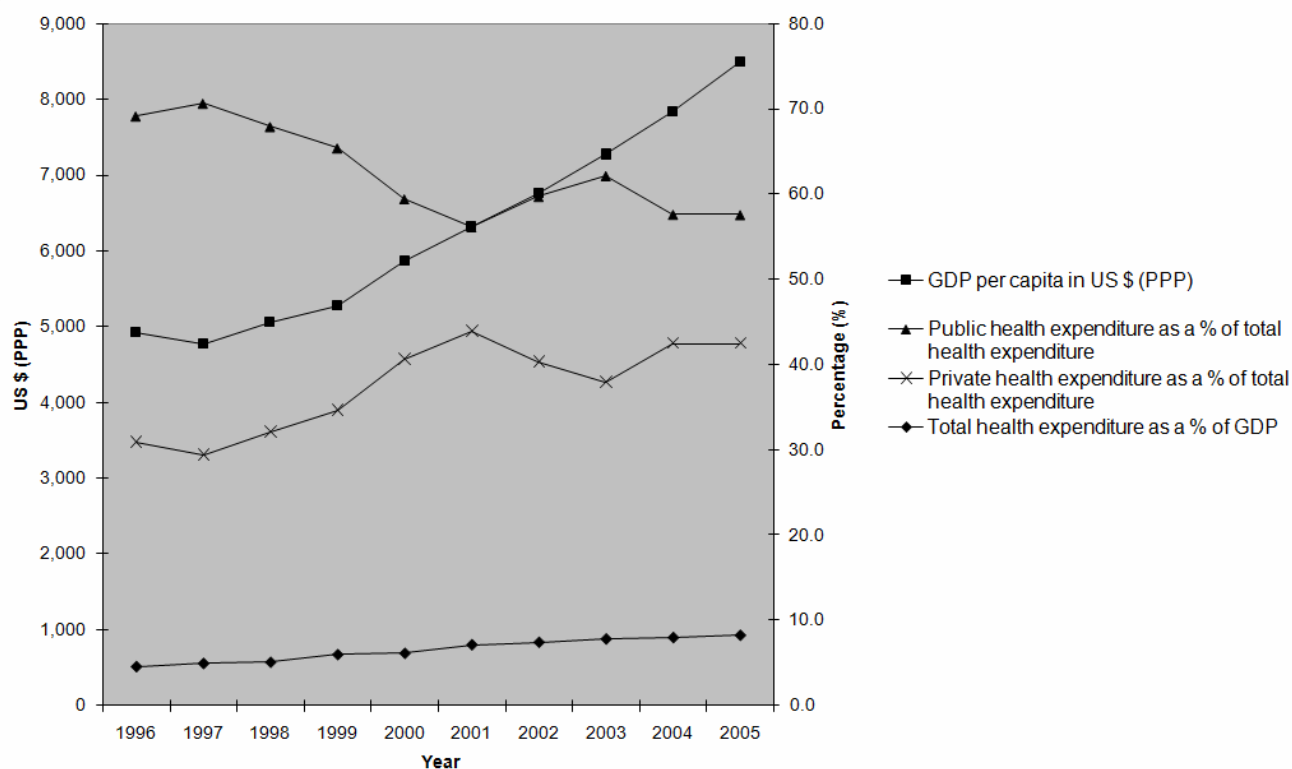
Source: WHO 2007

## Health care financing in BULGARIA

### Health care expenditure

Between 1996 and 2005 total expenditure on health as a proportion of GDP almost doubled, rising from 4.6% to 8.3% (see Figure 1). During the same period public spending on health as a proportion of total health expenditure fell from 69.1% to 57.5%, while out of pocket payments rose significantly from 30.9% to 41.6%.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

The publicly-financed health insurance scheme covers all residents for a broadly comprehensive, defined benefits package. Cost sharing was introduced in 1998 for outpatient prescription drugs, with exemptions for treatment of chronic illnesses. In 2000 further cost sharing was introduced for doctor visits, diagnostics and inpatient care. Patients with specific illnesses, children, unemployed and other low-income people are exempt from these charges. Informal payments are an issue. Private health insurance plays a very small complementary role.

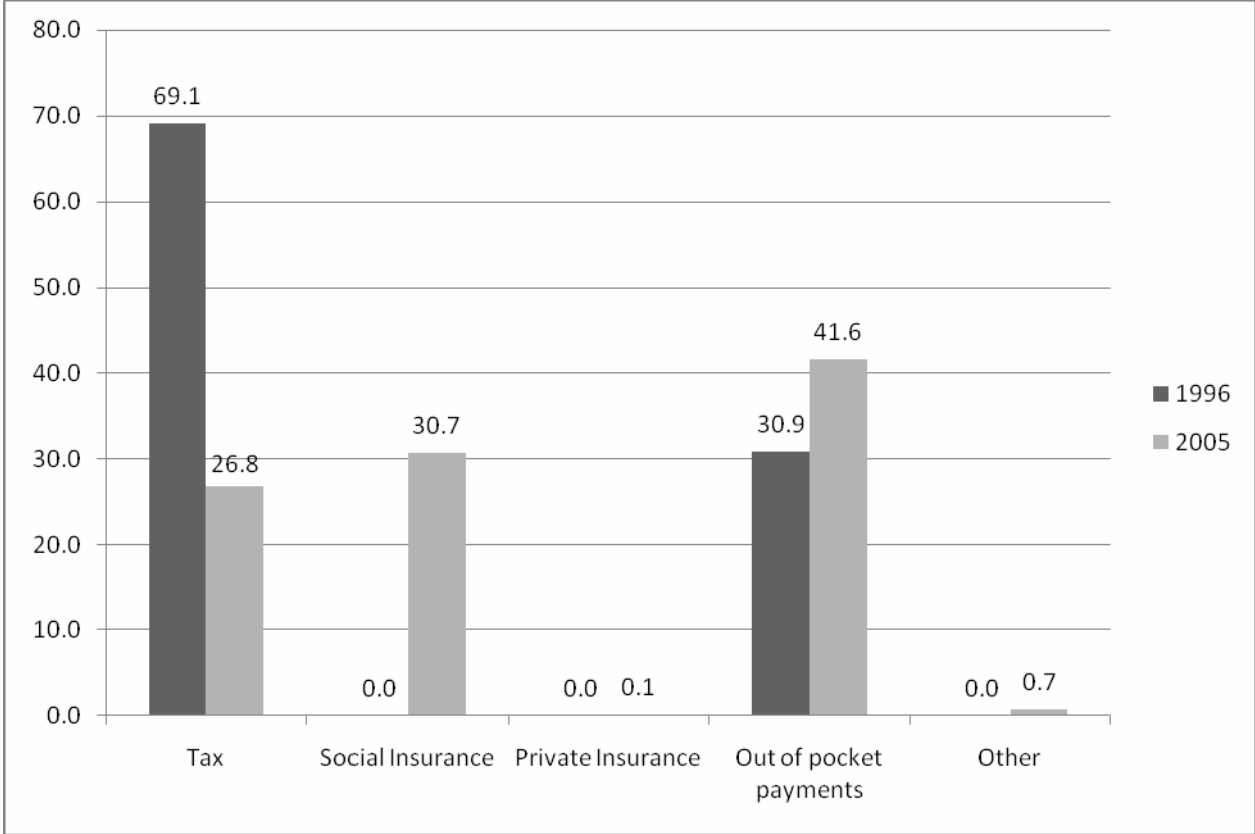
### Collection of funds

The statutory health insurance scheme was established in 1998. Its contribution to public expenditure on health has gradually increased as the share of municipal financing has fallen. However, out of pocket payments are now the main single contribution mechanism for health care (see Figure 2). Central taxes and social insurance contributions are collected by the tax agency. Municipalities collect local taxes and user charges. Compulsory contributions for health care are set centrally at 6% of income and shared by employer and employee (with the share to be divided equally by 2009).



Central and local government budgets cover contributions for unemployed and low-income people, pensioners, students and civil servants. The Roma and permanently unemployed are excluded from the statutory health insurance scheme, which covers 92% of the population.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

Compulsory contributions are pooled by the national health insurance fund. Taxes are pooled nationally and locally.

**Purchasing health services**

The national health insurance fund finances outpatient care on a contractual basis. Public and private providers contract with one of the 28 regional branches of the national fund (the National Framework Contract signed annually). The national fund allocates funds to regional branches via risk adjusted capitation. The Ministry of Health finances university and regional hospitals and other specialist institutions, as well as public health. Municipalities finance the non-contracted hospitals in their area, but in future it is expected that the national health insurance fund will finance a larger share of hospital care.

**Provider payment**

General practitioners (GPs) are paid via capitation and in addition receive bonus payments. Outpatient specialists are paid on a fee for service basis. Hospital doctors are salaried employees and receive performance-related bonuses. Hospitals are paid on a case basis by the national health insurance fund and on a per diem basis by the Ministry of Health.

### **Key financing-related reforms**

- 1998: Establishment of the statutory health insurance scheme and creation of the national health insurance fund; introduction of cost sharing for outpatient prescription drugs; introduction of contractual relations between the national health insurance fund and providers.
- 2000: Introduction of cost sharing for doctor visits, diagnostics and inpatient care; introduction of case-based payment as part of the first National Framework Contract.
- 2001: Financing of outpatient care and dental care moved from municipalities to the national health insurance fund; case-based payment introduced for hospitals.
- 2002: Introduction of performance-related pay for hospital doctors.  
2004: Hospital financing reform leads to formal adoption of performance-related case-based payments.

### **Source**

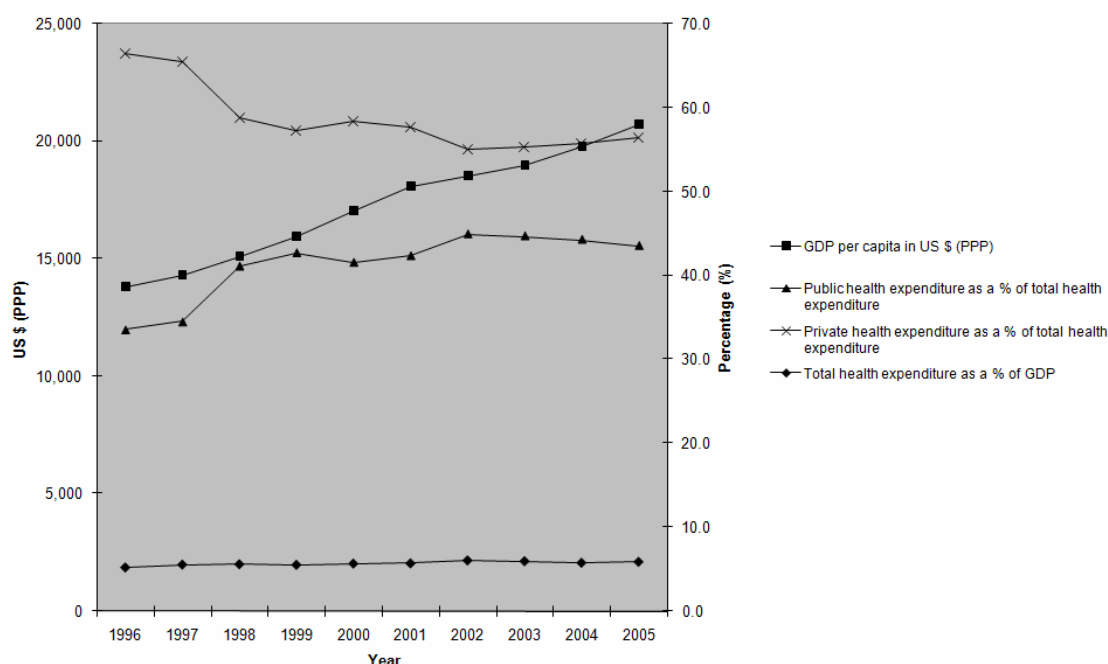
Georgieva L, Salchev P, Dimitrova S, Dimova A, Avdeeva O. Bulgaria: Health system review. *Health Systems in Transition*, 2007; 9(1): 1–156.

## Health care financing in CYPRUS

### Health care expenditure

Total expenditure on health as a proportion of GDP remained relatively stable between 1996 and 2005 (see Figure 1). Throughout this period, GDP per capita grew substantially. In 2005, private expenditure on health accounted for over 50% of total expenditure on health. However, public spending as a proportion of total expenditure on health increased sharply between 1996 and 1999 (from 33.6% to 42.7%). Since 2002 it has fallen (down to 43.5% in 2005).

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage, benefits and cost sharing

Cyprus is in the process of implementing a National Health Insurance Scheme (NHIS), under which comprehensive coverage will be extended to all residents. Prior to the implementation of the NHIS, the government provided free or reduced cost care to 85-90% of the population. Employer- and trade union-sponsored schemes also provided coverage for their members. Out of pocket payments for health care are high. Individuals with chronic or severe acute illnesses may face catastrophic levels of health expenditure.

### Collection of funds

Health services currently provided by the government are financed through general taxation and user charges (see Figure 2). Private health insurance plays a small supplementary role. Under the NHIS, taxation will be supplemented by compulsory health insurance contributions (collected by the Health Insurance Organisation) and there will be no user charges for publicly-financed health services (except, perhaps, for pharmaceuticals).

### Pooling funds

General tax revenues are pooled by the Ministry of Health.

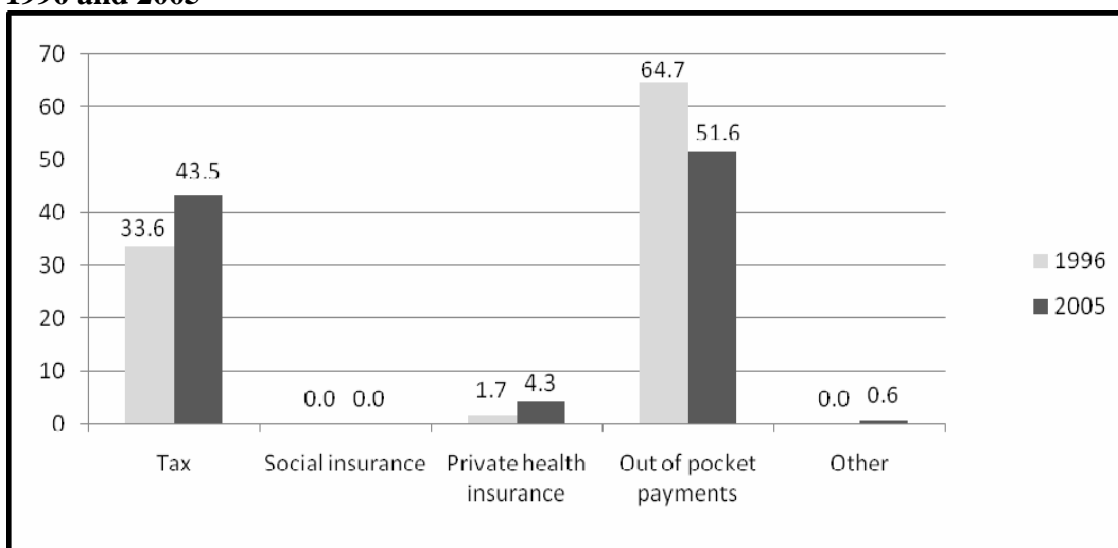
## Purchasing health services

Under the NHIS, the Health Insurance Organization will be responsible for purchasing health care from public and private providers.

## Provider payment

Primary care physicians in the public sector and specialists are salaried employees. Private sector physicians are paid on a fee for service basis. Under the NHIS, primary care physicians will be paid through capitation (which may be risk adjusted and related to professional experience), while specialists will be paid fees for service based on a fee schedule to be negotiated with their institution. Public hospitals are currently allocated an annual budget based on historical data adjusted for inflation. Under the new system public hospitals may be paid on an average cost basis.

**Figure 2 Breakdown of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source

e: WHO 2007

## Key financing-related reforms

The introduction of the NHIS is expected to result in the following changes:

- Universal coverage financed through general taxation and compulsory insurance contributions.
- Abolition of user charges for publicly-financed health services (with the possible exception of user charges for pharmaceuticals).
- The creation of a national Health Insurance Organization as the single purchaser of publicly-financed health services.
- Reform of provider payment (see above).

## Sources

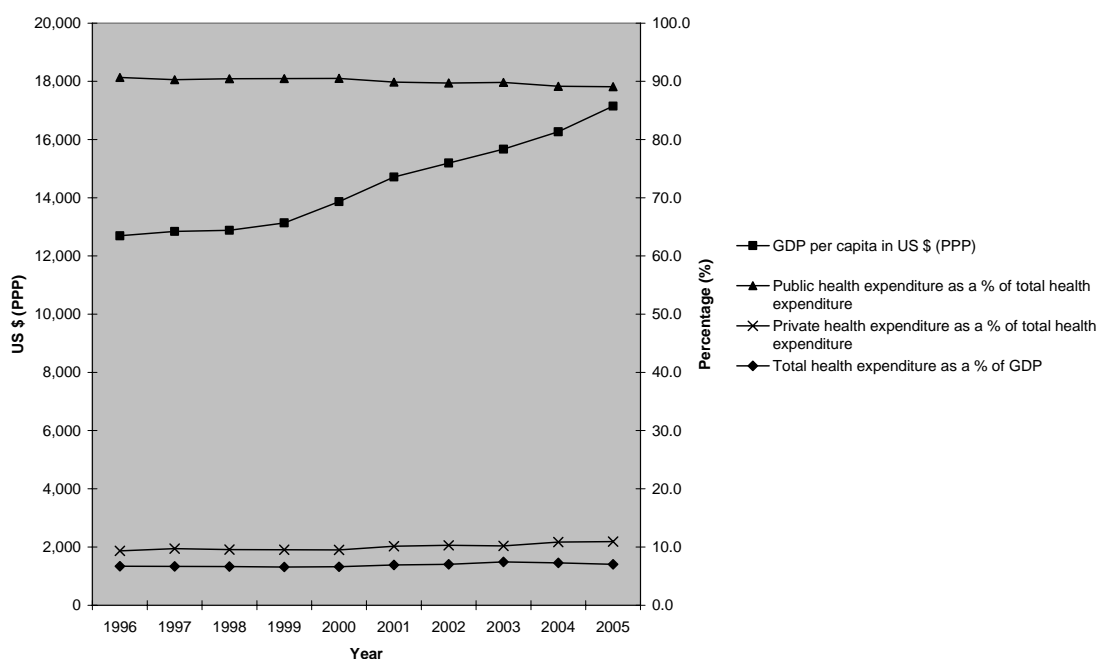
Golna, C., P. Pashardes, S. Allin, M. Theodorou, S. Merkur and E. Mossialos (2004). Health Care Systems in Transition: Cyprus. Brussels, European Observatory on Health Systems and Policies.

## Health care financing in the CZECH REPUBLIC

### Health care expenditure

Between 1996 and 2005 total expenditure on health rose slightly as a proportion of GDP from 6.7% to 7.0% (see Figure 1). During the same period, private spending also rose very slightly as a proportion of total health expenditure.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

The publicly-financed health system covers all citizens, who are required to enrol with one of nine health insurance funds. The benefits package covers a broad range of services, and cost sharing has been restricted to outpatient pharmaceuticals and dental care. From 2008, cost sharing will be introduced for doctor visits, inpatient stays and use of the emergency department, with exemptions for pregnant women, chronically ill people and people with low incomes. Private health insurance plays a very limited supplementary/complementary role in the Czech health system, covering better amenities and dental care.

### Collection of funds

Health care is mainly financed through social insurance contributions but supplemented by central and municipal taxes (see Figure 2). Social insurance contributions are levied on earnings at a centrally-set rate of 13.5% (with the employer contributing 9.0% and the employee 4.5%). Contributions by self-employed people are only levied on half of their net income and are capped. Health insurance funds are individually responsible for collecting contributions. The central government makes contributions on behalf of children, unemployed people, soldiers and pensioners. The General Health Insurance Fund (the statutory insurer; GHIF) provides private health insurance, mainly to non-residents and to Czech residents travelling abroad.

## **Pooling**

Individuals have free choice of health insurance fund. The number of health insurance funds has fallen from 27 in the late 1990s to 9 currently. The GHIF is obliged to accept all applications and is therefore the largest insurer, covering about 75% of the population. All the health insurance funds collect their own contributions. However, the GHIF re-allocates 60% of all revenue based on capitation adjusted for the proportion of people aged 65 and over in each health insurance fund. There are plans to apply the risk adjustment scheme to 100% of funds from 2008, and to introduce additional risk factors. Public health services are funded directly from central and municipal government budgets.

## **Purchasing health services**

The health insurance funds compete to purchase health services for their members based on contracts with individual providers and hospitals. The GHIF purchases through 77 regional branches. Contracts are usually for two years. Negotiations between the health insurance funds and provider associations about fee levels take place every six months and are approved by the central government. Changes in 1994 and 1997 have strengthened the ability of health insurance funds to engage in strategic purchasing by allowing them to negotiate volume limits and use non fee for service payment methods such as capitation.

## **Provider payment**

Between 1993 and 1997 fee for service was the method used to pay most providers. Since 1997 primary care providers have been paid through age-weighted capitation (70%) with additional fees for preventive care and health promotion. Ambulatory specialist care is reimbursed on a capped fee for service basis; a system of budgets was introduced in 1997 but the fee for service system was reintroduced in 2001. Hospital-based specialists are salaried employees. Since 1997 hospitals have been paid via global budgets with (since 2001) some adjustment for levels of activity. DRGs have been introduced in a pilot scheme in several hospitals.

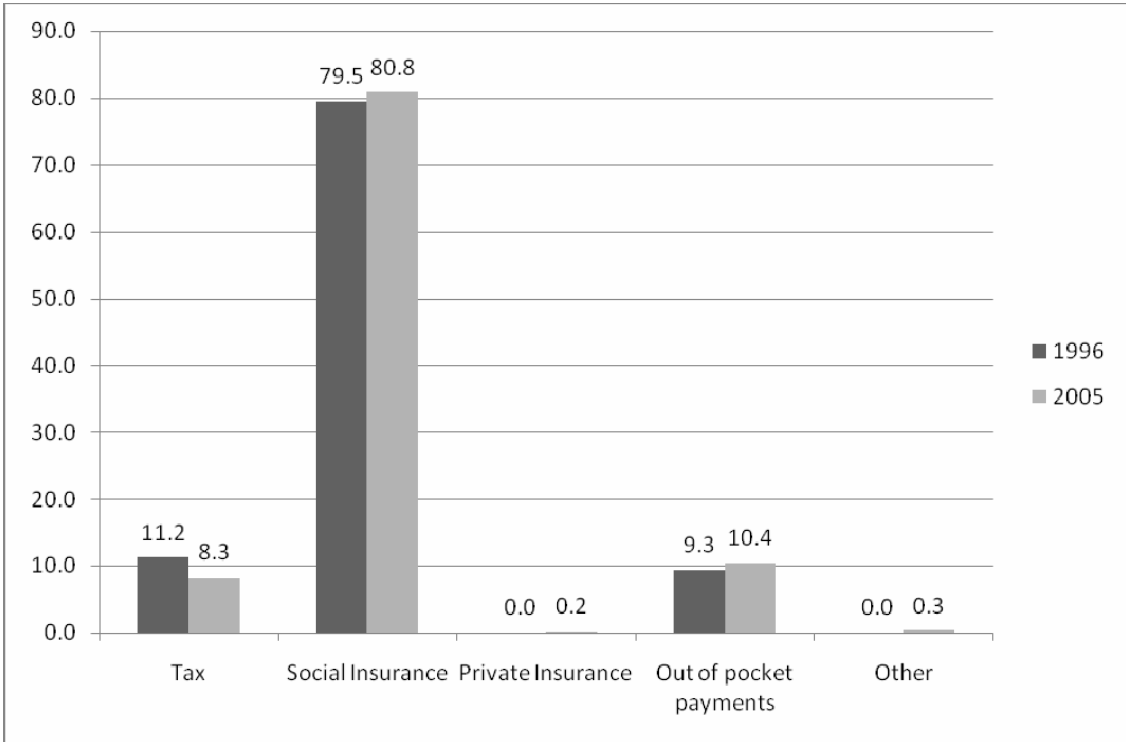
## **Key financing-related reforms**

- 1992: Introduction of statutory health insurance and establishment of the GHIF and its branches.
- 1994: Health insurance funds are allowed to limit the volume of services they will reimburse (above a set level).
- 1997: Health insurance funds are allowed to use payment methods in addition to fee for service. Capitation replaces fee for service as the main method for paying for primary care services. The fee level negotiations now require the approval of the Ministry of Finance.
- 2001: Further reform of provider payment, strengthening volume controls for ambulatory specialists and hospitals.
- 2008: Proposed introduction of cost sharing for GP visits, inpatient stays and use of the emergency department. Also proposals to extend the risk adjustment scheme to 100% of health insurance fund revenue and to introduce additional risk factors.

## **Sources**

Rokosová, M., P. Háva, J. Schreyögg and R. Busse (2005). Health care systems in transition: Czech Republic. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



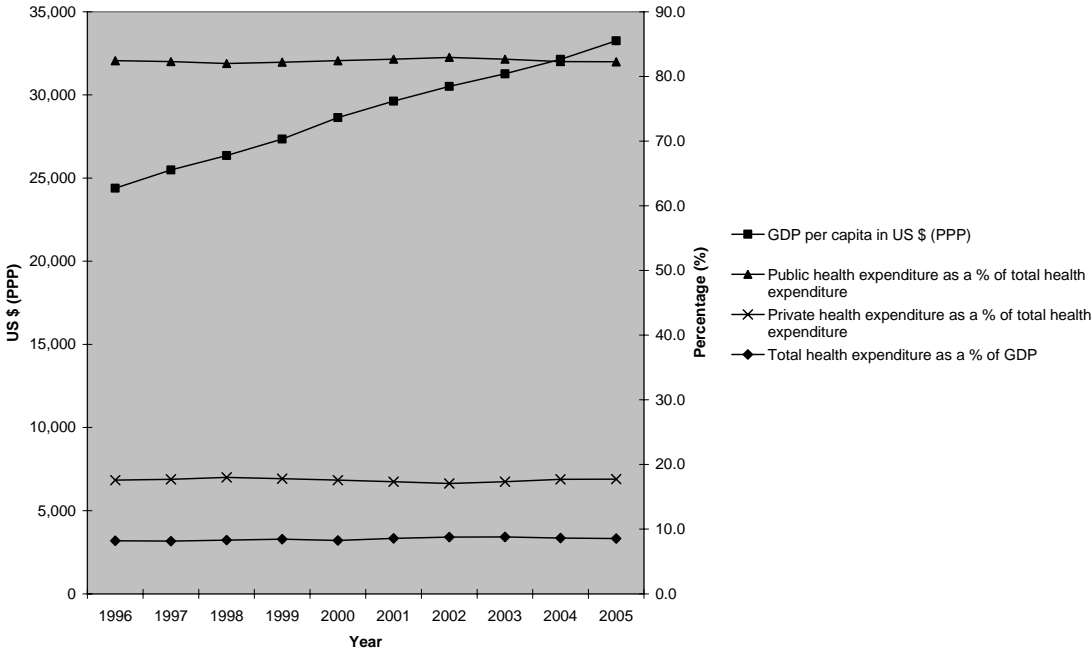
Source: WHO 2007

# Health care financing in DENMARK

## Health care expenditure

Health care expenditure has remained relatively stable in Denmark in recent years (see Figure 1). The only noticeable change has been a fall in out of pocket payments as a proportion of private spending on health care (from around 92% in 1996 to around 81% in 2005). Levels of public spending on health care are high as a proportion of total expenditure on health care, on a par with Luxembourg, Sweden and the United Kingdom.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

## Coverage and benefits

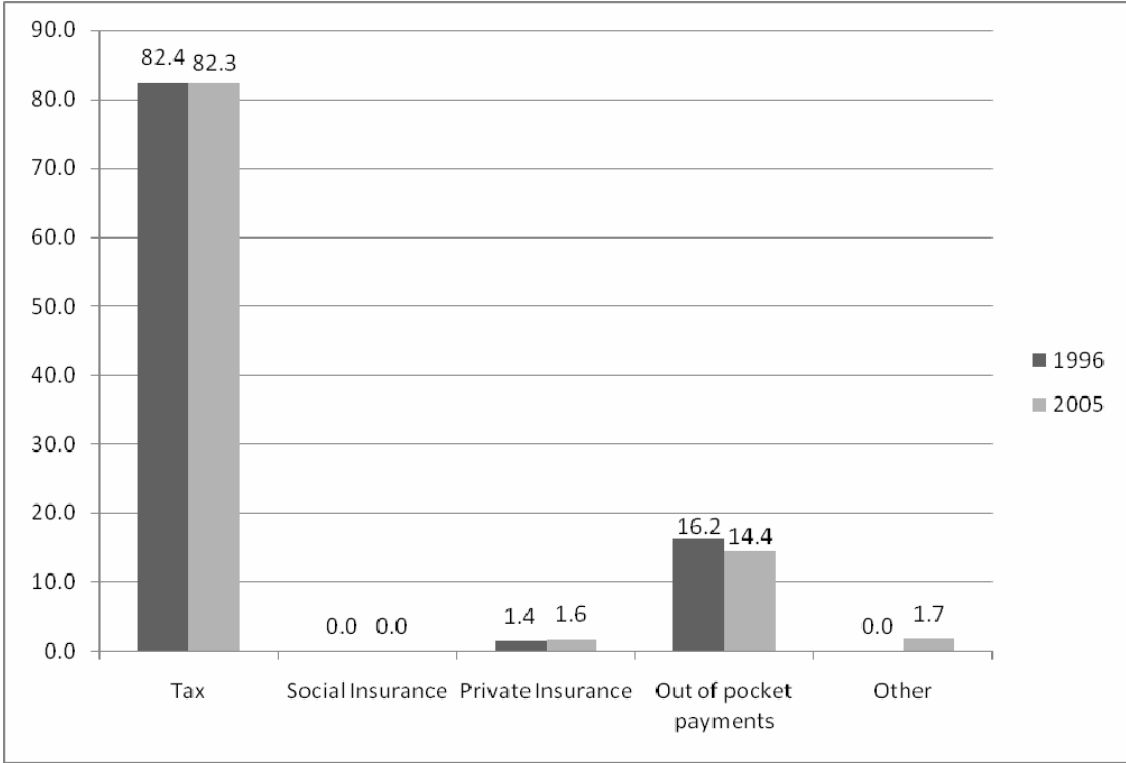
The publicly-financed health system covers all residents for primary and specialist (hospital) services. There are relatively few cost sharing arrangements in place. Cost sharing mainly applies to dental care for adults, to outpatient drugs and to optician services. Chronically ill patients with a high use of drugs can apply for full reimbursement of any drug expenditure above an annual ceiling (DKK 3805). People with very low incomes can also apply for financial assistance. Complementary private health insurance provided by a not-for-profit organisation reimburses cost sharing for pharmaceuticals, dental care, physiotherapy and corrective lenses. It covers about 30% of the population. There is a small market for supplementary private health insurance, which covers about 5% of the population and provides access to care in the private sector and abroad.

## Collection of funds

A major administrative reform in 2007 gave the central government responsibility for financing health care. Public revenue for health care comes from a centrally-collected tax set at 8% of taxable income and earmarked for health. This replaces a mixture of progressive central income tax and proportionate regional income and property tax (see Figure 2).



**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling funds**

Annual negotiations between the central government and the regions and municipalities result in agreements on the economic framework for the health sector (including setting levels of taxation and expenditure). The agreements set a national budget cap for the health sector and form the basis for resource allocation from the central government. The central government allocates tax revenue earmarked for health to 5 regions (80%) and 98 municipalities (20%) using a risk-adjusted capitation formula and some activity-based payment.

**Purchasing health services**

The five regions are responsible for providing hospital care and own and run hospitals and prenatal care centres. The regions also finance general practitioners (gate keepers to secondary care), specialists, physiotherapists, dentists and pharmaceuticals. The 98 municipalities are responsible for nursing homes, home nurses, health visitors, municipal dentists (children’s dentists and home dental services for physically and/or mentally disabled people), school health services, home help and the treatment of alcoholics and drug addicts.

**Provider payment**

Hospitals are paid via fixed budgets, some fee for service and a national case-based (DRG) system introduced in 2000. Hospital physicians are employed by the regions and paid a salary. Self-employed general practitioners act as gatekeepers to secondary care and are paid via a combination of capitation (30%) and fee for service. Non-hospital based specialists are paid on a fee for service basis. Professionals involved in delivering municipal services are paid a salary.

### **Key financing-related reforms**

- 2000: Introduction of case-based payment for hospitals.
- 2007: An administrative reform replaces the 14 counties with 5 regions and lowers the number of municipalities from 275 to 98.

### **Sources**

Vallgård, S., A. Krasnik and K. Vrangbæk (2001). Health care systems in transition: Denmark. Copenhagen, European Observatory on Health Care Systems.

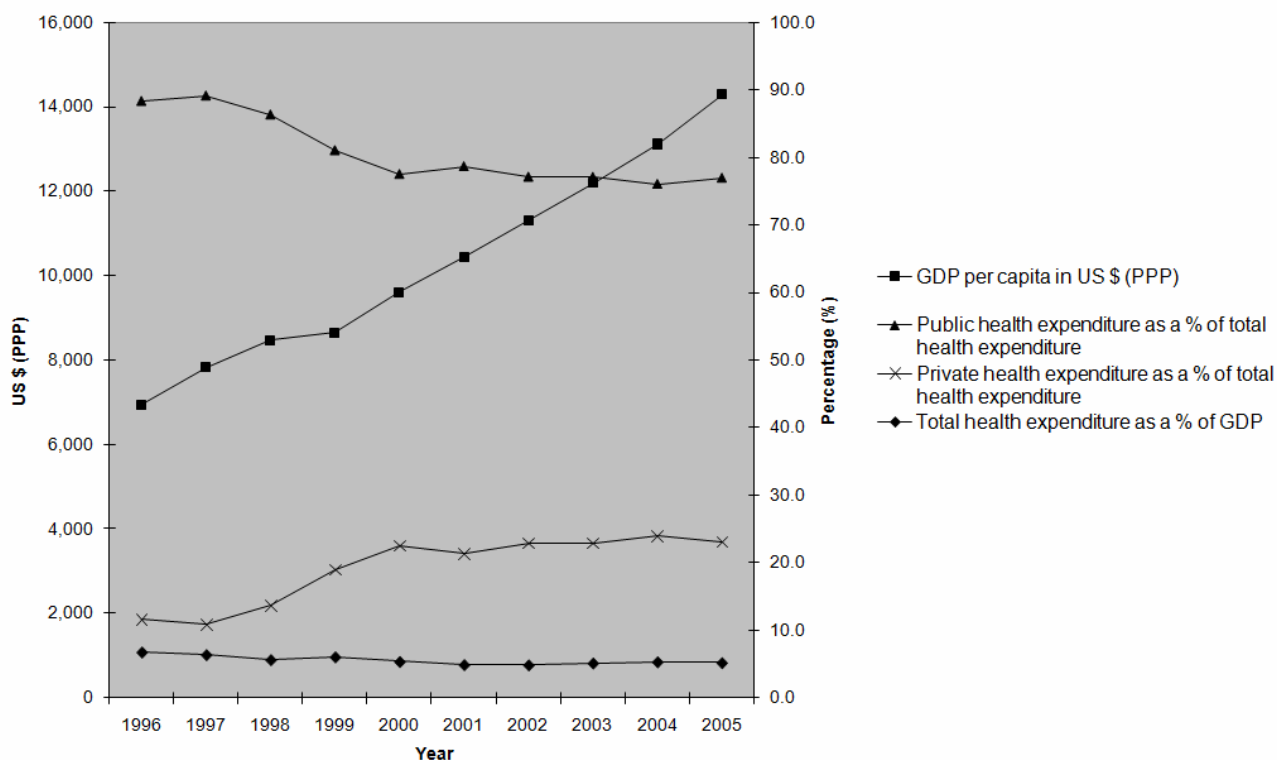
Vrangbaek, K. (2008 forthcoming). The health system in Denmark. New York, The Commonwealth Fund.

## Health care financing in ESTONIA

### Health care expenditure

Total expenditure on health as a proportion of GDP has remained relatively stable over time at around 5% (see Figure 1). However, public spending as a proportion of total expenditure on health fell significantly between 1996 and 2000 and has now stabilised at around 77%. Between 1996 and 2005, out of pocket payments almost doubled as a proportion of total expenditure on health.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

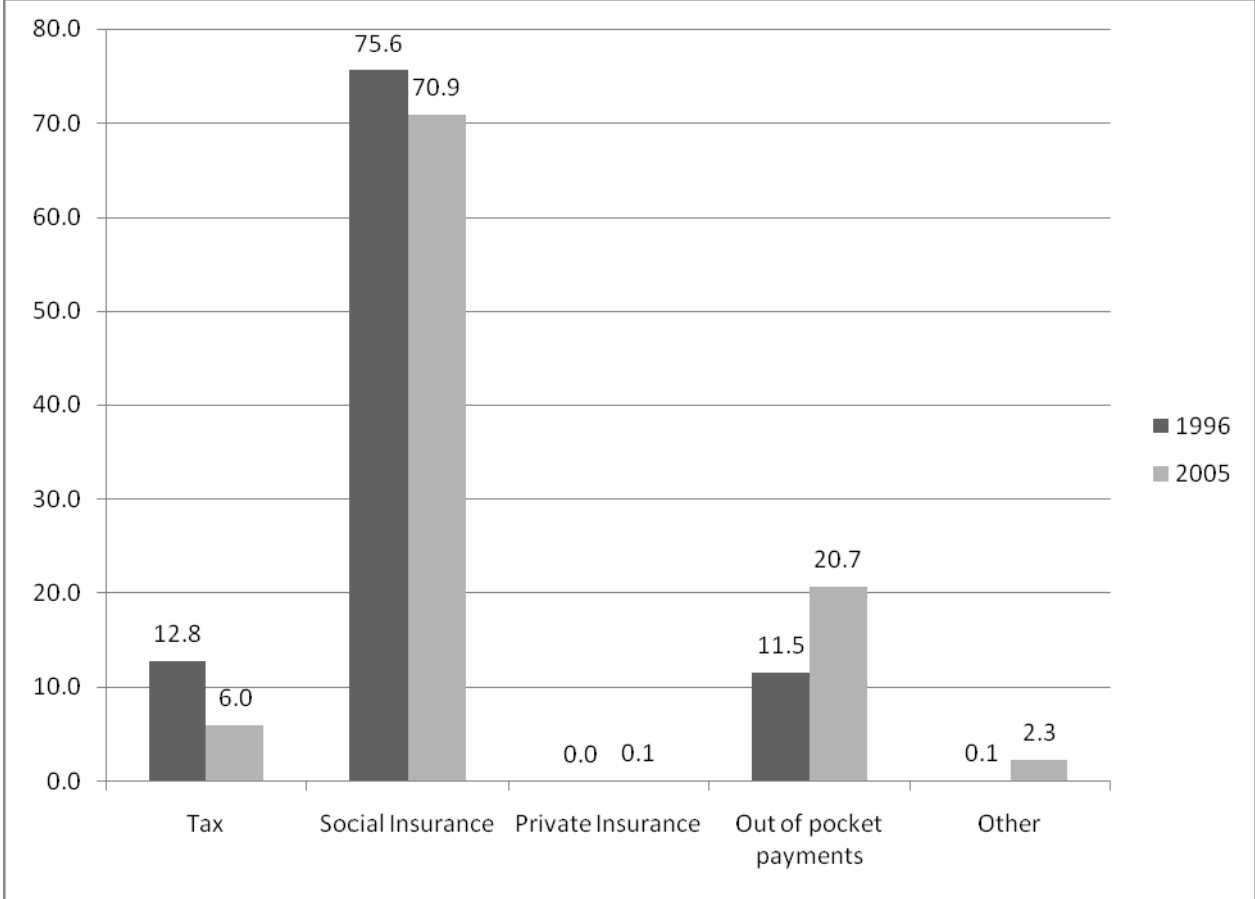
Coverage is based on residence and membership of specific groups. The Estonian Health Insurance Fund (EHIF) covers 94% of the population. Prisoners are covered by the Ministry of Justice. Those without coverage are usually non-working adults. They have access to publicly-financed emergency care but must pay for all other care. The EHIF provides a broad and defined package of benefits, although it does not cover optician services or adult dental care. Statutory cost sharing was introduced during the 1990s and has since increased. Co-payments now apply to home visits by doctors, outpatient prescription drugs, specialist visits and inpatient care, with some recently-introduced exemptions and/or reduced rates for small children, pregnant women, older people (prescription charges) and patients in intensive care (inpatient charges).

### Collection of funds

Estonia's health system is mainly publicly financed. Since 1992, earmarked payroll taxes have been the main contribution mechanism, accounting for about 65% of total expenditure on health (see Figure 2). Other public sources of finance include state and municipal budgets (8% and 2% of total expenditure on health respectively).

The payroll tax is levied at a rate of 13% of gross earnings, paid by employers on behalf of employees and collected by the central government tax agency. Private health insurance plays a marginal role, covering less than 2% of the population. It covers those who are not eligible for EHIF coverage (mainly non-Estonian citizens in the process of applying for residence in Estonia) and provides faster access to a range of services.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

The EHIF pools the earmarked payroll taxes collected by the central tax agency and state budget allocations for non-contributing EHIF members (for example, unemployed people, people caring for disabled people and parents on parental leave). The budget for health care for prisoners is pooled separately, by the Ministry of Justice. The Ministry of Social Affairs pools funds from the state budget to finance emergency services and public health programmes. Municipalities finance social care.

**Purchasing health services**

The EHIF is the main purchasing organisation. It allocates resources to its four regional branches based on capitation, which is adjusted for age for primary care. The EHIF signs yearly contracts with providers. The general terms are negotiated between the EHIF and national provider associations, but detailed agreements are negotiated between the regional branches and individual providers.

Contracts are legally binding, specify obligations relating to payment levels, service volumes and maximum waiting times and are monitored by the regional branches. Financial penalties apply to providers who do not fulfil their contractual obligations.

### **Provider payment**

General practitioners and primary care nurses are paid a combination of age-weighted capitation, fee for service (up to a ceiling of 18.4% of the capitation payment) and basic allowances. Doctors working for hospitals are mainly salaried employees. Ambulatory specialists are paid on a fee for service basis up to the maximum amount specified in their contract. Hospitals negotiate cost and volume contracts with the EHIF based on a list of maximum prices per service or procedure. Activity-based payments were introduced in 2004 (the Nordic DRG system).

### **Key financing-related reforms**

- 1994: The Central Health Insurance Fund established to co-ordinate 22 health insurance funds.
- 1999: The central tax agency is made responsible for collecting the earmarked payroll tax (previously collected by the (now) 17 health insurance funds ).
- 2000: The Health Insurance Fund Act established the EHIF as an independent public body.
- 2001: The Central Sickness Fund is replaced by the EHIF; the 17 regional funds are merged into 7 regional branches of the EHIF (and, in 2003, merged into 4 regional branches).
- 2002: The Health Insurance Act outlines the functions of the health insurance system, including definition of benefits, lists of reimbursement for specific services and drugs, cost sharing ceilings for EHIF members and EHIF-provider contractual relations. Adult dental care excluded from the benefits package and replaced by (more limited) cash benefits.
- 2003: EHIF coverage extended to include long-term care, nursing care and some home care.
- 2004: Introduction of the Nordic DRG system to pay hospitals.
- 2004: Introduction of exemptions from cost sharing for outpatient prescription drugs and primary care for children aged under 4 and 2 years respectively and for pregnant women.

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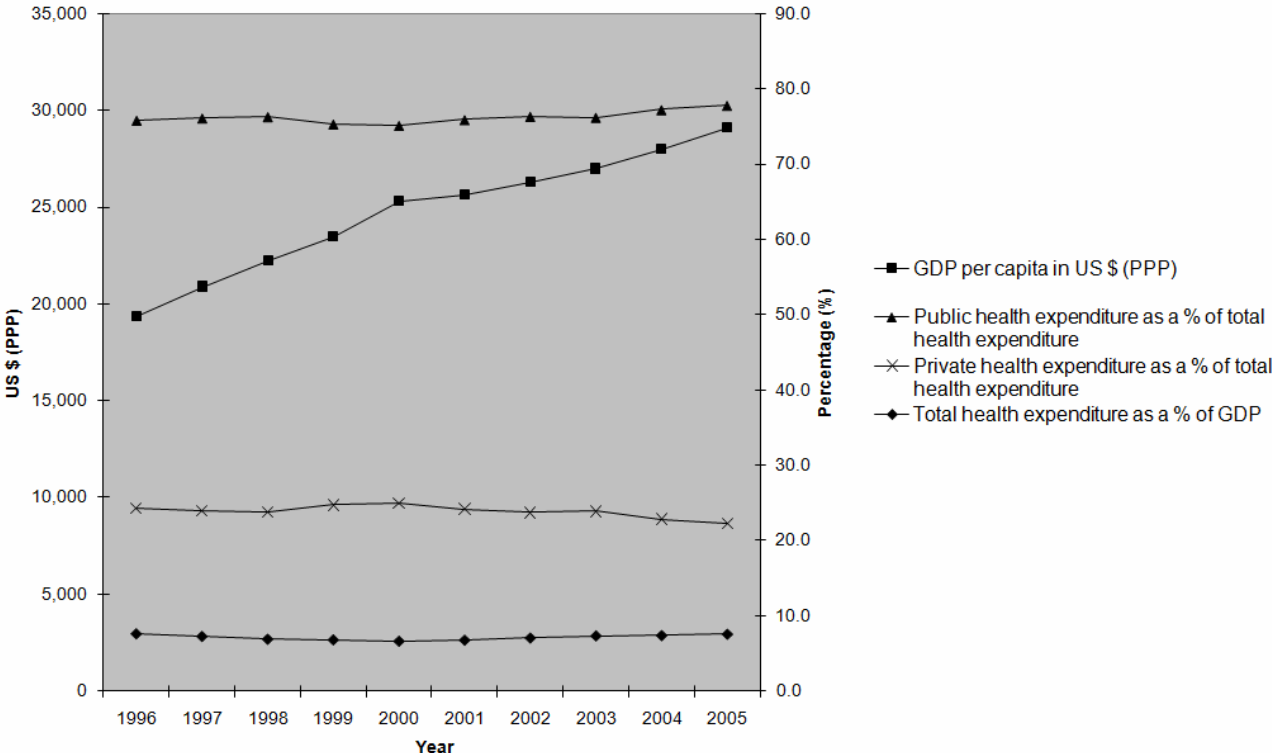
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# Health care financing in FINLAND

## Health care expenditure

Finland is one of only two EU member states (along with Estonia) in which total expenditure on health has declined as a proportion of GDP, falling from 7.6% in 1996 to 7.5% in 2005 (see Figure 1). Public spending as a proportion of total health expenditure has risen slightly from 75.8% in 1996 to 77.8% in 2005. Out of pocket payments fell (as a proportion of total spending) from about 20% in 1996 to about 18% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

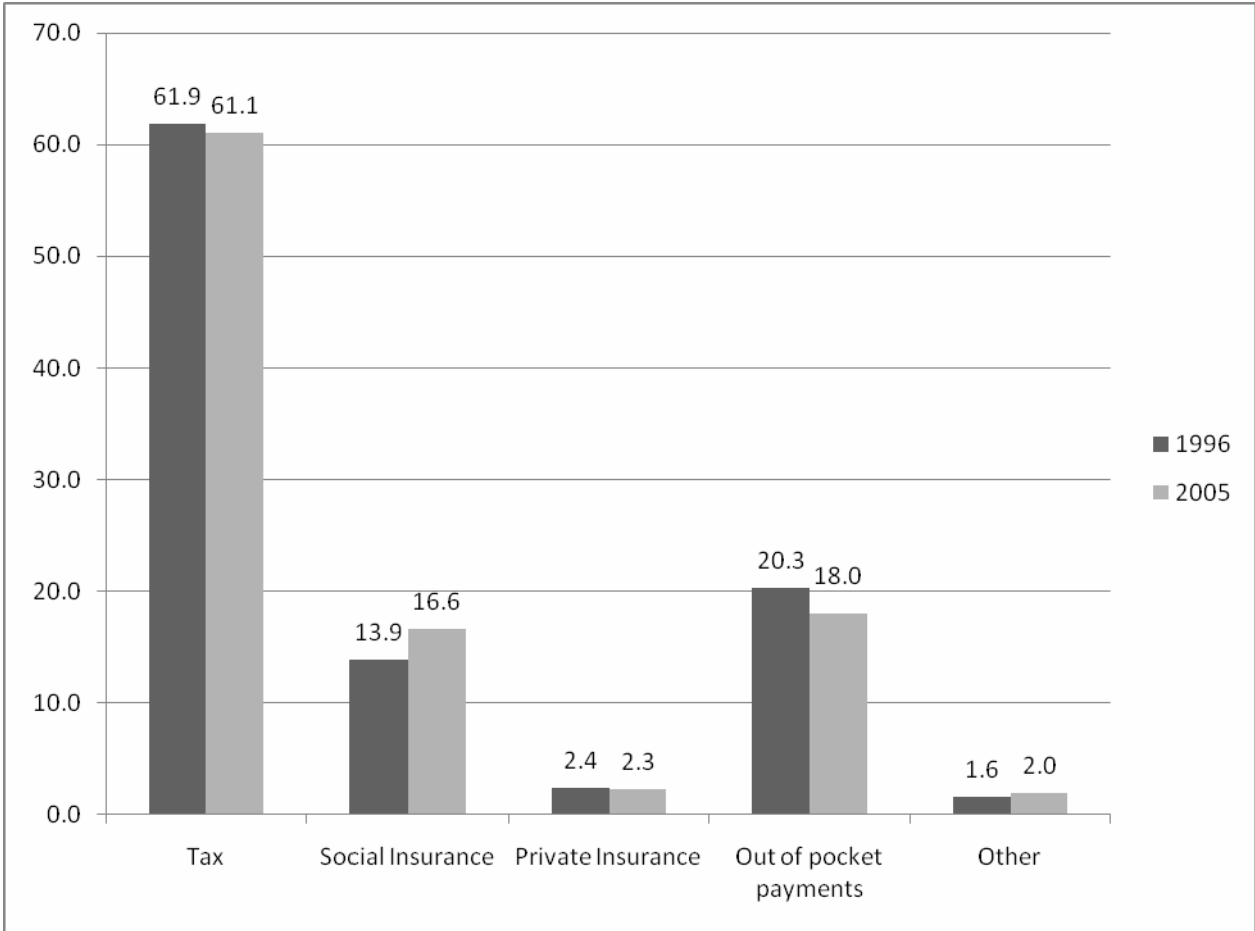
## Coverage and benefits

The publicly-financed health system covers all residents for a comprehensive range of benefits. Cost sharing is applied to most health services but in 2000 an annual maximum out of pocket amount was introduced and children aged under 18 are exempt from primary care charges. Supplementary private health insurance mainly covers children and plays a very small role.

## Collection of funds

The health system is mainly financed through central and local taxes (see Figure 2). In 2004 the 416 municipalities financed about 40% of public spending on health care, the central government about 20% and National Health Insurance (NHI) about 17%. Due to the economic recession of the early 1990 there has been a shift towards increased financing by municipalities and NHI. NHI is financed by employers and employees.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

The size of the health budget is determined nationally and locally. The national budget is allocated to the municipalities based on risk-adjusted capitation, but municipal variation in per capita health expenditure remains an issue. NHI revenue is pooled separately and is mainly used to reimburse outpatient health care provided by private physicians and dentists and outpatient pharmaceutical expenditure.

**Purchasing health services**

As municipalities own most hospitals and primary care centres there is no real purchaser-provider split for tax-financed services. Hospital districts comprising several municipalities (ranging in number from 6 to 58) organise specialist care. The NHI reimburses part of the costs of privately-provided outpatient physician and dental care and pharmaceutical costs. Patients have limited choice of health centre and free choice of private doctors. Referral is required for public sector specialist care.

**Provider payment**

Primary care centres are allocated prospective budgets. Hospital districts increasingly use DRGs to pay hospitals. Hospital and most municipal doctors are salaried employees (with some additional fee for service payments) and some hospital doctors also practise privately.

Health centres that operate a personal doctor system pay doctors a mixture of salary, capitation and fee for service. Semi-private beds in public hospitals are to be abolished in 2008 as they allow patients to bypass waiting lists. Private providers are reimbursed on a fee for service basis.

### **Key financing-related reforms**

- 1993: Introduction of cost sharing for outpatient care; since then, general increases in cost sharing across the board.
- 2000: DRGs begin to be used to pay hospitals; decided that by the end of 2002 publicly-funded dental care would be provided to the whole population.

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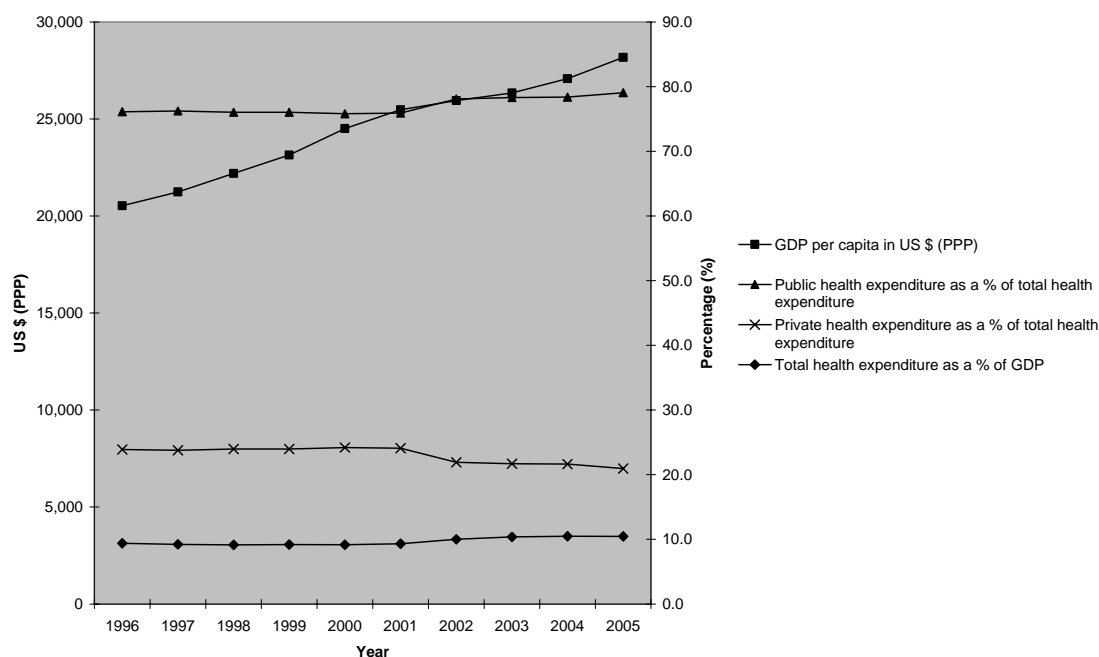


## Health care financing in FRANCE

### Health care expenditure

Between 1996 and 2005, total expenditure on health as a proportion of GDP rose from 9.4% to 10.5% (see Figure 1). It is now the second highest in the European Union (after Germany). In the same period, public spending as a proportion of total expenditure on health rose from 76.1% to 79.1%.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

In 2000 France introduced universal coverage (CMU<sup>14</sup>) and since then the publicly-financed health system has covered all those legally resident in France. The statutory health insurance scheme covers employees and their dependants, the central government covers those not eligible for membership of the health insurance scheme and there is a system of state-financed cover for illegal non-residents (AME<sup>15</sup>). The publicly-financed benefits package is defined by the national union of health insurance funds (UNCAM<sup>16</sup>) guided by advice from the National Health Authority (HAS<sup>17</sup>), an independent public body. Complementary private health insurance covering statutory user charges covers over 92% of the population.

<sup>14</sup> Couverture Maladie Universelle.

<sup>15</sup> Aide Médicale d'État.

<sup>16</sup> Union Nationale des Caisses d'Assurance Maladie, established in 2004.

<sup>17</sup> Haute Autorité de Santé, established in 2004.

## Collection of funds

The statutory health insurance scheme is financed through social insurance contributions paid by employers and employees (43%), a personal income tax (33%) created in 1990 to broaden the revenue base of the social security system (CSG<sup>18</sup>), revenue from taxes levied on tobacco and alcohol (8%), transfers from other branches of social security (8%) and state subsidies (2%) (see Figure 2). Contribution rates are set centrally by the government and collected locally by social security agencies. There is no ceiling on contributions. Patients contribute to about 30% of the costs of health and dental care at the point of use. People with chronic conditions and people with low incomes are exempt from cost sharing for health care. Complementary private health insurance covers statutory cost sharing and is mainly provided by employment-based non-for-profit mutual associations. Since 2000, people with low incomes are entitled to free complementary cover (CMU-C<sup>19</sup>). In 2004, the government introduced a non-reimbursable co-payment of €1 per doctor visit. From 2008, further non-reimbursable co-payments will be introduced for prescription drugs (€0.50) and ambulance journeys (€2) up to an annual ceiling of €50. Pregnant women, children and people with low incomes are exempt from these non-reimbursable charges.

## Pooling funds

Social insurance contributions are pooled nationally within each of the health insurance schemes, the largest of which (the general scheme) covers most of the population. Persons are assigned to a particular scheme based on occupation. There is no competition among public health insurance funds.

## Purchasing health services

The public health insurance funds purchase services from public and not-for-profit private hospitals (two-thirds of all beds) and from for-profit private clinics. In 2004 voluntary gate keeping (*médecin traitant*) was introduced to control demand for health care.

## Provider payment

Hospitals are paid through nationally-uniform tariffs per diagnosis-related group (DRG) in combination with budgets and additional payments for some services. Separate funding systems for public and private hospitals are expected to converge in 2008 (originally 2012), when all hospital funding will be based on activity. Ambulatory doctors are paid on a fee for service basis. Hospital doctors in public or not-for-profit private hospitals are paid a salary.

## Key financing-related reforms

- 1990: Introduction of a national income tax (CSG) to broaden the revenue base for social security.
- 1996: Introduction of a (soft) ceiling (ONDAM<sup>20</sup>) for the rate of expenditure growth in the statutory health insurance scheme. The ceiling is voted on in parliament every year.
- 1998: The CSG is increased to replace most of the employee contribution for health care (which falls from 6.8% to 0.75%).

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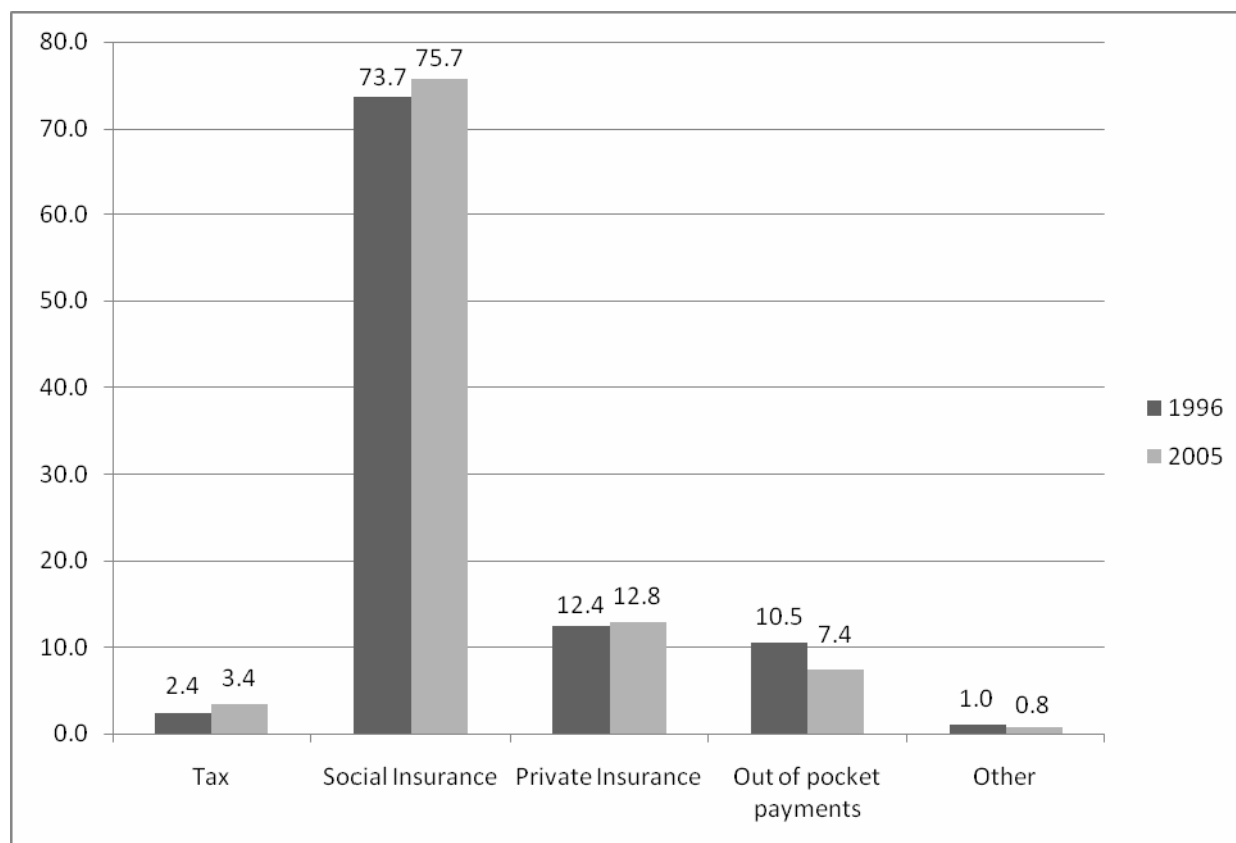
<sup>18</sup> Contribution Sociale Généralisée. In 1998 the CSG (5.25% of gross income) replaced most of the employees' contribution (now only 0.75% of gross earnings).

<sup>19</sup> Couverture Maladie Universelle Complémentaire.

<sup>20</sup> Objectif National de Dépenses d'Assurance Maladie.

- 2000: Introduction of universal coverage through CMU and free complementary private health insurance for people with low incomes (CMU-C).
- 2002: Introduction of DRGs to pay hospitals, with phased implementation due for completion in 2012.
- 2004: Introduction of a non-reimbursable co-payment of €1 per doctor visit.
- 2004: Creation of two new associations: the National Union of Health Insurance funds (UNCAM) and the National Union of Voluntary Health Insurers (UNOCAM<sup>21</sup>), bringing together all public health insurance funds and private health insurers respectively. UNCAM given responsibility for defining the benefits package and setting price and cost sharing levels.
- 2008: Introduction of non-reimbursable co-payments for outpatient prescription drugs and ambulance journeys.
- 2008: Prospective payment through DRGs to be implemented for all hospitals and clinics (brought forward from 2012).

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

Note: The actual level of tax finance for health is much higher than shown, but because some of it is channelled through the statutory health insurance scheme it is classed as 'social insurance'.

<sup>21</sup> Union Nationale des Organismes Complémentaires d'Assurance Maladie.

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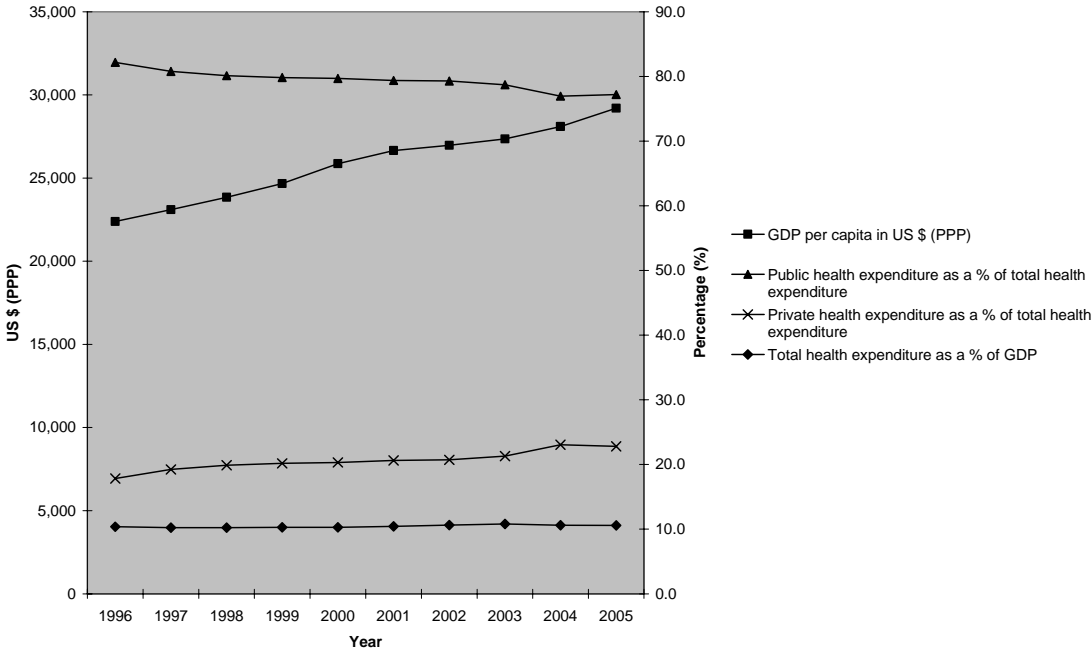
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# Health care financing in GERMANY

## Health care expenditure

Germany spends more on health (as a proportion of GDP) than any other EU member state (10.6% in 2005; see Figure 1). Between 1996 and 2005 public spending on health fell from 82.2% of total health expenditure to 77.2%. The rise in private expenditure can mainly be attributed to higher levels of out of pocket spending on health, which rose from 9.5% in 1996 to 13.8% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

## Coverage and benefits

Publicly-financed health insurance provides a comprehensive package of benefits and is compulsory for employees earning up to around €48,000 per year and their dependants. Civil servants and employees with earnings above this amount are currently not obliged to be covered. If they wish, they can remain in the publicly-financed scheme on a voluntary basis, they can purchase private health insurance or they can be uninsured. The publicly-financed scheme covers about 88% of the population. Around three quarters of those who are able to choose between public or private health insurance (less than 20% of the population) opt to remain in the publicly-financed scheme, which offers free cover of dependants. In total, 10% of the population are covered by private health insurance, mainly civil servants and self-employed people. Less than 1% of the population has no insurance coverage at all. From 2009, health insurance will be compulsory for the whole population. Long-term care is covered by a separate insurance scheme, which has been compulsory for the whole population since 1995. Cost sharing traditionally covered outpatient prescription drugs and dental care, but in 2004 it was introduced for doctor visits and extended in other areas. However, children are exempt from cost sharing, which is capped at an annual maximum of 2% of household income (or 1% for chronically ill people).

## **Collection of funds**

Health care in Germany is mainly financed through social insurance contributions (see Figure 2). The publicly-financed scheme is funded by compulsory contributions on the first €43,000 earned in a year. The average contribution is around 15% of gross earnings. Unemployed people also contribute, but the government pays a flat rate per capita contribution for long-term unemployed people. Currently, health insurance funds are free to set their own contribution rates. However, from 2008, a uniform contribution rate will be set by the government and all contributions will be centrally pooled by a new national fund. Funds will also be allowed to charge their members a flat-rate premium.

Private health insurance playing a substitutive role covers both groups excluded from publicly-financed health insurance (civil servants and self-employed people; the former have part of their health care costs directly reimbursed by their employers) and high earners who choose to opt out of the publicly-financed scheme. All pay a risk-rated premium and the substitutive market is regulated to ensure access and affordability for older or unhealthier subscribers. From 2009, private insurers offering substitutive cover will be required to take part in a risk adjustment scheme to finance the costs of cover for people in ill health. Private health insurance also plays a mixed complementary and supplementary role.

## **Pooling**

The publicly-financed scheme is operated by over 200 competing non-profit health insurance funds regulated by the government. The risk adjustment mechanism re-allocates funds' revenue based on the age, sex, disability of their members. From 2009 all fund revenue will be pooled centrally and allocated based on capitation adjusted for age, sex and health risk.

## **Purchasing health services**

Health insurance funds contract with mainly private providers on a regional basis. In recent years their purchasing power has increased. Individuals have free choice of provider and direct access to specialists. Since 2004 funds have been required to offer their members the option of enrolling in a gate keeping system with financial incentives for adhering to gate keeping rules. Funds have financial incentives to care for chronically ill patients through Disease Management Programmes (DMPs).

## **Provider payment**

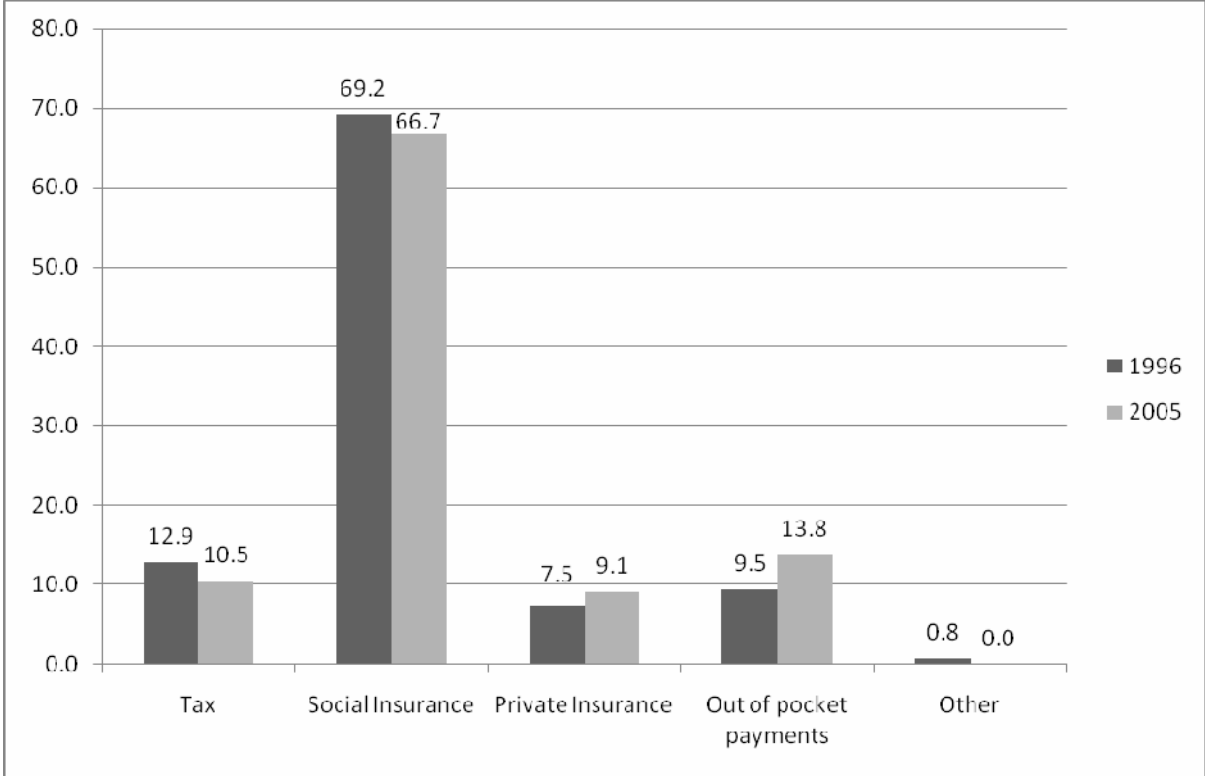
Physicians in the ambulatory sector are paid a mixture of fees per time period and per medical procedure. Hospitals are principally staffed by salaried doctors, although senior doctors may also treat privately-insured patients on a fee-for-service basis. Inpatient care is reimbursed through a system of global budgets with diagnosis-related groups (DRG) per admission (the latter introduced in 2004).

## **Key financing-related reforms**

- 2002: Increase in the threshold for 'opting out' of the publicly-financed scheme.
- 2004: introduction of co-payments for doctor visits; Institute for Quality and Efficiency (IQWiG) established to carry out health technology assessment (HTA); DRGs introduced to pay hospitals; all drugs subject to reference prices.
- 2008: Global budgets for hospitals to be totally replaced by DRGs; contribution rate will be set centrally; resources will be allocated by a new national fund.

2009: Budgets for ambulatory care will be replaced by a more sophisticated system that accounts for population morbidity; risk adjustment for substitutive private health insurance; health insurance (public or private) will be compulsory for the whole population.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Sources**

Busse, R. and A. Riesberg (2004). Health care systems in transition: Germany. Copenhagen, European Observatory on Health Systems and Policies.

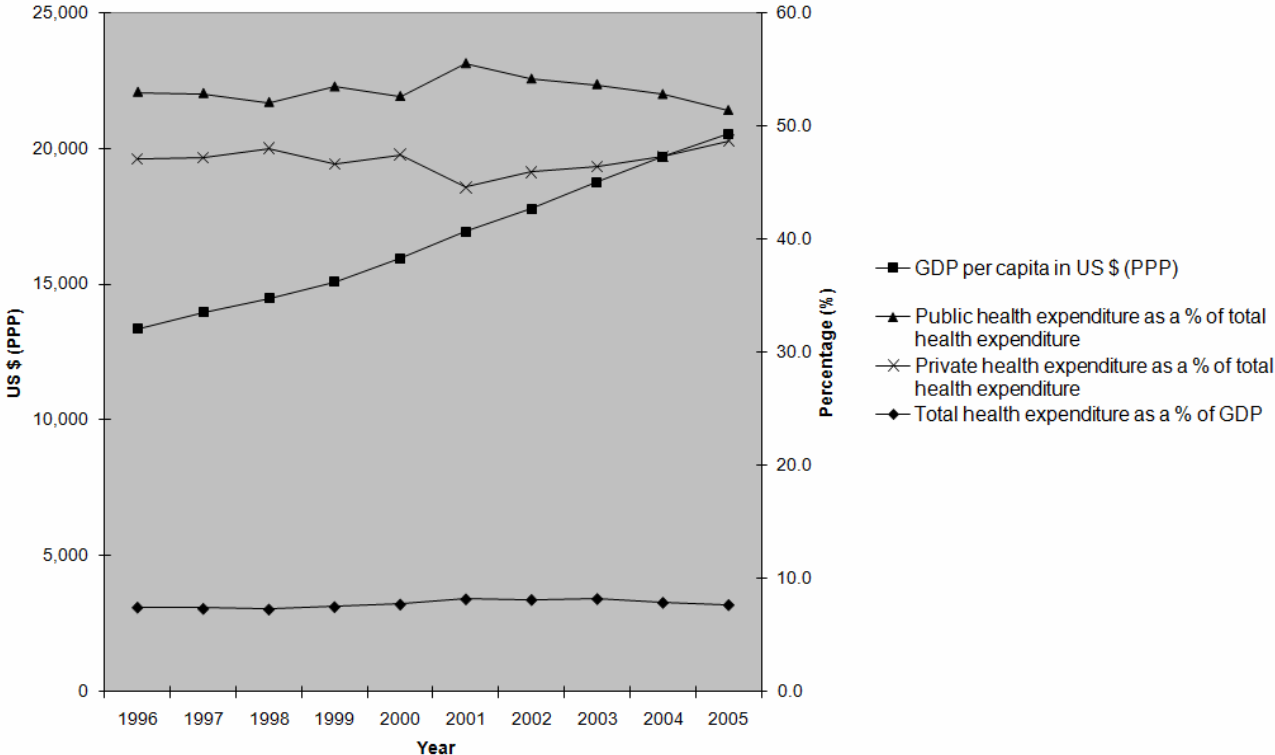
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# Health care financing in GREECE

## Health care expenditure

Total expenditure on health as a proportion of GDP has risen slightly from 7.4% in 1996 to 7.7% in 2005 (see Figure 1). Public spending has declined as a proportion of total health expenditure from 53.0% in 1996 to 51.3% in 2005. Out of pocket payments have risen significantly as a proportion of total health expenditure, from 35.6% in 1996 to 46.5% in 2005, and are the highest in the European Union after Cyprus (51.6%).

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

## Coverage and benefits

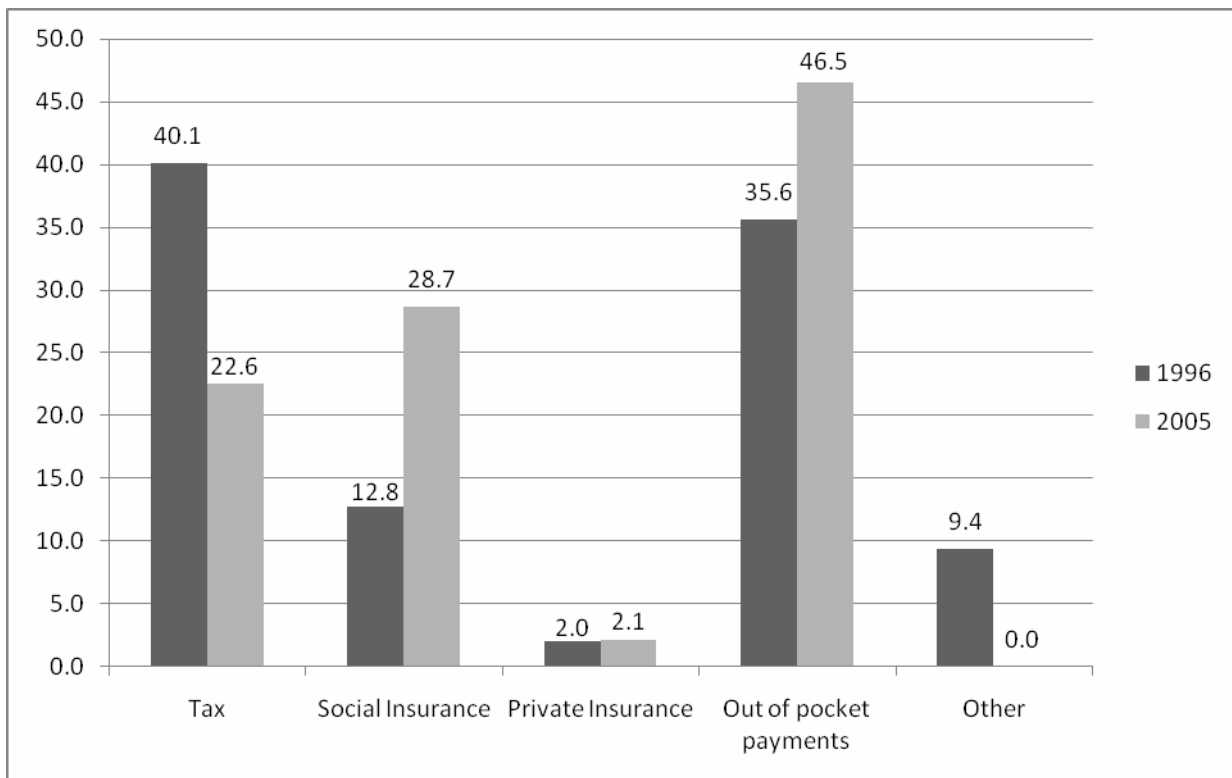
The National Health System (NHS) created in 1983 covers all residents for services provided in NHS facilities. However, access to health care is also dependent on membership of 35 occupation-based health insurance funds financed by social insurance contributions, which cover 97% of the population. The Social Insurance Institute (IKA) covers around half of the population, with three other funds (OGA, OAEE and OPAD) covering a further 40%. The funds cover outpatient care, with inpatient care mainly provided by NHS hospitals and (for some funds) by contracted private hospitals. Funds offer their own benefits packages. Cost sharing mainly applies to outpatient prescription drugs, dental prostheses and visual care, with exemptions from prescription charges for pregnant women and chronically ill patients and reduced prescription charges for some diseases and low-income pensioners. Direct out of pocket payments are extensive and informal payments are an issue. Out of pocket payments are made to avoid waiting lists and to guarantee better quality of care. Supplementary private health insurance plays a very small role.



## Collection of funds

Out of pocket payments are the largest single contribution mechanism in the Greek health system (see Figure 2). Publicly-generated funds are almost equally derived from central taxes and through social insurance contributions from employers and employees. However, some funds are fully financed from state budget transfers (including OGA and OPAD, the funds for farmers and civil servants respectively). Social insurance contribution rates vary by fund.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

## Pooling

Tax revenue is pooled by the Ministry of Finance. Social insurance contributions are pooled by individual funds. There is no re-allocation of resources among them.

## Purchasing health services

The Ministry of Health and health insurance funds are the main purchasers of health care from NHS and private providers. The Ministry of Health allocates resources to providers from its budget (determined by the Ministry of Finance) on a largely historical basis.

## Provider payment

Greek hospitals are remunerated on the basis of a mixture of budgets, per diem and case-based payments (depending on the payer). Rural health centres and health insurance fund hospitals are allocated budgets. Doctors in hospitals and health centres are mainly salaried employees and receive fee for service payments. Purely private doctors are paid on a fee for service basis.

### **Key financing-related reforms**

- 1999: Merger of three health insurance funds into a single fund for self-employed people (OAEE)
- 1999-2001: Creation of a fund for civil servants (OPAD)
- 2001: Legislation for developing and decentralising regional structures, establishing new managerial structures within public hospitals, altering NHS doctors' employment terms, merging and co-ordinating agencies for health care funding, developing public health services
- 2002: Introduction of private practice for NHS hospital doctors

### **Source**

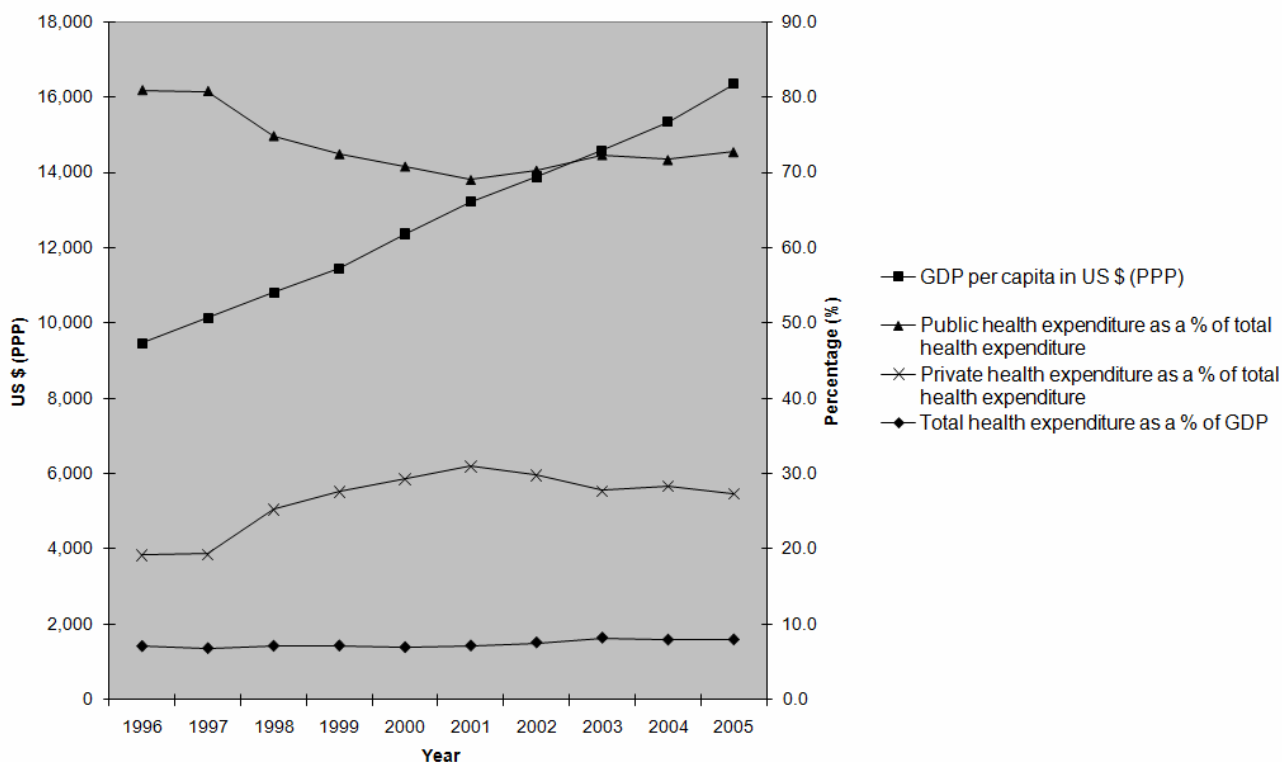
Arsenopoulou, I., C. Economou, C. Golna, D. Kaitelidou, V. Kontozamanis, A. Kosmopoulou, O. Siskou, A. Sissouras, K. Souliotis and M. Theodorou (2008 forthcoming). "Greece: health system review." Health Systems in Transition **10**.

## Health care financing in HUNGARY

### Health care expenditure

Total expenditure on health as a proportion of GDP has been relatively stable in recent years, at around 7% since 1996 (see Figure 1). However, the share of public spending has fallen significantly from 81% in 1996 to 73% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

Entitlement to statutory health benefits is based on citizenship. The statutory system covers over 99% of the population and offers a comprehensive range of benefits. Initially, cost sharing was limited and mainly applied to outpatient prescription drugs, with some cost sharing for spa treatment, dental prostheses, long-term care, some hotel services in hospital and specialist care obtained without referral. In 2007 cost sharing was introduced for ambulatory care and inpatient care, with higher charges for accessing secondary care without referral. Patients on very low incomes are exempt from paying prescription charges. Informal payments are a deeply rooted and persistent issue in the Hungarian health system.

### Collection of funds

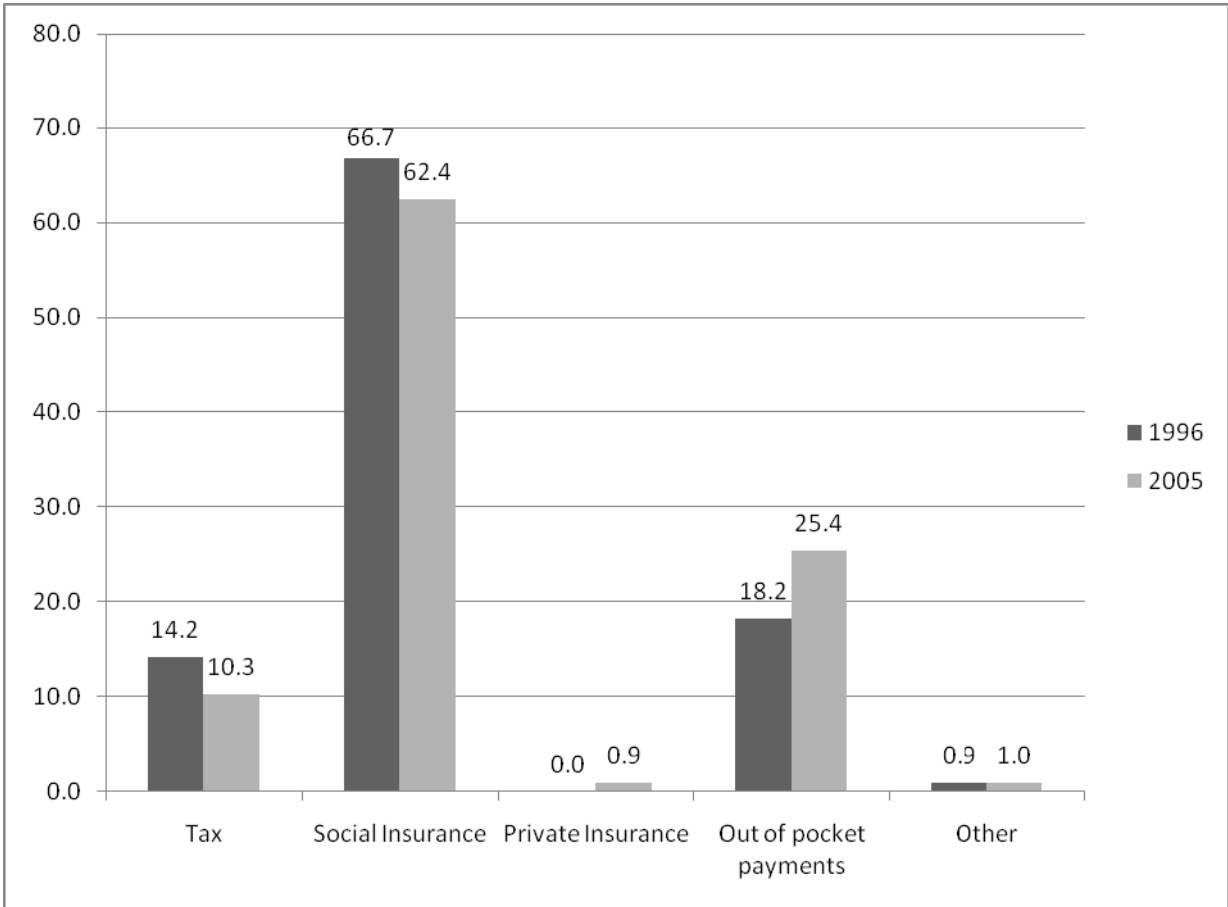
Since 1990 the health system has mainly been financed through social insurance contributions (see Figure 2). Funds were initially collected by the national health insurance fund, but in 1998 this role was shifted to the central tax agency. Contributions are set centrally. They are complemented by an earmarked health care tax (levied as a lump sum by employers and as a proportional tax on income by everyone else) to cover the cost of non-contributors and a mixture of central and local taxes. Evasion of contributions has been a persistent problem. Eligibility for care is being tightened and from 2008 those without entitlement will no longer receive care.

Out of pocket payments have risen in the last ten years and, in spite of various reforms, the system of informal payments remains deeply embedded in the health system. In 1993 non-profit associations began to offer private cover of services excluded from or only partially covered by the statutory system. This type of complementary cover operates through household savings accounts (thus there is no pooling) and benefits from tax relief of 30%. The market for supplementary private health insurance is very small.

**Pooling**

A single health insurance fund overseen by the National Health Insurance Fund Administration (NHIFA) pools social insurance contributions and tax revenue earmarked for health. NHIFA is controlled by the central government through the Ministry of Health.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Purchasing health services**

NHIFA purchases health services by contracting with providers. It cannot engage in selective contracting but must contract with all providers who have a territorial supply obligation. The national budget is divided into 20 sub-budgets based on different types of health service. Each sub-budget is capped (except the pharmaceutical sub-budget). Primary care providers are increasingly private, while secondary care institutions remain under local government ownership. From 2009 the single purchaser model will be replaced by a system of five to eight competing insurance companies (which may be part-owned by private insurers). These competing insurers will be allocated risk-adjusted resources by NHIFA and people will have free choice of insurer.

## **Provider payment**

Since 1992 family doctors have been paid on a capitation basis adjusted for age and the qualifications of the doctor. Outpatient specialists are mainly paid a salary, as are hospital doctors. Hospital services are reimbursed via case-based payment capped by a global budget for acute inpatient care.

## **Key financing-related reforms**

- 1990: Social insurance contributions become the dominant method for financing health care; ownership of health facilities devolved from central to local government.
- 1992: Social insurance fund splits into two branches: health and pensions; NHIFA collects contributions for health via local offices; introduction of capitation payment for family doctors; family doctors encouraged to become private providers.
- 1993: Introduction of case-based payment for acute inpatient care and fee for service points-based payment for outpatient specialists; private health insurance legally permitted.
- 1995: Tax relief (30% of the premium) introduced for complementary private health insurance; dental services excluded from statutory coverage, subsidies on spa treatment removed and a co-payment for patient transport introduced.
- 1996/97: Widening of the social insurance contribution base, decrease in the employer health insurance contribution rate and introduction of the earmarked health care tax.
- 1998: Abolition of self-governance for NHIFA; NHIFA comes under the control of the Prime Minister's Office; the earmarked health care tax extended to tackle contribution evasion.
- 1999: Plans for introducing competing health insurance funds debated but dropped; NHIF comes under the control of the Ministry of Finance; the Tax Office takes over responsibility for collecting contributions from NHIFA.
- 2001: NHIFA comes under the control of the Ministry of Health.
- 2001: Ceiling on contributions abolished.
- 2006: Central government pays for non-contributors as a defined and prospective lump sum, which has increased the statutory health insurance scheme's revenue.
- 2007: Cost sharing introduced for ambulatory and inpatient care.
- 2009: Monopsony purchasing by NHIFA to be replaced by five to eight competing health insurance companies.

## **Sources**

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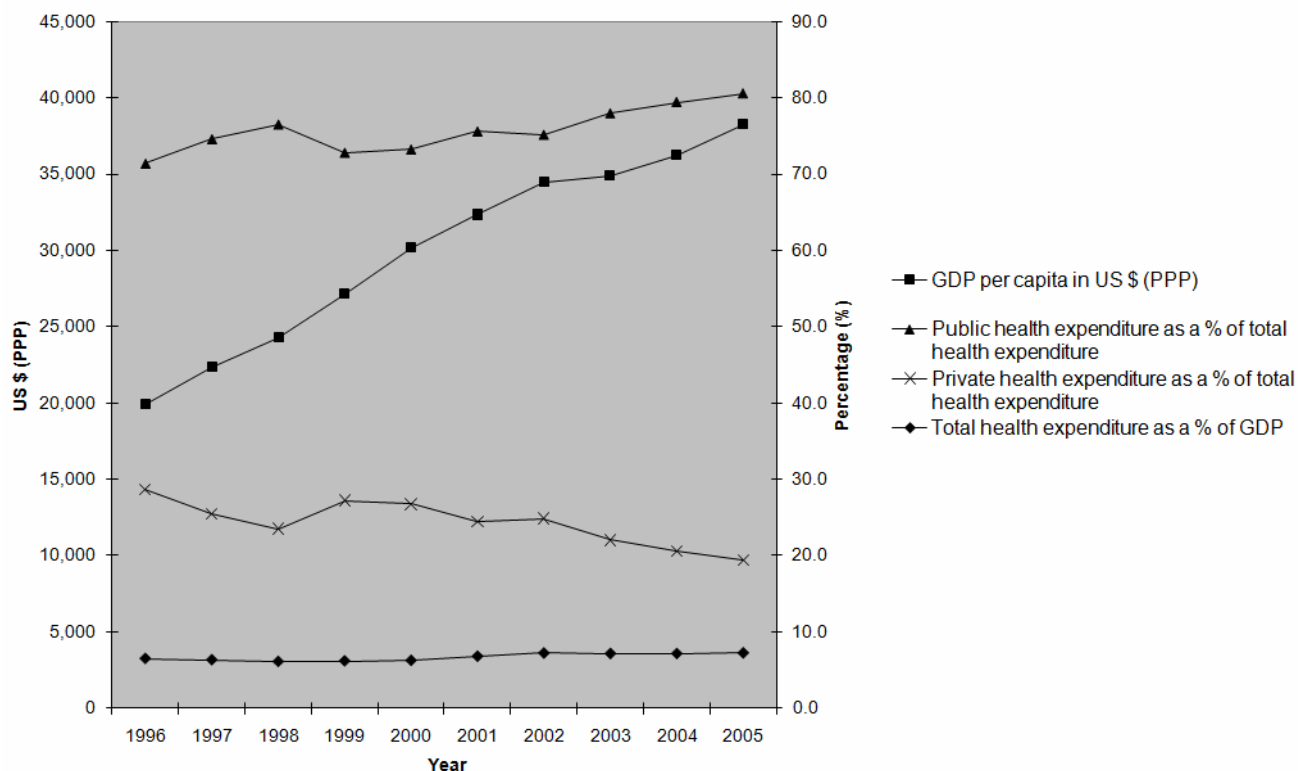
National Institute for Strategic Health Research (2007). Hungarian Health System Scan, June 2007. Budapest, National Institute for Strategic Health Research (ESKI).

## Health care financing in IRELAND

### Health care expenditure

Total expenditure on health as a proportion of GDP has remained relatively stable in recent years (7.3% in 2005) (see Figure 1). Public spending on health as a proportion of total expenditure rose significantly between 1996 and 2005, from 71.4% to 80.6%. Out of pocket payments have also risen, as a share of private expenditure on health, from 48.3% in 1996 to 61.0% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

The publicly-financed health system covers all residents. The population is divided into two categories depending on income and other eligibility criteria. Individuals in Category I are eligible for the General Medical Services Scheme and receive 'Medical Cards' (28.8% of the population), which means that all health services (apart from long-term care) can be accessed free at the point of use. Asylum seekers are entitled to the same range of services as medical card holders. The remainder of the population is classified into Category II and has access to publicly-financed secondary care services (subject to cost sharing in the form of a daily inpatient co-payment of €60, up to an annual maximum of €600), but must pay out of pocket for primary care (unless they hold a GP Visit card, see below) and outpatient prescription drugs (up to a monthly maximum of €85). Category II individuals also have to pay privately for dental and ophthalmic services, although some help for these costs may be available via the 'Treatment Benefits' scheme. In 2005 the government introduced a new means-tested GP Visit Card to provide free access to GP services. The income threshold for this card is 50% higher than the threshold for medical cards. Private health insurance covers just over half the population. It plays a mixed supplementary and complementary role, offering faster access to care and access to private sector care plus reimbursement of inpatient cost sharing and (limited) reimbursement of outpatient cost sharing.

## **Collection of funds**

The health system in Ireland is mainly funded through general taxation and progressive earmarked health contributions (see Figure 2). Health contributions are levied on earnings (2.0% on earnings under €100,000 and 2.5% on earnings above this level). Medical card holders and other low income people are exempt from making health contributions. General taxation and health contributions account for around 70% and 10% of total expenditure on health respectively. Private health insurance is sold by three companies and the market is heavily regulated. Insurers are obliged to offer open enrolment (up to age 65), lifetime cover, community rating (for a given level of benefits) and minimum benefits. They are also required to make financial transfers under a risk equalisation scheme activated in 2006.

## **Pooling**

General taxation and earnings-related health contributions are collected by the Department of Finance and transferred to the Health Service Executive (HSE) and the National Treatment Purchase Fund (NTPF; established in 2002 to address hospital waiting times). The health budget is voted for by the parliament annually.

## **Purchasing health services**

The HSE and NTPF contract with providers and hospitals. The health budget is largely determined based on historical allocations, with fixed allocations made to public and voluntary hospitals. In some hospitals, however, resource allocation is adjusted according to case mix and activity volume. The NTPF is available to all patients who have been waiting for treatment for three months or more.

## **Provider payment**

Public GPs are paid according to a fee schedule mainly based on weighted capitation, with supplementary fees for special services such as out of hours home visits or influenza vaccinations. Private GPs are paid on a fee for service basis. Hospital-based specialists in public and voluntary hospitals are salaried employees, while those working in private hospitals are paid on a fee for service basis. Public hospital specialists are also paid on a fee for service basis when treating private patients. Hospitals are allocated budgets adjusted for case mix (through DRGs).

## **Key financing-related reforms**

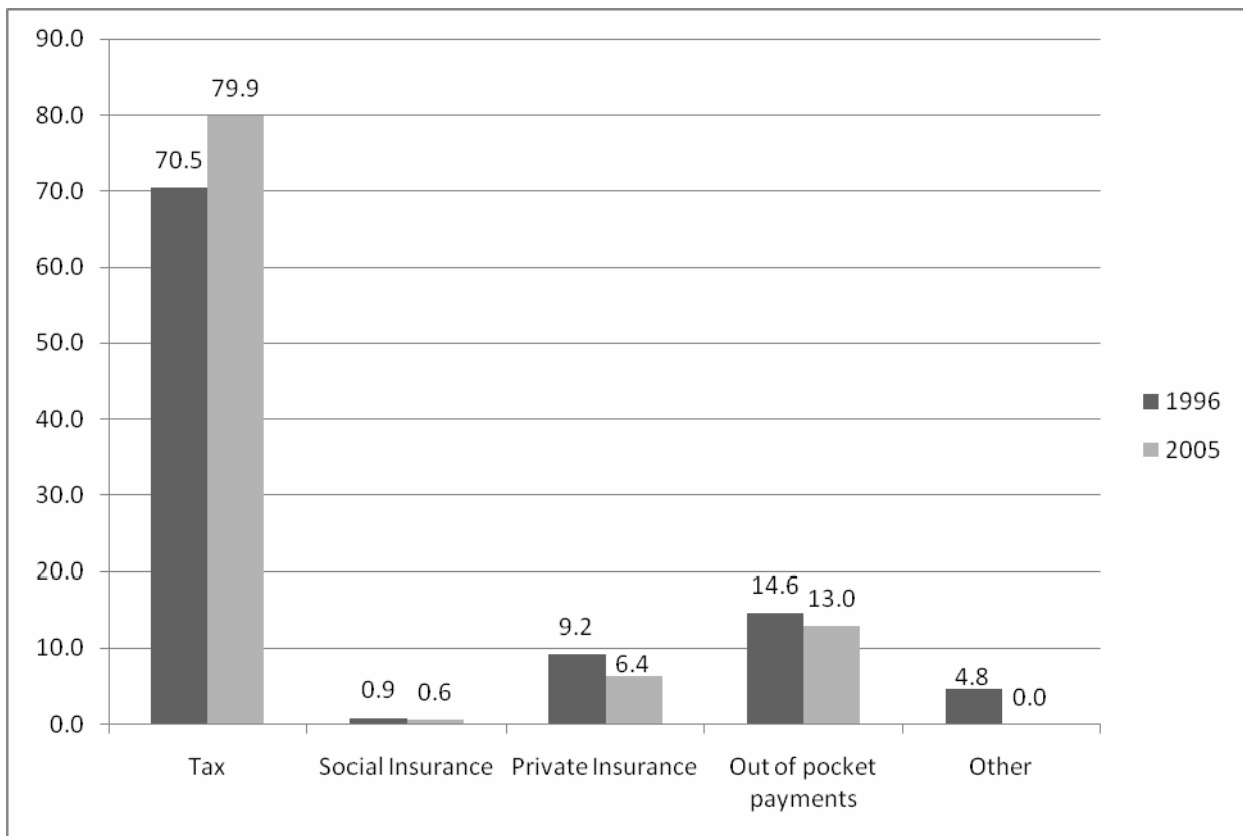
- 1993: Introduction of case-mix adjustment through DRGs for hospitals.
- 1994: Health Insurance Act opens the private health insurance market to competition (in response to the European Commission's Third Non-Life Insurance Directive) and sets the regulatory framework.
- 1999: Publication of a government White Paper on private health insurance, which leads to the 2001 Health Insurance (Amendment) Act and the introduction of the risk equalisation scheme (with effect from 2003).
- 2001: All those aged 70 and over become eligible for medical cards, irrespective of income.
- 2002: Creation of the National Treatment Purchase Fund (NTPF), which obtains independent statutory status in 2004.
- 2004: The Health Act makes the Health Service Executive (rather than the Department of Health and Children) responsible for the management of the national health budget and how it is to be spent.

- 2005: Introduction of the GP Visit card, with an income threshold 25% higher than the threshold for medical cards; the threshold raised to 50% higher than the medical card threshold in 2006.
- 2005: Modification of user charges for people residing in public long-term care homes.

**Source**

McDaid, D. and M. M. Wiley (2008 forthcoming). *Ireland: health system review*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

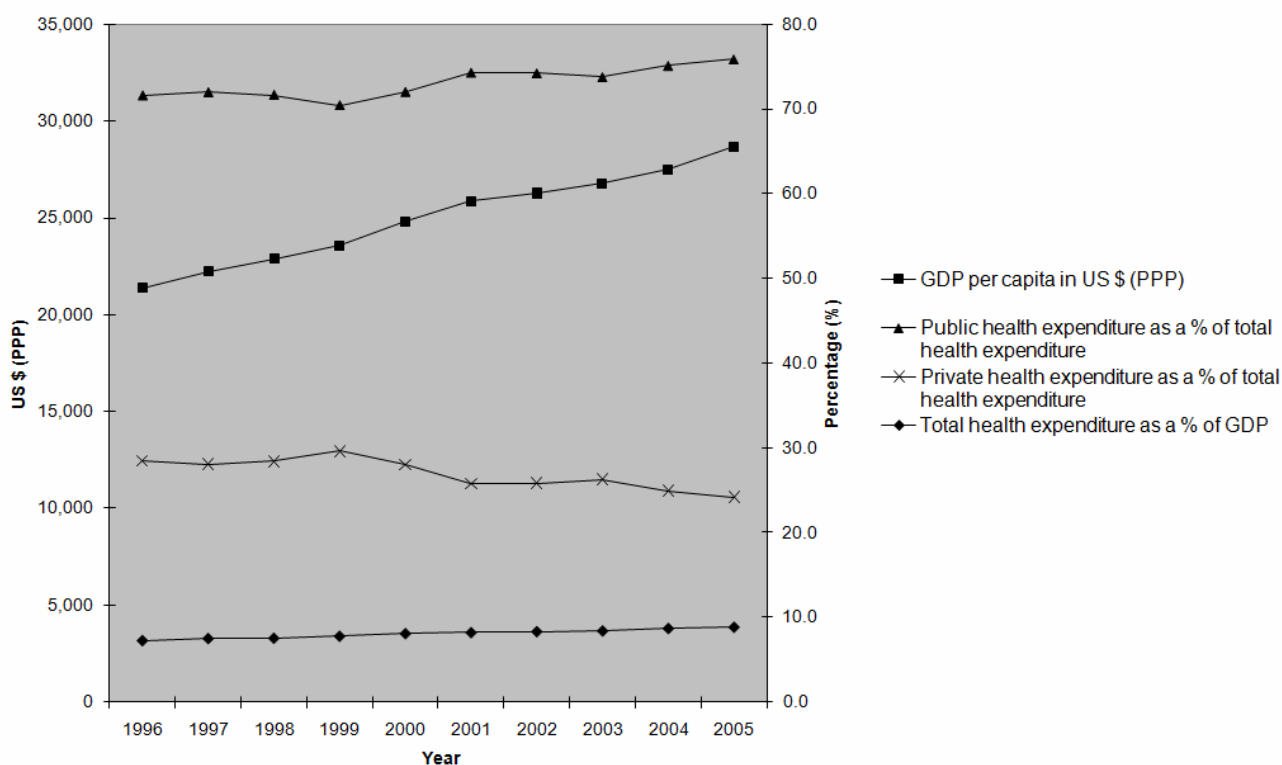


## Health care financing in ITALY

### Health care expenditure

Total expenditure on health as a proportion of GDP has risen from 7.3% in 1996 to 8.8% in 2005 (see Figure 1). Public spending on health has also risen, as a share of total expenditure, from 71.5% in 1996 to 75.8% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

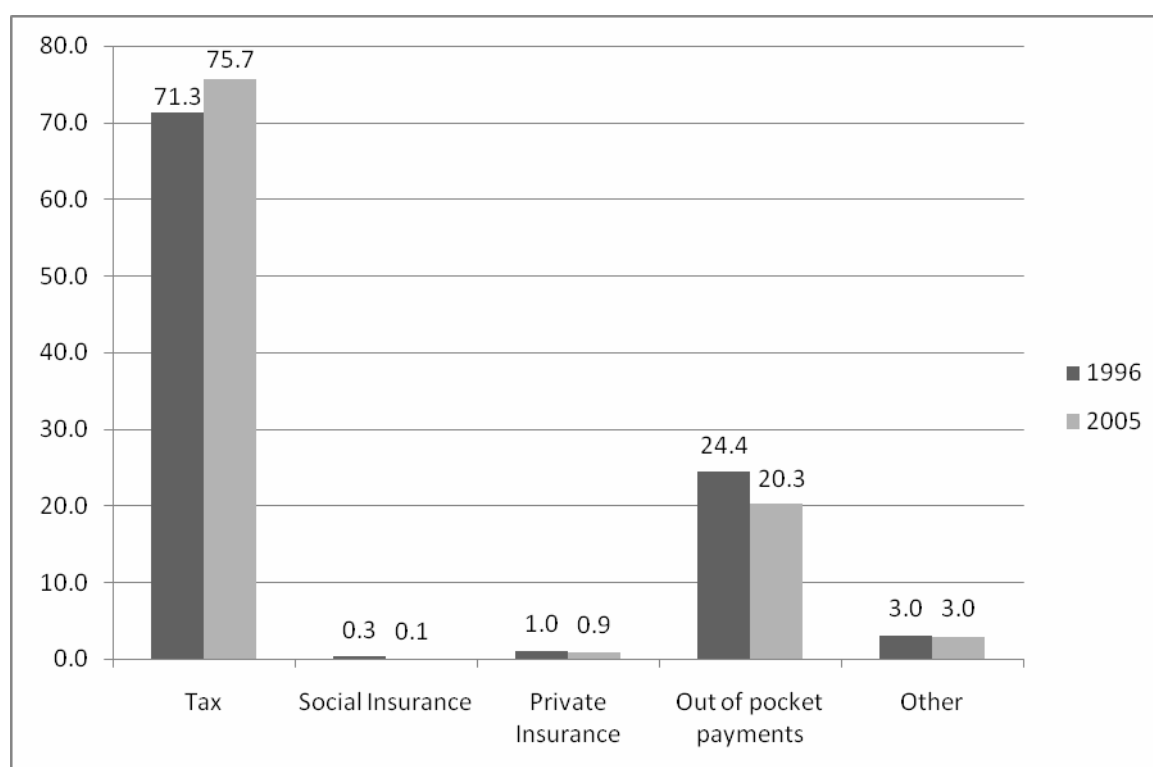
### Coverage and benefits

Since the creation of the SSN (*Servizio Sanitario Nazionale*) in 1978, the publicly-financed health system has covered all citizens. Since 1998 it has also covered immigrants and provides illegal immigrants with access to basic services. The central government defines the national benefits package, which covers a broad range of services. Cost sharing in the form of fixed co-payments applies to diagnostic procedures, outpatient prescription drugs, specialist visits and unwarranted use of emergency services (for conditions judged to be both non critical and non urgent). Exemptions apply to people aged 65 and over with an annual household income of less than €36,152, people with chronic or rare diseases, disabled people, HIV positive people, prisoners and pregnant women. In addition, all out of pocket payments (cost sharing and direct payments) above €129 per year are eligible for a tax credit (equal to 19% of the value of out of pocket spending). Primary care and inpatient care are free at the point of use. Private health insurance plays a small role, covering about 15% of the population and providing complementary cover of cost sharing and excluded services. It also plays a supplementary role, giving subscribers access to a wider choice of providers and increased access to private providers.

## Collection of funds

Health care is mainly financed through earmarked central and local taxation (see Figure 2). Prior to 1998 tax-based finance mainly came from payroll taxes (social insurance contributions). In 1998 social insurance contributions were replaced by two new types of regional tax earmarked for health. A regional corporation tax (IRAP<sup>22</sup>) is levied on the 'value added' of companies (4.5%) and on salaries paid to public sector employees (8.5%). The tax is collected nationally but 90% of its revenue is allocated back to the regions in which it is levied. In 2005 regions were allowed to raise the rate by 1% to cover health deficits (five regions now have a rate of 5.25%). A regional income tax set at 0.5% initially and raised to 0.9% in 2001 (Addizionale IRPEF)<sup>23</sup>. These regional taxes are supplemented by central government grants financed through value added tax (VAT).

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

## Pooling

Since 1998, the 20 regions have raised their own revenue for health care, as outlined above, which means that there are, in effect, 20 main pools. (Prior to this there had been a single national pool). However, regional inequalities in health care expenditure have been a long-standing issue in the Italian health system. Consequently, in 2001 the government introduced a National Solidarity Fund (financed from central government VAT revenue) to redistribute resources to regions unable to generate sufficient funds. The redistribution formula accounts for regional revenue raising capacity and health and non health financing needs. Unfortunately, the regions and the central government have not been able to agree on the formula, which has not yet been implemented.

<sup>22</sup> Imposta regionale sulle attività produttive.

<sup>23</sup> The national income tax (IRPEF) was lowered by 0.5% to accommodate the new regional tax.

## **Purchasing health services**

Regions are free to decide how best to allocate health care resources. Most allocate resources to local health authorities (geographically based entities) based on capitation. Since 1999 local health authorities must engage in comparative evaluation of provider quality and costs when selecting public and private hospitals to provide publicly-financed services. However, only one region (Lombardy) has introduced a full split between purchasers and autonomous providers. Most other regions operate on an integrated/semi-integrated model, 'purchasing' services from a mixture of public and accredited private (for profit and non profit) hospitals. In total, across the country, about 40% of hospital beds are directly controlled by local health authorities.

## **Provider payment**

General practitioners and ambulatory paediatricians are paid via capitation and additional fee for service, some related to performance. Hospital-based doctors are generally salaried employees. Since 1995 hospitals have been paid on the basis of DRGs (replacing a system of per diem payment). A national DRG system was introduced in 2006. Additional payments are used to supplement DRG payments.

## **Key financing-related reforms**

- 1993: Changes in cost sharing. New ceilings for cost sharing for specialist visits introduced.
- 1995: DRG payment system adopted by 16 regions, with 5 other regions following in 1996 and 1997.
- 1998: Social insurance contributions for health abolished and replaced by two regional taxes.
- 1999: Purchasing of publicly-financed health care to be based on a four-step process involving comparative evaluation of provider quality and costs.
- 2001: Regions given the freedom to abolish or maintain cost sharing for outpatient prescription drugs. Eleven of the 20 regions applied co-payments or co-insurance rates to outpatient prescription drugs.
- 2001: A National Solidarity Fund financed by central VAT revenue established to redistribute resources to the regions. The resource allocation formula has not yet been agreed.
- 2001: Inclusion in the benefits package of new services (for early cancer diagnosis) to be provided free of charge: mammography every 2 years for 45 to 69 year-old women, cervical smear test every 3 years for 25-65 year-old women and colonoscopy every 5 years for individuals aged over 45 years.
- 2005: Introduction of a new national DRG system from 2006 (with some room for regional variation).
- 2007: Introduction of a fixed €10 co-payment per referral by a specialist in addition to the €36.15 maximum fee per specialist visit. Following patient complaints, a new government abolished the referral fee in May 2007. Introduction of a fixed €25 co-payment for unwarranted use of emergency services (prior to this some regions already charged co-payments for this).

## **Source**

Donatini, A., A. Lo Scalzo, L. Orzella, A. Cicchetti, S. Profili, A. Maresso and S. Thomson (2008 forthcoming). Italy: health system review. Brussels, European Observatory on Health Systems and Policies.

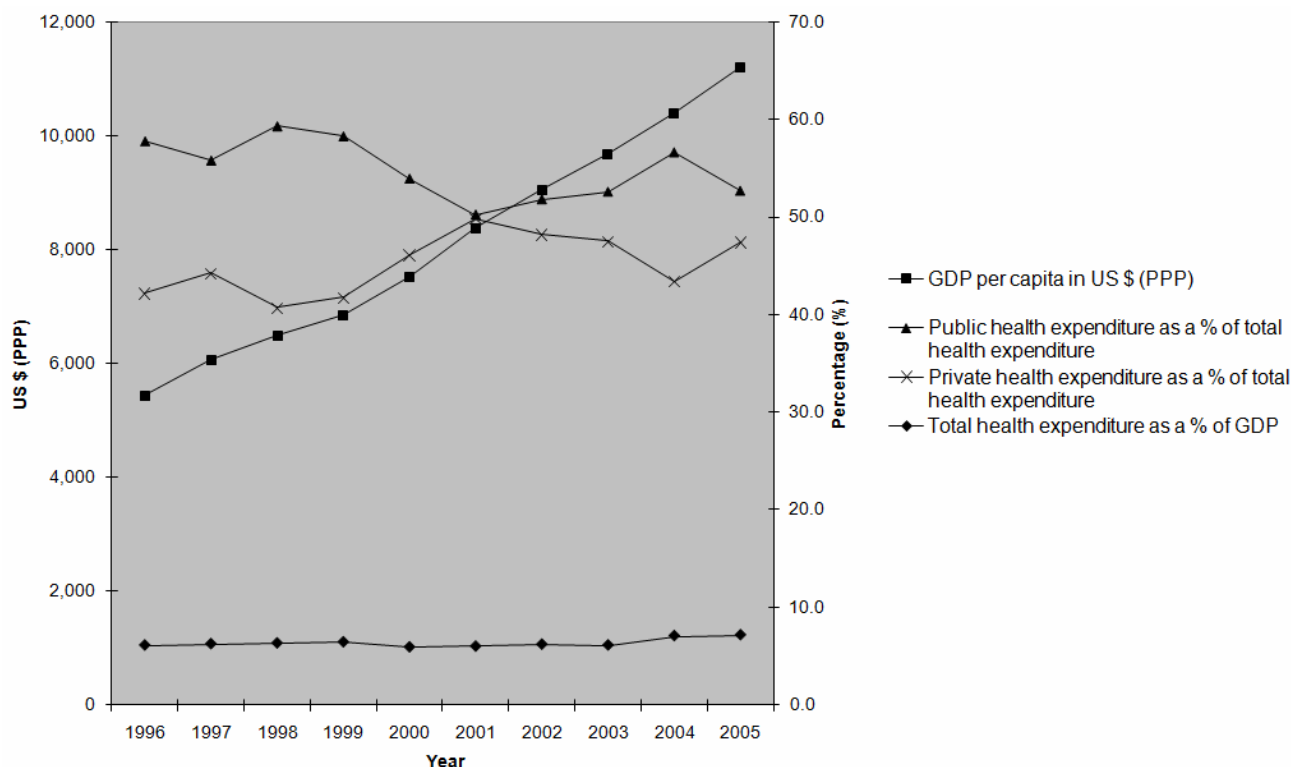
Fattore G, Torbica A. Inpatient reimbursement system in Italy: How do tariffs relate to costs? *Health Care Management Science*. 2006;9:251-8.

## Health care financing in LATVIA

### Health care expenditure

Total expenditure on health (as a proportion of GDP) has remained relatively stable, rising from 6.1% in 1996 to 7.1% in 2005 (see Figure 1). Public spending on health as a proportion of total expenditure has gone up and down, falling from 57.8% in 1996 to 52.6% in 2005. Out of pocket payments increased over the same period from 41.5% to 46.6% of total health expenditure.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

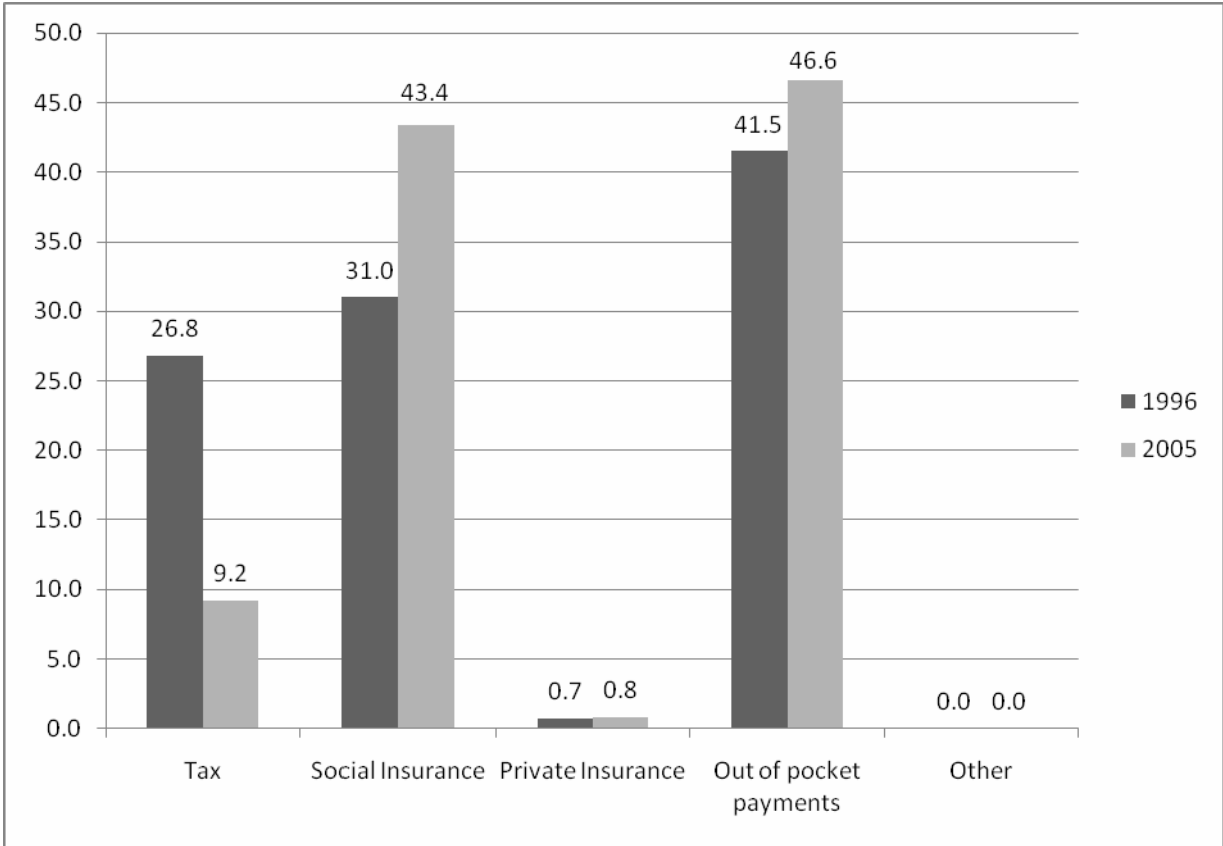
### Coverage and benefits

The publicly-financed health system covers all residents for a wide range of health services (excluding adult dental care and surgical treatment for non-life-threatening conditions such as hip replacements). Cost sharing is applied to most health services and outpatient prescription drugs in the form of co-payments, with some maximum ceilings, exemptions for drugs for some diseases (such as cancer and diabetes) and reduced rates for some older people. Private health insurance plays a minor complementary and supplementary role covering patient co-payments and providing faster access to care. Informal payments are an issue.

### Collection of funds

Publicly-generated finance for health care comes from centrally-collected income tax (28.4% of personal income tax is earmarked for health care and supplemented by general tax revenues). These funds are channelled through the national health insurance fund (see Figure 2). Out of pocket payments continue to be the largest single contribution mechanism.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

The national health insurance fund pools the health budget (determined by the Ministry of Finance and approved by parliament) and purchases health care.

**Purchasing health services**

The national health insurance fund allocates resources to the eight regional funds based on age-weighted capitation. The regional funds contract with and pay providers. The national fund directly finances the provision of some health services (such as tertiary care). Patients have free choice of primary care provider but must be referred for specialist care.

**Provider payment**

In 1998 per diem payment of hospitals was replaced by a mixed system based on case-based payment, per diem and fee for service points. Payment of individual providers was reformed in 1993 and different regions adopted different mechanisms (fee for service in most regions, with capitation for primary care and salaries for specialists in other regions). The system is being further reformed and age-weighted capitation plus some fee for service payment is now the norm for paying general practitioners (GPs). GPs reimburse specialists through case-based payment. Hospital-based doctors are mainly salaried employees with some bonus fee for service payments.

### **Key financing-related reforms**

- 1993: Establishment of the Central Account Fund (precursor to the national health insurance fund); state and local government budgets used to finance health care; introduction of fee for service payment of providers in some regions and capitation and global budgeting in other regions.
- 1995: Introduction of earmarking personal income tax for health care.
- 1996: Introduction of minimum spending levels for local governments to improve geographical equity of access to care.
- 1997: The national fund takes over administration of the health budget; state budget allocations now channelled through the national fund rather than local governments; the national fund allocates resources to eight regional funds (formerly 32 local funds) based on age-weighted capitation.
- 1998: New system for paying hospitals.
- 1999: Many centrally-financed health services now financed through the regional funds; co-payment rates established for publicly-financed care.

### **Source**

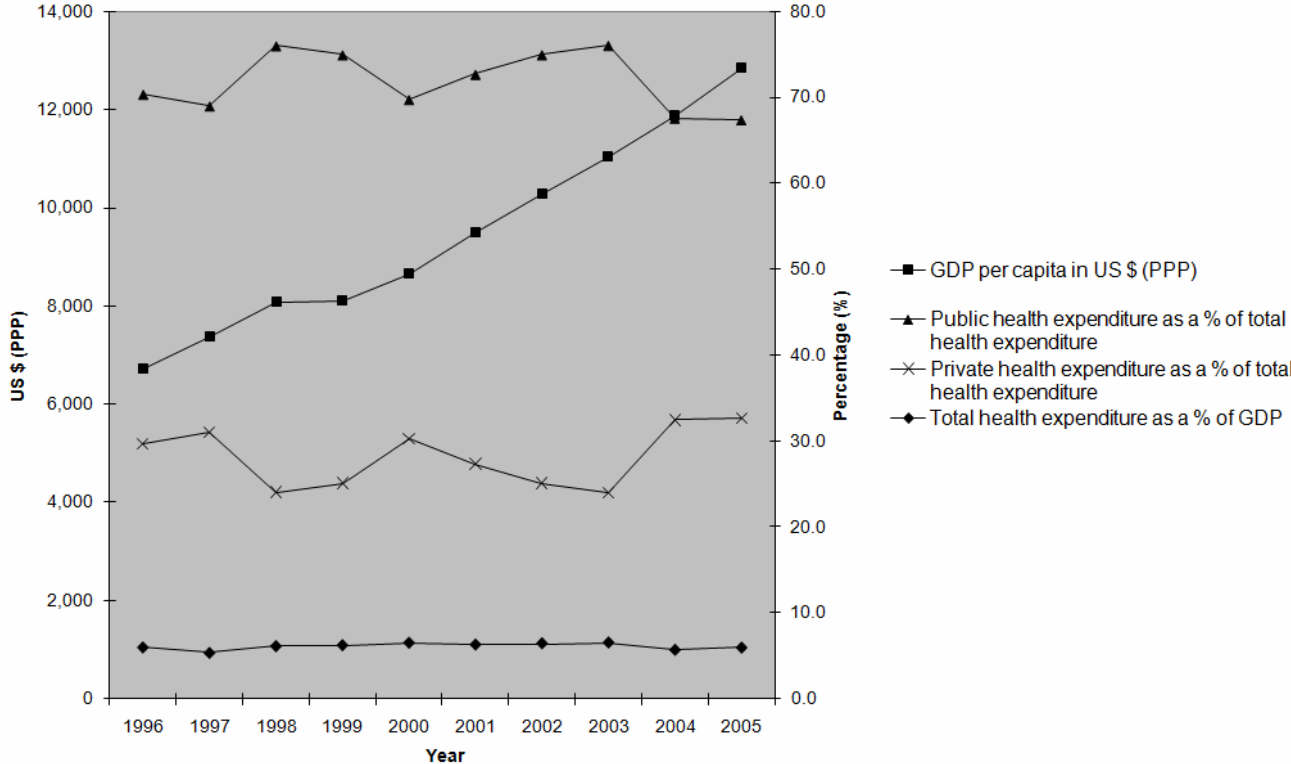
Karaskevica, J. and E. Tragakes (2001). Health care systems in transition: Latvia. Copenhagen, European Observatory on Health Systems and Policies.

# Health care financing in LITHUANIA

## Health care expenditure

Total expenditure on health has remained stable as a proportion of GDP (at around 6%; see Figure 1). Public spending on health has gone up and down as a proportion of total health expenditure; overall, it has fallen from 70.3% in 1996 to 67.3% in 2005. During the 1996 to 2005 period out of pocket payments increased significantly as a proportion of total health expenditure, rising from 26.3% to 32.2%.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

## Coverage and benefits

The publicly-financed health system covers all residents for emergency care. Access to other services depends on payment of contributions to the statutory health insurance scheme, which covers a fairly comprehensive range of benefits. Cost sharing applies to outpatient prescription drugs and dental care for adults, with exemptions from prescription charges for children, disabled people and pensioners. Patients pay out of pocket for non-essential care if they are not covered by the statutory scheme. Informal payments are an issue. Private health insurance plays a very minor supplementary role.

## Collection of funds

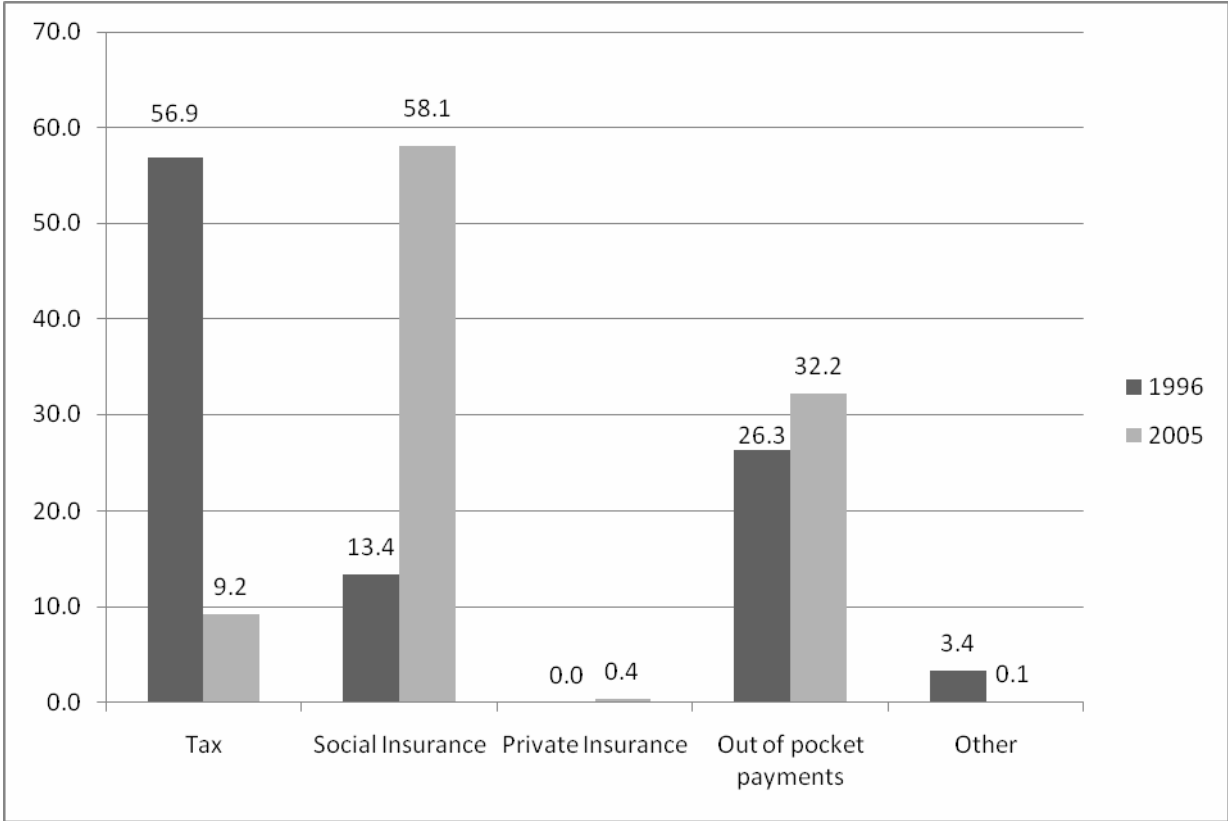
Prior to 1997, the Lithuanian health system was mainly tax financed. A statutory health insurance scheme was introduced in 1997 and administered by the National Health Insurance Fund and (initially) ten regional funds. Contribution rates are set centrally by parliament. Employers contribute 3% of their employees gross earnings, while 30% of the revenue from employees' and self-employed persons' personal income tax is earmarked for health.

Farmers contribute based on a proportion of the minimum wage and the state covers pensioners, registered unemployed, dependants, single parents, people receiving statutory benefits, disabled people and others. Those not covered by the above categories pay 10% of the average salary. Although Figure 2 shows about 58% of total health expenditure as being derived from social insurance contributions, in practice central government funds channelled through the national fund account for almost a quarter of the national fund’s revenue, while payroll contributions by employers account for only 20% and the income tax-based share accounts for about 55%.

**Pooling**

Contributions are collected by the tax agency and pooled by the national health insurance fund. In addition to funds channelled through the national fund, state and local budgets account for a further 9% of public expenditure on health. The share of local budget funding has gradually declined.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Purchasing health services**

The national fund is responsible for allocating resources to the regional funds. The regional funds are responsible for ensuring contributors are registered and have the necessary documentation to enable them to access health care. The national fund takes responsibility for monitoring overall performance, but the regional funds negotiate contracts with providers. Since 1997 the allocation of resources for primary care has been based on capitation with additional payments for rural populations. Patients have free choice of provider but must be referred to specialist care.



## **Provider payment**

Doctors in hospitals are salaried employees. Primary care doctors are financed through age-weighted capitation. Ambulatory specialists are reimbursed through case-based payment. Hospitals are paid through global budgets and case-based payments.

## **Key financing-related reforms**

- 1997: Establishment of the National Health Insurance Fund and health care financing through social insurance contributions; establishment of five regional health insurance funds to act as purchasers; adoption of nation-wide contract-based financing of providers through capitation for primary care and case-based payment for specialist care.
- 1999: Responsibility for collecting contributions from self-employed people moved to the central tax agency.
- 2003: Tax agency now responsible for collecting contributions from farmers.

## **Source**

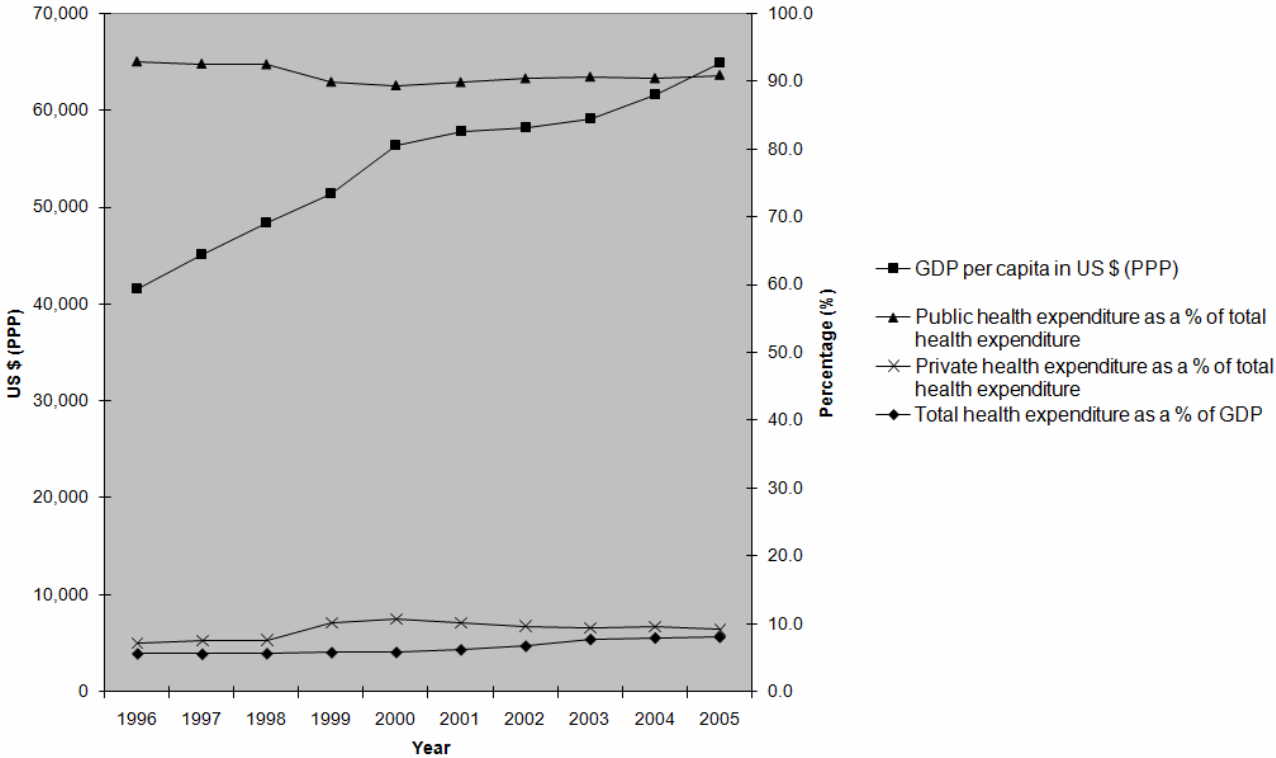
Cerniauskas, G., L. Murauskiene and E. Tragakes (2000). Health care systems in transition: Lithuania. Copenhagen, European Observatory on Health Systems and Policies.

# Health care financing in LUXEMBOURG

## Health care expenditure

Total expenditure on health as a proportion of GDP has risen from 5.7% in 1996 to 8.1% in 2005 (see Figure 1). Public spending on health (as a proportion of total expenditure) fell slightly during the 1996 to 2005 period, from 92.8% to 90.8. Spending through private health insurance increased as a proportion of total health expenditure, from 0.7% in 1996 to 1.6% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

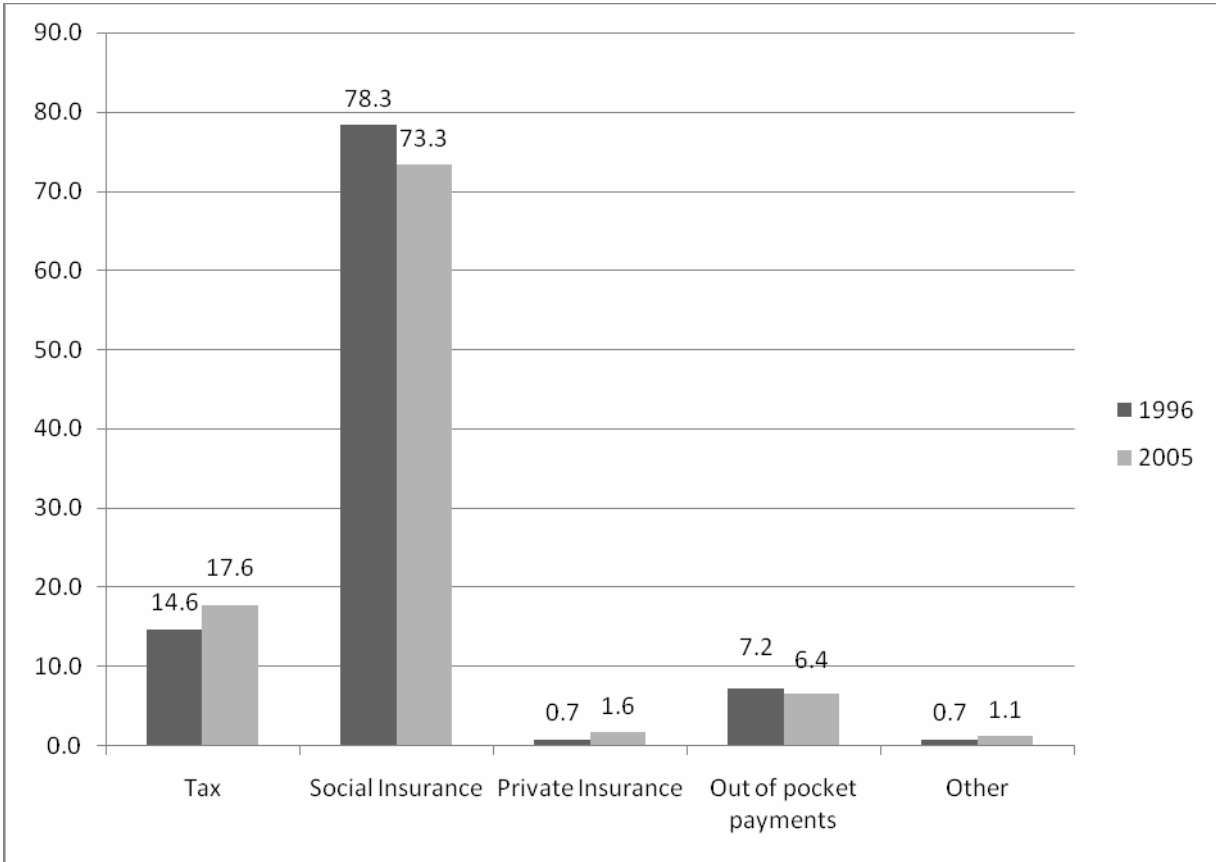
## Coverage and benefits

The publicly-financed health insurance scheme covers 99% of the population. The scheme does not cover civil servants and employees of international and European institutions and unemployed people not receiving benefits. The range of benefits covered by the scheme is broad. Cost sharing is widely applied in the form of co-insurance, with exemptions for antenatal and postnatal care and emergency care. Three quarters of the population purchases private health insurance to cover services not covered by the statutory scheme. Private health insurance benefits from tax subsidies.

## Collection of funds

Health care in Luxembourg is mainly financed through compulsory social insurance contributions (see Figure 2), which are generated through contributions from the central government (limited to a maximum of 40% of the statutory scheme’s total revenue), from employers (30%) and from covered individuals (30%). Contribution rates are set centrally and shared equally between employers and employees at a rate of 5.4% of gross earnings up to a maximum ceiling.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

Contributions are collected centrally and allocated to nine occupation-based health insurance funds. Individuals are assigned to a particular fund based on occupation. In addition to its contribution to the statutory scheme, the central government directly finances health promotion and prevention services, maternity services, capital investment, social care services and some training costs. The Union of Health Insurance Funds has a special reserve fund to cover the deficits of individual funds.

**Purchasing health services**

The Union of Health Insurance Funds is responsible for purchasing health services, but its purchasing function is mainly limited to negotiating hospital budgets with individual hospitals. In general, it simply reimburses the costs of care provided by health professionals. Patients have free choice of doctor and hospital.

**Provider payment**

Hospitals are paid through a mixture of global budgets, case-based payment and bonuses for participation in quality initiatives. Most doctors are paid on a fee for service basis, with the exception of those working at the city’s main hospital, who are salaried employees. Fee levels are negotiated annually between provider associations and the Union of Health Insurance Funds.

### **Key financing-related reforms**

- 1992: Reform of the statutory scheme: responsibility for provider reimbursement shifted from the nine individuals funds to the Union of Health Insurance Funds.
- 1995: Introduction of prospective payment for hospitals (replacing a per diem system) based on negotiation of budgets between the Union of Health Insurance Funds and individual hospitals.
- 1998: Legislation established to ensure that long-term care costs are covered by the statutory scheme.

### **Source**

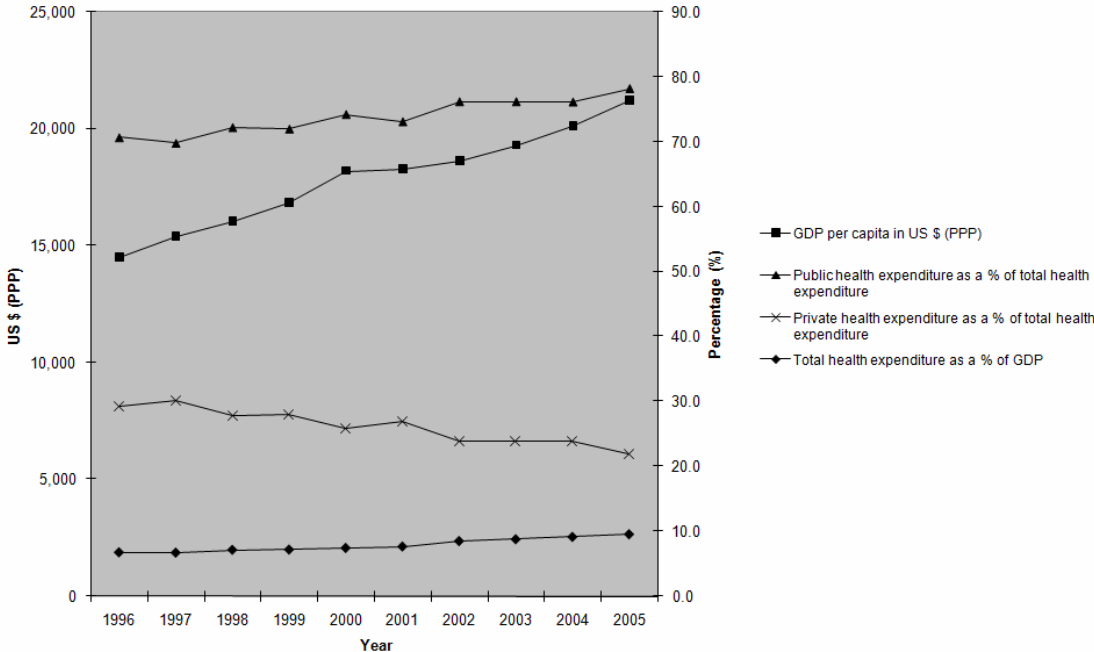
Kerr, E. *Health care systems in transition: Luxembourg*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 1999.

# Health care financing in MALTA

## Health care expenditure

Total expenditure on health (as a proportion of GDP) has risen from 6.8% in 1996 to 9.6% in 2005 (see Figure 1). Public spending as a proportion of total expenditure on health has increased over time, rising from 70.7% in 1996 to 78.1% in 2005. Spending through private health insurance has doubled from 1.1% of total health expenditure in 1996 to 2.1% in 2005, while the share of out of pocket payments has fallen slightly.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

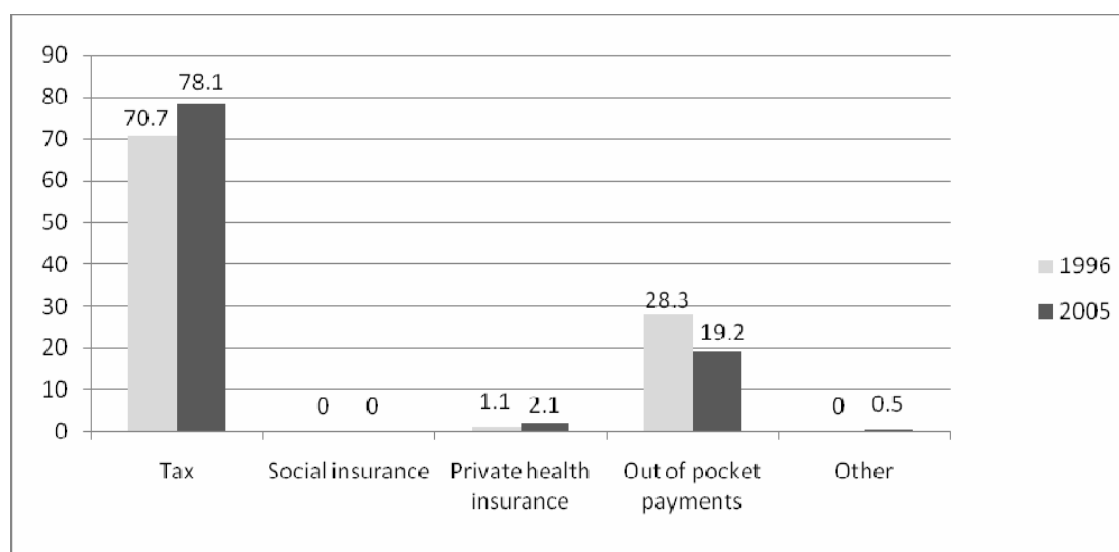
## Coverage and benefits

The publicly-financed health system covers all residents for a wide range of benefits, largely free at the point of use. Cost sharing applies to optical and dental care and to outpatient prescription drugs, with exemptions for people with low income (‘pink card’ holders), people with certain illnesses and some other categories (prisoners, members of religious orders, some police and military personnel etc). Private health insurance plays a minor supplementary role.

## Collection of funds

The publicly-financed system is funded by government through central general taxes (see Figure 2). Although the publicly-financed system provides broad coverage, many people use private sector services as a means of bypassing waiting lists for public sector care. Private sector services are mainly financed by out of pocket payments, although supplementary private health insurance is beginning to play more of a role. However, it tends to focus on elective surgery and medical treatment overseas.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

### Pooling funds

General tax revenues are pooled at the national level by the Ministry of Finance. The health budget is allocated to the Ministry of Health, which is responsible for purchasing health services.

### Purchasing health services

The Ministry of Health allocates resources to different sectors based mainly on historical allocations. There is no purchaser-provider split in the public sector. Patients have free choice of primary care doctor but must be referred to specialist care.

### Provider payment

Global budgets based on historical allocations were introduced to pay hospitals in 1999 (previously reimbursed retrospectively). Public sector health professionals are salaried employees and many work in the private sector to boost their income. Private sector providers are paid on a fee for service basis, with some per diem payment for private hospitals.

### Key financing-related reforms

- 1991: Family doctor scheme: in part proposed to modify GP payment mechanism from salary to a capitation/allowance mix.
- 1998: Introduction of flat-rate co-payment for outpatient prescription drugs, but the co-payment was abolished in September when a new government was elected.
- 1999: Introduction of global budgets to pay hospitals.

### Source

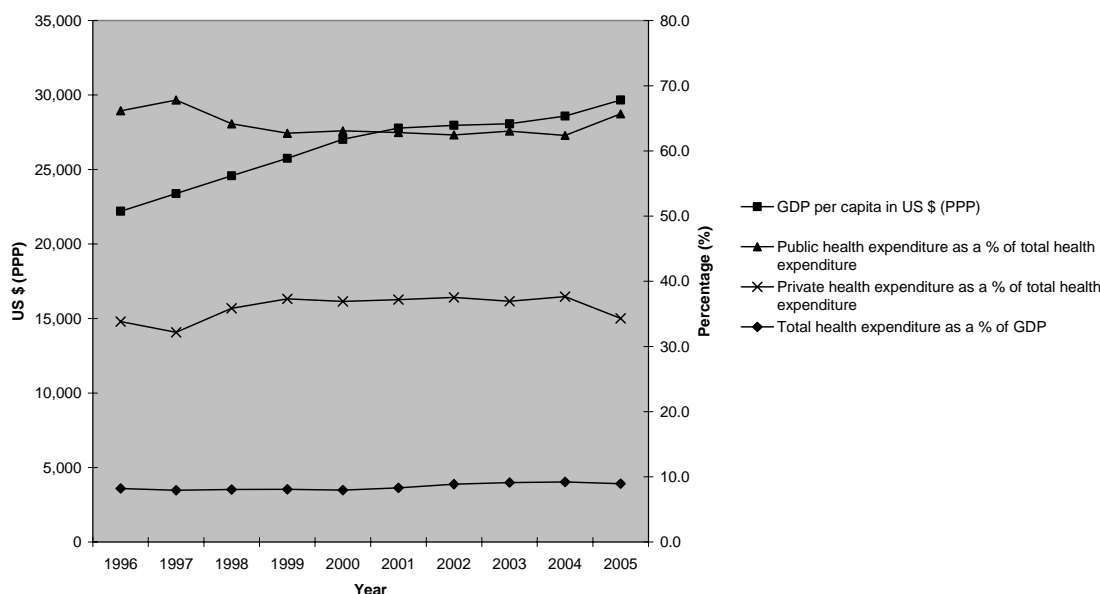
Muscat, N. (1999). Health care systems in transition: Malta. Copenhagen, European Observatory on Health Care Systems.

## Health care financing in the NETHERLANDS

### Health care expenditure

Total expenditure on health as a proportion of GDP has risen from 8.2% in 1996 to 8.9% in 2005 (see Figure 1). Public spending on health as a proportion of total expenditure fell between 1997 and 2004 (from 67.8% to 62.3%), before rising again in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

Prior to 2006 the statutory health insurance scheme excluded people with earnings over around €30,000 per year (and their dependants). These people mainly relied on substitutive private health insurance (which is why the figures for private health insurance shown in Figure 2 are relatively high). In 2006 the government introduced universal coverage through the Health Insurance Act (Zorgverzekeringswet; ZVW). Coverage is statutory but provided by private health insurers and regulated under private law. Insurers must accept every resident in their coverage area (although most already operate nationally) and offer a standard benefits package defined by law. The ZVW covers primary and secondary outpatient care, inpatient care and dental care (the latter only up to the age of 18). The Exceptional Medical Expenses Act (AWBZ) covers the whole population for long-term and mental health care. Cost sharing is applied to some services but not to GP visits or antenatal and maternity care. Complementary private health insurance covering services excluded by the ZVW or AWBZ is purchased by most of the population.

### Collection of funds

The new statutory insurance scheme is financed by a mixture of income-related contributions and premiums paid by the insured (50%). As it is universal, the proportion of health expenditure generated through statutory (previously social) insurance contributions is likely to have increased since 2005 (see Figure 2). The income-related contribution is set at 6.5% and levied on income up to €30,000 per year.

Employers must reimburse their employees for this contribution and the reimbursement is taxable. The contribution rate for non-employed people not receiving unemployment benefits is 4.4%. Contributions are set and collected centrally. In 2006 the average annual premium was €1050. The government pays for the premiums of those aged under 18 and provides adults with a 'health care allowance' if the average premium exceeds 5% of an individual's income. Insurers are free to set their own premiums for complementary private health insurance. They can also reject applications for cover.

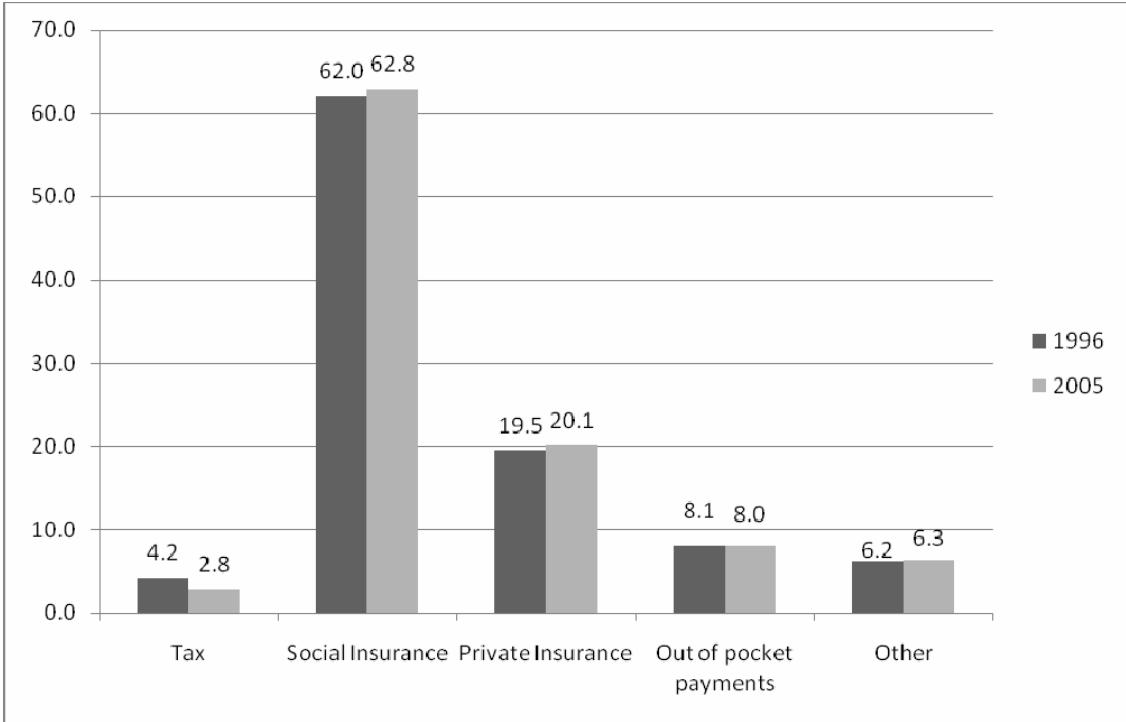
**Pooling**

Contributions are pooled centrally and allocated to insurers based on risk adjusted capitation. Individuals have free choice of insurer and can change insurer once a year.

**Purchasing health services**

Insurers are responsible for purchasing services for their subscribers and contract with individual providers and hospitals (which are mainly private non-profit organisations). While the services they are legally required to provide are defined by law, insurers are free to decide how and by whom these services should be provided.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Provider payment**

General practitioners are paid via capitation and a fee per consultation, with negotiable additional fees for other services. The majority of specialists work in hospitals and are mainly self-employed (around two thirds), paid on a capped fee for service basis or salaried employees. Hospital budgets are developed using a formula that pays a fixed amount per bed, patient volume and number of licensed specialists, in addition to other factors.



A new system of payment related to activity, through the Dutch version of DRG payment known as Diagnosis Treatment Combinations (DTCs), is being implemented. Ten per cent all hospital services are now reimbursed on the basis of DTCs (up to 100% of all services in some hospitals). In future it is expected that most hospital care will be reimbursed using DTCs.

### **Key financing-related reforms**

- 2000: Introduction of volume adjustments for hospital payment.
- 2001: Introduction of volume adjustments for fee for service payment of hospital-based specialists.
- 2005: National implementation of the new DTC payment scheme for hospitals.
- 2006: Introduction of universal statutory health insurance scheme (ZVW) operated by private insurers under private law. This effectively abolishes substitutive private health insurance, which had previously covered around a third of the population.
- 2007: The no-claims bonus system introduced in 2006 (which rewarded those who did not use health services) is abolished.

### **Sources**

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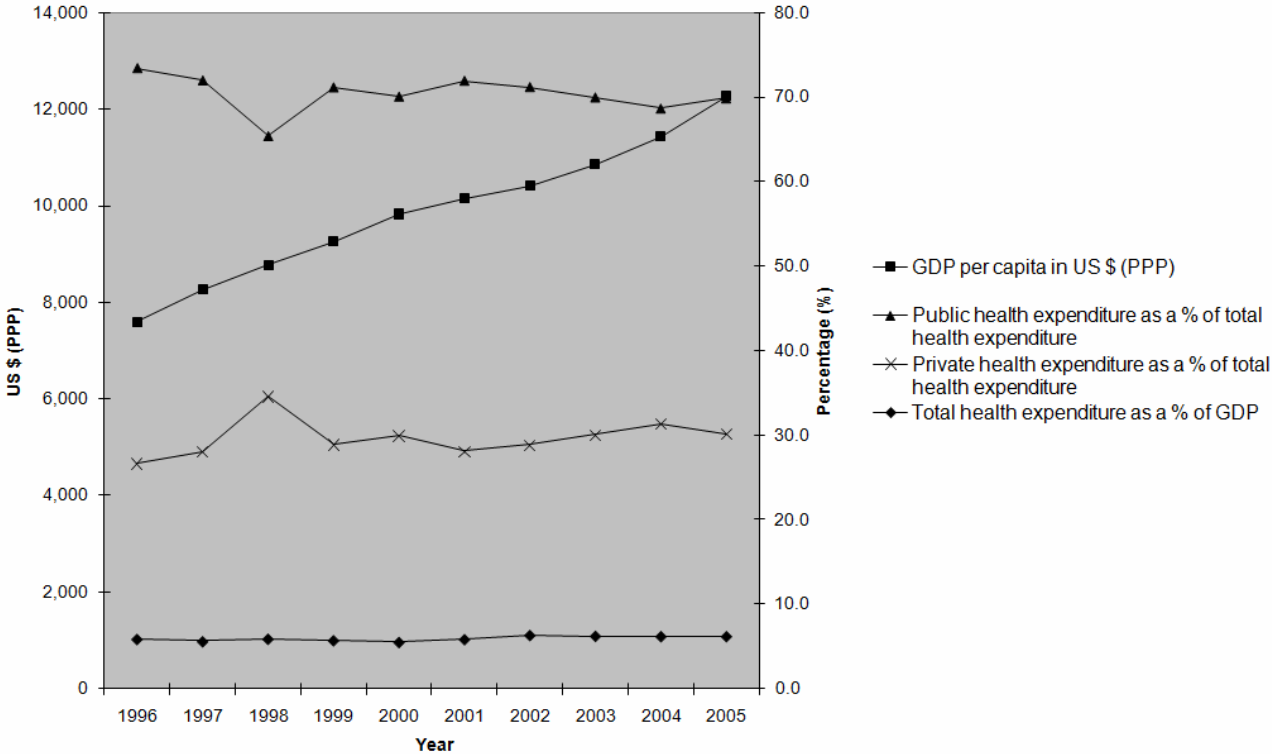
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# Health care financing in POLAND

## Health care expenditure

Total expenditure on health as a proportion of GDP has remained relatively stable in recent years at around 6% (see Figure 1). Public spending on health as a proportion of total expenditure fell sharply between 1996 and 1998 (from 73.4% to 69.8%), rose in 1999 and 2001, and fell again in subsequent years.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

## Coverage and benefits

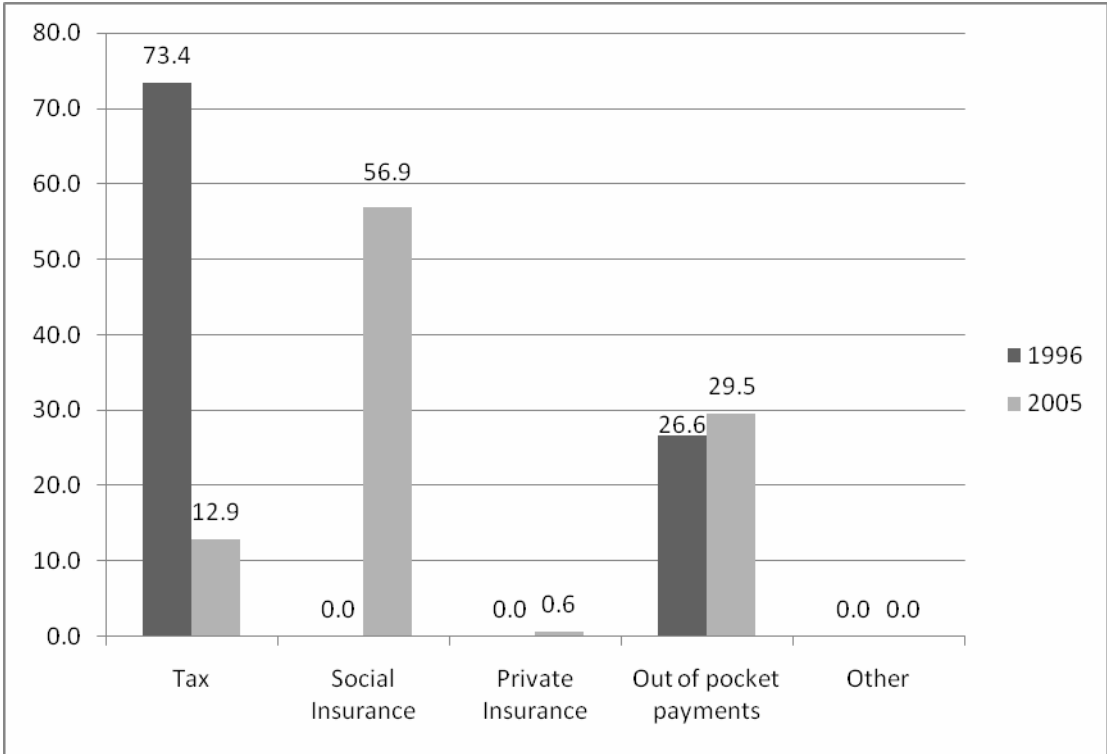
The publicly-financed health system covers all citizens, giving them access to a wide range of benefits. Recently, rehabilitation, spa treatment and ‘non-standard’ dental and other health services (such as some cosmetic surgery) have been excluded from the benefits package. Cost sharing applies to outpatient prescription drugs, diagnostic tests, orthopaedic devices, the costs of food and accommodation in nursing home and rehabilitation centres and some travel costs. Levels of cost sharing are limited by out of pocket maximums linked to household income. Private health insurance is mainly organised by employers and takes the form of supplementary cover, providing faster access to outpatient care. Commercial private health insurance exists but plays a very minor role.

## Collection of funds

The main contribution mechanisms in the Polish health system are social insurance contributions and out of pocket payments. Centrally-set social insurance contributions are levied on the same base as personal income tax (not just wages) and there is no ceiling on contributions. The contribution rate has risen several times, from 7.5% in 1999 to 9.0% in 2007.

Central and local government revenue is channelled through the National Health Insurance Fund (NHIF) and used to finance contributions for specific groups (for example, unemployed people receiving social security benefits, farmers, war veterans and some pensioners) and to pay for those not covered by the health insurance scheme; for catastrophic health care costs and for public health measures. Cost sharing for publicly-covered services accounts for only a small share of total out of pocket payments – most of this comes from spending on private sector care.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

Health contributions are collected by the tax agency and transferred to the NHIF, which pools them with central and local government budget allocations for health.

**Purchasing health services**

The NHIF is responsible for purchasing and planning publicly-financed health services.

**Provider payment**

Primary care doctors are paid on the basis of age-weighted capitation, while ambulatory specialists are paid on a fee for service basis. Hospital doctors are salaried employees. Since 2000, hospitals have been reimbursed via case-based payments (DRGs).

**Key financing-related reforms**

- 1998/1999: Introduction of social insurance contributions as the main mechanisms for financing health care.
- 2000: Contribution rate rises to 7.75% (from 7.5%), to 8% in 2003 and to 9% in 2007.
- 2003: 17 regional funds merged to create a national fund.

- 2004: Law on Financing Health Services from Public Resources passed by the parliament (new rules for health services contracting). It states that the NHIF is to implement exclusions from the benefit package, the creation of the Polish Health Technology Assessment Agency and take responsibility for drug reimbursement drug lists.

**Source**

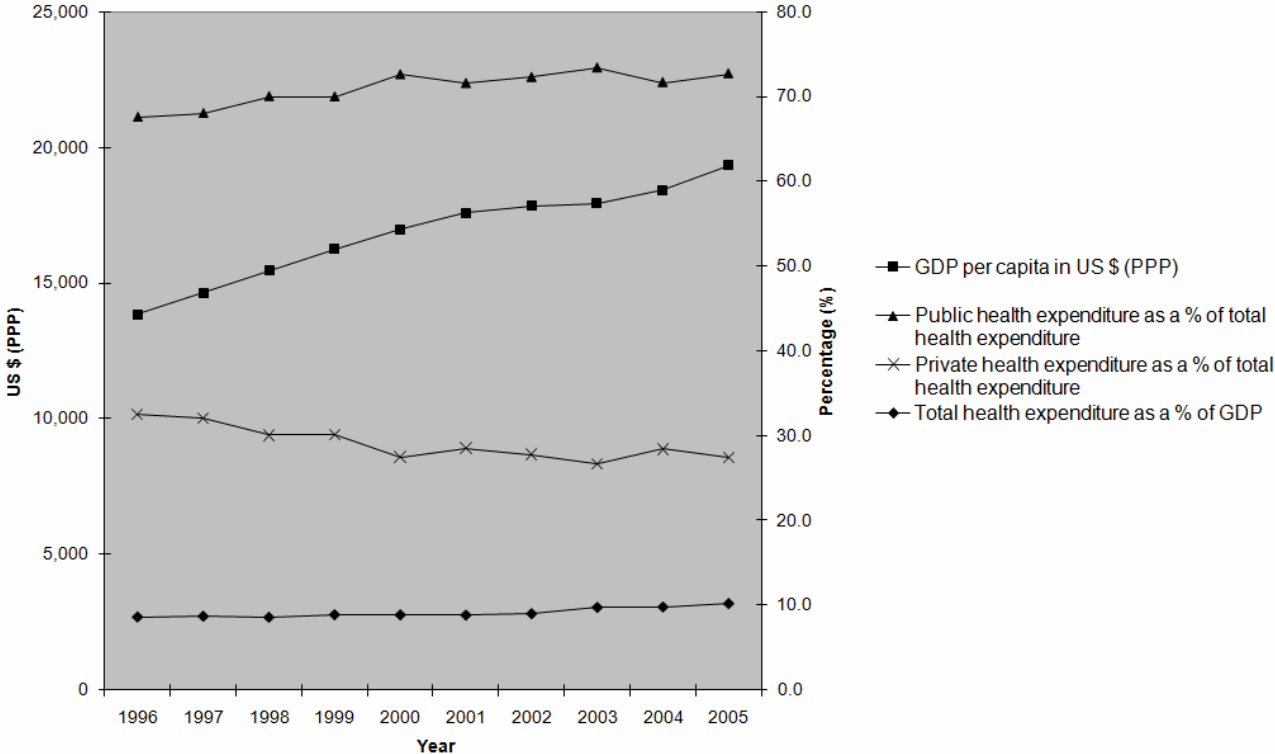
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# Health care financing in PORTUGAL

## Health care expenditure

Total expenditure on health (as a proportion of GDP) has increased over time from 8.6% in 1996 to 10.2% in 2005 (see Figure 1). It is now among the highest in the European Union (equal to Austria and just lower than France and Germany). During the 1996 to 2005 period, public spending rose as a proportion of total health expenditure (from 67.5% to 72.7%). Private health insurance also increased, as a share of total health expenditure, from 1.3% in 1996 to 3.8% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

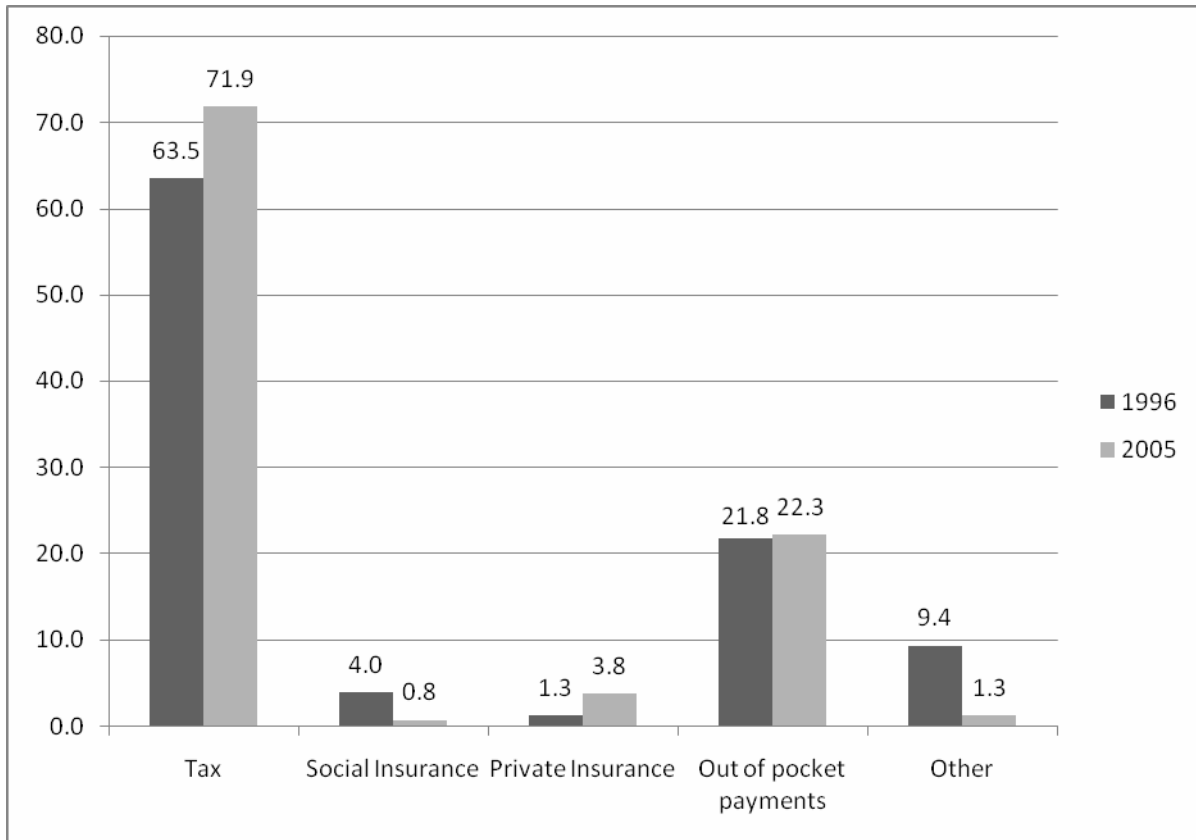
## Coverage and benefits

All residents of Portugal are covered by the National Health System (NHS), established in 1979), which provides a comprehensive range of services largely free at the point of use. The NHS does not cover dental care. Due to NHS shortages, about 60% of specialist consultations take place in the private sector. Cost sharing is applied to most health services in the public and private sectors, but exemptions or reduced rates cover a significant share of the population. Cost sharing for inpatient stays and outpatient surgery was introduced in 2007. Public and private health ‘sub-systems’ providing additional benefits are financed through employer and employee contributions and account for about 9% of total health expenditure. Private health insurance playing a supplementary role covers about 10% of the population. Private health insurance premiums are tax deductible; tax benefits account for about 7% of total health expenditure.

## Collection of funds

The NHS is mainly financed through general taxation (see Figure 2), about 60% of which comes from indirect taxes. The public health sub-systems are financed through employment-based contributions (1.5% of gross earnings), but in practice 90% of their revenue comes from the central government budget (90%).

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

## Pooling

The Ministry of Health receives an annual global budget for the NHS from the Ministry of Finance. The NHS also raises its own revenue – for example, from charges for private rooms and additional services. The Ministry of Health allocates a budget to five health regions (RHAs) on the basis of historical expenditure (40%) and (for primary care) capitation adjusted for age and gender and a disease burden index of four chronic conditions (60%). Historically, NHS budgets have been soft.

## Purchasing health services

The NHS allocates resources to hospitals and RHAs. The latter then allocate resources to Primary Care Centres (PCC). Reforms introduced in 1998 have aimed to increase the purchasing role of the RHAs, through the establishment of regional contracting agencies at each RHA. Over time, these contracting agencies have become less independent of RHAs and more involved in monitoring performance. Contracts with hospitals are usually negotiated annually, while the RHAs allocate to PCCs using a weighted capitation formula. The health sub-systems and private health insurers do not actively purchase health care. Instead, they mainly reimburse patients.

## **Provider payment**

The Ministry of Health devises and allocates budgets for hospitals through the IGIF (Institute for Financial Management and Informatics). Public hospitals are currently remunerated by global budgets based on contracts signed with the Ministry of Health. Since 1997, contracts are increasingly based on DRG information (10% in 1997, rising to 50% in 2002) and non-adjusted hospital outpatient volume. Case-mix adjustments are also used for ambulatory surgery. NHS doctors are salaried employees, but can benefit from fee for service payment for private activity. In 1999 a new system of payment for groups of GPs/family doctors was introduced based on salary, capitation and performance.

## **Key financing-related reforms**

- 1997: Introduction of DRGs for paying hospitals
- 1998: Introduction of capitation for resource allocation to RHAs (for primary care); establishment of contracting agencies in each RHA
- 1999: Introduction of capitation and performance-related pay for primary care providers
- 2005: Decrease in public cost sharing for pharmaceutical products
- 2007: Introduction of cost sharing for inpatient care and outpatient surgery

## **Source**

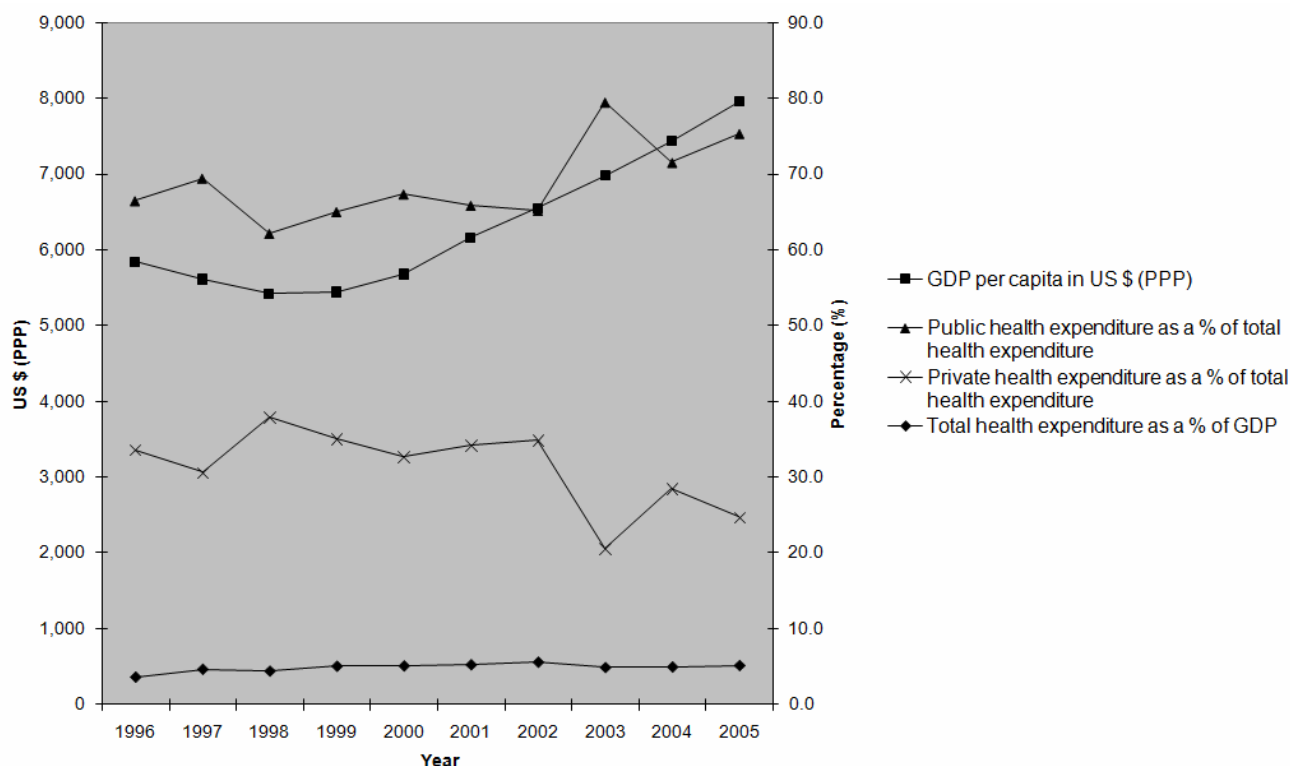
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## Health care financing in ROMANIA

### Health care expenditure

Total expenditure on health as a proportion of GDP has risen from 3.6% in 1996 to 5.1% in 2005 (see Figure 1). During the same period public spending also rose significantly as a proportion of total health expenditure, from 66.5% to 75.3%. Out of pocket payments fell as a proportion of private expenditure, from 100.0% in 1996 to 80.6% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

The publicly-financed health system covers all citizens and residents for a broad range of health services. The voluntarily insured and the uninsured have access to a more limited package of benefits, which includes cover of emergency care, care of communicable diseases and family planning. Services not covered by the defined benefits package include in vitro fertilisation, adult cosmetic surgery and some dental care. Cost sharing applies to outpatient drugs, long-term spa treatment and specialist visits without referral. Patients also make informal payments to secure better quality of care or faster access to care.

### Collection of funds

Since 1999, health care has been mainly financed through social insurance contributions supplemented by central tax revenue (see Figure 2). Social insurance contribution rates are centrally set and paid by employees (6.5%) and employers (7%). The employee contribution is levied on income (rather than just earnings). Contributions are collected by the tax agency and transferred to the National Health Insurance Fund (NHIF). The 42 District Health Insurance Funds (DHIFs) collect contributions from self-employed people.

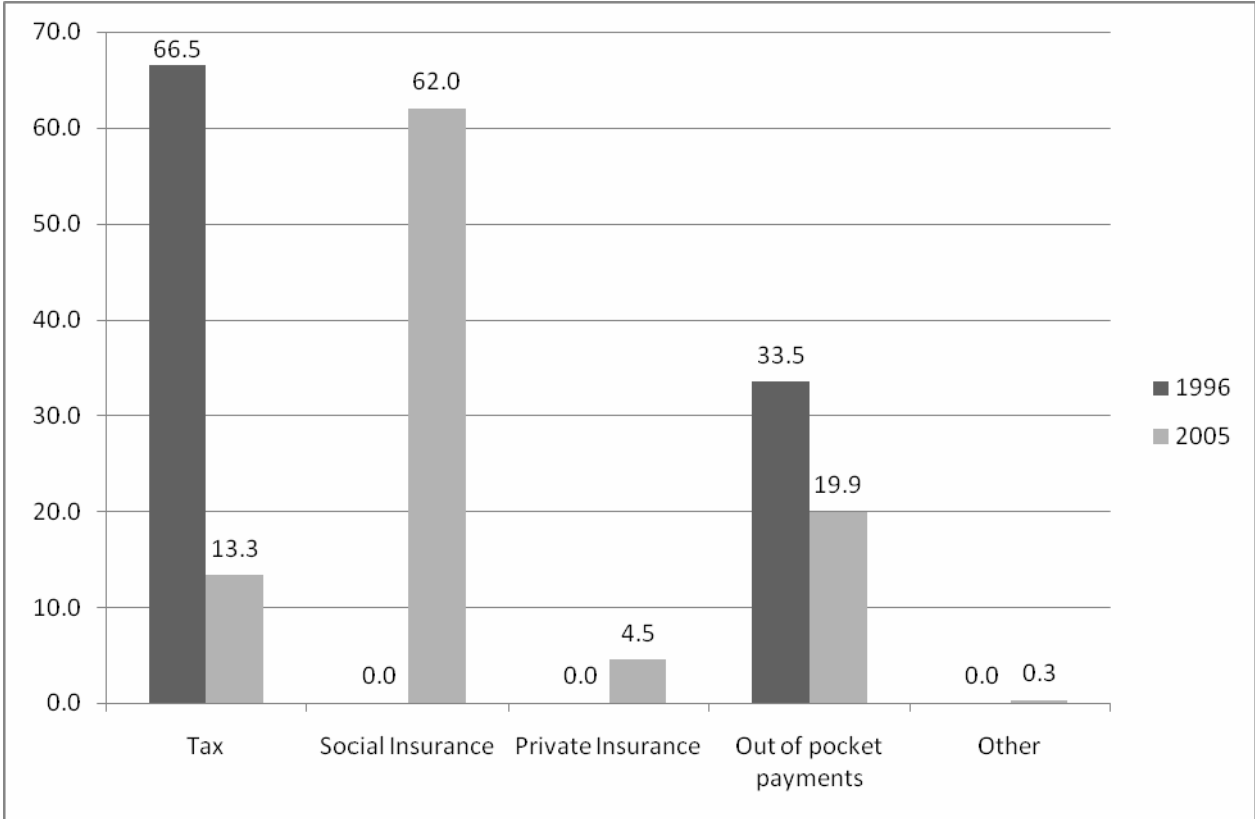


Self-employed people and pensioners are required to contribute 7%, while children and young people, low income disabled people and war veterans and dependants are covered without contributing. The central government makes contributions on behalf of other exempt groups such as soldiers, prisoners, unemployed people and people on benefits. Central tax revenue also pays for public health services and capital investments. Private health insurance plays a minor supplementary role.

**Pooling**

Contributions collected by the central tax agency and allocations from central tax revenues are pooled by the NHIF and allocated to the 42 DHIFs and 2 national occupation-based health insurance funds (for civil servants in the Ministry of Justice and the Ministry of Transport and Communication) based on a risk-adjusted capitation formula. Prior to 2002 all the health insurance funds collected their own contributions and only 25% of their revenue was subject to re-allocation.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Purchasing health services**

An annual framework contract is agreed by the NHIF and the Ministry of Public Health and approved by the government. This contract defines the benefits package, conditions for service delivery and payment mechanisms. The NHIF and DHIFs monitor implementation of the contract. The same contracting rules apply to public and private providers but there is little competition among providers as the DHIFs usually sign collective contracts with all providers in their district.

## **Provider payment**

Prior to 1994 all providers were salaried. Now primary care providers are paid a mixture of capitation (85%) and fee for service points. Ambulatory specialists are also paid on a fee for service points basis. Doctors in public hospitals are salaried employees. Hospitals are paid through activity-based budgets, fee for service and case-based payments (DRGs are now used in 276 acute hospitals).

## **Key financing-related reforms**

- 1994: Introduction of capitation and fee for service points for general practitioners.
- 1997: The Health Insurance Law (implemented in 1999) changes the main contribution mechanism from general tax to social insurance contributions. Health insurance funds were established as independent entities.
- 1998: Two special occupation-based health insurance funds were set up: the health insurance fund for the employees of the ministries and agencies related to national security (CASAOPSNAJ) and the health insurance fund for the employees of the Ministry of Transports, Communications and Tourism (CAST).
- 1999: Introduction of fee for service points for payment of ambulatory specialists.
- 2000: Introduction of the DRG pilot in several hospitals.
- 2002: An emergency ordinance replaced the Health Insurance Law and introduced a single national health insurance fund (the NHIF). It also lowered the contribution rate from 14% to 13.5% and allowed for the introduction of cost sharing. Responsibility for collecting contributions moved from the 42 DHIFs and the 2 occupation-based funds to the central tax agency. Contribution revenue is now pooled centrally by the NHIF, which allocates to the other health insurance funds.
- 2003: The government introduced cost sharing for inpatient stays but the initiative was highly controversial and never implemented.
- 2004: Private health insurance permitted but the relevant legislation was not implemented.
- 2006: Health Reform Law: for-profit insurers are permitted to offer complementary cover of cost sharing and excluded services; the two occupation-based health insurance funds will be re-organised and privatised with effect from 2007; providers permitted to introduce cost sharing.

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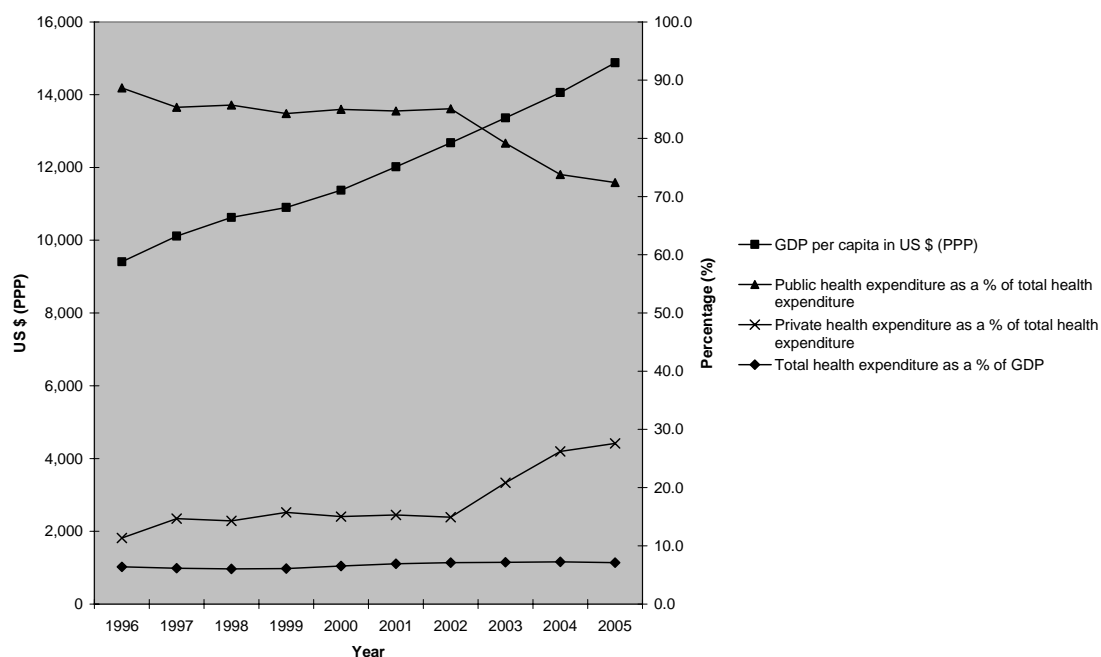
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## Health care financing in SLOVAKIA

### Health care expenditure

Total expenditure on health as a proportion of GDP increased between 1996 and 2005 from 6.4% to 7.1% (see Figure 1). During that time, however, public spending on health fell from 88.7% of total health expenditure to 72.4%. This decline can be attributed to significant growth in out of pocket spending, which more than doubled, rising from 8.3% in 1996 to 20.2% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

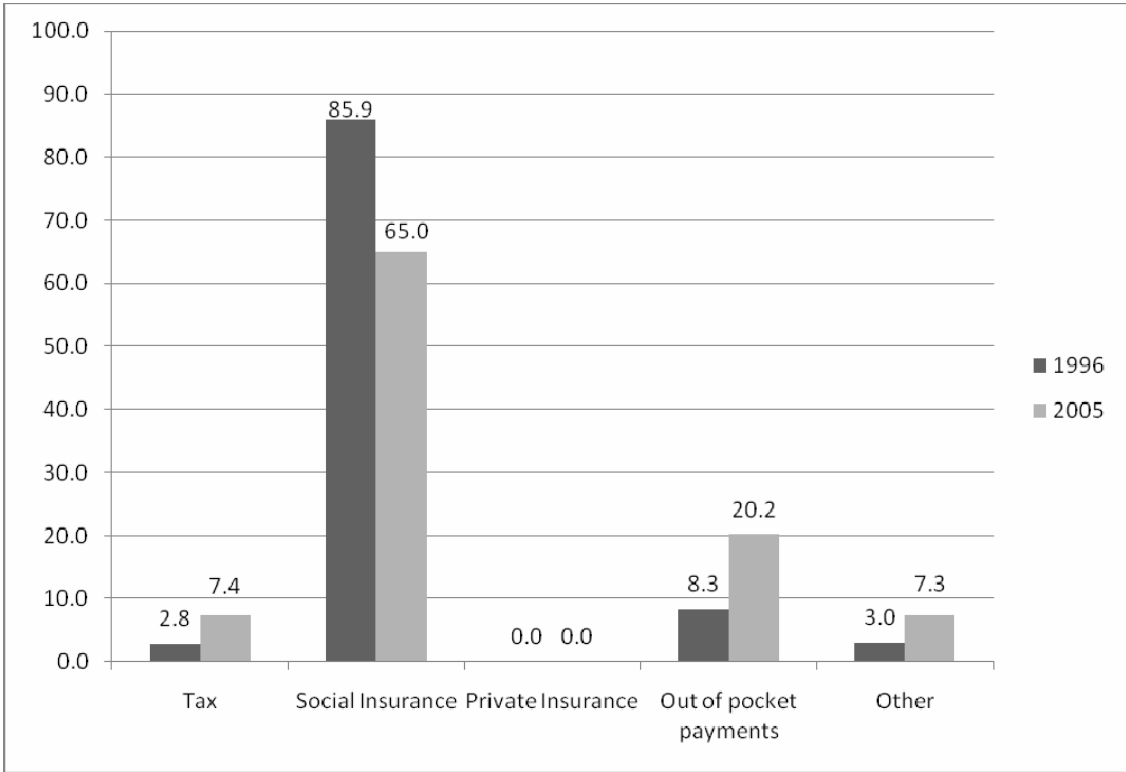
### Coverage and benefits

The statutory health insurance scheme in Slovakia covers all residents for a comprehensive defined package of benefits including preventive, curative and rehabilitative care. Cost sharing was introduced for doctor visits and inpatient care in 2003, but abolished in 2006. At the beginning of 2007, co-payments applied to visits to an emergency department, outpatient prescription drugs, transport to hospital, spa treatment and dental care.

### Collection of funds

Health care is mainly financed through the statutory health insurance scheme (see Figure 2), which generates revenue from earnings-based contributions, and transfers from the central government to cover non-working people. The centrally-set contribution rate is 14% of gross earnings for employed and self-employed people (4% paid by employees and 10% by employers), with a reduced rate of 7% for disabled people. There is a ceiling on contributions. Private voluntary health insurance plays a very marginal role in the Slovakian health system. It was intended to play a complementary role, covering statutory co-payments, following a 2004 reform. However, the market has not experienced much development.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

Six competing health insurance funds are responsible for collecting and pooling contributions and for purchasing health services for their members. The two largest funds are state-owned enterprises. Between them they cover about 68% of the population. A risk adjustment mechanism re-allocates 85% of health insurance funds’ revenue based on the age and gender of their members.

**Purchasing health services**

The health insurance funds negotiate volume-based contracts with providers and are required to monitor provider performance. General practitioners play a gate keeping role, referring patients to specialist care. Patients have free choice of provider.

**Provider payment**

Provider payment has undergone several reforms, moving from a predominantly retrospective reimbursement system to a system of prospective payment. Budgets were introduced for hospitals and outpatient specialists in 1998. Since 2002 DRGs have also been used to pay hospitals. Since 2001 the capitation payment system for primary care has been adjusted for age and supplemented by fee for service payment for preventive services.

**Key financing-related reforms**

- 1998: Prospective spending caps introduced for individual hospitals and outpatient specialist providers.
- 2003: Case-based payment for hospitals (DRGs) introduced in 2002.

- 2003: Small co-payments introduced for most forms of health care; spending caps for drugs and medical aids introduced at individual provider level; health insurance funds obliged to negotiate structured contracts with all providers and monitor their performance.
- 2005: Health insurance funds transformed from non-profit organisations to private joint stock companies.
- 2006: Co-payments for doctor visits abolished and co-payments for outpatient prescription drugs lowered; profits and administrative costs of the insurance companies limited to 4% of their expenditure; legislation passed to change the legal status of the two state-owned health insurance funds from joint stock companies to public agencies; the value-added tax rate for most pharmaceuticals reduced from 19% to 10%; government transfers to the health insurance companies to cover the non-working population (pensioners and unemployed people) were raised from 4% to 5% of the minimum wage per person.

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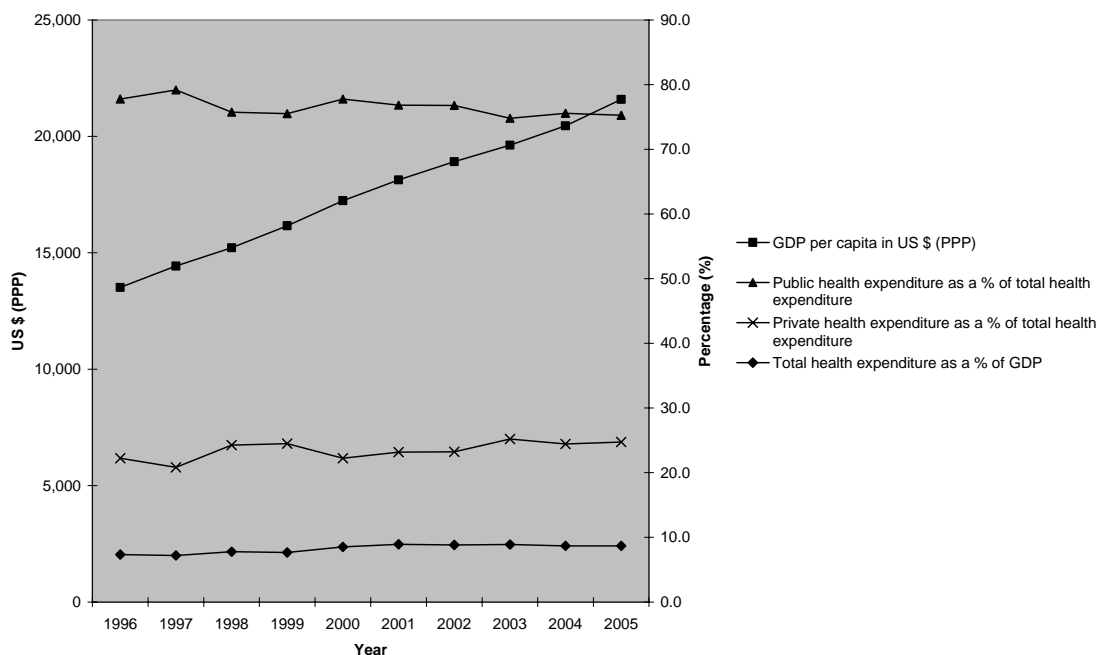
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## Health care financing in SLOVENIA

### Health care expenditure

Between 1996 and 2005, total expenditure on health as a proportion of GDP rose from 7.3% to 8.7% (see Figure 1). At the same time, GDP per capita grew by almost 60%. However, public spending on health as a percentage of total health expenditure declined by 2.5% points (from 77.8% in 1996 to 75.3% in 2005).

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

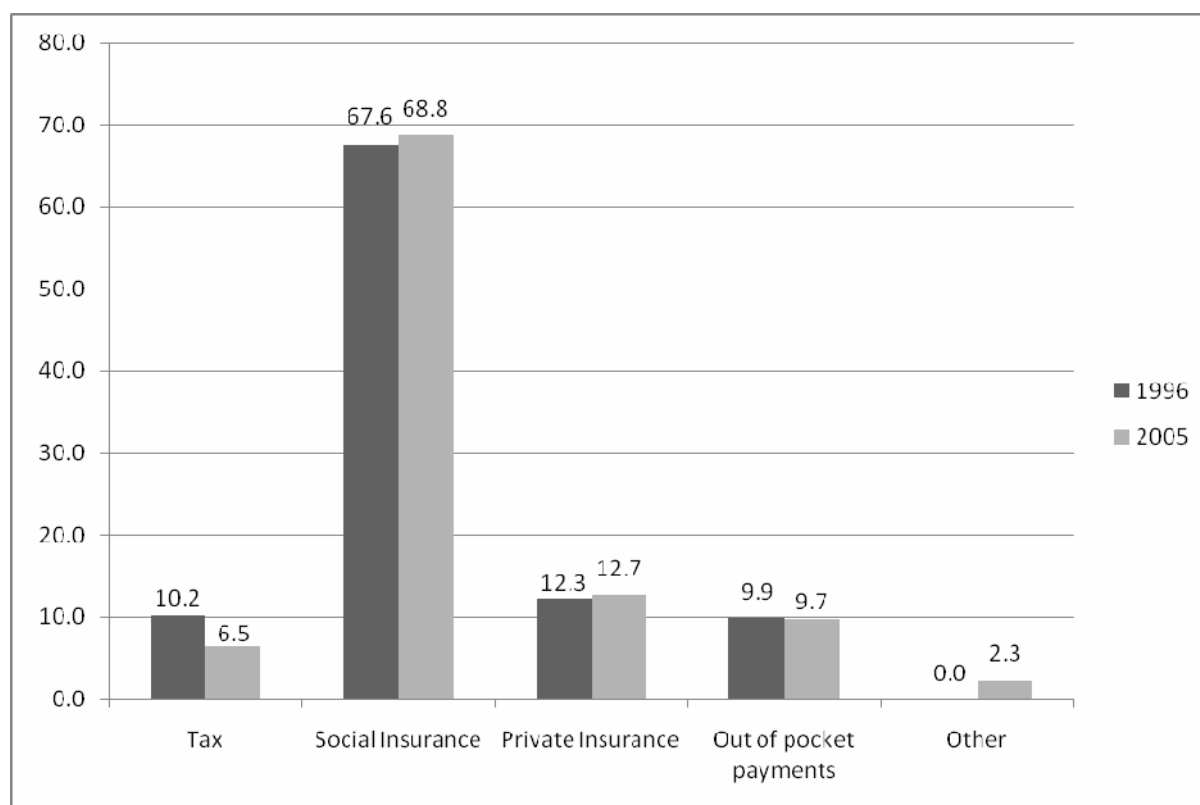
### Coverage and benefits

The statutory health insurance scheme covers all Slovenian citizens for a wide range of benefits, as well as temporary absence from work due to illness or injury, funeral expenses and death benefits. However, cost sharing is extensive. Complementary private health insurance covering statutory cost sharing is available and covers over 74% of the population (98% of those eligible for cost sharing).

### Collection of funds

Health care in Slovenia is predominantly financed from social insurance contributions (see Figure 2). Contributions are levied as a proportion of gross earnings and paid by employees and employers or on their behalf by the government or unemployment fund. Dependants are covered at no additional cost. Due to the relatively high levels of cost sharing, complementary private health insurance plays a significant role and its contribution to total spending on health care is among the highest in the European Union (second only to France). In addition to cost sharing, out of pocket payments include payments for pharmaceuticals and services excluded from the benefits package and access to physicians on a private basis.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

### Pooling funds

Statutory health insurance contributions are pooled by the national health insurance fund (the Health Insurance Institute of Slovenia; HIIS). Private health insurance is provided by three insurance companies, of which the largest is a mutual association (that was originally part of the HIIS).

### Purchasing health services

The HIIS is responsible for purchasing services in the benefits package. Every year the Ministry of Health, the HIIS and providers decide on the range of services to be included in the benefits package and the total value of benefits to be covered by the statutory health insurance scheme. They also decide on the total level of government funding for health care. In a subsequent step the partners negotiate the rights, responsibilities, norms, standards and payment methods for each type of provider. The HIIS then issues a public tender for contracts with providers. Contracts define the type and volume of services to be provided, prices, method of calculation and payment, supervision and rights and responsibilities.

### Provider payment

Primary care is reimbursed through capitation (50%) and fee for service (50%). Ambulatory specialist care is reimbursed through fee for service. Acute care in hospitals is financed using DRGs. Non-acute care is financed on a per diem basis, with rates agreed yearly. HIIS-contracted doctors are salaried.

### **Key financing-related reforms**

- 1992: Health Care and Health Insurance Act, Health Care Activity Act, Pharmacies' Activity Act; the new legislation revised financing methods and shifted some costs to individuals; it established statutory health insurance plus cost sharing and enabled the development of private health insurance.
- 1993: Complementary private (voluntary) health insurance introduced.
- 1995: Cost sharing increased.
- 1996: Cost sharing increased.
- 2000: Health Insurance Act; complementary private health insurance defined as being in the public interest; risk equalisation among private insurers permitted.
- 2004: Health Insurance Act amended to be in line with EU directives.
- 2005: Introduction of DRG financing for hospital reimbursement.
- 2005: Introduction of risk equalisation among private insurers.

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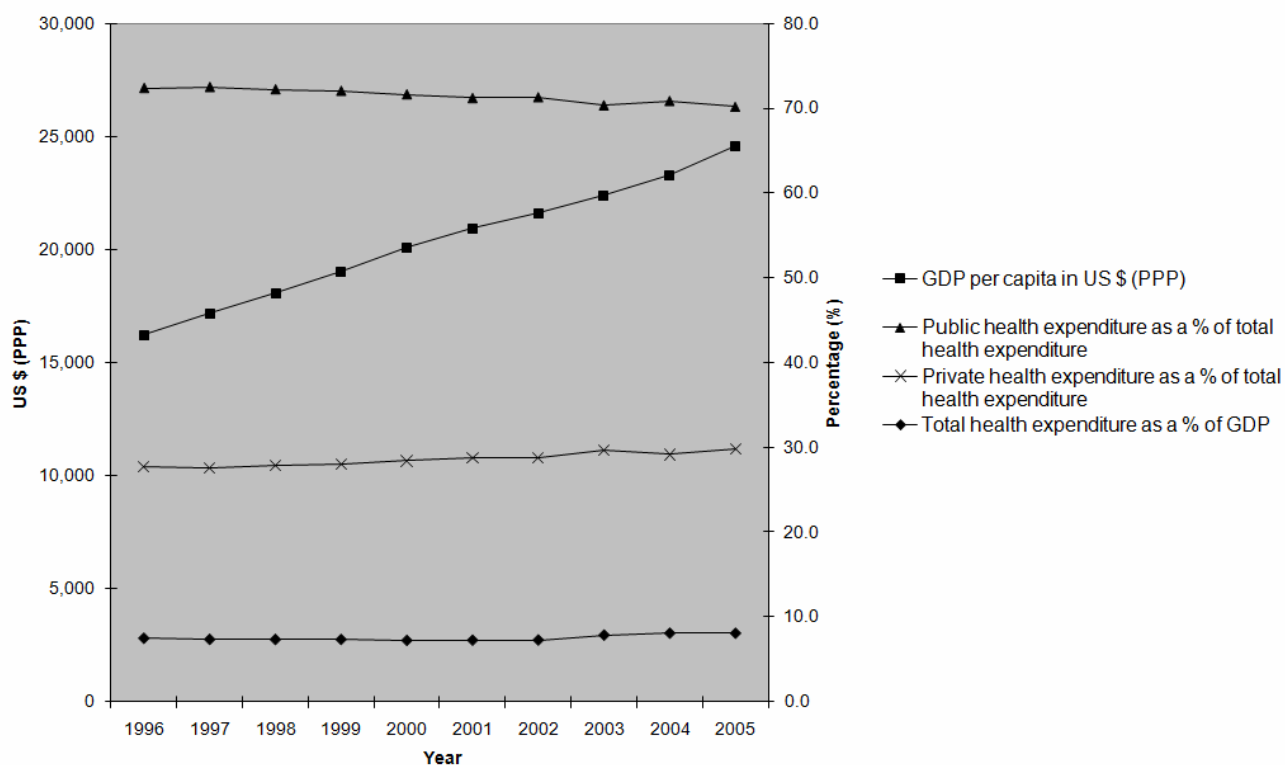


## Health care financing in SPAIN

### Health care expenditure

Total expenditure on health as a proportion of GDP has remained relatively stable in recent years at around 7.5% (see Figure 1). Public spending on health as a proportion of total expenditure has fallen slightly, from 72.4% in 1996 to 70.2% in 2005.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

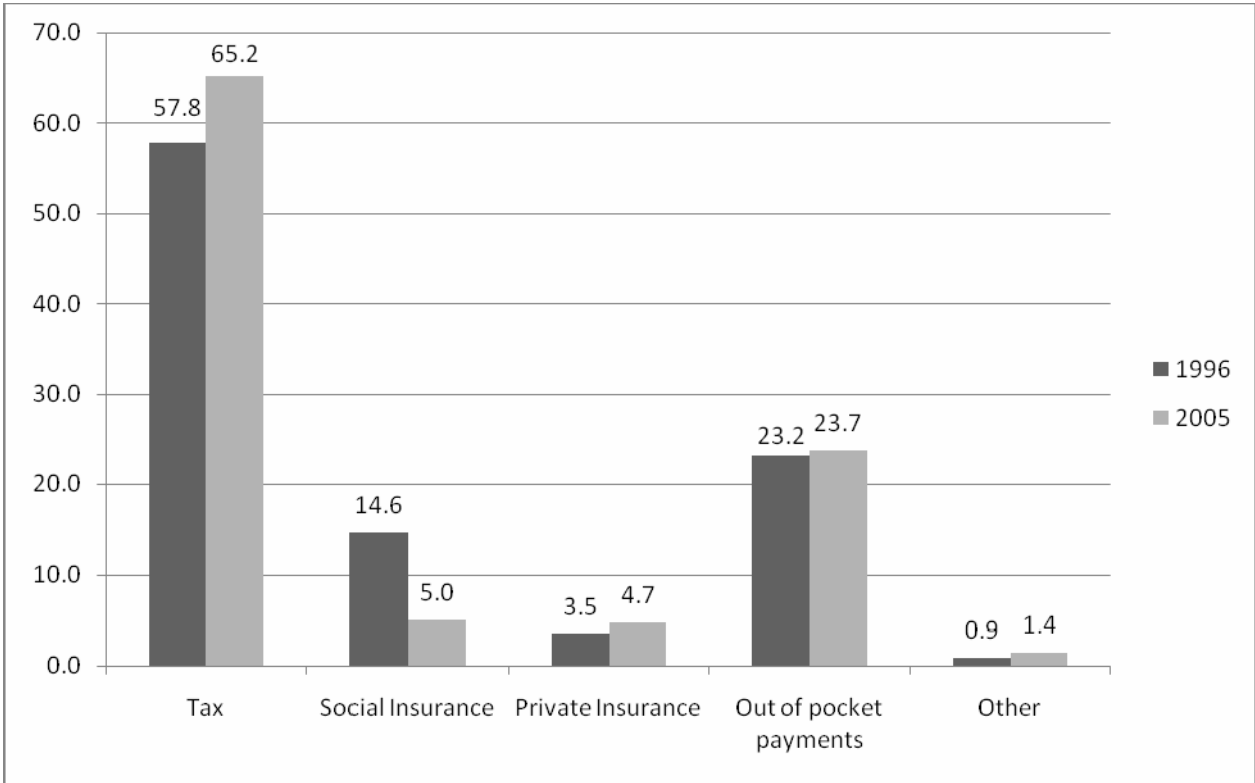
### Coverage and benefits

The Spanish population is almost universally covered (99.5%) by the National Health System (NHS), which provides a relatively extensive benefits package. The remaining 0.5% of the population (non-salaried, high-income workers) is not required to contribute to the NHS. Civil servants and their dependants can choose to access services via the NHS or via non-profit mutual schemes. The latter cover 5.1% of the population. Cost sharing applies to outpatient pharmaceuticals and medical aids such as hearing aids and corrective lenses. People aged 65 and over and those with permanent disabilities or chronic illnesses are exempt from prescription charges. Private health insurance mainly plays a supplementary role.

### Collection of funds

The publicly-financed health system is mainly funded through central and regional taxes (about 65%) (see Figure 2), while the civil servants' social security contributions play a much smaller role (5%). Regional taxes have been used to finance health care since the 1980s, but their contribution has increased over time and was strengthened by a significant reform in 2001.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source: WHO 2007

**Pooling**

A reform in 2001 improved the mechanism used to allocate central tax revenue to the regions, introducing risk adjustment to the capitation formula (the proportion of the population aged 65 and over and the region’s insularity) based on historical allocations. However, inter-regional inequalities in health care expenditure and access to health care persist.

**Purchasing health services**

Regions are free to provide health services as they wish, but are required to spend a minimum amount on health care (in other words, the central government specifies a minimum regional budget for health care). The purchasing agent is usually the regional health authority. In many cases, there is no purchaser-provider split, although some regions have experimented with contracting models (in particular Andalusia, the Basque Country and Catalonia).

**Provider payment**

General practitioners are paid a salary, which includes an element of capitation (about 15%) adjusted for the proportion of registered patients aged 65 and over and population density. Private doctors are paid on a fee for service basis. Hospital doctors and all ambulatory specialists are salaried. Most regions specify contracts with NHS hospitals, which are predominantly financed through global budgets. During the late 1990s case-based payment began to be used, particularly for hospitals outside the NHS.

### **Key financing-related reforms**

- 1999: DRGs introduced to pay hospitals.
- 1999-2000: Coverage extended to non-Spanish residents.
- 2001: Role of regional taxes in financing health care strengthened and resource allocation formula improved better to reflect regional health care need.
- 2005: Ad hoc injection of financial resources to the regions to reduce deficits and consolidation of measures to guarantee that health care expenditure rises at least in line with the growth of GDP.

### **Source**

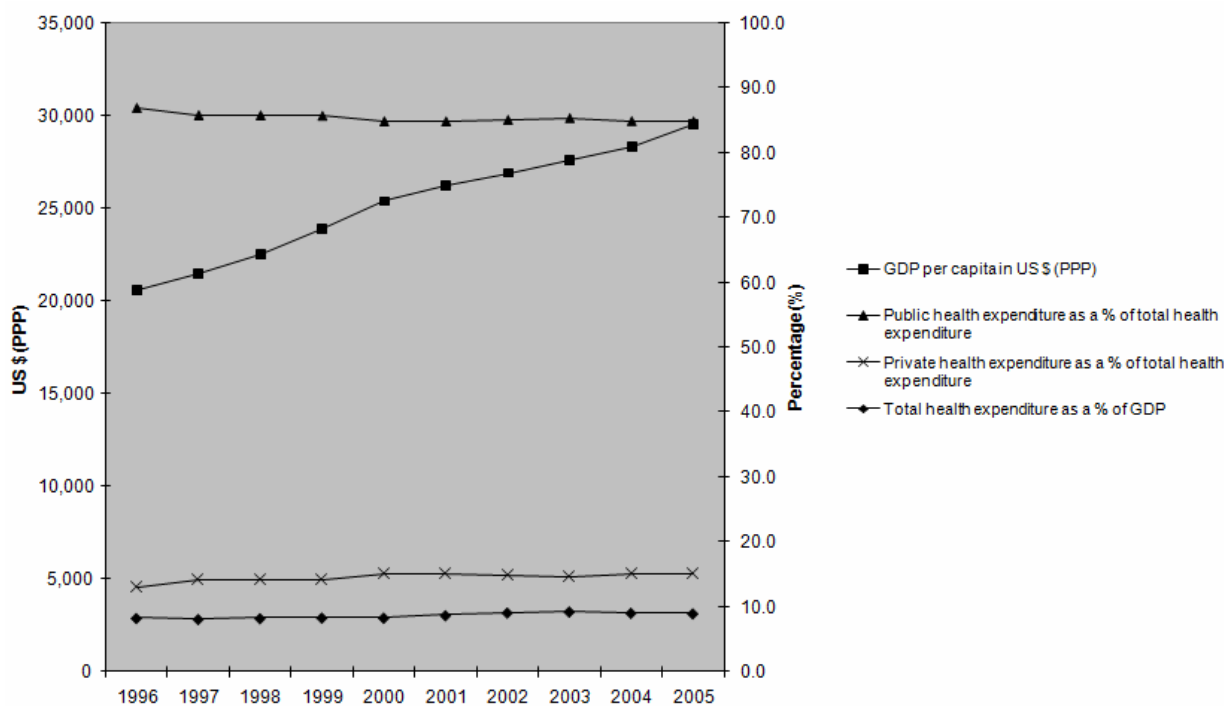
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## Health care financing in SWEDEN

### Health care expenditure

Total expenditure on health as a proportion of GDP remained relatively stable between 1996 and 2005, rising from 8.3% to 9.0% (see Figure 1). Throughout this period, GDP per capita grew substantially. Public expenditure accounts for over 80% of total expenditure on health.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

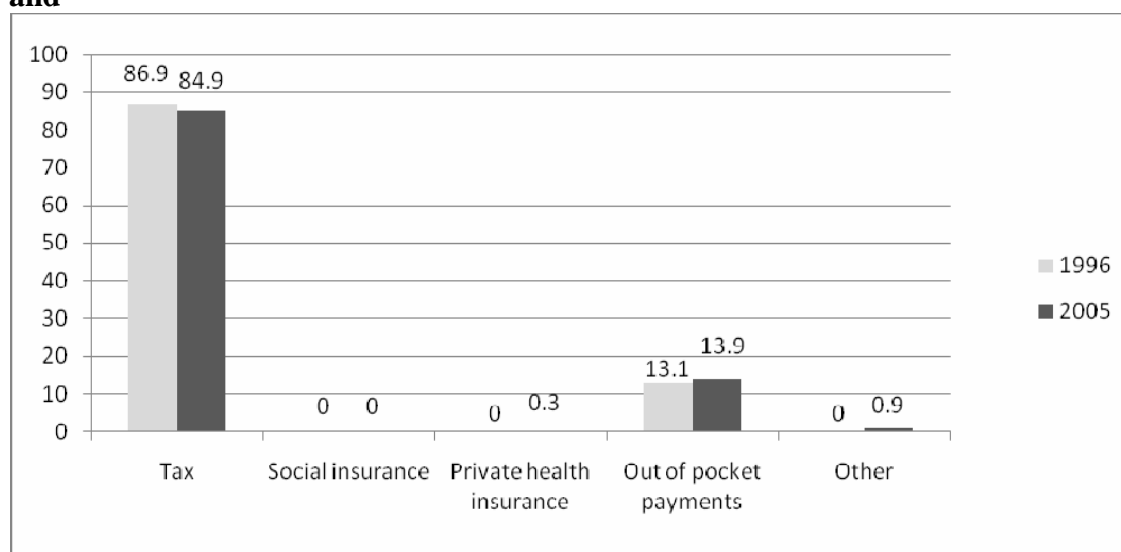
### Coverage, benefits and cost sharing

All residents are covered for a comprehensive range of health services by the publicly-financed system under the 1982 Health and Medical Services Act. There is no defined list of benefits, but guidelines have been put in place to establish health care priorities. Co-payments exist for most health services, but children are exempt and cost sharing is capped at an annual amount of SEK 900 for health services and SEK 1800 for prescription drugs. There are limited subsidies for dental care for adults.

### Collection of funds

Health care is predominantly financed through national and local general taxation (see Figure 2). In addition to centrally-collected taxes, both county councils and municipalities are entitled to levy proportional income taxes. Local taxes are supplemented by central taxes. Government grants to county and local levels reflect socio-economic differences across local governments. Private health insurance plays a supplementary role (providing faster access to care) and covers 2.5% of the population.

**Figure 2 Breakdown of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source:

WHO 2007

### Pooling funds

General tax revenues are pooled by the Ministry of Health and local taxes are pooled by 21 county councils and 290 municipalities.

### Purchasing health services

County councils are responsible for financing primary care, hospital care and mental health care. Municipalities are responsible for financing home care and nursing home care. Most primary health centres and hospitals are owned and operated by the county councils, although the number of privately-contracted primary care providers is growing (up to 60% in some urban counties). Some county councils have established central or local purchasing organisations (a purchaser-provider split). Residents increasingly have choice of primary care provider. Primary care has no formal gate-keeping function, but financial incentives (higher co-payments) encourage patients to visit primary care providers before visiting specialists. Private hospitals tend to specialise in elective surgery and work under contract with county councils.

### Provider payment

Health services are mainly financed through global budgets (for hospitals and primary care providers in about half of the counties). Health care personnel are usually salaried. Some primary care providers are paid through capitation, with limited fee for service arrangements. Several counties have introduced a DRG system with price and/or volume ceilings (so there is limited incentive to increase activity).

### Key financing-related reforms

- 1994: Family Doctor Act and the Act on Freedom to Establish Private Practice; the law was eventually withdrawn, but led to a reform giving residents choice of GPs/family physicians and a change to capitation-based payment.
- 1995: Psychiatric Act; local municipalities held financially responsible for patients post treatment.

- 1997-8: New National Drug Benefit scheme; regulation of co-payments for pharmaceuticals and county councils bear full responsibility for the costs of prescription drugs.
- Late 1990s: merging of hospitals and county councils for cost containment and efficiency purposes.
- 1999: Reform in dental care; free provider pricing and nominal and fixed subsidies introduced for different types of services.
- 2002: Pharmaceutical Benefits Reform: the Pharmaceutical Benefits Board (LFN) was established to decide whether or not a specific drug should be subsidized (assessment based on cost-effectiveness and other criteria) and, consequently, to negotiate a price with manufacturers.

### **Sources**

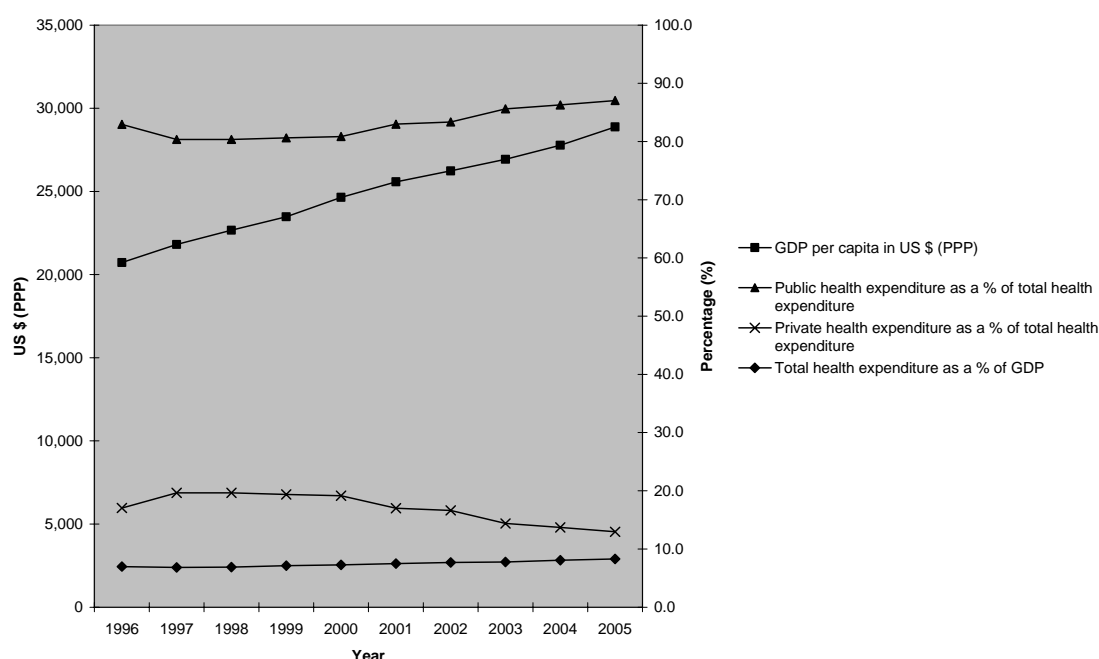
Glenngård, A. H., F. Hjalte, M. Svensson, A. Anell and V. Bankauskaite (2005). Health Systems in Transition: Sweden. Brussels, European Observatory on Health Systems and Policies.

## Health care financing in the UNITED KINGDOM<sup>24</sup>

### Health care expenditure

Between 2000 and 2005, total expenditure on health as a proportion of GDP rose from 7.3% to 8.4% (see Figure 1). Public spending fell as a proportion of total expenditure on health between 1980 and 2000 (from 89% to 81%), but has since risen to 87%.

**Figure 1 Trends in health care expenditure, 1996-2005**



Source: WHO 2007

### Coverage and benefits

The National Health Service (NHS) provides preventive and primary care and hospital services to all those 'ordinarily resident' in England. There is no defined list of benefits, but the National Institute for Health and Clinical Excellence (NICE) issues binding guidelines on whether the NHS should or should not provide specific health services. Supplementary private health insurance covers about 12% of the population, mainly providing access to elective acute care in the private sector and some cover of dental care and complementary and alternative therapies. Over time, NHS coverage of dental care has declined.

### Collection of funds

Health services in England are mainly financed through general taxation (including some national insurance contributions) and are largely free at the point of use<sup>25</sup> (see Figure 2). Patients pay a fixed co-payment per prescription for drugs prescribed outside hospital (£6.85), although many categories of patient are exempt (for example, children, people on low incomes, pregnant women, people aged 60 and over and people with specific chronic conditions).

<sup>24</sup> Political devolution to the constituent countries of the United Kingdom (Northern Ireland, Scotland and Wales) in 1999 has resulted in a diversity of approaches to health system organisation. Here, expenditure data refer to the United Kingdom, but the description of coverage and health financing functions refers to England only.

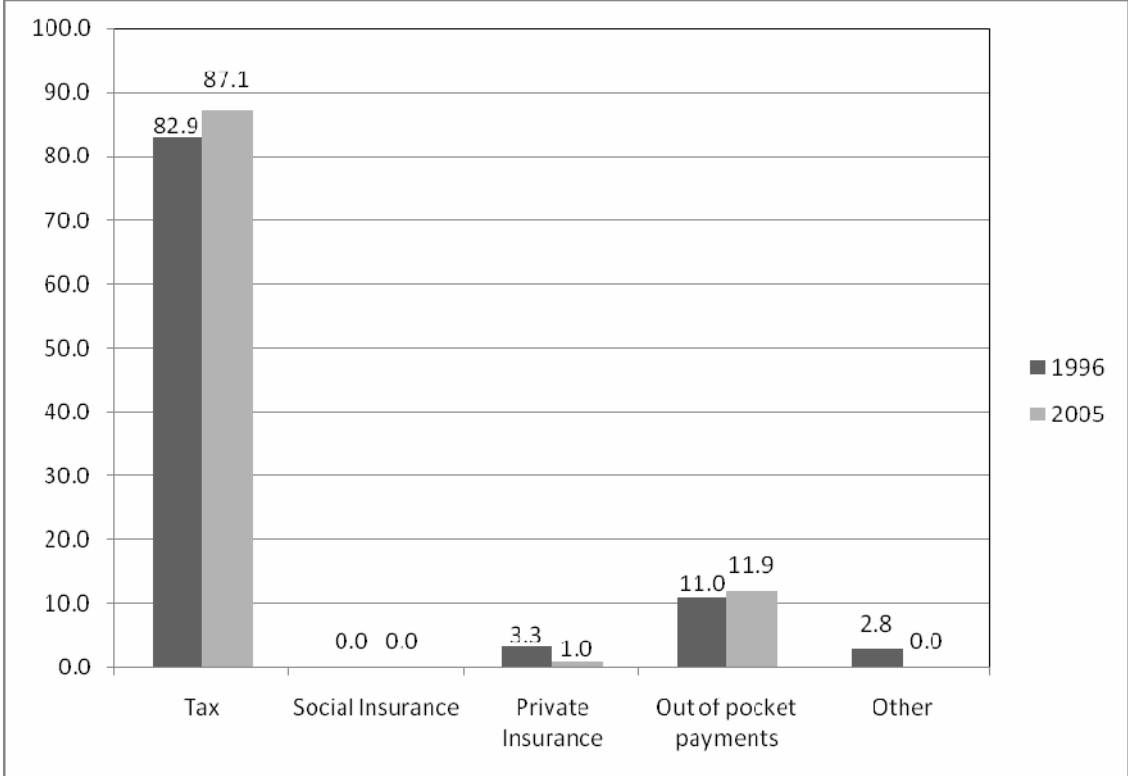
<sup>25</sup> National insurance contributions (NICs) paid by employers and employees are counted as general government revenue in the National Health Accounts.

Patients also contribute to the cost of NHS dental care (up to an annual ceiling of £200) and optometry services. There are no patient charges for GP consultations or normal hospital services. Transport costs to and from providers are covered for some low-income people. NHS charges account for 8% of public expenditure on health. The proportion of the population covered by supplementary private health insurance (12%) has remained relatively stable over time. Out of pocket payments for private treatment account for over 90% of private expenditure on health.

**Pooling funds**

General tax revenues are pooled by the Treasury (the Ministry of Finance), which negotiates a budget with the Department of Health every three years.

**Figure 2 Breakdown of the percentage of total expenditure on health by main contribution mechanisms, 1996 and 2005**



Source:

WHO 2007

**Purchasing health services**

The Department of Health allocates 85% of the NHS budget to 152 geographically-organised Primary Care Trusts. Funds are allocated using a weighted capitation formula that accounts for population size and various indicators of health care need. Most publicly-funded health services are purchased by PCTs. Since 2005, some purchasing takes place through practice-based commissioning (PBC) led by GPs. PCTs mainly purchase services from publicly-owned hospitals and self-employed general practitioners (GPs). More recently, they have started to purchase from the private sector.

**Provider payment**

Hospitals have traditionally been financed through a system of global budgets based on annually-negotiated block contracts. In 2003 the government introduced a new payment system known as 'Payment by Results' (PbR), which uses a nationally-uniform tariff per 'health resource group' (HRG).



In 2006 PbR accounted for about 30% of a PCT's budget. Health professionals working in hospitals are mainly salaried employees. Most GPs are self-employed professionals paid through a combination of capitation and performance-related fees for service. Around a third of GPs choose to work as salaried employees of PCTs.

### **Key financing-related reforms**

- 1997: tax relief for private health insurance abolished.
- 1999: 303 PCTs created to be the main purchasers of health services in the NHS.
- 2000: the government announces increased investment in the NHS.
- 2000: the government signs a 'concordat' with the private sector; PCTs are encouraged to purchase from private providers to increase capacity.
- 2002: NICE guidelines on whether specific services should or should not be provided become binding for PCTs.
- 2003: the government increased funding for the NHS by raising the level of National Insurance Contributions.
- 2003: introduction of DRGs to pay for hospital services.
- 2004: new contract for GPs links payment to achievement of quality, outcomes and other performance targets (the Quality and Outcomes Framework).
- 2005: introduction of practice-based commissioning led by GPs.
- 2005: the number of PCTs cut from 303 to 152.

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