The London School of Economics and Political Science

Voluntary health insurance and health system performance in the European Union

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Declaration

I certify that the thesis I have presented for examination for the PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

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Abstract

This thesis examines the usefulness of voluntary health insurance (VHI) as a lever for improving health system performance. It posits that VHI may further health policy goals if it addresses gaps in statutory coverage, if it does not make those who rely on statutory coverage worse off, and if those who need VHI have access to it. The thesis presents four studies that analyse markets for VHI in the European Union; developments in public policy towards VHI, including the implications of the EUlevel regulatory framework for VHI; the impact of VHI on health system performance; the effects of allowing people to choose between statutory and voluntary health insurance; and VHI's influence on consumer mobility where insurers compete to offer statutory benefits. The thesis finds that while VHI is critical to financial protection in some countries, it does not always address key gaps in statutory coverage or reach those who need it, and the depth of its coverage has declined over time, even in heavily regulated markets. VHI has a regressive effect on equity in health financing, lowers equity in the use of health services and does not seem to have a positive effect on efficiency, partly because insurers in many countries lack appropriate incentives. What is more, a failure to align incentives across VHI and statutory health insurance can undermine the efficiency of public spending on health. Many of VHI's negative effects can be attributed to poor policy design. Policy makers can try and ensure VHI contributes to rather than undermines health system performance through the following mechanisms: better understanding of VHI's interaction with the health system; stronger policy design, focusing on aligning incentives in pursuit of health policy goals and ensuring efficiency in the use of public resources; willingness and capacity to regulate the market to secure financial and consumer protection; and regular monitoring and evaluation.

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The thesis is for Robin, Shoko, Adela, Tom and Sasha.

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List of abbreviations

CAM	complementary and alternative medicine
CEE	central and eastern Europe
CFI	Court of First Instance
CMU-C	couverture maladie universelle - complémentaire
DMP	disease management programme
DRG	diagnosis-related group
DTC	Diagnostic Treatment Combinations
EC	European Commission
ECJ	European Court of Justice
EU	European Union
FFS	fee for service
FHIA	Federal Health Insurance Act
GDP	gross domestic product
GKV	Gesetzliche Krankenversicherung
GP	general practitioner
HIA	Health Insurance Authority
OECD	Organisation for Economic Cooperation and Development
PD	per diem
PHI	private health insurance
PKV	Privaten Krankenversicherung
PMI	private medical insurance
PPN	preferred provider network
PPO	preferred provider organisation
SGEI	service of general economic interest
SHI	statutory health insurance
TEH	total expenditure on health
UK	United Kingdom
US(A)	United States (of America)
VHI	voluntary health insurance
WHO	World Health Organization
ZFW	Ziekenfondswet

Note on the structure of the thesis

This thesis follows the publishable paper format, in which a series of three or four papers are submitted as a thesis. The papers must be thematically linked and tied together with an introduction and a conclusion.

Study 1

The first paper in the thesis is solely the work of the PhD author (ST). It draws on a survey of experts in 26 EU member states (Imre Boncz, Ģirts Briģis, Karine Chevreul, Joan Costa-i-Font, Martin Dlouhy, Charalambos Economou, Stefanie Ettelt, Thomas Foubister, Margherita Giannoni-Mazzi, Gabriel Gulis, Triin Habicht, Galina Kanazireva, Adam Kozierkiewicz, Joy Ladurner, Hans Maarse, Anja Milenkovic Kramer, Ljudmila Mincheva, Natasha Muscat, Mónica Oliveira, Victor Olsavsky, Willy Palm, Marc Perronnin, Sofia Silva, Caj Skoglund, Skirmante Starkuviene, Mamas Theodorou, Svetla Tsolova, Brian Turner, Karsten Vrangbaek and Lauri Vuorenkoski) and a study visit to Luxembourg by a research assistant at the LSE (Jessica Hohman). The survey responses were also used to prepare a report for the European Commission (grant VT/2007/064), which is available as:

Thomson, S. and E. Mossialos (2009). *Private health insurance in the European Union*. Brussels, European Commission (DG Employment, Social Affairs and Inclusion). http://ec.europa.eu/social/main.jsp?catId=754&langId=en

ST devised the survey questionnaire, the 2009 report and the paper. ST collated the responses to the questionnaire with the assistance of Jessica Hohman. ST drafted the 2009 report and the paper and both were critically reviewed by Elias Mossialos (EM; Brian Abel-Smith Professor of Health Policy in the Department of Social Policy at the LSE).

Study 2

The second paper is primarily the work of the PhD author. In 2007 it was published as:

Thomson, S. and E. Mossialos (2007). Regulating private health insurance in the European Union: the implications of single market legislation and competition policy. *Journal of European Integration* 29(1): 89-107.

Prior to publication in the journal it was subject to double-blind peer review by two referees. An extended and updated version of the journal article was subsequently included in an edited book published by Cambridge University Press in 2010:

Thomson, S. and E. Mossialos (2010). Private health insurance and the internal market. *Health systems governance in Europe: the role of EU law and policy*. E. Mossialos, G. Permanand, R. Baeten and T. Hervey. Cambridge, Cambridge University Press: 419-460.

It is the book chapter that is presented in the thesis. The book chapter was reviewed by two of the book's editors (Rita Baeten, Senior Policy Analyst at the OSE, European Social Observatory, Brussels and Tamara K. Hervey, Professor of Law at the University of Sheffield) and an expert in EU law (Willy Palm, formerly the Managing Director of AIM, the International Association of Mutual benefit societies). It also benefited from comments from Wolf Sauter (Professor of Healthcare Regulation, Tilburg Law and Economics Center).

ST and EM devised the paper and the book chapter. ST reviewed the literature and drafted the paper and the book chapter. EM commented on drafts of the paper and the book chapter.

Study 3

The third paper is primarily the work of the PhD author. In 2006 it was published as:

Thomson, S. and E. Mossialos (2006). Choice of public or private health insurance: learning from the experience of Germany and the Netherlands. *Journal of European Social Policy* 16(4): 315-327. Prior to publication in the journal it was subject to double-blind peer review by two referees. In 2011 it was reprinted in:

Marmor, T. and C. Wendt, Eds. (2011). *Reforming Healthcare Systems*. Cheltenham, Edward Elgar.

ST and EM devised the paper. ST reviewed the literature and drafted the paper. EM commented on drafts.

Study 4

The fourth paper is primarily the work of the PhD author. It draws on responses to a questionnaire by a researcher in each of the four countries it reviews. The researchers are listed as co-authors of the paper: Reinhard Busse, Professor of Health Care Management at Berlin University of Technology; Luca Crivelli, Professor of Economics at Università della Svizzera italiana; Wynand van de Ven, Professor of Health Insurance at Erasmus University Rotterdam; and Carine Van de Voorde, Department of Economics, Catholic University Leuven.

ST devised the paper and the questionnaire, collated responses to the questionnaire, reviewed the literature and drafted the paper. The four researchers provided additional references and commented on drafts. The paper has been critically reviewed by EM and also benefited from comments made by participants at the Commonwealth Fund's International Health Policy Symposium in Washington DC in November 2010. Financial support for the paper came from the Commonwealth Fund (grant 20100091).

The paper is currently under review for publication in a peer-reviewed journal.

Overview of the thesis

The focus of the thesis

This thesis is about the usefulness of voluntary health insurance (VHI)¹ as a policy lever for improving health system performance – that is, the health system's ability to meet its goals (2000). A key argument in favour of VHI is that, in the context of limited public resources for health care, it can further health policy goals by relieving fiscal pressure in the health sector. The thesis posits that VHI may be able to do this if it addresses gaps in statutory coverage and does not undermine health system performance. In order for VHI not to undermine health system performance, two further conditions must hold: those who rely on statutory coverage should not be made worse off by the introduction or expansion of VHI, and those who need VHI should have access to it. If all of the above conditions hold, VHI may be a useful policy lever for improving health system performance.

Policy makers can ensure VHI is useful through the following mechanisms:

- better understanding of the way in which VHI interacts with the rest of the health system
- stronger policy design, which should be underpinned by a focus on
 - health policy goals
 - aligning incentives in pursuit of these goals
 - ensuring efficiency in the use of public resources for health
- willingness and capacity to regulate the market to secure financial and consumer protection
- regular monitoring and evaluation of the VHI market and its interactions with and impact on the health system

¹ The thesis distinguishes between public and private health insurance by considering whether or not the financing occurs on a voluntary or compulsory basis. With one or two exceptions, what is commonly referred to as private health insurance is, in the European Union, taken up voluntarily and paid for privately by individuals or employers on behalf of individuals (Mossialos and Thomson 2002). In contrast, statutory health coverage is financed through taxes or mandated contributions.

Of course there may be other reasons for promoting VHI, such as advancing stakeholder interests or satisfying ideological beliefs, which may contribute to the relief of political pressure. However, these other objectives should not be confused with health policy goals. If policy makers need to balance health policy goals with other objectives for VHI, they should understand and be explicit about the trade-offs involved.

Why focus on VHI and health system performance?

Voluntary health insurance has a long history in European health systems. Over the course of the 20th century its role diminished as universal statutory health insurance spread. Internationally, no country now relies exclusively on VHI to finance health care and in the vast majority of cases the contribution of VHI to total spending on health is modest (well under 10%). As a result, VHI has typically not been subject to much research outside the United States (US). However, the last 15 years have been marked by a growing body of academic publications on VHI in non-US settings, including studies commissioned by key international agencies. There are two possible reasons for this: greater awareness of the problems associated with VHI, and interest in its potential to further a range of health policy goals, particularly at a time of sustained fiscal pressure. Interest in VHI has also coincided with a commitment on the part of European governments to improving health system performance. It is therefore an opportune moment to ask how and whether VHI can contribute to strengthening health systems.

The thesis presents four studies, two of which have been published in peer review journals (Thomson and Mossialos 2006; Thomson and Mossialos 2007b). Taken together, the studies aim to shed light on different aspects of the relationship between VHI and health system performance in the European Union (EU). In this section I elaborate on each of the points made in the paragraph above. The next section summarises the contribution of the thesis. Subsequent sections present the aims, methods, findings, conclusions and limitations of each of the studies in turn. A final section highlights the conclusions of the thesis as a whole.

A brief history of VHI in Europe

VHI's European origins can be linked to the guilds formed by skilled workers in the Middle Ages (Abel-Smith 1988). Out of this tradition emerged the protagonist of modern VHI, the occupation-based mutual aid society or association. Mutual associations played an important role in the lives of workers during the Industrial Revolution, providing them with cash benefits in case of ill health and laying the foundation for contemporary welfare states. In many countries VHI was supported by the emerging trade union movement and increasingly grew to benefit from the support of the medical profession (Abel-Smith 1988). The benefits it provided were extended as medical care progressed, but usually had to be complemented by meanstested access to hospital care funded by charitable organisations. Even at its height, however, VHI never covered more than a minority of the population, partly due to its roots in employment and partly due to the fact that the middle classes could afford to pay out of pocket for the limited medical care then available.

The establishment and successful expansion of statutory health insurance, beginning with Germany in 1883, greatly reduced the need for VHI. While VHI retained a residual presence in most countries, its role was, and still is, marginal. In the second half of the 20th century mutual associations in several countries were joined by and competed with new entrants to the VHI market – commercial insurance companies – creating a dynamic which would occasionally lead to tension and, in the 21st century, legal action at national and international levels (Thomson and Mossialos 2010).

The limited contribution of VHI to total spending on health

Statutory systems of health insurance² arose largely in response to the inherent limitations of voluntary coverage, including the information and other failures associated with health insurance markets. No country has found a way of fully addressing these limitations. As a result, no country relies exclusively on VHI to provide financial protection in the health sector. Internationally, the country with the highest share of total spending on health achieved through VHI is South Africa, closely followed by the United States (WHO 2011a). There are only twelve other

² The thesis refers to publicly financed health coverage as statutory health insurance or statutory coverage, regardless of whether it is organised in the form of a national health service or on the basis of membership of statutory health insurance funds.

countries in which VHI accounts for more than 10% of total spending on health, and of these only two are in Europe (Figure 1).

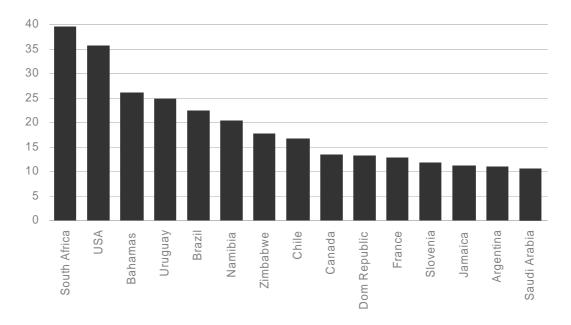


Figure 1 VHI accounts for at least 10% of total spending on health, 2009

VHI accounts for more than 5% of total spending on health in only a quarter of EU countries (Figure 2). Markets for VHI are particularly small in the newer member states of central and eastern Europe (CEE). Between 2000 and 2009 VHI grew as a share of total spending on health in about half of all EU countries. Growth was generally concentrated among the newer member states (albeit from a very low base in 2000 in CEE countries). The most significant growth was seen in Hungary, Malta and Cyprus. There was also growth in two of the largest markets: a very small increase in France and a larger one, of 9%, in Germany. However, four of the ten largest markets experienced a decline (Austria, Ireland, the Netherlands and Slovenia). The decline was particularly steep in the Netherlands (68%).

Source: WHO (2011a) Note: USA = United States of America

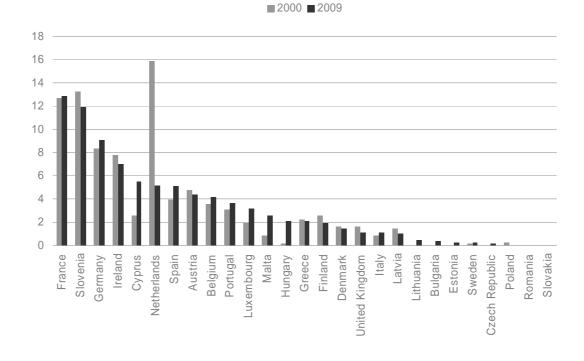


Figure 2 VHI as a percentage of total spending on health, EU, 2000 and 2009

Source: WHO (2011b)

Growing research interest in VHI

One outcome of its generally marginal contribution to health spending is that VHI has been relatively under-researched outside the United States³. The lack of attention paid to VHI outside the US began to change in the 1990s. In 1992 the European Commission (EC) held a two-day seminar on the subject, leading to one of the first comparative efforts to analyse EU markets for VHI (Schneider 1995). Following debates about VHI at the European Parliament in the late 1990s, the European Commission published a more comprehensive study (Mossialos and Thomson 2002c). Other international organisations subsequently carried out their own studies, with reports published by the Organisation for Economic Co-operation and Development (OECD) in 2004, the World Health Organization (WHO) in 2005 and the World Bank in 2006 (the last two focusing on VHI in low- and middle-income countries) (OECD 2004b; Preker et al 2006; Sekhri and Savedoff 2005). In 2009 the European Commission published a third study (Thomson and Mossialos 2009).

³ The other country in which there is a significant amount of research on VHI is Australia.

The interest of international organisations in VHI has been matched by a spate of academic publications⁴ analysing VHI internationally (Gechert 2010; Jost 2000; Maynard and Dixon 2002; Paolucci et al 2007), VHI in the European Union (Mossialos and Thomson 2002b; Mossialos and Thomson 2004; Wasem et al 2004), VHI in transition economies (Thomson 2010), VHI in low-income countries (Drechsler and Jütting 2007), national VHI markets in high-income countries (Besley et al 1999; Buchmueller et al 2003; Foubister et al 2006; Hall et al 1999; Harmon and Nolan 2001; Jones et al 2006; King and Mossialos 2005; Moorin and Holman 2006; Nolan 2006; Rajmil et al 2000; Roach et al 2005; Rodríguez and Stoyanova 2004; Roos and Schut 2011; Saliba and Ventelou 2007; Schokkaert et al 2010; Shmueli 2001; Willcox 2001; Willcox 2003), national VHI markets in low- and middle-income countries (Jowett et al 2003; Murray 2000; Sapelli 2004; Sapelli and Vial 2003) and the influence of EU law on national regulation of VHI (den Exter 2005; Palm 2002; Thomson and Mossialos 2007a; Thomson and Mossialos 2010).

What explains this proliferation of research interest in VHI in the last 15 years? Market expansion may be a factor, although the research does not emerge exclusively from countries that have experienced significant growth, and in many countries VHI has not grown as a share of total spending on health. There are two other possible factors worth considering: greater awareness of the problems associated with VHI, and interest in its potential to further a range of health policy goals, particularly at a time of sustained fiscal pressure.

Awareness of the problems associated with VHI

The presence of market failures in health insurance are well established (Barr 1992). Economic theory posits that VHI will only result in an optimally efficient allocation of health care resources if certain assumptions hold: there are no major problems with adverse selection, moral hazard and monopoly, and the probabilities of becoming ill are less than one (no pre-existing conditions), independent of each other (no endemic communicable diseases), and known or estimable (insurers are able to estimate future claims and adjust premiums for risk) (Barr 2002; Barr 2004).

⁴ This list is limited to published literature in English and is not intended to be exhaustive.

Moral hazard and monopoly issues can be problematic for both statutory and voluntary health insurance, although researchers have questioned the extent to which moral hazard is inefficient (Nyman 2004). The main problems specific to VHI stem from information asymmetry between insurers and individuals wanting insurance (Rothschild and Stiglitz 1976). Insurers' efforts to avoid adverse selection (people concealing information about their risk of ill health) can lead to risk selection and market segmentation. Consequently, some people will not be able to obtain any voluntary cover or cover at a price that they are willing to pay, while insurers will try to maintain or increase their margins by selecting risks rather than by focusing on enhancing efficiency (Evans 1984; Rice 2001; Rice 2003). Public policy can address these and other issues through direct intervention in the market (regulation) and indirect means involving tax policy (Hsiao 1995b).

Outside the United States research has not generally focused on concerns traditionally associated with the effects of market failures in VHI: lack of access to affordable cover and the need for the government to organise cover for poorer, older or disabled people. Instead (and not surprisingly, given VHI's more marginal role), research focusing on EU countries has tended to concentrate on some aspects of the interaction between VHI and the dominant institution of statutory health insurance. These include the relationship between demand for VHI and waiting lists for publicly financed treatment (Besley et al 1999; King and Mossialos 2005), the impact of VHI on equity in the use of health services (Jones et al 2006), particularly the use of specialist care, and the potential for VHI to be employed by statutory insurers as a risk selection tool (Paolucci et al 2007).

VHI's potential to further health policy goals

Arguments in favour of VHI can be divided into two schools of thought. There are those who regard private insurance as inherently superior to public insurance; their premise is that incentives created by the pursuit of profit in a competitive environment will result in administrative efficiency, innovation and better quality care (Chollet and Lewis 1997; Gilbert and Tang 1995; Johnson 1995). Others see VHI as second best: statutory coverage is preferable, but given its limitations, VHI can step in to fill gaps (Chollet and Lewis 1997; Sekhri and Savedoff 2005). Both schools are united in taking the weaknesses of public institutions as their point of departure, highlighting the inefficiency created by bureaucracy, the absence of appropriate incentives and government failure to raise sufficient revenue for health care.

Policy interest in VHI may have a foot in both camps. After the collapse of the Soviet Union in the early 1990s many of its former satellites eagerly embraced market mechanisms, including in the health sector, and all introduced legislation to allow VHI (Kornai and Eggleston 2001; Kutzin et al 2010; Thomson 2010). The grey literature from think tanks across Europe is awash with often ideologically driven advocacy of private health insurance (and its variant, medical savings accounts) (Booth 2011; Bramley-Harker et al 2006; Hrobon et al 2005). But whether or not private institutions are more efficient than public institutions is an empirical question, and one that should be considered in the light of market failures in health insurance. Most academic interest in VHI therefore falls under the second category, with researchers seeking to identify ways in which VHI can address existing gaps in statutory coverage or relieve fiscal pressure by compensating for reductions in nonclinical aspects of health care quality and reductions in the breadth, scope and depth of statutory coverage (Chollet and Lewis 1997).

Table 1 illustrates how VHI can in theory be used to achieve these objectives. First, where there is public dissatisfaction with non-clinical aspects of the quality of publicly financed care, supplementary VHI could enhance choice of provider and amenities. It could also contribute to shorter waiting times for treatment, both for those with VHI (who can jump the queue) and those who rely on statutory coverage (if VHI-financed care takes place in the private sector, releasing capacity in the public sector). Second, a complementary VHI market could cover health services that are excluded or not fully covered by the statutory benefits package. This would be particularly attractive, from a policy perspective, if statutory coverage were to focus on essential, cost-effective health services – so-called high-value care – leaving VHI to cover the rest. Third, a complementary VHI market could cover statutory user charges, allowing the government to shift costs onto households in the knowledge that people would have access to financial protection through voluntary coverage.

Finally, the government could oblige or encourage wealthier people to pay for their own health care, creating a role for substitutive VHI.

Market role	Driver of market development	Nature of cover	EU examples
Supplementary	Consumer satisfaction: perceptions about the quality of publicly financed care	Offers faster access and enhanced choice of provider	Ireland, Poland, Sweden, United Kingdom
Complementary (services)	Scope of statutory coverage: the range of benefits covered	Covers services excluded from or only partially covered by the statutory benefits package	Denmark, Hungary, Netherlands
Complementary (user charges)	Depth of statutory coverage: the proportion of the benefit cost met	Covers statutory user charges	France, Slovenia
Substitutive	Breadth of statutory coverage: proportion of the population eligible for statutory cover	Covers people excluded from or allowed to opt out of the statutory system	Germany

Table 1 Functional classification of VHI markets

Source: Adapted from Mossialos and Thomson (2004) and Foubister et al (2006)

One of the assumptions underlying the use of VHI to address gaps in statutory coverage is that if VHI covers less 'essential' aspects of health care or richer groups of people, public resources can be better targeted towards high-value health services or poorer households, resulting in a net gain for the health system. This assumption is most likely to be problematic where substitutive VHI is concerned, due to the negative effects of risk segmentation. Excluding wealthier people from statutory coverage might help to address short-term fiscal pressure if coverage is predominantly financed through general tax revenues, entitlement is based on residence and tax subsidies to make substitutive VHI more affordable are self financing. In the medium to longer term, the government would also need to ensure that those excluded from statutory coverage had adequate financial protection, both to avoid having to pick up the costs of poor health caused by lack of coverage and to prevent worsening health outcomes from undermining economic growth (Moreno-Serra et al 2011 in press; Suhrcke et al 2005; Suhrcke et al 2006; Suhrcke et al 2008). Where statutory coverage is mainly financed through contributions, however, excluding the rich is likely to exacerbate fiscal pressure. The only short-term advantage in this approach would be to place some health spending 'off budget' for

accounting purposes, which might be useful in a situation where reducing government deficits is a political priority.

A commitment to improving health system performance

Interest in VHI in Europe must be seen in the context of two recent developments. On 15 September 2008 WHO's Regional Committee for Europe convened to endorse the Tallinn Charter on health systems for health and wealth on behalf of 53 countries and several international agencies (including WHO, the World Bank and the European Investment Bank) (WHO 2008). In doing so they were agreeing on the need for health systems to demonstrate good performance and committing themselves to improving people's health by strengthening health systems. On the same day Lehman Brothers, one of the world's largest investment banks, filed for bankruptcy, triggering a global financial crisis (Clark 2009). The severe economic recession that followed has exacerbated fiscal constraints in many European countries, and one effect of this may be to weaken government investment in strengthening health systems. Another effect may be to galvanise policy interest in VHI, giving renewed impetus to the idea of VHI as a means of addressing gaps in statutory coverage.

The signing of the Tallinn Charter reflects in part a broader preoccupation with measuring health system performance both within and across countries, a phenomenon invigorated by the publication of WHO's World Health Report on health systems in 2000 (Smith et al 2010; WHO 2000). Against this background, and in the context of fiscal constraints, it is important to consider the usefulness of VHI as a lever or tool for attaining health policy goals. Countries in which VHI already plays a role may be interested in developing a better understanding of VHI's impact on health system performance, while those interested in introducing or expanding a market for VHI may want to know what they can learn from the experience of others.

The contribution of the thesis

The focus of the thesis is on VHI and health system performance in the European Union. Its main purpose is to consider the usefulness of VHI as a means of furthering health policy goals, particularly in terms of VHI's ability to relieve fiscal pressure in the health sector by addressing gaps in statutory coverage. The thesis does this by analysing different aspects of VHI's interaction with statutory health insurance, assessing the effects of VHI on key dimensions of health system performance and identifying the mechanisms through which these effects are achieved.

Key propositions underpinning the thesis

The thesis is underpinned by four propositions:

- VHI cannot be considered in isolation. As a result of well-established market failures in health insurance, exclusive reliance on VHI does not serve health policy goals. Statutory health insurance has developed in response to market failures and VHI generally operates alongside some form of statutory coverage. Discussion of VHI and its usefulness as a policy lever should not focus on VHI alone, but should always consider its relationship to and interaction with the rest of the health system, particularly statutory health insurance. The guiding principle, for policy, should be to think about how best to combine voluntary and statutory coverage to achieve health policy goals.
- 2. VHI should not weaken the health system's capacity to achieve its goals. The economic concept of Pareto efficiency or optimality may be helpful when thinking of VHI's potential to address gaps in statutory coverage or relieve fiscal pressure in the health sector (Begg et al 1997; McPake et al 2002). A Pareto-based approach to introducing or expanding VHI would note (for example) that while VHI may only be within reach of richer groups of people, this is acceptable so long as those who rely on statutory coverage are not made worse off. In principle it is possible to determine if VHI makes those who rely on statutory coverage worse off. If VHI undermines the performance of the statutory health insurance scheme or the health system as a whole, it cannot be said to contribute

to the attainment of health policy goals. In practice this can be difficult to establish due to lack of data. It is also possible that empirical evidence will be overruled by *political* considerations, particularly if VHI is seen as a means of relieving political pressure by satisfying stakeholder interests, or if cutting public spending on health is a political imperative. In spite of these challenges, the proposition should be central to any consideration of the usefulness of VHI.

3. Before considering the advantages and disadvantages of any policy lever (not just VHI), policy makers should be clear about what it is the health system is trying to achieve. Since health system performance is inextricably linked to health system goals, clarity about the latter is a prerequisite to any discussion of a policy lever's impact on the former. In its analysis the thesis adopts the health system and health financing policy goals identified by WHO (Table 2) and considers the impact of VHI on financial protection, equity in financing and use of health care, incentives for efficiency and quality in care delivery, and administrative costs (Kutzin 2008; WHO 2000).

Policy levers may be chosen for their potential to contain health care costs, limit public spending on health or contribute to fiscal sustainability. However, to regard any of these as valid *health policy goals* would be to follow a misguided logic (Thomson et al 2009a). Cost containment should not be confused with efficiency. Indeed, a narrow focus on containing public spending on health – for example, by making cuts across the board – would be likely to undermine efficiency. Fiscal sustainability is a constraint that needs to be respected, but it cannot be seen as a goal in its own right, on a par with or even overriding other goals. Ultimately, how much a country or government spends on health is an essentially political choice which should be informed by awareness of the opportunity cost of spending (or not spending) on health.

4. *The nature of VHI's impact on health system performance is heavily influenced by public policy.* In the thesis I distinguish between two types of public policy action: policy design and regulation of the market. Policy design sets out how VHI relates to and interacts with the health system. It determines the role VHI plays, establishes the rules of the game and puts in place the incentives facing

insurers, health care providers and the public (including tax incentives). Regulation of the market refers to rules about how the VHI market operates. Of course regulation creates its own incentives and in practice it may not be possible or even necessary to say whether an action falls under the category of policy design or regulation of the market. I simply want to draw attention to a frequently overlooked aspect of public policy towards VHI, which is the broader institutional framework in which VHI markets operate. In many respects the quality of VHI policy design may be a more important determinant of VHI's impact on health system performance than regulation of the VHI market, and yet regulation is often the main focus of scrutiny in the literature.

Table 2 Summary of health system and health financing policy goals

Health system goals

- Improving the health of the population (overall level and distribution)
- Responding to people's legitimate non-medical expectations (overall level and distribution)
- Providing financial protection against the costs of ill health

Health financing policy goals

- Financial protection: ensuring people do not face financial hardship when using needed health services
- Equity in financing: distributing the burden of financing the health system relative to individual capacity to contribute
- Equity in use: distributing health services (by distributing health system resources) in relation to need
- Promoting efficiency (in organisation, service delivery, administrative arrangements) and quality (in service delivery)

Promoting transparency and accountability

Source: Kutzin (2008), WHO (2000) and WHO (2010)

The contribution of each study

Study 1 lays the groundwork for the thesis. It provides a comprehensive but succinct review of markets for VHI in the European Union, describing the role VHI plays across 27 countries, analysing the structure, conduct and performance of different markets, summarising the key features of the five most significant markets (France, Germany, Ireland, the Netherlands and Slovenia) and setting out public policy towards VHI at national and EU level. The study gives the reader a snapshot of how markets currently function and are regulated, as well as a sense of different types of potential interaction with statutory health insurance and important developments that have taken place in the last ten years. A key aim of providing this overview is to prepare the reader for the more detailed analysis that follows, both in the study itself and in the other studies. The first study's review of public policy and assessment of the impact of VHI on health system performance identify the main challenges presented by large substitutive, complementary and supplementary markets. However, because the study is intended for a general audience, some of the major issues it highlights are analysed more closely in the other studies, as set out below.

The second study expands in some detail on the first study's discussion of public policy towards VHI. In the early 1990s the legislative institutions of the European Union established an EU-level regulatory framework for VHI through the Third Non-Life Insurance Directive (from here on referred to as 'the Directive'). The Directive's underlying premise was that most health insurance markets need not be regarded as substantively different from other non-life insurance markets and should therefore be subject to EU internal market rules. The study analyses the impact of the Directive and other aspects of EU law on national public policy towards VHI and considers the capacity of the EU framework to promote financial and consumer protection in health insurance markets. In doing so it attempts to increase understanding of the constraints the EU framework places on national regulators and the tensions the Directive has created since its introduction. The analysis of case law aims to inform health and wider regulatory policy by distinguishing areas where there is clarity from those in which significant legal uncertainty persists.

The third and fourth studies focus on important aspects of the interaction between VHI and statutory health insurance. Study 3 elaborates on perhaps the most substantial area of interaction by examining what happens when people are allowed to choose between statutory and voluntary coverage. The study's analysis of competition between these two forms of cover provides an empirical test of economic theory regarding health insurance markets. In exploring a key policy issue – whether or not statutory health insurance should extend to richer households and do so on a mandatory basis – the study also provides an evidence base for contemporary debate. This issue was seriously considered in a number of European countries during the 1990s, but with no conclusive results, and in the first years of the 21st Century the policy focus shifted to thinking about universal health coverage (at least in western Europe). However, interest in the issue remained in parts of eastern

Europe and, in the aftermath of the financial crisis, it may find its way onto the policy agenda in other countries.

Detailed analysis of substitutive VHI in Germany and the Netherlands highlights the challenges VHI presents in the European Union's two largest markets (as measured in terms of contribution to total spending on health prior to the abolition of the substitutive market in the Netherlands in 2006). Not only are these markets large in size, they are the most significant in terms of their potential impact on statutory health insurance and on health system performance more broadly. The thesis does not devote a whole study to the issue of complementary and supplementary VHI but it covers them in some detail in the first study – particularly markets for complementary VHI covering user charges in France and Slovenia, which are now the largest markets in Europe.

Study 4 considers the role of VHI in undermining the potential for competition among statutory insurers to improve health system performance. In the last 15 years policy in a handful of European countries has tried to create incentives to encourage competing statutory insurers to enhance efficiency through better purchasing⁵. Consumer choice of statutory insurer combined with greater financial risk for insurers is, in these countries, a key strategy for improving health system performance. However, many statutory insurers also sell VHI. Because of regulatory differences in the sale of statutory and voluntary benefits, linking sales of the two – so-called conditional sale – may create a barrier to switching from one statutory insurer to another for older people and people with pre-existing conditions. If people in general (and less healthy people in particular) cannot choose and switch insurer easily, without incurring significant costs, the instrumental value of insurer competition is weakened. As a result, the use of competition among statutory insurers may fail to achieve its goal of enhancing efficiency and strengthening health system performance.

⁵ Belgium, the Czech Republic, Germany, the Netherlands, Slovakia and Switzerland. Because VHI plays such a marginal role in the Czech Republic and Slovakia these countries were excluded from the analysis.

Conditional sale is identified as an issue in the first study and taken up in much greater detail here. Previous research has noted it is a key area of interaction between statutory and voluntary health insurance but has focused on its use as a tool to enable insurers to select risks in statutory health insurance, without considering the wider implications for health system performance (Paolucci et al 2007). This study goes further by examining the issue in the context of broader policy expectations about insurer competition. For insurer competition to achieve expected outcomes, three assumptions must hold: people must have free choice of insurer, insurers must have incentives to compete on price and quality rather than through risk selection, and insurers must have (and use) tools to influence health care costs and quality. The study assesses the extent to which these assumptions hold in four countries with significant markets for VHI. It is important to look at all three assumptions in order to be able to assess the relative importance of conditional sale of VHI as an obstacle to improved performance in statutory health insurance.

Summary of study 1

How does voluntary health insurance affect health system performance? Evidence from the European Union

Background

The last ten years have been marked by greater scrutiny of VHI by international organisations and in the academic literature. They have also seen growing interest in measuring comparative health system performance, a phenomenon both reflected in and stimulated by the publication of the World Health Report on health systems in 2000 (WHO 2000). It is therefore an opportune moment not only to review developments in VHI markets, but also to consider the effects of VHI on health system performance. The purpose of measuring health system performance, defined as the health system's ability to achieve its goals (WHO 2000), is to generate reliable information for policy development and to foster accountability by enabling stakeholders to make informed decisions (Smith et al 2010).

Aims

This paper has three aims: to review the way in which markets for VHI currently operate across the European Union and identify important changes that have taken place since 2000; to review developments in public policy towards VHI; and to examine the impact of VHI on the following dimensions of health system performance: financial protection, the distribution of health financing and health care use (equity), incentives for efficiency and quality in health care delivery, and administrative costs (Kutzin 2008; WHO 2000; WHO 2010).

Methods

Data presented in the paper come from three sources: a survey of experts in 26 member states based on a detailed questionnaire (included in the Appendix) and a study visit to Luxembourg by a research assistant; a review of published and grey literature identified through searches of academic databases (ISI Web of Knowledge

and PubMed) and the Internet (Google and Google Scholar); and international statistical databases (WHO National Health Accounts). The survey was carried out in 2008 and data from the completed questionnaires were collated in 2009.

Contribution to the literature

The paper fills a gap in the literature by updating and building on earlier analyses of markets for VHI in the European Union (Mossialos and Thomson 2002a; Mossialos and Thomson 2002b; Mossialos and Thomson 2002c).

Findings

How have markets for VHI developed since 2000?

VHI market growth has been mixed. No 'new' markets have emerged since 2000, but some old ones have disappeared and others have grown. Following the demise of substitutive VHI in the Netherlands (in 2006) and Belgium (in 2008), Germany now has the only significant substitutive market. Complementary VHI covering user charges has grown in France due to the introduction of government vouchers and other subsidies targeted at low-income households, but had already reached saturation point in Slovenia by the mid 1990s. Although Hungary's market for complementary VHI covering excluded services has grown as a result of generous (but highly regressive) tax subsidies, it remains marginal. Some supplementary markets have experienced rapid growth, mainly due to favourable tax incentives (Denmark, Ireland), an increase in the purchase of VHI as an employee benefit (Belgium, Denmark, Sweden) or lack of confidence in the public system due to waiting times for elective surgery (Denmark, Ireland, Sweden).

Commercial insurers now have a larger share of the VHI market than in 2000 and often play a dominant role in supplementary markets. Non-profit insurers continue to enjoy a dominant market position in a handful of countries, particularly those in which complementary VHI plays a significant role. In some countries risk selection by commercial insurers has triggered greater regulation (Slovenia), while competition between commercial and non-profit insurers has led to legal challenges at national and EU levels (Belgium, Ireland, France and Slovenia). VHI markets are

highly concentrated in many countries and some markets have become more concentrated in the last ten years. The effect of market concentration on competition is not clear. Buyer characteristics have not changed much since 2000. People with higher socio-economic status are still generally more likely to have VHI than people with lower socio-economic status. The role of groups in purchasing VHI has grown in some countries and declined in others but is still significant overall.

VHI continues to be a generally profitable business in which insurers bear minimal financial risk. The price of VHI to consumers is lowered by tax subsidies in many countries and insurers in all except some of the largest markets are free to reject applications for cover, charge premiums based on age and health status, charge additional premiums for covering dependants, exclude cover of pre-existing conditions, terminate policies, differentiate products, set limits to the benefits they provide and impose both waiting periods before benefits can be claimed and cost sharing. As a result, insurers in most VHI markets have limited incentives to enhance efficiency in organisation, administration or health care delivery. Many simply reimburse policy holders, often paying providers fees that are higher than the fees paid in statutory health insurance, and few make use of the purchasing tools at their disposal.

How has public policy towards VHI changed since 2000?

Measured along a single dimension (the use of tax incentives to encourage take up of VHI), there was a public policy trend away from supporting VHI in the 1990s. Since then this trend has been reversed, with 19 out of 27 countries offering some form of tax incentive for VHI. However, looking at a wider range of factors influencing demand for VHI reveals a more complex picture.

Following the collapse of the Soviet Union in the early 1990s many of its former satellites embraced market mechanisms in the health sector and all introduced legislation to allow VHI (Kornai and Eggleston 2001; Kutzin et al 2010; Thomson 2010). In spite of VHI's lacklustre performance in these countries (Slovenia excepted), public debate has continued to focus on encouraging the development of VHI and, in some cases, on involving voluntary insurers in the provision of statutory health insurance. This stands in contrast to the expansion of statutory coverage in other (mainly western European) countries. Increases in the breadth of statutory coverage have diminished the role of substitutive VHI in Belgium and the Netherlands and, to a much lesser degree, in Germany, while proposed increases in the scope and depth of statutory coverage are intended to diminish VHI's role in Ireland and Slovenia.

What seems, at first glance, to be an east-west divide in public policy towards VHI may actually be a division between smaller and larger VHI markets. With the exception of Belgium, expansions in statutory coverage have taken place in countries with the largest markets for VHI (in terms of contribution to total spending on health) and government intervention has intensified in these markets since 2000. Policy developments in Belgium were heavily influenced by EU infringement proceedings (Palm 2009; Van de Voorde 2011). In the other countries, however, policy developments arose in response to the acknowledged limitations of VHI and concerns about its negative impact on health system performance. It is plausible to speculate that as these already large VHI markets grew in size, the problems associated with them became more visible, putting pressure on the government to take action. Growing fiscal constraints may have added to this pressure, allowing policy makers to weigh the costs of further intervention in the VHI market against the benefits of expanding statutory coverage.

Since 2000 EU law-related tensions have increased, affecting VHI markets in Belgium, France, Ireland, the Netherlands and Slovenia. Legal action has usually been prompted by insurer rivalry (often rivalry between commercial and non-profit insurers). The EU-level framework for VHI restricts material regulation to substitutive markets. However, analysis suggests that on one hand the framework fundamentally underestimates the contribution VHI makes to financial protection in non-substitutive markets, resulting in inappropriate legal action, but that on the other hand, this may not be such an issue since the European Court of Justice seems reluctant to challenge national sovereignty with respect to general good measures for services declared to be of general economic interest (Thomson and Mossialos 2010). Analysis also suggests that the European Commission's original premise about the effectiveness of deregulation in the VHI sector was misguided. There is no evidence of VHI market deregulation and competitive pressures resulting in lower prices for consumers. Rather, the price of VHI has continued to rise and in some cases higher premiums have been accompanied by a decline in the quality of VHI coverage; in other words, VHI seems to have become worse not better value for money. At the same time it is important to note that greater accessibility to VHI has almost exclusively arisen through government intervention and not as a result of market forces. Thus, while relying on financial regulation may suffice for supplementary VHI, it is not appropriate for substitutive VHI and complementary VHI covering user charges. In future public policy should focus more on transparency and consumer protection issues and, in non-supplementary VHI markets, on the quality of VHI coverage.

How does VHI affect health system performance?

VHI appears to be critical to financial protection in France, Slovenia and Germany. It is difficult to estimate the extent to which VHI in these three countries provides adequate financial protection, but there is some evidence to show that the quality of VHI coverage (the generosity of benefits) has declined in France and Germany in the last five years. Policy makers in all three countries have been sufficiently concerned about financial protection to introduce extensive regulation of VHI (Germany) and significant means-tested tax subsidies (France), or to propose major reform of statutory user charges (Slovenia). In other countries VHI has not developed to fill significant gaps in statutory coverage or is too expensive for many of those who are likely to need it (since levels of population coverage are low) and is therefore unable to address financial protection problems.

VHI is likely to be regressive in substitutive markets and where it covers a substantial proportion of the population. Research confirms it is regressive in France and Ireland. VHI markets of all types are found to skew the distribution of health care away from need, largely as a result of rules allowing those with VHI to bypass waiting lists for publicly provided care and the incentives facing providers, which encourage them to prioritise VHI-financed patients. Clear differences in patterns and

frequency of use and waiting times between those with and without VHI are not justified by greater need among those with VHI, and are therefore a cause for concern about efficiency in the use of health resources.

As already noted, EU markets for VHI do not seem likely to have a positive effect on efficiency in the health system due to the absence of appropriate incentives for insurers. Of more concern for public policy is the way in which failing to align incentives across VHI and statutory health insurance can undermine the efficiency of public spending on health – for example, by undermining value-based benefit design, through direct and indirect tax subsidies for VHI, and through conditional sale of VHI and statutory health insurance.

Growing government regulation to promote access to VHI in the largest markets has not allayed concerns about financial protection for those without VHI or declining financial protection for those with VHI. Affordability is a persistent problem even where VHI is heavily regulated or subsidised. Concerns about the impact of VHI on equity in the use of health care, and the potential for VHI to undermine efficiency in public spending on health, have also grown in the largest markets. What is striking, however, is just how many of VHI's negative effects on health system performance can be attributed to the quality of public policy towards VHI. Poor policy design enables and exacerbates risk segmentation, permits public resource allocation to be skewed in favour of those with VHI, and fails to ensure that incentives are aligned across VHI and statutory health insurance. Policy makers must accept some of the responsibility for failing to create an environment in which insurers have incentives to enhance efficiency and for allowing public resources to subsidise VHI (directly or indirectly) when such subsidies are of questionable value.

Conclusions

Measured in terms of contribution to total spending on health, VHI's role in EU health systems has grown in many countries in the last ten years (sometimes from a very low base), but there has been no clear trend and some significant markets have disappeared as governments have expanded statutory coverage. In the next few years other markets may decline in significance if proposed reforms in Ireland and

Slovenia are implemented. Over time VHI markets have become more commercial and more concentrated and voluntary cover continues to favour wealthier and better educated households.

VHI has a mixed impact on health system performance. Although it provides critical financial protection in a handful of countries, its protective quality has declined over time, and in many other countries it has completely failed to address significant gaps in statutory coverage. Some of VHI's negative effects on other dimensions of performance – for example, its propensity to make health financing more regressive and to skew the distribution of health care away from need, its potential to undermine efficiency in public spending on health and its high administrative costs – are particularly visible in the larger markets. Growth in these markets has been accompanied by increasing government intervention to alleviate fiscal pressures caused by risk segmentation, to secure access to VHI, and to redress VHI's effect on efficiency in public spending on health.

Many of the problems associated with VHI are caused or exacerbated by poor policy design. This may stem from limited understanding of or lack of attention to the interaction between statutory and voluntary health insurance and often results in a failure to establish appropriate institutional arrangements. Better understanding of how VHI interacts with and affects the rest of the health system will enable policy makers to identify the appropriate role for VHI and should contribute to stronger policy design. Stronger policy design can also be achieved if policy makers have clarity about health policy goals and are able to align incentives in pursuit of these goals.

Finally, policy makers must demonstrate the political and technical capacity to regulate VHI to secure both financial and consumer protection. A good starting point would be to ensure that the regulator has a grasp of the specificities of health insurance markets or, if necessary, to establish a dedicated health insurance regulator. This also applies to those responsible for determining the EU-level regulatory framework. The current framework reflects a fundamental misunderstanding of the nature of markets for VHI. It is therefore no surprise that the European Commission's expectations for deregulation – competitive pressure

enhancing choice and lowering prices – have not been fulfilled. Oversight should also include systematic monitoring and evaluation of the VHI market and its interactions with and impact on the health system. Regular data collection and analysis of VHI are the exception rather than the norm and there are only a handful of countries in which there is a good evidence base for policy development.

Limitations

The degree of information about VHI presented in the paper varies across countries. This variation mainly reflects differences in the size and significance of markets and the availability of research on VHI. In many countries research is extremely limited, which means that the evidence base for an assessment of VHI's impact on health system performance is small. Much of the evidence in the paper comes from the largest VHI markets; in smaller markets, the effects of VHI may be more muted.

Because published information on VHI is scarce in many countries, the paper has made extensive use of the survey of experts in 26 countries. Although I took steps to ensure that the survey responses were of a consistently high standard (for example, by carefully selecting the experts, using a detailed questionnaire and giving the experts an opportunity to clarify and strengthen their responses), the quality of response may vary across countries and there is always some risk in relying on a single expert per country⁶.

⁶ More than one expert responded to the survey in Bulgaria, France and Portugal.

Summary of study 2

VHI and the internal market

Background

In 1992 the legislative institutions of the European Union adopted regulatory measures in the field of health insurance. The mechanism affirming the free movement of health insurance services, the Third Non-life Insurance Directive, does not apply to health insurance that forms part of a social security system (European Commission 1992). But all other forms of health insurance, which the paper refers to as 'private health insurance' (PHI)⁷, fall within the Directive's scope. The EU-level regulatory framework created by the Directive imposes restrictions on government intervention in health insurance markets. There are areas of uncertainty in interpreting the Directive, particularly with regard to when and how governments can intervene to promote public interests.

Aims

The paper's main aim is to examine how the Third Non-Life Insurance Directive and some aspects of EU competition law affect national public policy towards PHI. It also considers the capacity of the EU-level regulatory framework established by the Directive to promote financial and consumer protection in health insurance markets.

Methods

The paper's analysis is based on a review of PHI-related case law dating from the introduction of the Directive in 1992 (with effect from 1994) to June 2009. The 'cases' involve instances in which national public policy towards PHI has been challenged as potentially contravening EU law. These include decisions issued by the European Commission, official infringement proceedings against a member state, and legal challenges brought before the European Court of Justice (ECJ). The cases

⁷ For the purposes of this study it is more appropriate to refer to private than to voluntary health insurance because the Directive could apply to statutory health insurance operated by private insurers (as in the Netherlands).

were identified through searches of EUR-lex (the EU law portal available at http://eur-lex.europa.eu/en/index.htm), Internet searches (Google and Google Scholar) and informal discussions with EC officials from DG Internal Market. Where actual examples are lacking, the paper's analysis is, inevitably, more speculative. The paper benefited from the comments of two anonymous journal referees and four experts in health law (Rita Baeten, Tamara Hervey, Willy Palm and Wolf Sauter).

Contribution to the literature

A handful of academic studies have examined the impact of EU law on national public policy towards PHI, some based on analysis of a range of EU case law relating to PHI (Jost et al 2006; Palm 2002; Thomson and Mossialos 2007b); some based more on speculative examination of specific aspects of the EU legal framework (its application to risk equalisation schemes) (Paolucci et al 2006); and some focusing on effects in a single country (den Exter 2005). The paper adds to this small body of work by including developments covering the period from 2007 to the middle of 2009.

In this summary I also refer to case law covering the period from July 2009 to September 2011 and have added a table showing case law from 1994 (when the Directive came into force) to September 2011 (Table 3). The main developments since the book chapter was published are: the Belgian government's decision to bring VHI sold by sickness funds in line with the Directive, requiring sickness funds to establish separate non-profit societies of mutual assistance with effect from 2012; the European Commission's finding that *contrats solidaires* and *contrats responsables* in France contravene EU law (European Commission 2011b); the European Commission's decision to pursue infringement proceedings against Slovenia (European Commission 2011a); and an ECJ ruling against the Irish government (European Court of Justice 2011).

Findings

How has the Directive affected regulation of PHI?

The Directive brought about two key changes for PHI. First, the requirement for governments to abolish existing product and price controls (Articles 6(3), 29 and 39) rendered material regulation redundant. Second, it required governments to open markets for PHI to competition at national and EU levels (Article 3). Most member states amended existing laws or passed new laws to comply with the Directive. Legislative changes generally involved the introduction of tighter solvency controls. Some also resulted in the loosening or abolition of prior approval and systematic notification. However, a handful of countries have experienced difficulty in adapting national regulation to the requirements of the Directive and EU competition rules.

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Date	Country	Case	Status	Issue and area of EU law		
1998	France	Case C-239/98	Concluded 1999	Differential treatment (solvency), freedom to provide services		
1998	France	Case C-296/98	Concluded 2000	Systematic prior notification, freedom to provide services		
2000	France	Infringement proceedings	Resolved 2000	Failure to comply with two ECJ rulings, freedom to provide services		
2001	France	Infringement proceedings	Resolved 2001	Differential treatment (tax), state aid		
2001	Germany	Case C-298/01	Resolved and removed from the register 2003	Specialist insurers, freedom to provide services		
2003	Ireland	Case T-289/03	Concluded 2008	Risk equalisation scheme, state aid		
2006	Netherlands	Case T-84/06	Withdrawn 2008	Risk equalisation scheme, state aid		
2006	Belgium	Infringement proceedings	Resolved 2010	Differential treatment (solvency), freedom to provide services		
2007	Ireland	Case C-82/10	Concluded 2011	Differential treatment (solvency), freedom to provide services		
2007	France	Formal investigation	EC rules against France 2011	Differential treatment (tax), state aid		
2007	Slovenia	Infringement proceedings	Referred to the ECJ 2011	Appointment of local representative and systematic prior notification, freedom to provide services		
2007	Slovenia	Infringement proceedings	Ongoing	Risk equalisation scheme, state aid		

Table 3 EU case law relating to private health insurance, 1994-2011

Source: Author's research

When can governments intervene in health insurance markets?

Member states retain some power to protect PHI policy holders. They can impose material regulation in the interest of the 'general good' where contracts covering health risks 'may serve as a partial or complete alternative to health cover provided by the statutory social security system' (Article 54(1)). General good measures must be shown to be necessary and proportionate, not unduly restrict the right of establishment or the freedom to provide services, and apply in an identical manner to all insurers operating within a country.

The paper argues that the Directive is not sufficiently clear about when governments can justify material regulation, mainly because there is no explicit consensus about the meaning of 'partial or complete alternative', leading to uncertainty and confusion among policy makers, regulators and insurers. Where the European Commission and the ECJ (in *BUPA*) have had opportunity to clarify this aspect of the Directive, they have sidestepped the issue, relying instead on rules about services of general economic interest (SGEI) to authorise or prohibit government intervention (European Commission 2003; European Court of Justice 2008). In 2008 the European Commission missed an opportunity to clarify the wording of the Directive when the Directive was amended under the Solvency II framework (European Commission 2007c).

Two factors lead the paper to conclude that partial or complete alternative refers exclusively to PHI playing a substitutive role. First, a description of the Directive on the Commission's web site refers to 'specific rules for health cover serving as a substitute for that provided by statutory social security systems' (European Commission 2011c). Second, in a letter to the Dutch government the (then) Commissioner for the Internal Market argues that Article 54(1) of the Directive should not to be used to justify material regulation of complementary PHI (Bolkestein 2003). This suggests that general good measures can only be applied to substitutive PHI.

How can governments intervene in health insurance markets?

Article 54(2) and recitals to the Directive list the types of measures that may be introduced if PHI provides a partial or complete alternative to statutory cover: open enrolment, community rating, lifetime cover, policies standardised in line with the cover provided by the statutory health insurance scheme at a premium rate at or below a prescribed maximum, participation in risk equalisation schemes, and the operation of PHI on a technical basis similar to life insurance. Case law clearly indicates that general good measures that differ in their treatment of insurers based on an insurer's legal status are not compatible with the Directive.

There is less clarity about the compatibility (with the Directive) of the measures themselves. Here, case law has mainly focused on the legality of risk equalisation schemes in non-substitutive markets (Ireland and Slovenia). (A case challenging risk equalisation among statutory insurers in the Netherlands, brought by a Dutch insurer in 2006, was withdrawn when the insurer was taken over by a larger company in 2008.) The European Commission has contributed to uncertainty by supporting the risk equalisation scheme in Ireland, but initiating infringement proceedings against the Slovenian government for its risk equalisation in Slovenia's complementary VHI market covering statutory user charges than in Ireland's mainly supplementary VHI market (see below). It also argues that the ECJ's landmark ruling in *BUPA*, which indicated that governments have relative freedom to define PHI as being a service of general economic interest and can therefore apply general good measures (subject to the proportionality test), provides the Slovenian government with a relatively solid legal basis on which to defend risk equalisation.

To what extent does the Directive promote financial and consumer protection?

The paper argues that the logic underlying Article 54(1) is to permit material regulation where PHI contributes to financial protection ('social protection' in the language of the European Commission). Official interpretations of the Directive and interpretations of the Directive by EC officials specify that material regulation is permissible for substitutive PHI but not for complementary PHI. This, the paper argues, goes against the logic underlying Article 54(1), because substitutive PHI is

not the only type of PHI that provides financial protection. Complementary PHI can also contribute to financial protection, especially where it covers statutory user charges (as in France and Slovenia). General good measures should be permitted in complementary markets and not limited to substitutive markets. In the *BUPA* ruling the ECJ did not acknowledge this point. However, its defence of government freedom to define PHI as being a service of general economic interest does appear to recognise the right of governments to introduce material regulation if they feel it is necessary (subject to the proportionality test).

The Directive implies that financial regulation is sufficient to protect consumers in non-substitutive VHI markets. However, this fails to account for consumer detriment arising from product differentiation, which lowers transparency, increases transaction costs for consumers and may therefore undermine price competition and consumer mobility (switching). The paper notes that information asymmetry exacerbated by product differentiation has been a problem in PHI markets, but the European Commission has not yet put in place mechanisms for monitoring anti-competitive behaviour by insurers.

Policy implications

In *BUPA* the ECJ suggested that whether or not PHI requires material regulation to protect the general good should be a matter for national governments. The paper supports this view. It has argued that the logic underlying Article 54(1) is to ensure access to PHI where it contributes to financial protection. As definitions of financial protection may vary from one country to another (and even within a country, over time), deciding what does or does not contribute to financial protection may be construed as a political issue and a matter best left to the discretion of national political processes.

When intervening in any type of PHI market, regulators should avoid applying rules differentially to insurers based on legal status. Differentiating between insurers on other grounds (insurer conduct, for example) may also breach EU rules if it is deemed not to be necessary and proportional to securing the general good.

Governments regulating substitutive PHI should feel confident in applying material regulation if it is applied equally to all insurers. Although they will not be immune from legal action, the *BUPA* ruling suggests that the European Court of Justice will allow them considerable freedom to introduce general good measures if VHI is declared as being a service of general economic interest.

When applying material regulation to other types of PHI market, governments run greater risk of being subject to infringement proceedings by the European Commission for breach of the Directive or competition rules. However, following the *BUPA* ruling, in which the ECJ permitted risk equalisation in an essentially supplementary market that could not be regarded as providing significant financial protection, it is difficult to predict how legal action would end. If PHI has been defined by the government as a service of general economic interest, the arguments employed by the ECJ in *BUPA* suggest material regulation may be applied without sanction if deemed to be necessary and proportionate, particularly if the PHI market in question covers a significant proportion of the population.

Conclusions

The EU-level regulatory framework established by the Directive places limits on national competence in the area of PHI. It relies on financial regulation to protect consumers, prohibiting material regulation except where PHI is substitutive and so long as any intervention is necessary, proportionate and non-discriminatory. Unfortunately, neither the Directive nor its interpretation in case law are sufficiently clear about when governments can justify material regulation of PHI. This is also true of the question of what types of intervention are permitted, although case law clearly indicates that differential treatment of insurers is not acceptable. The absence of clarity has led to uncertainty and confusion among policy makers, regulators and insurers, and inconsistent responses by the European Commission to national public policy towards PHI.

The European Commission's expectations about deregulation in insurance markets have not been fulfilled in markets for VHI. Although some consumers may experience more choice, it is not clear that this has led to increased competition and

there is no evidence of lower prices. In addition to providing clarification about when and how governments can intervene in health insurance markets, the European Commission should pay more attention to monitoring anti-competitive behaviour by insurers.

Limitations

Because the relevant case law is limited, some aspects of the paper's analysis are inevitably speculative. Publicly available documentation regarding infringement proceedings is also limited. As a result, it has not always been possible to ascertain the European Commission's rationale for action in a particular area and it is possible that some cases have been missed.

Summary of study 3

Choice of statutory or voluntary health insurance: the experience of Germany and the Netherlands

Background

Until recently Germany and the Netherlands were the only European countries without universal statutory health insurance. Prior to 2006 about a third of the Dutch population was not eligible for statutory coverage and instead relied on substitutive VHI. In Germany employees with earnings over a threshold and their dependants are allowed to choose between statutory and voluntary coverage. In the last 15 years a range of European countries have considered emulating the German model. Debates about choice of statutory or voluntary coverage tend to be framed in terms of offering some or all of the population the possibility of 'opting out' of the statutory health insurance scheme. Arguments in favour of opting out, generally derived from economic theory, presuppose that enhancing consumer choice and stimulating competition between insurers will be beneficial for health policy goals such as equity and efficiency. But economic theory also suggests that, as a result of market failures in health insurance, choice of statutory or voluntary coverage may adversely affect equity and efficiency and could, in the longer term, restrict consumer choice (Barr 1998). This apparent contradiction merits investigation.

Aims

The paper examines the European experience of choice of statutory or voluntary health insurance to establish whether there is empirical support for economic theory regarding choice in health insurance markets; to review and assess real policy outcomes and regulatory responses to these outcomes; and to analyse the impact of this form of choice on equity in financing health care and efficiency in production.

Methods

The information presented in the paper is based on a review of the literature. Relevant literature was identified through searches of academic databases (PubMed and EconLit) and the Internet (Google). The paper also benefited from informal discussions with health policy experts in Germany (Reinhard Busse, Professor of Health Care Management at Berlin University of Technology) and the Netherlands (Hans Maarse, Professor of Health Care Policy Analysis, University of Maastricht), feedback from participants at the UK Social Policy Association conference in 2006 and the comments of two anonymous journal referees.

The paper's analytical framework derives from economic theory regarding consumer choice. A key argument in favour of opting out assumes that the threat of voluntary exit from the statutory health insurance scheme will be sufficient to stimulate competition between statutory and voluntary insurers, leading to greater responsiveness and increased efficiency (Hirschman 1970). However, markets for health insurance suffer from failures relating (mainly) to information. The failure of most relevance to this paper concerns adverse selection, which arises when those seeking insurance are able to conceal information about their risk of ill health from insurers (Rothschild and Stiglitz 1976). Where there is choice of more than one type of health insurance 'plan', plans offering a more generous level of benefits or a lower level of cost sharing will attract individuals with a higher risk of ill health. Insurer and consumer responses to the ensuing risk segmentation can further destabilise the market and exacerbate barriers to health insurance for high-risk individuals.

Giving consumers a choice of statutory or voluntary health insurance is similar in effect to offering a choice of plan and is likely to result in two main outcomes: a market segmented by degree of health (and financial) risk and barriers to VHI for high-risk individuals. The paper examines whether these outcomes have emerged in Germany and the Netherlands and considers the effectiveness of any regulatory responses. It then assesses the impact of choice of statutory or voluntary coverage on equity in financing health care and efficiency in production.

Contribution to the literature

This paper is the first comparative study of choice of statutory or voluntary health insurance in Europe. To my knowledge it is also the only comparative study.

Findings

Risk segmentation

In both countries choice of statutory or voluntary health insurance resulted in risk segmentation, with systematic differences in the characteristics of those covered by the statutory scheme and VHI, and the former covering a disproportionate number of high-risk individuals and dependants. Risk segmentation contributed to financial pressure in the statutory scheme, and this was augmented by the loss of contributions from richer people and by people being able to return to the statutory scheme after opting out of it. Risk segmentation can be attributed to important differences in the rules governing statutory and voluntary insurers, creating opportunities for risk selection by the latter.

Growing financial pressure led to a series of reforms in both countries. In 1986 the Netherlands abolished choice and instead excluded higher earners from statutory coverage. During the 1990s Germany introduced measures to restrict voluntary exit from and return to the statutory scheme. The reforms in both countries failed to tackle risk segmentation. Arguably, they entrenched risk segmentation, particularly in the Netherlands. Recognising this, the Dutch government imposed a levy on all those with substitutive VHI to compensate the statutory scheme for covering a concentration of high-risk individuals.

Barriers to VHI for high-risk individuals

In both countries measures introduced to restrict voluntary exit with a view to protecting the finances of the statutory scheme had the unintended effect of lowering financial protection for specific groups of people who relied on substitutive VHI, particularly older people and people with pre-existing conditions. Some of those who were no longer eligible for statutory coverage faced financial and other barriers to obtaining VHI for themselves and their dependants. This precipitated further reforms

aimed at enhancing financial protection for those who relied on substitutive VHI. The reforms involved mandatory pooling in VHI, VHI product and premium controls, changes to the threshold for eligibility for substitutive VHI in Germany, and changes to eligibility for statutory coverage in the Netherlands (to allow older people to remain in the statutory scheme).

Equity in financing health care

Because statutory coverage in both countries (but particularly in the Netherlands) was predominantly financed by the contributions of lower-earning employees and covered a concentration of high risks, the burden of paying for health care largely fell on those with statutory cover (even accounting for the levy imposed on substitutive VHI policy holders in the Netherlands). Research confirms that the financing of the statutory scheme was regressive in both countries and considerably more so than financing from all sources together due to the voluntary exit or exclusion of richer people (Wagstaff and van Doorslaer 1997; Wagstaff et al 1999).

Efficiency in production

In both countries the substitutive VHI market was characterised by weak incentives for private insurers to compete on the basis of efficiency in production. Rather, private insurers had strong incentives to avoid financial risk and could do so through risk selection or by shifting risk to the statutory scheme in Germany and the WTZ scheme in the Netherlands (the latter was established in the VHI market to pool the risks of older people; as a result, Dutch voluntary insurers did not bear any financial risk for older policy holders). There was very little consumer mobility in the substitutive market in either country, particularly in Germany where ageing reserves were not transferable, which meant that there was almost no switching. Competitive efforts mainly focused on attracting new entrants to the market (in Germany) and sales to groups (in the Netherlands). Voluntary insurers also had high administrative costs in comparison to their statutory counterparts. Finally, in both countries voluntary insurers were slow to adopt strategies to enhance efficiency and quality in health care delivery, such as vertical integration, selective contracting or monitoring of providers' behaviour. Cost inflation tended to be much higher in the voluntary than the statutory sector.

Conclusions

The paper's review of policy outcomes in Germany and the Netherlands provides empirical support for economic theory regarding market failures in health insurance. As predicted by economic theory, choice of statutory or voluntary coverage results in risk segmentation, heightens the degree of financial risk borne by the statutory scheme, lowers equity in financing health care and fails to create incentives for private insurers to enhance efficiency. Risk segmentation can be attributed to weaknesses in policy design and regulation, which created strong incentives for voluntary insurers to select risks, allowed risk selection to occur unchecked and permitted high-risk individuals to return to the statutory pool with relative ease.

Regulatory responses in the two countries have differed in form and effectiveness. The Netherlands has usually been one step ahead of Germany. Excluding higher earners from statutory coverage (as the Netherlands did in 1986) presents slightly fewer challenges than allowing people to choose between statutory and voluntary health insurance, but its effects are similar. The Dutch government's decision to address financial pressures by abolishing choice and introducing a cross-subsidy from voluntary to statutory coverage did not fully address the issue of risk segmentation and created new problems concerning financial protection for those reliant on substitutive VHI.

Germany has not abolished choice of statutory or voluntary coverage, preferring gradually to make the decision to opt out all but irreversible. Some debate about universal statutory coverage took place prior to the most recent reforms introduced in 2009, but the current system looks set to remain, with many underlying issues unresolved. Indeed, a measure introduced in 2009 to further restrict exit from the statutory scheme was overturned by a new government in 2011. It is beyond the scope of this paper to examine why governments prefer some measures to others, but stakeholder interests are likely to have had considerable influence on the policy making process in both countries.

Giving people the ability to choose between statutory and voluntary health insurance may seem attractive for various reasons. However, the experience of Germany and

the Netherlands suggests it is unlikely to be an effective means of relieving fiscal pressure or improving key dimensions of health system performance such as equity in financing or efficiency in production. Also, advocates of choice or exclusion should be explicit about the financial and distributional implications. The policy intention may be to lower public spending on health by shifting costs to (generally richer) households. But in practice, risk and costs tend to be shifted in the opposite direction, from voluntary to statutory coverage, as the statutory scheme finds itself paying for a disproportionate amount of high-risk individuals with a lower level of contributions.

The most effective method of dealing with the risk segmentation and financial pressure associated with both choice and exclusion is to introduce universal statutory coverage, as the Dutch did in 2006. If policy makers feel people value choice in health insurance, it can be organised within the statutory scheme, where it is likely to be better regulated and may therefore be more effective.

Limitations

It would be useful to have a better understanding of the politics of regulatory responses, but a detailed analysis of institutional arrangements and stakeholder views was beyond the scope of the paper.

Summary of study 4

Can insurer competition improve health system performance? Evidence from western Europe

Background

Choice of and competition among insurers in statutory health insurance has gained prominence in Europe in the last 15 years and is now an integral feature of health financing policy in Belgium, the Czech Republic, Germany, the Netherlands, Switzerland and Slovakia (Thomson et al 2009b). Although not yet widespread, the idea that third-party payers (whether health insurers or other entities) should compete for clients is an option debated with growing frequency in countries as diverse as England and Estonia (Bevan and van de Ven 2010; Thomson et al 2010b). A key argument in favour of insurer competition is that it can be used to improve health system performance by creating incentives to strengthen purchasing.

Aims

The paper examines the potential for insurer competition to improve health system performance in western Europe. Economic theory suggests insurer competition will enhance efficiency if people have free choice of insurer, insurers have incentives to compete on price and quality rather than through risk selection, and insurers have (and use) tools to influence health care costs and quality. The paper assesses the extent to which these assumptions hold in Belgium, Germany, the Netherlands and Switzerland. If the assumptions do not hold, it may be difficult for insurer competition to succeed in improving health system performance. The paper discusses why the assumptions do not always hold in the four countries and tries to identify barriers to successful implementation.

Methods

Information presented in the paper comes from two sources: responses to a questionnaire by an expert in each of the four countries (see the Appendix for a copy

of the questionnaire) and a review of literature identified through searches of academic databases (IBSS) and the Internet (Google and Google Scholar).

The paper's analytical framework derives from economic theory regarding consumer choice. If people can buy the same good or service from more than one firm, the possibility of a person buying from a rival firm – the threat of exit (Hirschman 1970) – will encourage all firms to improve the price-quality ratio of their products or lose clients and, eventually, face bankruptcy. Competition between insurers is intended to secure efficiency (enhanced value) through two mechanisms: making insurers bear financial risk and giving people choice of insurer (Enthoven 1988). The ultimate aim of insurer competition is to improve the performance of the health system (WHO 2000). For this to happen, these mechanisms must be in place and at least three further assumptions must hold:

- People should be able to choose and switch insurer with ease and without incurring significant transaction costs. This implies that people are able to make an informed choice of insurer and do not face barriers to switching. If nonswitchers are mainly people with predictably high health care costs, insurers may not have enough incentive to make statutory cover attractive to them, which would severely weaken the instrumental effect of exit.
- Insurer competition must be based on price and quality rather than risk selection, otherwise it will not create incentives for efficiency (van de Ven and Ellis 1999).
- Insurers must have access to tools that allow them to enhance value, and be willing to use them.

Contribution to the literature

Previous studies have analysed insurer competition in single countries, particularly in the Netherlands (Helderman et al 2005; Rosenau and Lako 2008; van de Ven and Schut 2008); compared performance in two or three countries (most often the Netherlands and Switzerland) (Bevan and van de Ven 2010; Greß 2006; Leu et al 2009; Schneider 2009); or compared specific aspects of insurer competition, such as risk equalisation, across a wider range of countries (van de Ven et al 2007). This paper provides the first comprehensive comparison of health insurance choice and competition across four countries. The inclusion of Belgium and Germany, whose

more recent experiences are less well documented internationally, adds to the literature. Previous research has also focused on the issue of conditional sale, but has focused on its use as a tool to enable insurers to select risks in statutory health insurance, without considering the wider implications for health system performance (Paolucci et al 2007). This study goes further by examining the issue in the context of broader policy expectations about insurer competition.

Findings

In the last 15 years policy makers in Belgium, Germany, the Netherlands and Switzerland have introduced insurance market reforms that have involved making insurers bear financial risk and giving people choice of insurer to stimulate insurer competition. The range of policy goals underlying these reforms varies across the four countries, but there is common ground. While Germany was unique in expanding choice of insurer to address equity concerns, all four countries expected this form of choice, combined with greater financial risk for payers, to enhance efficiency and quality in health care administration and delivery and to keep health care costs under control. Belgium is the only one of the four countries in which public policy has not emphasised insurer competition to improve health system performance. It is included in the analysis because the 1995 reform shifting some financial risk to sickness funds aimed to stimulate greater cost control, one of the main goals of insurer competition in the other countries. Following this reform, consumer choice of sickness fund (which dates to 1945) became an integral part of the incentive structure facing insurers, even though it was not originally intended to have such an effect.

Free choice of insurer

All four countries employ multiple strategies to ensure that the whole population is able to switch from one insurer to another, for statutory benefits, with relative ease and at low cost. As a result the financial and administrative costs of switching are likely to be low. Other transaction costs may be high, however, particularly for older or chronically ill people.

Switching rates vary across the four countries, with the lowest rates in Belgium and the highest rates in Switzerland. Reasons for switching differ in importance across the four countries, with price playing no role in Belgium, a significant role in the Netherlands and Switzerland and, probably to a lesser degree, a role in Germany. Consumer perceptions of differences in quality seem to play some role in all four countries. Switchers are more likely to be younger and healthier in two out of the three countries for which data are available (Germany and the Netherlands). In Switzerland switchers are also likely to be younger, but health status only seems to be a factor among those with VHI.

Low rates of switching appear to reflect satisfaction with the status quo for many people. But there is evidence of barriers to consumer mobility, particularly among older and less healthy people. Close links between the sale of statutory and voluntary cover are a cause for concern in all four countries. Recent research suggests that consumer beliefs about risk selection by insurers in the VHI market may be a barrier to switching in the statutory market and that regulators have not done enough to allay consumers' fears about the potential for switching to jeopardise their access to VHI. Swiss research showing lower switching rates in areas with more insurers (Frank and Lamiraud 2009) highlights the importance of monitoring the degree of choice available to people. Too much choice of product or insurer lowers transparency, which increases the transaction costs of switching.

Competition based on price and quality rather than risk selection

Prior to the introduction of insurer competition many insurers did not bear any financial risk. The degree of financial risk borne by insurers has increased over time in all four countries and is particularly high in Germany and Switzerland, but remains low in Belgium. Each country has also focused on developing a risk adjustment formula to allocate resources to health insurers, although there are significant differences both in the design of the formula and the degree of insurer revenue subject to the formula. None of the four countries has managed to eliminate incentives for risk selection through risk equalisation, even though the formula has been significantly strengthened in Belgium, Germany and the Netherlands. In all four

countries there is circumstantial evidence indicating risk selection through targeted advertising, reminders and discounts, and through product differentiation in VHI.

Availability and use of tools to influence health care costs and quality

Insurers in Belgium have very limited recourse to purchasing tools, reflecting the absence of national policy emphasis on competition as a mechanism for improved purchasing, as well as a preference for sickness funds to operate collectively. In Germany and Switzerland (as in Belgium) collective negotiation between insurers and providers is the normal method of setting prices, which limits the ability of individual insurers to influence the cost and quality of most health services. However, insurers have a degree of leeway in the contracting process. Since 2006 insurers in the Netherlands have had more freedom in contracting than their counterparts in the other countries. Selective contracting is now permitted for all forms of care and, while the government continues to set the prices of two-thirds of all hospital care, as well as maximum prices for GP (general practitioner) services, there is slow movement towards greater price liberalisation.

Although Belgian insurers are at a disadvantage when it comes to strategic purchasing, insurers in the other countries do not make full use of the greater range of tools they have for several reasons. These include wariness on the part of insurers about alienating existing or potential enrolees by curbing choice of provider; intervention by national competition authorities to block the use of legitimate tools such as vertical integration in cases where they are seen to be anti-competitive; the technical challenges and high transaction costs associated with the use of some tools (particularly selective contracting and price negotiation); and the difficulty of engaging in systematic benchmarking, which in turn precludes fully informed decision making by insurers and consumers.

Policy outcomes

The introduction of financial responsibility for sickness funds in Belgium in 1995 was not intended to promote competition, but it has succeeded in its primary aim of ensuring a more level playing field for the sickness funds. A secondary aim was to encourage sickness funds to contain health care costs, and while there has been some

progress in this area, there is little evidence of significant improvement. The German reforms had some success in tackling equity concerns and streamlining the sickness funds' administrative costs, but there is little evidence to suggest insurer competition has led to lower rates of health care expenditure growth or achieved substantial and lasting efficiency gains. Reforms in the Netherlands have expanded choice for consumers and put quality of care at the top of the political agenda, while market pressures have led to significant mergers and strong premium competition. With the exception of the pharmaceutical sector, however, there is little evidence of improved expenditure control or efficiency gains. In Switzerland the effects of insurer competition on efficiency and cost control have been equally modest and premiums have continued to grow at a much faster rate than wages.

Conclusions

Health insurance market reforms intended to stimulate efficiency gains through improved purchasing have had mixed results in the four western European countries reviewed in the paper. Each country has put in place measures to enable insurer competition to achieve its goals, including extensive regulation to secure consumer mobility, lower insurers' incentives to select risks and provide insurers with tools to enhance value. However, some of these measures have not been sufficiently effective.

Introducing risk equalisation schemes has been a priority for policy makers – for good reason, since risk selection erodes insurers' incentives to operate efficiently. But in spite of the energy devoted to fine-tuning schemes and finding a balance between risk adjustment and risk sharing, no country has eliminated incentives to select risks. There is room for improvement, even in the countries with the most sophisticated formulas and especially in Switzerland, where incentives to select risks remain strong. The Swiss formula will be strengthened in 2012, but why Swiss policy on risk equalisation should consistently lag behind policy in other countries warrants further investigation.

Consumer mobility has not received as much policy attention as risk equalisation. Extensive regulation to facilitate mobility (much of it predating the introduction of

insurer competition) means that the cost of changing insurer is likely to be negligible for most people. As a result, policy makers may have interpreted relatively low switching rates as indicating consumer satisfaction. However, a small but growing body of evidence suggests consumer mobility is limited among older and less healthy individuals (that is, those likely to use health services on a regular basis). This ought to be a cause for concern because if insurers feel that these enrolees are unlikely to switch they may not have sufficient incentive to provide them with high-quality care.

Research identifies two obstacles to greater consumer mobility: increasingly close links between the sale of statutory and voluntary cover and choice overload. The growing importance of VHI as an obstacle to consumer mobility, particularly in the Netherlands and Switzerland, requires some form of policy action. Better risk adjustment may help, alongside better information for consumers and closer scrutiny of the sales process. Policy attention should also focus on the potential for choice overload in the context of a trend towards growing product differentiation. It is well established that product differentiation, even at the margin, lowers transparency (Office of Fair Trading 1997). This in turn increases transaction costs for consumers, particularly those who rely on regular access to health care, and can therefore undermine competition.

Making sure insurers have and use tools to influence health care quality and costs is essential if competition is to improve health system performance. Insurers in Belgium do not have these tools, insurers in Germany and Switzerland have access to some tools, and insurers in the Netherlands have access to a wider range of tools but do not always use them. An essential assumption underpinning insurer competition is therefore absent or only partially upheld in all four countries. Many of these tools restrict consumer choice, affect provider autonomy and require data that are not readily available. Thus, cross-country variation in the availability and take-up of tools may be explained by differing degrees of willingness to curb the choices of important stakeholders. It may also reflect a broader uncertainty on the part of policy makers (including national competition authorities and courts) about the appropriate locus of competition – among insurers or among providers? – and about who is best placed to influence provider behaviour – insurers or health care users? In all four countries, commentators have argued for better information about health care quality

and costs to facilitate systematic benchmarking. While there is no doubt that better information and benchmarking would bring benefits, they would not in themselves be sufficient to foster strategic purchasing.

Developments in the four countries suggest that the instrumental value of insurer competition as a means of improving health system performance rests on multiple assumptions that can only be upheld through frequently complex interventions often requiring elusive data. Making it work therefore requires action on many fronts, particularly to ensure incentives are aligned across the health system, and greater awareness of the political nature of some barriers to success.

Limitations

The paper has not attempted to assess the impact of insurer competition on health system performance, which would in any case be difficult to do due to noise from other reforms and the absence of knowledge about the counterfactual (what might have happened without insurer competition). Instead, it has tried to assess the extent to which assumptions hold in three key areas. In the absence of specific metrics, weighing up the relative contribution of the different assumptions to performance is largely a matter of judgement.

Conclusions

The purpose of the thesis has been to consider the usefulness of VHI as a policy lever for improving health system performance. To do this the thesis has presented four studies. Taken together, the studies provide an analysis of:

- the role, structure, conduct and performance of VHI markets in the European Union, including important changes since 2000
- public policy towards VHI and changes since 2000, including the impact of the EU-level regulatory framework for VHI on national regulatory efforts and its implications for financial and consumer protection in VHI markets
- the impact of VHI on key dimensions of health system performance
- the effects of allowing people to choose between statutory and voluntary health insurance
- VHI's influence on insurers' incentives to enhance efficiency where insurers who compete to offer statutory benefits also sell VHI

A key argument in favour of VHI is that, in the context of limited public resources for health care, VHI can further health policy goals by relieving fiscal pressure in the health sector. The thesis posits that VHI may be able to do this if it is able to address gaps in statutory coverage and if it does not undermine health system performance. VHI might undermine health system performance by making those who rely on statutory coverage worse off or by not being accessible to those who need it.

In this section I address the question of whether or not VHI is a useful policy lever based on the analysis presented in the four studies. I also discuss ways in which policy makers can ensure VHI contributes to rather than undermines health system performance. Finally, I suggest areas for further research.

Does VHI address gaps in statutory coverage?

One way of answering this question is to look at VHI's contribution to private spending on health. The purpose of any form of health insurance is to provide financial protection through risk pooling and pre-payment. Lack of adequate coverage results in out-of-pocket spending and high levels of out-of-pocket payment for health care are associated with low levels of financial protection in countries at all stages of economic development (Moreno-Serra et al 2011 in press). If VHI does not make a significant contribution to private spending, in a given health system, then it is plausible to assume that VHI is not doing well in addressing gaps in statutory coverage.

VHI only accounts for more than 25% of private spending on health in a handful of countries (substitutive VHI in Germany, complementary VHI covering statutory user charges in France and Slovenia, supplementary VHI in Ireland and complementary cover of excluded services in the Netherlands) (Figure 3). Where out-of-pocket payments account for over 75% of private spending, it is clear that VHI is only partially addressing gaps (particularly if private spending is high as a proportion of total spending).

There is also the issue of what sort of VHI market will develop and which gaps will be filled. VHI most commonly plays a supplementary role, but non-clinical aspects of health care quality are not usually the most important source of gaps in statutory coverage. Gaps generated by poor depth or scope of statutory coverage are often of greater concern. For example, outpatient prescription drugs are a common driver of catastrophic or impoverishing spending on health (Võrk et al 2009), and yet voluntary insurers have rarely developed policies to cover them (Thomson et al 2009b). Finally, where the 'right' sort of VHI is available, there is the issue of whether it (adequately) covers those who need it most. Research provides evidence of financial and other barriers to access to VHI in countries where VHI provides critical financial protection (France and Germany), and of reductions in the quality of VHI coverage (the generosity of benefits) over time (Grabka 2006; IRDES 2011a).

VHI clearly can and does address gaps in statutory coverage, but it is not always effective in this respect. A conclusion to be drawn from this is that while gaps in statutory coverage are a necessary prerequisite for VHI market development, they are not sufficient. The countries in which it contributes to more than 25% of private spending on health are generally the ones with the most accessible markets, an accessibility achieved through government intervention in the form of regulation (Germany, Ireland, Slovenia) and means-tested vouchers (France) or through collective agreements among voluntary insurers to offer open enrolment (the Netherlands). It was beyond the scope of the thesis to investigate why markets fail to develop in some settings, but other analysis has suggested a range of explanatory supply and demand factors, including lack of insurer capacity to develop appropriate products, insurer concerns about low profitability due to adverse selection, the presence of informal payments, and affordability (Thomson 2010). Affordability is a key issue in existing markets too, and a persistent problem even where VHI is heavily regulated or subsidised.

Does VHI undermine health system performance?

The thesis has assessed the impact of VHI on financial protection, equity in financing and use of health care, incentives for efficiency and quality in health care delivery, and administrative costs. VHI appears to be critical to financial protection in France, Slovenia and Germany. It is difficult to estimate the extent to which VHI in these three countries provides adequate financial protection since there is limited research directly analysing financial hardship among those with VHI and those who need VHI but do not have it. Nevertheless, there is some evidence to show that the quality of VHI coverage (the generosity of benefits) has declined in France and Germany in the last five years and policy makers in the three countries have been sufficiently concerned about financial protection to introduce extensive regulation of VHI (Germany) and significant means-tested tax subsidies (France), or to propose major reform of statutory user charges (Slovenia) (Chevreul et al 2010; Grabka 2006). In several other countries VHI has not developed to fill significant gaps in statutory coverage or is too expensive for many of those who are likely to need it (since levels of population coverage are low) and is therefore unable to address financial protection problems.

Although there is no recent comparative research on equity in financing health care, the thesis has shown how VHI has had a regressive effect on health system financing in France, Germany, Ireland and the Netherlands (in the latter prior to 2006). The larger the proportion of the population covered by VHI, the more regressive the effect is likely to be. Tax subsidies that are not targeted at poorer households are regressive in general, because take-up of VHI is generally higher among wealthier people, and highly regressive if they are provided at the marginal rate of taxation, which means that higher-rate tax payers receive larger subsidies (Sheils and Haught 2004).

VHI markets of all types are found to skew the distribution of health care away from need, lowering equity in the use of health services. Research has demonstrated clear differences in the frequency of using health services, in waiting times for treatment, and in patterns of use, between those with and without VHI (Jones et al 2006; Lüngen et al 2008; Perronnin et al 2011; Schellhorn 2007; Statistik Austria 2007; Tussing and Wren 2006). These differences are not justified by greater need among those with VHI and are therefore a cause for concern about efficiency in the use of health resources.

Markets for VHI do not in general seem likely to have a positive effect on efficiency in the health system. Voluntary insurers in many countries lack incentives to enhance efficiency due to their freedom to select risks and limited consumer mobility. As a result, it is not surprising that so few insurers use tools to enhance value, even though they have access to them. The majority simply reimburse policy holders and often pay providers fees that are higher than statutory fees. There is little evidence to support the idea that voluntary insurers are actively engaged in trying to enhance efficiency and quality in health care delivery, particularly in the largest markets.

Of more concern for public policy is the way in which failing to align incentives across VHI and statutory health insurance can undermine the efficiency of public spending on health. The thesis has highlighted three areas in which incentives are often not aligned: value-based benefit design, direct and indirect tax subsidies for VHI, and conditional sale of VHI and statutory health insurance. VHI often allows people to bypass gatekeeping and access specialists without referral and, in some cases, to undermine value-based user charges. Tax subsidies for VHI can be substantial, but policy makers do not seem interested in assessing their worth. The only recent research on this subject (from Ireland) clearly shows how tax subsidies are not only very far from being self financing, but can also exacerbate inequalities in access to health care. Finally, evidence from the Netherlands and Switzerland suggests that allowing insurers to sell statutory and voluntary cover may limit consumer mobility in the statutory part of the market, potentially lowering statutory insurers' incentives to enhance efficiency, and thereby undermining a key tenet of competition among statutory insurers.

Many of VHI's negative effects on health system performance can be attributed to the quality of public policy towards VHI. Poor policy design enables and exacerbates risk segmentation, permits public resource allocation to be skewed in favour of those with VHI, and fails to ensure that incentives are aligned across VHI and statutory health insurance. Policy makers must accept some of the responsibility for failing to create an environment in which insurers have incentives to enhance efficiency and for allowing public resources to subsidise VHI (directly or indirectly) when such subsidies are of questionable value.

Does VHI relieve fiscal pressure in the health sector?

In many countries VHI does not do well in addressing gaps in statutory coverage and has been shown to undermine health system performance. It is therefore difficult to conclude that it relieves fiscal pressure in the health sector. Substitutive VHI has been shown to increase fiscal pressure due to risk segmentation, the loss of contributions from those who have opted out or been excluded from statutory coverage, and the ability of those who have opted out to return to the statutory scheme when they are older, have more dependants or are in poorer health.

Complementary VHI has the most potential to relieve fiscal pressure if the government can shift costs onto households (by reducing the scope or depth of coverage) without losing contributions to the statutory scheme and without undue effect on health system performance. However, there is only one large VHI market covering excluded services (the Netherlands), and the factors that contribute to the size of the Dutch market are unlikely to be easily replicated in other settings. The Hungarian market, which is very small but has experienced rapid growth since 2000, has been fuelled by highly regressive tax subsidies, calling into question its ability to relieve fiscal pressure.

The European Union's largest VHI markets, in terms of contribution to total spending on health, contribution to private spending on health and population coverage, are those covering statutory user charges in France and Slovenia. Because these two markets account for a relatively high proportion of total spending on health, they seem capable of providing genuine fiscal relief. However, the main reason they are able to make such a significant contribution to total spending is because they cover almost the whole population, an achievement that has been helped by tax subsidies (both countries) and heavy regulation to promote access to VHI (Slovenia), but that has not been replicated in other countries. In France and Slovenia there have also been concerns about VHI distorting incentives and priorities in the statutory scheme, which may undermine fiscal relief in the longer term.

Supplementary VHI can relieve fiscal pressure if it releases capacity and lowers waiting times for publicly financed treatment, but there is no evidence of this occurring in EU countries. Reductions in waiting times have usually been achieved through the introduction of targets and guarantees (Bevan and Hood 2006).

In any type of VHI market there is a real risk that direct public subsidies for VHI will not be self financing. Where this is the case, the government needs to consider whether tax subsidies represent an efficient use of public resources. There is also a risk that VHI will benefit from indirect public subsidies – for example, if public doctors are able to treat VHI-financed patients in public hospitals, if VHI subscribers can choose to be treated in public hospitals, and if public hospitals fail to charge voluntary insurers the full economic cost of treating these patients. There is good evidence from Ireland to show how the government makes a significant contribution to the cost of VHI-financed treatment at the expense of longer waiting times for those who rely on statutory coverage (Smith 2008; Smith 2010; Smith and Normand 2009; Tussing and Wren 2006).

The experience of the largest VHI markets in Europe belies the idea that VHI is capable of providing fiscal relief in the short or longer term. However, by enhancing consumer choice, boosting provider incomes, keeping private insurers in business and satisfying ideological beliefs, VHI can of course relieve political pressure, which may explain why policy makers are sometimes willing to pursue gains for generally richer groups of people at the risk of losses for those who rely on statutory coverage. As I noted in the introduction, these other objectives for VHI should not be confused with health policy goals. If policy makers need to balance health policy goals with other objectives, they should understand the trade-offs involved.

Developments in public policy in the last five years – the introduction of universal statutory coverage and the abolition of substitutive VHI in the Netherlands in 2006, the extension of statutory coverage to self-employed people in Belgium in 2008, the reinforcing of the border between statutory and voluntary coverage and increased regulation of substitutive VHI in Germany in 2009, proposals to introduce universal statutory coverage in Ireland announced in 2011, and proposals to increase the depth of statutory coverage in Slovenia, also announced in 2011 – suggest that some of the trade-offs are not as politically acceptable as they once were.

What factors might make VHI more useful to policy makers?

There are ways in which policy makers can decrease the likelihood of VHI undermining health system performance and increase the likelihood of VHI furthering health policy goals. Here I highlight four important mechanisms.

- Poor policy design in many VHI markets may reflect a lack of awareness among policy makers of how VHI interacts with the rest of the health system. Better understanding of this crucial dynamic will enable policy makers to identify the appropriate role for VHI and should contribute to stronger policy design.
- Stronger policy design can be achieved through clarity about health policy goals. In turn, focusing on health policy goals should enable policy makers to align incentives in pursuit of these goals, paying attention to all aspects of VHI-health

system interaction. An important principle should be to preserve and, if possible, enhance efficiency in the use of public resources for health.

- Policy makers must demonstrate the political will and technical capacity to regulate VHI to secure both financial and consumer protection. A good starting point would be to ensure that the regulator has a grasp of the specificities of health insurance markets or, if necessary, to establish a dedicated health insurance regulator. This also applies to those responsible for determining the EU-level regulatory framework. The current framework reflects a fundamental misunderstanding of the nature of markets for VHI. It is therefore no surprise that the European Commission's expectations for deregulation – competitive pressure enhancing choice and lowering prices – have not been fulfilled in this sector.
- Oversight must include systematic monitoring and evaluation of the VHI market and its interactions with and impact on the health system. Regular data collection and analysis of VHI is the exception rather than the norm and there are very few countries in which there is a good evidence base for policy development.

Further research

In spite of growing policy and academic interest in VHI, there is very little research on which to base an assessment of VHI's impact on health system performance. Much of the research comes from the largest VHI markets; in smaller markets, effects may be more muted. Several issues warrant further investigation. First, it would be useful to consider why VHI fails to develop or address gaps in statutory coverage in some settings. Thomson (2010) discussed this in the context of transition economies, but a more systematic analysis would be welcome. Second, there is good research on the distributional implications of financial flows between publicly and VHI-financed health care in Ireland (Smith 2010; Smith and Normand 2009). This type of analysis should be carried out in other countries. Third, given the widespread and apparently increasing use of tax subsidies to promote VHI, it is surprising that there are so few analyses of whether or not these subsidies are self financing. Analysis should not be limited to direct subsidies in the form of tax relief, but also focus on indirect transfers of resources from the public budget to VHI-financed care.

Finally, there does not seem to be any published research in English examining the politics of public policy towards VHI. Why is VHI favoured in some countries? Why is policy design stronger in some markets? Why are some markets more regulated? Why do governments prefer some interventions to others? What is the role of stakeholder interests and how do they influence the policy process? All of these questions are worth trying to answer, especially if VHI is to contribute to rather than undermine health system performance in future.

Study 1: How does voluntary health insurance affect health system performance? Evidence from the European Union

Paper provenance and peer review

This paper is solely the work of the PhD author (ST). It draws on a survey of experts in 26 EU member states (Imre Boncz, Ģirts Briģis, Karine Chevreul, Joan Costa-i-Font, Martin Dlouhy, Charalambos Economou, Stefanie Ettelt, Thomas Foubister, Margherita Giannoni-Mazzi, Gabriel Gulis, Triin Habicht, Galina Kanazireva, Adam Kozierkiewicz, Joy Ladurner, Hans Maarse, Anja Milenkovic Kramer, Ljudmila Mincheva, Natasha Muscat, Mónica Oliveira, Victor Olsavsky, Willy Palm, Marc Perronnin, Sofia Silva, Caj Skoglund, Skirmante Starkuviene, Mamas Theodorou, Svetla Tsolova, Brian Turner, Karsten Vrangbaek and Lauri Vuorenkoski) and a study visit to Luxembourg by a research assistant at the LSE (Jessica Hohman). The survey responses were also used to prepare a report for the European Commission (grant VT/2007/064), which is available as:

Thomson, S. and E. Mossialos (2009). *Private health insurance in the European Union*. Brussels, European Commission (DG Employment, Social Affairs and Inclusion). http://ec.europa.eu/social/main.jsp?catId=754&langId=en

ST devised the survey questionnaire, the 2009 report and the paper. ST collated the responses to the questionnaire with the assistance of Jessica Hohman. ST drafted the 2009 report and the paper and both were critically reviewed by EM.

Introduction: VHI and health system performance

The last ten years have been marked by greater scrutiny of VHI by international organisations and in the academic literature. They have also seen growing interest in measuring comparative health system performance, a phenomenon both reflected in and stimulated by the publication of the World Health Report on health systems (WHO 2000). It is therefore an opportune moment not only to review developments in VHI markets, but also to consider the effects of VHI on health system performance. The purpose of measuring health system performance, defined as the health system's ability to achieve its goals (WHO 2000), is to generate reliable information for policy development and to foster accountability by enabling stakeholders to make informed decisions (Smith et al 2010).

This paper has three aims: to review the way in which markets for VHI currently operate across the European Union and identify important changes that have taken place since 2000; to review developments in public policy towards VHI; and to examine the impact of VHI on the following dimensions of health system performance: financial protection, the distribution of health financing and health care use (equity), incentives for efficiency and quality in health care delivery, and administrative costs (Kutzin 2008; WHO 2000; WHO 2010). It fills a gap in the literature by updating an earlier analysis of VHI markets in the European Union (Mossialos and Thomson 2002b).

Data presented in the paper come from three sources: a survey of experts in 26 member states based on a questionnaire (included in the Appendix) and a study visit to Luxembourg by a research assistant; a review of published and grey literature identified through searches of academic databases (ISI Web of Knowledge and PubMed) and the Internet (Google and Google Scholar); and international statistical databases (WHO National Health Accounts). The survey and the study visit took place in 2008 and data from the completed questionnaires were collated in 2009. In the paper information from the survey is either attributed to the experts involved or marked with an asterisk (*) if referring to more than one or two countries.

There are two important caveats concerning data sources. First, research on which to base an assessment of VHI's impact on health system performance is extremely limited in most countries. Much of the evidence presented here comes from the largest VHI markets; in smaller markets, the effects of VHI may be more muted. Second, while I have taken steps to ensure that the survey responses were of a consistently high standard (for example, by carefully selecting the experts, using a detailed questionnaire and giving the experts an opportunity to clarify and strengthen their responses), the quality of response may vary across countries and there is always some risk in relying on a single expert per country⁸.

The next section discusses ways in which VHI interacts with statutory health insurance. It uses the market structure-conduct-performance framework commonly applied in industrial organisation (Bain 1956)⁹ to review key aspects of VHI markets, providing the descriptive information necessary for readers to understand how the most significant VHI markets work. It also identifies important changes since 2000. Subsequent sections review developments in public policy towards VHI at national and EU levels, analyse the impact of VHI on dimensions of health system performance, and discuss policy implications.

Markets for VHI

Market role: interaction with statutory health insurance

It is difficult to think of VHI in isolation from statutory health insurance, since there are no countries in which VHI is the only source of coverage. Almost every EU country provides universal health coverage on a statutory basis as part of a wider system of social protection. As a result, markets for VHI are heavily shaped by statutory institutions and usually play a modest role, although there are crucial exceptions.

⁸ More than one expert completed the survey in Bulgaria, France and Portugal.

⁹ Here, the structure-conduct-performance framework is employed for descriptive rather than explanatory purposes.

Many member states have a market for VHI that supplements statutory coverage. A **supplementary** market offers access to health care that is covered by statutory health insurance, but gives subscribers greater choice of provider and level of amenity (usually including access to private providers) and may enable them to bypass waiting lists for publicly financed treatment. It tends to be purchased by employers on behalf of better-educated, higher-skilled and wealthier people living in larger cities and, because it covers people and services already covered by the statutory health system, its contribution to financial protection is minimal¹⁰. **Complementary** VHI covers services excluded from or only partially covered by the statutory benefits package. It contributes to financial protection where it lowers or removes financial barriers to accessing essential health services. Complementary VHI can be understood as 'completing' coverage where there are gaps in the scope and depth of statutory coverage. VHI can also provide **substitutive** cover for people excluded from significant aspects of statutory coverage or for those who are not required to be statutorily covered, thereby ensuring 'completeness' in terms of coverage breadth.

The role VHI plays in a given health system is largely determined by public policy regarding statutory health insurance arrangements and the regulatory environment for VHI. This in turn may reflect historical developments, political ideology, the relative power and interests of different stakeholders (particularly providers and insurers, but sometimes including employers, civil servants and higher earners) and government capacity to shape and develop the market. Understanding differences in market role is important for several reasons. First, market role may provide some indication of the rationale for VHI in a given context. Table 1 shows how VHI can in theory respond to gaps in statutory coverage. Second, the role a VHI market plays is closely correlated to its size, notably in terms of its contribution to spending on health (see below). Third, a market's role often determines the way in which it is regulated, which has implications with respect to EU internal market and competition rules. Finally, market role may tell us a great deal about VHI's interaction with statutory health insurance and its likely impact on health system performance. Table 4 shows the main role or roles VHI plays in EU countries.

¹⁰ The OECD (2004) classifies this type of market as 'duplicate' because it covers health services that the statutory scheme already covers. However, the OECD's classification fails to capture the extra benefits VHI offers in this role: choice of provider, faster access to care and access to superior amenities.

Country	Market role(s) ¹¹	Eligibility ¹² *	Examples of benefits covered*	% population covered (latest available year)	% TEH (2009)
Austria	Complementary (S) & Supplementary	Whole population	Dental and eye care, physiotherapy, home visits, psychotherapy, health resorts, rehabilitation, CAM; private care, choice of hospital doctor, faster access (elective care), per diem cash benefits for inpatient care	(2066) 33.0	4.4
	Substitutive	Self-employed occupational groups opting out of the statutory scheme, individuals not eligible for statutory cover	Similar to statutory cover	(2006) ≈0.1	
Belgium	Complementary (S) & Supplementary	Whole population	CAM, dental and eye care, vaccines, prostheses and implants; better facilities in hospital (single room)	(2008) 49.5	4.1
Bulgaria	Supplementary & Complementary (S)	Whole population	Superior amenities in hospital, private room, faster access to care; dental care, medical devices, outpatient pharmaceuticals	(2006) ¹³ 2.0-4.6	0.4
Cyprus	Supplementary	Whole population	Inpatient care, outpatient care, diagnostic procedures, ambulance transport, psychiatry, routine maternity care, physiotherapy, cash benefits, CAM, treatment abroad	(2009) 21.5	5.5
Czech Republic	Supplementary	Whole population	Private room	n/a	0.1
	Substitutive	Individuals not eligible for statutory cover	Similar to statutory cover, but excludes treatment of some chronic conditions eg HIV/AIDS, drug addiction, mental health, spa treatment etc	(2008) <1.0	
Denmark	Complementary (S/UC)	Whole population	Eye and dental care, physiotherapy, psychiatric care, chiropractic, medical aids, chiropody; outpatient prescription drug costs	(2011) ≈38.0	1.4
	Supplementary		Choice of doctor, private hospital and diagnostic care, faster access	(2011)≈18.0	
Estonia	Substitutive	Individuals not entitled to statutory cover	Similar to statutory cover, but commercial cover offers different levels of benefit	(2010) <0.01	0.2
Finland	Complementary (UC) & Supplementary	Whole population	Reimburses statutory user charges for outpatient prescription drugs; private care, faster access	(2005)≈12.0	1.9

Table 4 Overview of VIII market role and size 2011

 ¹¹ The dominant role is listed first.
 ¹² Reference to the whole population implies that anyone can in theory purchase this form of cover, but many insurers limit the sale of VHI to people below the age of 65.
 ¹³ There are two different estimates for population coverage. The Financial Supervision Commission estimates 4.6%, a patient rights group estimates 2.0%.

Country	Market role(s)	Eligibility*	Examples of benefits covered*	% population covered (latest available year)	% TEH (2009)
France	Complementary (UC), Supplementary & Complementary (S)	Whole population	Reimburses statutory user charges; superior amenities in hospital, private room; eye and dental care, elective procedures (eg eye correction surgery)	(2008) 94.0	12.9
Germany	Substitutive	Households with higher earnings, self-employed excluded from statutory cover	Similar benefits to statutory cover	(2010) ≈10.0	9.1
	Complementary (UC)	Civil servants	Reimburses health care costs not fully covered by the government		
	Complementary (S/UC) & Supplementary	Whole population	Dental care; reimburses statutory user charges for outpatient care; private hospitals, choice of specialist, per diem cash benefits for hospitalisation	(2010) ≈20.0	
Greece	Supplementary	Whole population	Consumer choice, better quality of services, faster access	(2002) 12.0	2.1
Hungary	Complementary (S) & Supplementary	Whole population	Physiotherapy, home care, preventive care, therapeutic spa services, sports/recreation, medical devices, CAM; superior amenities in hospital	(2006) Commercial: 2.1 (2006) Mutual: 6.2	2.1
Ireland	Supplementary & Complementary (UC/S)	Whole population	Semi-private/private rooms in public/private hospitals, faster access; reimburses statutory user charges; GP visits, physiotherapy, eye and dental care, CAM	(2008) ≈50.0	7.0
Italy	Complementary (S/UC) & Supplementary	Whole population	Eye and dental care, home care, cosmetic treatment, prostheses, rehabilitation, transplants, inpatient and outpatient care, CAM; reimburses statutory user charges for outpatient drugs; private care	(2006) 6.1	1.0
Latvia	Complementary (UC/S) & Supplementary	Whole population	Reimburses statutory user charges; eye and dental care, physiotherapy and massage, rehabilitation, vaccines, hearing aids, prostheses, plastic surgery, IVF, CAM; direct access to specialists, access to non-contracted providers, faster access (consultations and clinical examinations)	(2003) 15.6	1.0
Lithuania	Supplementary & Complementary (S)	Whole population	Outpatient care including surgery, consultations, diagnostics, prevention, prenatal care, home visits, physiotherapy, eye and dental care, rehabilitation, inpatient care	(2006) 0.2	0.5

Country	Market role(s)	Eligibility*	Examples of benefits covered*	% population covered (latest available year)	% TEH (2009)
Luxembourg	Complementary (UC)	Whole population	Reimburses statutory user charges	(2006) Commercial: 25.0 (2006) Mutual: 66.0	3.1
	Complementary (S) & Supplementary		Eye and dental care, treatment abroad, CAM, sickness cash benefits; superior amenities in hospital, private care		
Netherlands	Complementary (S) & Supplementary	Whole population	Eye and dental care, physiotherapy, speech therapy, cross-border care, some preventive care, some forms of cosmetic surgery, CAM; single room in hospital	(2009) 91.0	5.1
Malta	Supplementary	Whole population	Treatment abroad, inpatient and outpatient care	(2006) 20.0	2.6
Poland	Supplementary	Whole population	Private care, faster access	(2006) 3.1-3.9	0.0
Portugal	Supplementary & Complementary (S/UC)	Whole population	Choice of provider, faster access, direct access to specialist care; dental care; reimburses statutory user charges for outpatient drugs	(2010) ≈20.0	3.6
Romania	Supplementary	Whole population	Superior accommodation, choice of provider, private care	(2006) 0.1	0.0
Slovenia	Complementary (UC)	Whole population	Reimburses statutory user charges (covering about 98% of those who contribute to statutory health insurance)	(2008) ≈85.0 (2004) <1.0	11.9
	Complementary (S) & Supplementary		CAM, superior dental care, elective care (eg cosmetic surgery); superior amenities in hospitals and health spas, superior medical		
	Substitutive	Individuals not entitled to statutory cover	devices, drugs not on positive and intermediate lists, faster access	n/a	
Slovakia	Substitutive	Individuals not entitled to statutory cover	n/a	n/a	0.0
Spain	Supplementary & Complementary (S)	Whole population	Private care, faster access; dental care for adults, chiropody, CAM	(2006) ≈15.0	5.1
Sweden	Supplementary & Complementary (UC)	Whole population	Faster access, private elective care; reimburses statutory user charges for outpatient prescription drugs	(2007) 3.0-3.3	0.2
United Kingdom	Supplementary & Complementary (S)	Whole population	Acute care (elective surgery), screening, 'employee health management' processes; dental care, CAM	(2008) 12.3	1.1

Source: Survey responses, Albreht et al (2009), Boyle (2011), García-Armesto et al (2010), Gerkens and Merkur (2010), IRDES (2011b), Krasnik and Hernandez-Quevedo (2012 forthcoming), Theodorou and Cylus (2012 forthcoming), Schäfer et al (2010); expenditure data from WHO (2011b)

Note: CAM: complementary and alternative medicine; n/a = information not available; TEH: total expenditure on health.

Supplementary VHI

Almost every country has a market for supplementary VHI, often sold in combination with some form of complementary cover*. These supplementary or mixed markets tend to be small in terms of contribution to health expenditure (usually well under 5% of total spending on health) and generally do not cover more than 20% of the population. The exception is Ireland (Box 1), which has a significant supplementary market covering half the population, but still only accounting for 7% of total health care expenditure (in 2009) (WHO 2011b).

Box 1 Supplementary VHI in Ireland

Access to some elements of statutory coverage in Ireland is means tested (McDaid and Wiley 2009). Richer groups must pay out of pocket for primary care and are subject to statutory user charges for inpatient care (up to an annual ceiling). VHI mainly provides faster access to elective inpatient treatment in private hospitals and private beds in public hospitals. In 1994 the market was opened to competition, to comply with EU law, and the dominant quasi-public insurer Vhi Healthcare was joined by two commercial insurance companies in subsequent years. In 1996 the Health Insurance Act established a regulatory framework for VHI including open enrolment, community-rated premiums, minimum benefits and risk equalisation (Mossialos and Thomson 2002b). The risk equalisation scheme has been the subject of legal action at national and EU levels (Thomson and Mossialos 2010). VHI currently covers about half of the population and benefits from tax relief equal to 20% of the cost of the premium (Turner 2009). Following a general election in 2011, the Irish government announced proposals to extend statutory coverage to the whole population and prohibit VHI from covering services in the statutory benefits package (Government of Ireland 2011; Ministry of Health 2011). If implemented, both measures seem likely to diminish the role of VHI in future.

Ireland and Denmark are the only countries in which supplementary markets have grown substantially since 2000, albeit it from a very low base in Denmark's case. In both countries growth has been fuelled by favourable tax incentives and the critical tone of public debate about the adequacy of publicly financed health care, including perceived problems with quality and waiting times (McDaid and Wiley 2009; Vrangbaek 2009).

In the absence of a clear government strategy for VHI, the type of market most likely to emerge is a supplementary one offering faster access to care, often through private providers. This has been the experience of many of the newer member states of central and eastern Europe (CEE). These countries passed legislation permitting VHI in the 1990s, but in many there was no concerted effort to shape VHI; consequently, markets have either not developed or play a marginal, supplementary role (Thomson 2010). The exceptions are Slovenia, Latvia and Hungary (see below).

Complementary VHI covering excluded services

Complementary VHI for excluded services is widespread and often sold in combination with supplementary VHI*. The benefits it provides are generally limited to eye and dental care, physiotherapy and complementary and alternative medicine (CAM) and this type of market does not usually cover a large proportion of the population or make a significant contribution to health expenditure. A key exception is the Netherlands (Box 2), where about 90% of the population has this form of cover and VHI therefore makes a modest but significant contribution to total and private spending on health (5% and 33% respectively in 2009) (Schäfer et al 2010; WHO 2011b). Denmark has the next largest complementary market in terms of population coverage (38% in 2011), but VHI's contribution to total and private spending on health is small (1.4% and 10.5% respectively in 2009) (Krasnik and Hernández-Quevedo 2012 forthcoming; WHO 2011b). Hungary has tried to stimulate a complementary market since the early 1990s, with limited success, in spite of substantial tax subsidies (30% of the premium) (Boncz 2009). In 2009 its market accounted for 2.1% of total spending on health and only 7.4% of private spending (WHO 2011b). Reasons for slow market development may include the relatively broad scope of statutory coverage and the presence of informal payments. VHI is mainly purchased by people in employment, is more likely to be purchased by those working for larger companies and is often financed by employers (Boncz 2009).

Complementary VHI would be particularly attractive, from a policy perspective, if it allowed policy makers to systematically exclude non-cost-effective services from statutory cover. This would have the dual advantage of streamlining the statutory benefits package and removing concerns about access to VHI. In practice, however, such an approach presents both technical and political challenges (Jost 2005; Robinson 1999; Sorenson et al 2008). As a result, policy makers generally find it easier to exclude whole areas of less politically visible services (for example, eye and dental care and physiotherapy)¹⁴ than to systematically de-list interventions of low value.

Box 2 Complementary VHI covering excluded services in the Netherlands

VHI in the Netherlands covers about 90% of the population (Schäfer et al 2010). High take-up may reflect various factors: voluntary cover is sold alongside statutory cover, often by the same entities (even if they may be separate for accounting purposes); the market has been in place for many years, so people are familiar with it and understand its purpose; it covers services that are valued by a well-educated and relatively affluent society (eye care, dental care for adults and physiotherapy); and it is increasingly purchased on a group basis and paid for by employers, enhancing its accessibility and affordability. Factors like these may be difficult to replicate in other settings. Also, between 2006 and 2008 insurers voluntarily agreed to offer open enrolment and community-rated premiums for VHI, which made the market easily accessible, even to older people and people in poor health (Maarse 2009). The period of agreement has now concluded and some insurers are beginning to introduce an element of risk rating, which may lower levels of take-up (Roos and Schut 2011).

Complementary VHI covering statutory user charges

Complementary cover of statutory user charges is the dominant role VHI plays in France, Latvia, Luxembourg and Slovenia. The presence of statutory user charges in the form of co-insurance¹⁵ appears to be a key determinant of demand for this form of VHI. All of the health systems in which complementary VHI policies have developed require co-insurance for ambulatory or outpatient care (although Latvia changed from co-insurance to co-payments (Tragakes et al 2008)). France (Box 3) and Slovenia (Box 4) are the only EU countries that also apply co-insurance to inpatient care¹⁶. Where co-insurance is applied to essential health services (without exemptions for low-income people or regular users of health services and without a cap on out-of-pocket spending), paying for publicly financed health care at the point of use is likely to be at once unavoidable, unpredictable (especially for inpatient care, where the volume and price of services used may be difficult to estimate in advance) and expensive. These three factors may explain the high level of demand for VHI

¹⁴ Although this is not always easy either. Governments in several member states have tried to exclude some of these services and then re-introduced them following adverse media coverage – for example, dental care in Germany in the 1990s and cover of spectacles in France in 2008 (Busse 2001; Chevreul and Perronnin 2009).

¹⁵ Co-insurance is a form of user charge in which the user pays a set percentage of the service price. ¹⁶ The rates are 20% in France (Chevreul et al 2010) and range from 5% to 25% in Slovenia, with exemptions for low-income households (France) and people aged under 26 (Slovenia) (Albreht et al 2009).

covering statutory user charges in France and Slovenia. The corollary is that insurers must be willing to supply the appropriate cover and they may be more likely to do so if demand is high across a broad spectrum of the population, so as to avoid adverse selection problems¹⁷. Covering a large share of the population also spreads risk, enabling lower premiums.

Box 3 Complementary VHI covering statutory user charges in France

The French market pre-dates the establishment of national health insurance in 1945 and is dominated by non-profit mutual associations. Coverage has grown from about 30% of the population in 1950 to 86% in 2000 and 94% in 2008 (Couffinhal and Franc 2012 forthcoming; IRDES 2011b). VHI's contribution to total health spending has also grown, from 5% in 1960 to just under 13% in 2009, and it makes a significant contribution to private health spending (61.9% in 2009) (WHO 2011b). Worried about low take-up of VHI among poorer households, in 2000 the government introduced vouchers for low-income people to purchase VHI (*Couverture maladie universelle complémentaire*; CMU-C), followed by subsidies (from 2005) for those just above the threshold for CMU-C (*l'Aide à la complémentaire santé*) (Chevreul et al 2010; Perronnin et al 2011).

Box 4 Complementary VHI covering statutory user charges in Slovenia

The Slovenian market was established in 1993 and covered 74% of the population by 2005 and 85% in 2008 (Albreht et al 2009; Milenkovic Kramer 2009). Its contribution to total and private spending on health is significant (11.9% and 47.5% respectively in 2009) (WHO 2011b). VHI is sold by a mutual association (initially part of the statutory health insurance fund) and two commercial insurers. In 2000 complementary VHI was defined as being in the public interest and risk equalisation was permitted but not implemented. In 2004 risk rating was permitted but, following risk selection by a commercial insurer, new regulations were put in place in 2005 (open enrolment, community-rated premiums and systematic notification of premium increases) and risk equalisation was implemented (Thomson 2010). The risk equalisation scheme has been subject to an unsuccessful national legal challenge and is currently subject to legal challenge at EU level (Thomson and Mossialos 2010).

Substitutive VHI

Substitutive markets are rare and generally small in terms of population coverage. Germany has by far the largest in terms of contribution to total and private spending on health (9.1% and 42.7% respectively in 2009) (Box 5). Cover is usually only available to selected groups determined by occupation (Austria), level of earnings and age (Germany) or (non)eligibility for statutory coverage (the Czech Republic,

¹⁷ That is, to avoid a situation in which only those who knew they were going to be using health care on a regular basis would purchase VHI.

Estonia, Slovakia and Slovenia)*. The role of substitutive VHI has declined since the 1970s following significant expansions of statutory coverage. Ireland extended statutory coverage of inpatient care to the whole population in 1970, effectively transforming its VHI market from a substitutive to a mainly supplementary one; in 2006 the Netherlands extended statutory coverage to the third of the population who had previously been excluded on the basis of having higher earnings; and Belgium extended statutory coverage of ambulatory care to self-employed people in 2008 (Gerkens and Merkur 2010; McDaid and Wiley 2009; Schäfer et al 2010). In Germany failed attempts to abolish substitutive coverage in the mid 2000s were followed by efforts to limit the market's expansion (Ettelt and Roman 2012 forthcoming).

Box 5 Substitutive VHI in Germany

In Germany people with earnings over a threshold (\pounds 44,550 in 2011) can choose to be covered by private insurance (*Privaten Krankenversicherung*; PKV) rather than the public scheme (*Gesetzliche Krankenversicherung*; GKV); if they opt for private cover, the GKV no longer benefits from their contributions, but nor does it subsidise their care (Busse 2011 in press). Those who have opted for private cover can only return to the GKV if their earnings fall below the threshold and they are under 55 years of age. Since 2009 it has been compulsory to have some form of health insurance (Federal Constitutional Court 2009), so anyone who opts to leave the GKV must buy private cover (including paying separate premiums for dependants). However, private cover still benefits from employer financing equal to half of what the employee and employer would have paid for GKV cover up to 50% of the cost of the premium. Only about a quarter of those who have the option of being privately insured actually choose to leave the GKV (Busse 2011 in press).

Risk segmentation is a key issue where substitutive VHI is concerned. In Germany it has contributed (with other factors) to deficits in the GKV (Wasem 1995). Fiscal pressure attributable to risk segmentation is accentuated by the voluntary nature of the decision to leave the GKV, the regulatory framework for VHI and people's ability to return to the GKV if they no longer find it beneficial to be privately insured. The regulatory framework for substitutive VHI allows private insurers to reject applications for cover, risk-rate premiums, exclude cover of pre-existing conditions, charge separate premiums for dependants and offer discounted premiums in exchange for high deductibles. VHI is therefore more attractive and more accessible to younger and healthier individuals with smaller families. There are clear differences in health status and use of health services between those compulsorily covered by the GKV and those voluntarily covered by private insurance (Table 8) and, due to the income eligibility criterion, the average earnings of the privately insured are about 60% higher than those of contributing GKV members (€38,109 compared to €22,658) (Leinert 2006a).

Risk segmentation has contributed to steady rises in GKV contribution rates (Wasem 1995), which in turn encourages more younger people with higher earnings to opt for substitutive VHI. Research estimates that the GKV loses about €750 mllion a year as a result of people changing from public to private cover or from private to public cover. Between 2000 and 2004, more than half of those leaving the GKV were 'low risks' in terms of age and family status, while most of those joining the GKV were 'high risks': older people with dependants (Ettelt and Roman 2012 forthcoming). Extending statutory coverage to the whole population would alleviate fiscal pressure by lowering the GKV's average risk profile and at the same time increasing the average amount it has to spend per person.

The government has taken numerous steps to mitigate the porosity of the border between public and private cover. In 1995 people aged 65 and over lost the right to return to the GKV, even if their earnings fell below the income threshold. In 2000 the age limit for returning to the GKV was lowered to include people aged 55 and over. The income threshold for opting out rose in 2003 by a higher than usual amount (11%) and in 2009 the government extended the waiting period for eligibility to opt out of the GKV to three years. Although the latter reform was estimated to have lowered the financial loss to the GKV by 15-20% a year (Albrecht et al 2007), it was reversed in 2011 by the Christian Democrat-Liberal Democrat coalition, reflecting the new government's commitment to maintaining the market for substitutive VHI.

The Netherlands faced similar risk segmentation issues in its substitutive market (Thomson and Mossialos 2006). In 2006 the Dutch government effectively abolished substitutive VHI by extending statutory coverage to the whole population. The continued existence of substitutive cover in Germany has created tension in recent years, resulting in increasingly stringent regulation and efforts to introduce universal statutory coverage (Ettelt and Roman 2012 forthcoming). However, current arrangements favour specific groups in the population – the highest-earning employees (who can choose between statutory and private cover), civil servants (who do not have to pay GKV contributions), physicians (who benefit from higher fees for treating privately insured patients) and private insurers – which may explain their longevity.

Market performance: size and profitability

The size of a VHI market can be measured in three ways: in terms of the contribution VHI makes to spending on health, in terms of population coverage (that is, the proportion of people covered by VHI in a given population) and in terms of VHI premium income.

Contribution to spending on health

Levels of spending on health care vary widely across EU countries. In 2009, the latest year for which international data are available, health care expenditure as a

share of national wealth (gross domestic product; GDP) ranged from 5.4% in Romania to 11.8% in Belgium, with an average of 8.9% (WHO 2011b). Each country uses a range of public and private mechanisms to finance health care, but public spending accounts for over two-thirds of all health care spending in all but four countries (the exceptions being Bulgaria, Cyprus, Greece and Latvia). Since 2000 the public share of total spending on health care has fallen in about half of the countries. However, the only countries in which the public share declined significantly between 2000 and 2009 (by more than 10%) are the Czech Republic and Slovakia.

Health spending channelled through VHI is low in most countries, ranging in 2009 from 0.0% in Poland, Romania and Slovakia to 12.9% in Slovenia (Figure 2). In 2009 VHI accounted for over 5% of total health spending in only six countries (France, Slovenia, Germany, Ireland, Cyprus and the Netherlands). Between 2000 and 2009, VHI grew as a share of total health spending in about half of the countries. Some markets saw huge relative growth, but from a very low base (Hungary, Malta, Cyprus, Luxembourg). During the same period the Netherlands experienced the most significant decline in VHI's share of total health spending (a contraction of twothirds) due to the abolition of its substitutive market in 2006. Other VHI markets also experienced a decline (of around or over 25% in Poland, the United Kingdom (UK), Latvia and Finland). In the United Kingdom the decline probably reflects increased levels of public spending on health from 2000, as well as improvements in timely access to publicly financed elective care and rises in the cost of VHI (mainly for individuals, as opposed to employers) (Boyle 2011).

VHI is also relatively low as a proportion of private spending on health, accounting for less than 20% in 2009 in most countries (Figure 3). Between 2000 and 2009 VHI's share of private spending grew in about two-thirds of the countries, with significant growth (of around or over 25%) in Hungary, Malta, Cyprus, Luxembourg, Spain, Italy and Portugal.

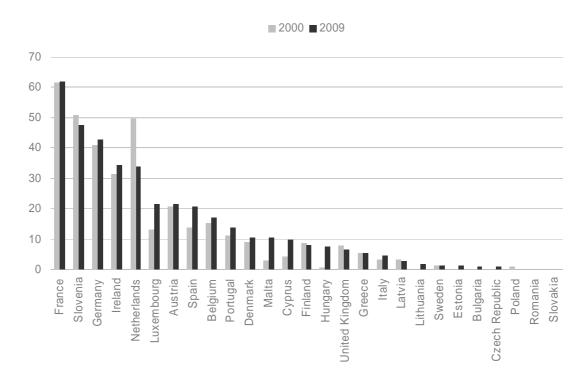


Figure 3 VHI as a percentage of private expenditure on health, EU, 2000 and 2009

Source: WHO (2011b)

Population coverage

The proportion of the population covered by VHI in different countries varies widely (Table 4). The largest markets are those covering statutory user charges in France (95% population coverage), Luxembourg (91%) and Slovenia (85%) and the Dutch market covering excluded services (91%). Denmark also has a significant complementary (services) market (38% population coverage). Among supplementary markets, Ireland and Belgium have the highest level of coverage (around 50% population coverage), followed by Austria (33%). The other significant markets in terms of population coverage include Cyprus, Denmark, Latvia, Malta, Portugal, Spain – all mainly supplementary markets covering 15-20% of the population. With the exception of Slovenia, the proportion of the population in CEE countries with any form of VHI is very small.

Since the late 1990s, levels of population coverage have increased significantly in some countries, notably Belgium (growth in commercial supplementary VHI from about 33% to about 49% of the population, largely due to employers purchasing on

behalf of employees), Denmark (growth in supplementary VHI largely due to the introduction of tax incentives for group cover in 2002 and lack of confidence in the public system), France (from around 85% in 1998 to about 94% as a result of the introduction of government vouchers in 2000), Ireland (due to a combination of economic growth, generous tax relief and lack of confidence in the public system), Portugal (from about 12% to 20%), Sweden (from under 1% to around 3%) and Latvia (Barros et al 2011; Brigis 2009; Chevreul et al 2010; Gerkens and Merkur 2010; Krasnik and Hernández-Quevedo 2012 forthcoming; Skoglund 2009; Turner and Smith 2012 forthcoming).

Premium income

The German market for VHI is by far the largest measured in terms of premium income, with around 30% of total VHI premium income in the European Union in 2009, followed by France (9%), Spain (6%) and the United Kingdom (4%) (CEA 2010). On a per capita basis substitutive VHI (Germany) will be more expensive than complementary or supplementary cover because it covers the full range of health services.

Profitability

VHI is a profitable business in many countries. Although voluntary insurers often incur administrative costs that are much higher as a proportion of total revenue than those found in the statutory health system (see below), they are still able to maintain healthy margins. Claims expenditure as a proportion of premium income is well under 75% in about half of the countries*.

Market structure: sellers, buyers and concentration

Who sells VHI?

Entities providing VHI include non-profit mutual and provident associations, commercial companies, statutory health insurance funds and employers. Mutual and provident associations have dominated the VHI market in many western and northern European countries, including Belgium, Denmark, France (mutuals currently have 59% of the market and provident institutions a further 17%), Ireland (73%), Malta, Italy, Luxembourg, the Netherlands, Slovenia and the United Kingdom*. They also play a significant role in Hungary. Nevertheless, their share of the VHI market has declined in several countries since the 1990s due to the entry of commercial insurers or the acquisition of mutual associations by commercial insurers, notably in Finland (where the mutuals' share was already insignificant), Denmark, Malta, Ireland, Slovenia, the United Kingdom and, to a lesser extent, France.

In some countries, commercial insurers are the only source of VHI (Cyprus, Greece, Latvia, Lithuania, Spain and Sweden) or have a major share of the market (Austria, Bulgaria, the Czech Republic, Finland, Portugal and the United Kingdom)*. In others, employers organise their own health schemes (company 'self-insurance') for employees. Company schemes are a key feature of the Polish market and increasingly important in the UK market, where they have proved to be a cheaper alternative to VHI (Foubister 2009; Foubister et al 2006).

Statutory health insurance funds compete with other entities to sell VHI in some of the newer member states (Bulgaria, the Czech Republic, Estonia, Romania and Slovakia). In Romania the statutory health insurance fund dominates the VHI market. In the Netherlands statutory health insurance funds had been active in the VHI market, but were required to establish separate entities for voluntary coverage. In Slovenia the voluntary coverage arm of the statutory health insurance fund is now an independent mutual association with the dominant share of the complementary VHI market.

A further distinction concerns an insurer's degree of specialisation in health. Some insurers offer only health products, while others may sell a range of life and non-life products. Mutual associations generally specialise in health and are required by law to do so in Belgium, France, Hungary and Luxembourg*. Some commercial insurers in Belgium and Bulgaria also specialise in health. The German government used to prevent non-specialist domestic insurers from selling VHI in order to protect VHI subscribers from insolvency arising from an insurer's other business (Bundesaufsichtsamt für das Versicherungswesen 2001). This practice was outlawed by EU internal market rules and Germany was forced to change its legislation following a European Court of Justice ruling (European Court of Justice 2001).

Who buys VHI?

The extent and quality of statutory coverage are major determinants of demand for VHI. Socio-economic status is another important determinant. Data regarding the distribution of all types of VHI coverage in the European Union, whether individual or employer-paid, show that subscribers are more likely to come from higher socio-economic groups*. In many countries the typical subscriber is aged 40-50 years old, relatively well off, better educated, employed as a white-collar worker (often at management level or higher) or self employed, working for larger companies, living in urban areas and male. This profile has not changed much over time. Among older people, survey data¹⁸ from 2004 suggest that VHI coverage is concentrated among those with higher educational levels and better cognitive functioning in many European countries (Paccagnella et al 2008) and that those with VHI are more likely to be at low risk of ill health (Bolin et al 2010).

Group cover purchased (but not always paid for) by employers dominates in 11 out of 18 countries for which data are available and is particularly high (70% and above) in Belgium, Bulgaria, Denmark, Latvia, Lithuania, Sweden and the United Kingdom*. In some countries, the rise of group policies has been attributed to strategic price discounting by insurers (Ireland, Portugal, the United Kingdom), often accompanied by less stringent policy conditions, and the changing attitude of employers, who increasingly recognise the potential costs of long absence from work due to accident or ill health (Lithuania, the United Kingdom) (Foubister et al 2006; Papworth 2000). In other countries, insurers mainly sell to groups (Latvia, Lithuania, Sweden). Group policies have gained market share in Sweden (where local governments (municipalities) have recently purchased VHI cover for all their employees) and Spain.

VHI purchased by employers may be provided as an employee benefit, in which case the employer pays the full premium, or employees may pay some or all of the premium themselves. Information about who pays for group policies is hard to find*. However, in the United Kingdom the likelihood of insurance being paid for by an

¹⁸ Data from the first wave of the Survey of Health, Ageing and Retirement in Europe (SHARE). The survey interviewed 28,000 people aged 50 and over in 11 European countries: Austria, Belgium, Denmark, France, Germany, Greece, Italy, the Netherlands, Spain, Sweden and Switzerland.

employer increases with income (Emmerson et al 2001). This potential source of inequity is exacerbated where group policies benefit from tax subsidies (see below). Most group policies are voluntary, although group policies provided as a compulsory component of an employee's contract play a role in France (Sandier and Ulmann 2001).

Market concentration

There is considerable variation in the number of insurers operating in each member state*. Some national markets have five or fewer insurers (Estonia, Ireland, Lithuania, Slovenia), others have around 50 or more (Belgium, Finland, Germany, Greece, Hungary, Italy, Luxembourg). France is the outlier with almost 1000 insurers. The VHI market is highly concentrated in many countries: in 2006 the three largest insurers in most countries had a market share of over 50%*. The main exceptions were France, Germany, Hungary, Italy and Spain.

The last two decades have seen a clear trend towards increasing concentration in the VHI market in many countries, mainly through mergers (Austria, France, Finland, Greece, Italy, Luxembourg, Portugal and Spain)*. In some countries this has reflected increased concentration in the banking and insurance sectors as a whole (Portugal). In others it reflects changes in EU legislation concerning solvency margins, which has particularly affected the mutual market in France. Between 2000 and 2006 the number of insurers in the VHI market in France fell by 40%, although the high level of competition among insurers in a saturated market was probably partly responsible for some of the mergers that took place (Chevreul and Perronnin 2009). Conversely, the VHI market has become less concentrated in some countries, as the number of insurers has increased (Bulgaria, Ireland, Malta and Sweden).

Economic theory generally suggests that market concentration reflects the degree of competition in the market, with a higher degree of market concentration usually associated with higher prices, to the detriment of consumers (Tirole 1988). However, unpublished European Commission research into the effects of VHI market concentration on prices suggests that higher levels of market concentration may actually be associated with lower prices for diagnostic tests (Schmitt 2008). While this may reflect the stronger purchasing power of insurers where the market is

dominated by a small number of insurance companies, there is no evidence to suggest insurers pass on these savings to consumers.

Market conduct: premiums, benefit design and relations with providers

Premiums and policy conditions

Take up of VHI is usually restricted to people aged under 65, cover is most commonly provided as a short-term (annual) contract and insurers are generally free to reject applications, exclude or charge higher premiums for pre-existing conditions, rate premiums on the basis of individual health risk, set limits to benefits and impose waiting periods¹⁹ and cost sharing*. Age is almost universally used to set premiums. Health status is also used in more than half of the countries. Dependants almost always have to be covered separately at additional cost. Group cover often benefits from community-rated premiums and less stringent policy conditions. There are very few countries in which VHI premiums and policy conditions are regulated beyond the usual rules governing non-life insurance contracts (see below).

Benefit design

Consumers in VHI markets usually have some choice of insurer, plan and provider*. Individuals may be able to choose from a wide selection of packages with differences in coverage levels, reimbursement (in kind or cash), the extent of cost sharing and benefit ceilings. Benefit ceilings in the form of maximum annual levels of VHI reimbursement apply in several countries (Austria, Belgium, Bulgaria, the Czech Republic, Finland, Greece and Portugal). Insurers impose cost sharing in over half of the countries. Only two countries regulate the quality of VHI benefits. Ireland requires insurers to offer minimum benefits, while Germany requires substitutive VHI policies to cover both ambulatory and inpatient care and caps the level of cost sharing in VHI.

The lack of standardised benefits and extensive product differentiation may benefit some consumers. However, product differentiation lowers transparency by making it difficult for consumers to make price comparisons, which increases transaction costs

¹⁹ That is, a period of time before which benefits will not be paid. A classic example is benefits relating to childbirth, which some insurers will not cover if the birth occurs within nine months of taking out a policy.

and may undermine price competition (Office of Fair Trading 1997). Consumer choice is also circumscribed by eligibility criteria (people aged 60 and over are not usually allowed to buy VHI), health status (many insurers can reject applications) and ability to pay (VHI is only available to those who can afford the premium). In addition, the extent of choice (of insurer and provider) available to those with statutory coverage has increased in many countries in recent years (Thomson and Dixon 2006). Thus, while it is broadly true to say that VHI enhances consumer choice, the gap between the level of choice available to those with statutory and voluntary coverage has narrowed over time.

Relations with providers

Voluntary insurers purchase from a wide range of public and private providers*. Vertical integration (insurers owning their own facilities) is the exception rather than the norm (Table 5), although there has been a move towards greater integration (in some countries) and increased effort to engage in selective contracting. Insurers may be cautious about adopting purchasing tools that restrict consumer choice of provider. In about half of the countries insurers simply reimburse policy holders (in other words, they do not 'purchase' care at all). The dominant provider payment mechanism is retrospective fee-for-service reimbursement and insurers frequently pay providers fees that are higher than the fees paid by statutory health insurance.

Private beds in public hospitals (beds reserved for the use of privately financed patients) are used by insurers in Austria, Ireland, Portugal, Luxembourg, Romania and the United Kingdom*. In Austria and Ireland the proportion of public beds that may be reserved for private use is capped at 25% and 20% respectively. In the United Kingdom there is full economic costing for the use of private beds in public hospitals, but this is not the case in Ireland. A handful of countries prohibit doctors from working in both the private and the public sector (Greece, Cyprus, Luxembourg), but doctors work in both sectors in most other countries. Some countries impose limits on the extent to which doctors can do this (Denmark, Italy the United Kingdom).

Country	Purchasing from providers or reimbursement of patients?	Insurers free to contract selectively?	Vertically integrated with providers?	Provider payment?	Who sets fees?	Different from public fee- setting?
Austria	Purchasing; reimbursement for doctor visits and non- contracted hospitals	Yes	Some insurers part-own private facilities, but subscribers not obliged to use them	PD, FFS, lump sum	Austrian Insurance Association negotiates fees with inpatient providers, hospital doctors and regional medical associations	Yes (higher)
Belgium	Reimbursement	Yes	No	FFS	Fees are set in the context of statutory health insurance at national level by the health insurance funds and provider representatives	No, but extra billing permitted in some cases
Bulgaria	Reimbursement	Yes	Some insurers have their own facilities, but subscribers not obliged to use them	FFS	Providers; but insurers set fees for their own facilities	Varies
Cyprus	<25% purchasing	Yes, but only to a limited extent	No	FFS	Insurers and providers negotiate fees individually	No
Czech Republic	Reimbursement	Yes, but not in practice	No	FFS	Providers	n/a
Denmark	Reimbursement and purchasing	Yes, commonly occurs	Some insurers have exclusive agreements with providers	FFS	Insurers typically negotiate lower fees based on volume and type of company being insured	Yes (double for specialists)
Estonia	Commercial: reimbursement EHIF: purchasing	Commercial: Yes EHIF: Yes, for up to 20% of outpatient care	No	CAP, DRG, FFS, PD	Commercial: fees 20% higher EHIF: fees government approved	Yes (20% higher)
Finland	Reimbursement	Yes, but not in practice	No	n/a	Providers	Yes
France	Reimbursement (usually), but some purchasing	No	No	n/a	Providers	No, but some extra billing permitted
Germany	Reimbursement	Yes, but only among providers treating PHI patients only	Uncommon; insurers cannot own policlinics; some collectively own hospitals	FFS (individuals), DRGs (hospitals)	Providers are allowed to charge higher fees than statutory fees	Yes (higher)

Table 5 Voluntary insurers' relations with providers, 2008

Country	Purchasing from providers or reimbursement of patients?	Insurers free to contract selectively?	Vertically integrated with providers?	Provider payment?	Who sets fees?	Different from public fee- setting?
Greece	Trend towards purchasing	Yes, typically occurs	One insurer has own facilities; others encourage use of PPNs	CAP (outpatient diagnostics), FFS, salary (managed care)	Insurers negotiate fees with providers	Yes (higher)
Hungary	Mutuals: reimbursement	Yes	Some commercial insurers use PPNs	FFS	Statutory fee schedule used for benefits covered by the statutory system; insurer-provider negotiation for other services	Yes (higher)
Ireland	Purchasing	Yes, but in practice each insurer covers most hospitals and consultants	None traditionally; Vhi Healthcare recently set up SwiftCare Clinics and Hibernian AVIVA Health an Xpress Med Urgent Care Centre	FFS (typically); trend from PD to fixed price procedures in hospital	Vhi Healthcare leads pricing negotiations with providers; the other insurers follow and most providers accept the fees	Yes (public pays salary)
Italy	Purchasing	Yes (private sector)	No	FFS (typically)	Accredited private providers working for the public sector regulated by fees set at regional/national level, but insurers can negotiate fees with private providers	Yes (higher)
Latvia	Reimbursement	Yes, always occurs	No	FFS	Providers, but insurers may not pay 100%	Yes (higher)
Lithuania	Reimbursement	No	Insurers offer PPNs, subscribers not obliged to use them	n/a	n/a	n/a
Luxembourg	Commercial: Reimbursement	n/a	n/a	FFS	Social security and government negotiate with providers to determines user charges	No
Malta	Reimbursement	Yes, but only to a limited extent	No	FFS	Insurers negotiate individually with hospitals, pay doctors what is reasonable	Yes (public pays salary)
Netherlands	Reimbursement, but purchasing is in initial stages	Yes, but occurs only to a limited extent	Negligible, but one insurer is investing in primary care centres	CAP, FFS, standard hourly tariffs	n/a	n/a
Poland	Reimbursement	Yes	No, but some insurers use networks	CAP (networks), FFS	Typically, insurers set their own fee, which is accepted or not	Varies

Country	Purchasing from providers or reimbursement of patients?	Insurers free to contract selectively?	Vertically integrated with providers?	Provider payment?	Who sets fees?	Different from public fee- setting?
Portugal	Reimbursement (primarily), some limited purchasing	Yes, typically occurs	Some larger insurers collectively integrated; insurers offer PPNs	FFS	Providers and insurers negotiate fees; but in practice, providers are often forced to accept the prices defined by insurers	n/a
Romania	Purchasing and reimbursement	Yes, frequently occurs	Some insurers have their own hospitals	FFS, but salary if insurers own facilities	Providers and insurers negotiate fees	Yes (higher)
Slovakia	n/a	n/a	n/a	n/a	n/a	n/a
Slovenia	Purchasing	Yes, frequently occurs	No	FFS	Providers	Varies
Spain	Purchasing	Yes, commonly occurs	Typically insurers own hospitals, use beds in other private hospitals	FFS; some CAP	Insurers and providers implicitly negotiate fees, but insurers have monopsony power	Yes (higher public pays salary)
Sweden	Reimbursement	Yes, typically occurs	No	FFS	Price negotiations occur, but fees based on government-set fees for private providers offering care to the public sector	Yes (higher, extra pay for handling PHI claims)
UK	Purchasing	Yes, common with hospitals (less common with doctors)	No (strict) vertical integration	FFS	Insurers and providers negotiate hospital fees; insurers typically stipulate a limit for doctor fees up to which they will pay	Yes (higher)

Source: Survey responses

Note: n/a = information not available; CAP = capitation; DRG = diagnosis-related groups; FFS = fee for service; PD = per diem; PPN = preferred provider networks; PPO = preferred provider organisations

Public policy towards VHI

EU and national regulation

Regulation of VHI has three main goals (Chollet and Lewis 1997):

- maintaining market stability by setting financial and non-financial standards for insurer entry and operation, conditions for insurer exit, and requirements for financial reporting, scrutiny and oversight; this is known as financial or prudential regulation
- protecting consumers by governing insurers' marketing practices and their relations with health care providers
- improving access to VHI through open enrolment (guaranteed issue), lifetime cover (guaranteed renewal), community rating, premium review, approval or caps, mandated (usually minimum) benefits and prohibition on exclusion of preexisting conditions from cover; these last two goals are known as material or contract regulation

The European Union has a framework for regulation of non-life insurance (the Third Non-Life Insurance Directive established with effect from 1994) that precludes material regulation in non-substitutive VHI markets (Thomson and Mossialos 2010). All member states are expected to comply with minimum solvency standards (European Commission 1992). They are also expected to comply with EU rules on contracts and complaints procedures. Since 2000 there have been some minor changes to the EU-level regulatory framework, but nothing with any significance for VHI (European Commission 2007a; European Commission 2007c; European Commission 2008a; Thomson and Mossialos 2010).

In most of the countries VHI is regulated by some form of national financial market authority or supervisory commission under the jurisdiction of the Ministry of Finance*. Health-specific regulation of commercial VHI is rare (Finland, Ireland, Spain; Italy and Slovenia for the complementary market covering statutory user charges only); it is more common for regulation of non-profit VHI (France, Ireland, Luxembourg). Non-profit insurers are sometimes regulated by a separate body (Belgium, France, Ireland, Luxembourg). Regulatory approaches vary across countries, with some governments favouring minimal financial regulation and others preferring heavier material regulation*. The nature, extent and effectiveness of national regulatory frameworks are affected by a range of factors including the role of VHI in the health system, aspects of market structure (for example, the number and type of insurers in operation), political ideology, government capacity and legal constraints.

National regulations applied to VHI do not go beyond what is required at EU level in just under half of the countries*. Thus, VHI is regulated in the same way as any other financial service and the legislative framework does not include specific mention of VHI. This is more likely to be the case where commercial VHI is concerned and in predominantly supplementary markets. In a few countries the general insurance legislation includes sections relating exclusively to VHI (Austria and Finland). National regulation goes beyond general insurance requirements in VHI markets with a strong mutual or non-profit insurer presence (Belgium, France, Hungary, Ireland, Luxembourg, the Netherlands and Romania), where the market plays a substitutive role (Germany) or a complementary role covering statutory user charges (Italy, Slovenia), and in a handful of other countries (Bulgaria, Lithuania). Material regulation mainly aims to improve access to the market (Table 6).

While VHI in Ireland has always been heavily regulated, government intervention in the market has intensified in other countries since 2000, mainly in Belgium, France, Germany and Slovenia (Table 7). Regulatory developments have overwhelmingly aimed to improve access to VHI and financial protection for those covered by VHI. In Germany they have also aimed to address risk segmentation in the health system (Box 5) and enhance consumer choice and consumer protection in VHI (for example, by making ageing reserves portable).

Regulation	Application		
Access to VHI			
Open enrolment and lifetime cover	Belgium, Germany (for the basic substitutive policy only – see Table 7), Ireland, Slovenia ²⁰		
Prohibition of age limits	n/a		
Affordability			
Community-rated premiums	Non-profit VHI only: Belgium, Estonia, Hungary All VHI: Ireland, Slovenia		
Risk equalisation to support community rating	Ireland, Slovenia		
Tax-financed vouchers for VHI	France (for low-income households)		
Premium caps	Germany (for the basic substitutive policy only): the premium is capped at the level of the maximum contribution for statutory health insurance		
Quality of coverage			
Cover of pre-existing conditions	Non-profit VHI only: Belgium (mutual associations cannot charge higher premiums for pre-existing conditions) All VHI: Ireland (subject to maximum permissible waiting periods)		
Minimum or standard benefits	Germany (for the basic substitutive policy only), Ireland		
Cost sharing caps	Germany (for substitutive policies only): insurers cannot offer annual deductibles above €5,000		
Prohibition of benefit ceilings	n/a		

Table 6 Regulation to ensure access to affordable and good quality VHI, 2011

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Source: Survey responses and additional research

Since 2000, national regulation of VHI has led to legal action at EU level in Belgium, France, Ireland, the Netherlands and Slovenia (Thomson and Mossialos 2010). It is no coincidence that these are the European Union's most heavily regulated non-substitutive VHI markets. In 2008 the British private insurance company BUPA lost its case at the European Court of Justice in which it argued that risk equalisation in the Irish VHI market was a form of state aid and therefore contravened EU competition rules (European Court of Justice 2008). However, it won a national legal challenge on a technicality and the risk equalisation scheme was suspended. Following national parliamentary elections in Ireland in 2011 the new government has announced plans to introduce universal statutory coverage and to prevent VHI from covering services in the statutory benefits package, which may both diminish demand for VHI and lead to a change in the regulatory framework for VHI (Government of Ireland 2011).

²⁰ Open enrolment and community rating are not legal requirements in France but are encouraged through tax policy (exemptions from insurance premium tax for insurers who comply).

Risk equalisation has also sparked national and EU-level controversy in the Slovenian market for complementary VHI covering statutory user charges. In 2007 the European Commission initiated infringement proceedings against the Slovenian government, partly on the grounds that risk equalisation contravened EU internal market rules (Thomson and Mossialos 2010). However, the Slovenian government's recent proposal to revise the statutory benefits package (Ministry of Health 2011) and abolish many statutory user charges (Rupel 2011), which will largely eliminate the need for VHI, may make these proceedings defunct.

Year	Regulatory change
2000	France: Introduction of vouchers for VHI for low-income households (CMU-C) Germany: Age limit for switching from VHI to statutory cover lowered from 65 to 55 Slovenia: VHI defined as being in the public interest; risk equalisation permitted but not introduced
2002	France: Introduction of <i>contrats solidaires</i> (exemptions from insurance premium tax for insurers who refrain from risk rating premiums)
2004	Slovenia: Risk rating of premiums permitted
2005	France: Introduction of tax subsidies for VHI for households just above the threshold for CMU-C Slovenia: risk rating of premiums prohibited; insurers must offer open enrolment and community-rated premiums; risk equalisation implemented; premium increases must be approved by the regulator
2006	Ireland: Risk equalisation scheme triggered by the Health Insurance Authority
2007	Belgium: Open enrolment for VHI (all insurers) and cover of pre-existing conditions (non-profit insurers only)
2008	France: Introduction of <i>contrats responsables</i> (exemptions from insurance premium tax for insurers who refuse to cover new compulsory deductibles for statutory treatment) Ireland: Risk equalisation scheme suspended and to be amended following national legal challenge by BUPA
2009	Germany: Having health insurance of some sort made compulsory for the whole population; substitutive VHI must cover both ambulatory and inpatient care; introduction of the 'basic policy' (replacing the 'standard policy') in substitutive VHI (open enrolment, cover of pre-existing conditions, benefits equivalent to the GKV at a price that cannot exceed the maximum GKV contribution); a cap on deductibles in VHI (of up to €5,000 per year); VHI ageing reserves made portable; new ruling means people have to demonstrate earnings above the income threshold for three consecutive years before they can opt out of the statutory scheme
2010	Belgium: From 2012 statutory local sickness funds can no longer offer VHI; these can only be offered by new independent 'societies of mutual interest' and (as before) commercial insurers, both now regulated by the insurance supervisory authority
2011	Germany: Three year waiting period for eligibility for opting out of the statutory scheme abolished

Table 7 Developments in national regulation of VHI, 2000-2011

Source: Survey responses and additional research

The only area in which EU law has successfully changed national legislation since 2000 is where national regulators have directly or indirectly favoured mutual

associations over commercial insurers (Belgium, France and Ireland) (European Court of Justice 2011; Thomson and Mossialos 2010). In 2001 the European Commission asked France to abolish insurance premium tax exemptions favouring non-profit insurers (European Commission 2001c). The government replaced these with exemptions unrelated to legal status, but in 2011 the European Commission ruled that the French government's *contrats solidaires* and *contrats responsables* were illegal because they indirectly favoured mutual associations and the benefit to the insurers did not seem to be passed on to consumers (European Commission 2011b). In 2010 Belgium was required to place VHI sold by sickness funds on the same footing as VHI sold by commercial insurers (via newly created 'societies of mutual interest', which are to be independent of the sickness funds with effect from 2012). In 2011 the European Court of Justice ruled that Ireland should apply the same financial regulations to all insurers, regardless of legal status (European Court of Justice 2011).

Tax policy

Most countries offer some form of tax incentive for VHI, usually tax relief that permits some or all of the cost of VHI premiums to be deducted from taxable personal or corporate income*. Tax incentives are aimed at individuals (France, Germany, Hungary, Ireland, Luxembourg, Romania), groups (Belgium, Denmark, Finland, Latvia, Lithuania, Spain, Sweden) or both (Austria, Bulgaria, Greece, Italy, Portugal, Slovenia). In Austria and Denmark tax subsidies for groups are only available to companies that purchase VHI for all their employees (as opposed to restricting group coverage to senior management, for example) (Ladurner 2009; Vrangbaek 2009). There are no tax incentives in a handful of countries (Cyprus, the Czech Republic, Estonia, Poland, Slovakia, the United Kingdom). In Romania capped tax relief applies to all insurance premiums, not just VHI, and therefore does not create an incentive to purchase VHI. This was the case in Germany until recently, but new legislation has introduced a specific tax relief for all health insurance (statutory and voluntary) (Ettelt and Roman 2012 forthcoming). France is the only country with means-tested tax subsidies. Tax disincentives in the form of insurance premium tax and tax on employerprovided benefits in kind apply to individuals in some countries (Estonia, Lithuania, Poland, the United Kingdom). In Ireland and Sweden there are tax disincentives for groups (for employer-paid cover only) and individuals respectively, but the size of the disincentive is very small. Mutual associations are exempt from premium tax in Hungary and Luxembourg. In Belgium and France exemptions for mutual associations were found to contravene EU law and have been abolished.

During the 1990s tax subsidies were lowered in Austria, Greece, Italy, Ireland and the United Kingdom and expanded in Portugal (Mossialos and Thomson 2002b). Spain abolished them for individuals and introduced them for groups in 1999. Since 2000 they have been expanded in Lithuania (2007) and Germany (2010); Denmark abolished them in 1986 and re-introduced them (for groups) in 2002*. While generous tax subsidies have succeeded in increasing demand for VHI in a few countries (notably Hungary and Ireland), they can be expensive, there is no evidence to suggest they are self financing and they are likely to be regressive because VHI tends to be purchased by richer people. In Ireland tax relief on VHI premiums cost the Irish government €321 million in 2008, roughlyequivalent to 2.5% of public spending on health (Revenue Commissioners 2009; WHO 2011b).

Impact on health system performance

Financial protection

A key tenet of universal health coverage is that access to treatment for illness or injury should not lead to financial hardship (WHO 2010). VHI contributes to financial protection by addressing gaps in the breadth, scope and depth of statutory coverage. In theory it can play a critical role in removing financial barriers to accessing health care where people are not eligible for statutory coverage (for example, those in Germany who have opted out of the GKV and are aged over 55), where statutory health insurance does not cover essential services, or where essential services are subject to statutory user charges (particularly in the form of coinsurance) and there are no exemptions for low-income groups or regular service

users and no cap on out-of-pocket spending. Supplementary VHI does not contribute to financial protection since those who buy it are mainly benefiting from faster access to care that they could have obtained through their statutory entitlement. Whether or not VHI contributes to financial protection in practice depends on three factors: a market existing to cover gaps; those in need of financial protection having access to the market; and VHI offering good quality coverage (that is, good scope and depth of coverage).

All EU health systems provide universal or near-universal statutory coverage, but there is evidence of coverage gaps. Although out-of-pocket payments declined as a share of total spending on health between 2000 and 2009 in two-thirds of countries (the exceptions were Belgium, the Czech Republic, Estonia, France, Germany, Lithuania, Slovakia, Slovenia and Sweden), their share remains significant in some instances, accounting for around or over 20% in Belgium, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Slovakia and Spain (WHO 2011b). It is difficult to find recent comparative data on the distribution of out-of-pocket payments for health or the extent to which they have a 'catastrophic'²¹ or 'impoverishing' effect on households. However, past analysis has found them to be highly regressive (Wagstaff et al 1999) and survey data suggest that the incidence of catastrophic out-of-pocket spending in EU health systems in the 1990s ranged from 0.0% to 2.75% (Xu et al 2003).

Measuring financial protection in terms of spending incidence fails to account for those who forego using health services due to cost (that is, those who do not incur out-of-pocket payments because they cannot afford them). As a result, metrics regarding catastrophic or impoverishing spending levels need to be complemented by survey data on financial barriers to access. A 2007 survey identified people who had foregone care due to cost in the previous year in every EU health system, ranging from an average of 12% of respondents across countries for dental care to 4% for specialists and 3% for GPs and hospitals (Eurobarometer 2007). More recent survey data highlight substantial variation across countries, with the proportion reporting

²¹ Most often measured as out-of-pocket spending on health that is greater than or equal to 40% of a household's capacity to pay (income after basic subsistence needs have been met).

cost-related access problems²² ranging from a low of 5% in the UK and 6% in the Netherlands to 10% in Sweden, 13% in France and 25% in Germany (Commonwealth Fund 2010).

These survey data do not tell us about the role of VHI in lowering or eliminating financial barriers to access. A study based on a 2004 survey of older adults in Europe found that the probability of foregoing care was lower among those with VHI coverage (1.3% vs 2.7%) (Paccagnella et al 2008). However, it is nevertheless the case that VHI does not always address gaps in statutory coverage. Voluntary insurers in Ireland have been slow to cover access to primary care, for which richer households must pay out of pocket. Since a GP visit can cost as much as €80 (McDaid and Wiley 2009), this can leave a significant gap in financial protection. In some countries where statutory coverage of adult dental care is minimal (Estonia is one example), insurers have not developed policies to cover it (Habicht 2009; Thomson et al 2010b). Similarly, statutory user charges are widely applied to outpatient prescriptions (Thomson et al 2009b), and yet this is an area in which VHI does not play a role in many countries*.

Nor do those who rely on VHI for financial protection always have access to the market or access to good quality voluntary cover. Some countries rely on the presence and dominance of non-profit insurers (particularly mutual associations) to guarantee access to VHI. Historically, mutual associations offered open enrolment with community-rated premiums and in some countries this continues to be the norm (Belgium, France and Luxembourg). In other countries, the government has resorted to regulation to ensure people have access to VHI and to VHI of good quality (open enrolment, community rating, cover of pre-existing conditions, lifetime cover, minimum benefits, premium and cost sharing caps and so on), but these types of regulation are limited to VHI in a handful of countries (Table 6). The vast majority of VHI markets are not subject to any regulation intended to promote financial protection.

²² People who reported doing at least one of the following in the past year due to cost: not filling a prescription or skipping a dose of prescribed medicine; had a medical problem but did not visit the doctor; or skipped a test, treatment or follow-up appointment. The survey only included these five EU countries.

Markets for complementary VHI covering statutory user charges are among the most stringently regulated. Access to VHI is critical to ensuring financial protection in Slovenia and France, where user charges in the form of co-insurance apply to most health services and there are only limited exemptions and no cap on out-of-pocket spending. In Slovenia the maximum user charge limits set out in health insurance legislation in 1992 were reached in the space of four years; since then there has been a steady increase in the price of VHI premiums (Milenkovic Kramer 2009). Concerns about VHI affordability (and other issues, discussed below) prompted the government (in 2011) to propose a reform to expand the depth of statutory coverage, which would lead to the abolition of complementary VHI (Rupel 2011).

France traditionally relied on its mutual associations to promote affordable access to VHI (Couffinhal and Franc 2012 forthcoming), but the non-profit share of the market has declined in recent years, while concerns about inadequate financial protection for those without VHI have grown. Means-tested vouchers (CMU-C) and subsidies introduced since 2000 have increased the uptake of VHI, but have not succeeded in reaching all those who might benefit from them. In 2008 nearly 4 million people did not have VHI (Perronnin et al 2011). The most commonly cited reason for not having VHI among those not eligible for CMU-C who would have liked voluntary cover was 'lack of means' (42% of respondents); among the general population the most commonly cited reasons for loss of voluntary cover were 'financial problems' and 'becoming unemployed' (20% and 15% of respondents, respectively) (IRDES 2011a). Rises in VHI premiums, partly reflecting steady increases in statutory user charges, have not been matched by a concomitant rise in the level of VHI benefits (Chevreul and Perronnin 2009). This suggests an aggregate reduction in the quality of VHI coverage in France and, therefore, in the degree of financial protection it provides.

Substitutive VHI is heavily regulated in Germany and efforts to ensure access to this type of VHI have grown since the mid 1990s, when the government first began to make it more difficult for those who opt for substitutive VHI to return to the GKV and therefore needed to ensure that those reliant on VHI had access to affordable cover of good quality. The earlier regulation was limited in achieving its goals. VHI premiums more than tripled between 1986 and 2006, rising almost twice as fast as

increases in statutory contributions (Grabka 2006). Cost sharing in VHI has also increased. Between 2001 and 2005 the proportion of substitutive VHI policy holders opting to pay deductibles in return for lower premiums rose continuously, with older people more likely to have higher deductibles than younger people (contrary to what economic theory would predict) (Grabka 2006). In 2005 5% of those with substitutive VHI (about 350,000 people) were found to be paying premiums that were higher than the maximum GKV contribution (Grabka 2006). The government introduced further regulation in 2009 (Table 7), including a cap on deductibles. However, the maximum deductible permitted in substitutive VHI is €5,000 per year, which is very limited in terms of protection when compared to the cap on out-ofpocket payments for publicly financed care, equivalent to 2% of an individual's annual income or 1% for people with chronic conditions (Busse 2011 in press). Two per cent of income for a person with earnings equal to the threshold for opting out (€44,550 in 2011) would be around €900. Thus, the dvel of financial protection available in the GKV is much higher than in the VHI market.

Where substitutive VHI is not so tightly regulated, it seems more likely that people who rely on it for access to health care will lack adequate financial protection, particularly if they have pre-existing conditions. For example, migrant workers buying substitutive VHI in the Czech Republic are not covered for immunisation, childbirth or chronic conditions such as HIV/AIDS and mental health problems, and must pay out of pocket for these essential services (Dlouhy 2009).

In complementary VHI markets covering excluded services the absence of regulation may reflect judgements about the likelihood of people incurring catastrophic costs when in need of services such as dental care and physiotherapy. However, comparative research indicates that the use of dental care is heavily skewed in favour of richer people in many OECD countries, suggesting that poorer people may face financial and other barriers to access (van Doorslaer et al 2006; Võrk et al 2009). The same research finds income-related inequality in the use of dental care in OECD countries to be lowest in the Netherlands, which suggests that the very high take-up of complementary VHI among the Dutch population contributes to financial protection (van Doorslaer et al 2006). Open enrolment is not a formal rule in the Dutch VHI market but in 2006 and 2007, under pressure from parliament, insurers

agreed collectively not to reject applications for cover (Roos and Schut 2011). The agreement was not renewed in 2008 and insurers are making increasing use of health questionnaires in scrutinising applications and setting premiums (Roos and Schut 2011). If access to VHI becomes more difficult, its contribution to financial protection may fall.

Although VHI is critical to financial protection in Germany, and probably also for regular users of health care in France and Slovenia (where statutory user charges are high and there is no cap on out-of-pocket spending on health), there is evidence to suggest that the quality (depth) of VHI coverage has declined in France and Germany in the last five years. Policy makers in all three countries have been sufficiently concerned about financial protection to introduce extensive regulation of VHI (Germany and Slovenia) and significant means-tested tax subsidies (France), or to propose major reform of statutory user charges (Slovenia).

Equity in financing and use of health care

Health policy aims to promote a more even distribution of the burden of financing the health system, often by requiring richer people to pay more for health care, as a proportion of their income, than poorer people. Equity in financing health care should be considered alongside equity in the use of health care because a health system may be highly progressive in terms of financing, but exhibit financial and other barriers that restrict access to health care for some groups of people (Smith 2010; Smith and Normand 2009).

There is no recent comparative research on equity in financing health care in Europe. However, it is plausible to assume that substitutive VHI will lower equity in financing where those who are not covered by the statutory scheme do not make financial contributions to it, particularly if they are wealthier and would therefore have made higher than average income-based contributions. Earlier international research confirms this assumption (Wagstaff et al 1999). It is also plausible to assume that the larger the proportion of the population covered by VHI, the more regressive its effect is likely to be, as demonstrated by Wagstaff et al (1999) and more recent analysis of equity in financing the Irish health system (Smith 2010).

In France the introduction of vouchers for low-income households (CMU-C) may have improved equity in financing complementary VHI covering statutory user charges. Nevertheless, VHI in France remains regressive. Survey data found that in 2006 the cost of paying for voluntary cover accounted for 3% of household income for the richest quintile versus 10% for the poorest quintile (Kambia-Chopin et al 2008). Tax subsidies that are not targeted at poorer households are generally regressive because VHI tends to favour richer groups; they are highly regressive if provided at the marginal rate of taxation, which means that higher-rate tax payers receive larger subsidies (Sheils and Haught 2004).

Health care use is considered to be equitably distributed when it is based on need rather than other factors such as socio-economic status. Socio-economic status has a clear effect on the likelihood of having VHI in many countries (Paccagnella et al 2008)*. In France there is good evidence of variation in the likelihood of having VHI and the quality of VHI coverage by socio-economic status (Saliba and Ventelou 2007). Prior to the introduction of CMU-C, only 72% of unskilled workers were covered by VHI compared to 93% of those in managerial, academic and professional positions (Bocognano et al 2000; Sandier et al 2004). Additionally, over 60% of those earning at least €1,220 per month had an average or high level of VHI cover (providing good financial protection), compared to only about 20% of those earning less than €610 per month (Chevreul and Perronnin 2009). CMU-C has not had a significant impact on these trends. Survey data show that 97% of people in the top two income quintiles were covered by VHI in 2008 compared to 88% in the lowest quintile and 84% among people who had never worked (IRDES 2011a). Among households not eligible for CMU-C, the trend was even more marked, with 97% of those in the top two income quintiles covered by VHI versus only 65% in the lowest quintile. Similar results have been found for supplementary VHI in Ireland (Smith 2010; Smith and Normand 2009). These confirm the findings of earlier research indicating that the probability of having VHI increased with income in the four countries studied (Ireland, Italy, Portugal and the United Kingdom) (Jones et al 2006).

Variations in health care use among those with and without VHI manifest themselves in three ways: differences in the frequency of using health services, differences in waiting times for treatment and differences in the quality of care received. Comparative research based on data from the second half of the 1990s found that VHI was positively associated with a higher probability of visiting a specialist in the four countries studied (Ireland, Italy, Portugal and the United Kingdom) (Jones et al 2006). Further research using data from 2000 found that specialist visits favoured richer groups in OECD countries and were particularly pro-rich in Portugal, Finland, Ireland and Italy, all countries in which supplementary VHI (and in Portugal's case out-of-pocket payments) play a significant role in providing access to specialists (van Doorslaer et al 2006). Survey data from 2004 indicate that older people with VHI use health services more frequently than older people without VHI (Paccagnella et al 2008). The almost universal VHI cover of dental care in the Netherlands (unique in the European Union) seems to have a positive effect on equity in dental care use; the study found inequality in the use of dental care to be lowest in the Netherlands. The following paragraphs summarise the findings of national research from Austria, France, Germany and Ireland.

Research has consistently shown that in France those without VHI use health services less frequently than those with VHI (Figure 4), even though their selfreported health status is worse (Figure 5) (Buchmueller et al 2003; Perronnin et al 2011). A further equity issue in France concerns discrimination against CMU-C beneficiaries by doctors. Because CMU-C does not reimburse patients the difference between collectively negotiated fees and extra billing by doctors (in contrast to normal complementary cover), some doctors appear to refuse to treat CMU-C beneficiaries (Chevreul and Perronnin 2009). Fear of not being treated is one of the reasons people give for purchasing complementary VHI privately even when they are eligible for free CMU-C cover (Perronnin et al 2011). Other reasons given include good health (among younger people), linguistic barriers (among non-native French speakers), embarrassment and fear of being stigmatised.

The volume of research available in France is not matched in Slovenia, the other large market for complementary VHI covering statutory user charges. However, anecdotal evidence suggests that people without VHI in Slovenia sometimes face barriers to accessing publicly financed care due to fears on the part of providers about patients not being able to pay the necessary user charges (Milenkovic Kramer 2009).

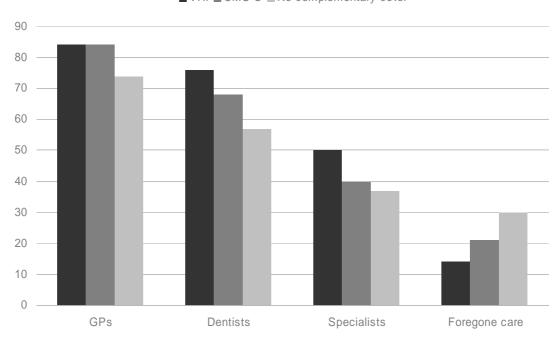
Providers in Germany generally receive substantially higher fees for treating privately insured patients and there have been concerns about the effect of payment differences on equity in the use of health care. Research based on survey data of older people found a significantly higher intensity of use of specialist care among men with private cover (Gruber and Kiesel 2010). Other research has found significant variation by coverage status in waiting times for outpatient specialist appointments (Schellhorn 2007), with GKV members waiting on average about three times longer than the privately insured (Lüngen et al 2008)²³. Studies also show that the privately insured have faster access to patented and innovative drugs than GKV members (Krobot et al 2004; Ziegenhagen et al 2004). There is no evidence of the impact of differential access on health outcomes and evidence of the impact on user satisfaction is inconclusive (Mielck and Helmert 2006; Schellhorn 2007).

Better access to hospital care is cited as a key reason for purchasing supplementary VHI in Ireland (Nolan 2006) and survey data show significantly shorter waiting times for inpatient care, outpatient consultations and day case procedures among those with VHI (Tussing and Wren 2006). As Smith (2008) has noted, the value of VHI to such a large proportion of the population (around 50%) suggests that non take-up of VHI among poorer households may be linked to lack of affordability. Concern about waiting time differences led the government to set up a National Treatment Purchase Fund in 2002 to purchase private care in Ireland and abroad on behalf of publicly financed patients waiting for extended periods of time (McDaid and Wiley 2009; Smith 2010). There are also concerns about differences in access to specialists, with anecdotal evidence suggesting that VHI-financed patients are more likely than publicly financed patients to receive care from specialists (as opposed to more junior hospital doctors) (Turner 2009).

²³ Differences in waiting time between the two groups ranged from 24.8 working days for a gastroscopy to 17.6 working days for an allergy test (including pulmonary function test) and 4.6 days for a hearing test (Lüngen et al 2008).

Austrian survey data show that waiting times are four times longer for publicly financed patients than for VHI-financed patients for cataract surgery, three and a half times longer for knee operations and twice as long for intracardiac catheterisation (Statistik Austria 2007). Given that average waiting times for these procedures are 100 days, 97 days and 28 days respectively, these differences can be substantial.

Figure 4 Variation in access to care by type of care and coverage status in France, 2008



■VHI ■CMU-C ■No complementary cover

Source: Perronnin et al (2011)

Note: % visiting a GP or specialist or foregoing care in the last 12 months; % visiting a dentist in the last 24 months

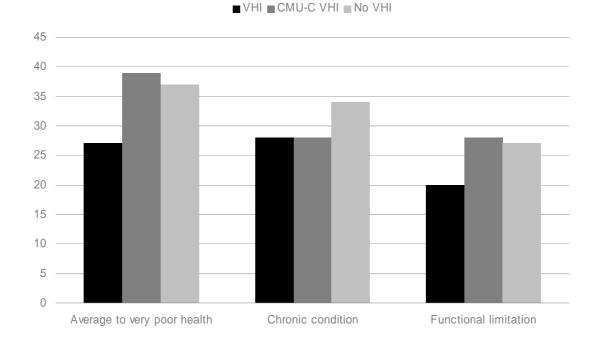


Figure 5 Variation in health status by coverage status in France, 2008

Supplementary VHI has generated concerns about 'two-tier' health care in other countries such as Denmark, Finland, Italy, Latvia, Poland, Portugal, Spain and the United Kingdom*. The main reasons for differential access in the countries reviewed here include access to treatment in private facilities, which allows those with VHI to bypass waiting lists for publicly provided care, and the incentives facing providers, which encourage them to prioritise VHI-financed patients regardless of the sector in which care is actually provided.

Although there is good research linking VHI with access to health care based on factors other than need for health care, what is lacking is evidence of any negative impact on health outcomes. Even so, VHI's role in skewing the distribution of health services away from need may be a cause for concern about efficiency in the use of resources, as discussed in the next section.

Incentives for efficiency and quality in health care delivery

The extent to which VHI contributes to efficiency has not been subject to much research and is therefore difficult to establish. Economic theory suggests competition

Source: Perronnin et al (2011)

between insurers will enhance efficiency if people can choose and switch insurer with ease and without incurring significant costs, if competition is based on price and quality rather than risk selection, and if insurers have tools to influence health care costs and quality (Enthoven 1988). This section therefore considers the extent to which these conditions hold in VHI markets. If consumer mobility is limited and competition is based on risk selection, insurers are unlikely to bear much financial risk and will therefore lack incentives to enhance efficiency. The section also considers different ways in which the failure to align incentives across VHI and statutory health insurance can undermine the efficiency of public spending on health.

In the absence of risk equalisation schemes, voluntary insurers in most countries have incentives and ample opportunity to select risks*. They can generally reject applications for cover, charge high-risk individuals higher premiums, exclude cover of pre-existing conditions and refuse to renew contracts. As a result of these freedoms for insurers, older people and people with pre-existing conditions are particularly likely to face barriers to switching. Thus, while research on financial and other barriers to switching in VHI markets is more or less non-existent, it is plausible to conclude that switching incurs significant transaction costs for some groups of people. In Germany until recently it was not possible for ageing reserves to be transferred from one insurer to another and as a result there was almost no consumer mobility in the substitutive VHI market; competition focused on new entrants (those leaving the GKV to take up VHI) (Thomson and Mossialos 2006).

Consumer mobility may also be limited if VHI products are highly differentiated, which lowers transparency and increases transaction costs (Office of Fair Trading 1997). During the 1990s there were concerns in several countries about the lack of transparency in VHI markets and the potential for consumer detriment (Bundesaufsichtsamt für das Versicherungswesen 2001; Mossialos and Thomson 2004; OECD 2004b; Office of Fair Trading 1998). Product differentiation now characterises most VHI markets (the exceptions are Bulgaria, Cyprus, Lithuania, Malta and Slovenia)*. In some countries central agencies, consumer associations or independent websites and other media have established centralised sources of comparative information to help people choose VHI cover (the Netherlands, Italy, Ireland, Finland and France)*. These may make price comparison easier.

Due to their ability to select risks and limited consumer mobility for some groups of people, it is reasonable to conclude that many voluntary insurers lack incentives to enhance efficiency. As a result, it is not surprising that so few insurers seem to engage in efforts to generate efficiency gains through, for example, better purchasing. Voluntary insurers usually have access to a much wider set of purchasing tools than their statutory counterparts (for example, freedom to negotiate provider fees on a case by case basis, to contract providers selectively or to integrate vertically with providers), but they rarely use them (Table 5); nor do they tend to make use of purchasing tools more frequently used in statutory health insurance, such as health technology assessment (HTA) to inform clinical guidelines and coverage decisions. There are one or two exceptions, notably in the UK, where a voluntary insurer was among the first to experiment with patient-reported outcome measures to identify poor-quality care (Maynard 2008).

Voluntary insurers in the European Union frequently favour passive reimbursement of providers, offering them retrospective fee-for-service payment in more or less every case; and the fees they pay providers are either the same as or (much more commonly) higher than the fees paid in statutory health insurance (Table 5). The question is whether higher provider fees result in commensurately better quality of care or better health outcomes. If they do not, they would represent an efficiency loss. In Germany there is no evidence to suggest that the significantly higher fees paid for VHI-financed treatment (sometimes two to three times higher) result in better clinical quality. Private insurers argue that these additional funds indirectly subsidise the costs of outpatient care for GKV members (Niehaus and Weber 2005), but there is no evidence to support such a hypothesis and research showing substantially longer waiting times for GKV members seems to refute it.

Overall, it is difficult to find evidence to support the idea that voluntary insurers are actively engaged in trying to enhance efficiency and quality in health care delivery, particularly in the largest markets. Of more concern for public policy, however, is the way in which failing to align incentives across VHI and statutory health insurance can undermine the efficiency of public spending on health. The following paragraphs highlight three areas in which incentives are often not aligned: value-based benefit design, direct and indirect tax subsidies for VHI, and conditional sale of VHI and statutory health insurance.

Research shows that user charges are a blunt policy tool, reducing the use of appropriate and inappropriate care in almost equal measure (Chernew and Newhouse 2008; Lohr et al 1986). Recognising this, statutory cost sharing policy in many countries has often exempted or offered reduced charges to children, poorer households and people with chronic conditions (Thomson et al 2009b). Some countries have also tried to apply user charges selectively, with the aim of steering patients towards health care that is 'high value' (cost-effective) and away from treatment or patterns of use that are 'low value' (Fendrick and Chernew 2006). Several countries adopt this so-called value-based approach for pharmaceuticals to discourage people from using less effective drugs, including France (Chevreul et al 2010). Some countries have also applied the approach to other areas to encourage people to obtain referrals to specialists and adhere to care protocols (Thomson et al 2010a).

Complementary VHI undermines the value-based approach where it covers all or almost all cost sharing, as in France and Slovenia. In France it also conflicts with the more fundamental aim of statutory user charges, which is to moderate demand for health care (Buchmueller et al 2003). In response to this latter issue, the French government introduced (in 2008) small minimum deductibles that all except children, very low-income patients (including those eligible for CMU-C) and pregnant women must pay at the point of use ($\notin 0.50$ per prescription and $\notin 1$ per doctor visit) (Chevreul et al 2010). The government has tried to encourage VHI not to cover these flat-rate charges by exempting insurers who agree not to cover them from paying insurance premium tax, but the exemption has been found to contravene EU competition rules (European Commission 2011b). Recent research suggests that the deductibles create financial barriers to access for low-income people and people with poor health, even though they are small and subject to an annual out-of-pocket cap, and in spite of exemptions (Kambia-Chopin and Perronnin 2010). In Slovenia the government has also expressed concern about VHI undermining efforts to enhance efficiency in statutory health insurance (Ministry of Health 2011).

In some countries VHI allows people to bypass gatekeeping and access specialists without referral. Research shows that while the privately insured in Germany visit GPs at a much lower rate than GKV members (55% vs 81%), as befits their healthier risk profile (Table 8), they visit specialists at almost the same rate (45% vs 47%) (Mielck and Helmert 2006). This may indicate a degree of inappropriate use of specialists among those with VHI, a phenomenon also observed in Ireland, Italy, Portugal, Spain and the United Kingdom (Jones et al 2006; Rodríguez and Stoyanova 2004). In Austria it is reported that VHI-financed patients sometimes receive too much care, being subject to multiple laboratory tests or being kept in hospital for longer than is medically necessary (Url 2006).

 Table 8 Comparison of health status and health care use among the publicly and privately insured in Germany, 2006

Health status and health care use	Mandatory GKV (those with earnings under the threshold)	Voluntary GKV (those with earnings above the threshold)	Mandatory PHI (those who have opted for VHI and are aged >55) ²⁴	Voluntary PHI (those opting for VHI and aged <55)
Been ill during the last three months	46%	42%	47%	28%
Chronically ill	47%	33%	45%	23%
Regularly take medication	50%	35%	54%	21%
Number of visits to a doctor in a year	6.6	4.4	6.2	3.2

Source: Leinert (2006b)

In any VHI market there is a real risk that direct tax subsidies for VHI will not be self financing. Where this is the case, the government needs to consider whether the use of public resources to subsidise VHI represents good value. Research has estimated that in order for tax relief for supplementary VHI in the United Kingdom in the 1990s to have been self financing, the market would have had to have grown by 28% (Emmerson et al 2001). When the relief was abolished in 1997 it saved the government £135 million per year; although it also reduced demand for VHI, it is unlikely that the costs to the National Health Service in that year of providing health care to the 6,600 individuals who gave up VHI would have been equal to £135 million, particularly as UK VHI policies only cover acute care (Emmerson et al 2001; Foubister 2009).

²⁴ Those who are not permitted to return to the GKV.

Indirect subsidies to VHI may also lower value in public spending on health. The only recent attempt to quantify the magnitude of both direct and indirect tax subsidies for VHI comes from Ireland. The Irish government has in the past argued that VHI helps to ensure 'the effectiveness and profitability of the public health insurance scheme by reducing pressure on the costs which it would otherwise bear, particularly as regards care provided in public hospitals' (European Court of Justice 2008: paragraph 204). However, research suggests that the public budget provides a substantial indirect subsidy to VHI in addition to the direct subsidy it contributes through tax relief for VHI (20% of the premium) (Turner and Smith 2012 forthcoming). About half of all VHI-financed care is delivered in public hospitals, but public hospital charges for VHI-financed care do not cover the full economic cost of that care; therefore, the total public subsidy to VHI-financed treatment in public hospitals is estimated to amount to over 60% of the cost of care (Smith 2008 cited in Turner and Smith 2009 forthcoming). This estimate does not account for: the fact that VHI-financed patients in private facilities are treated by public doctors who have been trained at public expense; the longer waiting times for inpatient care publicly financed patients face due to provider incentives to prioritise VHI-financed patients; or the government having to purchase private care in Ireland and abroad on behalf of publicly financed patients waiting for extended periods of time (through the National Treatment Purchase Fund set up in 2002), which is more expensive than treating patients in public hospitals (McDaid and Wiley 2009; Smith 2010). Consequently, while tax relief for VHI cost the Irish government \in 321 million in 2008 (roughly equivalent to 2.5% of public spending on health, 8.7% of private spending on health and 25.4% of VHI spending on health) (Revenue Commissioners 2009; WHO 2011b), the full public cost of direct and indirect subsidies for VHI is much higher.

In Ireland financial flows from the government to VHI and, by extension, to a wealthier part of the population are visible due to the fact that the market is relatively large (covering half of the population). But the elements of public policy design that allow incentives to be skewed in this way are present in other countries, among them providers being paid significantly more to treat VHI-financed patients, public doctors being able to treat VHI-financed patients in public hospitals, VHI subscribers being

able to choose to be treated in public hospitals, and public hospitals failing to charge private insurers the full economic cost of treating these patients.

Finally, allowing the same insurers to sell statutory and voluntary cover in countries where people have choice of statutory insurer (possible in Belgium, the Czech Republic, Germany, the Netherlands and Slovakia) may limit consumer mobility in statutory health insurance. Voluntary insurers may (threaten to) cancel voluntary cover or charge higher premiums for it when an individual wants to switch to another insurer for statutory cover (Paolucci et al 2007). This is unlikely to be problematic in the Czech Republic or Slovakia because the VHI market in those countries is marginal. It is much more likely to be an issue in Belgium, Germany and the Netherlands, where VHI plays a larger role. There is some evidence to suggest socalled conditional sale occurs in the Netherlands (even though it is prohibited in law); research also indicates that a small but growing number of Dutch people, particularly those with lower health status, are deterred from switching to an alternative insurer for statutory cover because they fear losing their voluntary cover (Roos and Schut 2011). This may have the effect of lowering statutory insurers' incentives to enhance efficiency, undermining a key aim of insurer competition.

Administrative costs

It is difficult to compare the administrative costs of statutory and voluntary coverage due to the absence of reliable data. Where these data are available, they suggest that statutory coverage incurs much lower administrative costs, of around 5% to 10% of revenue (OECD 2010), in comparison to VHI (Figure 6). Higher administrative costs among voluntary insurers may be attributed to the duplication of tasks necessitated by fragmented pooling and the extensive bureaucracy required to assess risk, rate premiums, design products and review claims. The VHI administration in Slovenia employs around 400 people, for example, whereas the statutory scheme employs around 800 people, and yet VHI accounts for only 13% of total spending on health, whereas the statutory scheme accounts for about 70% (Rupel 2011). Voluntary insurers also incur additional expenses through advertising, distribution, reinsurance and the need to generate a profit or surplus. Following liberalisation of the VHI market in Ireland, the administrative costs of the dominant insurer rose from 2% of

premium income in 1996 (Light 1998) to 8.5% in 2007 (Turner 2008). In EU countries these additional costs cannot be justified on the grounds that voluntary insurers are more innovative than their public counterparts in devising mechanisms to improve quality and efficiency. Most attempts by insurers to contain costs operate on the demand side, through cost sharing, rather than through improved purchasing*. The very high administrative costs incurred by voluntary insurers have been controversial in Poland (Kozierkiewicz 2009), and the cost of administering meanstested vouchers for VHI has been a concern in France (Perronnin et al 2011).

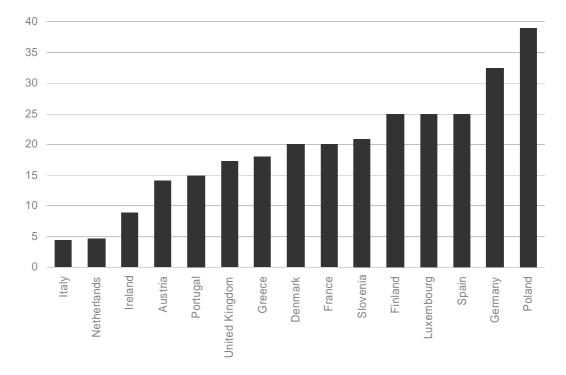


Figure 6 VHI administrative costs as a percentage of premium income, selected EU countries, 2008

Source: Survey responses

Notes: Denmark: data for commercial insurers; the figure for non-profit insurers is much lower, at 4.6%; Germany: some of these costs include provisions for ageing reserves; Ireland: data for 2006; Luxembourg: data for commercial insurers; Netherlands: data for 2007; Poland: data for 2007; Spain: administrative costs range from 20-30%; UK: average of BUPA's and AXA PPP's administrative costs as a proportion of their respective premium incomes (2003).

Discussion

How have markets for VHI developed since 2000?

VHI market growth has been mixed. No 'new' markets have emerged since 2000, but some old ones have disappeared and others have grown. Following the demise of substitutive VHI in the Netherlands (in 2006) and Belgium (in 2008), Germany now has the only significant substitutive market. Complementary VHI covering user charges has grown in France due to the introduction of government vouchers and other subsidies targeted at low-income households, but had already reached saturation point in Slovenia by the mid 1990s. Although Hungary's market for complementary VHI covering excluded services has grown as a result of generous (but highly regressive) tax subsidies, it remains marginal. Some supplementary markets have experienced rapid growth, mainly due to favourable tax incentives (Denmark, Ireland), an increase in the purchase of VHI as an employee benefit (Belgium, Denmark, Sweden) or lack of confidence in the public system due to waiting times for elective surgery (Denmark, Ireland, Sweden).

Commercial insurers now have a larger share of the VHI market than in 2000 and often play a dominant role in supplementary markets. Non-profit insurers continue to enjoy a dominant market position in a handful of countries, particularly those in which complementary VHI plays a significant role. In some countries risk selection by commercial insurers has triggered greater regulation (Slovenia), while competition between commercial and non-profit insurers has led to legal challenges at national and EU levels (Belgium, Ireland, France and Slovenia). VHI markets are highly concentrated in many countries and some markets have become more concentrated in the last ten years. The effect of market concentration on competition is not clear. Buyer characteristics have not changed much since 2000. People with higher socio-economic status are still generally more likely to have VHI than people with lower socio-economic status. The role of groups in purchasing VHI has grown in some countries and declined in others but is still significant overall.

VHI continues to be a generally profitable business in which insurers bear minimal financial risk. The price of VHI to consumers is lowered by tax subsidies in many

countries and insurers in all except some of the largest markets are free to reject applications for cover, charge premiums based on age and health status, charge additional premiums for covering dependants, exclude cover of pre-existing conditions, terminate policies, differentiate products, set limits to the benefits they provide and impose both waiting periods before benefits can be claimed and cost sharing. As a result, insurers in most VHI markets have limited incentives to enhance efficiency in organisation, administration or health care delivery. Many simply reimburse policy holders, often paying providers fees that are higher than the fees paid in statutory health insurance, and few make use of the purchasing tools at their disposal.

How has public policy towards VHI changed since 2000?

Measured along a single dimension (the use of tax incentives to encourage take up of VHI), there was a public policy trend away from supporting VHI in the 1990s. Since then this trend has been reversed, with 19 out of 27 countries offering some form of tax incentive for VHI. However, looking at a wider range of factors influencing demand for VHI reveals a more complex picture.

Following the collapse of the Soviet Union in the early 1990s many of its former satellites embraced market mechanisms in the health sector and all introduced legislation to allow VHI (Kornai and Eggleston 2001; Kutzin et al 2010; Thomson 2010). In spite of VHI's lacklustre performance in these countries (Slovenia excepted), public debate has continued to focus on encouraging the development of VHI and, in some cases, on involving voluntary insurers in the provision of statutory health insurance*. This stands in contrast to the expansion of statutory coverage in other (mainly western European) countries. Increases in the breadth of statutory coverage have diminished the role of substitutive VHI in Belgium and the Netherlands and, to a much lesser degree, in Germany, while proposed increases in the scope and depth of statutory coverage are intended to diminish VHI's role in Ireland and Slovenia.

What seems, at first glance, to be an east-west divide in public policy towards VHI may actually be a division between smaller and larger VHI markets. With the

exception of Belgium, expansions in statutory coverage have taken place in countries with the largest markets for VHI (in terms of contribution to total spending on health) and government intervention has intensified in these markets since 2000. Policy developments in Belgium were heavily influenced by EU infringement proceedings (Palm 2009; Van de Voorde 2011). In the other countries, however, policy developments arose in response to the acknowledged limitations of VHI and concerns about its negative impact on health system performance. It is plausible to speculate that as these already large VHI markets grew in size, the problems associated with them became more visible, putting pressure on the government to take action. Growing fiscal constraints may have added to this pressure, allowing policy makers to weigh the costs of further intervention in the VHI market against the benefits of expanding statutory coverage.

Since 2000 EU law-related tensions have increased, affecting VHI markets in Belgium, France, Ireland, the Netherlands and Slovenia. Legal action has usually been prompted by insurer rivalry (often rivalry between commercial and non-profit insurers). The EU-level framework for VHI restricts material regulation to substitutive markets. However, analysis suggests that on one hand the framework fundamentally underestimates the contribution VHI makes to financial protection in non-substitutive markets, resulting in inappropriate legal action, but that on the other hand, this may not be such an issue since the European Court of Justice seems reluctant to challenge national sovereignty with respect to general good measures for services declared to be of general economic interest (Thomson and Mossialos 2010).

Analysis also suggests that the European Commission's original premise about the effectiveness of deregulation in the VHI sector was misguided. There is no evidence of VHI market deregulation and competitive pressures resulting in lower prices for consumers*. Rather, the price of VHI has continued to rise and in some cases higher premiums have been accompanied by a decline in the quality of VHI coverage; in other words, VHI seems to have become worse not better value for money. At the same time it is important to note that greater accessibility to VHI has almost exclusively arisen through government intervention and not as a result of market forces. Thus, while relying on financial regulation may suffice for supplementary VHI, it is not appropriate for substitutive VHI and complementary VHI covering user

charges. In future public policy should focus more on transparency and consumer protection issues and, in non-supplementary VHI markets, on the quality of VHI coverage.

How does VHI affect health system performance?

VHI appears to be critical to financial protection in France, Slovenia and Germany. It is difficult to estimate the extent to which VHI in these three countries provides adequate financial protection, but there is some evidence to show that the quality of VHI coverage (the generosity of benefits) has declined in France and Germany in the last five years. Policy makers in all three countries have been sufficiently concerned about financial protection to introduce extensive regulation of VHI (Germany) and significant means-tested tax subsidies (France), or to propose major reform of statutory user charges (Slovenia). In other countries VHI has not developed to fill significant gaps in statutory coverage or is too expensive for many of those who are likely to need it (since levels of population coverage are low) and is therefore unable to address financial protection problems.

VHI is likely to be regressive in substitutive markets and where it covers a substantial proportion of the population. Research confirms it is regressive in France and Ireland. VHI markets of all types are found to skew the distribution of health care away from need, largely as a result of rules allowing those with VHI to bypass waiting lists for publicly provided care and the incentives facing providers, which encourage them to prioritise VHI-financed patients. Clear differences in patterns and frequency of use and waiting times between those with and without VHI are not justified by greater need among those with VHI, and are therefore a cause for concern about efficiency in the use of health resources.

As already noted, EU markets for VHI do not seem likely to have a positive effect on efficiency in the health system due to the absence of appropriate incentives for insurers. Of more concern for public policy is the way in which failing to align incentives across VHI and statutory health insurance can undermine the efficiency of public spending on health – for example, by undermining value-based benefit design,

through direct and indirect tax subsidies for VHI, and through conditional sale of VHI and statutory health insurance.

Growing government regulation to promote access to VHI in the largest markets has not allayed concerns about financial protection for those without VHI or declining financial protection for those with VHI. Affordability is a persistent problem even where VHI is heavily regulated or subsidised. Concerns about the impact of VHI on equity in the use of health care, and the potential for VHI to undermine efficiency in public spending on health, have also grown in the largest markets. What is striking, however, is just how many of VHI's negative effects on health system performance can be attributed to the quality of public policy towards VHI. Poor policy design enables and exacerbates risk segmentation, permits public resource allocation to be skewed in favour of those with VHI, and fails to ensure that incentives are aligned across VHI and statutory health insurance. Policy makers must accept some of the responsibility for failing to create an environment in which insurers have incentives to enhance efficiency and for allowing public resources to subsidise VHI (directly or indirectly) when such subsidies are of questionable value.

Conclusions

Measured in terms of contribution to total spending on health, VHI's role in EU health systems has grown in many countries in the last ten years (sometimes from a very low base), but there has been no clear trend and some significant markets have disappeared as governments have expanded statutory coverage. In the next few years other markets may decline in significance if proposed reforms in Ireland and Slovenia are implemented. Over time VHI markets have become more commercial and more concentrated and voluntary cover continues to favour wealthier and better educated households.

VHI has a mixed impact on health system performance. Although it provides critical financial protection in a handful of countries, its protective quality has declined over time, and in many other countries it has completely failed to address significant gaps

in statutory coverage. Some of VHI's negative effects on other dimensions of performance – for example, its propensity to make health financing more regressive and to skew the distribution of health care away from need, its potential to undermine efficiency in public spending on health and its high administrative costs – are particularly visible in the larger markets. Growth in these markets has been accompanied by increasing government intervention to alleviate fiscal pressures caused by risk segmentation, to secure access to VHI, and to redress VHI's effect on efficiency in public spending on health.

Many of the problems associated with VHI are caused or exacerbated by poor policy design. This may stem from limited understanding of or lack of attention to the interaction between statutory and voluntary health insurance and often results in a failure to establish appropriate institutional arrangements. Better understanding of how VHI interacts with and affects the rest of the health system will enable policy makers to identify the appropriate role for VHI and should contribute to stronger policy design. Stronger policy design can also be achieved if policy makers have clarity about health policy goals and are able to align incentives in pursuit of these goals.

Finally, policy makers must demonstrate the political and technical capacity to regulate VHI to secure both financial and consumer protection. A good starting point would be to ensure that the regulator has a grasp of the specificities of health insurance markets or, if necessary, to establish a dedicated health insurance regulator. This also applies to those responsible for determining the EU-level regulatory framework. The current framework reflects a fundamental misunderstanding of the nature of markets for VHI. It is therefore no surprise that the European Commission's expectations for deregulation – competitive pressure enhancing choice and lowering prices – have not been fulfilled. Oversight should also include systematic monitoring and evaluation of the VHI market and its interactions with and impact on the health system. Regular data collection and analysis of VHI are the exception rather than the norm and there are only a handful of countries in which there is a good evidence base for policy development.

Study 2: Private health insurance and the internal market

Paper provenance and peer review

This paper is primarily the work of the PhD author. In 2007 it was published as:

Thomson, S. and E. Mossialos (2007). Regulating private health insurance in the European Union: the implications of single market legislation and competition policy. *Journal of European Integration* 29(1): 89-107.

Prior to publication in the journal it was subject to double-blind peer review by two referees. An extended and updated version of the journal article was subsequently included in an edited book published by Cambridge University Press in 2010:

Thomson, S. and E. Mossialos (2010). Private health insurance and the internal market. *Health systems governance in Europe: the role of EU law and policy*. E. Mossialos, G. Permanand, R. Baeten and T. Hervey. Cambridge, Cambridge University Press: 419-460.

It is the book chapter that is presented in the thesis. The book chapter was reviewed by two of the book's editors (Rita Baeten, Senior Policy Analyst at the OSE, European Social Observatory, Brussels and Tamara K. Hervey, Professor of Law at the University of Sheffield) and an expert in EU law (Willy Palm, formerly the Managing Director of AIM, the International Association of Mutual benefit societies). It also benefited from comments from Wolf Sauter (Professor of Healthcare Regulation, Tilburg Law and Economics Center).

ST and EM devised the paper and the book chapter. ST reviewed the literature and drafted the paper and the book chapter. EM commented on drafts of the paper and the book chapter.

Introduction: private health insurance and EU law

In 1992 the legislative institutions of the European Union (EU) adopted regulatory measures in the field of health insurance. The mechanism affirming the free movement of health insurance services – the Third Non-life Insurance Directive (from here on referred to as 'the Directive') – does not apply to health insurance that forms part of a social security system (European Commission 1992). But all other forms of health insurance, which the paper refers to as 'private health insurance', fall within the Directive's scope.

This paper examines the implications of the Directive, and some aspects of EU competition law, for the regulation of private health insurance in the European Union. The EU-level regulatory framework created by the Directive imposes restrictions on the way in which governments can intervene in markets for health insurance. However, there are areas of uncertainty in interpreting the Directive, particularly with regard to when and how governments may intervene to promote public interests. As in most spheres of EU legislation, interpretation largely rests on European Court of Justice (ECJ) case law, so clarity may come at a high cost and after considerable delay.

The paper also questions the Directive's capacity to promote financial and consumer protection in health insurance markets. In many ways the Directive reflects the health system norms of the late 1980s and early 1990s, a time when boundaries between 'social security' and 'normal economic activity' were still relatively well defined in most member states (White 1999). Today these boundaries are increasingly blurred – the new health insurance system in the Netherlands is a case in point. As governments look to private health insurance to ease pressure on public budgets or to expand consumer choice, uncertainty about the scope of the Directive and concerns about its restrictions on regulation are likely to grow.

The paper's analysis is based on discussion of private health insurance-related ECJ rulings and cases of infringement of the Directive or other EU rules. Where actual examples are lacking, the analysis is, inevitably, more speculative. The following

sections summarise the main changes brought about by the Directive and its initial impact on regulation of private health insurance in EU member states; examine uncertainty as to when and how governments can intervene in health insurance markets; and conclude with a summary of key points and policy implications.

Regulation and the Third Non-life Insurance Directive

Health insurance attempts to alleviate some of the uncertainty around ill health. We do not usually know if or when we might fall ill; nor do we always know how severe an illness will be or how much it will cost to treat it. By pooling health risks (across groups of people) and resources (over time), health insurance provides protection from the financial risk associated with ill health, making a valuable contribution to social welfare. However, markets for health insurance require regulation to protect consumers and insurers from the potentially negative effects of market failures such as adverse selection and risk selection (Barr 1998). Without government intervention to correct market failures, health insurance would not be easily accessible to people at high risk of ill health, people already in ill health and people with low incomes. Governments in most high-income countries therefore ensure that health insurance is compulsory for the whole population, that contributions are based on income, and that publicly financed 'insurers' (whether sickness funds, private insurers or a national health service) cannot deny cover to any individual.

In contrast to the rules applied to statutory health insurance, the principles of which are broadly convergent across the European Union, there is considerable variation in the regulation of private health insurance. Prior to the introduction of the Third Nonlife Insurance Directive in 1992, the extent to which EU governments intervened in markets for health insurance was largely determined by the role private cover played in the health system. Thus, substitutive private health insurance in Germany and the Netherlands tended to be relatively heavily regulated, mainly to ensure access to private cover for older people and people in poor health, but also to protect the finances of the statutory health insurance scheme, which in both cases covered a disproportionate amount of higher-risk households (Thomson and Mossialos 2006).²⁵ The extent of regulation was also influenced by aspects of market structure, such as the number and mix of insurers in operation (particularly markets dominated by mutual associations) and political ideology.

Two broad approaches to regulation prevailed: minimal financial or prudential regulation focusing on solvency levels, or material regulation emphasising control of prices and products. While both approaches aimed to protect consumers from insurer insolvency,²⁶ material regulation also endeavoured to ensure access to health care through access to health insurance. Under the subsidiarity principle, established in EU law through the European Community Treaty (Article 5 EC), governments were free to decide on the appropriate form of regulation required in a given context. Over the last thirty years, the EU legislature has restricted this freedom by introducing a series of directives aimed at creating an internal market in insurance services (European Commission 1973; European Commission 1988; European Commission 1992). Grounded in the principle of the free movement of services (enshrined in Articles 43 49 and 50 EC), the internal market in insurance services was intended to enhance competition and consumer choice. EU competence in this area comes from the fact that insurance is considered to be an economic activity.

The Third Non-life Insurance Directive created, for the first time, an EU-level framework for regulating health insurance. The first and second generation of insurance directives had been limited to the cover of 'large risks' of a commercial nature, such as aviation or marine insurance and reinsurance (which were considered small enough, in relation to the size or status of their policy holders, not to require special protection) (Mabbett 2000; Merkin and Rodger 1997). 'Mass risks' involving individuals and small businesses were excluded on the grounds that they required special protection because their policy holders would not normally have the ability to judge all the complexities of the obligation they undertook in an insurance contract

²⁵ This is partly due to the way in which these systems are (were, in the Dutch case) designed and regulated. For example, in Germany, the statutory health insurance scheme is attractive to families because it covers dependants for free, whereas private insurers charge separate premiums for all family members. It is also due to risk selection by private insurers.

²⁶ Financial or prudential regulation focuses on ex post scrutiny of an insurer's financial returns on business. Material or contract regulation involves ex ante scrutiny of an insurer's policy conditions and premium rates on the grounds that this eliminates the potential for insolvency.

(Nemeth 2001). The third generation of insurance directives extended the application of internal market legislation to all types of risks, including mass risks such as health insurance.

As a result of the Directive, insurers have full freedom to provide services throughout the European Union, with or without a branch presence. The mechanisms facilitating free movement are 'home country control' (Article 9), a single system for the authorisation and financial supervision of an insurance undertaking by the member state in which the undertaking has its head office; the mutual recognition of systems of authorisation and financial supervision; and the harmonisation of minimum solvency standards (Article 17). ECJ case law confirms that insurance activities fall under the scope of the Directive (Article 2) when they are carried out by insurance undertakings at their own risk with a view to making a profit (European Court of Justice 2000). ECJ case law more broadly (not relating to the Directive) also suggests that activities with an exclusively social purpose involving solidarity are beyond the scope of internal market and competition rules (European Court of Justice 1993; European Court of Justice 2004).

To protect the freedoms outlined above and to prevent barriers to competition, the Directive brought about two key changes for private health insurance. First, the Directive accords primacy to the financial approach to regulation: the requirement for governments to abolish existing product and price controls (Articles 6(3), 29 and 39) renders material regulation redundant and, in some cases, illegal. Second, it requires governments to open markets for private health insurance to competition at national and EU levels (Article 3).

Material regulation in the form of national rules requiring the prior approval or systematic notification of policy conditions, premium rates, proposed increases in premium rates and printed documents insurers use in their dealings with policy holders is no longer permitted (Articles 6(3), 29 and 39). Such rules played an important regulatory function in several countries – notably, France, Germany and Italy. However, most member states amended existing laws or passed new laws to comply with the Directive. Legislative changes generally involved the introduction

of tighter solvency controls. Some also resulted in the loosening or outright abolition of prior approval and systematic notification.

Although the Directive prevents governments from introducing regulatory measures that go beyond solvency requirements, member states do retain limited residual powers to protect policy holders. For example, if the home supervisory authority fails to prevent an insurer from infringing the host country's domestic law, the host supervisory authority may take action (Article 40(5)). More importantly, the host supervisory authority may impose specific measures, in the form of restrictions on insurance contracts, in the interest of the 'general good', where contracts covering health risks 'may serve as a partial or complete alternative to health cover provided by the statutory social security system' (Article 54(1)). Where this is the case, the government can require private insurers to 'comply with the specific legal provisions adopted by that member state to protect the general good in that class of insurance' (Article 54(1)).

Article 54(2) and recitals to the Directive list the types of legal provisions that may be introduced if private cover provides a partial or complete alternative to statutory cover: open enrolment, community rating, lifetime cover, policies standardised in line with the cover provided by the statutory health insurance scheme at a premium rate at or below a prescribed maximum, participation in risk equalisation schemes (referred to as 'loss compensation schemes') and the operation of private health insurance on a technical basis similar to life insurance. Measures taken to protect the general good must be shown to be necessary and proportional to this aim, not unduly restrict the right of establishment or the freedom to provide services, and apply in an identical manner to all insurers operating within a member state.

The German government has used Article 54(1) to justify intervention in its substitutive market, where risk selection by private insurers has prevented some older people and people with chronic illnesses from buying an adequate and affordable level of private cover (Rupprecht et al 2000; Wasem 1995). Regulatory measures include the provision of lifetime cover, the introduction of policies with mandatory pooling, standardised minimum benefits and guaranteed prices. Similar regulatory measures were also present in the Dutch substitutive market prior to 2006.

Private insurers in the German substitutive market are subject to further regulation concerning the way in which they fund cover (on a similar basis to life insurance) and the provision of information to potential and existing policy holders.

In contrast, regulation of many markets for complementary and supplementary cover has tended to focus on ex post scrutiny of financial returns on business to ensure that insurers remain solvent. Insurers are often permitted to reject applications for cover, exclude cover of, or charge higher premiums for, individuals with pre-existing conditions, rate premiums according to risk, provide non-standardised benefit packages and offer annual contracts, while benefits are usually provided in cash rather than in kind. However, there are some notable exceptions – many of them recent – particularly where complementary private health insurance is concerned. Relatively heavy government intervention in markets for complementary or supplementary cover can be found in Belgium, France, Ireland and Slovenia. It is no coincidence that these are also the countries in which regulation of private health insurance has been most problematic from an EU law perspective (see below).

At first sight, the Directive appears to give governments significant scope for regulating private health insurance under the general good principle, which broadly refers to any legislation aimed at protecting consumers (in any sector, not just the insurance sector). But on closer examination interpretation of the principle is shown to be problematic in two areas: first, the issue of what is meant by complete or partial alternative to statutory health insurance; and second, what types of intervention are necessary and proportional. These problems arise because there is no agreed definition of the general good; interpretation relies on ECJ case law. Following complaints about the absence of a definition, the European Commission (from here on referred to as 'the Commission') tried to clarify when and how the general good might be invoked in the insurance sector, but its Interpretive Communication failed to provide new information (European Commission 2002). Calls for further clarification persist on the grounds that the lack of a definition creates legal uncertainty, while the process of testing questionable use of the general good through the courts is prohibitively lengthy and expensive (Mossialos and Thomson 2004). The paper discusses interpretation of the general good in relation to when and how governments can intervene in markets for private health insurance.

When can governments intervene?

There is uncertainty about when the general good can be invoked to justify material regulation, mainly because the Directive does not define what it means by partial or complete alternative to statutory health insurance. How is it possible to distinguish between private cover that falls into this category and private cover that does not? Circumstantial factors suggest that the distinction may hinge on whether or not private health insurance plays a substitutive role. For example, Article 54 was inserted during negotiations prior to the drafting of the Directive at the instigation of the German, Dutch and Irish Governments (Association Internationale de la Mutualité 1999). Perhaps as a result of lobbying by member states with substitutive markets, the regulatory measures outlined in Article 54(2) are an exact match of those that were in place in Germany, Ireland and the Netherlands when the Directive was being negotiated. To date, the regulations applied to private insurers in these three countries have not been challenged by the Commission.²⁷ In addition, a summary of the Directive available on the Commission's web site refers to the Directive having 'specific rules for health cover serving as a substitute for that provided by statutory social security systems' (European Commission 2011c).

Recent policy developments in the Netherlands shed further light on how this distinction might be made. Dissatisfaction with the dual system of statutory cover for lower earners and voluntary private cover for higher earners had led successive Dutch governments to consider the introduction of a single, universal system of health insurance. Some governments favoured a public system, others preferred private options, in spite of concerns about the applicability of internal market rules to a private system (Maarse 2002). In 2006, a universal and compulsory privately-operated system governed under private law came into force. Regulatory measures under the new system include open enrolment, lifetime cover, government-set income-based contributions deducted at source, additional community-rated premiums set by each insurer, a package of minimum benefits in kind or cash defined by the government and a risk equalisation scheme (Hamilton 2003; Ministry of Health Welfare and Sport 2005).

²⁷ Although some aspects of the regulatory environment in Ireland have recently been questioned by the Commission (see below).

Prior to the introduction of the new system, the Dutch Government asked the Commission to clarify whether or not Article 54 could be relied on to justify such extensive regulation (Hoogervorst 2003). The Commission's response came in the form of a letter to the Dutch Minister of Health from the (then) Commissioner for the Internal Market, Frits Bolkestein (Bolkestein 2003). In the letter (the legal status of which is not clear), Bolkestein states that the privately-operated system falls within the scope of the Directive, even though it is compulsory, because the insurers involved are carrying out 'an insurance activity'. However, he notes that the regulatory measures can be justified under Article 54 for two reasons: first, the system, though private, can be construed as constituting a 'complete alternative' to statutory health insurance; and second, the regulations (with some caveats, see below) 'appear necessary to ensure legitimate objectives pursued by the Dutch government' (Bolkestein 2003: 2). The Commission supported this position in response to written questions put forward by Members of the European Parliament in 2005 (McCreevy 2005; McCreevy 2006a; McCreevy 2006b). It also stated that the new Dutch system was 'to be considered as a statutory sickness insurance scheme' (Špidla 2006).

Bolkestein's letter goes on to point out that it would not be proportionate to apply the proposed regulatory measures to 'any *complementary* insurance cover offered by private insurers *which goes beyond the basic social security package of cover* laid down by the legislation' (Bolkestein 2003: 3) (emphasis added). The letter therefore suggests that 'partial or complete alternative' can be understood in terms of the benefits provided by a particular insurance scheme. Substitutive private health insurance constitutes an alternative to statutory cover because it replaces statutory benefits for those who are excluded from some aspects of the statutory system (higher earners in the Netherlands and Ireland) or those who are allowed to choose statutory or private cover (higher earners in Germany). Whether the substitutive cover is a partial or complete alternative depends, presumably, on whether the benefits it provides are 'partial' (for example, cover of mainly outpatient care in Ireland) or 'complete' (cover of outpatient and inpatient care in Germany and the Netherlands). Conversely, complementary and supplementary cover cannot be

construed as alternatives to statutory cover because they offer benefits in addition to those offered by the statutory system.

On the basis established in Bolkestein's letter, material regulation would only be permissible where private health insurance covers the same benefits as those provided by statutory health insurance. But 'partial alternative' could be interpreted in other ways. The logic behind allowing governments to intervene in substitutive markets implies that purely financial regulation of solvency levels will suffice for the purposes of consumer protection but will not be enough to ensure financial protection (access to health care). Bolkestein's letter implicitly assumes that only substitutive private health insurance provides financial protection. But what if other forms of private health insurance also contribute to financial protection? For example, where the statutory benefits package (the 'basic social security package of cover' mentioned by Bolkestein) is relatively narrow or subject to extensive copayments it could be argued that individuals do not have adequate protection from the financial risk associated with ill health unless they purchase complementary private health insurance covering excluded (and effective) services or statutory user charges. In such cases, complementary cover provides a degree of financial protection. Material regulation to prevent private insurers from selecting risks might therefore be justified. Under the Directive, however, rules to ensure affordable access to complementary private cover would be illegal.

The implications of outlawing material regulation of complementary cover depend on various factors, not least the extent to which this form of cover does, in practice, contribute to financial protection. This issue may become more serious in future if markets for complementary cover develop and expand in light of constraints on public funding. For example, in recent years, policy makers across the European Union have intensified efforts to define statutory benefits packages, often putting in place explicit criteria (including cost-effectiveness) to determine whether or not certain procedures should be publicly financed (Gibis et al 2004; Schreyögg et al 2005). Such efforts may implicitly assume that statutory benefits packages can be complemented by voluntary take-up of private insurance covering non-cost-effective services. In practice, however, efforts to set priorities and measure cost-effectiveness tend to be limited by technical, financial and political considerations, making it

easier for governments to exclude whole areas of service, such as primary care, outpatient drugs or dental care, than single interventions of low cost-effectiveness (Ham and Robert 2003). This means that complementary insurance often covers a range of cost-effective, essential services.

Similarly, in some countries, governments have introduced or raised statutory user charges to supplement public resources, again under the assumption that complementary cover will bridge the funding gap. Complementary cover of statutory user charges in France has grown from covering 33% of the population in 1960 to 85% in 2000 (Sandier et al 2004). It now accounts for about 13% of total expenditure on health (Figure 2). Complementary cover of statutory user charges introduced in Slovenia in 1993 now covers over 90% of the population eligible to pay user charges (about 70% of the total population) and accounts for over 11% of total health expenditure (Albreht et al 2002; Albreht et al 2009).

However, greater reliance on complementary cover can create or exacerbate inequalities in access to health care. In France, the likelihood of having complementary cover and the quality (generosity) of that cover have been highly dependent on social class and age, employment and income levels (Blanpain and Pan Ké Shon 1997; Bocognano et al 2000). Research from France and Spain shows that those who do not have complementary cover do not consult doctors and dentists as frequently as those with cover (Breuil-Genier 2000; Rajmil et al 2000). In Slovenia, there are concerns about the affordability of complementary cover and its effect on access to publicly financed health care (Albreht et al 2002; Albreht et al 2009). Anecdotal evidence suggests that doctors may be reluctant to provide publicly financed care to people without private cover in case they are unable to pay the necessary user charges (Milenkovic Kramer 2009). There are also concerns for market stability, as complementary private health insurance covers a disproportionately high number of older people.

Governments in several member states recognise that complementary cover of statutory user charges can contribute significantly to financial protection. In 2000, the French government introduced free complementary cover for people with low incomes (through a scheme known as *Couverture Maladie Universelle*-

Complémentaire, CMU-C), raising the proportion of the population covered to over 92% (Durand-Zaleski 2008). In 2006 it extended favourable fiscal treatment to any private insurers offering open enrolment and community-rated premiums (see below). Since 2005 the Slovenian government has required private insurers to offer open enrolment and community-rated policies accompanied by a risk equalisation scheme (Milenkovic Kramer 2006). In 2007 the Belgian government also introduced open enrolment and other rules to ensure access to health insurance, particularly for people in poor health and disabled people.

The lack of a definitive interpretation of partial or complete alternative creates further uncertainty in the case of a particular market for health insurance changing from playing a substitutive to a complementary role. In Ireland, for example, private health insurance developed at a time when entitlement to publicly financed inpatient and outpatient care was restricted to low- and middle-income households. A significant proportion of the population could only access health services by paying out of pocket or buying private cover, which may partly explain why, when the Irish market was liberalised in 1994, private insurers were subject to quite stringent regulation involving open enrolment, minimum benefits, community-rated premiums and a risk equalisation scheme²⁸ (see below). However, the level of public benefits has gradually increased so that low-income households and all those aged seventy and over have free access to all types of care, while non-elderly higher-income households have access to services that are predominantly publicly financed but subject to co-payments (McDaid and Wiley 2009). In 2006 the government further increased the number of people eligible for free primary care (Department of Health and Children 2006). The regulatory framework originally justified under Article 54(1) could now be questioned on the grounds of whether or not private health insurance in Ireland still constitutes a partial or complete alternative to statutory health insurance. In other words, it is debatable whether the Irish market for private health insurance continues to play a significant role in providing financial protection.

In the past, the Commission has avoided formally addressing what might or might not constitute a partial or complete alternative where the issue has not been

²⁸ In effect, these were the regulations already in place prior to 1994 (with the exception of the risk equalisation scheme, which had not been necessary when Vhi Healthcare was the only insurer).

absolutely clear cut. When it approved the Irish risk equalisation scheme, for example (see below), it deliberately abstained from commenting on the compatibility of the regulatory framework with the Directive. The recent *BUPA* ruling on the Irish regulatory framework did not address the issue either (see below) (European Court of Justice 2008). Informally, however, Commission officials have acknowledged that there is a need for further clarification.

Beyond its potential impact on social protection, the restriction of material regulation of non-substitutive cover may have implications for consumer protection. Examples include the possibility of conditional sale and consumer detriment arising from product differentiation. Where voluntary cover is offered by the same entities responsible for providing statutory cover, insurers can take advantage of the absence of open enrolment or lifetime cover requirements for voluntary cover to terminate a voluntary contract when an individual moves to a rival insurer for statutory cover. This 'conditional' sale is a form of risk selection that is particularly likely to deter older people or people in poor health from switching from one statutory insurer to another, for fear that a new insurer might reject their application for cover or that a new voluntary contract might be too expensive (taking into account the person's current age) or might exclude pre-existing conditions (that had developed since the signing of the original voluntary contract and were therefore covered by that contract). Conditional sale poses a barrier to competition among statutory health insurers. If construed as abuse of dominant position, it could breach EU competition rules. However, although there is some evidence to suggest that conditional sale prevents fair competition in Belgium, Germany, the Netherlands and Switzerland, there is no ECJ case law in this area (Paolucci et al 2007). The issue of product differentiation is discussed in the following section.

How can governments intervene?

The second area of uncertainty concerns the types of intervention that might be considered necessary and proportional. Article 54(2) and recitals to the Directive list the legal provisions governments can introduce where private cover provides a

partial or complete alternative to statutory cover. But it is not clear if the list should be understood as being exhaustive, in which case unlisted interventions would contravene the Directive. And, again, there is the problem of interpreting partial or complete alternative. This section discusses interventions that have been disputed under internal market or competition legislation, or that may be contentious in future.

Financial transfers (risk equalisation schemes)

Risk equalisation schemes are a direct form of intervention typically involving financial transfers from insurers with low risks to insurers with high risks. They are an essential component of health insurance markets with open enrolment and community rating, where they are introduced to ensure access to health insurance and fair competition among insurers (Puig-Junoy 1999; van de Ven and van Vliet 1992). Risk equalisation aims to lower insurers' incentives to compete through risk selection and to encourage insurers to compete in terms of cost and quality. As such, it is widely applied to public or quasi-public entities involved in the provision of statutory health insurance (van de Ven et al 2007). More recently, governments have applied it to private health insurers in the Netherlands (2006), Ireland (2006) and Slovenia (2005). Internationally, risk equalisation schemes are also applied to private health insurers in Australia, Chile and South Africa. Wherever risk equalisation has been introduced in the European Union, it has been subject to legal challenge by private insurers or infringement proceedings²⁹ initiated by the Commission in response to complaints.

The legal challenges in Ireland and the Netherlands have focused on the potential for financial transfers made under a risk equalisation scheme to breach competition rules on state aid (European Court of Justice 2006; European Court of Justice 2008). There has been less emphasis on whether or not they breach internal market rules in the

²⁹ Infringement proceedings based on the Article 226 EC procedure are triggered by complaints to the European Commission. Following an informal process (informal contacts with the member state concerned to provide the Commission with more information) and failure to reach a settlement, the formal process involves three stages. First, the Commission writes a letter of infringement to the member state government asking it to submit its observations on the alleged infringements. Second, if the Commission considers that the member state has not satisfactorily responded, it delivers a 'reasoned opinion', setting out the formal reasons why the member state has failed to comply with its obligations under the Treaty and asking the government to redress the breach, usually within two months. Third, if the member state does not respond satisfactorily, the Commission refers the matter to the European Court of Justice.

form of the Directive. An unsuccessful domestic legal challenge in Slovenia also focused on unfair competition, but did not refer either to EU competition or internal market rules (Milenkovic Kramer 2006). However, the Commission's current infringement proceedings against the Slovenian government do focus on breach of the Directive. One of the issues at stake seems to be whether or not the risk equalisation scheme in Slovenia can be justified by Article 54. The following paragraphs briefly outline the legal challenges in the three countries.

The Netherlands

Bolkestein's letter to the Dutch Minister of Health raised concerns that the Dutch Government's risk equalisation scheme, part-financed from public funds, might contravene EU rules about state aid (Bolkestein 2003). However, in 2005 the Commission issued a decision authorising the transfer of public funds as, in its opinion, the aid did not unduly distort competition (European Commission 2005c; McCreevy 2005). Despite further assurances from the European Commissioner for Competition (Reerink and Rosenberg 2005), Dutch analysts and politicians continued to question the legality of the risk equalisation scheme, noting that the ECJ would have the final say on whether or not the scheme was both necessary and proportionate (den Exter 2005; Meijer and Liotard 2005). In 2006 a Dutch insurer brought a case before the European Court of Justice, challenging the Commission's 2005 authorisation of the risk equalisation scheme primarily on the grounds that the scheme breached EU rules on state aid (European Court of Justice 2006). The insurer also argued that the new Dutch health insurance system was incompatible with the Directive and Articles 43 and 49 EC (on freedom of establishment and free movement of services respectively). It accused the Commission of failing to provide reasons to substantiate its view that the risk equalisation scheme did not contravene either the Directive or competition rules on state aid. In 2008 the case was withdrawn when the insurer was taken over by another company.

Ireland

The risk equalisation scheme in Ireland has also been challenged as breaching competition rules on state aid. In 1994 the Irish market was opened up to competition to comply with the Directive. Prior to this, private health insurance was almost exclusively provided by Vhi Healthcare, a quasi-public body under the jurisdiction of

the Department of Health. By 1994 Vhi Healthcare covered about 37% of the population (Department of Health and Children 1999). After the market was opened up to competition, the Irish Government relied on Article 54 to formalise the rules that had applied to Vhi Healthcare, involving open enrolment, community-rated premiums, minimum benefits and lifetime cover. The Irish government also passed new legislation allowing it to establish a risk equalisation scheme to be activated by the government at the request of the independent Health Insurance Authority (HIA) if it became evident that private insurers were competing through risk selection rather than on the basis of administrative efficiency and quality (Department of Health and Children 1999). In 2006 the government triggered the risk equalisation scheme on the advice of the HIA.

In 1998 BUPA Ireland, a branch of the UK insurer BUPA set up in Ireland in 1996, complained to the Commission that the risk equalisation scheme was a form of state aid that distorted competition and discouraged cost containment in the health sector (BUPA Ireland 2003). In response, the Irish Government argued that the Directive allowed member states to exercise reasonable discretion with respect to the general good and that the scheme had particular regard for the need for proportionality (Department of Health and Children 2001). Five years later, the Commission issued a decision³⁰ stating that financial transfers made under the scheme would not constitute state aid for two reasons (European Commission 2003). First, the scheme would legitimately compensate insurers for obligations they faced in carrying out a service of general economic interest (Article 86(2) EC). Second, the compensation was limited to what is necessary and proportionate to ensure stability in a communityrated market for private health insurance. The decision also noted that the scheme would not distort competition, penalise efficiency or create perverse incentives that might lead to cost inflation, nor was it likely to deter insurers from entering the market, as new entrants can exclude themselves from the scheme for up to three years. Even if financial transfers were to be considered a form of state aid, the Commission pointed out that this aid would not, by itself, amount to a violation of the Directive.

³⁰ Unlike Bolkestein's letter, a Commission decision is binding and judicially reviewable at the suit of the addressee or those directly and individually concerned (Article 230 EC). Article 88(2) EC and Regulation 659/99/EC give the Commission the power to make such decisions.

The Commission's decision is as noteworthy for what it abstains from commenting upon as for what it confirms. It explicitly states that it assessed the risk equalisation scheme's compatibility with state aid rules 'without prejudice to the analysis of its compatibility with other relevant EU rules, and in particular with [the Directive]', emphasising that it was made independently of any consideration as to whether the Irish market could be regarded as a partial or complete alternative to cover provided by the statutory system (European Commission 2003). BUPA Ireland subsequently challenged the Commission's reluctance to consider whether the scheme infringed the Directive. Asking the ECJ to suspend the decision in 2003, it accused the Commission of misapplying the public service compensation test and wrongly identifying open enrolment, community rating, minimum benefits and lifetime cover as public service obligations when they actually represent rules generally applied to all insurers offering private health insurance (European Court of Justice 2008). It also accused the Commission of failing to consider whether these obligations imposed a financial burden on Vhi Healthcare and whether the risk equalisation scheme would affect the development of trade contrary to the interests of the Community, and of failing to initiate a formal investigation procedure, given the complexity of the arguments and the economic analysis required. The Dutch and Irish governments and Vhi Healthcare joined the legal proceedings in defence of the Commission. BUPA Ireland also launched a domestic challenge to the risk equalisation scheme in 2006 (see below). The following year, it pulled out of the Irish market and its business was bought by Quinn Healthcare, an Irish company. Quinn Healthcare has also challenged the risk equalisation scheme (within Ireland).

In 2008 the Court of First Instance (CFI) dismissed BUPA's application, finding its claim inadmissible (European Court of Justice 2008). The Court used the criteria³¹ laid down in *Altmark* (European Court of Justice 2003), finding that the Commission had been right to conclude that the risk equalisation scheme did not contravene EU state aid rules. It is worth going into the Court's decision in some detail, since the

³¹ These are as follows: (a) the recipient undertaking must have public service obligations to discharge and the obligations must be clearly defined; the service must also be of a universal and compulsory nature; (b) the parameters on the basis of which the compensation for carrying out the SGEI mission is calculated must be established in advance in an objective and transparent manner; (c) the necessity and proportionality of the compensation must be provided for; and (d) comparison with an efficient operator must be established.

arguments involved are revealing. BUPA had argued that private health insurance in Ireland could not constitute a service of general economic interest (SGEI) since there was no obligation of general interest imposed on insurers to provide certain services and those services were not available to the whole population. Rather, they were optional – even 'luxury' – financial services and not intended to replace the public social security system. BUPA also argued that the decision of whether or not SGEIs were being carried out was a decision for European Community institutions and not to be delegated to national authorities. In contrast, the Irish Government contended that the definition of SGEIs falls primarily within the competence and discretion of the member states and that private health insurance is 'an important instrument of the social and health policy pursued by Ireland ... and an important supplement to the public health insurance system, although it does not *replace* that system' (European Court of Justice 2008: para 164) (emphasis added). It added that, because the obligations of open enrolment and community rating ensure that private health insurance is available to all, it is not necessary that it should be universal, compulsory, free of charge, economically accessible to the whole population or constitute a substitute for the public social security system.

Responding to these claims and counterclaims, the Court confirmed that member states have a wide discretion to define what they regard as SGEIs. Moreover, the definition of such services by a member state can only be questioned by the Commission in the event of a manifest error (European Court of Justice 2008). It found that there had been an act of public authority creating and entrusting an SGEI mission in Ireland. It also found that the compulsory nature of the SGEI mission could lie in the obligation on insurers to offer certain services to every citizen requesting them (open enrolment) and was strengthened by other obligations, such as community rating, lifetime cover and minimum benefits (European Court of Justice 2008: paras 188-191). According to the Court, these obligations guarantee that the Irish population has 'wide and simple access' to private health insurance, which entitles private health insurance to be characterised as universal within the meaning of Community law (European Court of Justice 2008: para 201). The Court went on to note:

[T]he criterion of universality does not require that the entire population should have or be capable of having recourse to it in practice ... the fact that approximately 50% of the Irish population has subscribed to PMI [private medical insurance] cover indicates that, in any event, the PMI services respond to a very significant demand on the Irish PMI market and that they make a substantial contribution to the proper functioning of the social security system, in the broad sense, in Ireland (European Court of Justice 2008: para 201).

The Court further found that the parameters used to calculate the risk equalisation payments were sufficiently clearly defined and that the scheme itself was necessary and proportionate to the costs incurred. In addition, it found that insurers operating less efficiently than their competitors would not be able to gain undue advantage from the risk equalisation scheme, because the scheme compensated insurers based on average costs. Finally, the Court concluded that the risk equalisation scheme was necessary and proportionate for the purposes of Article 86(2) EC. It noted that the Commission had been right to support the risk equalisation scheme as a measure necessary to prevent destabilisation of the community-rated Irish market caused by active risk selection on the part of Vhi Healthcare's competitors (European Court of Justice 2008: paras 285-286).

The comments by the Court on the nature of the Irish market are particularly revealing. Paragraph 204 states:

In the light of the foregoing, the applicant's [BUPA's] very general argument concerning the optional, complementary and 'luxury' nature of the PMI services cannot succeed. Apart from the fact that the applicants disregard, in this context, the various levels of PMI cover available, they have not submitted a detailed challenge to the argument put forward by the defendant [the Commission] and by Ireland that Irish PMI constitutes, alongside the public health insurance system, the second pillar of the Irish health system, the existence of which fulfils a mandatory objective of social cohesion and solidarity between the generations pursued by Ireland's health policy. According to the explanations provided by Ireland, PMI helps to ensure the effectiveness and profitability of the public health insurance scheme by reducing pressure on the costs which it would otherwise bear, particularly as regards care provided in public hospitals. Within the framework of the restricted control that the Community institutions are authorised to exercise in that regard, those considerations cannot be called in question either by the Commission or by the Court. Accordingly, it must be accepted that the PMI services are

used by Ireland, in the general interest, as an instrument indispensable to the smooth administration of the national health system and they must be recognised, owing to the PMI obligations, as being in the nature of an SGEI.

These comments and the ruling as a whole suggest three things. First, not only do national governments have considerable discretion in deciding what is in the general interest, but the regulations in place themselves contribute to the definition of a particular service as being in the general interest. In other words, if the Irish government defines a service as being in the general interest, regulations such as open enrolment and community rating can only strengthen the government's case, although the necessity and proportionality tests would still apply. This apparently circular argument reflects the complexity of determining what is and is not an SGEI in the absence of a central definition, but it reinforces the significant scope for member state autonomy in this area. Second, the Irish government claims that, even though private health insurance in Ireland plays a supplementary rather than a substitutive role, it is an important instrument of Irish social and health policy – 'the second pillar of the Irish health system' – and helps to sustain the public health insurance scheme by relieving pressure on public hospitals. The ruling notes that these claims cannot be questioned by the Commission or the Court. Consequently, if a government says that private health insurance is a key component of the national health strategy, the European Union's legislative institutions must accept it as being the case. Third, the Court makes much of the fact that private health insurance in Ireland covers about half of the Irish population and takes this as evidence that it makes a 'substantial contribution to the proper functioning of the [Irish] social security system'. Thus, the degree of population coverage might bolster arguments about the contribution of private health insurance to the 'national health strategy'.

In spite of the Court's ruling, which BUPA decided not to appeal against, the Irish regulatory framework has continued to be questioned in the domestic courts. In 2006, the Irish High Court ruled against BUPA's legal challenge to the risk equalisation scheme. BUPA appealed and, in 2008, the Supreme Court upheld its appeal on procedural grounds, finding that the risk equalisation scheme was based on an incorrect interpretation of the meaning of community rating in the relevant law and would therefore have to be abandoned (Supreme Court of Ireland 2008). However,

the Supreme Court did not question the risk equalisation scheme on other grounds, so a change in legislation may be sufficient to secure the scheme's domestic legitimacy. In the meantime, the scheme has been set aside.

Slovenia

The *BUPA* ruling came after the Commission had initiated infringement proceedings against Belgium and Slovenia, but may have some bearing on both of these cases. This subsection discusses the case against Slovenia. The case against Belgium is discussed in a subsequent subsection. In 2005 two of the three insurance companies operating in the Slovenian complementary private health insurance market (covering statutory user charges) challenged legislation establishing a risk equalisation scheme. The largest insurer, Vzajemna (a mutual association), argued that the scheme would favour the two other (commercial) insurers and encourage risk selection, while the larger commercial insurer, Adriatic, argued that the scheme would distort competition (Adriatic 2005; Vzajemna 2005). Neither challenge referred to EU law, and the Slovenian High Court ruled in the government's favour (Toplak 2005). However, in 2007, following a complaint from Vzajemna, the Commission initiated infringement proceedings against the Slovenian Government, arguing that the risk equalisation scheme could not be justified under Article 54(1) of the Directive because complementary private health insurance in Slovenia does not constitute a partial or complete alternative to statutory health insurance. The Commission's letter of formal notice, the contents of which have not been made publicly available, may also have noted that the requirement for insurers involved in the complementary market to inform the regulator of changes to policy conditions and premiums breaches the Directive (Articles 6, 29 and 39) (Rednak and Smrekar 2007). The requirement for insurers to put 50% of any profits generated back into the private health insurance scheme was also problematic.

The Slovenian government responded by arguing (in May 2007) that the complementary market is a part of the broader social security system and has been defined in legislation as a service of general interest (Slovenia Business Week 2007). It also drew to the Commission's attention the similarities between the Irish market and the Slovenian market. Previously, the Commission had rejected the government's claim that the Slovenian market represented a partial or complete

alternative to compulsory health insurance, arguing instead that the market played a supplementary role. While it seems clear that the Slovenian government will need to address potential breaches of the Directive's ban on systematic prior notification of policy conditions and premiums, it is less clear, following the *BUPA* ruling, whether the risk equalisation scheme breaches the Directive or EU state aid rules. The Court's rationale for upholding the Commission decision in favour of the risk equalisation scheme breaches the Directive, in the Slovenian case. First, there is an act of public authority creating and entrusting an SGEI mission (given in the Slovenian Health Care and Health Insurance Act), which, along *BUPA* lines, is both compulsory and universal in nature. Second, complementary private health insurance covers an even greater proportion of the population than in Ireland (70%), strengthening the government's claim that the complementary market is part of the social security system. And, third, following *BUPA*, does the Commission have the right to question the claims of the Slovenian government?

Both the Dutch and Slovenian cases for risk equalisation seem stronger than the Irish case, in the Netherlands because the 'private' health insurance scheme *is* the statutory health insurance scheme, and in Slovenia because the complementary market makes a more significant contribution to financial protection than the predominantly supplementary market in Ireland. For example, the extent of statutory cost sharing has increased in Slovenia in recent years, whereas it has gone down in Ireland (McDaid and Wiley 2009; Milenkovic Kramer 2006). Reflecting this, private health insurance in Slovenia accounts for over half of all private spending on health (the second highest proportion in the European Union after France), but only a third of private health expenditure in Ireland (Figure 3).

Benefits

Governments can regulate the benefits offered by private insurers by specifying a minimum level or standard package of benefits or requiring benefits to be provided in kind rather than in cash. The first intervention aims to facilitate price competition, while both aim to lower financial barriers and ensure access to a given range of health services.

Minimum or standard benefits

The question of whether or not regulators should be able to specify minimum or standard benefits – as they do in Germany, Ireland and the Netherlands (prior to 2006 and now) – has not yet been legally challenged as a form of material regulation that contravenes the Directive or as an intervention that impedes the free movement of services. Nevertheless, it is worth raising as an issue that has implications for consumer protection. The issue is also pertinent since a key objective underlying the introduction of the internal market in insurance was to stimulate competition among insurers, precipitating efficiency gains and bringing consumers the benefits of wider choice and lower prices (European Commission 1998). The preamble to the Directive states that it is in policy holders' interest that they should have access to 'the widest possible range of insurance products available in the Community so that [they] can choose that which is best suited to [their] needs' (Recital 19) (European Commission 1992).

In theory, product differentiation benefits consumers by providing policies tailored to meet particular needs. It benefits insurers by allowing them to distinguish between high- and low-risk individuals. But in practice it may be detrimental to consumers in two ways. First, it gives insurers greater opportunity to select risks, leading to access problems for high-risk individuals. Second, making consumers choose from a wide range of highly differentiated products restricts competition, which only operates effectively where consumers find it easy to make informed comparisons about price and quality.

To encourage competition based on price and quality (rather than risk selection), regulators can require insurers to offer a standard package of benefits, use standardised terms when marketing products, inform potential and existing policy holders of all the price and product options open to them and provide consumers with access to centralised sources of comparable information. However, the Directive specifically outlaws product and price controls, except where private health insurance constitutes a partial or complete alternative to statutory cover. Even in these circumstances, control is limited to offering benefits standardised in line with statutory benefits – that is, the primary aim is to ensure that the privately insured have access to the same services as the publicly insured, rather than to facilitate price

competition. For example, governments in Germany and the Netherlands have required private insurers to offer older policy holders benefits that match statutory benefits (Mossialos and Thomson 2004).

In the absence of product regulation, liberalisation of health insurance markets in some member states has been accompanied by rising levels of product differentiation, with evidence suggesting that consumers may be confused by the proliferation of products on offer (Mossialos and Thomson 2004). For example, an official investigation into information problems in the market for supplementary private health insurance in the United Kingdom found that increased product complexity did not benefit consumers; rather, consumers sometimes paid more than they should and often purchased inappropriate policies (Office of Fair Trading 1998). An OECD study noted that as the diversity of schemes in the UK market rose, consumers faced increasing difficulty in comparing premiums and products, a concern echoed by consumer bodies in other member states (OECD 2004b).

Perhaps due to limited price competition and private insurers' limited ability to control costs, prices appear to have gone up rather than down in many member states. Research based on data from several member states shows that, during the 1990s, the compound annual growth rate of private health insurance premiums rose much faster than the average annual growth rate of total spending on health care (Mossialos and Thomson 2004).

Benefits in kind

The provision of benefits in kind enhances social protection by removing financial barriers to accessing health care. Bolkestein's letter to the Dutch Minister of Health suggests that the Dutch Government's requirement for insurers to provide a basic package of benefits in kind could infringe the free movement of services by creating barriers for non-Dutch insurers entering the market and might need to be assessed for proportionality and necessity (Bolkestein 2003). This raises concerns not only for the new Dutch system, but for statutory and substitutive private health insurance in other member states. However, the issue has not yet been subjected to legal challenge.

Differential treatment of insurers

Under the Directive, governments can no longer influence market structure (by restricting the provision of private health insurance to a single approved insurer or to statutory health insurance funds) or discriminate against particular types of insurer. For example, Recital 25 outlaws regulations preventing non-specialist or composite insurers from providing health insurance. When the German government transposed the Directive, it had to abolish its rule excluding non-specialist insurers from entering the private health insurance market, but used its social law to prohibit employers from contributing to policies offered by composite insurers, leading the Commission to refer Germany to the European Court of Justice (European Court of Justice 2001). Germany amended its legislation and the case was removed from the register in December 2003. Other areas in which the Directive affects differential treatment of insurers concern solvency requirements and tax treatment.

Solvency requirements

National laws often distinguish between non-profit and for-profit institutions, sometimes resulting in preferential treatment of non-profit institutions. This usually favours mutual associations, which have a long history of involvement in statutory and private health insurance in many member states and traditionally operate in different areas of the market from commercial insurers (Palm 2002). The special status accorded to mutual associations has given rise to difficulties under the Directive. For example, French mutual associations operated under a special Code de *la Mutualité*, which means they were subject to less rigorous solvency rules than commercial insurers or provident associations (Palm 2002). In 1999 the European Court of Justice ruled against France for its failure to completely transpose the Directive with regard to mutual associations (European Court of Justice 1999). However, the French Government failed to act and the Commission was forced to begin fresh infringement proceedings under Article 228 EC the following year, which eventually resulted in the adoption of a revised code tightening the solvency requirements for mutual associations and bringing French law in line with the Directive (European Commission 2000a; European Commission 2000b).

Solvency rules have also led to controversy in Belgium and Ireland. Mutual associations in Belgium that are engaged in selling a mixture of complementary and supplementary private health insurance operate under separate solvency rules from commercial insurers. Both types of insurer competed to provide cover for self-employed people, who were excluded from statutory cover of outpatient care. More recently, they also began to compete to provide complementary cover of some hospital costs. For example, the Mutualité Chretienne, which is one of several statutory health insurers, also provided its members with compulsory complementary cover of all hospital costs above a deductible per inpatient stay (Mutualité Chretienne 2008). Previously, this type of cover had been exclusively offered by commercial private insurers. In 2006 the European Commission began infringement proceedings against the Belgian Government on the grounds that differential treatment might distort the market (European Commission 2006).

The issue regarding self-employed people in Belgium has been addressed by extending statutory cover of outpatient care to them from 2008. However, the issue of complementary private health insurance has been more problematic. The Belgian Government has argued that the Directive does not apply to mutual associations because the cover they provide is part of the social security system, their activity is based on solidarity rather than being economic in nature and, if the complementary cover they provide were to be viewed as an economic activity, it would be a service of general economic interest and exempt from competition rules under Article 86(2) EC. In 2008 the Commission rejected this defence and sent a reasoned opinion to Belgium, asking it to amend its national rules so that mutual associations are no longer governed by separate solvency and supervisory rules (European Commission 2008c). As shown in the discussion of France (below), the Commission is unlikely to consider this type of differential treatment of insurers to be necessary or proportionate to the costs incurred in carrying out SGEI activities.

In the 1970s the Irish government had obtained a derogation from the First Non-life Insurance Directive's solvency requirements for its quasi-state insurer Vhi Healthcare (The Competition Authority 2007). This meant that Vhi Healthcare was not subject to the same solvency requirements as its commercial competitors and was not regulated by the same regulatory body. In January 2007 the Commission began infringement proceedings against Ireland in response to a claim made by Vivas (a commercial insurer that entered the Irish market in 2004) that Vhi Healthcare had breached the conditions of its derogation from the Directive by carrying out business in addition to its core health insurance activity (European Commission 2007b). The Irish government subsequently brought forward plans to change the status of Vhi Healthcare, announcing that Vhi Healthcare would become a conventional insurer authorised by the financial regulator by the end of 2008 (Department of Health and Children 2007). However, in late 2008 the Commission sent a 'complementary reasoned opinion' to the Irish government and in 2009, following further complaints from Vivas³² (O'Regan 2009), it referred the case to the European Court of Justice (European Commission 2008b; European Commission 2009).

Some of these solvency issues may change in the future, with the introduction of new economic risk-based solvency requirements in 2012 (the so-called 'Solvency II' framework) (European Commission 2007c). The Commission is proposing to move away from a 'one-model-fits-all' method of estimating capital requirements to more entity-specific requirements, which would be applied to all entities regardless of their legal status. However, as yet, the implications of this new framework for health insurance are not clear.

Tax treatment

Tax incentives for voluntary health insurance in France, Luxembourg and Belgium have traditionally favoured mutual or provident associations over commercial insurers. In Luxembourg, the existence of a 'gentleman's agreement' between mutual associations and commercial insurers has prevented the latter from complaining about preferential tax treatment (Mossialos and Thomson 2004). The agreement rests on the understanding that mutual associations will not encroach on commercial insurers' dominance of the market for pensions and other types of insurance. Prior to 2008, Belgian mutual and commercial insurers competed to cover outpatient care for self-employed people. Mutual associations providing this cover benefited from state subsidies, whereas commercial insurers did not. The commercial insurers tried to challenge this in the Belgian courts, but lost their legal challenge. In 2006 the

³² Trading as Hibernian Aviva following a takeover in 2008 by British company Aviva, one of the world's largest health insurance companies.

Commission began infringement proceedings against preferential treatment. The issue of cover for self-employed people is no longer relevant, as in 2008 the Belgian Government extended statutory outpatient cover to all self-employed people (European Commission 2006).

Preferential tax treatment of mutual insurers has been most problematic in France, where mutual and provident associations have been exempt from health insurance premium tax since 1945. In 1992 the French Federation of Insurance Companies lodged two complaints against the French government for this discriminatory tax policy, arguing that it contravened EU rules on state aid. Their complaints were eventually upheld by a Commission decision in November 2001 and the French government was asked either to abolish the tax exemptions in question or to ensure that the aid did not exceed the costs arising from the constraints inherent in a service of general economic interest (European Commission 2001c). At the same time, the Commission noted that it did not regard the provision of private health insurance by these associations to be a service of general economic interest explicitly provided for in their articles. The French government responded by removing the health insurance premium tax exemption for mutual and provident associations (European Commission 2005b)³³ and, instead, applying it to two types of private health insurance contract: those based on 'solidarity' (contrats solidaires) - in this case, contracts concluded without a prior medical examination or other reference to an individual's risk of ill health – or 'responsible' contracts (contrats responsables), in which private health insurers agree not to cover new co-payments, intended to encourage patients to obtain a referral for specialist care and to adhere to protocols for the treatment of chronic illnesses. At first, the Commission agreed that this form of exemption was compatible with EU rules on state aid (European Commission 2001a; European Commission 2005a). However, in 2007, it launched a formal investigation into the new *contrats*, to find out if they are indeed non-discriminatory and how much consumers really stand to benefit from the advantages granted to insurers (European Commission 2007d). The results of this investigation have not yet been published.

³³ In 2006, in response to a further decision from the Commission, the French government abolished the exemption from insurance premium tax for mutual and provident associations on non-health insurance business.

Some argue in favour of treating mutual associations differently on the grounds that they provide better access to health services because they generally offer open enrolment, lifetime cover and community-rated premiums, whereas commercial insurers usually restrict access by rejecting applications, excluding the cover of preexisting conditions and risk rating premiums (Rocard 1999). In a market where mutual associations and commercial insurers operate side by side, the latter may be able to undermine the former by attracting low-risk individuals with lower premiums, leaving mutual associations to cover high risks. However, while the distinction between non-profit and for-profit insurers is important in so far as an insurer's profit status determines its motivation and influences its conduct, in practice there is considerable variation in the way in which mutual associations behave; in some member states their conduct may be indistinguishable from the conduct of commercial insurers. As it is not possible to make assumptions about an insurer's conduct on the basis of its legal status, it would be more appropriate to discriminate on the basis of conduct, favouring insurers who offer greater access to health services or, where appropriate, penalising those who restrict access. This was the approach taken by the French government in 2004 and again in 2006, when it expanded the remit for exemption from insurance premium tax to any insurer agreeing to abide by specific rules intended to promote access to health care (Sécurité Sociale 2008).

Conclusions

The EU regulatory framework established by the Directive places limits on national competence in the area of private health insurance. It relies on financial regulation to protect consumers, prohibiting material regulations such as price and product controls, except where private cover constitutes a complete or partial alternative to statutory health insurance and so long as any intervention is necessary, proportionate and non-discriminatory. The paper has argued that the Directive is not sufficiently clear about when governments can justify material regulation of private health insurance. This is mainly because there is no explicit consensus about the meaning of

partial or complete alternative, leading to uncertainty and confusion among policy makers, regulators and insurers. Where the Commission and, more recently, the European Court of Justice (in *BUPA*), have had opportunity to clarify this aspect of the Directive, they have tended to sidestep the issue, relying instead on rules about services of general economic interest to authorise (Ireland) or prohibit (France) government intervention. Key exceptions are Bolkestein's letter, in which he argues that Article 54(1) of the Directive should not to be used to justify material regulation of complementary private health insurance, and a description of the Directive on the Commission's web site, which refers to 'substitutive' private health insurance (European Commission 2011c).

Bolkestein's definition of complementary cover fails to recognise that this type of private health insurance increasingly contributes to social protection for those who purchase it, operating in an unofficial partnership with statutory health insurance where it offers reimbursement of statutory user charges and/or provides access to effective health services excluded from the statutory benefits package. In particular, complementary cover of statutory user charges tends to be purchased by a relatively high proportion of the population, making it regressive in financing health care (because it is not restricted to richer groups) and creating or exacerbating inequalities in access to health care (van Doorslaer et al 2006; Wagstaff et al 1999). If, as the paper has argued, the logic underlying Article 54(1) is to permit material regulation where private health insurance fulfils a financial protection function, then, in either case, obliging complementary insurers to offer open enrolment, lifetime cover and community rating would be necessary to ensure equitable access to health care, while a risk equalisation scheme might be needed to lower incentives to select risks and to encourage competition based on price and quality. The Irish experience highlights the complexity of the issues at stake and the difficulties caused by legal uncertainty.

The Directive has been amended several times since its introduction, most recently in 2007 (European Commission 2007a). None of the amendments has had any direct bearing on private health insurance. In 2008 the Commission circulated a proposal for an amended directive that would repeal and replace the Third Non-life Insurance Directive and several other insurance-related directives under the 'Solvency II' framework (European Commission 2008a). Once again, there are no major changes

specifically relating to private health insurance. The only real change seems to be in the wording of Recital 58 (Recital 24 of the original Directive), which now excludes open enrolment, community rating and lifetime cover as possible measures that may be introduced to protect the general good (where private health insurance serves as a partial or complete alternative). It is not clear whether this omission has any particular significance.³⁴

By maintaining the same wording as the Directive ('complete or partial alternative'; Article 204), the proposed new directive has missed a key opportunity to address legal uncertainty. The Commission's reluctance to be explicit about what the phrase means, the importance of the phrase in the infringement proceedings against Slovenia (but its seeming irrelevance in the eyes of the Court of First Instance in BUPA), and increasing reliance on the Treaty (Article 86(2) EC) to justify intervention in private health insurance markets (in France and Ireland), suggest that the Commission would have done better to have removed the phrase from the proposed directive. As the Court confirms, whether or not private health insurance requires material regulation to protect the general good should be a matter for national governments. The paper has argued that the logic underlying Article 54(1) is to ensure access to private health insurance where it contributes to financial protection. However, as definitions of financial protection may vary from one country to another (and even within a country, over time), deciding what does or does not contribute to financial protection is a largely political issue. It is therefore a matter best left to the discretion of national political processes.

If, as the Court states in *BUPA*, governments have relative freedom to define private health insurance as being a service of general economic interest, and regulations such as open enrolment can be construed as demonstrating SGEI obligations, then there seems little need for further elaboration of this particular issue in the form of a directive, particularly given the uncertainty created by the current and proposed wording and the fact that proportionality must still be tested, regardless of which process (Treaty or directive) applies. It remains to be seen whether the *BUPA* ruling

³⁴ As before, Recital 58 of the 'Third Non-life Insurance Directive' states that standardised benefits offered at a premium rate at or below a prescribed maximum, participation in loss compensation (risk equalisation) schemes, and private health insurance operated on a technical basis similar to life insurance may be introduced as measures to protect the general good.

will change the position of the Commission in its infringement proceedings against Slovenia (at least concerning the legality of the risk equalisation scheme), since the Slovenian government now has a good legal basis on which to defend the SGEI nature of its complementary private health insurance market. The SGEI argument is unlikely to be much help to the Belgian government, however, because case law consistently rejects differential treatment of insurers based on legal status. A more pragmatic (and effective) approach to influencing the conduct of insurers is to favour those who adhere to specific principles. France has led the way here, with its system of tax exemptions for insurers that uphold *contrats solidaires* or *contrats responsables*, although even this move is under investigation by the Commission.

The paper has also argued that there is uncertainty about what sort of government intervention in the private health insurance market might be considered to be necessary or proportionate, not just because of the Directive, but also under EU state aid rules. While it is clear that differential treatment of insurers based on legal status will not be tolerated, it is much less clear whether regulatory requirements such as open enrolment and risk equalisation schemes are compatible with the Directive particularly (but not exclusively) where non-substitutive private health insurance is concerned. For example, the Commission's decision to authorise risk equalisation in the Netherlands has been challenged by a Dutch insurer, even though the new Dutch health insurance system is broadly accepted as being statutory in nature (European Court of Justice 2006). The Commission has contributed to this uncertainty by approving the risk equalisation scheme in Ireland (on the grounds that private health insurance in Ireland constitutes a service of general economic interest), but accusing the Slovenian risk equalisation scheme of contravening the Directive – and yet, as the paper has argued, the case for risk equalisation is stronger in Slovenia than in Ireland. It is possible that the *BUPA* ruling will, in practice, remove some of this uncertainty.

Finally, the paper has argued that the Directive's regulatory framework may not provide sufficient protection of consumers. In markets where private health insurance does not contribute to financial protection, the Directive assumes that financial regulation will protect consumers. But solvency rules alone may not be adequate if health insurance products are highly differentiated. Information asymmetry exacerbated by product differentiation appears to be a growing problem in markets across the European Union and the Commission has not yet put in place mechanisms for monitoring anti-competitive behaviour by insurers. Communications from the Commission have also raised doubts about the compatibility of certain regulatory measures with competition rules – for example, the provision of benefits in kind (Bolkestein 2003). If a requirement for insurers to provide benefits in kind were to be found to contravene competition rules, there would be implications for statutory as well as private health insurance.

The Directive reflects the regulatory norms of its time. When it was introduced in 1992, the Commission may have been convinced that it would provide ample scope for governments to protect consumers where necessary and would not jeopardise statutory arrangements. Article 54 would protect markets contributing to financial protection, while, in markets regarded as purely supplementary, the benefits of deregulation (increased choice and competition resulting in lower prices) would outweigh concerns about consumer protection. These assumptions are more problematic now, partly because there is no evidence to suggest that the expected benefits of competition have, as yet, materialised. Private health insurance premiums in many member states have risen rather than fallen in recent years, often faster than inflation in the health sector as a whole, while insurers' expansion across national borders has been limited to cross-border mergers and acquisitions, rather than genuinely new entrants to the market (Mossialos and Thomson 2004). The new Dutch health insurance system has not yet seen any cross-border activity and the number of insurers in operation has swiftly fallen to about five (Maarse 2009).

The assumptions are also problematic due to increased blurring of the boundaries between normal economic activity and social security. On the one hand, the case law reviewed in this paper shows governments how they might put their health insurance arrangements beyond the scope of internal market law, either by placing them firmly within the sphere of social security or by invoking the general good defence. On the other hand, as the Dutch system shows, the trend seems to be going in the opposite direction. Consequently, social security is no longer the preserve of statutory institutions or public finance, a development likely to bring new challenges for policy makers. Greater blurring of the public-private interface in health insurance

gives rise to complexities that neither the existing Directive nor the proposed new directive seem equipped to address. In light of these complexities, only some of which the paper has attempted to highlight, it is time for a debate about how best to move forward. A priority for debate should be to find ways of thinking about private health insurance that go beyond 'partial or complete alternative' to statutory cover. These terms are unclear and do not reflect the often complicated relationship between public and private cover. At least in the European Union, private health insurance rarely offers a genuine 'alternative' to statutory cover (Thomson et al 2009b). The paper also emphasises that financial regulation may not be the only or best means of protecting consumers in health insurance markets. If it is not possible to reach a political consensus about re-examining the need for material regulation of private health insurance under some circumstances, then the Commission and the member states should consider how best to improve the way in which products are marketed and the quality of the information available to consumers.

Study 3: Choice of public or private health insurance: learning from the experience of Germany and the Netherlands

Paper provenance and peer review

This paper is primarily the work of the PhD author (ST). In 2006 it was published as:

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ST and EM devised the paper. ST reviewed the literature and drafted the paper. EM commented on drafts.

Introduction: opting out of health insurance

Since 1945 governments across Europe have successfully worked towards the provision of universal or near-universal statutory (public) insurance for health care. The exceptions are Germany and the Netherlands, where the public insurance scheme covers 92% and 70% of the population respectively, leaving a substantial number of people to rely on voluntary (private) insurance, either by choice, as in Germany since 1970 and the Netherlands from 1941 to 1986, or through compulsion, as in the Netherlands since 1986 (OECD 2004a). More recently, and in the context of universal health coverage, various European countries have considered emulating the German model, among them Italy, Portugal and the United Kingdom during the 1990s and Croatia, Portugal, Russia, Slovakia and Slovenia in the last five years (Atella and Spandonaro 2004; Propper and Green 2001; World Bank 2003). Debates about choice of public or private insurance tend to be framed in terms of offering some or all of the population the possibility of 'opting out' of the public insurance scheme.

Arguments in favour of opting out, generally derived from economic theory, presuppose that enhancing consumer choice and stimulating competition between insurers will be beneficial for health policy goals such as equity and efficiency. But economic theory also suggests that, due to failures in markets for health insurance, choice of public or private coverage may adversely affect equity and efficiency and could, in the longer term, restrict consumer choice (Barr 1998). This apparent contradiction merits investigation. The paper therefore examines the European experience of choice of public or private health insurance to establish whether there is empirical support for economic theory regarding choice in health insurance markets and to review and assess real policy outcomes using equity in funding health care and efficiency in production as evaluative criteria.

The only European countries in which choice of public or private health insurance has been available to a significant part of the population for a prolonged period are Germany (1970 to the present day) and the Netherlands (1941 to 1986)³⁵. In 1986 the Dutch government abolished choice, changing to a system, still in place today, in which higher earners are simply excluded from public coverage. The paper focuses on a comparative examination of the German and Dutch experience for three reasons. First, choice of public or private health insurance is an option increasingly raised in European policy debates but usually proposed without supporting evidence. Second, the small body of empirical literature addressing the impact of opting out draws on the Chilean experience (Bitran et al 2000; Sapelli and Vial 2003); to date, health insurance choices in Germany and the Netherlands have not been systematically documented or evaluated. Third, the German and Dutch governments have responded differently to problems arising from choice of public or private health insurance, the former attempting to find solutions while maintaining choice, the latter preferring to replace choice with exclusion of higher earners from public coverage. A comparative approach allows us to examine the extent to which either response succeeds in tackling market failures relating to health insurance choices.

Framework for analysis

Based on economic theory regarding consumer choice, a key argument in favour of opting out assumes that the threat of voluntary exit from the public scheme will be sufficient to stimulate competition between public and private insurers, leading to greater responsiveness and increased efficiency (Hirschman 1970). A further argument – more pertinent in countries with large informal sectors or where tax evasion is widespread, but also made in richer countries – concerns the sustainability of public health care funding. Proponents claim that encouraging individuals, particularly the wealthy, to opt for private coverage (the German model) will ease pressure on government budgets and allow public finances to be spent on improving the provision of health services for poorer people (Chollet and Lewis 1997). If curbing public expenditure takes political precedence over boosting consumer

³⁵ Governments in Austria (1999), Portugal (1993) and Spain (1975) have introduced arrangements that increase access to private health insurance for specific groups, but the Austrian system involves collective rather than individual decision making, while the Portuguese and Spanish systems still require the payment of statutory contributions, so the choice is one of public or private *provision* rather than *insurance* (Mossialos and Thomson 2004).

choice, policy makers may even favour the outright exclusion of some groups from public coverage (the Dutch model). The implication is that either model will enhance equity in funding health care if those who opt out of, or who are excluded from, public coverage continue to contribute to public resources – for example, through taxation.

However, these arguments may be undermined by important aspects of economic theory as it applies to health insurance (Barr 1992; Cutler and Zeckhauser 2000). Markets for health insurance suffer from 'failures' relating (mainly) to information. This means they can only operate efficiently if certain conditions hold: the probabilities of ill health must be independent, less than one and known and there should be no major problems with adverse selection, moral hazard and monopoly. Moral hazard and monopoly issues may feature in both public and private systems of health insurance. The issue of most relevance to this paper concerns adverse selection, which arises because those seeking insurance are able to conceal information about their risk of ill health from insurers (Rothschild and Stiglitz 1976).

Where there is choice of more than one type of health insurance 'plan', plans offering a more generous level of benefits or a lower level of cost sharing will attract individuals with a higher risk of ill health. In response to the ensuing risk segmentation, plans with a concentration of high risks must raise their premiums, provoking low risks to switch to cheaper plans – for example, those with fewer benefits or higher deductibles – or forego cover altogether, if either of these options is open to them. This precipitates further premium rises and exacerbates the problem of segmentation. Ultimately, more generous plans become financially unstable and are forced out of business. Researchers have shown how adverse selection led to the swift collapse of indemnity health insurance plans in the United States (Cutler and Zeckhauser 1997).

Health insurance markets suffering from adverse selection are inefficient because they prevent low risks from purchasing full cover – comprehensive and free of cost sharing – or cover at an actuarially fair price, while the threat of adverse selection creates strong incentives for insurers to engage in risk selection; that is, to attract low risks and deter high risks (Barr 1998; Rice 2001). Unless these incentives are curbed

by regulation, older people and those in poor health may not be able to obtain any cover or cover at an affordable price.

Giving consumers a choice of public or private health insurance, as in Germany and in the Netherlands prior to 1986, is similar in effect to offering a choice of more than one plan and is likely to result in two main outcomes: a market segmented by degree of risk and financial barriers to private coverage for high risks. Negative effects can be avoided, to some extent, by careful policy design or addressed by regulation – for example, abolishing choice and making health insurance compulsory for the whole population, prohibiting voluntary exit from the public scheme by excluding some groups from public coverage, as happened in the Netherlands in 1986, and more incremental measures to tackle risk selection and increase access to coverage, such as cross-subsidies from private to public insurance, or tighter regulation of insurers, including risk adjustment (Table 9).

In the following sections the paper examines whether the German and Dutch policies have led to risk segmentation and created financial barriers to private coverage. It then assesses their impact on equity in funding health care and efficiency in production, focusing on these particular analytical concepts partly because proponents of choice of public or private health insurance argue that it can enhance equity and efficiency, but also because they are commonly cited as key health policy goals (Aday 1998; European Commission 2001b; WHO 2000)³⁶.

Two caveats are worth noting. First, the German and Dutch policies were not intended to curb public expenditure or stimulate competition by expanding consumer choice. In the context of partial rather than universal coverage, they aimed to increase equity in access to health care by offering public coverage to individuals who had previously relied on private coverage. Thus, they allowed people to opt *into* the public scheme, whereas contemporary proposals aim to enable people to opt *out* of it. However, once people had opted into the public scheme they were then also free to opt out of it, so analysis of the German and Dutch experience may usefully inform current and future debates, not least by highlighting potential policy

³⁶ Due to space constraints, lack of data and analytical complexity the paper does not consider other criteria such as efficiency in resource allocation, quality, responsiveness or impact on health status.

implications and demonstrating the nature and extent of regulation required to preserve the policy goals noted above.

Second, the analysis that follows is not based on any ideal benchmark for equity and efficiency in health insurance markets. Rather, it considers the impact of opting out (or exclusion, as is now the case in the Netherlands) in comparison to a system of universal public coverage, as this is the starting point for current debates about health insurance choices in European health systems. Equity and efficiency may have multiple interpretations. The paper considers whether similar individuals are treated equally based on the extent to which public contributions or private premiums are detached from characteristics such as age, income, family size and health status (horizontal equity); and the degree of progressivity in funding health care based on the extent to which richer people contribute or pay proportionately more than poorer people (vertical equity). For efficiency in production, which can be defined as obtaining maximum output from given inputs, we consider whether competition based on risk selection rather than price and quality lowers incentives for private insurers in Germany and the Netherlands to make gains in productive efficiency; the extent to which private insurers minimise operating costs by avoiding administrative waste; and the extent to which they attempt to lower their prices by controlling provider payment and behaviour (Barr 1998).

Policy outcomes	Regulatory responses	Implications	Germany	Netherlands
Risk selection by private insurers leading to a segmented market	 abolish choice of public or private health insurance; replace with a universal compulsory plan 	 adverse selection no longer a threat 	x (proposed in current policy debates)	x (planned, with effect from 2006)
	 prohibit voluntary exit from the public plan by excluding some groups from public coverage 	 loss of public contributions and potential for concentration of high risks in the public plan 	X	 ✓ 1986 higher earners excluded from public coverage
	 introduce cross-subsidies from the private to the public plan 	 may not be sufficient to compensate the public plan may be contested under EU competition law 	X	 1986 cross-subsidy from private to public plan
	 restrict access to the public plan for those who choose the private plan 	 high risks may not be able to pay rising private premiums 	 ✓ 1994 restricted to <65 ✓ 2000 restricted to <55 	 ✓ 1986 higher earners excluded from public coverage
	 tighten regulation of private plans through risk adjustment 	 crude risk adjustment may encourage risk selection sophisticated risk adjustment may be technically difficult to implement 	X	X
Limited access to private plans for high risks	 tighten regulation of private plans through open enrolment, lifetime cover and community-rated premiums 	 may encourage risk selection 	 private insurers must offer lifetime cover with ageing reserves to prevent premiums rising with age 	X
	 tighten regulation of private plans by introducing mandatory pooling and product and price controls 	 may encourage risk selection 	✓ 2000 standard policy for >55	 ✓ 1986 standard policy for >65
	 raise the earnings/income threshold making more people eligible to join the public plan 	 may entrench existing risk segmentation 	 ✓ annually; higher than average increase in 2003 	 ✓ 1994, 1997, 1998, 2000

Table 9 Choice of public or private health insurance: policy outcomes and regulatory responses

Source: Authors' research

Note: x = not applied; $\checkmark = applied$

Comparison of policy outcomes and regulatory responses

The development of choice of public or private health insurance

Germany is currently the only country in Europe to offer individuals choice of public or private health insurance. Enrolment in the public scheme (*Gesetzliche Krankenversicherung*; GKV) is compulsory for all non-public sector employees earning less than \notin 46,344 a year (in 2004) (Busse and Riesberg 2004)³⁷. Those with earnings above this threshold and their dependants (about 20% of the population) have three options: they can remain in the GKV; they can opt for substitutive private health insurance, which exempts them from contributing to the GKV; or they can abstain from health insurance all together. The majority (76%) choose to remain in the GKV as voluntary members, most of the remainder purchase private coverage and only 0.1% of the German population have no health insurance (Busse and Riesberg 2004).

Choice of public or private health insurance was introduced in 1970, when legislation to promote equity of access extended compulsory enrolment in the GKV to white collar workers with earnings below a specified threshold (Rosenberg 1986). Previously, the GKV had only covered blue collar workers. The same law also allowed white collar workers with earnings above the threshold to enrol in the GKV on a voluntary basis, again for equity reasons. In 1989 choice of public or private cover was made available to all non-public sector workers with earnings above the threshold, in order to eliminate an increasingly irrelevant distinction between blue and white collar workers.

In the Netherlands, choice of public or private health insurance was available between 1941 and 1986. Health insurance had been voluntary for the whole population until German forces occupying the Netherlands during the Second World War introduced a public scheme that was compulsory for employees and voluntary for self-employed people (Cox 1993). The rest of the population relied on private

³⁷ The paper does not intend to provide detailed information about the German and Dutch health systems. This can be found elsewhere (see Busse and Riesberg 2004 and den Exter et al 2004).

coverage. In 1966 the Dutch government reformed the system, establishing three public schemes (*Ziekenfondswet*; ZFW): two compulsory schemes for employees and older people and a voluntary scheme for everyone else. Eligibility for each scheme was subject to an earnings threshold (den Exter et al 2004). Those not covered by the compulsory schemes, mainly self-employed people, could choose one of three options: public coverage through the voluntary scheme, substitutive private coverage or no coverage at all.

As in Germany, the primary reason for setting up the ZFW was to increase equity of access to health care, although it was also intended to put an end to the somewhat piecemeal development of the public scheme (den Exter et al 2004). However, the government was prevented from introducing universal public coverage by pressure from private insurers, who wanted to ensure that they would still be able to sell policies to a significant proportion of the population, and medical professionals, who were keen to maintain access to more profitable private patients (Maarse and Okma 2004). A more detailed analysis of institutional arrangements and stakeholder views is beyond the scope of this paper.

Risk segmentation and risk selection

Risk segmentation can be demonstrated by differences in the characteristics of those covered by public and private health insurance. In both countries, policies introducing choice of public or private coverage have developed in such a way as to result in risk segmentation. In Germany the demand for substitutive private cover is heavily influenced by age, sex, income and family size. Those most likely to be privately insured are young, single people, couples with double incomes and adult males living in what used to be West Germany (Datamonitor 2000). Consequently, the GKV covers a disproportionate number of women and children, older people and larger families (Rupprecht et al 2000). For example, in 1999 men accounted for 52.7% of those with private coverage, while women and children only accounted for 32% and 15.3% respectively (PKV 2000). People aged 65 and over account for 22% of all those covered by the GKV but only 11% of those covered by the largest private insurer and voluntary members of the GKV have almost twice as many dependants

(0.76 per contributor) as compulsory members (0.47) (Schneider 2003; Schnitzler 2005).

Risk segmentation can be attributed to important differences in the rules governing public and private insurers, creating opportunities for risk selection by the latter (see below). Private premiums are rated according to age, sex and health status, with women facing premiums that are 30-50% higher than premiums for men (PKV 2002a). Private insurers can reject applications, exclude cover of pre-existing conditions, charge extra for dependants and offer discounted premiums in exchange for high deductibles. However, they cannot terminate contracts, must offer lifetime cover and should not raise premiums as policy holders age, unless required to do so by unexpected discrepancies between actuarial forecasts and the current cost of providing benefits.

The problem of risk segmentation became acute soon after the 1989 law extended choice of public or private health insurance to all higher earners. During the early 1990s private premiums rose sharply for older policy holders, partly due to mismanagement and partly due to exploitation of loopholes in the regulatory framework. Private insurers had based premium calculations on average life expectancy, failing to account for the longer life expectancy enjoyed by substitutive policy holders, who come from higher socio-economic groups. This 'unexpected' discrepancy between premiums and benefit costs allowed them to raise premiums. Some private insurers also barred new policy holders from joining existing risk pools, which meant that current policy holders were unable to benefit from lower premiums arising from the entry of younger people (Riemer-Hommel et al 2003). The GKV subsequently faced an influx of older people who had previously chosen private cover but could no longer afford the premiums (Wasem 1995). Increased risk segmentation and other factors fuelled the growth in the GKV's deficits and prompted steady rises in average GKV contribution rates (from 12.4% in 1991 to 13.2% in 1993 and 13.6% in 1997), which in turn created even stronger incentives for younger people to opt for private cover (Busse and Riesberg 2004; Busse and Wörz 2004).

Financial pressures precipitated a series of reforms aimed at restricting voluntary exit from, and return to, the GKV. In 1994 the decision to leave the GKV became irreversible for those aged 65 and over and in 2000 for those aged 55 and over (CEA 2000). The legislation passed in 2000 also aimed to prevent future age-related premium increases in the private market by imposing a surcharge of up to 10% on all new private policies and 2% a year for 5 years for existing policy holders (Bundesaufsichtsamt für das Versicherungswesen 2001).

While these regulatory responses addressed, in part, the problem of people returning to the GKV and benefiting from public cover even though they had not previously contributed to it, they largely failed to tackle risk segmentation. High risks and the risk averse are now much less likely to leave the GKV, to the advantage of private insurers, who have been swift to highlight the fact that private cover is best value for the young, single and healthy (PKV 2002b).

Prior to the establishment of the ZFW in 1966, private insurers in the Netherlands operated on relatively egalitarian lines; most offered community-rated premiums. During the 1970s, however, a major private insurer decided to offer discounted premiums to students, prompting others to follow suit (Tapay and Colombo 2004). This coincided with further changes in private insurers' conduct; some began to reject applications for cover, risk-rate premiums, exclude cover of pre-existing conditions and market policies with reduced premiums but high deductibles, all of which encouraged younger and healthier individuals to leave the ZFW's voluntary scheme in favour of cheaper private cover (Gresz et al 2002b). At the same time, private cover became significantly more expensive for older and unhealthier people, many of whom returned to the ZFW, contributing to its rising deficits (Wasem 1995).

The Dutch government responded by abandoning its policy of choice of public or private health insurance. In 1986 it abolished the compulsory scheme for older people and the voluntary scheme for the self-employed, transferring most of their members to the remaining compulsory scheme for employees. It also changed the rules for enrolment in this scheme, establishing the system in place today. Those with earnings above a threshold (\leq 32,600 a year in 2004) and their dependants, are no longer eligible for public cover. If they want health insurance, they can purchase private cover for themselves and their dependants (den Exter et al 2004). Currently, the ZFW covers about 63% of the population and substitutive private insurance, including the WTZ (Health Insurance Access Act) scheme (see below), 30% (Maarse and Okma 2004).

By prohibiting voluntary exit from the ZFW, while maintaining a market for private insurance, the government successfully dealt with adverse selection and risk selection between public and private coverage. However, it was less successful in addressing risk segmentation. In fact, the 1986 reform of the ZFW served to entrench the unequal distribution of high risks, a problem that persists to this day. For example, Table 10 shows that the ZFW covers a much higher proportion of older people and a much lower proportion of younger people than private insurers. To compensate the ZFW for the financial burden this entails, the government introduced the MOOZ scheme (1986), which requires all private policy holders to subsidise the ZFW through an annual flat-rate contribution (den Exter et al 2004).

Table 10 Age distribution in the Dutch population and public and privatecoverage, 2000

Age	Population (%)	ZFW (%)	Substitutive VHI and WTZ (%)
0-19	24.4	21.3	30.9
20-64	62.0	63.4	59.0
65+	13.6	15.2	10.1
Total	100.0	100.0	100.0

Source: Vektis 2000

Note: ZFW = public scheme covering non-long-term care; WTZ = scheme created in 1986 to ensure access to private coverage for specific groups

Financial barriers to private coverage

In both Germany and the Netherlands measures taken to restrict voluntary exit with a view to protecting the finances of the public scheme had the unintended effect of lowering access to health care for specific groups of people. Some of those who were no longer eligible for public coverage faced financial barriers to private coverage for themselves and their dependants – for example, older private policy holders in Germany and older people and younger self-employed people with pre-existing conditions in the Netherlands. This problem has precipitated further reforms

involving mandatory pooling, product and price controls and changes to the threshold for public coverage.

In 2000 the German government introduced a 'standard' policy to protect older private policy holders who could no longer return to the GKV, even if their earnings fell below the threshold. Open to those aged 55 and under who have been privately insured for at least 10 years and whose earnings are below the threshold, the standard policy guarantees access to the same level of benefits as the GKV for a premium that cannot exceed the average maximum GKV contribution (or 1.5 times the contribution for married couples) (PKV 2001). In order to address information problems in the private market, the government also requires private insurers to inform policy holders of the irreversibility of the decision to opt out of the GKV, the likelihood of premiums rising with old age and the possibility of changing to a standard policy (Bundesaufsichtsamt für das Versicherungswesen 2001).

Every year, the government raises the threshold for compulsory enrolment in the GKV in line with increases in average earnings. In 2002, to prevent younger and healthier individuals from opting for private cover, the government proposed raising the threshold by as much as a third (Busse and Wörz 2004). It was eventually raised by about 11% in 2003, from \notin 41,400 to \notin 45,900, buthe threshold for returning to the GKV remained at \notin 41,400 (Busse and Wörz 2004).

The Dutch government introduced the WTZ scheme in 1986 to guarantee private policy holders access to a standard policy providing a similar level of benefits to the ZFW for a fixed premium (calculated as the typical private premium for someone of average risk) and no exclusion of pre-existing conditions (den Exter et al 2004). The standard policy covers all privately insured people aged 65 and over (since 1989) or whose private premiums have been higher than the WTZ premium for three consecutive years (since 1991) and students eligible for financial assistance (since 1992). As the WTZ premium only covers part of the standard policy's costs, private insurers are compensated through a centrally administered equalisation fund financed by annual contributions from non-WTZ private policy holders (Zorgverzekeraars Nederland 2005). The WTZ scheme currently covers about 12% of privately insured persons (Ministry of Health Welfare and Sport 2002).

Over time it has become clear that the WTZ scheme alone is unable fully to remove financial barriers to private cover, partly due to requirements to purchase separate policies for dependants. Consequently, the government has taken measures to increase access to public cover. Since 1998 ZFW members aged 65 and over are permitted to stay where they are, even if their earnings rise above the threshold, while privately insured persons aged 65 and over are eligible for public cover if their annual household taxable income (not earnings) is less than €20,750 (in 2004) (den Exter et al 2004). However, once they have enrolled in the ZFW they can no longer leave it.

The Dutch government has also used the border line between public and private coverage to benefit those just above the threshold (den Exter et al 2004). However, any concern for equity of access has been constrained by the politics of health insurance – notably, the government's attempt to ensure a stable market share for private insurers (Maarse and Okma 2004).

Impact on equity and efficiency

Horizontal and vertical equity in funding health care

Contributions to public insurers in Germany and the Netherlands are mainly set as a proportion of wages and are therefore independent of ability to pay. Making contributions entitles the payer, and any non-working dependants he or she may have, to a package of benefits defined by the government. The existence of a ceiling on contributions breaches vertical equity and individual sickness funds are allowed to set their own contribution rates (Germany) or additional flat-rate premiums (the Netherlands), which breaches horizontal equity (Busse and Riesberg 2004; den Exter et al 2004).

However, the degree to which public cover breaches horizontal equity is limited when compared to private cover: determined by an individual's age, sex and health status, private premiums do not cover dependents and depend on ability to pay. This means that there may be significant differences in funding health care among the privately insured and between those with public and private coverage, even if they share the same characteristics. It is difficult to demonstrate the magnitude of these differences in financial terms as data regarding public contributions and private premiums are either presented in average amounts (both countries) or do not distinguish between different types of privately insured persons (Germany) and cannot therefore give sufficient indication of the level of benefits covered. Nevertheless, the distribution of high risks among public and private insurers shown in the previous section strongly suggests that private coverage is likely to be expensive for older people and larger families and may not even be available to those in poor health.

Although the German and Dutch governments have taken action to ensure that private cover is affordable for older people and those in poor health, financial barriers probably remain. For example, the Dutch standard policy premium is still 20% higher than the average ZFW contribution and neither the Dutch nor the German standard policies cover dependents, who must be separately insured.

As level of earnings determines eligibility for public coverage in both countries, the public pool is funded by people with lower earnings and loses the potentially larger contributions of higher earners who choose private cover or were subsequently excluded from public cover, as in the Netherlands. The combination of a public pool predominantly funded by lower earners and covering a disproportionate concentration of high risks means that the burden of paying for health care largely falls on those with public cover. Consequently, the publicly insured contribute proportionately more towards health care costs than privately insured higher earners. Over time this burden will worsen as those who have opted for private cover return to the public scheme and claim benefits towards which they have not previously contributed. The public scheme may be forced to raise contribution rates, not only to cover the costs of caring for high risks, but also to compensate for the influx of new members, many of whom may themselves be high risks.

The Dutch government's MOOZ scheme attempted to rectify this anomaly, but the size of the subsidy involved is small (about 5% of the average private premium) and

does not adequately compensate the ZFW for its concentration of high risks or for the loss of contributions from higher earners (Hamilton 1996). Ironically, as ZFW contributions are based on earnings rather than income, some private policy holders may in fact be subsidising ZFW members who are low earners but have large nonwage incomes (Westerhout 1999).

Taking these factors into account, and assuming that private premiums are, on average, cheaper than public contributions, it is possible to conclude that a health system offering choice of public or private insurance is regressive in funding health care, thereby breaching vertical equity. International analysis confirms that funding from all sources together (public insurance, taxes, private insurance and direct payments) was regressive in Germany and the Netherlands at the end of the 1980s and in the Netherlands in the early 1990s (Wagstaff et al 1999). However, funding through public insurance alone was not only regressive, but considerably more so than funding from all sources together due to the voluntary exit or exclusion of richer people. Because the private pool consists almost exclusively of higher earners, funding from private insurance alone was found to be mildly progressive. The analysis concluded that health care funding in the Netherlands was pro-rich in its redistributive effect, a factor attributed to the dual system of income-related public contributions for lower earners and non-income-related private premiums for higher earners; the same conclusion can be drawn for Germany (Wagstaff and van Doorslaer 1997; Wagstaff et al 1999).

Efficiency in production

The private market in both countries is characterised by weak incentives for insurers to compete on the basis of efficiency in production. First, private insurers have strong incentives to avoid financial risk, either through risk selection or by shifting risk to other entities (such as the GKV in Germany and the WTZ scheme in the Netherlands; thanks to the latter, Dutch private insurers do not bear any financial risk for unhealthy and older policy holders). So rather than competing on the basis of their ability to operate more efficiently than their rivals, for a given level of quality, private insurers are more likely to compete on the basis of their ability to select risks. Analysis of Dutch private insurers' non-medical expenditure, based on a sample,

shows that they spend 14 times as much on selection (\notin 28 per insured) as on efficiency measures (\notin 2 per insured) (Douven and Westerhout 2000). Public insurers spend less on selection (\notin 10 per insured) and moreon efficiency measures (\notin 3 per insured).

Second, levels of competition among private insurers are low, measured by level of policy holder movement, because those who have been privately insured for some time are likely to find it difficult to change from one insurer to another without incurring higher premiums. Risk-rated premiums combined with rejection of applications, exclusion of pre-existing conditions, the non-transferability of claims histories and (in Germany) the existence of ageing reserves and surcharges on new policies mean that individuals become 'locked in' to their existing policies. Consequently, movement between private insurers is minimal in both countries (Datamonitor 2000). In contrast, a survey carried out in Germany in 1999 showed that 7.3% of the population had changed from one public insurer to another since the introduction of competition among public funds in the mid 1990s (Zok 1999). The proportion switching in the Netherlands is lower but has been increasing over time (Gresz et al 2002a).

In the private sector, competitive efforts focus on attracting new entrants to the market and (in the Netherlands) sales to groups (Westerhout 1999). Private insurers that succeed in attracting new entrants will probably keep them for as long as those individuals remain in the private market, partly due to the constraints on mobility already noted but also because market exit is determined by income level rather than choice. Not only does this encourage some insurers to behave in ways that disadvantage consumers in the long run (Riemer-Hommel et al 2003), it also means they are less likely to compete through avoiding administrative waste and exerting control over provider payment and behaviour. For example, German private insurers spend almost three times as much of their income on administration as sickness funds (16.7% versus 6.1% in 2002), as do Dutch private insurers (12.7% versus 4.4% in 2000) (Busse and Riesberg 2004; PKV 2003; Vektis 2000).

Private insurers in both countries have been slow to adopt cost containment strategies such as vertical integration, selective contracting or monitoring of providers'

behaviour (Mossialos and Thomson 2004). Effective negotiation of lower prices with providers and control of provider behaviour by private insurers are also limited by market fragmentation and provider power (Busse and Riesberg 2004; Schut 1995; Westerhout 1999). Cost inflation tends to be much higher in the private than the public sector. For example, in Germany between 1992 and 2002 per capita expenditure among private insurers rose by 1.4 times as much as the rise in spending by sickness funds; some of this increase is due to the fact that doctors are permitted to charge their privately insured patients higher fees (Busse and Riesberg 2004).

Conclusions

This review of policy outcomes in Germany and the Netherlands provides some empirical support for inequity and inefficiency in markets where there is choice of public or private health insurance, as predicted by economic theory. It shows that choice of public or private coverage breaches horizontal and vertical equity in funding health care, heightens the degree of financial risk borne by the public scheme and lowers incentives for private insurers to operate efficiently.

Policies introducing choice of public or private coverage have developed in such a way as to result in risk segmentation, partly through poor design and partly through the incentive structures they bring about. First, eligibility for this choice depends on level of earnings and as income is usually correlated positively with health status and negatively with old age, it seems inevitable that the public scheme will cover a disproportionate amount of poorer, unhealthier and older individuals (Whitehead 1992). Second, the choice itself creates incentives for insurers to select risks. Third, rules aimed at preventing public insurers (sickness funds) from explicit risk selection – for example, open enrolment, wage-related contributions, automatic coverage of dependants at no extra cost and benefits defined by government – make it even easier for private insurers, free from similar regulation, to attract low risks and deter high risks. It is difficult to establish the separate influence of these three factors on risk segmentation in the German and Dutch markets for health insurance. The aim here

was simply to demonstrate how policy design and regulation have combined to facilitate risk selection by private insurers.

Regulatory responses to risk segmentation and risk selection differ in their effectiveness and have varied across the two countries. German efforts to deal with these issues at the same time as maintaining choice have had the unintended consequence of limiting access to coverage for some groups. However, the more radical Dutch solution of moving from choice to exclusion of higher earners from public coverage, while protecting the public scheme from adverse selection, has entrenched existing levels of risk segmentation and also led to problems of access. More incremental measures, such as cross-subsidies from private to public insurance, tend to be limited in their impact and could be contested under supranational competition law – for example, European single market legislation (Neudeck and Podczeck 1996; Palm 2002). Others, such as risk adjustment and tighter regulation of insurers, are not only technically difficult to implement but may also be resisted by insurers (Puig-Junoy 1999; van de Ven et al 2000). It is beyond the scope of this paper to examine why governments prefer some measures to others, but stakeholder interests are likely to have had considerable influence on the policy making process.

In practice, neither country's regulatory approach has resolved the underlying issues, even after successive reforms. From a theoretical perspective, abolishing choice and making health insurance compulsory for the whole population is the most effective means of dealing with adverse selection – a conclusion that governments in both countries have recently reached (Barr 1998; Hsiao 1995a). German proposals for compulsory universal health insurance are still under debate, but Dutch plans to introduce a compulsory universal scheme have been approved by parliament and will take effect in 2006 (Busse and Riesberg 2004; Maarse 2002; Rürup-Kommission 2004).

Proponents of choice of public or private health insurance argue that this type of choice is valued by consumers and may curb public expenditure on health care. The absence of relevant data makes it difficult to address the first issue. However, the extent to which individuals value choice of public or private coverage may be determined by attitudes towards risk; uncertainty about future health care needs,

family size, earnings and regulation complicate decision making and a choice made at one point in time may, at a later stage, turn out to have been sub-optimal. Importantly, the conduct of private insurers and technical and information problems in private markets in Germany and the Netherlands have severely restricted choice for certain individuals and prevented others from exercising any choice at all. It is not known what effect choice for some has on those who do not qualify for choice or who cannot exercise choice due to poor health.

The voluntary nature of choice of public or private health insurance also makes it hard to establish whether there will be a net cost or net benefit to public finances in the long term, but the possibility of adverse selection against the public scheme makes the prospect of lower per capita public expenditure unlikely. Total levels of public expenditure might fall if governments follow the Dutch model of excluding higher earners from public coverage, but given that private insurers have limited incentives to operate efficiently, increasing private coverage may actually lead to rises in total levels of spending on health care. Advocates of opting out or excluding some groups from public coverage should also be explicit about the distributional implications. The ostensible aim of such policies may be to shift health care costs from public to private insurance. In reality, however, costs tend to be shifted in the opposite direction, from private to public coverage, as the public scheme finds itself paying for a disproportionate amount of high risks with a lower level of contributions.

This examination of the German and Dutch experience suggests that the potential benefits of opting out or excluding higher earners from public coverage may be overestimated in current policy debates. These policies give rise to perverse incentives and, while measures can be taken to correct any negative impact on equity and efficiency, some forms of regulation will face opposition from interest groups; others may be technically difficult to implement.

Study 4: Can insurer competition improve health system performance? Evidence from western Europe

Paper provenance and peer review

This paper is primarily the work of the PhD author (ST). It draws on responses to a questionnaire by a researcher in each of the four countries it reviews. The researchers are listed as co-authors of the paper: Reinhard Busse, Professor of Health Care Management at Berlin University of Technology; Luca Crivelli, Professor of Economics at Università della Svizzera italiana; Wynand van de Ven, Professor of Health Insurance at Erasmus University Rotterdam; and Carine Van de Voorde, Department of Economics, Catholic University Leuven.

ST devised the paper and the questionnaire, collated responses to the questionnaire, reviewed the literature and drafted the paper. The four researchers provided additional references and commented on drafts. The paper has been critically reviewed by EM and also benefited from comments made by participants at the Commonwealth Fund's International Health Policy Symposium in Washington DC in November 2010. Financial support for the paper came from the Commonwealth Fund (grant 20100091).

The paper is currently under review for publication in a peer review journal.

Introduction: the rationale for insurer competition

Choice of and competition among health insurers has gained prominence in Europe in the last 15 years and is now an integral feature of health financing policy in Belgium, the Czech Republic, Germany, the Netherlands, Switzerland and Slovakia (Thomson et al 2009b). Although not yet widespread, the idea that third-party payers (whether health insurers or other entities) should compete for clients is an option debated with growing frequency in countries as diverse as England and Estonia (Bevan and van de Ven 2010; Thomson et al 2010b).

Arguments in favour of insurer or payer competition (the terms are used interchangeably) derive from neo-classical economic theory. They take as their starting point the idea that if people can buy the same good or service from more than one firm, the possibility of a person buying from a rival firm – the threat of exit (Hirschman 1970) – will encourage all firms to improve the price-quality ratio of their products or lose clients and, eventually, face bankruptcy. Competition between insurers is intended to secure efficiency (enhanced value) through two mechanisms: making insurers bear financial risk and giving people free choice of insurer (Enthoven 1988). Where insurers have a fixed and prospectively determined budget within which they must meet the health care costs of their enrolees they will, it is argued, aim to use resources judiciously. Those that do not will have to charge higher premiums and risk losing enrolees. The threat of consumer exit will also encourage insurers to be more responsive to public preferences. If people are sensitive to price and quality, insurers will try to enhance value – maintaining or improving quality while minimising costs – using a range of tools, including cutting overheads and engaging in strategic purchasing (Figueras et al 2005).

The ultimate aim of insurer competition is to improve the performance of the health system – that is, to strengthen the health system's ability to meet its goals (WHO 2000). For this to happen, however, the mechanisms listed above must be in place and at least three further assumptions must hold³⁸. First, people should be able to

³⁸ Bevan and van de Ven (2010) have set out a larger number of conditions that must be fulfilled if insurer competition is to achieve its goals. This paper has condensed some of these conditions so that

choose and switch insurer with ease and without incurring significant transaction costs. This implies that people are able to make an informed choice of insurer and do not face barriers to switching. Second, insurer competition must be based on price and quality rather than risk selection, otherwise it will not create incentives for efficiency (van de Ven and Ellis 1999). Third, insurers must have access to tools that allow them to enhance value, and be willing to use them.

This paper considers the potential for insurer competition to improve health system performance in western Europe. It does so by assessing the extent to which the assumptions noted above hold in Belgium, Germany, the Netherlands and Switzerland. If the assumptions do not hold, it may be difficult for insurer competition to succeed in strengthening the health system. This may in turn help to explain why reforms introducing or expanding insurer choice and competition have not always lived up to policy makers' expectations. It is also useful to know *why* assumptions do not hold, so that barriers to successful implementation can be identified and addressed. The paper does not attempt to assess the impact of insurer competition on health system performance, which would in any case be difficult to do due to noise from other reforms and the absence of knowledge about the counterfactual (what might have happened without insurer competition). After briefly outlining the history, development and goals of insurer choice and competitions in turn, summarises the outcome of reforms and discusses implications for policy.

Insurer choice and competition: history, development and goals in western Europe

This section outlines the history and development of insurer choice and competition in the four countries in chronological order. It also highlights the policy goals underpinning more recent reforms. Awareness of the goals specific to each country, and the context in which they have been formulated, is important for the assessment

they fall under the three assumptions listed here. It also takes some of the conditions in Bevan and van de Ven's list (such as regulation) as a given: for example, freedom to switch could probably only be achieved through regulation.

of outcomes and discussion of implications in subsequent sections. Table 11, Table 12 and Table 13 depict key features of current health insurance coverage, regulation and market structure.

Switzerland

Choice of health insurer in Switzerland dates to 1911, when the first federal law on Sickness and Accident Insurance came into force. At that time the health insurance system was mainly managed by small-scale, private, non-profit institutions, and state subsidies were required to encourage voluntary enrolment and make premiums more affordable. In order to qualify for subsidies, insurers had to offer open enrolment to people under the age of 55 and portable benefits. They also had to limit the difference between premiums for men and women to 25%. By 1945, about half of the population was covered, expanding to near-universal coverage between 1985 and 1990.

Weak regulation, premiums based on age at enrolment, and the entry of new insurers led to a degree of unfair competition based on risk selection. During the early 1990s, many sickness funds collapsed or merged with others to avoid bankruptcy. Concerns about unequal access to health insurance, combined with concerns about health expenditure and gaps in coverage, gave rise to a new Federal Health Insurance Act (FHIA) in 1996. The new law made health insurance universally compulsory. To encourage fair competition based on price and quality, it extended open enrolment and introduced a standard benefits package, risk equalisation and minimum costsharing requirements. The law maintained collective contracting of providers, but gave insurers leeway to develop so-called managed-care plans (involving referral to specialists, selective contracting and capitation-based provider payment) and sell them to those willing to accept limited choice of provider in return for lower premiums. Thus, the reform aimed to enhance access to health care but at the same time to create incentives for better quality and cost control (Crivelli 2012 in press).

Belgium

Compulsory health insurance for employees was established in Belgium in 1944 and is currently managed by five non-governmental, non-profit sickness fund

associations comprising 57 local sickness funds, a special fund for railroad employees and a public insurer of last resort. In 1964 compulsory coverage of inpatient care was extended to self-employed people and in 2008 coverage for the self-employed was further extended to include outpatient care.

Although Belgian residents have enjoyed free choice of sickness fund since 1945, this choice has not been regarded as a means of stimulating insurer competition. Rather, funds were associated with different political or religious groups, and choice simply allowed people to express their preference for a 'Christian' or 'Socialist' insurer. Even when sickness funds took on some financial risk (in 1995 the government introduced partial prospective funding of sickness funds, accompanied by risk equalisation), the underlying policy intention was not to encourage competition among sickness funds but to place them on an equal footing and encourage them to contain health care costs (Schokkaert and Van de Voorde 2000). The sickness funds were not given new tools, such as selective contracting, with which to influence health service costs and quality (Schokkaert and Van de Voorde 2003).

Belgium is the only one of the four countries to have a public insurer of last resort. Unlike the sickness funds, the public fund has no historical affiliation to political or religious groups, nor does it offer compulsory additional benefits³⁹ (as the local sickness funds do). As a result, its small share of the market (1%) is made up of people who do not wish to pay for any additional benefits or who prefer a 'neutral' fund.

The Netherlands

In 1991 the Dutch government introduced free choice of non-profit sickness fund for the two-thirds of the population eligible for statutory coverage and, for the first time, sickness funds began to take on financial risk for their enrolees' health care costs.

³⁹ The local sickness funds have traditionally offered a mixture of compulsory additional benefits and voluntary supplementary and complementary health insurance. Additional benefits are compulsory on the grounds that if everyone pays for them adverse selection can be avoided and they will be cheaper to cover. In 2010 a change in the law separated compulsory and voluntary activity. From 2012 voluntary additional benefits will be sold by new non-profit societies of mutual assistance, which are part of the national sickness fund associations.

Free choice of fund was intended to improve efficiency and responsiveness to consumer preferences. By the end of 2005, the sickness funds bore financial risk for 53% of their revenue. However, there was growing dissatisfaction among policy makers with the absence of other incentives for efficiency and innovation within the prevailing regulatory framework, coupled with concerns about long waiting times for specialist care. The increasingly heavy regulation required to ensure access to voluntary private health insurance for the third of the population excluded from statutory coverage was also seen as unsatisfactory.

The 2006 Health Insurance Act extended statutory coverage to the whole population under a new system managed by private insurers, some of whom were formerly sickness funds. Insurers now have stronger incentives to be prudent purchasers of health services, including increased financial risk (75% of revenue) and some tools to stimulate competition among providers. It was expected that over time consumer choice of insurer would reduce the emphasis on government regulation of health care supply and increase the use of strategic purchasing to enhance value. This in turn would make health care more affordable, more responsive to patient needs and more effective (Westert et al 2010).

Germany

Historically, statutory health insurance (SHI) in Germany was compulsory for all blue-collar employees and white-collar employees with earnings below a threshold. Employees were assigned to a non-profit, quasi-public sickness fund based on geographical or occupational criteria. Only white-collar employees with earnings above the threshold were allowed a choice of voluntary enrolment in the SHI system or voluntary private health insurance; if they chose SHI, they not only had free choice of sickness fund but also the ability to switch fund at regular intervals (Busse 2011 in press). Assigned membership led to large variations in income-related contribution rates (of up to 8 percentage points in the early 1990s) because sickness funds covered people with very different income levels and risk profiles (Gaskins and Busse 2009). Over time, variation in contribution rates and differences in the rights of white- and blue-collar employees came to be regarded as inequitable,

particularly since blue-collar employees often experienced higher contribution rates than white-collar employees.

In 1992 the German government extended free choice of sickness fund to almost all those covered by SHI, with effect from 1996. This was primarily intended to tackle equity concerns about varying contribution rates by permitting anyone to choose a sickness fund with a lower contribution rate. It was expected that free choice would lead to a convergence in contribution rates and, since the national and international ideological climate at that time favoured the introduction of market mechanisms in health care, it was also hoped that fostering competition within the SHI system would control health care costs and increase efficiency. Free choice of sickness fund was preceded by the introduction (in 1994–1995) of risk equalisation to prevent risk selection and ensure contribution rates would signal a sickness fund's ability to operate efficiently. Although it was clear from its inception that the risk-adjustment formula was crude, the government did not have the tools and data necessary to implement a more sophisticated scheme.

In 2009 the government made health insurance compulsory for all permanent residents. SHI covers employees (with the exception of civil servants) and their dependants (non-earning spouses and children), and other groups such as the unemployed, pensioners, students, farmers, and (since 2007) anyone not covered by private health insurance (PHI). Employees whose gross wages exceed €49,950 a year (less than 15% of the population) can choose to opt for PHI instead, but they must have some form of coverage. Less than a third of this high-earning group opts for PHI. SHI covers about 85% of the population, PHI covers around 10% (more than half of whom are civil servants and the self-employed) and government schemes cover about 4%. As people aged 55 and over who have opted for PHI are no longer eligible for SHI coverage (to prevent people from opting for PHI when younger and then returning to SHI when older), PHI has become increasingly tightly regulated to ensure financial protection and access to health care. For example, private insurers are required to offer a basic PHI package, which matches SHI benefits and contribution rates, on an open enrolment basis.

Summary of policy goals across the four countries

The range of policy goals underlying insurer competition varies across the four countries, but there is common ground. While Germany was unique in expanding consumer choice of insurer to address equity concerns, all four countries expected this form of consumer choice, combined with greater financial risk for payers, to enhance efficiency and quality in health care administration and delivery and to keep costs under control.

Belgium is the only one of the four countries in which public policy has not emphasised insurer competition to improve health system performance. However, it is included in the analysis because the 1995 reform shifting some financial risk to sickness funds aimed to stimulate greater cost control, one of the main goals of insurer competition in the other countries. Following this reform, consumer choice of sickness fund (which dates to 1945) became an integral part of the incentive structure facing insurers, even though it was not originally intended to have such an effect.

	Belgium	Germany	Netherlands	Switzerland
Statutory coverage breadth (universality)	Coverage compulsory for all residents since 2008 (salaried workers: 1944; inpatient care for self employed: 1964; outpatient care for self employed: 2008).	Coverage compulsory under SHI since 2007; coverage compulsory for all residents since 2009. Around 85% covered by SHI, 10% through PHI, 4% through other government schemes.	Coverage compulsory for all legal residents since 2006.	Coverage compulsory for all residents since 1996.
What % of the population is not covered?	Less than 1.0% of the population (a high of 1.4% in 2007).	Probably less than 0.5% of the population (in 2007, before the introduction of compulsory insurance).	About 1.0% of the population (plus a further 1.0% who are illegally resident).	About 2.0% until January 2011. A new regulation should have significantly reduced this percentage (but no official statistics exist).
What are the characteristics of the uninsured?	Not known (a mixture of people unable and unwilling to pay health insurance premiums).	Before 2007/09: Self employed, formerly voluntary SHI members, people aged 55+ no longer eligible for SHI, divorced women formerly covered as dependants and illegal immigrants.	Low-income individuals, both legal and illegal immigrants (illegal immigrants are not allowed to purchase subsidised health insurance).	Not known (there was a big debate about whether the uninsured were unable or unwilling to pay health insurance premiums). More likely to be aged 20-59, foreigners, divorced or single, below or just above the threshold for social assistance, users of mental health services.
What is the main role of voluntary health insurance?	Supplementary (mainly for superior accommodation in a hospital, not to increase choice or for faster access) and complementary covering eye and dental care.	Substitutive, covering civil servants, self- employed and high-earning employees who choose private insurance (in total, around 10% of the population); complementary, covering user charges and some uncovered services (around 20% of the population).	Complementary, offering mainly dental care and physiotherapy benefits (about 90% of the population).	Supplementary cover (offering free choice of hospital across all cantons, free choice of physician in public hospitals, higher standards of hotel comfort in private and semi-private wards, daily cash benefits) and complementary cover of excluded or partially covered services (eg dental care and home care). In 2005 59% of the population had hospital cover, 37% had cash benefit cover, 11% had dental cover and 52% had cover for other excluded services (Kocher and Oggier 2007).
Coverage scope (benefits)	Broad coverage.	Broad coverage.	Broad coverage.	Broad coverage.
What health services are typically not covered?	Eyeglasses and contact lenses, hearing aids, orthodontic care, cosmetic plastic surgery, less necessary drugs, alternative medicine.	Eyeglasses, contact lenses and over-the- counter and 'lifestyle' drugs.	Eyeglasses and contact lenses, dental care for adults, orthodontic care, cosmetic plastic surgery, alternative medicine.	For eyeglasses and contact lenses only a lump sum is paid. Inpatient care provided at a hospital not on a specific cantonal list, psychotherapy (covered subject to certain conditions), drugs not listed in the 'catalogue of pharmaceutical specialities', alternative medicine, dental care, and cosmetic plastic surgery.

Who defines the statutory benefits package?	Belgium Federal government based on proposals negotiated between sickness funds and providers. The Minster of Social Affairs defines entitlement to drugs based on advice from the Drug Reimbursement Committee.	Germany In general terms federal legislature/parliament; details by Federal Joint Committee representing payers, providers and patients.	Netherlands Central government based on advice from the independent Dutch Health Care Insurance Board (CVZ).	Switzerland Central government based on advice from the Federal Commission on Health Insurance Benefits and General Questions representing payers, providers, patients and scientific advisors.
Coverage depth (user charges)	Co-insurance or co-payments applied to most health services, with an annual out- of-pocket maximum.	Co-payments for adults applied to most health services, with an annual out-of- pocket maximum.	Annual deductible of €170 per adult (18+) applied for non-primary care services.	Minimum annual deductible of CHF 300 (€250) plus co-insurance or co-payments applied to most health services, with an annual out-of-pocket maximum. The maximum optional deductible for adults is CHF 2500 (€2085). Controversial proposal debated in parliament: to introduce a 20% co-insurance rate for people who do not opt for managed- care contracts.
Who defines user charges policy?	Federal legislation.	Federal legislature/parliament. Sickness funds can waive some charges (eg for enrolment in DMPs).	Central government. Insurers can waive or increase some charges for use of preferred/non-preferred providers. The insured can choose to pay a higher annual deductible.	Central government. Insurers may waive or increase some charges. The insured can choose to pay a higher annual deductible.

Source: Survey responses

Note: Currency converted using 30 June 2011 exchange rates from www.oanda.com; DMP = disease management programme

	Belgium	Germany	Netherlands	Switzerland
Who sets and collects contributions?	Federal government sets and collects a uniform income-related contribution. Sickness funds set and collect additional community-rated premiums.	From 2011 a national contribution rate is defined in legislation. In 2009/10 the federal government (the cabinet) set a uniform income- related contribution rate. Prior to this the sickness funds determined their own contribution rate. Contributions are collected by sickness funds but transferred to a central health fund. Sickness funds set and collect additional community-rated premiums.	Central government sets and collects a uniform income-related contribution. Insurers set and collect additional community-rated premiums.	Insurers set and collect their own community-rated premiums.
How are statutory health insurance revenues pooled and (re)allocated?	Income-related contributions and general tax revenue pooled by a central fund and allocated to sickness funds based on a risk- adjusted formula and actual costs.	Income-related contributions and general tax revenue pooled by a central fund (see note) and allocated to sickness funds based on a risk-adjusted formula.	Income-related contributions and general tax revenue to cover children pooled by a central fund and allocated to insurers based on a risk-adjusted formula.	Premiums pooled by insurers and redistributed at cantonal level based on a risk-adjusted formula managed by a foundation owned by the insurers. General tax revenue is pooled by Cantons and used to pay for about half of all inpatient care costs.
Who sets the formula for (re)allocating resources?	Federal government.	Federal Ministry of Health.	Central government.	Parliament defines the principles on which risk adjustment should be based. The Federal Council is responsible for applying them in setting the formula.
Who monitors insurer competition?	A government agency (Control Office of the Sickness Funds) and the Belgian Central Bank (NBB).	SHI: the Federal Insurance Authority; PHI: the Federal Financial Supervisory Authority	Semi-public supervisory authorities at arm's length: the Dutch Healthcare Authority (NZa) manages competition among the providers and insurers; the Dutch Competition Authority (NMa) covers all sectors (monitoring the health sector now accounts for about one third of its time); the Dutch Central Bank (DNB) supervises financial solvency.	Under the FHIA, the Federal Office of Public Health controls SHI activity; VHI activity falling under the private Law on Insurance Contracts (VVG) is supervised by FINMA, the Swiss Financial Markets Supervisory Authority, which replaced the Federal Office of Private Insurance in 2009.

Table 12 Regulation of statutory health insurance, 2011

Source: Survey responses

Note: Farmers' sickness funds in Germany do not participate in the central fund and are not subject to the risk equalisation scheme.

	Belgium	Germany	Netherlands	Switzerland
What is the legal/profit status of insurers?	Sickness funds are non-governmental non- profit organisations under public law. The market is closed to new entrants.	Sickness funds are non-governmental, non- profit organisations under public law. Private insurers fall under private law.	Insurers are private entities allowed to share profits with their shareholders.	Insurers are private entities and cannot make a profit on SHI business.
If profit status varies, what is the balance between non-profit and for-profit?	Not relevant.	Among private insurers, 20 insurers are non-profit and 26 are for-profit.	Most insurers are non-profit mutual associations.	About 60% have non-profit legal status (foundations or associations) and 40% are stock companies owned by non-profit institutions.
If profits are allowed, are there any controls on profit margins?	Not relevant.	No.	No.	Profits not allowed for SHI business (see note).
How many insurers are there?	Five sickness fund associations (divided into 57 local funds), a public insurer of last resort and a scheme for railroad workers.	169 sickness funds in 2010 and 46 private insurers.	11 health insurance holding companies in 2010, 28 different health insurers in total. The largest holding company contains 7 insurers.	82 insurers involved in SHI in 2010.
What is the market share of the largest three insurers?	About 90%.	About 32% for the sickness funds and around 42% for private health insurance.	74% for holding companies.	Nationally: 45% (holdings); 28% (individual insurers). Cantonal markets are much more concentrated.
Can insurers who sell SHI also sell voluntary cover?	Yes, but in 2010 local sickness fund compulsory health insurance activity was separated from VHI activity. From 2012 the latter will be offered by non-profit societies of mutual assistance (part of the national sickness fund associations).	Sickness funds can broker VHI sold by private insurers; in practice the line is becoming blurred as SHI policies for 'integrated care' include some supplementary benefits (eg smaller wards in hospital).	Yes. The Dutch Health Insurance Act prohibits the termination of VHI contracts when enrolees switch to another insurer for SHI cover.	Yes. Legislation prohibits tied sales of VHI and SHI.

Table 13 Market structure of statutory health insurance, 2011

Source: Survey responses

Note: A survey of 65 Swiss funds found that only one had distributed part of its VHI profits to the holding company. This suggests profits on VHI business are generally kept within companies to increase reserves, reduce premiums or invest in marketing campaigns (Hefti and Frey 2008).

Can people move freely between insurers?

The threat of exit may be muted if people cannot move (switch) freely from one insurer to another, undermining a major premise of insurer competition. This is most likely to be problematic where switching is difficult for regular users of health care – for example, those with chronic conditions. Insurers who assume these people have no real alternative to their existing insurer, and are therefore 'locked in', may not have much incentive to respond to their preferences. In the absence of a single metric to establish the degree of consumer mobility in insurance markets, a range of factors needs to be considered. These include financial and administrative barriers to joining a new insurer, actual rates of switching among the total population, the reasons people give for switching or staying put and the characteristics of those who do and do not switch.

Strategies to facilitate switching

All four countries employ multiple strategies to ensure that the whole population is able to switch from one insurer to another, for statutory benefits, with relative ease and at low cost: open enrolment (in Belgium since 2007 only, replacing a system of guaranteed renewal of contract), full coverage of pre-existing conditions, premiums that are not linked to risk of ill health, fully portable benefits, a standardised benefits package to enable straightforward price comparisons, good comparative information available through newspapers, web sites⁴⁰ and intermediaries, and a risk equalisation scheme intended to compensate insurers for covering high-risk individuals. These universally applied strategies mean that the financial and administrative costs of switching are likely to be low. Other transaction costs may be high, however, particularly for some groups.

Rates of switching and switcher characteristics

Switching rates vary across the four countries, with the lowest rates in Belgium and the highest rates in Switzerland (Table 14). An important question is whether current

⁴⁰ Government-sponsored web sites in the Netherlands (<u>www.kiesbeter.nl</u>) and private initiatives in all four countries.

mobility levels are sufficient to stimulate competition. It is difficult to say, however, what degree of mobility is necessary for the possibility of exit to present a genuine threat to insurers. Looking at the characteristics of those who are more (or less) likely to switch may be a more useful indicator of consumer mobility. If non-switchers are mainly people with predictably high health care costs – a situation termed 'adverse retention' (Altman et al 1998) – insurers may not have enough incentive to make statutory cover attractive to them – for example, by contracting the best providers or organising integrated care for people with chronic conditions (Strombom et al 2002). This would severely weaken or even eliminate the instrumental effect of exit. Depending on the quality of the risk adjustment scheme in place (see below), insurers might attempt to erode service quality for this group and take other steps to encourage them to switch. Table 14 shows that switchers are more likely to be younger and healthier in two out of the three countries for which data are available (Germany and the Netherlands). In Switzerland switchers are also likely to be

Country	Switching rates	Characteristics of switchers
Belgium	Early 2000s: around 1% (Schokkaert and Van de Voorde 2003).	No data available.
Germany	1997-2007: varied from 4.0% to 5.8% (Potratz and Zerres 2010).	1995-2001: switchers more likely to be younger and healthier (Gresz et al 2002a; Knaus and Nuscheler 2005; Schut et al 2003; Zok 1999); 2010: switchers more likely to be younger, higher income, better educated and not chronically ill (Zok 2011).
Netherlands	Before 2000: around 1% (Laske- Aldershof et al 2004); 2005: around 3% (Westert et al 2010); 2006: 18%; 2007: 4.4%; 2008: 3.6%; 2009: 3.5% (Roos and Schut 2011); 2010: 5.5% (Vektis 2011).	Prior to 2006: switchers more likely to be younger and better educated (Gresz et al 2002a; van Dijk et al 2008); 2006-2009: switchers have better self-reported health (Roos and Schut 2011).
Switzerland	Switching rates fell from 4.8% in 1997 to 2.1% in 2000 (Frank and Lamiraud 2009) and rose from 12% in 2008/9 to 15.4% in 2009/10 (25% among those choosing the largest annual deductible) (Comparis.ch 2011).	1996-2005: switching more likely among people choosing higher deductibles, less likely with age and less likely among people with voluntary cover whose self- reported health is 'poor' or 'good' (as opposed to 'very good') (Dormont et al 2009); 2000: switching less likely among people with voluntary cover (Frank and Lamiraud 2009).

 Table 14 Switching rates among enrolees for statutory benefits and characteristics of switchers

Source: Authors' research

Reasons for switching

Reasons for switching differ in importance across the four countries, with price playing no role in Belgium, a significant role in the Netherlands and Switzerland and, probably to a lesser degree, a role in Germany. Consumer perceptions of differences in quality seem to play some role in all four countries (Table 15). The Netherlands and Switzerland have the largest differences in price across insurers. In the Netherlands, however, the gap between the cheapest and most expensive communityrated premiums is slightly smaller now than in 2006 (€265 in 2008 and €216 in 2010) (Westert et al 2010). Premium inflation has been modest.

In contrast, premiums have grown rapidly in Switzerland in recent years, prompting the much higher than usual rates of switching seen in 2008/2009 and 2009/2010. Premium variation is also significant, which makes the Swiss switching rates seem surprisingly low. By selecting the highest deductible and enrolling in a managed-care network, Swiss policy holders can lower their premiums by 50%. In just one region (Zurich canton), 5% of people paid an annual premium of less than CHF 3,500 in 2010, while 5% paid over CHF 4,900, a difference of more than CHF 1,400 (Federal Office of Public Health 2008).

In Germany in 2010 only 13 of the more than 150 sickness funds charged additional community-rated premiums and the premiums are low in comparison to the Netherlands and Switzerland. Nevertheless, people appear to be very sensitive to price. In the first half of 2010 sickness funds that introduced an additional community-rated premium of €8 per month in Februaryof that year lost up to 20% of their enrolees (Mihm 2010). In 2011 the cap on additional premiums was lifted, which may intensify price competition in future.

Country	Is price a reason for switching?	Is quality a reason for switching?
Country Belgium	No. Price differences are negligible. In 2010 additional community-rated premiums did not exceed €20 per enrolee per year. Price elasticity <1 (Laske-Aldershof et al 2004).	Is quality a reason for switching? Yes. People switch to be with the same insurer as a partner, for better customer service or to obtain a different set of VHI benefits (the main reason).
Germany	Yes. In the late 1990s substantial differences in contribution rates across insurers and the role of employers in financing coverage led to high price elasticity (Laske-Aldershof et al 2004; Schut et al 2003). Since 2009, with the introduction of the nationally uniform contribution rate, price signals have generally been weak, but people are very sensitive to price where signals exist.	Yes. The reasons given for switching include better benefits, better service, better image and change of employer or industry (Zok 1999). In 2010 additional care offers were also mentioned (Zok 2011).
Netherlands	Yes. Negligible price differences before 2006. Since 2006 insurers differentiate themselves through premium discounts for higher deductibles or group coverage.	Yes. Little product differentiation before 2006. Greater differentiation since 2006 in terms of the range of prescription drugs reimbursed within a given therapeutic category, modes of customer service and VHI products.
Switzerland	Yes. Substantial variation in premiums; insurers differentiate themselves through discounts for children under 18, students aged 19-25, enrolees who opt for higher deductibles (up to 70% of difference between the minimum and the chosen deductible) or managed-care contracts (up to 20%).	Yes. People can opt for managed-care contracts involving gatekeeping and preferred provider networks.

Table 15 Price and quality differences between insurers

Source: Authors' research

Possible barriers to exercising choice of insurer

Survey data from the Netherlands and Switzerland suggest many people feel no need to switch because they are satisfied with their current insurer (45% in the Netherlands and 79% in Switzerland) (Frank and Lamiraud 2009; Vos and De Jong 2009). There is also evidence of people preferring to maintain the status quo (Samuelson and Zeckhauser 1988) or using 'subjective' measures of quality to determine insurer choice. In Switzerland 40% of those surveyed chose an insurer based on parents' and friends' choices and 'tradition', while 13.5% said they stayed with their insurer out of habit; those who had been with an insurer for longer were less likely to express an intention to switch (Frank and Lamiraud 2009). About 25% said they did not try to choose the insurer with the lowest premiums. Prior to the 2006 reform in the Netherlands, the most frequently mentioned reason for being enrolled with a particular insurer was having joined the fund in early adulthood (Gresz et al 2002a), a status quo bias that was perhaps reinforced by the relatively

small difference between insurers at that time. In spite of the growth in premium and product differentiation since then, the proportion of Dutch respondents who believe they do not stand to benefit much by switching has risen from 68% in 2006 to 74% in 2008 and 18% said it was too much trouble to switch (Vos and De Jong 2009). Seven per cent said they did not switch because they felt they would not be able to obtain a new VHI policy if they changed to a new insurer for statutory cover (Vos and De Jong 2009).

Responses like these suggest that many people have legitimate reasons (from a policy perspective) for not switching. Nevertheless, the association between age, health and switching suggests, first, that switching costs may be higher for regular users of health care who are at greater risk of having to change provider or interrupt current treatment (Buchmueller and Feldstein 1997; Knaus and Nuscheler 2005). Even where this is not the case, regular users may risk losing valuable knowledge about how things work with their current insurer, which makes them reluctant to switch. Second, insurers may engage in covert risk selection, trying to encourage low risks to enrol and high risks to switch through targeted advertising and reminders of the right to switch and product differentiation. Third, VHI can also be used to select risks in statutory health insurance if it can be linked to the sale of statutory cover (Mossialos and Thomson 2002c; Paolucci et al 2007). Insurers in the four countries are generally free to reject applications, charge risk-rated premiums, exclude coverage of pre-existing conditions and terminate contracts for voluntary cover (Thomson and Mossialos 2009).

In all four countries there is ample opportunity for VHI to be used to select risks in statutory health insurance (Paolucci et al 2007). VHI is sold by entities belonging to the same sickness funds that provide statutory cover in Belgium, the Netherlands and Switzerland, and brokered by statutory insurers in Germany⁴¹ (Table 13). Until recently, Belgian households were required to purchase voluntary and statutory cover from the same entity and VHI was the main way in which insurers differentiated themselves. Legislation in Switzerland explicitly prevents insurers from linking the

⁴¹ Although sickness funds are not permitted to sell VHI, in practice this line has blurred as they have been allowed to offer more flexible policies (for example, covering better-quality hospital accommodation as part of integrated care contracts or complementary and alternative therapies).

sale of voluntary and statutory cover (Dormont et al 2009; Roos and Schut 2011), but there are close ties between them; 93% of those with voluntary policies (purchased by 75% of the population) obtain both types of cover from the same insurer, partly because reimbursement is much simpler when it comes from one company (Dormont et al 2009).

VHI covers about 90% of the Dutch population and most people buy voluntary and statutory cover from the same insurer (Westert et al 2010). The Dutch Health Insurance Act prohibits the termination of voluntary contracts when enrolees switch to another insurer for statutory cover, a widespread practice prior to 2006, although insurers retain the right to raise VHI premiums when people switch (and most do). However, recent research has found that, when queried, the customer services representatives of half of all insurers in the Netherlands specified that a voluntary contract would be terminated if the enrolee switched for statutory cover (whether deliberately to mislead or due to poor staff training was not clear), suggesting a gap between law and practice (Roos and Schut 2011). Roos and Schut argue that even if the new law were effective, Dutch insurers would still be able to link the sale of voluntary and statutory cover. Their survey identifies five ways in which insurers did this in 2009: 1) 24% of insurers only offered voluntary contracts in combination with statutory cover; 2) 34% charged higher premiums when people applied for voluntary cover alone; 3) 17% charged higher premiums for voluntary cover when people switched to another insurer for statutory cover; 4) 14% applied more stringent acceptance criteria when people wanted only voluntary cover; and 5) 86% offer free voluntary cover for children if parents and children obtain statutory cover from the same insurer. In 2009 97% of insurers adopted at least one of these linking strategies, a much higher proportion than in 2006 (at least 44% of insurers).

In spite of the close links between voluntary and statutory cover, a 2007 review concluded there was no clear evidence of insurers using VHI to select risks in the statutory market in any of the four countries (Paolucci et al 2007). This finding was confirmed by studies subsequently carried out in Switzerland (Dormont et al 2009) and the Netherlands (Roos and Schut 2011). What the more recent studies clearly suggest, however, is that consumer beliefs about risk selection by insurers in the VHI market may be a powerful potential barrier to switching in the statutory market. In

Switzerland having voluntary cover only affects switching among those whose selfreported health is less than 'very good'. In the absence of evidence of risk selection by insurers, the study authors argue that high-risk individuals stay where they are because they do not think they will be able to obtain voluntary cover from another insurer on the same terms. For example, the new voluntary policy may be more expensive, reflecting the enrolee's age, or fail to cover pre-existing conditions. The Dutch survey data show that the proportion of non-switching respondents who said they did not switch because they believed they would not be able to obtain a new voluntary policy at all due to their age or health status (that is, they believed insurers would reject their application for voluntary cover) rose from 4% in 2006 to 7% in 2009 (Roos and Schut 2011). The proportion of respondents who gave this as the most important reason for not switching rose from 1.5% in 2006 to 3.4% in 2009. Similar figures applied to respondents who did not switch but seriously considered doing so.

Another possible explanation for limited consumer mobility includes choice overload due to growing product differentiation or the number of insurers operating in the market. With the exception of Belgium, insurers have many more ways now than in the past of modifying the standard statutory product by offering choice of cash or inkind benefits, higher deductibles in return for lower premiums or contributions, noclaims bonuses and reduced cost sharing for accepting gatekeeping, disease management, or use of preferred providers (Table 16). While these options clearly benefit some, particularly if they reduce premiums or cost sharing, there is likely to be a trade-off in terms of transparency and ease of price comparison. They may also restrict choice in other areas; in Germany, for example, people who accept any of the options mentioned above lose the right to switch for a three-year period. Swiss research shows how the probability of switching is significantly lower in areas with larger numbers of insurers, even where premium variation is significant (Frank and Lamiraud 2009). Furthermore, among survey respondents who were very dissatisfied with their current insurer, 34% intended to switch in areas with fewer than 50 statutory health insurers versus 22% in areas with more than 50 insurers. This suggests a weak relationship between enrolment and both price and quality, which may undermine insurer incentives to enhance value.

Choice regarding:	Belgium	Germany	Netherlands	Switzerland
Insurance status (to be insured or not)	No	No	No	No
Insurers	Yes. After 12 months of enrolment, people can switch quarterly.	Yes. People can switch after 18 months or within 2 months if the insurer introduces or raises a community-rated premium.	Yes. People can switch once a year.	Yes. People can switch twice a year giving three months' notice.
Level of pre-paid contribution	Yes, for community-rated premiums, but the amounts are negligible.	Yes, for the community-rated premium (but this is currently very small).	Yes, for community-rated premiums.	Yes
Range of benefits	No	No, except for a very few benefits defined by individual sickness funds.	No	No
Benefit modality (cash vs in kind)	No	Yes	Yes	No
Degree of cost sharing	Only in conjunction with other conditions (eg use of generic drugs, use of regular GP, gatekeeping). Same for all sickness funds.	Only in conjunction with other conditions (eg gatekeeping, enrolment in DMP). Varies by sickness fund.	Yes	Yes
Providers	Yes	Yes	Yes	Yes

Table 16 Choice for users, 2011

Source: Survey responses

In summary, low rates of switching may reflect satisfaction with the status quo; there is some evidence to suggest this is the case for many people. But there is also evidence of barriers to consumer mobility, particularly among older and less healthy people. Lower mobility among this group may have serious implications for the effectiveness of purchaser competition to strengthen purchasing because it is likely to lower insurers' incentives to secure value in organising and delivering health care for those who use it most.

Three factors warrant policy attention. First, research does not provide evidence of insurers using VHI to select risks in statutory health insurance, but the close links between the sale of statutory and voluntary cover are a cause for concern in all four countries (van de Ven et al 2007). In practice risk selection is arguably less of an issue than the impact of linked sales on consumer mobility, as seen in the

Netherlands. Insurers do not need to select risks when overall rates of switching are low, consumer beliefs about insurer behaviour prevent high risks from trying to switch, switching is less likely among high-risk groups and strategies to lock people into their statutory cover are so successful (Roos and Schut 2011). The Dutch Healthcare Authority (NZa) and consumer and patient associations have been active in monitoring and publicly disclosing the extent of medical underwriting for voluntary cover (Roos and Schut 2011). However, the evidence suggests they have not done enough to allay consumer fears about access to VHI and should focus more on tied sales, which seem to be a significant deterrent to switching. The Belgian government has tried to address the problem of tied sales by introducing tighter regulation of the sale of VHI⁴² and strict separation of statutory and voluntary cover. In the other countries a range of proposals are under discussion⁴³. While it is too early to assess the impact of changes that only came into effect in 2010, it is worth noting that tighter regulation of VHI has been problematic in light of European Union (EU) internal market rules in Belgium and in other countries (Thomson and Mossialos 2007b; Thomson and Mossialos 2010).

Second, Swiss research showing lower switching rates in areas with more insurers (Frank and Lamiraud 2009) highlights the importance of monitoring the degree of choice available to people. Too much choice seems to undermine the instrumental value of insurer competition, perhaps by lowering transparency. Lower transparency increases the transaction costs of switching and may therefore restrict consumer mobility.

Third, research from the United States finds switching costs to be higher for older and less healthy people (Buchmueller and Feldstein 1997). These costs are probably much lower in the European countries than in the US, but they are far from absent, as the 18% of Dutch people reporting it was too much trouble to switch demonstrates

⁴² In Belgium open enrolment is guaranteed for compulsory additional benefits. In 2007 legislation extended open enrolment requirements to the sale of VHI and prohibited premium differentiation based on pre-existing medical conditions (except for people aged 65 years and above who did not already hold a similar policy with their former insurer).

⁴³ The Swiss Medical Association recently launched a popular initiative to introduce a strict separation between SHI and VHI. If the initiative succeeds, Swiss health insurers will have to choose whether they want to operate in SHI or in VHI. In Germany, the government had announced plans (in its 2009 'coalition contract') to re-restrict the ability of sickness funds to sell VHI products, but the proposal was not included in the SHI financial reform passed in 2010.

(Vos and De Jong 2009). They are also likely to grow in future as product differentiation increases and selective contracting becomes the norm. The rise of selective contracting, clearly an important tool to strengthen purchasing (see below), raises questions about the inherent tension between consumer versus purchaser choice of provider and how this plays out in the context of consumer choice of purchaser.

Does competition between insurers create incentives for efficiency?

For insurer competition to be effective it must be based on price and quality rather than risk selection. Where insurers are able to operate profitably by selecting people with lower-than-average risk and deterring those with higher-than-average risk, they may not be sufficiently motivated to focus on enhancing value. Risk selection therefore undermines efficiency. The extent to which competition between insurers is likely to be effective in creating incentives to enhance value can be gauged by the strength of incentives for insurers to select risks and the range of selective tools available to them. All other things being equal, insurer incentives to select risks will be stronger the greater the degree of financial risk they bear and the less the money they have per enrolee reflects the enrolee's risk of ill health (van de Ven 2011). The primary mechanism for reducing insurer incentives to select risks is risk equalisation or adjustment.

Prior to the introduction of insurer competition in the countries under review many insurers did not bear any financial risk. They were little more than financial conduits, channelling centrally raised resources to providers or raising their own revenue but with leeway to accumulate deficits. The degree of financial risk borne by insurers has increased over time in all four countries and is particularly high in Germany and Switzerland, but remains low in Belgium. Each country has also focused on developing a risk-adjustment formula to allocate resources to health insurers, although there are significant differences both in the design of the formula and the degree of insurer revenue subject to the formula (Table 17). The extent to which risk equalisation succeeds in lowering incentives to select risks largely depends on the

sophistication of the formula, but also on the presence of any risk-sharing arrangements in the form of ex-post compensation based on actual health care costs incurred. Risk sharing lessens the degree of financial risk insurers bear and therefore lowers incentives for risk selection, but it also dampens incentives to enhance efficiency (van de Ven 2011).

	Belgium	Germany	Netherlands	Switzerland
Prospective resource allocation subject to risk equalisation (%)	30%	100%	100%	100%
Risk equalisation scheme	Yes	Yes	Yes	Yes
Risk adjustment includes health-based criteria	Yes	Yes	Yes	No (but a new formula will come into force in 2012)
Risk sharing	Insurers pay 25% of any revenue- expenditure gap	No	Insurers only pay 10% of an individual's annual costs > €22,500	No (see note)
Incentive to select risks	Low	High	Moderate	Very high

Table 17 Strength of insurer incentives to select risks

Source: Survey responses

Note: Swiss insurers bear full financial risk for outpatient care, but the costs of inpatient care are shared between insurers and cantons.

Belgium, Germany and the Netherlands have significantly improved their risk equalisation schemes in the last ten years and now have relatively sophisticated formulas (van de Ven et al 2003; van de Ven et al 2007). All three countries include health-based risk adjusters in the formula, in contrast to Switzerland, which still relies on crude indicators (only adjusting for age and gender).

Incentives for risk selection are low in Belgium because of the low level of financial risk the sickness funds bear: only 30% of sickness fund revenue is subject to risk adjustment and insurers are only financially responsible for 25% of any difference between allocated revenue and actual health care expenditure. Risk selection does not seem to be a policy concern, even though the link between statutory and voluntary cover provides insurers with an effective selection tool (Schokkaert and Van de Voorde 2000; Schokkaert and Van de Voorde 2003). At the same time as the current arrangements limit incentives for risk selection, they are probably not sufficient to motivate insurers to enhance efficiency.

Insurers in both Germany and the Netherlands have incentives to select risks beyond the criteria included in the risk adjustment formula. Because German insurers bear full financial risk, in contrast to their Dutch counterparts, who still receive ex-post compensation (although this now accounts for only 25% of revenue), they may have stronger incentives to select risks. However, they may have less opportunity to do so, since the market for voluntary health insurance (VHI) is small in Germany (in terms of population coverage) compared to in Belgium and the Netherlands (Paolucci et al 2007). Risk selection is difficult to detect in the Netherlands, but it is a major issue, at least in terms of public debate (Paolucci et al 2007). Ex-post compensation for Dutch insurers lowers incentives to select risks (van de Ven et al 2007).

Incentives to select risks are probably highest in Switzerland, where risk equalisation is weak and insurers bear full financial risk for outpatient care (Minder et al 2000). About half of all inpatient costs are financed by the cantons using general tax revenue, so insurers are at much less risk for hospital services. Nevertheless, risk selection is a serious policy concern. Following debate about how best to tackle the high potential for risk selection among insurers, the Swiss government will add hospitalisation in the previous year to the formula in 2012. It is also considering the inclusion of health-based criteria (Beck et al 2010).

None of the four countries has managed to eliminate incentives for risk selection through risk equalisation, even though the formula has been significantly strengthened in Belgium, Germany and the Netherlands (van de Ven et al 2007). In all four countries there is circumstantial evidence indicating risk selection through targeted advertising, reminders and discounts and through product differentiation in VHI⁴⁴ (Dormont et al 2009; Nuscheler and Knaus 2005; van de Ven et al 2007; Westert et al 2010). However, there is only anecdotal evidence of insurers trying to

⁴⁴ Swiss insurers use holding companies to direct enrolees to a plan with an 'appropriate' premium, while in the Netherlands the growth of group contracts has allowed insurers to offer discounts to some groups (employers, self-employed people, sports clubs) but not others (patient associations) (van de Ven et al 2007).

deter high risks from enrolling⁴⁵. This might reflect the accuracy of risk equalisation⁴⁶, the difficulty of detecting an essentially covert activity or the fact that, as noted above, insurers may not need to select risks when consumer mobility is low among high-risk groups.

In summary, strengthening risk equalisation is clearly a priority for Switzerland. But in all four countries there is room for improving the risk adjustment formula, particularly by focusing research on people with the highest expenditure levels over a series of years (van de Ven 2011). Currently, risk equalisation is unlikely to be able to compensate insurers for covering people with rare diseases (around 6% of the population in the Netherlands). Thus, policy should also focus on risk sharing, currently used in Belgium and the Netherlands only, where it applies to all enrolees with health care expenses above a threshold. Germany had a similar regulation between 2002 and 2008 but dropped it when disease-based supplements were added to the risk-adjustment formula. Since risk sharing lowers insurers' incentives to enhance efficiency, it would be better to use a differentiated system in which compensation is limited to covering the high costs of a small group of enrolees identified in advance (van de Ven 2011). Such a move would increase insurers' financial risk without significantly increasing their incentives to select risks. Finally, it may be worth noting the difficulty of adapting risk adjustment to account for differences in benefit levels. While this is not a major issue in the four countries, the growing trend to permit insurers to differentiate the statutory benefits package may cause complications in future.

Do insurers have (and use) tools to enhance value?

The final dimension of interest is the extent to which purchasers are able to influence health care costs and quality. If they were not able to do so, then the main reasons for

⁴⁵ In 2011 several hundred members of an insolvent sickness fund were put off joining other sickness funds through statements such as "we cannot guarantee that your insurance card will be ready in time" etc; the Federal Insurance Authority had to intervene and reminded the sickness funds to obey legal requirements.

⁴⁶ Dutch insurers have begun to target diabetic patients in their advertising, suggesting they feel risk equalisation provides sufficient compensation for this high-risk group (van de Ven 2011).

encouraging them to compete would be to ensure that they provided quality customer services, kept administrative costs to a minimum and passed on any cost savings to enrolees in the form of lower premiums. These would be satisfactory outcomes, but they are not the primary policy goal of insurer competition, which is to strengthen purchasing with a view to improving health system performance. This includes but goes beyond notions of customer service and administrative efficiency.

Table 18 and Table 19 show how purchaser-provider relations are regulated and the availability and take-up of a wide range of tools insurers might use to influence health care costs and quality. These tools range from allowing insurers to integrate with providers, which would strengthen incentives for cost control, to permitting them to selectively contract providers, choose how best to reward or penalise good or poor provider performance and influence the types of services to which enrolees have access. The list of tools included in Table 19 is not exhaustive.

In Belgium, Germany and Switzerland, collective negotiation between insurers and providers is the normal method of setting prices, which limits the ability of individual insurers to influence the cost and quality of most health services, but preserves free choice of provider for service users (Table 18). However, in Germany and Switzerland, insurers have a degree of leeway in the contracting process. People in Germany can opt to follow a GP gatekeeping model of care and sickness funds are therefore able to selectively contract GPs (in addition to the collective contract) and negotiate prices and other conditions on a bilateral basis. The same applies to providers who have signed integrated-care contracts with sickness funds. Swiss insurers are allowed to engage in selective contracting, negotiate lower prices and use capitation to pay providers for people who choose a managed-care plan.

	Belgium	Germany	Netherlands	Switzerland
Who regulates purchaser-provider relations?	Basic framework established through federal legislature. Organised at the federal level through collective negotiation between provider and sickness fund representatives.	Basic framework established through federal legislature. Details negotiated among corporatist actors at the federal level with federal Ministry of Health oversight, and at state level with state ministries responsible for health.	The Dutch Healthcare Authority and the Dutch Competition Authority.	FHIA defines general rules. Hospital sector strongly regulated and planned by the 26 cantonal authorities. Outpatient care regulated through the TARMED tariff scheme. In 2002 the Federal Council decreed a moratorium on the opening of new medical practices (delegating this to the cantons), which was extended to end 2009 for GPs and end 2011 for specialists.
Describe the main characteristics of purchaser-provider relations	Fee schedule determined through collective negotiation among sickness funds / provider groups. Agreements negotiated for two years. Increasingly, physicians opt out of the agreements (13% of GPs, 20% of specialists, with large differences among specialists). Selective contracting not allowed.	Social law stipulates the areas in which decisions must be made by joint committees of sickness funds and providers (eg SHI benefits and the relative point value scale for SHI-accredited physicians), and those in which decisions can be reached through direct negotiations (total level of remuneration for ambulatory care and contracts between funds and providers).	Free pricing for physiotherapy since 2005 and for selected inpatient services (see below). Selective contracting and vertical integration allowed since 2006. Insurers and providers are free to choose tools for managing care.	Insurers must reimburse all medical services prescribed by physicians and contract all hospitals included in cantonal planning and any physician permitted to practise, giving patients the right to visit any outpatient physician without registration or referral. Selective contracting and capitation payment are allowed for patients opting for managed-care plans.
Are there caps on insurer administrative costs?	Yes. The cap is determined annually by federal law (programme law).	Yes (since 2004). The cap used to apply to administrative costs as a percentage of expenditure; for 2011 capped at the 2010 level.	No.	No.
Who determines how providers are paid?	All payment mechanisms are set out in federal legislation.	Federal legislation increasingly sets out payment mechanisms, but details are decided by corporatist actors.	A combination of government and free price negotiation between insurers and providers.	National legislation (FHIA) sets out general rules for provider payment.
Who sets health service prices?	Collective negotiation between provider / sickness fund representatives, approved by Minister of Social Affairs. Maximum price of pharmaceuticals set by Minister of Economic Affairs based on advice from a commission of trade unions, pharmacists, sickness funds, pharmaceutical industry, government.	Ambulatory care:federal and state corporatistinstitutions (sickness funds and FederalAssociation of SHI Physicians)DRGs:federal corporatist institutions (sicknessfunds and German Hospital Federation) andfederal government if no agreement.Pharmaceutical reference prices:corporatistinstitutions at federal level, but manufacturersgenerally free to determine prices.	Government price setting and free price negotiation between insurers and providers. The prices of two- thirds of all hospital products (which include doctors' fees) are set by the government, and the government sets maximum prices for most GP services.	Mainly collective negotiation between insurer and provider representatives approved by government. Cantonal authorities set prices if agreement cannot be reached. Pharmaceutical and laboratory prices set by the federal government.
Changes in any of the above	No.	From 2011 pharmaceuticals demonstrating clinical added value and those that cannot be included in the reference pricing system will be subject to price negotiations between manufacturers/sickness funds a year after launch.	Insurers and providers have more freedom to negotiate prices. This trend is expected to continue.	No.

Table 18 Regulation of purchaser-provider relations, 2011

Source: Survey responses

Tools	Belgium	Germany	Netherlands	Switzerland
Vertical provider integration	No	No	Yes; take-up low but growing.	The future law on managed care, currently under discussion in Parliament, could ban vertical integration between insurer and providers.
Selective contracting	No	Yes, but only in the context of integrated care contracts, therefore low take-up.	Yes; take-up low but growing.	Yes, but only for enrolees opting for managed-care contracts (30% of the population in 2008); however, only part of these contracts are genuinely based on selective contracting.
Financial incentives for patients to use preferred providers	No	Yes; moderate take-up (GP contracts less popular than expected).	Yes; take-up low but growing.	Planned in future (15% to 20% co-insurance for ordinary coverage, 7.5% to 10% for plans with preferred providers and integrated care networks).
Clinical guidelines / protocols	Yes, collectively.	Yes, possible within GP contracts and integrated care contracts; low take-up.	Yes; moderate to high take- up.	Not explicitly. It is up to the physicians to use these tools to deal with eg capitation payment within managed-care contracts.
Formularies for medicines	Yes, collectively.	Yes, possible within GP contracts and integrated care contracts; low take-up.	Yes; moderate take-up.	No. Pharmaceuticals included in the benefits package cannot be restricted through managed-care arrangements.
Incentives for rational prescribing / dispensing of medicines	No	Directed at physicians: prescription limits; directed towards pharmacists: generic substitution unless ruled out; directed at patients: lower co-payments for drugs priced at least 30% below reference price.	Financial incentives to pharmacists to encourage generic substitution.	A higher co-insurance rate (20% rather than 10%) for brand drugs if a generic alternative is available.
Disease management programmes	Yes, collectively.	Yes; high take-up (about 8% of SHI enrolees in 2009).	Yes; take-up low but growing.	Not explicitly, but more leeway for their implementation included in forthcoming legislation on integrated care networks and in relation to the federal government's e-health strategy.
Utilisation review	Yes, collectively, but only for very expensive services.	Yes, collectively and routinely; individually only in integrated care contracts, low take up.	Yes; moderate take-up.	Yes, within managed-care arrangements.
Waiting list management	Not relevant.	Not relevant.	Yes; high take-up.	Not relevant.
Price negotiation	No	Yes, partial (eg GP-based gatekeeping or integrated care contracts); currently mainly with pharmaceutical manufacturers, high take up (about 60% of drugs distributed under rebate contracts).	Yes, partial; moderate take- up.	Yes, but only for enrolees opting for managed-care contracts.
Performance-based payment of providers	No	Yes, but used only within integrated care contracts; low take up.	Yes, partial; take-up low but growing.	Yes, within managed-care arrangements.
Public disclosure of performance indicators	Yes, collectively, mainly for supplementary hospital costs	Yes; mandatory for certain hospital indicators (but not very relevant for purchasing).	Yes; moderate take-up but growing.	Yes, in the hospital sector; modest results.

Table 19 Availability and take-up of purchasing tools, 2011

Source: Survey responses

Since 2006, insurers in the Netherlands have had more freedom in contracting than their counterparts in the other countries. Selective contracting is now permitted for all forms of care and, while the government continues to set the prices of two-thirds of all hospital care, as well as maximum prices for GP services, there is slow movement towards greater price liberalisation. The Dutch government has recently proposed raising the proportion of hospital care subject to free pricing to 70% in 2012 (Schut and van de Ven 2011).

There are clear differences between Belgium and the three other countries in the range of tools available to enable insurers to secure value in purchasing. The more limited recourse to purchasing tools in Belgium reflects the absence of national policy emphasis on competition as a mechanism for improved purchasing, as well as a preference for sickness funds to operate collectively. Although this suggests Belgian insurers are at a disadvantage when it comes to strategic purchasing, insurers in the other countries do not make full use of the tools they have. There are several reasons for this.

First, legal restrictions imposed on insurers may preclude widespread take-up of some tools. In Germany the use of selective contracting, sickness fund-specific clinical guidelines and prescription drug formularies is only possible in a few areas outside the collective contracting process (where patients opt for GP gatekeeping and providers opt for integrated-care contracts). A proposal by the red-green coalition government in the early 2000s to extend selective contracting to elective inpatient treatment was blocked by the states on the grounds that it would restrict their ability to plan hospital capacity. In Switzerland many purchasing tools are limited to managed-care plans, primarily to preserve free choice of provider for those who value it. The Swiss Parliament is discussing legislation to stimulate more managed care through a controversial proposal to introduce higher user charges (co-insurance of 20% rather than 10%) for those who do not opt for managed-care plans.⁴⁷ However, the proposal also includes a (controversial) ban on vertical integration of insurers and providers, which is intended to separate the management of integrated care networks from the management of health insurance.

⁴⁷ The two chambers disagree on the appropriate co-insurance rate. The National Council is in favour of a 20%-10% rate, whereas the Council of States would prefer a lower rate (15%-7.5%).

Second, insurers may be wary about alienating existing or potential enrolees by curbing choice of provider. Insurers in Germany and the Netherlands reveal a strong preference for offering enrolees financial incentives (lower cost sharing or lower premiums) to choose preferred provider networks or GP gatekeeping. Consumers also seem to favour wider choice of provider: GP contracts have not been as popular as expected in Germany, take-up of preferred provider networks in the Netherlands is low and only 30% of Swiss enrolees choose managed-care plans (Federal Office of Public Health 2008).

Some analysts argue that Dutch insurers have been reluctant to de-select hospitals for fear of fuelling consumer perceptions that this sort of action is motivated by financial rather than quality considerations (Boonen and Schut 2011; Maarse and Paulus 2011). Insurers also face resistance from regulators and providers. In 2010 a large Dutch insurer published hospital rankings for quality of breast cancer care on its website and announced it would no longer send breast cancer patients to hospitals that did not reach minimum volume thresholds for breast cancer treatment, a decision supported by patient groups (Sheldon 2010). The Dutch Healthcare Inspectorate initially stated that all breast cancer treatment in the Netherlands met its standards for responsible care, while the Dutch Association of Surgeons suggested the insurer had used "incorrect standards", but the decision was upheld by the courts (Sheldon 2010).

Third, national competition authorities may intervene to block the use of legitimate tools such as vertical integration in cases where it is seen to be anti-competitive. This happened in the Netherlands in 2009, when a group of local health care providers (including GPs) and the dominant regional insurer tried to take over a failing hospital (Maarse and Paulus 2011). Some members of parliament pressured the Minister of Health to prevent the takeover on the grounds that all parties involved would have a financial incentive to direct patients toward the hospital in question, which would restrict consumer choice. Conversely, residents expressed a desire for their local hospital to remain open since closure would also have limited their options (Maarse and Paulus 2011).

Fourth, some tools present technical challenges under certain circumstances, particularly selective contracting and price negotiation. As a result, insurers may lack the capacity to employ them or the transaction costs involved may be high. Selective contracting in Germany is unattractive partly due to the complexity of recalculating global payments to office-based physicians (Table 18) if some patients are treated under separate contracts, and partly because hospitals cannot be de-selected on a service-by-service basis (as in the Netherlands).

Price negotiation is regarded as a key purchasing tool in the Netherlands. Since 2006, individual insurers have been encouraged to negotiate prices with individual hospitals for pre-defined services covering 10,000 Diagnostic Treatment Combinations (DTCs, case-based payments per episode of illness) equal to one third of hospital revenue in 2010. To help insurers cope with the magnitude of the task, the Dutch Insurers' Association publishes an annual purchasing guide focusing on 200 of the most frequently used DTCs (Bal and Zuiderent-Jerak 2011).

Finally, the difficulty of obtaining information about health care costs and quality limits systematic benchmarking, which in turn precludes fully informed decision making by insurers and consumers. There is some public disclosure of information about provider performance (mainly hospitals) in all four countries and governmentled efforts to improve data collection and disclosure in Germany (Busse et al 2009) and the Netherlands (Westert et al 2010). However, public disclosure is sometimes controversial (as in the Dutch case) and it may be that the lack of informative indicators based on reliable data will represent a significant barrier to improved purchasing for some time to come.

Policy outcomes and implications

Policy outcomes

In the last 15 years policy makers in Belgium, Germany, the Netherlands and Switzerland have introduced insurance market reforms to improve efficiency and slow rising health care costs. Reforms have involved making insurers bear financial risk and giving people free choice of insurer to stimulate insurer competition. The introduction of financial responsibility for sickness funds in Belgium in 1995 was not intended to promote competition, but it has succeeded in its primary aim of ensuring a more level playing field for the sickness funds. A secondary aim was to encourage sickness funds to contain health care costs, and while there has been some progress in this area, there is little evidence of significant improvement.

In Germany extending choice of insurer to the whole population in 1996 had two main aims: to foster convergence in contribution rates (an equity goal) and to encourage health care expenditure control and greater efficiency in the SHI system. The reform had some success in tackling equity concerns, not only by placing all employees on an equal footing in terms of insurer choice and contribution rate, but also by narrowing the range of contribution rates. Sickness funds' administrative costs rose steadily after 1996 until their growth was capped by law in 2004, but at 5.5% in 2008 they were still well below those of private insurers, at 14.4% (Federal Statistical Office 2010). Although this suggests the reform did not succeed in controlling administrative costs, a comparison of SHI with other forms of social insurance, where there is little or no competition (for example, the old-age pension and disability scheme), shows the sickness funds' administrative structures are relatively streamlined. The large number of mergers among sickness funds since 1996 (169 in 2010 versus 960 in 1995) also indicates the influence of market pressures in the SHI system (Busse 2011 in press). At the same, there is little evidence to suggest competition among sickness funds has led to lower rates of health care expenditure growth (contribution rates have risen from 13.6% in 2000 to 15.5% in 2011) or achieved substantial and lasting efficiency gains (Busse 2011 in press).

Insurer competition in the Netherlands – first introduced in 1991 and extended to the whole population in 2006 – aimed to encourage health insurers to operate more efficiently and control health care spending. The reforms have expanded choice for consumers, while market pressures have led to significant mergers (over 100 insurers in 1990 down to 26 in 2010) (Vektis 2010) and strong premium competition. The reforms have also put quality of care at the top of the political agenda. There are signs of greater use of information on quality by insurers, initially mainly to identify

hospitals with lower waiting times, but increasingly to de-select hospital services that do not meet minimum volume thresholds. However, insurers have generally been slow to take advantage of the range of purchasing tools at their disposal and, with the exception of the pharmaceutical sector,⁴⁸ there is little evidence of improved expenditure control or efficiency gains.

In Switzerland the effects of insurer competition on efficiency and cost control have been equally modest. Between 1998 and 2008 premiums grew by 4% on average annually and the cost of SHI-covered health services by 4.4%, in contrast to wages, which grew by only 1.4%.

Policy implications

At the beginning of the paper it was noted that insurer competition would only be effective if people are able to switch insurer easily and at low cost, competition is based on price and quality rather than risk selection and insurers have access to and use tools to enhance value. The paper's analysis suggests that these assumptions do not always hold in the four countries under review, which may explain why insurance market reforms have not had the positive impact on health system performance proponents expected.

Introducing risk equalisation schemes has been a priority for policy makers – for good reason, since risk selection erodes insurers' incentives to operate efficiently. But in spite of the energy devoted to fine-tuning schemes and finding a balance between risk adjustment and risk sharing, no country has eliminated incentives to select risks. There is room for improvement, even in the countries with the most sophisticated formulas and especially in Switzerland, where incentives to select risks remain strong. The Swiss formula will be strengthened in 2012, but why Swiss policy on risk equalisation should consistently lag behind policy in other countries warrants further investigation.

⁴⁸ Pharmaceutical expenditure fell following a change in regulation in 2006 allowing insurers to negotiate lower prices with manufacturers (Schut and van de Ven 2011).

Consumer mobility has not received as much attention as risk equalisation. Extensive regulation to facilitate mobility (much of it predating the introduction of insurer competition) means that the cost of changing insurer is likely to be negligible for most people. As a result, policy makers may have interpreted relatively low switching rates as indicating consumer satisfaction. However, a small but growing body of evidence suggests consumer mobility is limited among older and less healthy individuals (that is, those likely to use health services on a regular basis). This ought to be a cause for concern, because if insurers feel these enrolees are unlikely to switch, they may not have sufficient incentive to provide them with high-quality care.

Research identifies two possible obstacles to greater consumer mobility: increasingly close links between the sale of statutory and voluntary cover and choice overload. Tied sales of statutory and voluntary health insurance are prohibited in most countries but insurers have found ways of linking the two types of cover. While a mixture of regulation, risk adjustment and accepted norms seems to have prevented most insurers from using VHI to select risks for statutory health insurance, it has not allayed consumer fears about not being able to obtain adequate voluntary cover if they switch to a new insurer for statutory cover. This is a particular problem in the Netherlands and Switzerland, where VHI coverage is widespread. The Belgian solution (greater regulation of VHI) may not be attractive to policy makers elsewhere, particularly due to concerns about infringing EU competition rules. Nevertheless, the growing importance of VHI as an obstruction to consumer mobility requires some form of policy action. Better risk adjustment may help, alongside better information for consumers and closer scrutiny of the sales process.

Policy attention should also focus on the potential for choice overload in the context of a trend towards growing product differentiation. Giving insurers scope to tailor benefits to suit individual preferences through greater choice of cost sharing and health services may be seen as facilitating price and quality competition. However, it is well established that product differentiation, even at the margin, lowers transparency (Office of Fair Trading 1997). This in turn increases transaction costs for consumers, particularly those who rely on regular access to health care, and can undermine competition.

Making sure insurers have and use tools to influence health care quality and costs is essential if competition is to improve health system performance. Insurers in Belgium do not have these tools, insurers in Germany and Switzerland have access to some tools, and insurers in the Netherlands have access to a wider range of tools but do not always use them. An essential assumption underpinning insurer competition is therefore absent or only partially upheld in all four countries. Many of these tools restrict consumer choice, affect provider autonomy and require data that are not readily available. Thus, cross-country variation in the availability and take-up of tools may be explained by differing degrees of willingness to curb the choices of important stakeholders. It may also reflect a broader uncertainty on the part of policy makers (including national competition authorities and courts) about the appropriate locus of competition – among insurers or among providers? – and about who is best placed to influence provider behaviour – insurers or health care users? International experience suggests health system efficiency is more likely to be served when purchasing is carried out by institutions as opposed to individuals (Figueras et al 2005). Whether or not this is the case in practice, however, depends on the range and quality of information available, the balance of power between different actors and the incentives facing insurers, providers and users.

In all four countries, commentators have argued for better information about health care quality and costs to facilitate systematic benchmarking. While there is no doubt that better information and benchmarking would bring benefits, they might not in themselves be sufficient to foster strategic purchasing. Rather, motivating and enabling insurers to enhance value through improved purchasing is likely to require action on multiple fronts, including removing perverse incentives to favour more expensive care over cheaper alternatives arising from weaknesses in provider payment methods or fragmented financing flows⁴⁹; helping users to make more informed decisions about where and how to be treated (not just providing them with more information); working with providers to minimise unwarranted variation in care delivery and improve quality; and fostering public trust in insurers.

⁴⁹ In Switzerland, for example, insurers only finance half of all inpatient care costs and therefore have an incentive to refer enrolees to hospital even when cheaper outpatient alternatives are available.

Conclusions

Health insurance market reforms intended to stimulate efficiency gains through improved purchasing have had mixed results in the four western European countries reviewed in this paper. Each country has put in place measures to enable insurer competition to achieve its goals, including extensive regulation to secure consumer mobility, lower insurers' incentives to select risks and provide insurers with tools to enhance value. However, some of these measures have not been sufficiently effective. It is also difficult to establish a link between insurer competition and improved health system performance, partly due to the introduction of other changes alongside this particular set of reforms and partly due to not knowing what the counterfactual might have been.

In spite of significant investment in risk equalisation, incentives for risk selection remain and there is scope for further fine-tuning of risk adjustment and risk sharing mechanisms. Consumer mobility is still not seen equally in all groups and is lower among older and chronically ill people, possibly due to close interaction between statutory and voluntary coverage. This lowers insurers' incentives to make statutory cover attractive to high-risk enrolees. Better risk adjustment has a role to play in facilitating mobility for older and less healthy people, but policy makers should also pay attention to the way in which insurers link the sale of statutory and voluntary health insurance and do more to allay consumer fears about losing voluntary cover if they switch to another insurer for statutory cover. Although the trend towards product differentiation may be an indication of responsiveness to consumer preferences, it can also lower the transparency needed for people to make informed choices. Finally, while insurers in some of the countries have increasing access to tools to enhance value, they may be prevented from using them for a range of reasons. In addition to data constraints, perceived and real resistance (including legal challenge) to the use of some tools from enrolees, providers, regulators and politicians seems to be a key issue.

Developments in Belgium, Germany, the Netherlands and Switzerland suggest that the instrumental value of insurer competition as a means of improving health system performance rests on multiple assumptions that can only be upheld through

frequently complex interventions often requiring elusive data. Making it work therefore requires action on many fronts, particularly to ensure incentives are aligned across the health system, and greater awareness of the political nature of some barriers to success.

Appendix

Questionnaire for Study 1

Private health insurance in the European Union

This exercise has two aims:

The first is to provide a **descriptive overview** of:

- market role: the role private health insurance (PHI) plays in the health system and its relationship to the statutory or publicly-financed system/scheme
- market performance: the size of the PHI market
- market structure: the nature of those who buy and sell PHI and their relations with providers
- market conduct: the way in which the PHI market operates
- public policy towards PHI

We also aim to provide information on trends over time, where available.

The second is to attempt some **evaluation of the performance of the PHI market** against a set of health financing policy goals developed by the World Health Organisation (see below for details), both 'within' the market and in terms of its impact on the wider health system.

Please note:

We define private health insurance (PHI) as health insurance that is taken up at the discretion of individuals or employers on behalf of individuals. It can be provided by public and quasi-public bodies and by for-profit (commercial) and non-profit organisations.

Please indicate all sources of information and provide a list of references. Please also indicate where there is no available information with which to answer a particular question. You may not be able to address all the questions listed below; some may not be relevant to the situation in your country.

Descriptive overview

Market role

- Based on the classification in Table 1, please describe the role(s) played by PHI.
- Indicate where the market combines one or more roles. How well defined are the boundaries between different types of PHI?
- Indicate if roles have changed over time (eg if there was a substitutive market but it no longer exists due to changes in the eligibility criteria for statutory coverage, as in the Netherlands in 2006; or if a supplementary or other type of market has recently developed).
- Who is eligible to purchase different types of PHI?

Market performance

In this section and the following sections, please remember to distinguish between different types of PHI (where possible).

Levels of population coverage

- 1. How many people are covered by each type of PHI (in numbers and as a % of the population)?
- How have levels of population coverage changed over time (the last 10-15 years)? For which types of PHI? If possible, provide time series data on levels of population coverage.

Contribution to private and total expenditure on health care

3. Comment on the data provided in Table 2, indicating how they differ from national data. Please provide more recent national data (for 2006 and 2007) if they are available.

Barriers to market development

4. This will not apply to all countries. Where levels of out of pocket payments are relatively high, but the market for PHI is very small, please indicate why, in your view the market has not developed further. If high out of pockets are due to statutory cost sharing, it may be because insurers are reluctant to offer complementary cover of user charges (due to fears about adverse selection etc). If direct out of pocket payments to providers are high, can the low growth of PHI be attributed to lack of affordability, lack of trust in third party payers, lack of trust in insurance mechanisms more generally, the existence of informal payments, lack of transparency in the statutory benefits package – or other factors?

Market structure

Buyer characteristics

- 5. Describe the characteristics of those who subscribe to PHI (eg socio-economic status, educational level, health status, gender, age, urban-rural mix etc) and any changes over time.
- 6. What drives demand for PHI? Is there any information (eg from surveys) to suggest why people subscribe to PHI?
- 7. What proportion of each type of PHI is purchased by individual subscribers and what proportion is purchased by groups (usually employment-based groups)? Have there been changes in the ratio of individual to group subscribers over time?

Seller characteristics

- 8. What type of insurers operate in the PHI market (eg statutory health insurance (sickness) funds, mutual associations, provident associations, for-profit organisations)? Has there been any change in the market share of non-profit vs for-profit (commercial) insurers over time?
- 9. How many insurers operate in the PHI market? Indicate what type of insurer. Has the number of insurers operating in the PHI market changed over time?

- 10. What share of the PHI market is held by the three largest insurers (market concentration)? Has this changed over time?
- 11. What is the ratio of specialist health insurers (ie insurers that specialise in health and do not engage in other insurance activity) to non-specialist insurers (insurers that also engage in other insurance activity eg life insurance)?
- 12. To what extent is PHI sold by insurers/funds that also offer statutory/social health insurance?
- 13. To what extent is PHI sold in combination with life insurance?
- 14. What share of the private insurance market is taken up by PHI?

Market conduct

Please also clearly indicate where there are differences in conduct between non-profit insurers (eg mutual associations) and for-profit (commercial) insurers.

Benefits

- 15. Describe the range of benefits covered by each type of PHI.
- 16. Do subscribers receive benefits in cash or in kind (ie as health services)?
- 17. What types of benefits are usually excluded from PHI cover (eg pre-existing conditions, chronic illnesses such as diabetes, normal child birth, drugs for treatment of cancer etc)?
- 18. Are insurers required to offer a minimum level of benefits or a standardised benefits package?
- 19. To what extent do insurers offer 'tailor-made' cover (ie cover adapted to suit a particular individual's requirements)?
- 20. Are there any restrictions on what insurers are permitted to cover?
- 21. Do insurers offer subscribers financial incentives to use publicly-financed services rather than privately-provided care? For example, in the UK some insurers offer cash lump sums or no claims bonuses to subscribers who choose to be treated in an NHS hospital (paid for by the NHS) rather than in the private sector (paid for by PHI).
- 22. Do insurers cover services not covered by the statutory health system?

- 23. To what extent is it possible for subscribers to 'combine' public and private funding streams? For example, would a cancer patient undergoing publicly-financed treatment be able to use PHI to pay for a cancer drug that was <u>not</u> reimbursed by the statutory scheme? Or would s/he be able to pay out of pocket for the drug to be administered as part of otherwise publicly-financed treatment?
- 24. In addition to cover for medical expenses, in some EU member states PHI also provides cover for the following: loss of earnings, cash benefits, long-term care, other (please specify). Indicate the extent to which these are covered by PHI (ie the number/proportion of people they cover and/or their share of the PHI market).

Setting premiums

- 25. How do insurers set premiums for each type of PHI? Are premiums community rated (the same for all subscribers to a particular insurer), risk rated (based on individual risk factors) or experience rated (adjusted based on the claims history of an individual or group)?
- 26. What variables are used for risk rating/medical underwriting (eg age, sex, medical history, family history of disease, results of genetic tests etc)? Are potential subscribers required to undergo medical examinations/genetic tests?
- 27. To what extent does moratorium underwriting take place (this is a system whereby individuals do not have to give any health-related information but are not covered for pre-existing conditions until a specified symptom- or treatment-free period after their policy has started)?
- 28. Is there a system of risk equalisation or risk adjustment among insurers in place (as in Ireland, for example)? If so, what are its objectives and how does it operate?
- 29. Is there any evidence of insurers engaging in risk selection ('cream skimming' eg by attempting to attract low risks and deter high risks)? With what consequences?

Policy conditions

- 30. Is PHI available to anybody? If not, which groups are ineligible to purchase PHI (eg people aged 65+, disabled people etc)?
- 31. Can insurers reject applications for cover?
- 32. What types of PHI contract are available (eg annual or life)?

- 33. Does the type of contract available vary with age or sex or any other personal characteristic?
- 34. Do premiums rise with age?
- 35. To what extent can/do insurers exclude pre-existing conditions from cover?
- 36. To what extent can/do insurers impose waiting periods?
- 37. Do policies cover individuals only or do some policies cover dependants as well (at no extra cost)?
- 38. To what extent is group-purchased PHI paid for by employers/employees?
- 39. To what extent does group-purchased PHI cover family members/dependants?
- 40. Does group-purchased PHI cover stop when the employee retires?

The price of premiums

- 41. Have premiums risen or fallen in the last 10 years? If so, by how much? Can you identify factors that account for rises/falls in premiums?
- 42. In your view, are premiums competitively priced?
- 43. If possible, please give an example of the cost in national currency of a 'typical' policy for a 25 year old man, a 35 year old woman and a 50 year old man. Please indicate if the cost covers dependents or not.

Subscriber choice

- 44. What number of products can subscribers choose from (eg from the three largest insurers)?
- 45. To what extent do insurers attempt to restrict subscriber choice of provider (eg by using 'preferred provider networks' etc)?
- 46. To what extent are individuals able to switch from one insurer to another and what are the costs involved in switching (if any)?
- 47. To what extent is the 'portability' of benefits an issue (this is most likely to be an issue in substitutive markets such as Germany or in employment-based markets such as the US)?

Subscriber information

48. To what extent do consumers have access to clear (possibly centralised) information about the price and policy conditions of different PHI products?

- 49. How easily can consumers compare PHI products in terms of value for money (eg how many premium options are offered by one insurer)?
- 50. Are there any national reports (eg by consumer associations or competition authorities) about subscriber access to information and consumer protection more broadly? Have any concerns for consumer protection been raised?

Subscriber cost sharing

- 51. Under PHI, are subscribers required to pay part of the costs of the health services they use? If so, in what form (please refer to Table 4)?
- 52. Is there any ceiling on subscriber cost sharing (eg an annual out of pocket maximum)?

Relations with providers

- 53. In your view, to what extent do insurers engage in 'strategic purchasing' or do they simply reimburse a) providers or b) subscribers?
- 54. Are insurers permitted to contract selectively with providers? If so, to what extent does this take place in practice?
- 55. To what extent are insurers 'vertically integrated' with providers? For example, do insurers enter into exclusive agreements with certain providers, which means that their subscribers can only use those providers? Some insurers in the UK and Spain have their own hospitals and therefore combine insurance with provision.
- 56. How do insurers pay providers (eg fee for service, capitation, salaries)? Have there been any changes in payment methods in the last 10 years (eg from fee for service to capitation etc)?
- 57. Who defines provider fees? Do insurers negotiate prices with providers or are insurers simply 'price takers' (ie they accept the fees set by providers themselves)?
- 58. Are the fees insurers pay providers higher than the fees the same providers get from the statutory scheme?
- 59. Do insurers have incentives to lower/control health care and operating costs? If so, how do they attempt this (eg through choice of provider payment method, by requiring GP referral to outpatient or inpatient specialist care, through use of preferred provider networks, through utilisation review (providers), by requiring

patients to obtain prior authorisation (for expensive procedures only or for all care) etc)?

- 60. From whom do insurers 'purchase' services? From private hospitals and clinics? From public providers? To what extent do insurers make use of private beds in public hospitals?
- 61. Are doctors permitted to work in both the public and the private sector? To what extent does this take place in practice? How does it affect the treatment of publicly-financed patients (eg by creating or exacerbating waiting times)? Do doctors have financial incentives (eg different fee schedules for public and private patients) to treat PHI patients differently (eg to treat or refer them more quickly or give them better treatment)? Is there any evidence to suggest that PHI patients are treated more favourably than publicly-financed patients?

Administrative costs and claims ratios

- 62. What is the annual turnover of insurers (total premium income)?
- 63. How much do insurers spend on administration (including advertising and marketing) as a proportion of premium income? Have these costs changed over time? If so, why?
- 64. To what extent do insurers have incentives to minimise administrative costs?
- 65. Can you give a comparison of the administrative costs of insurers and administrative costs in the statutory health system?
- 66. Give an indication of insurers' claims ratios (this is the ratio of benefits paid to premium income).

Public policy towards PHI

Relationship with the statutory health system

67. Describe any changes in the rules and arrangements of the statutory system that may have affected the market for PHI (eg attempts to shift certain benefits from public to private coverage, attempts to exclude or include some groups from statutory coverage etc)?

- 68. Are there any debates about the role and development of PHI? If yes, what is the focus of debates? Who is engaged in these debates (eg insurers, providers, patient groups, media, politicians, the public etc)?
- 69. In your view, how is the market for PHI likely to develop in future?
- 70. Can you comment on ways in which the existence of PHI affects the wider health system?

National regulatory framework

- 71. What is the legislative framework for PHI?
- 72. Who is responsible for regulating the market for PHI (eg government department, PHI-specific regulatory body, insurance-specific regulatory body, financial services regulatory body etc)?
- 73. What is regulated? Regulations may apply to the following (although this list is not exhaustive): the nature and/or number of products on offer, requirements to provide minimum and/or standardised benefits, requirements to participate in a system of risk equalisation/risk adjustment, rules concerning premium setting and prices, rules concerning policy conditions, solvency, advertising, consumer information, complaints procedures. Describe existing regulations and any changes in regulation over time.
- 74. To what extent has the national regulatory framework (including tax treatment; see below) been controversial? Describe any court cases concerning PHI and its regulation.

Tax issues

- 75. Describe any tax incentives or disincentives (with levels and dates of introduction/abolition) to individuals and corporations to encourage the take up of PHI or particular types of PHI. Have there been any changes over time? To what extent do tax incentives contribute to demand for PHI?
- 76. Does tax treatment differ according to an insurer's corporate status (eg for-profit insurers have to pay premium tax but mutual associations or non-profits do not)?

European Union regulatory framework

77. In what way has the European Commission's Third Non Life Insurance Directive affected the market for PHI?

- 78. Describe any regulatory changes introduced as a result of the Directive.
- 79. Describe any national or EU-level court cases involving the Directive or EU competition rules (eg on state aid etc).

Evaluation

The study refers to a set of financing policy goals developed by WHO based on the health system performance goals established in *The World Health Report 2000* (WHO 2000; WHO Regional Office for Europe 2006). 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
- 80. To what extent does PHI contribute to these goals: a) within the market itself and b) in terms of its impact on the wider health system? Please refer to Table 5 for examples. Base your evaluation on evidence where it is available. Where this is lacking, please give your own view (but indicate that it is your own view).

81. Please discuss any further issues relevant to PHI that have not already been covered.

Market role	Driver of market development	Nature of cover	Examples
Substitutive	Public system inclusiveness (% of the population covered)	Covers people excluded from or allowed to opt out of the public system	Germany since 1970, the Netherlands prior to 2006, Chile
Complementary (services)	Scope of benefits covered by the public system	Covers services excluded from the public system (eg dental care, outpatient prescription drugs, complementary and alternative treatment etc)	Many EU member states, Canada
Complementary (user charges)	Depth of public coverage (% of the benefit cost met by the public system)	Covers statutory cost sharing (user charges)	France, Denmark, Slovenia, Ireland
Supplementary	Consumer satisfaction (perceptions about the quality of publicly- financed care)	Covers faster access or access to private sector care or enhanced consumer choice (of amenities, of providers)	The United Kingdom, Ireland and most EU member states

Source: Adapted from Foubister et al (2006)

Country	Data	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
AUT	PEH as % of TEH	29.6	24.5	24.3	23.9	2000	2001	2002	2003	2004	2003
AUI	PHI as % of PEH	19.9	24.3	24.3	23.9	19.4	19.1	19.6	19.7	24.4	24.3
	PHI as % of TEH	5.9	5.6	5.2	4.9	4.7	4.6	4.8	4.9	5.1	5.2
BEL	PEH as % of TEH	21.6	26.1	26.7	27.9	28.6	28.7	29.2	28.3	27.3	27.6
DEL	PHI as % of PEH	8.5	8.7	10.3	11.6	12.1	12.2	12.1	12.0	12.0	12.1
	PHI as % of TEH	8.3 1.8	2.3	2.7	3.2	3.5	3.5	3.5	3.4	3.3	3.3
BGR	PEH as % of TEH	30.9	2.3	32.1	34.6	40.6	43.9	40.3	37.9	42.4	42.5
DGK	PHI as % of PEH	0.0	0.0	0.0	0.0	0.0	43.9	40.3 0.1	0.3	0.2	0.3
	PHI as % of TEH	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.3
СҮР	PEH as % of TEH	66.4	65.5	58.9	57.3	58.4	57.7	55.1	55.3	55.7	56.5
UIP	PHI as % of PEH	2.6	3.6	4.9	4.7	4.7	4.4	4.3	6.3	5.4	7.6
	PHI as % of TEH	1.7	2.4	2.9	2.7	2.7	2.5	2.4	3.5	3.4	4.3
CZE	PEH as % of TEH	9.3	9.7	9.6	9.5	9.7	10.2	9.5	10.2	10.8	4.3
CZE	PHI as % of PEH	9.3	9.7	9.0	9.3	0.0	0.0	9.3 2.4	2.3	2.1	2.2
	PHI as % of TEH	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2
DNK	PEH as % of TEH	17.6	17.7	18.0	17.8	17.6	17.3	17.1	15.8	15.7	15.9
DINK	PHI as % of PEH	7.7	7.9	8.0	9.6	9.0	8.0	7.2	9.4	9.8	9.5
	PHI as % of TEH	1.4	1.4	1.4	9.0	9.0	1.4	1.2	9.4	9.8	9.5
ECT	PEH as % of TEH		1.4	1.4	1.7	22.5	21.4	22.9	22.9	24.0	23.1
EST	PEH as % of PEH	11.6 0.0	0.0	0.0						0.3	0.3
		0.0	0.0	0.0	n/a	n/a	n/a	n/a	n/a	0.3	0.3
EINI	PHI as % of TEH PEH as % of TEH	24.2	23.9	23.7	n/a 24.7	<u>n/a</u> 24.9	n/a 24.1	n/a 23.7	n/a 23.8	22.8	22.2
FIN		9.9		<u> </u>			10.4	10.1	23.8		10.2
	PHI as % of PEH PHI as % of TEH	2.4	11.0 2.6	2.6	10.8	10.6	2.5	2.4	2.4	10.3 2.4	2.3
EDA	PEH as % of TEH	2.4	2.0	2.0	2.7	2.0	2.3	2.4	2.4	2.4	2.3
FRA	PHI as % of PEH	49.3	49.7	50.5	49.9	49.7	49.7	50.2	60.6	61.3	62.0
	PHI as % OF TEH	49.3	10.6	<u> </u>	49.9 10.8	49.7	49.7	<u> </u>	12.5	12.6	62.0 13.4
DEU	PHI as % OF TEH	10.6	10.6	10.8	20.2	20.3	20.7	20.8	21.3	23.1	23.1
DEU	PEH as % of PEH	42.1	41.6	40.3	40.5	40.7	40.4	41.0	41.0	39.1	39.8
	PHI as % of TEH	7.5	41.0 8.0	8.0	<u>40.3</u> 8.2	8.3	<u>40.4</u> 8.4	8.5	<u>41.0</u> 8.7	<u> </u>	<u> </u>
GRC	PHI as % OF TEH	47.0	47.2	47.9		55.8	<u> </u>	53.0	53.6	<u>9.0</u> 55.4	<u>9.2</u> 57.2
GKU	PEH as % of PEH	47.0	47.2	47.9	46.6	3.7	3.4	3.6	3.2	3.0	2.8
				4.2	4.1				3.2		
	PHI as % of TEH	2.0	2.0	2.0	1.9	2.1	1.8	1.9	1./	1.7	1.6

 Table A2 PHI as a proportion of private expenditure on health and total expenditure on health, 1996-2005

Country	Data	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
HUN	PEH as % of TEH	19.2	19.3	25.2	27.6	29.3	31.0	29.8	28.1	28.7	29.1
	PHI as % of PEH	n/a	n/a	0.2	0.3	0.6	1.0	1.3	2.1	3.9	3.7
	PHI as % of TEH	n/a	n/a	0.0	0.1	0.2	0.3	0.4	0.6	1.1	1.1
IRL	PEH as % of TEH	28.8	26.3	26.5	27.3	27.1	26.4	24.4	23.3	21.8	22.0
	PHI as % of PEH	31.8	32.6	31.4	27.3	26.4	24.3	26.3	28.0	29.5	31.7
	PHI as % of TEH	9.1	8.6	8.3	7.4	7.2	6.4	6.4	6.5	6.4	7.0
ITA	PEH as % of TEH	29.4	29.2	29.6	29.3	27.5	25.4	25.5	25.3	24.2	23.4
	PHI as % of PEH	3.4	3.4	3.1	3.2	3.2	3.5	3.5	3.7	3.7	3.9
	PHI as % of TEH	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
LVA	PEH as % of TEH	42.2	44.2	40.7	41.7	46.1	49.8	48.2	47.5	43.4	47.4
	PHI as % of PEH	1.8	2.1	2.8	2.8	3.2	4.7	5.6	3.2	1.7	1.7
	PHI as % of TEH	0.7	0.9	1.1	1.2	1.5	2.3	2.7	1.5	0.7	0.8
LTU	PEH as % of TEH	29.7	31.0	24.0	25.1	30.3	27.4	25.1	24.0	32.5	32.7
	PHI as % of PEH	0.1	0.1	0.1	0.1	0.3	0.2	0.5	0.5	1.3	1.1
	PHI as % of TEH	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.4
LUX	PEH as % of TEH	7.2	7.5	7.6	10.2	10.7	10.2	9.7	9.4	9.6	9.2
	PHI as % of PEH	n/a	n/a	n/a	13.6	10.1	9.0	8.9	18.2	17.6	17.6
	PHI as % of TEH	n/a	n/a	n/a	1.4	1.1	0.9	0.9	1.7	1.7	1.6
MLT	PEH as % of TEH	29.3	30.2	27.8	28.0	25.8	26.9	23.9	23.9	23.9	21.9
	PHI as % of PEH	3.7	3.4	3.3	3.1	3.0	2.8	2.7	5.1	7.3	9.8
	PHI as % of TEH	1.1	1.0	0.9	0.9	0.8	0.7	0.6	1.2	1.8	2.1
NLD	PEH as % of TEH	33.8	32.2	35.9	37.3	36.9	37.2	37.5	31.8	32.8	34.3
	PHI as % of PEH	57.7	59.1	45.6	44.5	43.0	43.6	45.6	56.0	58.0	58.5
	PHI as % of TEH	19.5	19.0	16.4	16.6	15.9	16.2	17.1	17.8	19.0	20.1
POL	PEH as % of TEH	26.6	28.0	34.6	28.9	30.0	28.1	28.8	30.0	31.4	30.6
	PHI as % of PEH	0.0	0.4	0.3	0.5	0.8	1.2	1.8	1.9	1.9	1.8
	PHI as % of TEH	0.0	0.1	0.1	0.1	0.2	0.3	0.5	0.6	0.6	0.6
PRT	PEH as % of TEH	34.7	34.3	32.9	32.4	27.5	28.5	27.8	26.6	28.4	27.3
	PHI as % of PEH	4.0	4.4	4.7	4.3	11.1	11.3	13.2	15.6	15.9	13.8
	PHI as % of TEH	1.4	1.5	1.5	1.4	3.1	3.2	3.7	4.1	4.5	3.8
ROU	PEH as % of TEH	33.5	30.6	37.9	35.0	32.7	34.2	34.8	20.5	28.5	24.7
	PHI as % of PEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	9.4	18.2
	PHI as % of TEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	2.7	4.5

Table A2 PHI as a proportion of private expenditure on health and total expenditure on health, 1996-2005

Country	Data	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
SVK	PEH as % of TEH	11.3	14.7	14.3	15.8	16.7	17.8	17.5	22.4	26.2	27.0
	PHI as % of PEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PHI as % of TEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVN	PEH as % of TEH	22.2	20.8	24.3	24.5	22.2	23.2	23.2	25.2	24.4	24.7
	PHI as % of PEH	55.3	51.2	55.6	60.7	61.4	58.3	58.8	49.5	51.7	51.3
	PHI as % of TEH	12.3	10.7	13.5	14.8	13.6	13.5	13.7	12.5	12.6	12.7
ESP	PEH as % of TEH	27.6	27.5	27.8	28.0	28.4	28.8	28.7	29.7	29.1	28.6
	PHI as % of PEH	12.8	12.8	13.1	13.4	13.7	13.9	14.3	18.3	19.4	19.2
	PHI as % of TEH	3.5	3.5	3.7	3.8	3.9	4.0	4.1	5.4	5.7	5.5
SWE	PEH as % of TEH	13.1	14.2	14.2	14.3	15.1	15.1	14.9	14.6	15.4	15.4
	PHI as % of PEH	n/a	n/a	n/a	1.0	1.2	1.5	1.4	2.1	1.8	2.0
	PHI as % of TEH	n/a	n/a	n/a	0.1	0.2	0.2	0.2	0.3	0.3	0.3
GBR	PEH as % of TEH	17.1	19.6	19.6	19.4	19.1	17.0	16.6	14.4	13.7	12.9
	PHI as % of PEH	19.2	17.2	17.4	16.8	16.7	8.0	8.0	9.0	8.2	7.9
	PHI as % of TEH	3.3	3.4	3.4	3.3	3.2	1.4	1.3	1.3	1.1	1.0
ISL	PEH as % of TEH	16.7	17.9	18.8	16.9	18.0	18.1	17.3	17.5	17.6	17.5
	PHI as % of PEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PHI as % of TEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NOR	PEH as % of TEH	15.8	18.7	17.8	17.4	17.5	16.4	16.5	16.3	16.4	16.4
	PHI as % of PEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PHI as % of TEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	PEH as % of TEH	54.6	54.9	56.0	56.5	56.3	55.4	55.3	55.5	55.3	54.9
	PHI as % of PEH	61.3	60.7	60.6	61.4	62.7	64.2	65.2	65.8	66.4	66.6
	PHI as % of TEH	33.5	33.4	33.9	34.7	35.3	35.6	36.1	36.5	36.7	36.6

Table A2 PHI as a proportion of private expenditure on health and total expenditure on health, 1996-2005

Source: WHO (2007) <u>http://www.who.int/nha/country/en/#L</u> accessed 4 December 2007 Note: PEH = private expenditure on health; PHI = private health insurance; TEH = total expenditure on health; n/a = estimates not available

Table A3 Data sources for Table 2

Country	Data source
AUT	OECD HD 2007
BEL	2003 SHA JQ, else WHO based on Previous OECD HD versions. Projections based on PC. Estimated as share of HHC
BGR	2001 draft NHA Report, 2003 claims Stat Yearbook T 27, 2003 JQ. Ratio of average HE/total Exp applied to PC excluding reimbursement
СҮР	Statistical Service. Health & Hospital Statistics, T V 1999-2002, 2003-04 JQ. 2005 projection based on HHC
CZE	OECD HD 2007
DNK	OECD HD 2007
EST	Min of Social Affairs HealthExpend_add2_2003.xls and HealthExpend_1999-2003.xls. 2004 projected with share to HHC
FIN	OECD HD 2007
FRA	OECD HD 2007
DEU	OECD HD 2007
GRC	OECD HD 2006 (2000-2004) 1998-99: OECD HD 1998, 2005 projection based on HHC
HUN	1998-2002 OECD HD 2006, 2003-5 JQ
IRL	OECD HD 2007
ITA	OECD HD 2007
LVA	http://data.csb.lv/EN/Dialog/Saveshow.asp. Not included values for NGOs and Firms (additional to health insurance)
LTU	2002-2003 MoH HA draft report, 1996-2001 & 2004-5 projection based on PC. 1996-2001 Ratio applied to HHC
LUX	OECD HD 2006, 2005 projection based on ratio to PC
MLT	1993-98 NA 50% claims T6, 1999-2002 5% of "other spending" of higher income groups HHS NSO Pov & Soc Ineq T1, 2003-2005 projections based on
	growth of financial institutions. 93-99 estimated to be 50% of Life insurance claims NA T6. 99-2002 Estimated to be 5% of "other spending" of higher income
	groups in HHS according NSO Poverty and social inequality T1, 2003-05 projected through Annual Report CB T 3.9.
NLD	OECD HD 2006, 2003-04 JQ, validation to WHR 2007
POL	OECD HD 2007
PRT	OECD HD 2007
ROU	2003-5 JQ
SVK	OECD HD 2006, 2002-04 JQ, 2005 projection based on HHC
SVN	Stat Yearbook T 30 adjusted by MoH, Revisions supplied by MoH with CSO data, 2003-04 HA data. Revisions supplied by MoH with CSO data
ESP	OECD HD 2007
SWE	WHO based on 1999-2004 http://www.forsakringsforbundet.com/common/browse.asp?id=3643, 2004 CBS, 2005 estimated as 11.5% growth referred in the
	same source
GBR	OECD HD 2006, else: WHO based on private spending. Estimates based on HHC in NA
ISL	OECD HD 2007
NOR	OECD HD 2007
USA	OECD HD 2007

Form	Definition
Direct	
Co-payment	The user pays a fixed fee (flat rate) per item or service.
Co-insurance	The user pays a fixed proportion of the total cost, with the insurer
	paying the remaining proportion.
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.
Indirect	
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.
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).
No claims bonus	The insurer rewards users who do not make a claim in a given year.
Differential charges	
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.
C	omson and Mossiplos (2004)

Table A4 Direct and indirect forms of cost sharing

Source: Adapted from Thomson and Mossialos (2004)

	able A5 PHI impact on health financing policy goals							
Policy goal	Within the market	Impact on the wider health system						
Financial protection Equity in finance	Most relevant where PHI is a person's only source of health care 'cover' (ie substitutive PHI). Financial protection can be undermined by age limits, benefit limits, exclusion of pre-existing conditions and cost sharing. Are there any studies of this for your country? International analysis shows that PHI can be progressive due to the high proportion of richer people buying PHI, but tends to be regressive where it is the 'main' means of obtaining coverage (as in the US) and where it covers a large proportion of the population (Wagstaff et al	PHI may enhance financial protection if the statutory system does not offer universal coverage or if the depth and scope of statutory coverage are limited. But it may also hinder efforts to expand statutory coverage. Supplementary PHI is least likely to contribute to financial protection (within the market and in the health system as a whole). Again, depends on the role PHI plays, but likely to lower equity in finance in the health system as a whole where richer groups are allowed to opt out or are excluded from statutory cover (substitutive PHI) and where complementary PHI covers user charges.						
Equity of access	1999). To what extent do aspects of market conduct lower equity of access to PHI (eg premium setting, policy conditions etc)?	To what extent does the existence of PHI lower equity of access in the health system as a whole? Do privately-insured people have faster or better access to health care (or some types of care eg specialist care (van Doorslaer et al 2006)? How does PHI affect the allocation of public resources (eg if doctors have incentives to prioritise privately-insured patients or the latter use beds in public hospitals etc)?						
Transparency and accountability	How transparent is the PHI market? Who collects data on the PHI market and how accessible is it? Are consumers adequately informed and protected?	To what extent does the existence of PHI encourage or lower transparency and accountability in the wider health system? Do private insurers have higher standards (eg where informal payments are concerned)? What is their contribution to policy debates and processes (eg lobbying)?						
Rewarding good quality care	To what extent do private insurers try to reward good quality of care?	To what extent does this exceed, match or fall short of attempts to reward good quality care in the statutory health system?						
Providing incentives for efficiency	To what extent do private insurers try to ensure efficiency in service organisation and delivery?	To what extent does this exceed, match or fall short of efforts made in the statutory health system?						
Administrative efficiency		s of private insurers compare to those of the at extent are higher administrative costs justified lity / ensuring efficiency etc?						

Table A5 PHI impact on health financing policy goals

Questionnaire for Study 4

Can insurer competition improve health system performance? Evidence from western Europe

Introduction: rationale for insurer choice and competition

- When was insurer choice and competition introduced/extended and why?
- What were the expected outcomes?

Overview: health insurance organisation and regulation

The largely descriptive information in this section can be presented in the form of comparative tables.

Table A1 Regulation of coverage

Coverage breadth (universality)	
What is the basis for entitlement to statutory health insurance?	
What % of the population is not covered?	
What are the characteristics of the 'uninsured'?	
Coverage scope (benefits)	
What health services does statutory health insurance cover?	
Who defines the statutory benefits package?	
Changes in any of the above?	

Coverage depth

- who sets user charges policy?
- have there been any significant changes in user charges policy?

Table A2 Regulation of collection

Who sets contribution rates?	
Who collects contributions?	
Who pays contributions (eg which groups of people)?	
What is the balance between employee and employer contributions?	
Are contributions standard across the population?	
Is there a ceiling on contributions?	
What is the balance between wage/income-related contributions and flat-rate premiums?	
What is the balance between compulsory contributions/premiums and general tax revenues?	
Trends in premium growth (absolute / as % of household income); compare to	
growth in worker earnings	
Changes in any of the above?	

Table A3 Regulation of pooling

How are statutory health insurance revenues pooled?	
Who sets the formula for allocating resources to insurers?	
what proportion of insurer revenue is subject to risk adjustment?	
Is there outlier risk sharing above a threshold / up to a ceiling (retrospective adjustment)?	
What risk factors are used in risk adjustment? Is morbidity included?	
Changes in any of the above?	

Table A4 Insurer market structure

What is the legal/profit status of insurers?	
If profit status varies, what is the balance between for-profit and non-profit?	
If profits are allowed, are there any controls on profit margins?	
How many insurers are there?	
What is the market share of the largest three insurers?	
Can insurers who sell statutory health insurance also sell voluntary cover?	
Who monitors insurer competition?	
Changes in any of the above?	

Table A5 Regulation of purchasing

Who regulates purchaser-provider relations?	
Describe the main characteristics of purchaser-provider relations	
Are there caps on insurer operating/administrative costs?	
% of total revenue spent on health care (claims ratio)	
% of total revenue spent on administration (non-health care costs)?	
Who determines how providers are paid?	
Who sets health service prices?	
Changes in any of the above?	

Table A6 Provider payment

Provider	Payment methods
GPs / primary care providers	
Office-based specialists	
Hospital doctors	
Hospitals	
Other	
Changes in any of the above over time?	

Ensuring financial protection and (equitable) access to health care

Table A7 Financial protection and access: steps taken to ensure access to health

insurance	and	health	care
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Open enrolment	Yes / No
Lifetime cover (guaranteed renewal)	Yes / No
Prohibition of exclusion of pre-existing conditions	Yes / No
Prohibition of risk or experience premium rating	Yes / No
Premium subsidies (how much and for whom)	Describe (see below)
Portability (between jobs, regions etc)	Yes / No
Risk equalisation	Yes / No
Exemptions from / caps on cost sharing	Yes / No (describe in
	Tables 2-3)
Provisions for the uninsured	Describe (see below)
Other	

Note: if any of these steps have been introduced relatively recently, please say when introduced and why

Please describe in more detail how the premium subsidies work, who determines them, how they are administered, who benefits from them (characteristics and % of total insured), any issues/challenges arising etc.

Please describe in more detail provision for the uninsured eg whether they have any entitlement to health care, any issues/challenges arising etc.

How effective are all of these steps in securing financial protection and ensuring (equitable) access? Is there any evidence of inequitable access to health insurance/health services? To what extent are financial protection/access public policy concerns?

Choice for users

Table A8 Choice for users

Choice regarding:	Belgium	Germany	Netherlands	Switzerland
Insurance status				
Range of benefits				
Benefit modality				
Level of pre-paid contribution				
Degree of cost sharing				
Insurers				
Providers				

Is health insurance compulsory (and for whom)? If there is an 'individual mandate' in place, how does it work and what are the penalties for non-compliance? Are penalties enforced? What are the characteristics of the uninsured?

Choice of insurer: How often can people switch insurer? What proportion of the insured switch? What are the characteristics of switchers vs non-switchers?

Why would someone switch insurer ie what are the parameters for insurer competition (eg extent of differentiation between them, see next paragraph) and how strong are incentives to switch insurer? Are there significant price/quality differences between insurers? Do individuals/employers benefit from lower premiums? Is there any evidence on why people do actually switch insurer?

Do people have choices about how much they pay for statutory health services eg level of contributions/premiums, choice of deductible level, reduced cost sharing for opting for vertically-integrated insurers or preferred provider networks, benefit modality (cash reimbursement vs benefits in kind) etc?

Can people opt for voluntary health insurance (VHI)? What does VHI cover? What % of the population are covered by it? Does it prevent people from switching insurer for the statutory package of benefits?

Do people have access to comparative information about contribution or premium levels / benefits / cost sharing requirements / insurer quality / provider quality? If so, who provides this information? What sort of information is available? How good is it? Is there any evidence about its use?

Incentives for insurers: minimising risk selection and ensuring value for money (quality and cost control)

What steps are taken to maximise insurers' incentives to compete on price and quality and to minimise their incentives to select risks, and with what effect?

If VHI is sold by insurers providing statutory coverage, does it provide opportunities for risk selection in statutory coverage?

What leverage do insurers have over providers? Please describe the tools/levers insurers have to ensure quality and efficiency in the delivery of health care and discuss the extent to which they use them. Please mention any proposals to increase insurer leverage.

Tool / lever	Permitted	Use / take up: low / moderate /
	(Y/N)	high (and quantify if possible)
Selective contracting		
Financial incentives (eg through cost sharing) for		
patients to use preferred providers		
Price negotiation		
Vertical integration		
Clinical guidelines / protocols		
Disease management programmes		
Utilisation review		
Formularies		
Performance-based payment of providers		
Public disclosure of performance indicators		
Waiting list management / targets		
Other		

Note: if take up is low, please say why

Do insurers have access to comparative information about the quality and costs of different providers? If so, who provides it? What are the barriers to improved purchasing? Examples might include: insufficient or poor quality information for insurers, inadequate incentives for insurers (eg due to poor risk adjustment, inability to differentiate themselves, low switching), tension between wanting to exert leverage over providers and the need to promote user choice of provider, political interference etc.

Outcomes and challenges

- To what extent have policy expectations about insurer competition been met?
- If expectations have not been met, why not?
- What are the key policy challenges?
- Please summarise the benefits and costs of health insurance choice and competition in your country.

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