

# **Voluntary health insurance**

*in the European Union*

Elias Mossialos |  
Sarah Thomson |

# **Voluntary health insurance in the European Union**



MINISTRY OF  
SOCIAL AFFAIRS AND HEALTH



REGERINGSKANSLIET



European  
Investment  
Bank



The European Observatory on Health Systems and Policies is a partnership between the World Health Organization Regional Office for Europe, the Government of Belgium, the Government of Finland, the Government of Greece, the Government of Norway, the Government of Spain, the Government of Sweden, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science and the London School of Hygiene & Tropical Medicine.

# Voluntary health insurance in the European Union

**Elias Mossialos and Sarah Thomson**

European Observatory on Health Systems and Policies  
and LSE Health and Social Care,  
London School of Economics and Political Science

*with (in alphabetical order):*

Reinhard Busse, Technical University, Berlin • Charalambos Economou,  
National School of Public Health, Athens • Margherita Giannoni-Mazzi,  
University of Perugia • Jean Hermesse, Université Catholique de Louvain •  
Tony Hockley, The Policy Analysis Centre, London •  
Maria M Hofmarcher, Institute for Advanced Studies, Vienna • Hans  
Maarse, University of Maastricht • Hennamari Mikkola, National Research &  
Development Centre for Welfare & Health, Helsinki • Monica Oliveira, London  
School of Economics and Political Science • Marisol Rodríguez, University of  
Barcelona • Simone Sandier, Arguments Socio-Economiques pour la Santé,  
Paris • Caj Skoglund, BCS Kompetensutveckling AB and The Swedish Welfare  
Group • Philippe Ulmann, Conservatoire National des Arts et Métiers, Paris •  
Karsten Vrangbæk, University of Copenhagen

© World Health Organization, 2004  
on behalf of the European Observatory on Health Systems and Policies

This document may be freely reviewed or abstracted, but not for commercial purposes. For rights of reproduction, in part or in whole, application should be made to the WHO Regional Office for Europe, Scherfigsvej 8, DK-2100 Copenhagen, Denmark [for translation: [pubrights@euro.who.int](mailto:pubrights@euro.who.int); for reproduction: [permissions@euro.who.int](mailto:permissions@euro.who.int)]. The European Observatory on Health Systems and Policies welcomes such applications.

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the European Observatory on Health Systems and Policies or its participating organizations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. The names of countries or areas used in this document are those which obtained at the time the original language edition of the document was prepared.

The views expressed in this document are those of the contributors and do not necessarily represent the decisions or the stated policy of the European Observatory on Health Systems and Policies or its participating organizations.

For more information on the Observatory contact:  
European Observatory on Health Systems and Policies  
Rue de l'Autonomie 4  
1070 Brussels  
Belgium

[www.observatory.dk](http://www.observatory.dk)

ISBN 92 890 1065 7

---

# Table of contents

<b>Acknowledgements</b>	<b>7</b>
<b>List of abbreviations</b>	<b>9</b>
<b>List of tables</b>	<b>11</b>
<b>Foreword</b>	<b>13</b>
<b>Summary</b>	<b>15</b>
<b>Section 1 Context</b>	<b>25</b>
1.1 The rules and arrangements of statutory health care systems	25
1.1.1 Health insurance coverage	25
1.1.2 Mandatory participation	26
1.1.3 Comprehensive benefits	26
1.1.4 Levels of public expenditure on health care	27
1.2 The size of the market for VHI	29
1.2.1 Levels of expenditure on VHI	29
1.2.2 Levels of premium income	30
1.2.3 Levels of coverage	32
1.3 The demand for VHI	36
1.3.1 Determinants of demand	36
1.3.2 Subscriber characteristics	38
1.4 The regulatory framework for VHI in the European Union	45
1.4.1 Background	45
1.4.2 The third non-life insurance directive	46
1.4.3 The general good	47
1.4.4 Further implications of the third non-life insurance directive	49
<b>Section 2 The market for VHI in the European Union</b>	<b>51</b>
2.1 Types of VHI in the European Union	51
2.1.1 Substitutive VHI	52
2.1.2 Complementary and supplementary VHI	66
2.2 Market structure	67
2.2.1 Types of insurer	67
2.2.2 Buyer characteristics: individual versus group policies	72
2.3 Market conduct	75
2.3.1 Premium-setting, selection criteria and policy conditions	75
2.3.2 The provision of benefits	82
2.3.3 Insurers' relationship with providers	85
2.4 Subscribers' costs	88
2.4.1 The price of premiums	88
2.4.2 Tax incentives	90
2.5 Insurers' costs	97
2.5.1 Claims expenditure	97
2.5.2 Administrative costs	99

<b>Section 3 Access, equity and consumer protection</b>	<b>101</b>
3.1 Access to health care	101
3.2 Potential barriers to access in VHI markets	104
3.2.1 Price and ability to pay	104
3.2.2 Non-price barriers	107
3.2.3 Asymmetrical information, adverse selection and risk selection in VHI markets	107
3.2.4 Mitigating risk selection through risk adjustment	110
3.2.5 Genetic testing and insurance	115
3.2.6 Multiple products	119
3.3 Equity implications	126
3.3.1 Equity in funding health care	126
3.3.2 Equity in the delivery of health care	127
<b>Section 4 Implications for the free movement of people and services in the EU</b>	<b>131</b>
4.1 The free movement of patients in statutory health care systems	131
4.2 VHI and potential barriers to the free movement of people	135
4.3 VHI and potential barriers to the free movement of services	139
<b>Section 5 Trends and challenges</b>	<b>143</b>
5.1 Market trends and challenges	143
5.1.1 Demand	143
5.1.2 Buyer characteristics and premium trends	144
5.1.3 Consumer choice	145
5.1.4 Market structure	147
5.1.5 The free movement of people and services	148
5.1.6 Data availability	149
5.2 Trends and challenges in public policy	149
5.2.1 Health care expenditure	150
5.2.2 Access and consumer protection	154
5.3 Trends and challenges in EU regulation	156
5.3.1 The impact of the third non-life insurance directive	156
5.3.2 The equal treatment of insurers	160
5.3.3 Clarification of the general good	162
<b>Section 6 Concluding remarks</b>	<b>165</b>
<b>Appendices</b>	<b>169</b>
Appendix A – Background information and methodology	169
Appendix B – Voluntary health insurance in Spain and Portugal	176
Appendix C – List of contributors and their affiliations	180
<b>References</b>	<b>183</b>
<b>Index</b>	<b>199</b>

---

# Acknowledgements

The authors would like to thank Jeffrey V. Lazarus for managing the production, Misha Hoekstra for copy-editing and Jesper Rossing for the design and typesetting. The authors would also like to thank the following individuals for their assistance in providing information for this study. In alphabetical order:

**John Armstrong**, Actuarial Executive, Vhi Healthcare, Ireland

**Tara Buckley**, General Manager, Corporate Communications, Vhi Healthcare, Ireland

**Olaf Engemann**, Director, Le Foyer Santé, Luxembourg

**Costas Fotakis**, Directorate-General for Employment and Social Affairs, European Commission

**Florence Gérard**, Secrétaire Générale Adjointe, Association Européenne des Institutions Paritaires

**Christine Gersching**, Maison Européenne de la Protection Sociale/European Social Insurance Partners

**Michael Huebel**, Directorate-General for Health and Consumer Protection, European Commission

**Ralf Jacob**, Directorate-General for Employment and Social Affairs, European Commission

**Colm Keenan**, Principal Officer, Health Insurance Unit, Department of Health and Children, Ireland

**Rita Kessler**, Project Manager, Secretariat, L'Association Internationale de la Mutualité (AIM)

**Sean Murray**, Marketing Director, BUPA, Ireland

**Jean-Yves Muylle**, Directorate-General for the Internal Market, European Commission



**Patrick O'Barrett**, Health Insurance Unit, Department of Health and Children, Ireland

**Willy Palm**, Director, Secretariat, L'Association Internationale de la Mutualité (AIM)

**Javier Palmero Zurdo**, Directorate-General for the Internal Market, European Commission

**Christian Pierotti**, Comité Européen des Assurances (CEA)

**Sybille Sahmer**, Verbandsdirektorin, Verband der privaten Krankenversicherung (PKV)

**Michel Schmitz**, President, Conseil Supérieur de la Mutualité, Luxembourg

**Armindo Silva**, Directorate-General for Employment and Social Affairs, European Commission

**Luc Tholoniati**, Directorate-General for Employment and Social Affairs, European Commission

**Herwig Verschueren**, Directorate-General for Employment and Social Affairs, European Commission

**Franz-Josef Werle**, Deputy Secretary General, CEA

The opinions expressed in this study are the authors' own and do not necessarily reflect those of the European Commission.

---

# List of abbreviations

ABI	Association of British Insurers
AIM	Association Internationale de la Mutualité
AWBZ	Algemene Wet Bijzondere Ziektekosten
CEA	Comité Européen des Assurances
CMU	Couverture Mutuelle Universelle
CREDES	Centre for Research and Documentation in Health Economics
DECO	Associação Portuguesa para a Defesa do Consumidor
DRG	Diagnosis-related groups
EC	European Community
ECJ	European Court of Justice
EU	European Union
FNMF	Fédération Nationale de la Mutualité Française
FSA	Financial Services Authority
GDP	Gross domestic product
GKV	Gesetzliche Krankenversicherung
HCP	Health cash plan
HMO	Health maintenance organization
INE	Instituto Nacional de Estadística
MOOZ	Health Insurance Funds Act
NHS	National Health Service (in Portugal and the United Kingdom); National Health System (in Spain)
OECD	Organisation for Economic Co-operation and Development
OFT	The Office of Fair Trading
PKV	Verband der privaten Krankenversicherung/German Association of Private Health Insurers
PPN	Preferred provider network
PZV	Publiekrechtelijke ziektekostenverzekering
RES	Risk equalization scheme
RIZIV-INAMI	Rijksinstituut voor ziekte en invaliditeitsverzekering/Institut National d'Assurance Maladie Invalidité (National Institute of Health and Disability Insurance)
VHI	Voluntary health insurance
VHIB	Voluntary Health Insurance Board
WTZ	Wet op de Toegang tot Ziektekostenverzekeringen
ZFW	Ziekenfondswet



---

# List of tables

Table 1. Public and private expenditure as a percentage of total expenditure on health care in the European Union, 1975–1998	28
Table 2. Breakdown of private expenditure as a percentage of total expenditure on health care in the European Union, 1980–1998	31
Table 3. VHI expenditure as a percentage of private expenditure on health care in the European Union, 1980–1998	32
Table 4. Premium income of voluntary health insurers in the European Union, 1999	33
Table 5. Levels of VHI coverage as a percentage of the total population	34
Table 6. Insured individuals as a percentage of the total population in select EU member states, 1992–1998	36
Table 7. The proportion of the population covered by statutory and voluntary health insurance schemes in the Netherlands in 1990 and 2000 (%)	61
Table 8. Age distribution in the ZFW, substitutive VHI and the WTZ in the Netherlands in 2000	63
Table 9. Examples of the benefits provided by complementary and supplementary VHI in the European Union, 2001	68
Table 10. The extent to which VHI policies are purchased by groups and individuals in the European Union, 2000 or latest available year	73
Table 11. Examples of the variables used for rating VHI premiums and the medical information/procedures required from applicants, 2001	77
Table 12. Age limits and types of contract, 2001	79

Table 13. Conditions usually excluded from VHI cover, 2001	80
Table 14. Waiting periods before claims may be made, 2001	81
Table 15. Annual increases in the average price of VHI premiums in select member states, mid-late 1990s	89
Table 16. Tax incentives to purchase VHI in the European Union, 2001	95
Table 17. Tax disincentives in select countries, 2001	96
Table 18. Loss ratios of voluntary health insurers	98
Table 19. Administrative costs as a proportion of VHI premium income compared to administrative costs in the statutory health care system, 2000 or latest available year	100
Table 20. Comparison of laws and regulations affecting the use of genetic tests in select countries	120

---

# Foreword

*This study was originally made available in electronic format in February 2002. It was prepared at the request of the European Commission in response to concerns raised in the European Parliament. In October 2000 the European Parliament adopted a report on voluntary health insurance (VHI) written by its Committee on Employment and Social Affairs. The Committee's report called for further research into VHI and its role in providing access to health care in European Union member states.*

*In July 2001, the European Commission's Directorate-General for Employment and Social Affairs commissioned this study in order to respond to some of the questions raised by the Committee and the European Parliament; form a basis for any further research or other initiatives it might carry out in this area; and stimulate debate among key stakeholders. The original study prepared for the European Commission is reproduced in full here.*

*Since February 2002 there have not been many changes in public VHI policy in the European Union (EU), either at the national or the supranational level. Three significant developments are worth mentioning.*

*In May 2003 the European Commission announced that the controversial system of risk equalization for private insurers in the Irish VHI market was compatible with EU law and could therefore be implemented. Previously, the system of risk equalization proposed by the Irish government had been challenged on the grounds that any financial transfers between private insurers constituted a form of state aid to the insurer with the largest market share.<sup>1</sup>*

*Addressing the uneasy relationship between statutory and voluntary health insurance in Germany and the Netherlands was a key election issue in both countries in 2002. The re-elected government in Germany introduced a reform*

---

<sup>1</sup> For background information on this issue, see section 3 on access, equity and consumer protection. The European Commission's decision can be downloaded from the Internet at: [http://europa.eu.int/comm/secretariat\\_general/sgb/state\\_aids/industrie/n46-03.pdf](http://europa.eu.int/comm/secretariat_general/sgb/state_aids/industrie/n46-03.pdf).

*to raise the income threshold for opting out of the statutory scheme by a higher than usual amount – from €41 400 to €45 900 – with effect from January 2003.*

*Proposed reforms in the Netherlands go much further: the government plans to abolish the current system, which excludes people with annual incomes of more than €30 700 from the statutory health insurance scheme for outpatient and short-term inpatient care, replacing it with a system of compulsory private health insurance for the whole population. However, these reforms are not due to come into effect until after the next general election in 2006, so it is questionable whether it will be implemented at all.*

*The Dutch proposals for reform and the German policy debates share some similarities, for both arise from widespread dissatisfaction with systems seen as overly complex and subject to perverse incentives. While these views reflect a belief in the ability of competitive markets to produce efficiency gains, they also reflect strong opposition to universal statutory coverage from interest groups such as private insurers, civil servants and employers.<sup>2</sup>*

Elias Mossialos and Sarah Thomson  
November 2003

---

<sup>2</sup> For background information on substitutive VHI in Germany and the Netherlands, see section 2.1 on types of voluntary health insurance in the European Union.

---

# Summary

This study provides an overview of markets for voluntary health insurance (VHI)<sup>1</sup> in the European Union (EU). It examines their role in providing access to health care; assesses their impact on the free movement of people and services; and analyses recent trends and future challenges for voluntary health insurers and policy-makers at national and EU levels.

VHI markets in the European Union are diverse. This diversity arises from different historical patterns of development, variations in the rules and arrangements of statutory health care systems and discrepancies in national regulatory regimes. These factors underlie the wide range of: types of VHI on offer, levels of expenditure on VHI, levels of population coverage, types of insurer, mechanisms for premium-setting, selection criteria, policy conditions, benefits provided, premium prices, tax incentives, loss ratios, administrative costs, levels of access, equity implications and impact on free movement.

The types of VHI on offer in a particular member state reflect both the historical development and the current rules and arrangements of that member state's statutory health care system. Public policy in EU member states has aimed to preserve the principle of health care funded by the state or social insurance and made available to all citizens, regardless of ability to pay. As a result, statutory health care systems in the European Union are broadly characterized by near-universal coverage, mandatory participation, the provision of comprehensive benefits and high levels of public expenditure.

These characteristics have been important determinants of the scope and size of VHI markets in the European Union, and the voluntary nature of such markets means that they generally operate in areas that the state does not cover. In the EU context, therefore, we classify VHI according to whether it:

---

<sup>1</sup> We define VHI as health insurance that is taken up and paid for at the discretion of individuals or employers on behalf of individuals. It can be offered by public and quasi-public bodies and by for-profit (commercial) and non-profit private organizations.



- substitutes for cover that would otherwise be available from the state (substitutive VHI);
- provides complementary cover for services excluded or not fully covered by the state, including cover for co-payments imposed by the statutory health care system (complementary VHI); or
- provides supplementary cover for faster access and increased consumer choice (supplementary VHI).

Complementary and supplementary VHI are open to the whole population and some form of complementary and/or supplementary VHI is available in every member state. In contrast, substitutive VHI is limited to specific population groups in a handful of member states. It is usually purchased by:

- those who are excluded from participating in some or all aspects of the statutory health insurance scheme (high-earners in the Netherlands and self-employed people in Belgium and Germany); and
- those who are exempt from contributing to the statutory health insurance scheme because they are allowed to opt out of it (high-earning employees in Germany and some self-employed people in Austria).

The proportion of the population covered by VHI varies among member states. Levels of substitutive VHI cover range from 0.2% of the population in Austria to 24.7% in the Netherlands. Data on levels of complementary and supplementary VHI coverage are less comparable, partly because they do not always distinguish between the two types of coverage and partly due to variation in the quality of coverage. In member states where complementary VHI predominates, levels of coverage range from about 20% to 70%. Since the introduction of free complementary VHI cover for people on low incomes in France in 2000, coverage has risen from 85% to 94%. Where supplementary VHI predominates, it generally covers around 10% of the population.

Information about the characteristics of VHI subscribers suggests that those who purchase supplementary VHI are more likely to come from higher income groups, have higher occupational status and live in wealthier regions. The characteristics of complementary VHI subscribers are more varied, but those most likely not to have complementary VHI coverage include people on low incomes and people without employment (such as students, some women, the unemployed and elderly people). Because access to substitutive VHI is determined by income or employment status, those with substitutive VHI tend to be high-earning or self-employed people.

VHI does not play a significant role in funding health care in the European Union. Spending on VHI as a proportion of total expenditure on health care is low. In 1998 it accounted for less than 10% of total expenditure in every member state except France (12.2%) and the Netherlands (17.7%) and well under 5% of total expenditure in Belgium, Denmark, Finland, Greece, Italy, Luxembourg,

Portugal, Spain, Sweden and the United Kingdom. Although the last 20 years have seen some growth in levels of private expenditure as a proportion of total expenditure on health care, this growth has been influenced more by increases in cost-sharing through user charges than by rising demand for VHI. However, sustained economic growth and cutbacks in public expenditure on health care during the 1980s did increase demand for VHI in many member states. Demand for VHI continued to grow throughout the 1990s in some member states, but the pace of growth was much slower. The fact that levels of VHI coverage in many member states have remained fairly stable for some time now suggests that the market for VHI may have reached saturation point (within current health care system structures).

Over the last 20 years the demand for VHI in several member states has been fuelled by an increase in policies purchased by groups (usually employers, as a fringe benefit for their employees). Stagnant or falling levels of individual demand for VHI have forced insurers to rely even more heavily on sales to groups. Group policies gained an increasing share of the VHI market in many member states during the 1990s and currently account for almost all VHI policies in Sweden, Ireland, Portugal, Greece and the United Kingdom, more than half of all policies in the Netherlands, and about half of all policies in France. Group policies usually benefit from group-rated premiums, discounted prices and less stringent policy conditions. The price of group policies has also increased at a much slower rate than the price of individual policies.

It was expected that the framework for a single market for VHI established in 1994 by EU Council Directive 92/49/EEC (commonly known as the third non-life insurance directive) would increase competition among insurers, leading to greater choice and lower prices for consumers. However, increased competition does not appear to have reduced the price of VHI premiums, particularly for policies purchased by individuals. In fact, the price of individual VHI policies has often risen at a faster rate than health care expenditure in general. Since 2000, insurers offering substitutive VHI in Germany have been required by law to inform potential subscribers of the likelihood and magnitude of premium increases. The competition watchdog in the United Kingdom has asked insurers to do the same, also suggesting that they should publish figures showing applicants how much premiums have risen in previous years. Some industry commentators predict that future growth in the market for VHI is more likely to come through increases in price than increases in population coverage.

However, VHI markets in certain member states are characterized by a high level of product differentiation, perhaps as a result of the abolition of national price and product controls for complementary and supplementary VHI in 1994, which suggests that insurers may employ strategies other than price increases to sustain profitability by keeping existing subscribers and attracting new subscribers. While product differentiation can benefit consumers by increasing the range

of products available to them and by providing them with products that are tailored to meet their needs, it can also be used to segment the market, giving insurers greater opportunity to distinguish between “good” and “bad” risks. Either way, the presence of multiple insurance products may reduce price competition unless it is accompanied by a level of information sufficient to permit consumers to compare products in terms of value for money. EU consumers in many member states now have a wide choice of VHI products, but it is not clear that such choice always works to their advantage. Evidence from several member states suggests that consumers may not have sufficient access to comparable information about VHI products, to the possible detriment of consumers. The competition watchdog in the United Kingdom and consumer associations in some member states have noted that consumers can be easily confused by multiple VHI products and may therefore purchase inappropriate policies.

Information asymmetry between insurers and consumers arising from the proliferation, variability and complexity of VHI products can be mitigated by the use of standardized terms, the existence of a standard package of benefits, an obligation for insurers to inform potential and existing subscribers of all the options open to them and accessible sources of comparable information on the price, quality and conditions of VHI products. However, in the absence of product controls, insurers have little incentive to reduce consumer confusion by introducing standardized terms or standard benefit packages. Late in 2001 the British government announced that general insurance sales (including the sale of VHI) would now come under the statutory regulation of the Financial Services Authority. In making its decision the government stated that statutory regulation of general insurance would “help true competition to flourish in this area, because it would help correct the information asymmetry that presently exists against the customer”.

Insurers operating in a competitive environment may have strong incentives to lower their costs by risk selection, encouraging custom from individuals with below average risk and discouraging or refusing custom from individuals with above average risk. Risk selection may raise concerns about equity (particularly where substitutive VHI is concerned) and also presents serious efficiency problems, lowering the optimal level of competition in an insurance market. Risk selection is likely to occur where voluntary health insurers are able to reject applications, exclude pre-existing conditions and cancel contracts. Incentives to risk-select can be addressed to some extent by obliging all insurers to guarantee access to coverage (open enrolment), provide automatic renewal of contracts and limit exclusions for pre-existing conditions. This type of intervention would radically alter the nature of VHI markets in many member states: at present, open enrolment policies are rare among voluntary health insurers in the European Union, most insurers exclude pre-existing conditions (the norm) or charge higher premiums for them, short-term (usually annual)

contracts are the most common form of VHI contract and lifetime cover is the exception rather than the rule. Furthermore, VHI premiums in many member states rise with age and most insurers set a maximum age limit for purchasing VHI (usually between 60 and 75 years), while some actually cancel contracts when people reach retiring age. Incentives to risk-select can also be reduced by the introduction of sophisticated risk-adjustment mechanisms, but these are only found in Ireland (where a risk equalization scheme is in place but has not yet been activated) and Belgium (for substitutive VHI provided by mutual associations).

For largely historical reasons, some of the most extensive VHI markets in the European Union are currently dominated by non-profit mutual or provident associations. Many (but not all) of these non-profit insurers adhere to solidarity principles in their provision of VHI. In recent years their share of the VHI market has declined in some member states, and in future they may lose further market share to for-profit commercial insurers.

The extent to which VHI affects access to health care depends, in part, on the characteristics of the statutory health care system. Access to VHI may concern policy-makers in so far as VHI provides primary protection against the consequences of ill health. While this is usually the case for substitutive VHI, it may also apply to complementary VHI covering co-payments imposed by the statutory health care system and necessary and effective health services not provided or only partially provided by the state. The high price of VHI premiums in some member states (particularly for individual policies), the absence of open enrolment, lifetime cover and community rating, and the imposition of stringent selection criteria and policy conditions present barriers to VHI for those on low incomes, people with pre-existing conditions, elderly people and people without employment.

Access to VHI has been an issue of concern to policy-makers in some member states. In recent years governments in Germany, the Netherlands and, to a lesser extent, Belgium have intervened heavily in the market for substitutive VHI to ensure that people on lower incomes, people with pre-existing conditions and elderly people have access to adequate and affordable levels of VHI coverage. The German and Dutch governments have also intervened to prevent or address the consequences of risk selection by statutory and voluntary health insurance schemes.

Other governments have taken steps to increase access to complementary and supplementary VHI. Since 2000, the 1999 law on universal health coverage (CMU) in France has enabled those who do not benefit from any health insurance to be covered by a basic, compulsory, statutory health insurance scheme. The law also provides free complementary VHI coverage for people on low incomes. In Ireland the government continues to oblige voluntary health insurers to offer open enrolment, lifetime cover, community-rated premiums, max-

imum waiting periods and a minimum level of benefits. It will also subject insurers to a system of risk adjustment through a (not yet activated) risk equalization scheme. Insurers in Sweden have voluntarily agreed to refrain from requesting information about family history of disease, a type of genetic information that is required by insurers in several member states. Genetic testing for insurance purposes may emerge as an issue for VHI in future and therefore requires further debate at an EU level.

The existence of VHI could present a barrier to access in the statutory health care system for some individuals and population groups if it creates distortions in the allocation of resources. This scenario is most likely where the boundaries between public and private health care are not clearly defined, particularly if capacity is limited, if providers are paid by both the public and the private sector and if VHI creates incentives for health care professionals to treat public and private patients differently. While research into this issue is limited, there is evidence to suggest that VHI in some member states does create or exacerbate existing inequalities in access to health care. Policy-makers should pay greater attention to the equity (and efficiency) implications of the existence of VHI for statutory health care systems, particularly when considering any expansion of VHI markets.

Whether or not VHI conforms to the principle of free movement of people within the European Union depends on the extent to which the benefits provided by VHI are portable. Mobility may be limited if insurers are unwilling to provide cover for health care obtained in another member state or if individuals who move to another member state to work or live are unable to obtain cover on the same terms as those already living in that member state. The portability of benefits may also be restricted by differences in gaps in statutory coverage. Some voluntary health insurers do seek to provide cover for subscribers who regularly travel across national borders, but the role of VHI in covering health care provided beyond national boundaries is, at present, extremely small.

Even if insurers are prepared to extend VHI coverage to cover the costs of health care in another member state, the extension of coverage is likely to come at an additional cost; some subscribers may find themselves being charged higher premiums for the same level of coverage. The problems involved in obtaining VHI coverage in the host member state include non-legal barriers such as language differences, unfamiliarity (which may be a cause for extra concern when the information problems inherent in VHI markets are taken into account) and the extent to which applicants are treated as new risks and therefore subject to higher premiums, the exclusion of any pre-existing conditions and mandatory waiting periods. These factors may disadvantage people of all ages, but they are most likely to present a significant barrier for older people.

A key aspect of the third non-life insurance directive was its extension of the principle of free movement of services to voluntary health insurance. To date,

however, cross-border sales of VHI have been limited, and the few insurers that sell VHI in several member states do so from distinct host member state operations and rarely on the home member state freedom-to-provide-services basis introduced by the directive. Although there have been some notable cross-border mergers and acquisitions in the market for VHI, it seems that insurers have been slow to sell VHI products across national borders without a branch presence in another member state, and individuals have been slow to purchase VHI products in member states other than their own.

Although the third non-life insurance directive removed potential barriers to entry into cross-border insurance markets in theory, in practice some barriers may persist. Commonly cited barriers to the free movement of services include differences in the design and availability of VHI caused by variations in statutory entitlements to health care, the high cost of technical investments, lack of harmonization in certain areas (particularly differential tax treatment) and bureaucratic procedures. The extent to which some of these factors present genuine obstacles to free movement is debatable.

Lack of harmonization with respect to the directive itself may also be problematic for insurers. When the directive came into force in 1994, most member states amended existing legislation or passed new legislation to bring national insurance laws in line with it, but its implementation was not so smooth in a small number of member states, at least from the perspective of certain stakeholders. Some member states initially refused to implement the directive, although by 1997 Spain was the only member state in this position, and the European Commission subsequently referred it to the European Court of Justice. Others selectively incorporated those aspects of the directive that posed the least political difficulty; as a result, the European Commission referred France and Germany to the European Court of Justice for infringement of the directive. Problems with incomplete implementation or possible infringement of the directive are of continuing concern to insurers in Belgium, France, Germany, Ireland and the Netherlands.

What are the prospects for expansion of VHI markets in future? Any expansion is likely to depend on developments in statutory health care systems. Expansion could also occur as a result of market interventions such as obliging voluntary health insurers to offer open enrolment, but this type of regulatory action would fundamentally alter the nature of VHI markets in most member states and may be problematic under the current regulatory framework.

At the present time, member states demonstrate commitment in principle to publicly funded health care for all or almost all citizens, but the sustainability of funding health care from public sources continues to be called into question. It is often suggested that factors such as the ageing of the population, the high cost of new technology and rising public expectations will increase demand for health care, causing expenditure on health care to escalate beyond the willing-

ness or ability of citizens to pay for it (particularly through collective means such as taxation or social insurance). As a result, governments may no longer be able to provide sufficient levels of health care to the whole population, and citizens may be forced to rely on additional methods of funding the health care they require. In such a situation, there would be significant opportunity for VHI to play a more substantial role in funding health care.

However, recent studies have shown that population ageing is unlikely to put significant pressure on health care expenditure in future. Expected rises in the number of older people, particularly the “old old”, may have an impact on health care costs in future, but they are much more likely to affect the costs of long-term care (which is outside the terms of reference of this study). The impact of new technology on health care costs is not clear and cannot be used as an accurate predictor of future expenditure on health care. Public expectations may increase demand for health care, but it is neither evident nor logical to assume that a country’s ability to sustain a given level of expenditure on health care is increased by raising money from one funding source (VHI) rather than another (tax or social insurance). In this respect it is worth noting that although health care is mainly provided through private health insurance in the United States, the level of public expenditure on health care in the United States is substantial, the level of overall spending on health care (as a proportion of the gross domestic product or GDP) is much higher than in any EU member state, and a significant proportion of the American population is not covered by any type of health insurance. Therefore it does not follow that expanding VHI will automatically result in reduced levels of public spending on health care or increased levels of coverage.

Three options open to EU policy-makers might influence the future expansion of VHI markets in different member states: allowing more individuals to opt out of the statutory health care system, further excluding specific health services from statutory cover (either explicitly or through non-explicit rationing) and introducing or increasing tax incentives to purchase VHI.

Allowing people to opt out does not appear to be a growing trend in the European Union. Where high-earning individuals are given a choice to opt out (as in Germany), very few actually choose to leave the statutory health insurance scheme. Governments in Belgium and the Netherlands, where some individuals are excluded from statutory coverage, are currently considering the possibility of extending statutory health insurance to the whole population.

Explicit reductions in statutory coverage of some health services could increase demand for complementary VHI, while less explicit reductions through rationing might increase demand for supplementary VHI. However, increased demand for complementary VHI may not always be met, as VHI to cover the cost of co-payments or products excluded from statutory reimbursement may be less profitable for insurers to provide. Voluntary health insurers may only be

able to meet increased demand for supplementary VHI where there is sufficient private sector capacity.

Most member states do not use tax incentives to encourage individuals to purchase VHI, although tax incentives to firms have fuelled demand for group-purchased VHI in some member states. The current trend is to reduce or remove existing tax incentives for individuals as they are not particularly successful in stimulating demand. Resources devoted to tax relief might be better spent on improving the quantity and quality of statutory health care.

This study's analysis should be seen in the context of public policy objectives for health care systems (equity, efficiency, responsiveness, choice). Facilitating access to health care is the responsibility of governments. Any discussion of the access implications of the existence of VHI or the way in which VHI markets operate is incomplete without broader consideration of access to statutory health care. More attention should be paid to the determinants of unequal access and existing inequalities in access to health care arising from the funding and provision of statutory health care. Policy measures such as the imposition of user charges may present greater financial barriers to health care and therefore require further study.

Overall, the analysis presented in this study has been constrained by poor data availability. The operation of VHI markets in the European Union and their implications for issues such as access to health care or the free movement of people and services are under-researched areas that would benefit from greater scrutiny.





---

# Section 1 Context

This section aims to:

- review briefly the rules and arrangements of statutory health care systems, noting that their characteristics have been important determinants of the scope and size of VHI markets in the European Union;
- assess the size of the market for VHI in the European Union in terms of levels of expenditure on VHI, levels of insurers' premium income and levels of population coverage;
- examine the demand for VHI in the European Union, presenting information on subscriber characteristics in different member states;
- review the EU framework for regulating VHI markets.

## **1.1 The rules and arrangements of statutory health care systems**

VHI does not play a significant role in funding health care in the European Union, as it does in countries such as the United States, Australia and Switzerland. Public policy in EU member states has generally aimed to preserve the principle of health care funded by the state or social insurance and made available to all citizens, regardless of ability to pay. This has led to the development of health care systems broadly characterized by near universal coverage, mandatory participation, the provision of comprehensive benefits and high levels of public expenditure. These characteristics have been important determinants of the scope and size of the market for VHI in the European Union.

### **1.1.1 Health insurance coverage**

The existence of near universal coverage by the statutory health care system reduces consumers' need for additional coverage through VHI in many member states. In 1997 universal rights to health care could be found in Denmark, Finland, Greece, Ireland, Italy, Luxembourg, Portugal, Sweden and the United King-

dom, and near universal rights (99% coverage or higher) in Austria, Belgium, Germany, France and Spain (OECD, 2001a). Statutory health coverage was lowest in the Netherlands (74.6%), but this does not account for the fact that everyone resident in the Netherlands is automatically covered for long-term care, including mental health care and care for disabled people. Data for 1999 were only available for Austria, Denmark, Finland, Ireland, the Netherlands, Sweden and the United Kingdom, but they showed the same levels of statutory health coverage (OECD, 2001a).

### 1.1.2 Mandatory participation

Because health care systems in the European Union are mainly financed through taxation or contributions from employers and employees, participation in the statutory health care system is usually mandatory. Where there are exceptions to this rule, individuals are allowed to purchase VHI as a substitute for statutory protection. This type of substitutive VHI is currently only available to clearly defined groups of the population in Austria, Belgium, Germany and the Netherlands.<sup>2</sup>

### 1.1.3 Comprehensive benefits

Governments in most member states provide their citizens with comprehensive benefits, thereby reducing the need for additional coverage by VHI. However, the exclusion of certain health services from statutory coverage (particularly dental care and pharmaceuticals) and the rise in co-payments for statutory services have led to the development of a market for complementary VHI in many member states (see section 2.1.2). Supplementary VHI has developed to increase consumer choice and access to different health services. It is particularly prevalent in member states with national health services (where it is often referred to as “double coverage”), although it is available in some form in most member states. This type of VHI generally guarantees a wider choice of providers, faster access to treatment and superior accommodation and amenities in hospital (rather than improved clinical quality of care) (see section 2.1.2).

The rules and arrangements of statutory health care systems in the European Union are clearly important determinants of the type of VHI on offer in different member states, leading to the development of substitutive VHI in Austria, Belgium, Germany and the Netherlands, predominantly complementary VHI in Belgium, Denmark, France, Luxembourg, Sweden and the Netherlands, and predominantly supplementary VHI in countries with national health services.

---

<sup>2</sup> The Spanish government permits civil servants to choose between health care provided by the statutory health care system or health care provided through voluntary health insurance, while the Portuguese government allows individuals and groups of employees to opt out of the statutory health care system, but as these groups are neither excluded from the statutory health insurance scheme, nor exempt from contributing to it, they do not fall within our definition of substitutive VHI and we therefore consider them separately (see Appendix A).

### 1.1.4 Levels of public expenditure on health care

Health care systems in the European Union are characterized by high levels of public expenditure (see Table 1). With the exception of Austria, Greece, Portugal and Italy, public expenditure accounted for three quarters or more of all expenditure on health care in 1998 in most member states, while in Belgium, Luxembourg, Sweden, the United Kingdom and Denmark, public expenditure accounted for more than 80% of total expenditure on health care (OECD, 2001a).

The last twenty years have seen some decline in levels of public expenditure as a proportion of total expenditure on health care in the European Union. Table 1 shows that between 1990 and 1998 the share of public expenditure on health care decreased slightly in the United Kingdom (-0.3%), France (-0.7%), Denmark (-0.8%), Luxembourg (-0.9%) and Spain (-2.3%). It decreased more substantially in Finland (-6.2%), Sweden (-6.8%), Greece (-9.4%) and Italy (-12.9%). Finland's reduction in public expenditure can be attributed to the severe economic recession that began in 1991 and forced households' share of expenditure on health care to rise from 13% to 21% between 1990 and 1994 (Häkkinen, 1999). In Italy the reduction was caused by radical changes in pharmaceutical policy, leading to a steep decline in public spending on pharmaceuticals; in 1990 public spending accounted for 66.3% of total expenditure on pharmaceuticals, but by 1997 the public share had fallen by almost 40% to 40.6% of total expenditure (Fattore, 1999, OECD, 2000). Public expenditure on health care increased in Greece during the 1980s, after the introduction of a national health system, but public funding was not sustained by the conservative government that came to power in 1990; lower levels of public funding during the 1990s were accompanied by rapid growth in private expenditure on health care (Sissouras et al., 1999). Sweden also experienced a relative shift in the balance of health care funding during the 1990s, when private expenditure on health care grew much faster than public expenditure, mainly due to large increases in co-payments for doctors' services and pharmaceuticals (Anell, Svarvar, 1999).

More recent trends have shown a tendency for some governments to increase the amount they spend on health care. This trend is particularly evident in the United Kingdom, where the average annual real increase in spending on the National Health Service (NHS) almost doubled between 1992 and 1997, from 2.6% to 4.7% (Emmerson et al., 2000). Spending on the NHS is set to rise even further in future, with a projected average annual real increase of 6.2% between April 1999 and March 2004, which is substantially higher than the 3.4% real increase in spending that the NHS has received on average over its 52-year history.

**Table 1. Public and private expenditure as a percentage of total expenditure on health care in the European Union, 1975–1998**

Country		1975	1980	1985	1990	1995	1996	1997	1998	Overall growth	Overall growth	
										1975–1990	1990–1998	
											(%)	(%)
Austria	public	69.6	73.7	68.1	66.1	71.8	70.5	70.9	70.6	-5.3	6.8	
	private	30.4	26.3	31.9	33.9	28.2	29.5	29.1	29.4	10.3	-13.3	
Belgium	public	79.6	83.4	81.8	88.9	88.7	88.8	89.3	89.7	10.5	0.9	
	private	20.4	16.6	18.2	11.1	11.3	11.2	10.7	10.3	-83.8	-7.2	
Denmark	public	–	87.8	85.6	82.6	82.5	82.4	82.4	81.9	-5.9	-0.8	
	private	–	12.2	14.4	17.4	17.5	17.6	17.6	18.1	42.6	4.0	
Finland	public	78.6	79.0	78.7	80.9	75.6	75.8	76.0	75.9	2.8	-6.2	
	private	21.4	21.0	21.3	19.1	24.4	24.2	24.0	24.1	-12.0	26.2	
France	public	77.2	78.8	83.4	76.9	76.3	76.3	76.3	76.4	-0.4	-0.7	
	private	22.8	21.2	16.6	23.1	23.7	23.7	23.7	23.6	1.3	2.2	
Germany	public	79.0	78.6	77.4	76.3	78.0	78.3	76.9	–	-3.5	0.8	
	private	21.0	21.4	22.6	23.7	22.0	21.7	23.1	–	11.4	-2.5	
Greece	public	–	55.6	–	62.7	58.7	58.7	57.7	56.8	12.8	-9.4	
	private	–	44.4	–	37.3	41.3	41.3	42.3	43.2	-16.0	15.8	
Ireland	public	79.0	81.6	75.7	71.7	72.7	72.5	75.0	75.8	-10.2	5.7	
	private	21.0	18.4	24.3	28.3	27.3	27.5	25.0	24.2	25.8	-14.5	
Italy	public	84.5	80.5	77.2	78.1	67.7	67.8	68.0	68.0	-8.2	-12.9	
	private	15.5	19.5	22.8	21.9	32.3	32.2	32.0	32.0	29.2	46.1	
Luxembourg	public	91.8	91.2	89.4	93.1	92.5	–	91.0	92.3	1.4	-0.9	
	private	8.2	8.8	10.6	6.9	7.5	–	9.0	7.7	-18.8	11.6	
Netherlands	public	69.5	71.1	72.8	68.7	72.5	67.7	69.7	74.7	-1.2	8.7	
	private	30.5	28.9	27.2	31.3	27.5	32.3	30.3	25.3	2.6	-19.2	
Portugal	public	58.9	64.3	54.4	52.9	54.0	64.2	66.7	66.9	-11.3	26.5	
	private	41.1	35.7	45.6	47.1	46.0	35.8	33.3	33.1	12.7	-29.7	
Spain	public	77.4	79.9	81.1	78.7	78.3	78.5	76.5	76.9*	1.7	-2.3	
	private	22.6	20.1	18.9	21.3	21.7	21.5	23.5	23.1*	-6.1	8.5	
Sweden	public	90.2	92.5	90.4	89.9	85.2	84.8	84.3	83.8	-0.3	-6.8	
	private	9.8	7.5	9.6	10.1	14.8	15.2	15.7	16.2	3.0	60.4	
United Kingdom	public	–	90.1	86.0	86.0	85.8	83.8	83.6	85.7	-4.6	-0.3	
	private	–	9.9	14.0	14.0	14.2	16.2	16.4	14.3	41.4	2.1	

Sources: OECD 2001a; INE, 1998.

\* Data from the Spanish Family Budget Survey of 1998 show that the share of public and private expenditure would be 81.5% and 18.5% respectively.

Increases in public expenditure on health care are also likely to occur in member states that are trying to increase statutory coverage by extending it to groups that were previously excluded. In 1999 the French government passed a law on universal health coverage (Couverture Médicale Universelle, or CMU) to enable those who did not benefit from any health insurance (estimated on 31 December 2000 as 1.1 million people) to be covered by a basic, compulsory, statutory health insurance scheme (Sandier, Paris, Polton, 2004). Based on the

proposals of a working group of senior government officials, led by an academic, set up to examine the social security status of self-employed people in Belgium, the Belgian government is considering the possibility of extending statutory coverage of minor risks to self-employed people or legally obliging them to purchase substitutive VHI (Cantillon, 2001). The Dutch government has recently announced widespread reform of its health care system, including plans to extend statutory coverage to the whole population by merging the existing health insurance schemes into one universal, compulsory, public health insurance scheme (Ministry of Health Welfare and Sport, 2001).

Although it would seem that member states remain committed in principle to publicly funded health care for all citizens, the sustainability of funding health care from public sources continues to be called into question. Debate focusing on the possibility of further cutbacks in statutory health care, either by excluding certain services or offering a “core” service with limited benefits, has been accompanied, in some member states, by calls for greater reliance on private expenditure through an expansion of VHI. At the beginning of the 1990s both Italy and Portugal considered allowing individuals to opt out of the statutory health care system and purchase VHI instead, with Portugal going so far as to enact and implement legislation in 1993 (see Appendix A). Since 1999 certain groups of people in Austria have also been able to opt out. To date, however, these developments do not appear to have made a significant impact on the market for VHI in the European Union, as we will discuss in the following section.

## 1.2 The size of the market for VHI

In section 2.1 we present a detailed analysis of the different types of VHI available in the European Union. Here we attempt to assess the overall size of the market for VHI. Market size can be estimated in three ways: in terms of levels of expenditure on VHI (as a proportion of private and total expenditure on health care), in terms of levels of premium income per year and in terms of levels of coverage (that is, the proportion of people covered by VHI in a given population). Trends in levels of expenditure on VHI or levels of premium income can be used as an indirect measure of coverage levels, but these types of data should be interpreted with caution. A recent report on VHI in Europe notes that although the market for VHI in the European Union grew at a compound annual rate of 5.4% in real terms between 1994 and 1999, a large proportion of this growth was caused by increases in the price of VHI (rising premiums) rather than increases in coverage (Datamonitor, 2000a).

### 1.2.1 Levels of expenditure on VHI

Spending on VHI as a proportion of total expenditure on health care is low in the European Union, accounting for less than 10% of total expenditure in every member state except France (12.2%) and the Netherlands (17.7%) and well un-

der 5% of total expenditure in Belgium, Denmark, Finland, Greece, Italy, Luxembourg, Portugal, Spain, Sweden and the United Kingdom (see Table 2). Table 2 shows that VHI as a proportion of total expenditure on health care rose in every member state except Luxembourg between 1980 and 1990. Although it continued to rise in most member states between 1990 and 1998, it did so at a substantially slower rate and even declined in member states such as Spain (-59.9%), Ireland (-32.4%), Austria (-21.1%) and Germany (-4.2%). The only exception is the Netherlands, which experienced a rise of 46.3% in spending on VHI as a proportion of total expenditure during this period.

As a proportion of private expenditure on health care, spending on VHI is also relatively low, accounting for less than 5% in Greece, Italy and Portugal and for less than 25% in Austria, Belgium, Denmark, Finland, Luxembourg, Spain and the United Kingdom (see Table 3). VHI has a much larger share of private expenditure on health care in member states offering substitutive VHI, particularly in the Netherlands (70%), where about 30% of the population is excluded from statutory coverage. Its share is also much larger in France (51.7%), where 85% of the population is covered by complementary VHI to cover the cost of co-payments imposed by the statutory health care system.

The relatively small proportion of private spending on VHI can be attributed to the fact that governments in the European Union have tended to rely on other methods of shifting health care costs onto consumers, such as user charges (co-payments and direct payments), rather than promoting and subsidizing VHI. Consequently, out-of-pocket payments make up the bulk of private expenditure on health care in all member states except France and the Netherlands (see Table 3).

### 1.2.2 Levels of premium income

In most member states accident and (voluntary) health insurance markets account for only a small proportion of non-life insurance, although their importance is increasing (Eurostat 1997). Accident and (voluntary) health insurance premiums in 1995 made up 43% of total non-life business in the Netherlands and 31.3% in Germany; in Austria, Denmark, Finland and Spain accident and health insurance premiums accounted for more than 20% (Eurostat, 1997). In 1996 the accident and health market was fairly evenly divided in France and the Netherlands, whereas in Austria, Germany, the United Kingdom and Spain health insurance accounted for more than two thirds of the accident and health market (Natarajan, 1996).

**Table 2. Breakdown of private expenditure as a percentage of total expenditure on health care in the European Union, 1980-1998**

Country		1980	1985	1990	1995	1996	1997	1998	Overall growth	Overall growth
									1980-1990	1990-1998
									(%)*	(%)*
Austria	VHI	7.6	9.8	9.0	7.8	7.2	7.5	7.1	18.4	-21.1
	OOP**	16.3	19.6	22.4	14.8	15.9	17.7	18.3	37.4	-18.3
	Other***	2.4	2.5	2.5	5.6	6.4	3.9	4.0	4.2	60.0
Belgium	VHI	0.8	1.2	1.6	1.9	2.0	-	-	100.0	25.0
	OOP	15.8	17.0	9.5	9.4	9.2	-	-	-39.9	-3.2
Denmark	VHI non-profit	0.8	0.8	1.3	1.2	1.4	1.4	1.5	62.5	15.4
	OOP	11.4	13.6	16.1	16.3	16.2	16.2	16.6	41.2	3.1
Finland	VHI non-profit	0.6	0.6	0.5	0.4	-	-	0.5	-16.7	0.0
	VHI for-profit	0.8	1.2	1.7	2.0	-	-	2.2	112.5	29.4
	VHI total	1.4	1.8	2.2	2.4	2.4	2.5	2.7	57.1	22.7
	OOP	18.4	18.3	15.5	20.5	20.2	19.9	19.8	-15.8	27.7
	Other	1.2	1.2	1.4	1.5	1.6	1.6	1.6	16.7	14.3
France	VHI non-profit	-	5.8	6.8	7.5	-	-	7.8	17.2	14.7
	VHI for-profit	-	-	4.4	4.2	-	-	4.4	-	0.0
	VHI total	-	5.8	11.2	11.7	12.1	12.1	12.2	93.1	8.9
	OOP	-	10.8	10.8	10.9	10.6	10.5	10.3	0.0	-4.6
	Other	-	-	1.1	1.1	1.0	1.1	1.1	-	0.0
Germany	VHI	5.9	6.5	7.2	6.7	6.5	6.9	-	22.0	-4.2
	OOP	10.3	11.2	11.1	10.9	11.0	11.9	-	7.8	7.2
	Other	5.2	4.9	5.4	4.4	4.2	4.3	-	3.8	-20.4
Greece	VHI	-	-	0.9	-	-	-	-	-	-
	OOP	-	-	36.4	-	-	-	-	-	-
Ireland	VHI non-profit	-	9.9	13.9	15.0	-	-	9.4	40.4	-32.4
	OOP	-	14.4	14.4	12.3	-	-	14.8	0.0	2.8
Italy	VHI	0.2	0.5	0.9	1.3	-	1.3	-	350.0	44.4
	OOP	19.3	22.3	21.0	31.0	-	30.7	-	8.8	46.2
Luxembourg	VHI non-profit	1.6	1.4	1.4	1.3	-	1.6	-	-12.5	14.3
	OOP	7.2	9.2	5.5	6.2	7.2	7.4	-	-23.6	34.5
Netherlands	VHI non-profit	-	-	-	-	-	-	6	-	-
	VHI for-profit	-	11.2	12.1	-	-	-	11.7	8.0	-3.3
	VHI total	-	11.2	12.1	-	23.3	22.1	17.7	8.0	46.3
	OOP	-	-	-	-	7.7	6.6	5.9	-	-23.4
	Other	-	-	-	-	1.3	1.6	1.7	-	30.8
Portugal	VHI	-	0.2	0.8	1.4	1.7	-	-	300.0	112.5
	OOP	-	45.4	46.3	44.6	34.1	33.3	-	2.0	-28.1
Spain	VHI	3.2	3.7	3.7	5.2	-	1.5	-****	15.6	-59.5
	OOP	-	-	-	16.5	21.5	22.0	-****	-	33.3
United Kingdom	VHI	1.3	2.5	3.3	3.2	5.1	5.4	3.5	153.8	6.1
	OOP	8.6	11.5	10.7	11.0	11.1	11.0	10.8	24.4	0.9

Sources: OECD, 2001a; INE, 1998.

Note: No data were available for Sweden. \* Or nearest year for which data are available. \*\* OOP refers to out-of-pocket expenditure. \*\*\* Other refers to health expenditure incurred by corporations and private employers providing occupational health services and other non-funded medical benefits to employees, plus expenditure by non-profit institutions serving households (excluding social insurance) such as philanthropic and charitable institutions, religious orders and lay institutions. \*\*\*\* Data from the Spanish Family Budget Survey of 1998 show that the proportion of total health care expenditure funded through VHI and OOP in 1998 was 4.1% and 14.4% respectively.



**Table 3. VHI expenditure as a percentage of private expenditure on health care in the European Union, 1980–1998**

Country	1980	1985	1990	1995	1996	1997	1998
Austria	28.9	30.7	26.5	27.7	24.4	25.8	24.1
Belgium	4.8	6.6	14.4	16.8	17.9	–	–
Denmark	6.6	5.6	7.5	6.9	8.0	8.0	8.3
Finland	6.7	8.5	11.5	9.8	9.9	10.4	11.2
France	–	34.9	48.5	49.4	51.1	51.1	51.7
Germany	27.6	28.8	30.4	30.5	30.0	29.9	–
Greece	–	–	2.4	–	–	–	–
Ireland	–	40.7	49.1	54.9	–	–	38.8
Italy	1.0	2.2	4.1	4.0	–	4.1	–
Luxembourg	18.2	13.2	20.3	17.3	–	17.8	–
Netherlands	–	41.2	38.7	–	72.1	72.9	70.0
Portugal	–	0.4	1.7	3.0	4.7	–	–
Spain	15.9	19.6	17.4	24.0	–	–	–*
UK	13.1	17.9	23.6	22.5	31.5	32.9	24.5

Sources: OECD, 2001a; INE, 1998.

Note: No data available for Sweden. \* Data from the Spanish Family Budget Survey of 1998 show that VHI accounted for 22.1% of private expenditure on health care in 1998.

Table 4 shows the income obtained from policies sold by voluntary health insurers in the European Union in 1999. The figures for Germany and the Netherlands include premium income from substitutive VHI, which explains why Germany and the Netherlands have such large shares of the market (50.1% and 12.2% respectively), although France has the second largest share (13.2%). The smallest markets, with a share of less than one per cent each, are Sweden, Luxembourg, Portugal, Finland, Denmark and Belgium.

According to data provided by the Comité Européen des Assurances, between 1995 and 1998 VHI premium income (adjusted for inflation) grew most in Belgium (14.8%) and Portugal (14.4%), followed by Spain (5.8%) and the Netherlands (5.6%) (Comité Européen des Assurances 2000). Most other member states experienced growth of three to four per cent.

Market size in terms of premium income is reflected in the proportion of total expenditure on health care funded by VHI, although in 1998 VHI funded a higher proportion of expenditure on health in the Netherlands (17.7%) and France (12.2%) than in Germany (6.9%) (see Table 2).

### 1.2.3 Levels of coverage

Levels of coverage indicate the proportion of people covered by VHI in a given population and are usually linked to the rules and arrangements of the statutory health care system. The level of coverage for substitutive VHI is largely determined by the level of mandatory or voluntary statutory coverage, while

**Table 4. Premium income of voluntary health insurers in the European Union, 1999**

Country	Euros (millions)	% growth 1999–1998 (inflation-adjusted)	% share of total VHI market	As a % of GDP
Austria	1 136.0	1.0	2.8	0.6
Belgium	317.0	10.5	0.8	0.1
Denmark	282.0	7.9	0.7	0.2
Finland*	221.5	N/A	0.6	0.2
France	5 290.0	4.3	13.2	0.4
Germany	20 094.0	2.3	50.1	1.0
Ireland**	660.3	N/A	1.6	0.8
Italy	1 163.0	1.6	2.9	0.1
Luxembourg***	29.5	N/A	0.1	0.2
Netherlands	4 884.0	5.8	12.2	1.3
Portugal	172.0	19.5	0.4	0.2
Spain	2 360.0	9.1	5.9	0.4
Sweden	27.0	N/A	0.1	0.0
United Kingdom	3 490.0	5.8	8.7	0.2
TOTAL	40 126.3	4.2	100.0	0.5

Sources: CEA, 2001; OECD, 2001; Mikkola, 2001; Vhi Healthcare, 2001; Schmitz, 2001; Engemann, 2001.

Note: No data available for Greece. \* Accident and health insurance in 2000. \*\* Estimate for 2002. \*\*\* Figures for 2000.

levels of complementary and supplementary VHI coverage will depend on the extent to which the state provides timely and comprehensive benefits of good quality. This partly explains the substantial variation in levels of coverage among member states.

Table 5 shows levels of coverage (as a percentage of the total population) for different types of VHI in the European Union.<sup>3</sup> At first glance the figures can be misleading, and they may not be easily comparable across countries. For example, the relatively high levels of complementary VHI coverage for France (85%) and the Netherlands (more than 60%)<sup>4</sup> may disguise extreme variations in the quality of coverage. The figures only tell us how many people purchase complementary VHI; it does not reveal whether they have purchased a basic or comprehensive product.

Where substitutive VHI is concerned, almost all those who are fully or partially excluded from the statutory health insurance scheme purchase VHI. This is the case in Belgium and the Netherlands. However, if people have the choice to opt out of the statutory health insurance scheme and purchase substitutive

<sup>3</sup> It is not always possible to obtain official figures regarding levels of complementary and supplementary VHI coverage, so some of the data shown in Table 5 were obtained from surveys.

<sup>4</sup> The figure for the Netherlands may be even higher, as the only data published concern complementary VHI purchased by those insured under the Ziekenfondswet (ZFW). About 93% of those insured under the ZFW purchase complementary VHI (Vektis, 2000).

Table 5. Levels of VHI coverage as a percentage of the total population

Country	Substitutive	Complementary/supplementary
Austria (1999)	0.2%	18.8% (complementary) 12.9% (supplementary; hospital expenses)
Belgium (2000)	7.1%	30-50% (complementary)
Denmark (1999)	None	28% (mainly complementary; some supplementary)
Finland (1996)	None	Children aged <7: 34.8% (supplementary) Children aged 7-17: 25.7% (supplementary) Adults: 6.7% (supplementary)
France (2000)	Marginal (frontier workers)	85% (1998) (complementary) 94% (2000 estimate) (complementary)
Germany (1999)	9%	9%
Greece (2000)	None	10% (supplementary)
Ireland (2000)	None	45%
Italy (1999)	None	15.6%
Luxembourg (2000)	None	70% (mainly complementary)
Netherlands (1999)	24.7% (+ 4.2% WTZ)	>60% (complementary) Marginal (supplementary)
Portugal (1998)	None	12% (mainly supplementary)
Spain (1999)	0.6%	11.4%
Sweden (1999)	None	1.0-1.5% (mainly supplementary)
United Kingdom (2000)	None	11.5% (mainly supplementary)

Sources: National reports prepared for this study.

WTZ: Wet op de toegang tot Ziektekosteverzekfringen.

VHI instead, they are more likely to remain in the statutory health insurance scheme. In Germany fewer than a quarter of the high-earning employees eligible to opt out actually do so. Those who choose to opt out are likely to be young, healthy, single and without dependants (see section 2.1.1).

France has an exceptionally high level of complementary VHI coverage (85% of the population in 1998), but it is important to note that it is for the reimbursement of co-payments for treatment in the statutory health care system. Over the last 25 years the French government has used cost-sharing as a means of containing health care expenditure; instead of reducing consumption, however, this strategy has encouraged the growth of complementary VHI, with the result that most French people now purchase this type of VHI to reduce the financial burden of out-of-pocket expenditure (Lancry, Sandier, 1999). Complementary VHI in France has grown dramatically, covering a third of the popu-

lation in 1960, 50% in 1970, 70% in 1980 and 85% in 1998 (Sandier, Ulmann, 2001) (see section 3.2.1).

The French experience suggests that a reduction in statutory coverage of certain health services does increase the take-up of complementary VHI (if it is available), but this is not always the case. Where governments in other member states have pursued a deliberate and explicit policy of encouraging private expenditure on health care, the results, in terms of VHI coverage, have been mixed. For example, the relatively low levels of VHI coverage in Denmark (28%), Finland (6.7% of adults) and Sweden (1–1.5%) are traditionally attributed to the generosity of state benefits, but recent increases in cost-sharing have not made much impact on the size of the market for VHI in these member states. Although the impact of increased cost-sharing during the 1990s was greatest in Sweden, levels of VHI coverage in Sweden continue to be the lowest in the European Union. France is therefore an outlier in this respect.

Voluntary health insurers in some member states may be highly responsive to changes in state benefits. When some forms of dental care were removed from the statutory package of benefits in the Netherlands in the early 1990s (partly re-included in the package in 1996), the Minister of Health encouraged voluntary health insurers to cover it. Similarly, complementary VHI coverage was at its highest in Germany in 1997/1998 (covering 7.6 million compared to 6.0 million in 1995/1996), when access to dental crowns and dentures in the statutory health care system was restricted to people born after 1978; once these restrictions were reversed in 1999, the number of children with complementary VHI fell from 2.2 million in 1998 to 1.4 million in 1999 (Busse, 2001).

VHI coverage remains low in southern member states such as Greece (10%), Italy (15.6%), Portugal (12%) and Spain (11.4%), in spite of the fact that individuals in these countries often make substantial direct payments to providers. This may be partly due to reluctance to pay a third party (Mossialos, Le Grand, 1999). When patients are used to paying their doctor or hospital directly and may also make additional informal payments, the transferral of money to a third party, such as an insurer, may be seen as a measure that reduces patients' leverage over providers. The implications of this cultural element for the expansion of VHI in other countries with a high level of direct or informal payments, such as some central and eastern European states, should not be underestimated (Mossialos et al., 2002).

It is clear that member states' continued commitment to the principle of publicly funded health care available to all citizens and the provision of comprehensive benefits has implicitly restricted the growth of VHI, leaving it to play a largely marginal role in funding health care in the European Union. It should be noted, however, that the demand for VHI may also be affected by the way in which insurers conduct their business. Data published by the Comité Européen des Assurances show that between 1992 and 1998 the proportion of insured in-

dividuals declined in Austria and the Netherlands, remained largely the same in the United Kingdom and increased only slightly in Denmark, France, Portugal and Germany (see Table 6). Many of these countries experienced sustained economic growth during the same period, but poor growth in levels of VHI coverage may be attributed to the high cost of VHI premiums in many member states.

**Table 6. Insured individuals as a percentage of the total population in select EU member states, 1992–1998**

Country	% change			% change		
	1992	1995	1992–1995	1998	1995–1998	1992–1998
Austria*	36.8	34.2	-2.7	33.0	-1.2	-3.8
Belgium**	–	30.1	–	32.8	1.7	–
Denmark	25.1	24.9	-0.3	26.4	1.5	1.3
France	18.9	19.4	0.5	19.9	0.4	1.0
Germany	15.8	17.0	1.2	19.2	2.1	3.4
Netherlands	31.7	30.3	-1.3	30.1	-0.2	-1.5
Portugal	10.1	8.3	-1.8	12.2	3.9	2.1
Spain***	–	–	–	16.4	–	–
United Kingdom	11.4	11.1	-0.2	11.5	0.4	0.1

Source: CEA, 2000.

\* The high figure for Austria reflects the propensity of Austrians to purchase complementary VHI covering per diem hospital charges. However, many of these policies cover minor amounts, and this type of VHI only accounted for about 11% of total VHI benefits in 2000 (Hofmarcher, 2001). \*\* The high figures for Belgium may be a result of including compulsory complementary VHI coverage offered by mutual associations, which we have not included in the figures shown in Table 5. \*\*\* The figure for Spain includes the special schemes for civil servants covering 5% of the population, which we do not include in our definition of VHI (see Appendix B). This explains the difference from the 11.4% VHI coverage shown in Table 5.

## 1.3 The demand for VHI

### 1.3.1 Determinants of demand

The existence of a market for health insurance is dependent on three conditions: there must be positive demand (that is, some individuals must be risk averse), it must be possible for insurance to be supplied at a price which the individual is prepared to pay (the individual's risk aversion must be sufficient to cover the insurer's administrative costs and normal profit), and it must be technically possible to supply insurance (Barr, 1992).

In addition to risk aversion, the demand for health insurance may be influenced by some or all of the following factors: the probability of an illness occurring, the magnitude of the loss that illness might incur, the price of insurance and an individual's income and education. Some factors may be harder to measure than others, and the influence of each factor will vary from country

to country. In the context of VHI in the European Union, where the state provides a high level of protection against the risk of financial loss in the event of illness, factors such as price, income and education may be more important determinants of demand than the magnitude of financial loss (at least where supplementary VHI is concerned).

Some analysts argue that the performance of statutory health care systems affects the demand for VHI, and that the degree and distribution of satisfaction with the statutory health care system are key determinants of the demand for VHI. It is not easy to confirm the extent to which statutory performance influences the demand for VHI, partly because it is not at all evident how best to measure the performance of a health care system, as the World Health Organization's recent attempt demonstrates (WHO, 2000; Navarro, 2000; Williams, 2001). The degree and distribution of satisfaction with the statutory health care system are also difficult factors to measure with accuracy, and satisfaction surveys may not be representative of citizens' views. Other often-cited indicators of performance and determinants of the demand for VHI include reductions in statutory benefits and waiting lists, although the evidence regarding waiting lists and VHI in the United Kingdom is inconclusive, as we will show below.

Evidence from the United States shows that the demand for VHI is price-inelastic. Empirical studies reveal price elasticities<sup>5</sup> ranging from -0.03 to -0.54 (Marquis, Long, 1995; Manning, Marquis, 1989). They also show a relatively small income effect<sup>6</sup> (0.07 and 0.15 respectively), which may in part be due to the high level of tax subsidies for VHI in the United States, as well as the fact that most VHI in the United States is employment group rather than individually purchased. In 1998 tax expenditure on VHI cost the American government US\$111.2 billion (€17.7 billion) and mainly benefited the rich: families with incomes of US\$ 100 000 (€05 800) or more (10% of the population) accounted for 23.6% of all tax subsidies for VHI (Sheils, Hogan, 1999).

A Spanish study found that the price elasticity of VHI premiums in Spain for the period 1972 to 1989 was -0.44 (Murillo, González, 1993). This result is to be expected in health care systems where VHI is not heavily subsidized, but it cannot be generalized to other member states. A recent study of VHI in the United Kingdom estimated the price elasticity of VHI to be in the range of -0.003 to -0.044 (that is, highly price inelastic) (Emmerson, Frayne, Goodman, 2001). The much smaller effect of price on VHI shown in this study may be due to the fact that VHI in the United Kingdom is mostly purchased by high earners.

Very few similar studies have been conducted in different member states, and we therefore have little direct evidence regarding the price and income elasticity

---

<sup>5</sup> Price elasticity is a measurement of the change in demand for a good or service caused by a change in the price of that good or service.

<sup>6</sup> Income elasticity is a measurement of the change in demand for a good or service caused by a change in the income of the individual purchasing that good or service.

of VHI in the European Union. Most of the information we present here concerns the characteristics of those who subscribe to VHI, although we do have some indirect evidence of the demand for VHI in the United Kingdom, which we examine in greater detail below.

### 1.3.2 Subscriber characteristics

Data regarding the distribution of VHI coverage in the European Union show that most subscribers come from higher income groups. This is to be expected where substitutive VHI is concerned, as eligibility for this type of VHI depends on income or occupation, but complementary and supplementary VHI also reveal a strong bias in favour of higher income groups. In addition to income, determinants of the demand for VHI in the European Union include age, gender, occupational status, educational status and area of residence.

#### Austria

Most supplementary (hospital cost) VHI subscribers in Austria are in the higher income brackets (Hofmarcher 2001). About half of those with VHI are self-employed people and about 40% are civil servants or salaried employees (Hofmarcher, Rack, 2001). Self-employed people are most likely to subscribe to VHI (more than 50% of households, at least one individual per household), followed by 40% of white-collar worker households, 32% of blue-collar worker households and slightly more than 20% of farmers (Wieninger, 1997). The distribution of VHI in Austria also varies substantially between regions. Individuals living in Carinthia are most likely to subscribe to VHI (more than 50%), followed by individuals living in Salzburg, while only 17.5% of those living in Burgenland are VHI subscribers (Hofmarcher, Rack, 2001).

#### Denmark

The demand for supplementary VHI in Denmark is fuelled by general conditions in the Danish labour market (including strong competition for employees and high levels of personal income tax) and the fact that companies benefit from tax deductions when purchasing VHI for employees (Vrangbæk, 2001). Demand may also be fuelled by the critical tone of much public debate on the statutory health care system; quality and waiting times are perceived to be major problems in Denmark, although these perceptions are not always accurate or based on evidence, and insurers have been able to benefit from negative feelings about the statutory health care system (Vrangbæk, 2001). Supplementary (for-profit) VHI in Denmark favours people in employment (at a certain level), as many policies are tied to job contracts, while generally having less significance for children, unemployed people, students, elderly people and people with pre-existing conditions and chronic illnesses (Vrangbæk, 2001). For these reasons it introduces greater inequality in the health care system (other-

wise unacceptable in Denmark) and stimulates the demand for private health care, which has generally been very limited (Vrangbæk, 2001).

## Finland

In Finland children are much more likely to be covered by supplementary VHI than adults. According to a recent study based on the Finnish Health Care Surveys of 1987 and 1996, 24.8% of children under the age of 7 were covered by VHI in 1996, compared to 25.7% of children aged 7–17 and only 6.7% of adults aged 18–64; the corresponding figures for 1987 were 36.7%, 24.5% and 8.9% respectively (Häkkinen, 2002).

## France

Access to complementary VHI in France varies according to income and social class, and those who have little or no access to complementary VHI are much more likely to be from the lowest social classes (Bocognano et al., 2000). Levels of coverage for complementary VHI are also strongly associated with employment and occupational status: employed and retired people are more likely to be covered than unemployed people, while employees and white-collar workers are more likely to be covered than unskilled workers (Sandier, Ulmann, 2001). A recent study shows that 59% of unskilled workers have little or no VHI, compared to only 24% of executives and professionals (Bocognano et al., 2000). Another study found that 94% of individuals belonging to a household with an annual income of more than €6 600 and 89% of employees had complementary VHI, compared to only 65% of those with less than €6 850 a year and 61% of unemployed people (Blanpain, Pan Ké Shon, 1997).

The French system also appears to discriminate negatively against foreigners, young people aged 20 to 24, and those older than 70, all of whom are less likely to be covered by VHI. Furthermore, poorer people tend to have insurance cover of a lower quality than richer people, with 28% of individuals earning more than €6 600 a year judging their cover to be of good quality, compared to only 9% of individuals with an annual household income of less than €6 850. This finding is strongly supported by the study of Bocognano et al's study, which demonstrates that the level of coverage provided by VHI increases significantly with income (2000).

Subscriber characteristics in France vary according to the type of insurer. Mutual associations are more likely to cover older people, women, employees and mid-level executives, while commercial insurers are more likely to cover farmers and self-employed professionals, and provident associations are more likely to cover unskilled workers and senior executives (Sandier, Ulmann, 2001). A survey carried out by the Centre for Research and Documentation in Health Economics (CREDES) found that people older than 65 are more likely to be covered by mutual associations than by commercial insurers or provident



associations, and that people in poor health are under-represented by commercial insurers (although people with chronic illnesses are usually fully covered by the statutory health insurance scheme) (Sandier, Ulmann, 2001).

### Germany

Substitutive VHI coverage in Germany varies considerably by income, occupational status, employment status, age, gender and area of residence. The majority of substitutive VHI subscribers are high earners (Busse, 2001). According to a recent industry report, those who purchase substitutive VHI because their incomes are above the GKV (Gesetzliche Krankenversicherung) contribution ceiling are mostly young single people or young married couples with double incomes (Datamonitor, 2000a). Another industry report notes that substitutive VHI is growing in popularity among young and affluent Germans (Datamonitor, 2000b). Only 1% of unemployed people are covered by substitutive VHI (Busse, 2001). In 1998 children accounted for 16% of membership, men for 52% and women for 32% (PKV, 1999). Data from 1992 and 1993 show that only 4.4% of those with substitutive and 0.8% of those with complementary and supplementary VHI were from the new states, i.e. the states of the former German Democratic Republic (PKV, 1994). This discrepancy is still marked; in April 1999 overall coverage was 8.9%, with 10.1% coverage in the old states (those that comprised the Federal Republic of Germany before unification) and 3.6% coverage in the new ones (Busse, 2000b).

### Greece

Most supplementary VHI subscribers in Greece are medium or high earners between 35 and 45 years old; they tend to be employers, professionals, civil servants, white-collar workers and managers working for large private companies and banks and living in urban areas (Economou, 2001).

### Ireland

The results of a recent econometric analysis of the probability of subscribing to complementary and supplementary VHI in Ireland (based on data from the 1994 Living in Ireland survey) suggest that this probability is strongly influenced by educational level attained, household income, age and marital status (Nolan, Wiley, 2000). The analysis also found that poor health made an individual less likely to have VHI. VHI coverage is highest among individuals between 35 and 54 years old; married people are more likely to have VHI than single people; and coverage is highest for the professional and managerial social classes and those living in Dublin, and lowest in small towns and rural areas (Nolan, Wiley, 2000). The 1997 survey also found that the proportion of people with VHI rises significantly with household income, with coverage rising from 8% of those in the bottom decile to 70% of those in the top decile, so that only 15% of adults with VHI

are in the bottom half of the household income distribution, while about half are in the top 20% (Harmon, Nolan, 2001; Nolan, Wiley, 2000).

An interesting finding of the 1994 survey is that those with VHI reported better health than those without VHI; only 7.7% of those reporting “very bad” health status and 11.2% of those reporting “bad” health status had VHI, whereas 89.2% and 70.6%, respectively, were medical card holders<sup>7</sup> (Harmon, Nolan, 2001). Approximately 70% of professionals and managers are privately insured, compared to only 11% of semi-skilled and unskilled manual workers (Kennedy, 1995).

## Italy

Data from the 1999 Italian Household Budget Survey of the National Institute of Statistics show that VHI is largely purchased by high-earning and highly educated people (Giannoni-Mazzi, 2001). The demand for supplementary VHI varies substantially according to area of residence, with 32% of insured families living in the prosperous north-eastern part of Italy and 31% living in large urban centres (Databank, 1999). Econometric analysis based on national survey data from 1995 shows that the probability of purchasing VHI (by individuals and groups) in Italy is positively influenced by the age of the head of the family (with a non-linear effect, 42 years old being the age at which the probability is highest), employment status (with managers and professionals having the highest probability), education, income, and living in north, east or central Italy (Lippi Bruni, 2001). Individual VHI policies sold by commercial insurers are bought by medium- to high-income people (but mostly by high-income people), whereas individual VHI policies sold by mutual associations generally have lower premiums and are bought by middle- to low-income people (Giannoni-Mazzi, 2001).

Data from a 1994 survey show that among people covered by group VHI policies, 64% were high-level managers, 16% were intermediate-level managers, 13% were employees and 9% were blue-collar workers (Giannoni-Mazzi, 2001). Only 8% of these policies limited coverage to individual employees; 61% extended coverage to income-dependent family members and 31% covered all family members. The average age of those insured by mutual associations was 44 years old between 1994 and 1997 and has increased over time; individuals aged 41–50 account for 45% of those insured and individuals aged 41–60 for 70.1%; 89.8% of the insured were men and 10.2% were women (Mastrobuono, 1999).

## Luxembourg

According to the Conseil Supérieur de la Mutualité, the 30% to 35% of the population who do not have complementary VHI are mostly foreigners who live in

---

<sup>7</sup> Medical cards are issued to about a third of the population on the basis of income (people in Category I) and entitle the holder to free health care.

Luxembourg for work purposes and construction workers (largely Portuguese citizens, who account for 10% to 12% of the population) (Schmitz, 2001).

### The Netherlands

Complementary and supplementary VHI accounted for 2.2% of total expenditure on health care in the Netherlands in 1999 (Vektis, 2000). The absence of a clear division between substitutive and complementary VHI has important consequences for data collection (Maarse, 2001). The only data published concern complementary VHI purchased by those insured under the ZFW. About 93% of those insured under the ZFW purchase complementary VHI (Vektis, 2000). However, as we mention above, this figure only tells us how many people purchase complementary VHI; it does not say whether they have purchased a basic or comprehensive product.

As eligibility for substitutive VHI in the Netherlands is determined by income, individuals covered by this type of VHI are relatively high earners. In 2000, 28.9% of the population was not covered by statutory health insurance for outpatient care, inpatient care and hospitalization up to one year, but in 1999 only 1.25% of the population (200 000 people) did not have either statutory or voluntary health insurance. According to the Public Information Office of the Dutch Ministry of Health, Welfare and Sport, most of these uninsured people were homeless; a few refused to insure themselves for reasons of principle (Ministry of Health, Welfare and Sport, 2000b).

### Portugal

Most individual supplementary VHI subscribers in Portugal are from high-income groups. Group VHI coverage depends on company policy; some companies offer VHI to all employees, while others restrict coverage to certain professional categories (Oliveira, 2001). Between 1980/1981 and 1989/1990 expenditure on individual VHI increased for all income groups, although the increase was higher for higher income groups. According to recent survey data VHI coverage is higher among the working-age population (those aged between 25 and 54 years old) (Oliveira, 2001). The typical VHI subscriber is young (between 28 and 34), belongs to middle- and middle-to-high-income groups, is a professional or self-employed and lives in urban areas (Oliveira, 2001).

### Spain

According to the Family Budget Survey of 1998, the characteristics most commonly associated with buying complementary and supplementary VHI in Spain include area of residence, individual income, employment status and educational level (INE, 1998; Rodríguez, 2001). The demand for VHI in Spain is highly concentrated. While the average national level of VHI coverage is 16%, a quarter of the population is covered in the Balearic Islands (24%), just under a

quarter in Catalonia (22%) and 17% in Madrid (Costa, García, 2000; Rodríguez, 2001). Although these three regions are the richest in Spain, the association with regional income is not clear cut, since there are two or three other regions with high average incomes but very low VHI coverage (Rodríguez, 2001). VHI coverage is as low as 3% of the population in at least seven of the other regions (Asturias, Canarias, Extremadura, Galicia, Murcia, Navarra and Rioja). VHI also tends to be bought more often in urban than in rural areas.

The correlation between VHI coverage and individual income is very high, with the probability of purchasing VHI rising rapidly from middle to high income. Thirty per cent of households in the highest income group purchase VHI, compared to only 3% of households in the lowest income group. Employers and self-employed people are also much more likely to buy VHI than employees. Levels of VHI coverage have a strong positive correlation with the head of the family's status (in terms of education) (Lopez i Casanovas, 1999), and income, education, social class and employment are found to be important in influencing the decision to take up VHI (Vera-Hernández, 1999). The percentage of households that buy VHI is five times higher when the head of the household has a university degree than when she or he only has a primary-level education.

According to most surveys, the reasons for subscribing to VHI are faster access (to avoid waiting lists in the statutory health care system), better service (more kindness shown and more personal interaction with health personnel) and more choice (Rodríguez, 2001). Hospital care in Spain enjoys considerable prestige, so when people buy VHI they are mainly trying to avoid the shortcomings of primary care in the statutory health care system. It is common for people with supplementary VHI to use VHI to gain access to ambulatory specialists, but to make use of their statutory coverage when they need to use hospital services. This is particularly true in rural and small urban areas, where good hospitals may not be so prevalent.

## Sweden

Purchasers of VHI in Sweden are highly likely to be private companies in the service sector. In the past, group VHI used to cover top-level management (managing directors), but coverage is becoming more varied and it is now more common for companies to purchase VHI for key personnel regardless of their formal position in the company. An even more recent trend is for companies in all sectors to purchase VHI for all their employees (Skoglund, 2001).

## The United Kingdom

The distribution of coverage for VHI in the United Kingdom is heavily skewed in favour of middle aged professionals, employers and managers based in London and the southern region. In 1995 22% of professionals and 23% of

employers and managers were privately insured, compared to 9% of intermediate and junior non-manual workers, 4% of skilled manual workers and own account non-professionals, 2% of semiskilled manual and personal services workers, and 1% of unskilled manual workers (Laing, Buisson, 1999). The proportion of employers and managers insured drops from 26% aged 45 to 64, to 14% aged 65 and older, probably because their employment-based cover comes to an end when they reach retiring age. For intermediate and junior non-manual workers the corresponding fall is from 12% to 6% (Laing, Buisson, 1999). This pattern of coverage has remained largely unchanged in the last decade, with very little growth among lower socioeconomic groups and older people, in spite of the introduction in 1990 of tax relief on VHI premiums for individuals aged 60 and older (a measure subsequently withdrawn in 1997) (Robinson, 1999). Penetration by region in 1996/1997 shows 11% of the population covered in Greater London, 14% in the rest of the South-East, 10% in the South-West and only 4% in Scotland (Association of British Insurers, 2000).

In the United Kingdom it is estimated that 20% of conditions, typically those with the longest NHS waiting lists, generate up to 60% of claims by number (Natarajan, 1996). A recent study found a positive association between longer waiting lists for NHS treatment and greater purchases of VHI, confirming the view that people link waiting lists with reduced quality of service (Besley, Hall, Preston, 1999). However, the association was much stronger for individual rather than employer-provided VHI, which suggests that the latter is less sensitive to the quality of the statutory health care system. This finding is important, given that rising demand for VHI in the European Union during the 1980s and early 1990s can largely be attributed to substantial growth in group policies. In addition, an earlier study showed that regions in which a relatively high proportion of the population were voluntarily insured appeared to put fewer resources into keeping waiting lists short, and that high-income areas also seemed to enjoy shorter waiting lists for given VHI coverage, indicating a more complex reciprocal relationship between waiting lists and VHI (Besley, Hall, Preston, 1998). The studies by Besley, Hall and Preston are based on data taken from five years of the British Social Attitudes Survey, but because they do not address other factors that might have influenced the change in demand for VHI during that period, their results should be interpreted with some caution. A more recent study of the demand for VHI in Britain did not find a statistically significant association between demand for VHI and inpatient or outpatient waiting times overall, but did find a significant association between inpatient waiting times in 1996 and individual VHI coverage in 1998, which suggests that the individual purchase decision may be associated with previous information on the length of waiting times in the local health authority (King, Mossialos, 2001).

Further analysis of survey data reveals that while those who take out VHI are more likely to be dissatisfied with the NHS, their dissatisfaction is tied to broader sociopolitical values that emphasize individual responsibility, free market principles and consumer sovereignty (Calnan, Cant, Crabe, 1993). Propper's study of the demand for VHI in the United Kingdom also stresses the importance of political belief in determining choice sets, and of income and health in determining choice between the NHS and VHI (1993). Another study finds that users of private health care, and VHI subscribers in particular, are less supportive of the equity goals of the NHS and increases in NHS spending (Burchardt, Hills, Propper, 1999).

Overall, the evidence regarding waiting lists and VHI in the United Kingdom is inconclusive, and links between them may be tenuous, given that waiting lists have continued to rise while VHI coverage has declined. Perhaps the most obvious explanation for the decline in VHI coverage is that premiums are expensive and have consistently risen above the rate of inflation. A recent report found that while 40% of NHS users are worried about waiting for treatment in future years and concerned about a decline in services, the number of people subscribing to VHI is only slightly higher now than in 1990 because many subscribers think VHI cover is too expensive (BBC, 2000). The replacement of full hospital coverage by health cash plans (HCPs),<sup>8</sup> and the largest insurer's decision to exclude routine coverage of NHS pay beds on cost and quality grounds (Buck et al. 1997)<sup>9</sup>, may also have contributed to the decline in VHI subscriptions in the United Kingdom.

## 1.4 The regulatory framework for VHI in the European Union

In recent years the EU regulatory framework for VHI has become an increasingly important aspect of VHI public policy, largely as a result of a series of European Commission directives aimed at creating a single market for life and non-life insurance in the European Union. This section outlines recent regulatory developments at the EU level.

### 1.4.1 Background

Prior to the introduction of these insurance directives, there were two main models for the supervision of insurance operations in the member states: ma-

---

<sup>8</sup> HCPs are very different from traditional VHI policies. Designed to pay the subscriber tax-free cash benefits towards a wide range of treatments (including hospital stays, optical and dental care and some alternative treatment such as homeopathy and acupuncture), they cover a fixed percentage of treatment costs up to an annual ceiling, and patients can spend the money however they like. HCPs are popular because they pay out whether subscribers use the NHS or opt for private treatment, they are generally much cheaper than VHI policies, they have no age-related or regional premium differences and one premium can cover a whole family (Papworth, 2000). But HCPs do not provide full protection, and their cash benefit levels are unlikely to cover the full cost of private treatment.

<sup>9</sup> This decision was prompted by the 1989 NHS reforms, a key consequence of which was that the newly formed NHS trusts began to charge commercial rates for private beds, leading to problems for many insurers.

material regulation and financial regulation (Freeman, 1994). Material regulation is based on the premise that if insurers are sufficiently controlled in the type of business they write and the level of premiums at which they write, there can be no question of insolvency. This model applies in Germany, where the supervisory body scrutinizes policies before they are offered for sale, restricts price competition by enforcing compulsory tariffs and only permits insurers who specialize in health insurance to operate in the field of VHI. Financial regulation, as practised in the United Kingdom, is concerned with ensuring that the insurer remains solvent; the supervisory authority's role is restricted to examining detailed financial returns on business. As a result of the introduction of the European Commission's insurance directives, the focus of regulation has moved from material to financial control (CEA, 1999).

The first generation of insurance directives (1973) allowed insurance companies to set up a branch office or an agency in another member state (European Commission, 1973). The coordination of legal and financial conditions allowed authorization to be obtained more easily. The second generation of insurance directives (1988) realized the principle of the freedom to provide services, allowing insurers to provide services in another member state without setting up a branch or agency in that member state (European Commission, 1988). However, this freedom was limited to the cover of risks that were small enough not to require special protection. As a result, VHI was excluded from the freedom to provide services. The third generation of insurance directives, culminating in the third non-life insurance directive of 1992, extended the freedom to provide services to all types of risks, including those covered by VHI (European Commission, 1992).

### 1.4.2 The third non-life insurance directive

In theory the third non-life insurance directive was to be adopted by member states' national law on 1 July 1994, thereby creating a single market for VHI in the European Union and completing the process of economic integration started in the early 1970s.

Article 5 of the directive confirms EU insurers' freedom to:

- establish a branch or agency anywhere in the European Union (under the rules on establishment) and
- sell their products anywhere in the European Union without a branch presence (under the rules on the freedom to provide services).

The third non-life insurance directive also introduced the following key changes:

- a single system for the authorization and financial supervision of an insurance undertaking, including the business it carries out either through branches or under the freedom to provide services, by the member state in which the undertaking has its head office (home country control) (Article 9.1);

- financial supervision that include verification of an insurer's state of solvency, of the establishment of technical provisions and of the assets covering them in accordance with the rules laid down or practices followed in the home member state under provisions adopted at Community level (Article 9.2);
- the abolition of national controls on premium prices and prior notification of policy conditions (Articles 29 and 39).

Article 29 of the directive states that:

*Member States shall not adopt provisions requiring the prior approval or systematic notification of general and special policy conditions, scales of premiums, or forms and other printed documents which an insurance undertaking intends to use in its dealings with policy-holders. They may only require non-systematic notification of those policy conditions and other documents for the purpose of verifying compliance with national provisions concerning insurance contracts, and that requirement may not constitute a prior condition for an undertaking's carrying on its business. Member States may not retain or introduce prior notification or approval of proposed increases in premium rates except as part of general price-control systems (European Commission 1992).*

Article 39 applies this rule to member states where a branch is located or services are provided.

The case law of the European Court of Justice (ECJ) (José García and others v. Mutuelle de Prévoyance Sociale d'Aquitaine and others) demonstrates that insurance monopolized by a member state's social security system falls outside the scope of the third non-life insurance directive (ECJ, 1996). The directive applies to all other insurance and does not distinguish between for-profit and non-profit insurers.

### 1.4.3 The general good

Governments are no longer allowed to apply material regulation in the insurance sector, as this could impede competition among insurers. Consequently, consumer protection has been reduced to financial safeguards against the negative consequences of insolvency. However, under certain circumstances, a member state may invoke the general good to justify national regulation. Article 54.1 states that:

*Notwithstanding any provision to the contrary, a Member State in which contracts covering [health risks] may serve as a partial or complete alternative to health cover provided by the statutory social security system may require that those contracts comply with the specific legal provisions adopted by that Member State to protect the general good in that class of insurance,*



*and that the general and special conditions of that insurance be communicated to the competent authorities of that member state before use.*

Recital 24 to the directive indicates the type of measure that a member state might take in order to protect the general good, noting that:

*Whereas to this end some Member States have adopted specific legal provisions; whereas, to protect the general good, it is possible to adopt or maintain such legal provisions in so far as they do not unduly restrict the right of establishment or the freedom to provide services, it being understood that such provisions must apply in an identical manner whatever the home Member State of the undertaking may be; whereas these legal provisions may differ in nature according to the conditions in each Member State; whereas these measures may provide for open enrolment, rating on a uniform basis according to the type of policy and lifetime cover; whereas that objective may also be achieved by requiring undertakings offering private health cover or health cover taken out on a voluntary basis to offer standard policies in line with the cover provided by statutory social security schemes at a premium rate at or below a prescribed maximum and to participate in loss compensation schemes; whereas, as a further possibility, it may be required that the technical basis of private health cover or health cover taken out on a voluntary basis be similar to that of life assurance... (European Commission, 1992).<sup>10</sup>*

What this seems to suggest is that where VHI substitutes for statutory health insurance, constituting the principal means of protection for some sections of the population, the government may invoke the general good in order to adopt or maintain regulations to protect the public interest, in so far as they do not unduly restrict the right of establishment or the freedom to provide services.

The concept of the general good is based on the case law of the European Court of Justice, which has never actually defined the general good, preferring to maintain its evolving nature (European Commission, 2000a). For this reason, the concept is not defined by the third non-life insurance directive either. The absence of a clear definition has led to confusion and tension between the European Commission, member states and insurance companies (CEA, 1997; Mossialos, Le Grand, 1999).

In 2000 the European Commission issued an interpretive communication regarding the general good (European Commission, 2000a). The communication analyses the concept of the general good as developed by the case law of the European Court of Justice and systemizes this doctrine and the ways in which

<sup>10</sup> Since the recitals to a directive have legal force as an aid to interpretation, they shed light for the reader on the intentions of the Community legislator.

it is applied to the freedom of establishment and the freedom to provide services. It also maps out the framework within which a host member state can invoke the concept of the general good in order to enforce compliance with its own rules by an insurance undertaking wishing to conduct insurance business within its territory, either through a branch or through the freedom to provide services. An insurance undertaking operating through a branch or under the freedom to provide services that is required by a host member state to comply with a national rule that, in its view, constitutes a restriction, may challenge the application of that measure if it considers that one of the following six criteria is not met. In order to be justified on grounds of the general good, a national measure (European Commission, 2000a):

- must not have been the subject of prior Community harmonization;
- must not be discriminatory;
- must be justified for imperative reasons relating to the general good (such as consumer protection, prevention of fraud, cohesion of the tax system or worker protection);
- must be objectively necessary;
- must not duplicate home country rules; and
- must be proportionate to the objective pursued.

The communication notes that the directive does not define the general good in order to make it possible to assess the conformity with Community law of a national measure that is taken in a non-harmonized area at the Community level and that hinders freedom of establishment and freedom to provide services. In non-harmonized areas the level of what is regarded as the general good depends first on the assessment made by the member states and can vary substantially from one country to another according to national traditions and the objectives of the member states. It is necessary, therefore, to refer to the relevant case law of the Court of Justice. In spite of this attempt to clarify when and how the general good might be invoked by member states, insurers continue to express dissatisfaction with what they regard as a lack of clarity (see section 5.3.3) (CEA, 2001; BUPA Limited, 2001).

#### **1.4.4 Further implications of the third non-life insurance directive**

While harmonization initiatives appear to be a necessary prerequisite for the creation of a single market in insurance, they may pose problems for member states that attempt to reach a compromise between deregulation and consumer protection. Home country control effectively removes the right of member states to carry out regulation of the insurance sector. Furthermore, the risk of reverse discrimination could put pressure on strictly regulated countries to reduce their regulatory constraints, resulting in harmonization towards the low-

est common denominator. Home country control also raises the issue of regulatory capacity: to what extent are supervisory authorities able to monitor the activities of insurers from third countries?

According to the European Commission, the ultimate objectives of a single insurance market are to provide consumers with a greater choice of insurance products and to increase competition among insurance companies (European Commission, 1997). The third non-life insurance directive outlawed price and product regulation in the expectation that competition would benefit the consumer by lowering prices and increasing choice, but to date there is no clear evidence to suggest that this expectation has been fulfilled. The European Union's current approach to regulating the market for VHI centres around financial solvency. However, given the failures inherent in VHI markets (Barr, 1992), it could be argued that relying on the market to determine the best degree of regulation runs contrary to the objective of a stable and sound financial system. The implications of the third non-life directive are discussed further in section 5.3.

---

# Section 2 The market for VHI in the European Union

This section aims to:

- present a classification of the different types of VHI available in the European Union;
- describe (in some detail) the operation of substitutive VHI in Belgium, Germany and the Netherlands;
- describe the benefits provided by complementary and supplementary VHI;
- examine the structure of the market for VHI, in terms of types of insurer and buyer characteristics;
- examine the conduct of VHI markets, in terms of premium-setting, selection criteria, policy conditions and the provision of benefits;
- examine subscriber costs (the price of premiums and the influence of tax incentives); and
- examine insurer costs (claims and administrative expenditure).

We must emphasize that VHI systems operate differently in different member states. The comparative information and data we present should therefore be interpreted in the context of the systems to which they relate.

## 2.1 Types of VHI in the European Union

In this section, our discussion of the way in which substitutive VHI operates in Belgium, Germany and the Netherlands attempts to be comprehensive because the examination of market structure and conduct that follows focuses mainly on complementary and supplementary VHI. Some of the information we present in those sections refers to all three types of VHI (substitutive, complementary and supplementary), while some refers exclusively to complementary and supplementary VHI. Where possible, we have tried to distinguish clearly between substitutive VHI on the one hand and complementary and supplementary VHI on the other, but it is not always possible to separate data in this

way. There seems to be less information available on complementary and supplementary VHI in Germany and the Netherlands, perhaps because substitutive VHI is so extensive in these member states.

VHI can be classified in many different ways, as demonstrated by the numerous definitions in current use. Traditionally, the literature on VHI has distinguished between insurance that *duplicates* statutory insurance and insurance that constitutes the *principal* means of protection for sections of the population (Couffinhall, 1999). In the context of the European Union we find it more appropriate to classify VHI according to whether it:

- *substitutes* for cover that would otherwise be available from the state;
- provides *complementary* cover for services excluded or not fully covered by the state (including cover for co-payments imposed by the statutory health care system); or
- provides *supplementary* cover for faster access and increased consumer choice.

### 2.1.1 Substitutive VHI

Substitutive VHI in the European Union is limited to specific population groups in a handful of member states.<sup>11</sup> It may be purchased by:

- those who are *excluded from participating* in some or all aspects of the statutory health insurance scheme; and
- those who are *exempt from contributing* to the statutory health insurance scheme because they are allowed to opt out of it.

Eligibility for substitutive VHI may be determined by income (Germany and the Netherlands), employment status (the self-employed in Austria, Belgium and Germany) or occupation (certain professions in Austria).

The following groups of people are excluded from participating in the statutory health insurance scheme.

- *The Netherlands.* Individuals earning more than €30 700 per year (in 2002) are excluded from the statutory health insurance scheme covering outpatient care and the first year of inpatient care (28.9% of the population in 1999) (Vektis, 2000).
- *Belgium.* Self-employed people are excluded from statutory health insurance covering minor risks.
- *Germany.* Self-employed people are excluded from the statutory health insurance scheme unless they have been a member previously, with the exception of those who fall under compulsory statutory cover, such as farmers.

<sup>11</sup> Association Internationale de la Mutualité (AIM) defines substitutive VHI as VHI “to cover medical expenses for persons excluded or exempted from statutory protection” (Association Internationale de la Mutualité, 2001). CEA notes that substitutive VHI “is only found in member states where health insurance operates entirely or partly in lieu and place of social security schemes” (Comité Européen des Assurances, 2001b).

- *Germany.* Active and retired civil servants are excluded from the statutory health insurance scheme, as they are directly reimbursed by the government for most of their health care and only need VHI to cover the remainder. They therefore purchase complementary rather than substitutive VHI.
- *Spain.* One per cent of the population is not covered by the statutory health care system (for example, lawyers practising independently). In 1998 about 60% of these individuals purchased substitutive VHI (accounting for 6% of VHI expenditure). According to survey data, those who purchase substitutive VHI tend to have high incomes and high levels of education (Rodríguez, 2001).
- *France.* Substitutive VHI is only purchased by a few hundred frontier workers (Sandier, Ulmann, 2001).

The following groups of people are exempt from contributing to the statutory health insurance scheme if they choose to opt out of it.

- *Germany.* Employees earning more than €40 000 per year (about 20% of the population) may opt out (Busse, 2001).
- *Austria.* Since the social security law was amended in 1999, certain groups of self-employed people (such as veterinary doctors, notaries and priests) are allowed to opt out of the statutory health insurance scheme if their relevant professional organization can purchase substitutive VHI for them. To date the numbers covered by this type of VHI are small (only 0.2% of the population) (Hofmarcher, 2001).

Substitutive VHI in Austria, France and Spain is marginal and will not be discussed further in this study. It is available to much larger sections of the population in Belgium (9.5%), Germany (about 20%) and the Netherlands (about 28.9%). Substitutive VHI in these member states will be discussed in some detail below.

### Substitutive VHI in Belgium

The statutory health insurance scheme in Belgium (Rijksinstituut voor ziekte en invaliditeitsverzekering/Institut National d'Assurance Maladie Invalidité, or RIZIV-INAMI) does not cover self-employed people for minor risks. Minor risks are defined as outpatient care (such as visits to a general practitioner or specialist), drugs, nursing care, most types of physiotherapy, dental care and minor operations (AIM, 1999).

Self-employed people make up 9.5% of the Belgian population. If these self-employed people want cover for minor risks, they must purchase substitutive VHI. Substitutive VHI to cover minor risks for the self-employed can be provided by mutual associations (mutualités) or commercial insurers, but to date all substitutive VHI is provided by mutual associations. Mutual associations cur-

rently provide substitutive VHI cover to 742 552 self-employed people (76% of self-employed people and 7.1% of the population) (Hermesse, 2001). The remaining 24% of self-employed people without substitutive VHI cover must pay out of pocket for treatment (of minor risks). It has been suggested that these individuals do not purchase substitutive VHI because they are young and healthy, wealthy or too poor to afford it (Hermesse, 2001).

There are two key differences in the way in which mutual associations and commercial insurers offer substitutive VHI (Hermesse, 2001).

The benefits provided by mutual associations are clearly defined by the state, and they are obliged to cover all the minor risks excluded by RIZIV-INAMI, whereas the commercial insurers are not.

Mutual associations receive subsidies from the state for this type of VHI, whereas the commercial insurers do not. These state subsidies are designed to facilitate access to substitutive VHI for self-employed people.

There is no variation in the content of cover provided by different mutual associations. Self-employed people enjoy exactly the same benefits as those provided by RIZIV-INAMI, which means that they are subject to the same co-payments. However, different mutual associations are allowed to charge different premiums, enabling a degree of price competition to take place. The price of premiums may depend on factors such as age, household size, number of dependants, employment status and length of employment. Premiums may vary as follows (Hermesse, 2001):

- premiums for a single person of 25 insured from the age of 20 vary from €17 to €9 per month;
- premiums for the head of a family with three dependants and who has been insured from the age of 20 vary from €3 to €4 per month; and
- premiums for the retired 70-year-old head of a family with spouse when the head has been insured from the age of 40 vary €3 to €9 per month.

Premiums may be adapted once a year by the mutual associations' competent authorities. Only self-employed people under the age of 50 can purchase substitutive VHI. Some mutual associations require potential subscribers to complete a medical questionnaire.

Commercial insurers have more freedom than mutual associations to define the level of cover and the reimbursement rate they offer self-employed people. For example, one commercial insurer offers a reimbursement rate equal to 80% of RIZIV-INAMI tariffs (Hermesse, 2001). Dental care may be an optional extra, while some commercial insurers offer cover for treatment beyond the scope of minor risks, such as acupuncture and homeopathy. Premiums vary according to the age and gender of the insured.

In January 2001 a working group of senior government officials led by an academic was set up to examine the social security status of self-employed people in Belgium. This group proposed that self-employed people should either be covered by the statutory health insurance scheme for minor risks or obliged by law to purchase substitutive VHI (Cantillon, 2001).

### Substitutive VHI in Germany

Health care in Germany is largely funded through social security contributions by employers and employees and provided by the statutory health insurance scheme (Gesetzliche Krankenversicherung, or GKV).

Substitutive VHI can be purchased by two groups:

- self-employed people who are excluded from GKV (unless they have been a member previously), with the exception of those who fall under compulsory GKV cover, such as farmers;
- employees earning more than the GKV contribution ceiling, which has been indexed to the contribution ceiling for pensions since 1971; in 2001 the GKV contribution ceiling was € 336 per month in both the old and the new states (that is, the western and eastern parts of the country), but prior to 2001, the ceiling was approximately €11 lower in the new states (PKV, 2000).

#### *Market features*

Substitutive VHI in Germany is provided by 52 voluntary health insurers united in the German Association of Private Health Insurers (Verband der privaten Krankenversicherung or PKV). All of these insurers are health insurance specialist; substitutive VHI is prohibited by law from being sold in conjunction with any other type of insurance.

#### *The demand for substitutive VHI in Germany*

Employees earning more than €40 000 a year (about 20% of the population) have a choice: they can opt out of the GKV and purchase substitutive VHI instead, or they can stay where they are and continue to be covered by the GKV (Busse, 2000a). Fewer than a quarter of these employees actually choose to opt out and purchase substitutive VHI; the vast majority (77%) prefer to stay with the GKV. Although the GKV covers 88% of the German population, 16% of its members (equivalent to about 14% of the population) are voluntary members – high-earning employees who have chosen not to opt out and purchase substitutive VHI (Busse, 2000a).

The total number of people with substitutive VHI has risen from 4.2 million people in 1975 to 7.3 million in 1999 (9% of the population) (PKV, 2000). The number of people covered by substitutive VHI increased by 16% between 1991 and 1999. About half of the increase resulted from people in the new states



subscribing to substitutive VHI for the first time (as coverage was not available before 1991); the increase in the old states was much less pronounced (from about 9% to 10% of the population) (Busse, 2001).

About half of all those with substitutive VHI belong to the second group of high-earning employees; the rest are self-employed people (and active or retired civil servants, who only claim complementary benefits, but are included in the official figures for people covered by substitutive VHI). In 1999 children (defined as 15 and under) accounted for 15.3% of those with substitutive VHI, men for 52.7% and women for 32% (PKV, 2000). Substitutive VHI coverage also varies by geographical area; data from 1992 and 1993 show that only 4.4% of those with substitutive VHI (and 0.8% of those with complementary and supplementary VHI) were from the new states (PKV, 1994). This discrepancy is still marked; in April 1999 overall coverage was 8.9%, with 10.1% coverage in the old states compared to only 3.6% coverage in the new states (Busse, 2000b). Almost all substitutive VHI policies are purchased by individuals rather than by groups.

### *Selection procedures*

Substitutive VHI premiums are calculated according to the extent and level of cover required, in addition to risk, age at entry, gender and health status at the time of underwriting. Pre-existing conditions are excluded if they were known at the time of underwriting but were not disclosed by the insured; declared pre-existing conditions are covered, but generally result in higher premiums (Busse, 2001).

### *Benefits provided*

In order to obtain comprehensive coverage, the individual opting for substitutive VHI may have to buy several different policies, as outpatient and dental benefits can be offered separately from inpatient benefits. So while individuals with substitutive VHI usually enjoy the same benefits as those insured by the GKV, their level of cover depends on the policies they buy (Busse, 2001). It should be noted that because voluntary health insurers operate in direct competition with the public sector, substitutive VHI policies cover more than one type of insurance and may result in improved amenities, faster access and greater choice of providers.

### *Policy conditions*

Whereas the GKV automatically covers dependants, substitutive VHI policies can only be bought by individuals; dependants must buy separate policies and pay separate premiums. This makes family size a critical factor when choosing between statutory or voluntary health insurance (Schneider et al., 1992; Schneider, 1995). As a result, substitutive VHI is more attractive to young people without dependants (Busse, 2000a), which leaves the GKV to insure a dispro-

portionately high number of elderly people, people with large families and people in poor health (Rupprecht, Tisot, Chatel, 2000).

### *Premiums*

Employers are allowed to contribute up to 50% of employees' premiums (as in the GKV), but this contribution is limited to the average maximum GKV contribution, so that the insured individual bears the cost of any extra benefits (Bundesaufsichtsamt für das Versicherungswesen 2001; Busse 2001). Employers can only contribute to substitutive VHI policies offered by insurers that specialize in health.

The German government requires voluntary health insurers to operate technically like life insurers. This involves setting up ageing reserves (with the specific aim of preventing premiums from increasing with age) and effectively prohibits insurers from terminating contracts. As a result, substitutive VHI premiums should not increase as people get older. However, an adjustment clause allows voluntary health insurers to increase premiums where there is a discrepancy between the costs used as a basis for calculating premiums and the actual costs of providing benefits, and in the past this has led to steep increases in premiums as people have aged.

Although the voluntary health insurers' main marketing strategy is to highlight the better facilities they provide, many people regard substitutive VHI as expensive compared to the GKV (Natarajan, 1996). This is not surprising, given that gross written VHI premiums (for all types of VHI, including substitutive, long-term care, loss of earnings, hospital daily allowance and complementary and supplementary) grew in real terms at a compound annual growth rate of 5.2% between 1993 and 1999, a trend that is expected to continue through 2004 (Datamonitor, 2000a; Datamonitor, 2000b). Between 1994 and 1998 total expenditure on health care grew at the much slower average annual rate of 2.7% (deflated by the GDP deflator) (see Table 15) (OECD, 2000). Since 1994 the real compound annual growth in premiums for substitutive VHI has been lower, at 2.9%, compared to a growth rate of 8.8% for all other types of VHI (Datamonitor, 2000b). According to an industry report, this is primarily due to the fact that many voluntary health insurers were forced to subsidize premium increases with their own reserves in order to continue to attract new business, rather than raising existing premiums too high and risking the adverse publicity that surrounded the market in the early-to-mid-1990s, when voluntary health insurers came under fire for charging unreasonable premiums for older subscribers (Datamonitor, 2000b).

### *Tax incentives*

VHI premiums are deductible from taxable income, as are other insurance premiums, within certain limits. However, these deductions do not provide a

strong incentive to purchase VHI, as the limits are lower for individuals with substitutive VHI (that is, the limits decrease as income rises), and individuals interested in purchasing complementary or supplementary VHI will have exceeded the limit as a result of their GKV contributions.

### *Reimbursement*

Substitutive VHI provides benefits in cash rather than in kind, and voluntarily insured people generally have to pay providers directly and are subsequently reimbursed by their insurers (Bundesaufsichtsamt für das Versicherungswesen, 2001). Voluntary health insurers also offer a range of reimbursement options to reduce levels of coverage; voluntarily insured individuals may have the option of full reimbursement (100%) or different rates of co-insurance, and some outpatient policies offer a range of deductibles (Datamonitor, 2000b).

### *Expenditure*

Although insurers argue that the cost transparency associated with paying patients in cash rather than in kind encourages a more responsible attitude to 5858 for medical benefits (Schneider, 1995; CEA, 1997), it has not stopped health care costs in the substitutive VHI sector from rising. Over the last 10 years, expenditure for individuals with substitutive VHI has increased on average by 40% more than for those in the GKV, and by almost two or three times for ambulatory care, dental care and pharmaceuticals (Busse, 2000a). A likely explanation for this additional growth in VHI expenditure may be that providers are allowed to charge their voluntarily insured patients 1.7 or 2.3 times the reimbursement values set in the price list for private medical services issued by the Federal Ministry for Health and sometimes even more (Busse, 2000a). Charging extra may reduce access for some patients, although providers are no longer permitted to charge more than 1.7 times more for individuals with the standard rate (Bundesaufsichtsamt für das Versicherungswesen, 2001).

### *Public policy and regulation*

The German government has been forced to make substantial interventions in the market for substitutive VHI. High premium increases for older subscribers put considerable pressure on the GKV in the early 1990s, as people would opt for substitutive VHI when they were young and then attempt to return to the GKV when their substitutive VHI premiums became too expensive (due to either increasing age or ill health) (Wasem, 1995). In 1994 the government took action to put a stop to this trend, announcing that the decision to opt for substitutive VHI would be irreversible for those aged 65 and older, even if their incomes dropped below the contribution ceiling (Busse, 2000a). The recent Reform Act of Social Health Insurance 2000 tightened the rules even further by reducing the age limit for returning to the GKV to 54 (CEA, 2000).

Also in 1994, the government required voluntary health insurers to offer substitutive VHI policies at a standard rate (Standardtarif) to individuals aged 65 and older who had been voluntarily insured for a qualifying period of at least 10 years and (since 2000) a standard rate for individuals 55 and older who have been voluntarily insured for at least 10 years and whose incomes drop below the contribution ceiling. This standard rate provides benefits that match the benefits of the GKV and guarantees that premiums will not exceed the average maximum GKV contribution (or 1.5 times the contribution for married couples) (CEA, 1997). To date, however, very few people have chosen this option (only 1 161 people in 1998 and 1 407 in 1999) (PKV, 2000).

In 2000 the government also tackled the problem of inaccurate premium calculations and inadequate ageing reserves. Since 1 January 2001 a surcharge of up to 10% of the gross premium has been imposed on all new substitutive VHI policies and paid into a shared risk pool (for each insurer) (Datamonitor, 2000a). Existing subscribers need to pay an additional two per cent a year for five years (Datamonitor, 2000b). By paying this surcharge, subscribers can ensure that the cost of their premiums will not rise when they reach the age of 65. New subscribers who choose not to pay the surcharge risk paying substantially increased premiums as they grow older. The law also stipulates that the surplus obtained by applying the technical interest rate to the extra funds received through this surcharge is to be credited to the insured and used to limit premium increases in older age (Bundesaufsichtsamt für das Versicherungswesen, 2001). One side-effect of the requirement to accumulate ageing reserves is that voluntarily insured individuals have little incentive to change insurer, as reserves cannot be transferred from one insurer to another, which means that those who do switch insurer face a higher entry premium with the new insurer (Busse, 2001).

In order to enhance consumer protection, the Reform Act of Social Health Insurance 2000 stipulates that voluntary health insurers must inform potential substitutive VHI subscribers of the likelihood of increasing premiums, the possibility of limiting the increase in premiums with old age and the irreversibility of the decision to opt out of the GKV (CEA, 2000; Bundesaufsichtsamt für das Versicherungswesen, 2001). Voluntary health insurers are also required to inform policy holders of the possibility of switching to another tariff category when their premiums go up and to advise policy holders aged 60 or older to switch to the standard tariff or to switch to another tariff category that includes the same benefits for a lower premium (Bundesaufsichtsamt für das Versicherungswesen, 2001).

Since the third non-life Directive of 1992, the government is no longer obliged to approve VHI premiums or policy conditions. However, the government still requires the general policy conditions for substitutive VHI to be submitted to the Federal Supervisory Office for the Insurance Sector (under the authority of the Federal Ministry of Finance) before they are implemented and

every time there is an amendment. The supervisory authority checks that the conditions comply with the minimum standard laid down in the Law on the Supervision of Insurance Undertakings and other regulations concerning the general interest for this insurance class. The obligation to submit insurance conditions applies equally to insurance undertakings registered in Germany and foreign undertakings wishing to offer substitutive VHI in Germany. Insurance undertakings registered in Germany must also submit their premium calculations to the Federal Supervisory Office for the Insurance Sector, which checks that the calculation complies with the legal provisions on calculations designed to ensure that the interests of the insured are protected and that obligations arising under contracts taken out for life can be fulfilled. Any modifications in policy conditions and premiums must be agreed to by an independent trustee.

## Substitutive VHI in the Netherlands

### *Health insurance in the Netherlands*

The Dutch health care system operates on three levels (Ministry of Health, Welfare and Sport, 2000a).

The first level is a universal statutory scheme for exceptional medical expenses (known as *Algemene Wet Bijzondere Ziektekosten* or AWBZ), which provides benefits in kind to all those resident in the Netherlands for expensive, un-insurable, long-term care such as nursing care in hospitals (after the first 365 days) and nursing homes, mental health care and care for the disabled. This scheme is implemented by statutory sickness funds and voluntary health insurers. The level of benefits provided and the income-related contribution rate are set by the state.

The second level of the Dutch health care system (known as *Ziekenfondswet*; ZFW) comes under the Health Insurance Act, which automatically insures all those who meet the eligibility criteria. The ZFW covers the first year of hospital care, physician services, prescription drugs and some physiotherapy and basic dental care (again, in kind). This scheme is implemented by statutory sickness funds. The eligibility criteria, the level of benefits provided and the income-related contribution rate are set by the state, although the statutory sickness funds are allowed to set their own additional flat rate premium. The following groups are eligible for the ZFW:

- resident employees up to the age of 65 earning less than a certain amount (€30 700 in 2002);
- residents living on state benefits;
- self-employed people up to the age of 65 (since 2000) who are insured under the Incapacity Insurance (Self-Employed Persons) Act (WTZ) and whose taxable income is less than €18 700 in 2000 per year;
- those who are covered by the Act when they reach 65; and

- those who are not covered by the Act when they reach 65, if their annual household income is below a certain level (Ministry of Health, Welfare and Sport, 2000a).

Level three of the Dutch health care system consists of complementary and supplementary VHI.

#### *The demand for substitutive VHI in the Netherlands*

Individuals earning over €30 700 per year are not eligible for the ZFW and may purchase substitutive VHI instead if they wish to. Although it is not compulsory for these individuals to take up VHI, most of them do. In 2000, only 1.6% of the population did not have either statutory or voluntary health insurance; according to the Public Information Office of the Dutch Ministry of Health, Welfare and Sport, most of these uninsured people were homeless, while a few refused to insure themselves for reasons of principle (Ministry of Health, Welfare and Sport, 2000b). Some civil servants are also excluded from the ZFW; they are covered by a separate statutory health insurance scheme (Publiekrechtelijke ziektekosten-verzekering or PZV), which closely resembles the ZFW (Maarse, 2001).

In 2000 24.7% of the population purchased substitutive VHI, down from 27.2% in 1990 (see Table 7) (Vektis, 2000). The size of the market for substitutive VHI is very sensitive to developments in the ZFW. For example, if the ZFW's eligibility criteria are widened, the market for substitutive VHI shrinks correspondingly. Substitutive VHI is purchased by individuals and by groups. The market for group policies purchased by companies has grown rapidly over the last decade, and it is estimated that currently more than 50% of policies are purchased by groups.

**Table 7.** The proportion of the population covered by statutory and voluntary health insurance schemes in the Netherlands in 1990 and 2000 (%)

Health insurance scheme	1990	2000
AWBZ	100.0	100.0
ZFW	61.5	64.6
Substitutive VHI	27.2	24.7
WTZ	5.1	4.2
PZV	5.6	4.9
No cover other than AWBZ	1.6	1.6

Sources: Vektis, 1993; Vektis, 2000.

*The WTZ scheme*

The Dutch Health Insurance (Access) Act of 1986 (known as *Wet op de Toegang tot Ziektekostenverzekeringen* or WTZ) was adopted following the abolition of two voluntary ZFW schemes (one for the elderly and the other for self-employed people) due to large deficits. The WTZ guarantees access to substitutive VHI for specific groups of people. It was originally designed for individuals with substitutive VHI aged older than 65 and younger self-employed people who had difficulty purchasing substitutive VHI due to pre-existing conditions, but it currently also covers other groups, such as students whose parents are in the ZFW. The Act enables the government to determine the level of benefits and the price of a fixed premium for a standard package policy that provides similar benefits to the ZFW. In 1999 this premium was fixed at €1 135 per year for those under 65 and €1 275 for those 65 and older (Vektis, 2000). Unlike statutory cover, however, standard package policy cover does not extend to the insured individual's dependants, who must be separately insured. Another essential difference from the ZFW is that costs are reimbursed rather than paid for directly (Ministry of Health, Welfare and Sport, 2000a). In 2000, 4.2% of the population was covered by the WTZ (see Table 7).

Children under the age of 18, and children between the ages of 18 and 27 who are studying and who are included in the policy of the principal policy-holder, pay only half the amount paid by the main policy-holder.

The WTZ is implemented by voluntary health insurers. Because the fixed WTZ premium only covers half the cost of providing the standard package policy, insurers receive full compensation from a central equalization fund financed by an annual solidarity payment made by all those with substitutive VHI. This payment is currently fixed at €17.12 per year for children up to the age of 19 and €34.24 for individuals aged 20 to 64.

Since 1985 substitutive VHI has lost 17% of market share to the WTZ. However, this loss of market share has actually benefited voluntary health insurers, because they have tended to encourage high-risk individuals to opt for the WTZ (which they also implement), and until recently the costs of providing health care to all those insured under the WTZ were subsidized by the central equalization fund. As a result, the level of financial risk borne by voluntary health insurers has been extremely low. The government recently reduced insurers' financial incentive to push high-risk individuals into the WTZ by making the insurers liable for the full cost of providing health care to WTZ members under the age of 65 (that is, the costs of providing health care to those under 65 can no longer be subsidized by the central equalization fund).

*The Health Insurance Funds Act (MOOZ)*

The ZFW insures a disproportionately high number of elderly people (see Table 8). In order to compensate for this, all those with substitutive VHI are required

to make an annual solidarity payment to the ZFW of €10.80 (0 to 19 years), €11.60 (20 to 64 years) or €15.28 (65 years and older) (Ministry of Health, Welfare and Sport, 2000a). This is known as the MOOZ scheme.

**Table 8. Age distribution in the ZFW, substitutive VHI and the WTZ in the Netherlands in 2000**

	Population (%)	ZFW (%)	Substitutive VHI + WTZ (%)
0–19	24.4	21.3	30.9
20–64	62.0	63.4	59.0
65+	13.6	15.2	10.1

Source: Vektis, 2001.

### *Market features*

Voluntary health insurers in the Netherlands operate on non-profit and commercial base. Some of them specialize in health insurance, while others are part of larger insurance conglomerates offering other types of insurance. Voluntary health insurers incurred substantial deficits in 1999 and 2000 of €198 million and €14 million respectively; VHI is often sold as a loss leader, to enable insurers to market other, more lucrative insurance products (Vektis, 2000).

### *Benefits provided*

Voluntary health insurers are free to determine the substitutive VHI benefits they provide and are not required to offer a standard package. In general, however, the benefits they provide are very similar to those provided by the ZFW. Developments in the statutory health care system are important to the market for VHI. Any change in the benefits provided by the ZFW is usually followed by a change in the benefits provided by substitutive VHI. For example, when prescription drugs were moved from the ZFW to the AWBZ in the early 1990s, as part of the Simons reform, voluntary health insurers reacted immediately by removing prescription drugs from their benefit package. When this measure was cancelled in 1993, voluntary health insurers followed suit and added prescription drugs to their package. All substitutive VHI packages cover general practitioner care.

### *Selection procedures*

Premiums for individual subscribers are rated according to individual risk. Applicants must complete a medical questionnaire that includes questions about family history of disease. Group rating is applied to premiums for groups. Risk rating does not apply to applicants who purchase a policy from the sickness fund with whom they were insured under the ZFW (that is, before they became ineligible for ZFW cover). Applicants refused substitutive VHI cover can obtain cover through the WTZ.



There is little information regarding risk selection by voluntary health insurers, but risks may be selected by targeting groups, by selective marketing and by restricting entry to high-risk individuals and encouraging them to join the WTZ instead. Until recently, voluntary health insurers encouraged high-risk individuals to switch to the WTZ on a large scale, but the government has now reduced the financial incentive to do this, by making insurers liable for the full cost of providing health care to WTZ members under the age of 65 (that is, the costs of providing health care to those under 65 can no longer be subsidized by the central equalization fund) (see above).

### *Policy conditions*

Voluntary health insurers cannot terminate policies or raise premiums on the basis of an individual's health care consumption, although policies are automatically terminated when subscribers reach the age of 65 and move to the WTZ. As subscribers age or fall ill, they become locked in to their current substitutive VHI policy. Moving from one insurer to another becomes an unrealistic option because the new insurer is likely to charge much higher premiums. If an individual's substitutive VHI premium has been higher than the WTZ premium for three consecutive years, she or he has the right to move to the WTZ. Although subscribers have access to information about price and policy conditions, comparison can be difficult, and the VHI market as a whole is considered to be opaque (Maarse, 2001).

### *Premiums*

Premiums tend to rise with age. The average annual substitutive VHI premium per insured individual in 1999 was €98, although premiums vary substantially (Vektis, 2000). The annual fixed WTZ premium was €1 275 for those aged 65 and older, and €1 135 for those under 65. This compares to average annual income-related contributions of €110 in the AWBZ and €50 in the ZFW (including an average annual flat-rate payment of €45) (Vektis, 2000).

In addition to their annual premium, individuals with substitutive VHI are required to make two annual solidarity payments, one of €17.12 (under 20 years) or €34.24 (20 to 64 years) to the WTZ and another of €10.80 (younger than 20 years), €11.60 (20 to 64 years) or €5.28 (65 years and older) to the MOOZ scheme (see above) (Vektis, 2000).

### *Tax incentives*

Expenditure on health care, including premiums, can be deducted from taxable income once it exceeds a certain percentage of income, but the percentage is set relatively high, so that in practice the tax incentive is not significant.

### *Reimbursement*

Substitutive VHI uses the reimbursement model of providing benefits in cash rather than in kind, although in practice most voluntary health insurers provide some benefits in kind, as a special service to their subscribers. Voluntary health insurers also offer a range of reimbursement options in terms of deductibles. Most voluntary health insurers require their subscribers to obtain a general practitioner's referral before visiting a specialist.

### *Expenditure*

Substitutive VHI and the WTZ accounted for 13.7% of total expenditure on health in 1999. The largest share of expenditure was borne by the AWBZ (43.6%), followed by the ZFW (37.6%) (Vektis, 2000). In 1999 annual per capita health care expenditure was €804 in the AWBZ, €129 in the ZGW and €796 for substitutive VHI and the WTZ combined (Vektis, 2000). Between 1993 and 1999 per capita expenditure increased by 25.7% in the AWBZ, by 57% in the ZFW and by 41.4% in substitutive VHI and the WTZ (Vektis, 2000). This contrasts with Germany, where the costs of substitutive VHI rose much faster than those of the statutory health insurance scheme (the GKV) (see above), and may be explained by the disproportionately high number of elderly people covered by the ZFW.

Voluntary health insurers commonly pay individual providers on a fee-for-service basis, although they may set a fixed budget for hospitals. Selective contracting is possible, but only for individual providers (as opposed to hospitals).

Voluntary health insurers involved in substitutive VHI and the WTZ spend a much higher proportion of their total costs on administration (12.7% in 1999) than insurers involved in the AWBZ (0.7%) or the ZFW (4.4%) (see also Table 19) (Vektis, 2000).

### *Public policy and regulation*

The market for substitutive VHI is not as tightly regulated as the statutory health insurance schemes. Voluntary health insurers are free to set their own terms and conditions, leading to great variety in selection procedures, benefits provided, premiums, reimbursement etc. The only important form of supervision concerns insurers' solvency. Insurers involved in VHI as well as the AWBZ or ZFW are also prohibited from using the public resources of the AWBZ and the ZFW for their VHI activity.

For various reasons the current system of health care funding in the Netherlands has increasingly been seen as a source of inefficiency and inequity, leading the government to announce widespread reform of the health care system in 2001, including its intention to extend statutory coverage to the whole population by merging the existing health insurance schemes into one

universal, compulsory, public health insurance scheme (Ministry of Health, Welfare and Sport, 2001).

### 2.1.2 Complementary and supplementary VHI

Some form of complementary or supplementary VHI is available in every member state. We must emphasize that the distinction between complementary and supplementary VHI is not always clear, and in some member states there may be significant overlap between them. It is also important to note that the benefits provided by complementary and supplementary VHI are heavily influenced by the benefits provided by the statutory health care system and may therefore vary substantially from country to country. Complementary and supplementary VHI are usually available to the whole population.

#### Complementary VHI

In contrast to substitutive VHI, complementary VHI provides full or partial cover for services that are excluded or not fully covered by the statutory health care system. Some insurers restrict benefits to inpatient care, but where cover is available for outpatient care it may include a significant part of the costs of visits to primary care practitioners and specialists, nursing staff, drugs, tests, medical appliances, transport costs, corrective lenses, dental care, maternity care and complementary or alternative treatment. Levels of reimbursement vary from country to country and may also vary according to the insurance package chosen.

Complementary VHI provides cover for the reimbursement of co-payments in Belgium, Denmark (mainly pharmaceuticals and dental care), France (ambulatory care), Ireland, Luxembourg (hospital co-payments), the Netherlands (mainly dental care) and Sweden (mainly pharmaceuticals and dental care). As a result of recent reforms in Italy, Italian mutual associations are allowed to cover co-payments and the costs of services excluded from the statutory benefit package funded by the national health service (Taroni, 2000). With the exception of France, the market for VHI to cover co-payments is not substantial in the European Union. For example, coverage of co-payments for pharmaceuticals varies considerably, accounting for a large part of complementary VHI in Denmark, but hardly any in the Netherlands and none at all in Spain. VHI coverage for co-payments is also less likely to be offered by commercial insurers, perhaps because it is not particularly profitable.

Patients can purchase complementary VHI to cover outpatient costs in Austria (in conjunction with a supplementary VHI package), Belgium, France, Germany, Ireland, Italy, Portugal and Spain.

Although statutory health care systems increasingly exclude dental care, the VHI market for dental care in the European Union is not as large as might be expected. The reasons for this are not clear. Some cover for dental care is available in Austria, Belgium (for self-employed people), Denmark, France, Germa-

ny, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

### Supplementary VHI

Supplementary VHI serves to increase consumer choice and access to different health services, traditionally guaranteeing superior accommodation and amenities in hospital (a single room with en suite bathroom, for example) rather than improved clinical quality of care and, crucially, faster access to treatment, particularly in areas of health care with long waiting times, such as surgery. In some cases supplementary VHI increases choice of provider and benefits; subject to availability in different countries, individuals with supplementary VHI may see private general practitioners and specialists, be treated in private hospitals and private beds in public hospitals or receive benefits in cash rather than in kind. Supplementary VHI is particularly prevalent in member states with national health services such as Greece, Italy, Portugal, Spain and the United Kingdom, where it is often referred to as double coverage. It is of growing importance in Scandinavian member states such as Denmark, Finland and Sweden. In health care systems characterized by waiting lists or long waiting times for treatment, supplementary VHI may allow individuals to jump the queue.

Table 9 gives examples of the benefits covered by complementary and supplementary VHI in each member state.

## 2.2 Market structure

In this section we describe the types of insurers selling VHI in the European Union and examine the extent to which VHI is purchased by groups rather than by individuals.

### 2.2.1 Types of insurer

Voluntary health insurers in the European Union can be distinguished in terms of their legal status and in terms of their degree of specialization in health.

#### Legal status

In terms of legal status, three types of insurers are present in the EU market for VHI: mutual and provident associations (distinguished by their non-profit status) and commercial companies (distinguished by their for-profit status). The distinction between non-profit and for-profit is important because an insurer's profit status is likely to influence its motivation and may have a significant bearing on its tax burden.

Mutual and provident associations in the European Union have a long history of involvement in social protection-based solidarity principles (Palm, 2001). AIM<sup>12</sup>

<sup>12</sup>The international grouping of autonomous health insurance and social protection bodies operating according to the principles of solidarity and non-profit-making.

Table 9. Examples of the benefits provided by complementary and supplementary VHI in the European Union, 2001

Country	Complementary	Supplementary
Austria	<ul style="list-style-type: none"> <li>hospital per diem charge (cash benefit)</li> <li>alternative treatment</li> </ul>	<ul style="list-style-type: none"> <li>physician costs</li> <li>supplementary hospital costs</li> <li>faster access/increased choice</li> </ul>
Belgium	<ul style="list-style-type: none"> <li>legal co-payments for non-reimbursed inpatient/outpatient costs</li> <li>carer costs (loss of independence)</li> </ul>	<ul style="list-style-type: none"> <li>supplementary hospital costs</li> </ul>
Denmark	<ul style="list-style-type: none"> <li>co-payments for drugs, dental care, physiotherapy, corrective lenses etc.</li> </ul>	<ul style="list-style-type: none"> <li>access to private hospitals in Denmark and abroad</li> </ul>
Finland	<ul style="list-style-type: none"> <li>some public sector hospital costs</li> <li>travel expenses</li> </ul>	<ul style="list-style-type: none"> <li>private care for children</li> <li>faster access</li> <li>increased choice (including access to private hospitals)</li> </ul>
France	<ul style="list-style-type: none"> <li>co-payments (including differences between negotiated and real prices)</li> <li>treatments excluded by public sector</li> <li>home help</li> <li>hospital per diem charge</li> </ul>	<ul style="list-style-type: none"> <li>faster access to specialist consultations</li> <li>choice of private room in hospital</li> </ul>
Germany	<ul style="list-style-type: none"> <li>outpatient care</li> <li>dental care</li> <li>hospital daily allowance (cash benefit)</li> </ul>	<ul style="list-style-type: none"> <li>choice of specialist</li> <li>amenity beds</li> </ul>
Greece	<ul style="list-style-type: none"> <li>hospital daily allowance (cash benefit)</li> </ul>	<ul style="list-style-type: none"> <li>faster access</li> <li>choice of private provider and accommodation</li> </ul>
Ireland	<ul style="list-style-type: none"> <li>outpatient cover for general practitioner visits, specialist consultations, X-rays and other items (subject to a deductible)</li> <li>outpatient cover for alternative treatment (BUPA Ireland)</li> <li>hospital per diem charge</li> <li>cost of occupational therapy, X-rays, lab tests, drugs in hospital</li> <li>consultants' fees for inpatient, day care and some outpatient treatment</li> <li>maternity benefits</li> <li>convalescence in a nursing home</li> </ul>	<ul style="list-style-type: none"> <li>cost of hospital accommodation in private beds in public hospitals and private hospitals (including day care surgery)</li> </ul>
Italy	<ul style="list-style-type: none"> <li>co-payments</li> <li>non-reimbursed services</li> <li>dental care</li> <li>hospital per diem charge</li> </ul>	<ul style="list-style-type: none"> <li>increased choice of provider</li> <li>increased access to private hospitals</li> </ul>
Luxembourg	<ul style="list-style-type: none"> <li>hospital co-payments</li> <li>pre- and postoperative and convalescence costs</li> <li>dental prostheses</li> <li>surgical treatment abroad</li> <li>partial reimbursement where no agreement on the cost of a treatment</li> </ul>	<ul style="list-style-type: none"> <li>additional charges for a private room in hospital</li> </ul>
Netherlands	<ul style="list-style-type: none"> <li>mainly dental care</li> <li>drug co-payments (marginal)</li> <li>cross-border care</li> <li>alternative treatment</li> </ul>	<ul style="list-style-type: none"> <li>faster access to acute and long-term care</li> </ul>
Portugal	<ul style="list-style-type: none"> <li>dental care</li> <li>ophthalmology</li> <li>co-payments</li> <li>cash benefits</li> </ul>	<ul style="list-style-type: none"> <li>access to private providers</li> </ul>
Spain	<ul style="list-style-type: none"> <li>dental care</li> </ul>	<ul style="list-style-type: none"> <li>increased choice of provider</li> </ul>
Sweden	<ul style="list-style-type: none"> <li>some reimbursement of co-payments, drugs, dental care, alternative treatment</li> </ul>	<ul style="list-style-type: none"> <li>faster access to elective outpatient care</li> <li>access to private hospitals</li> </ul>
United Kingdom	<ul style="list-style-type: none"> <li>cash benefits</li> <li>dental care</li> <li>alternative treatment</li> </ul>	<ul style="list-style-type: none"> <li>faster access to specialists and elective treatment</li> <li>choice of amenities in public hospitals</li> </ul>

Sources: National reports prepared for this study.

defines solidarity as a mechanism that enables everyone to “contribute according to their financial resources and benefit from services according to their needs”. AIM’s member organizations in 11 member states therefore “strive to maintain access to high quality care for everyone regardless of age, sex, health status, income or any other social, professional, religious or ethnic criterion”. However, as there is variation in the extent to which the principle of solidarity is pursued by mutual or provident associations in different member states at the present time (even among AIM member organizations), we cannot make assumptions about insurers’ conduct on the basis of their legal and non-profit status.

Mutual or provident associations are present in most member states. The exception is Austria. For largely historical reasons, such organizations dominate the market in many countries, including Belgium, Denmark, France, Ireland, Luxembourg and the Netherlands. Nevertheless, their share of the VHI market is declining in some member states, notably in Finland (where it was already insignificant), Denmark, the United Kingdom and, to a lesser extent, France.

Provident associations in the United Kingdom used to enjoy about two thirds of the market in the 1990s, but in 1999 the second largest provident association (and second largest voluntary health insurer) was acquired by a commercial undertaking (AXA Sun Alliance) (Laing, Buisson, 1999). Provident associations now account for about half of all premiums in the United Kingdom, with the largest provident association holding a market share of 40% (Laing, Buisson, 2001). In France the mutual associations (*mutuelles*) gained market share between 1980 and 1996, a period when the proportion of total expenditure on health care financed by them rose from five to seven per cent (Lancry, Sandier, 1999), while the proportion financed by commercial insurers stabilized at around three per cent (Smosarski, Jack, 1998). Since then, however, the mutual associations’ share of the market appears to have declined slightly, and they now account for 61% of the overall VHI market in terms of number of people covered. Commercial insurers account for 22% and provident associations (*instituts de prévoyance*) for 17% (Sandier, Ulmann, 2001).

The Irish market is dominated by Vhi Healthcare (previously the Voluntary Health Insurance Board or VHIB), which was established in 1957 as a non-profit, quasi-public but independent body and developed as a virtual monopoly until the market was opened to limited competition in 1994, in order to comply with the third non-life insurance directive. To date only one other company (BUPA Ireland, a subsidiary of BUPA International) has established itself in the Irish market. Since entering the market in 1996, BUPA Ireland has gained a 14% share of the market. The Irish government’s 1999 white paper on VHI included plans to convert Vhi Healthcare to a state-owned public limited company with full commercial freedom, in the hope that privatizing the company and removing its links with the Department of Health and Children would encourage a more level playing field (Department of Health and Children, 1999), but

the effect this will have on competition remains to be seen. For the time being at least, the government does not show signs of privatising Vhi Healthcare.

The third non-life insurance directive does not distinguish between different types of insurer and specifically outlaws the preferential treatment of one type of insurer over another. For example, mutual and provident insurers are currently exempt from the insurance premium tax that is levied on policies sold by commercial insurers in Belgium, France and Luxembourg. Member states that use national tax laws to favour non-profit over commercial insurers may contravene EU competition law (for further details see sections 2.4 and 4.3). More broadly, the French government has so far failed to transpose the third non-life directive with regard to mutual associations, and in December 1999 the European Court of Justice ruled against this incomplete transposition (European Commission, 2000b). The French government has since agreed to transpose this aspect of the directive, although the legislation will not be implemented until the beginning of 2003 (see section 5.3.1) (European Commission, 2000b).

### Specialization in health and EU law

Germany is the only member state in which substitutive VHI is sold entirely by specialist health insurers (CEA, 2000). Traditionally, the German supervisory body has only allowed insurers specializing in health to sell VHI, in order to protect policy holders from insolvency arising from other business (Bundesaufsichtsamt für das Versicherungswesen, 2001). The legislation transposing the third non-life insurance directive into German law formally abolished this rule (Article 5 of the directive), but the German government added a new provision to German social law, prohibiting employees from benefiting from employer-paid contributions if the insurer combined health with other types of insurance (Busse, 2001). The European Commission considered this to be an indirect infringement of the directive and sent a so-called reasoned opinion to Germany in 1996 (European Commission, 1996). In the absence of a satisfactory response from the German government, the European Commission has referred Germany to the European Court of Justice (Case C-298/01). The principle of separation of VHI from other types of insurance does not apply to foreign insurers (Bundesaufsichtsamt für das Versicherungswesen, 2001).

Elsewhere, the proportion of specialist health insurers ranges from none in Austria and Portugal to very few in Italy (0.8%), Belgium (4.3%) and France (5.6%), to more than a third in the United Kingdom (36%) and almost half in the Netherlands (47.2%) (CEA, 2000). Some types of insurer may be more likely to specialise in health than others. In France, for example, more than half of all mutual associations specialise in health, and €3.3 billion of the €9 billion in premiums collected by mutual associations in 1999 were for VHI (Sandier, Ulmann, 2001).

## Number of insurers

According to a recent industry report, 54.9% of all VHI premiums in Europe in 1998 were written or earned by 25 companies, 17 of which were German (Datamonitor, 2000a). Four out of the top five insurers in the European Union were German; the fourth-largest insurer was British. There is considerable variation in the number of insurers operating in each member state. Some national markets are highly concentrated (for example, Ireland, Denmark, Finland, Austria, Greece and the United Kingdom), while France, Italy and Spain have the greatest proliferation of companies (more than 100 in each country). The number of insurers however, is not indicative of market size.

The 1990s have seen a clear trend towards increasing concentration in the market in many member states. In Spain, for example, there were 269 insurers selling VHI in 1981 and 135 insurers in 1991, but the number of insurers has now dropped to about 100 (Rodríguez, 2001). The number of insurers has also declined in Italy (from 125 in 1997 to 104 in 2000) (Giannoni-Mazzi, 2001), Luxembourg (from 13 to 14 commercial insurers in the 1990s to 11 in 2001 (Engemann, 2001)) and Portugal (from 45 insurers in 1996 to 39 in 1999 (Oliveira, 2001)). The same pattern has been observed in Austria and Greece (Hofmarcher, 2001; Economou, 2001).

The share of the three largest insurers in each market is highest in Ireland (100%), Luxembourg (92% out of commercial insurance), Austria (84%), Sweden (80–90%), the United Kingdom (75%), Finland (62% of commercial insurance) and France (59.5% of commercial insurance) (Engemann, 2001; Hofmarcher, 2001; Skoglund 2001; Laing, Buisson, 2001). VHI markets are much less concentrated in Portugal (31.6%), Italy (33%) and Belgium (49% of commercial insurance) (Oliveira, 2001; Giannoni-Mazzi, 2001; Hermesse, 2001). In Greece the share of the five largest insurers is relatively high (70.4%) (Economou, 2001).

During the 1990s statutory sickness funds in the Netherlands were allowed to offer complementary and supplementary VHI and to co-operate and merge with voluntary health insurers, leading to significant mergers that reduced the number of sickness funds by almost 50% (from 53 to 27), in spite of the entry of 6 new funds (OECD, 1998a). The current market is dominated by three insurance conglomerates, two of which are also the largest non-life insurance companies (Ohra and Achmea) (OECD, 1998a). Co-operation between the sickness funds and voluntary health insurers enables the sickness funds to market an integrated statutory and voluntary employee benefits package to employers (covering life insurance, VHI, sickness fund cover, invalidity benefit, advice on benefits and value-added management services). It also allows large voluntary health insurers to take advantage of the sickness funds' existing customer base (Natarajan, 1996). The Dutch government has introduced legislation preventing insurers involved in providing both voluntary and statutory health in-



insurance from using public funds for private business, but in practice it may be difficult to ensure that this distinction is observed (Maarse, 2001).

### 2.2.2 Buyer characteristics: individual versus group policies

A key factor in the degree and distribution of VHI coverage is the extent to which insurance is purchased individually or through groups (usually employment-based groups). Group policies are popular with insurers for three reasons:

1. they generally have a lower unit cost and provide high volumes of business without a correspondingly large market outlay (BMI Europe, 2000);
2. offering reduced premiums and favourable conditions to groups also means that insurers automatically cover a younger, healthier, more homogeneous population (Gauthier, Lamphere, Barrand, 1995); and
3. in terms of competition, an employer may be more likely than an individual to shop around for cheaper policies, and to switch from one insurer to another as a result of finding a better deal.

The distinction between policies purchased by individuals and groups is also important from the subscriber's perspective, partly because group premiums are often group-rated, whereas individual premiums are more likely to be adjusted for risk (see section 2.3.1), and partly because they are usually substantially cheaper than individual policies.

Relatively low levels of individual demand for VHI in many member states has forced insurers to rely more heavily on sales to groups. The 1980s saw rapid expansion of the market for group policies, largely as a result of the sustained economic growth experienced by several member states during this time. The trend for increasing sales of group policies continued into the 1990s, albeit at a slightly slower pace. Table 10 shows that group policies currently account for the majority of VHI policies in Sweden, Ireland, Portugal, Greece and the United Kingdom; more than half of all policies in the Netherlands; and about half of all policies in France. Group policies are not significant in Spain (15% to 18% of those covered by VHI), Austria or Germany (where the proportion of group contracts is as low as 6.6%) (Datamonitor, 2000a), and there are very few in Denmark or Finland. In some countries commercial VHI policies are more likely to be purchased by groups than individuals (73.6% of commercial Belgian VHI policies in 1998 (CEA, 2000) and most commercial VHI policies in Denmark (Vrangbæk, 2001)). During the 1990s, group policies gained an increasing share of the VHI market in Austria, Greece, Ireland, Luxembourg, the Netherlands, Spain, Sweden and the United Kingdom. Group policies are likely to increase in Belgium, Denmark and the United Kingdom, but have decreased in France. The majority of group policies are voluntary, although group policies provided as a compulsory component of an employee's contract account for 23.6% of all VHI policies in France. Group policies 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 (see Table 10).

**Table 10.** The extent to which VHI policies are purchased by groups and individuals in the European Union, 2000 or latest available year

Country	Policies purchased by groups (employers)	Are group policies employer paid?	Policies purchased and paid for by individuals
Austria	29.2% (gained market share 1996–2000)	Yes	70.8% of premium income (2000)
Belgium	Some commercial policies	Some group policies	All mutual and almost all commercial policies
Denmark	80+% commercial policies	Yes (part of job contract)	Almost all policies sold by Denmark (mutual association)
France	23.6% compulsory (1998) 25.2% voluntary (1998)	Partially or fully (compulsory); partially (voluntary)	46.8% (1998)
Germany	Very few	–	Almost all
Greece	Increased by 106.1% (1989–1995)	Yes	Increased by 64.1% (1989–1995)
Ireland	75–80% (2000)	20–25% (2000)	20–25% (2000)
Italy	26.3% (1999); in 1994 only 24% of firms did not offer any group policies	Yes	53.3% commercial (1999) 20.3% mutuals (1999)
Luxembourg	5% of commercial policies (2000)	–	100% mutuals (2000) 95% commercial (2000)
Netherlands	More than 50% (2000)	–	Less than 50% (2000)
Portugal	71% (1998)	Most group policies	29% (1998)
Spain	15–18% (1998)	Yes, for senior managers; some for other employees	82–85% (1998)
Sweden	90%	Yes	10%
United Kingdom	69.5% of persons covered by employer-paid policies in 2000	Some group policies	30.5% of persons covered by policies paid for by individuals and employees in 2000

Source: National reports prepared for this study.

Note: No data available for Finland.

Much of the growth in VHI in the United Kingdom in the 1980s was due to the increase in sales of employer-paid group policies (Association of British Insurers, 2000). Currently, around 59% of VHI policies are purchased by employers (compared to 48% in 1993 (Youngman, 1994)) and 31% by individuals; a

further 10% are bought by professional associations or trades unions but paid for by employees (Robinson, 1999). Almost a third of group policies are fully or partially paid for by employees themselves (Robinson, 1999). The likelihood of insurance being paid for by an employer increases with income; 50.7% of those with VHI in the top income decile report that their policy was purchased by their employer, compared with only 25.5% of those with VHI in the bottom four income deciles (Emmerson, Frayne, Goodman, 2001). This may be for two reasons: first, highly paid jobs are more likely to provide fringe benefits such as VHI; second, employers may be more concerned about the health of highly paid employees (Emmerson, Frayne, Goodman, 2001).

Since 1990 the number of subscribers with employer-paid policies in the United Kingdom has grown by an estimated 23%, compared to a fall of 6% in the number of subscribers who pay for their own policies (Laing and Buisson 2001). The disparity between employer-paid and other policies has been particularly noticeable since 1996, as the sale of employer-paid policies grew by 21.5%, while the sale of other policies fell by 14% (Laing, Buisson, 2001). In 1999 the number of people with VHI in the United Kingdom fell by 4.5% in 1999, with the fall in demand concentrated solely in individual/employee-paid policies; employer-paid policies grew by 1.2%, but individual/employee-paid policies were down by 5% (Laing, Buisson, 2000).

According to Laing and Buisson, the leading compilers of statistics on the VHI industry in the United Kingdom, the growth of employer-paid policies purchased by groups in the United Kingdom has been driven by the underlying strength of corporate economic performance, low unemployment, strategic price discounting, increased concentration of marketing and the changing attitude of employers, who are recognizing the potential costs of long absence from work due to accident or ill health (Laing, Buisson, 2001). Strategic price discounting is almost certainly the most powerful explanatory factor for the continuing rise in sales of group policies; not only are group policies in the United Kingdom much cheaper than individual policies, but their annual price increases have also been much smaller (Papworth, 2000).

In 1999 the Irish government predicted that the provision of VHI as an employee benefit would expand in Ireland (Department of Health and Children, 1999). The proportion of VHI policies purchased by groups has risen since the mid-1990s, when it was about 70% (Kennedy, 1995), to between 75% and 80%, although only 20% to 25% of all VHI policies are employer-paid (Vhi Healthcare, 2001c). The rise in the sale of group policies can be attributed to sustained economic growth, the presence of multinational corporations and discounts of up to 10% (the maximum allowable discount by law) (Vhi Healthcare, 2001c; Department of Health and Children, 2001b).

A 1992 survey found that 35% of French households purchased complementary VHI individually, while 49% received it from their employers (Natara-

jan, 1996). The proportion of group policies was estimated at 61.1% in 1998 (CEA, 2000) and at 48.8% in 2000 (Sandier, Ulmann, 2001).<sup>13</sup> French mutual associations dominate the individual policies market and have a 60% share of the overall market for VHI. As in Belgium and Denmark, most commercial VHI policies are sold to employers rather than individuals (Imai, Jacobzone, Lenain, 2000). Commercial insurers in France are increasingly looking to the individual sector for profit generation, but find it difficult to compete with the provident associations, partly because of the fiscal advantages awarded to provident associations and partly because of their historical involvement in the pension sector (Sandier, Ulmann, 2001).

Substantial growth in the Portuguese VHI market between 1996 and 1999 was largely the result of growth in the sale of group policies. In 1999 the market grew by 13.6%, with higher growth in the market for individual policies (an increase of 25.4%) (Oliveira, 2001).

Finally, group policies in the Netherlands rose from 34.5% of all policies in 1980 to 46.6% in 1990 and 53.8% in 1998 (CEA, 2000).

## 2.3 Market conduct

### 2.3.1 Premium-setting, selection criteria and policy conditions

#### Premium-setting

Contributions to the statutory health care system via tax or social health insurance are usually related to income or wages (although they may be restricted by ceilings on the amount of income or earnings to be taxed). In contrast, VHI premiums are rarely income-related.<sup>14</sup> They are much more likely to be rated according to risk or on a community or group basis. Community-rated and group-rated premiums are based on the average risk of a defined community or firm; premiums are the same for all subscribers or a subgroup of subscribers in a given community or firm. Risk-rated premiums are based on an individual assessment of the future risk of ill health and therefore vary according to one or more risk factors. The method used to set premiums (community, group or risk rating) and the variables used in risk rating may have implications for cost and access (see section 3.2.1).

Since the third non-life insurance directive abolished national price and product controls in 1994, voluntary health insurers in the European Union are in theory free to rate premiums on any basis they choose, although insurers offering substitutive VHI are generally subject to some degree of regulation regarding the price of premiums and policy conditions.

---

<sup>13</sup> This apparently large decline in group policies may be due to differences in sources of data.

<sup>14</sup> The VHI premiums charged by some mutual associations in France are income-related up to a defined ceiling (usually close to the ceiling imposed in the statutory insurance scheme) (Sandier, Ulmann, 2001), but this may be the only example of income-related VHI premiums in the European Union.

Risk rating is the most common method used by insurers in the European Union to set premiums for complementary and supplementary VHI (and it may also be used to set substitutive VHI premiums). It is used to varying degrees and for different types of VHI in Austria, Belgium, Denmark (some policies), Germany, Greece (individual policies), Italy (commercial insurers), Luxembourg (commercial insurers), the Netherlands (luxury dental policies), Portugal (individual policies), Spain, Sweden (policies for those with pre-existing conditions) and the United Kingdom (individual policies). Table 11 gives examples of the variables used in risk rating in different member states. These include age, sex, occupation, household size, health status, medical history, family history of disease and extent of coverage (both in terms of benefits provided and cost-sharing required).

Group rating is used in Denmark (most policies), Greece (group policies), Italy (policies sold by the largest mutual associations), Portugal (group policies), Sweden (group policies) and the United Kingdom (group policies).

VHI policies with community-rated (flat-rate) premiums are much less common. They can be purchased in Belgium and Luxembourg (for complementary VHI sold by mutual associations) and the Netherlands. Flat-rate premiums with some variation depending on age are available in Portugal. Ireland is the only member state in which community rating is prescribed by law. All insurers in Ireland must offer community-rated premiums, open enrolment and lifetime cover. The Irish Health Insurance (Amendment) Act of 2001 introduced the concept of lifetime community rating. Once this is implemented, voluntary health insurers will be free to impose a premium loading on any individual who purchases VHI after the age of 35 (The Society of Actuaries in Ireland 2001).

### Information required from applicants

The information required from applicants may be closely related to the rating method used to set premiums (see Table 11). Insurers that use health status as a variable for risk rating premiums will require applicants to complete a medical questionnaire. Medical questionnaires may also include questions about family history of disease, which is a form of genetic information (Mossialos, Dixon, 2001). For this reason Swedish insurers refrain from obtaining information about family history of disease (on the basis of an agreement between the Swedish government and the Swedish association of insurers), although it is required by insurers in Greece, Luxembourg, Portugal and the United Kingdom. The issue of genetics and insurance is discussed in some detail in section 3.2.5. Austrian law prohibits the use of medical examinations, but medical examinations may take place in Belgium (commercial policies), Greece, occasionally in Portugal (group policies) and in rare instances in Sweden. In some cases insurers will not require applicants to provide any medical information, but they may impose waiting periods or undertake moratorium underwriting (see below).

Table 11. Examples of the variables used for rating VHI premiums and the medical information/procedures required from applicants, 2001

Country	Variables used for rating premiums	Medical information/procedures required from applicants
Austria	Age at entry, sex, marital status, individual health status	Insurers are prohibited by law from carrying out examinations
Belgium	<i>Mutual</i> : age, household size <i>Commercial</i> : age, sex, area of residence (higher charges in the Brussels area), level of coverage, level of deductible	<i>Mutual</i> : only some mutuels require a medical questionnaire <i>Commercial</i> : medical questionnaire and/or examination
Denmark	<i>Mutual</i> : group rates according to level of coverage <i>Commercial</i> : age, employment status	Medical questionnaire
Finland	Age	
France	<i>Group</i> : socioeconomic and demographic status <i>Individual</i> : age	<i>Commercial</i> : medical questionnaire (usually for >55 years only) <i>Mutual</i> : none
Germany	Age at entry, sex, health status	
Greece	Age, sex, profession, family and individual health status	Medical questionnaire, examination, X-rays
Ireland	Age (late-entry loading for applicants older than 35)	None
Italy	<i>Commercial/individual</i> : age, sex, health status, area of residence <i>Commercial/group</i> : age, sex, area of residence, less emphasis on health status	<i>Commercial</i> : medical questionnaire <i>Mutual</i> : none
Luxembourg	<i>Commercial</i> : age, sex, family and individual health status, level of coverage, duration of cover, any additional guarantees	<i>Commercial</i> : medical questionnaire <i>Mutual</i> : none
Netherlands	<i>Dental policies</i> : age	
Portugal	Age, sex, family and individual health status	<i>Individual</i> : medical questionnaire, examination in rare cases <i>Group</i> : occasionally examination
Spain	Age, sex	Medical questionnaire
Sweden	Age, health status	Medical questionnaire, examination (in rare cases) Insurers refrain from obtaining information about family history of disease
United Kingdom	Insurers use a wide range of variables including family and individual health status	<i>Individual</i> : Medical questionnaire

Sources: National reports prepared for this study.

## Age limits and types of contract

VHI cover can be offered as a short-term (non-life) basis, or on a long-term (life) basis in which premiums are used to finance both current year costs and to build reserves for increasing age. Short-term (usually annual) contracts are the norm for VHI in the European Union, and most insurers set a maximum age limit for purchasing VHI, usually between 60 and 75 (see Table 12). Some insurers also cancel contracts when people reach retiring age. Lifetime cover is required by law in Ireland, where it applies to all policies. It is also available for hospital cost insurance policies in Austria, for some policies in Greece and Sweden and for the most expensive policies in Portugal. Substitutive VHI in Germany is written on a lifetime basis.

## Exclusions

Open enrolment entitles everyone in a given population to insurance cover and prohibits insurers from rejecting applications. The Irish government requires all voluntary health insurers in Ireland to offer open enrolment, and mutual associations in Luxembourg offer open enrolment, but it is otherwise rare in the European Union (Department of Health and Children, 1999).

Insurers in Austria cannot refuse to insure someone with a chronic illness, but they are permitted to charge higher premiums or introduce some form of cost-sharing (see Table 13) (Hofmarcher, 2001). French insurers are also usually prohibited from excluding particular conditions, although they may do so if the insurer can prove that the subscriber suffered from the condition before purchasing the policy (Sandier, Ulmann, 2001).

In all other member states, VHI policies are generally subject to exclusions (see Table 13). Complementary and supplementary VHI policies usually exclude pre-existing conditions, although some insurers will cover them for an increased premium. The list of exclusions can be very long. In the United Kingdom, for example, VHI policies do not usually cover pre-existing conditions, general practitioner services, accident and emergency admission, long-term chronic illnesses such as diabetes, multiple sclerosis and asthma, drug abuse, self-inflicted injuries, outpatient drugs and dressings, HIV/AIDS, infertility, normal pregnancy and child birth, cosmetic surgery, gender reassignment, preventive treatment, kidney dialysis, mobility aids, experimental treatment and drugs, organ transplants, war risks and injuries arising from hazardous pursuits (Association of British Insurers, 2001a).

Table 12. Age limits and types of contract, 2001

Country	Age limits	Type of contract
Austria	No	Per diem hospital cost policies: annual contracts Hospital cost insurance: life-time cover
Belgium	65	
Denmark	60	Annual or long-term contracts
Finland	60–65	
France	<i>Commercial</i> : 65–70 <i>Mutual</i> : usually none <i>Provident</i> : usually none (if covered before 65)	Annual contracts
Germany	No (substitutive VHI)	Lifetime cover (substitutive VHI)
Greece	Insurers can set age limits	Annual contracts and lifetime cover available (lifetime cover more popular); insurers can reject applications
Ireland	Open to people older than 65 since 2001	Lifetime cover
Italy	<i>Commercial individual</i> : people older than 75 usually not eligible <i>Commercial group</i> : access restricted to employees and (sometimes) dependants <i>Mutual group</i> : no age limits; retired people can continue to be covered if they have been covered for 5 to 10 years <i>Mutual individual</i> : 65–75	Mostly annual contracts
Luxembourg	<i>Commercial</i> : 60	Annual contracts; insurers cannot cancel contracts
Netherlands	Age limits may apply	Annual contracts; insurers cannot cancel contracts on the basis of claims experience
Portugal	65 (70 if covered between 55 and 64 years old)	Annual contracts; not always clear whether insurers can cancel contracts or not; the most expensive policies offer life-time cover
Spain	60–75 (but the two largest insurers do not set an age limit)	Annual contracts
Sweden	65–70	Annual contracts; some insurers offer lifetime cover if purchased before 65
United Kingdom	No age limits but only 5% of the older than-65 population is covered (against an average of 9% for all age groups)	Mostly annual contracts

Sources: National reports prepared for this study.



Table 13. Conditions usually excluded from VHI cover, 2001

Country	Usual exclusions
Austria	<i>Individual:</i> pre-existing conditions usually excluded (but not from group policies); insurers cannot refuse to insure someone with a chronic illness but may charge higher premiums and/or introduce cost-sharing arrangements
Belgium	<i>Mutual:</i> psychiatric and long-term care (lump sum) <i>Mutual:</i> psychiatric care (co-payment) <i>Commercial:</i> pre-existing conditions, infertility treatment, accidents arising from sports
Denmark	Pre-existing conditions
Finland	Pregnancy and childbirth, infertility treatment, alcoholism, herbal remedies, treatment covered by statutory health insurance
France	Excluding any disease is forbidden by law, although it can be authorized in individual policies under certain conditions: the disease has to be clearly stated and the insurer has to prove that the patient had the disease before purchasing the policy
Germany	Pre-existing conditions are excluded if they were known at the time of underwriting and were not disclosed by the insured; declared pre-existing conditions are covered but generally result in higher premiums
Greece	Pre-existing conditions
Ireland	Open enrolment
Italy	<i>Individual:</i> pre-existing conditions, chronic or recurrent diseases, mental illness, alcohol and drug addiction, cosmetic surgery, war risks, injuries arising from insurance, natural disasters etc.; also often dental care not caused by accident/illness <i>Group:</i> pre-existing conditions such as diabetes, drug and alcohol addiction, HIV/AIDS, severe mental health problems such as schizophrenia, voluntary termination of pregnancy and war risks
Luxembourg	<i>Mutual:</i> open enrolment (but no cover for treatments excluded from statutory health insurance) <i>Commercial:</i> pre-existing conditions
Netherlands	Some dental plans may require people to have their teeth restored before acceptance
Portugal	<i>Individual:</i> pre-existing conditions, long-term chronic illnesses (such as diabetes, multiple sclerosis and asthma), HIV/AIDS, haemodialysis, self-inflicted injuries, psychiatric treatments, check-ups, dental care, outpatient drugs, alternative medicine and non-evidence based treatment; dental care, delivery costs and outpatient drugs are only covered by the most expensive policies
Spain	HIV/AIDS, alcoholism and drug addiction, dental care (often available for a supplementary premium), prostheses, infertility treatments, orthopaedics etc.; some insurers do not have general restrictions but may reject certain conditions; most insurers offer extra benefits for a supplementary premium e.g. organ transplants, second opinions, family planning, assistance during trips, treatment abroad, certain prostheses; only one insurer, in one policy, offers homeopathy or spa treatment
Sweden	Emergency care, long-term care, HIV/AIDS, some other communicable diseases, diseases and injuries as result of the use of alcohol or other intoxicating substances, prenatal care, childbirth (normal or with complications), termination of pregnancy, infertility treatment, vaccinations
United Kingdom	Pre-existing conditions, general practitioner services, accident and emergency admissions, long-term chronic illnesses such as diabetes, multiple sclerosis and asthma, drug abuse, self-inflicted injuries, outpatient drugs and dressings, HIV/AIDS, infertility, normal pregnancy and childbirth, cosmetic surgery, gender reassignment, preventive treatment, kidney dialysis, mobility aids, experimental treatments and drugs, organ transplants, war risks and injuries arising from hazardous pursuits

Sources: National reports prepared for this study.

## Waiting periods and moratorium underwriting

Open enrolment is usually accompanied by mandatory waiting periods. For example, insurers in Ireland will only cover treatment after a waiting period of 12 months, and will only cover treatment of pre-existing conditions after a waiting period of 2 to 7 years with Vhi Healthcare (the dominant insurer) or up to the legally allowed maximum of 10 years with BUPA Ireland. Non-profit insurers stipulate a waiting period of 6 months in Belgium, 3 months to 2 years in France and 12 months in Luxembourg (see Table 14).

**Table 14. Waiting periods before claims may be made, 2001**

Country	Waiting periods
Austria	None
Belgium	<i>Mutual</i> : 6 months 9–10 months for delivery (lump sum), 12 months for delivery (co-payment)
Denmark	None
France	3 months to 2 years
Germany	May be required but in practice they only exist as limitations on dental surgery and dentures during the first years of subscription; for example the maximum reimbursement is limited to € 000 in the first year, €4 000 in the second and €3 000 in the third
Greece	None; but moratorium underwriting may emerge in future
Ireland	12 months Pre-existing conditions: up to 10 years (BUPA), 2–7 years (Vhi Healthcare) Limits on psychiatric care in hospital (BUPA, 100 days; Vhi Healthcare, 180 days) and inpatient stays (180 days)
Italy	<i>Individual and mutual</i> : usually 30–180 days
Luxembourg	<i>Mutual</i> : 12 months <i>Commercial</i> : 3 months
Portugal	<i>Individual</i> : minimum 3 months for all insurers; some insurers offer moratorium underwriting
Spain	9–12 months for delivery 6 months for surgery and high-tech diagnostic tests (MRI, CAT) Psychiatric hospitalizations usually limited to 30–60 days per year
Sweden	Only for group policies where no individual health information is required
United Kingdom	Some insurers use moratorium underwriting; the moratorium is typically 2 years

*Source*: National reports prepared for this study.

*Note*: No data available for Finland and the Netherlands. MRI: magnetic resonance imaging; CAT: computerized axial tomography.

Insurers in some member states may operate a moratorium system of underwriting whereby individuals do not have to make a medical declaration, fill in a medical questionnaire or undergo a medical examination, and whereby, for a specified period, any pre-existing conditions are not covered. Moratorium policies differ from policies with mandatory waiting periods in that they will only subsequently cover conditions for which the insured person remained symptom- or treatment-free during the waiting period. For example, moratorium-underwritten VHI policies in the United Kingdom typically state that any relevant pre-existing condition that has been incurred in the five years before the policy was taken out will become eligible for treatment two years from the policy start date, provided that in the interim the policy-holder has not consulted a doctor about that or any related condition, nor otherwise sought advice about it (including related check-ups), nor taken medication for it (including drugs, medicines, special diets or injections). This type of underwriting has raised concerns about the potential negative consequences of people foregoing or delaying treatment in order to qualify for full coverage.

As long as subscribers are clearly informed in advance, the existence of mandatory waiting periods should not present a problem. However, moratorium underwriting is more controversial and its use in the United Kingdom has been criticized by the Office of Fair Trading (OFT), particularly with regard to the potential of moratorium underwriting to discourage individuals from seeking treatment when they need it. In a report published in 1996, the OFT took the view that subscribers of moratorium-based VHI were more likely to suffer detriment through failing to understand what was covered, and recommended that insurers abandon the practice (OFT, 1996). The Association of British Insurers (ABI) was not able to reach a consensus on the issue and suggested that improved consumer education, with new leaflets, would help to reduce consumer detriment (OFT, 2000b). While the Office of Fair Trading agreed that improved information for consumers could represent an acceptable alternative to abandoning moratorium underwriting, it felt that the ABI's initiative fell short of what was required. In a second report, published in 1998, the OFT called for tighter self-regulation than the ABI's codes and guidance provided, but this has not been forthcoming (OFT, 2000b).

Moratorium underwriting is not common in the European Union. It is mainly offered by insurers in the United Kingdom and Portugal.

### 2.3.2 The provision of benefits

#### The range of benefits

VHI in the European Union covers a wide range of health services and offers a variety of benefit options, from total reimbursement of hospital costs to payment for cosmetic surgery or alternative treatment (see Table 9 above). Substitutive VHI schemes offer the most comprehensive benefit packages, largely as a result of government intervention, providing benefits similar to those cov-

ered by the statutory health care system. However, the benefits arising from complementary and supplementary VHI are largely unregulated, leaving insurers free to determine the size and scope of the packages they offer. This has led to a proliferation of complementary and supplementary VHI products in many member states; individuals may be able to choose from a wide selection of packages with differences in coverage levels, payment mechanisms, reimbursement (in kind or cash) and the extent of cost-sharing through co-payments, deductibles and ceilings on benefits.

### **Reimbursement**

Benefits can be provided in cash (either through reimbursement or direct payment of a specified sum) or in kind (through the direct provision of health services). Reimbursement requires subscribers to pay out of pocket and then claim back their expenses at a later date. It is the norm amongst voluntary health insurers in Belgium, Denmark, Germany and the Netherlands (although Dutch insurers are increasingly paying providers directly), and takes place to a lesser extent in Austria, France and Spain.

### **Cost-sharing**

Cost-sharing in the form of ceilings on benefits (usually annual expenditure caps), deductibles (excesses) and co-payments seek to increase subscribers' awareness of the costs of health care and reduce their level of coverage. The extent to which subscribers are subject to cost-sharing varies considerably in different member states, but the trend in some member states is towards insurers increasing their reliance on cost-sharing as a means of securing income (PPP Healthcare, 2000). No claims bonuses are a similar form of incentive, rewarding subscribers who make few or no claims. While some analysts argue that expanding the use of no claims bonuses would be an effective means of containing costs, others have expressed concern regarding their potentially negative impact on beneficial health care utilization (Zweifel, 1987). As with moratorium underwriting in the United Kingdom, no claims bonuses may encourage subscribers to postpone treatment for as long as possible.

### **Choice of provider**

Most supplementary VHI policies aim to widen subscribers' choice of provider, allowing subscribers to consult doctors working in the private as well as the public sector. Complementary and substitutive VHI policies may also give subscribers a wider choice of provider.

The extent to which choice is restricted through the use of preferred provider networks (PPNs) or as a result of integration of insurers and providers varies considerably among member states. On the whole, preferred provider networks and integrated care still play a minor role in most member

states, although there is a tendency towards some forms of vertical integration among the largest insurers in some member states, notably BUPA and PPP Healthcare in the United Kingdom and SANITAS in Spain (acquired by BUPA in the early 1990s), where insurers have traditionally been providers as well. Vertical integration takes place to some extent in France and Belgium, but is actually precluded by legislation in the Netherlands, at least for the time being (Ministry of Health, Welfare and Sport, 2000a). In recent years the three largest voluntary health insurers in Portugal have made significant investments in the creation and development of PPNs (Oliveira, 2001). PPNs also exist in Italy.

The transition from indemnity insurance to integrated care is possible in countries with large VHI markets, such as the United States. It is much harder to effect in smaller markets such as the European Union, where coverage is voluntary, double coverage is a possibility and subscribers may object to any restriction in choice. The experience of SANITAS in Spain suggests that insurers have had to strike a delicate balance between limiting preferred providers and maintaining subscriber choice. SANITAS owns and manages two major hospitals in Madrid; it also contracts services from about 450 private and public hospitals and clinics and 15 000 private practitioners. The company recently piloted a scheme offering lower premiums in return for more limited choice of provider, but this had to be discontinued for lack of profitability.

Policy holders of the largest insurer in the United Kingdom are discouraged from using services outside the insurer's preferred network of providers (that is, their own consultants and hospitals) by having to pay co-payments ranging from about €103 for a minor operation to €13 for a major operation. However, following complaints of anticompetitive practice, primarily from private consultants and hospitals, the competition watchdog in the United Kingdom (OFT) launched an enquiry into the two largest insurers' development of preferred provider networks, vertical integration and negotiation of hospital charges. Although the OFT did not uphold the complaints, it did conclude that it would closely monitor any further moves towards vertical integration (OFT, 1999). It also demanded greater transparency in hospital selection procedures, suggesting that subscribers should be fully informed as to their rights to receive treatment from particular hospitals or consultants. At the same time the OFT recommended that the British Medical Association and the private medical sector should develop a Code of Practice on charging, a recommendation that it had first made in 1996 (CareHealth, 2000).

Larger voluntary health insurers in France are trying to establish a network of preferred providers, but there is no general tendency towards vertical integration, partly due to the public's negative perception of American-style health maintenance organizations (HMOs). In Belgium recent experiments with inte-

grated care systems for specific medical treatments in mutual associations have met with limited success (Stevens et al., 1998).

## Restrictions

VHI subscribers in some member states may be subject to a referral system or require prior authorization for treatment. Subscribers in the United Kingdom need a general practitioner's referral before they can consult a specialist or receive inpatient treatment. In the Netherlands, too, many voluntary health insurers stipulate that patients obtain a letter of referral from their general practitioner before seeing a specialist (Maarse, 2001), but there is some evidence to suggest that on the whole this is not a practical requirement, as few insurers conduct checks before reimbursing subscribers (Kulu-Glasgow, Delnois, de Bakker, 1998). Insurers in most member states do not require general practitioner referrals.

Some insurers in the United Kingdom encourage subscribers to obtain permission prior to undergoing treatment, while others insist that subscribers contact them first to check that they are covered for the treatment they plan to undergo (ABI, 2000). Insurers can use this as an opportunity to guide a subscriber to their preferred network of providers. In most member states, however, prior authorization can only be required for treatment abroad.

### 2.3.3 Insurers' relationship with providers

#### Methods of paying providers

Voluntary health insurers usually pay providers on a fee-for-service basis, although there is deviation from this norm in some member states. For example, a small number of providers in Spain are paid on a capitation basis; in France and Greece providers employed in insurers' own facilities may be paid a salary or a combination of salary and fees for service, insurers in Ireland pay hospitals according to a fixed rate per diem; some insurers in the Netherlands fix budgets for hospitals; and in Austria fee-for-service payment may be supplemented by lump sums.

In some member states, fees for service are paid on the basis of a fixed fee schedule (Luxembourg and France) or reference prices (Portugal), while providers in other member states may be able to charge higher rates than the schedule (some doctors in France and doctors in Germany, the Netherlands and Sweden). From the insurers' perspective, allowing providers to charge higher rates is likely to have cost implications. From the perspective of public policy, allowing providers to charge higher rates may have equity and efficiency implications. For example, German doctors are allowed to charge VHI patients 1.7 or 2.3 times the reimbursement values set in the fee schedule for private medical services issued by the Federal Ministry for Health (and sometimes even more)

(Busse, 2000a). Charging extra may reduce access for some patients, although German providers are no longer permitted to charge more than 1.7 times extra for individuals with the standard tariff (see section 2.1.1) (Bundesaufsichtsamt für das Versicherungswesen, 2001). Furthermore, over the last 10 years, expenditure for individuals with substitutive VHI in Germany has increased on average by 40% more than expenditure for those in the statutory health insurance scheme, and by almost two or three times for ambulatory care, dental care and pharmaceuticals (Busse, 2000a).

### Selective contracting

Some voluntary health insurers contract providers on a selective basis (that is, they contract with some rather than all providers) in Austria, Denmark, Greece, Ireland, Italy, Portugal, Spain, Sweden and the United Kingdom. Selective contracting is more difficult to undertake in member states where VHI subscribers are reimbursed and where there is free choice of provider in the statutory health care system (as in Belgium, France, Germany and Luxembourg). In the Netherlands it is possible for insurers to contract selectively with individual providers, (not with hospitals), but this practice is rare. Selective contracting may be limited in some member states due to lack of capacity in the private sector. This is currently the case in Denmark, where private for-profit hospitals are few in number and contracting with public hospitals is prohibited.

Voluntary health insurers in Austria make full use of selective contracting. For example, a large insurer recently issued guidelines specifying the size they would like private rooms in public hospitals to be and the facilities they would like them to contain (Hofmarcher, 2001).

### Private beds in public hospitals

Private beds in public hospitals (beds reserved for private patients) are used by voluntary health insurers in Austria, Ireland, Portugal and the United Kingdom. Private beds do not exist in public hospitals in Belgium, Denmark, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Spain or Sweden.

The existence and use of private beds in public hospitals may have equity and efficiency implications for the public sector. Up to 25% of hospital beds can be reserved for private patients in Austria. Because these beds retain about 90% of supplementary VHI income for hospital expenses, there is an incentive for hospitals to maximize the number of beds they set aside for private use. This means that bed capacity may be kept unnecessarily high (Hofmarcher, 2001).

Another factor related to efficiency concerns the way in which insurers are charged for the use of private beds in public hospitals. Insurers in Ireland make extensive use of such beds, and it is estimated that the cost of providing private care in public hospitals substantially exceeds the current level of charges for such care by as much as twice the charge currently levied on a semi-private

bed (Nolan, Wiley, 2000). The total annual cost of what is effectively a public subsidy of private beds is estimated to be €44.4 million (O'Shea, 2000). The Irish government's White Paper on Private Health Insurance proposed introducing economic pricing for private beds in public hospitals over a period of 5 to 10 years, but it has not yet materialized (Department of Health and Children, 1999).

In 1989 the British government did introduce economic pricing for private beds in NHS hospitals. As a result of NHS reforms, the newly formed NHS trusts began to charge commercial rates, leading to financial problems for many voluntary health insurers. The largest insurer in the United Kingdom was eventually forced to exclude coverage of private beds in NHS hospitals (Buck, Jenkins, Leonard, 1997).

### **Doctors practising in the private and public sector**

Doctors are prohibited from working in both the private and the public sector in Belgium, Greece (except, until recently, university doctors), Luxembourg and Sweden. Doctors work in both sectors in Austria, Denmark (to a limited degree), Finland, France, Germany, Ireland, the Netherlands, Portugal, Spain and the United Kingdom. Doctors in Italy must choose to be employed in one sector or the other, but public doctors may engage in a limited amount of private practice.

Discrepancies between the way in which doctors are paid by the statutory health care systems and voluntary health insurers may create incentives for doctors to treat VHI patients differently from public patients. In Spain, for example, doctors have a clear incentive to pay more attention to VHI patients because insurers pay them on a fee-for-service basis, while the state pays them a salary (Rodríguez, 2001). There is anecdotal evidence to suggest that doctors treat VHI patients more favourably in Austria, Finland, France, Spain and Portugal, spending more time with them and providing them with a larger amount of tests and examinations etc (Hofmarcher, 2001; Mikkola, 2001; Sandier, Ullmann, 2001; Rodríguez, 2001; Oliveira, 2001), but there is no evidence to suggest that this happens in Denmark, Germany, Greece, Italy or Sweden.

Doctors in some member states may have incentives to treat VHI patients before public patients, so that VHI patients may have shorter waiting times than public patients. This is the case in Austria, Ireland, Italy, Portugal, Spain, Sweden and the United Kingdom (Hofmarcher, 2001; Murray, 2001a; Gianoni-Mazzi, 2001; Oliveira, 2001; Rodríguez, 2001; Skoglund, 2001; Hockley, 2001).

The equity and efficiency implications of voluntary health insurers' relationship with providers in different member states are issues that concern public policy rather than insurers themselves.



## 2.4 Subscribers' costs

### 2.4.1 The price of premiums

The price of premiums within a member state may vary according to the method used to set premiums (that is, community, group or risk rating). Employees will generally have better access to lower premiums than self-employed people or people without employment (students, unemployed people, those in retirement), as they may benefit from group policies, which are usually group-rated and often offered at reduced prices. In the United Kingdom, for example, group VHI policies are not only much cheaper than individual policies, but their annual price increases have also been much smaller (Papworth, 2000). Group VHI policies in Ireland also benefit from discounts of up to 10%, the maximum allowable discount by law, and those with higher employment status are more likely to benefit from employer-paid group policies (Vhi Healthcare, 2001c; Department of Health and Children, 2001b). The price of VHI premiums will also vary according to the variables used in risk rating, with generally higher premiums for older people, women, people with poorer health etc.

The level of variation among VHI policies in different member states makes it difficult to compare average premium prices across member states. Furthermore, there is substantial variation in the price of VHI premiums within member states (for the reasons given above). However, there is evidence to suggest that the price of VHI premiums in many member states has not been stable. On the contrary, VHI subscribers in some member states have been subject to premium increases above the rate of inflation in the health sector as a whole. Table 15 shows the real compound annual growth rate of VHI premiums during the 1990s in each member state for which we were able to obtain data, and compares this increase to the average annual growth rate of total expenditure on health care (TEH) deflated by the GDP deflator. The price of VHI premiums in these member states appears to have risen much faster than total health care expenditure. While the compound annual growth rate of VHI premiums ranged from 2.3% to 12%, the average annual growth rate of total expenditure on health care was between -1.1% and 2.7%.

Commercial voluntary health insurers in Italy argue that premiums rose above inflation due to increases in their administrative costs and rises in the fees paid to health care providers (Giannoni-Mazzi, 2001). The premiums of complementary and supplementary VHI in the Netherlands have also risen over the last few years; in 1999 they rose by 10% (Vektis, 2000).

The Portuguese consumer association DECO (Associação Portuguesa para a Defesa do Consumidor or DECO) notes that the costs of private health care and the price of VHI premiums in Portugal have risen well above the rate of inflation in the last five to seven years, making VHI seem unacceptably expensive to consumers (DECO, 2001). DECO argue that the only reason more VHI is be-

**Table 15. Annual increases in the average price of VHI premiums in select member states, mid-late 1990s**

Country	Compound annual growth rate of VHI premiums (%)	(%) Average annual growth rate of TEH* (deflated by GDP deflator**)
Austria	2.3% (1996–2000)	0.4% (1996–1999)
Germany	7.6% (1994–1998)	2.7% (1994–1998)
Greece	6.8–10.4% (1997–2000)	-1.1% (1997–1998)
Italy	6.5% (1994–1998)	1.6% (1994–1998)
Spain	10.5% (1993–1997)	2.3% (1993–1997)
United Kingdom	12.0% individual policies (1994–1999) <3.0% group policies (1994–1999)	2.5% (1994–1999)

Sources: Datamonitor, 2000a; OECD, 2001a; Hofmarcher, 2001; Economou, 2001.

\* We have used the average annual growth rate of total expenditure on health care because the OECD database does not provide an index of health or consumer prices. \*\* We have deflated annual total expenditure on health care (TEH) using the GDP deflator, as the health deflator was not available for these years; inflation in the health sector is likely to be higher than inflation in GDP.

ing purchased in Portugal is because employers are increasingly purchasing it as a fringe benefit for their employees (DECO, 2001).

The proportion of spending on VHI in Spain increased from 23.7% of private expenditure in 1986 to 30% in 1995 (Lopez i Casanovas, 1999). The number of insured people has increased relatively slowly in the last ten years; in 2000 VHI covered only 25% more people than in 1990 (Rodríguez, 2001). In contrast, VHI premiums have experienced a sharp rise, with the average premium per insured person increasing by 250% during the same period (Rodríguez, 2001). The sharp rise in the price of premiums has probably contributed to slow growth in the number of people subscribing to VHI in Spain.

VHI premiums have also risen sharply in Ireland in recent years. The cost of premiums increased by more than double the rate of inflation between 1993 and 1998 (Consumer Choice, 1998). Vhi Healthcare's premiums have risen by 72% in total over the last ten years and by 15% in 2001 (Move To Ireland, 2001). According to Vhi Healthcare, its premium rises have been caused by the high cost of new treatments, the ageing of the population and the Irish government's delay in activating the risk equalization scheme (RES) (see section 3.2.4) (Move To Ireland, 2001).<sup>15</sup> The price of BUPA Ireland's VHI premiums usually rise in line with those of Vhi Healthcare (Murray, 2001a).

Between 1991 and 1996, the real price of VHI premiums in the United Kingdom rose at an average rate of nearly 5% per year (after inflation)

<sup>15</sup> Because Vhi Healthcare has a larger proportion of older subscribers than BUPA Ireland, under the RES it would be compensated by BUPA Ireland.

(Couchman, 1999), with the average annual premium per subscriber rising from £323 (€13) in 1989 (or £373 (€92) for individual subscribers) to £582 (€24) (£746 (€185) for individual subscribers) in 1998 (Laing, Buisson, 2000). In 1988 the average individual premium was 15.5% higher than the average group premium, but by 1998 it was 28.2% more expensive (Laing, Buisson, 2000). Not only are individual premiums much more expensive than group premiums, but their annual increases have also been higher, typically more than 10% (Papworth, 2000). Because VHI premiums in the United Kingdom have risen by significantly more than inflation, the OFT's 1998 report on VHI recommended that subscribers be given a comprehensive warning about the likely increase in VHI premiums supported by reliable data on average increases over the last five years (OFT, 1998b). Although the recommendation was initially deemed infeasible by the industry, it eventually agreed to include a warning of premium increases (Davey, 1999). However, by July 2000 insurers had failed to take any action with regard to providing consumers with statistics on their average premium increases in the previous five years (OFT, 2000b).

The data we have collected suggest that poor growth in the VHI market in some member states may be attributed to expensive premiums and annual premium increases above the rate of inflation. Where there has been market growth, it may be largely due to steep increases in the price of premiums and not as a result of greater take-up of VHI (see Table 15). A recent market research report predicted that any future growth forecast in some VHI markets was more likely to come through increases in price than increases in coverage (Datamonitor, 2000a).

### 2.4.2 Tax incentives

National tax laws can influence the behaviour of individuals and firms by providing them with incentives or disincentives to purchase VHI. Tax incentives usually operate in the form of tax relief, which allows individuals and firms to deduct all or some of the cost of VHI premiums from income tax (individuals) or corporate tax (firms). Disincentives usually operate in the form of a tax on VHI premiums: either insurance premium tax to be paid by the firm selling insurance or a tax on benefits in kind to be paid by the individual receiving employer-paid VHI as a benefit in kind and/or the firm providing VHI as a benefit in kind.

The extent to which tax laws succeed in encouraging or discouraging the purchase of VHI appears to depend on whether they target firms or individuals (and which specific groups of individuals, such as employees or elderly people), and whether they are applied in conjunction with other incentives (or disincentives) that might enhance or diminish their effect.

Tax incentives are sometimes suggested as a means of encouraging more people to purchase VHI or rewarding those who have already purchased VHI. It is argued that providing tax incentives for VHI is in the public interest be-

cause increasing the demand for VHI reduces the demand for statutory health services, thereby relieving upward pressure on public expenditure. This argument is based on the assumptions that tax incentives are successful in encouraging more people to purchase VHI (rather than simply rewarding existing VHI subscribers) and that increased take-up of VHI reduces the demand for statutory health services. Tax incentives that aim to compensate individuals with VHI (either for the additional amount they spend on their own health care or for the reduced amount of statutory health care they consume) do not take into account the fact that these individuals may be paying for better amenities, such as a single room in hospital, and may still be using statutory health services.

It is also possible to argue against tax incentives on other grounds (Davies, 1999):

- tax relief distorts price signals;
- tax relief is administratively complex and therefore generates additional transaction costs;
- tax relief is a type of government subsidy, and because VHI in the European Union is largely purchased by people in higher income brackets (see section 1.3.2), tax relief for VHI acts as a government subsidy to wealthier people;
- tax relief can be regressive in terms of funding health care if it is applied at the marginal rate of tax, as the relief will then be greater for those who have a higher marginal tax rate; and
- it may create opportunities for tax avoidance or evasion.

Tax incentives (and disincentives) to purchase VHI do feature in the European Union (see Tables 16 and 17), although the last fifteen years have seen efforts to reduce or remove tax incentives in many member states. Currently, there are no tax incentives for individuals to purchase any type of VHI in Denmark, Finland, Spain or the United Kingdom, and there are no tax incentives for firms to purchase VHI on behalf of their employees in Finland, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Sweden or the United Kingdom. Tax relief for individually purchased VHI policies in Germany, Italy, Luxembourg and the Netherlands does not operate as an incentive to purchase VHI because the relief applies jointly to different types of insurance and is limited by a ceiling.

### Trends in tax incentives for individuals

In recent years governments have taken measures to reduce or reverse tax incentives in Austria, Greece, Ireland, Italy, Spain and the United Kingdom. Portugal is the only member state to have increased tax incentives for individuals to purchase VHI.

The Austrian government reduced tax incentives in 1996 by limiting tax relief to people earning less than a specified amount per year (Bennett, Schwartz, Marberger, 1993). In 1999 they also reduced the tax deductible amount from

100% to 25% of the cost of VHI premiums and imposed a ceiling on the deductible amount (CEA, 1999; Hofmarcher, 2001). Tax relief for VHI premiums in Greece was introduced in 1992, but in 1997 the government imposed a ceiling on the amount deductible from income tax (Economou, 2001). Until 1992, tax relief on VHI premiums in Italy was applied at the marginal tax rate; its effect was therefore regressive (Dirindin, 1996). In 1992 the Italian government reduced tax relief on commercial group and all mutual VHI premiums from the marginal to the standard rate of tax. In 1999 increased tax relief was established for contributions paid to the complementary national health service funds (as opposed to for other types of VHI contributions), and it is being applied in increasing annual increments through 2005 (Giannoni-Mazzi, 2001). The Spanish government abolished tax relief of 15% of all medical expenses, including VHI premiums, in 1999 (Freire, 1999; Rodríguez, 2001). At the same time the government introduced tax relief for firms purchasing VHI on behalf of their employees (see Table 16). The abolition of tax relief for individuals does not appear to have had any negative effect on the demand for individual VHI policies in Spain (Rodríguez, 2001).

Tax relief provides a large government subsidy to VHI in Ireland, but in recent years its effect has diminished, partly because it changed from being applied at the marginal tax rate to being applied at the standard tax rate in 1994 (as in Italy in 1992), and partly due to reductions in the standard rate of income tax during the late 1990s. During the 1970s, 1980s and early 1990s full tax relief for VHI premiums was available at the marginal rate of income tax (27% or 48% in 1994) (Harmon and Nolan, 2001). The importance of this relief increased as both tax rates and the number of people paying the top rate of tax rose through the 1980s (Harmon, Nolan, 2001). At the same time, the 1982 Commission on Taxation and the 1989 Commission on Health Funding questioned the availability of tax relief on the grounds that it was neither equitable nor effective, and recommended that it be abolished (Commission on Taxation, 1982; Commission on Health Funding, 1989). However, the Finance Act of 1994 only went so far as to reduce relief to the standard rate of income tax (27%) (Department of Health and Children, 1999).

The standard rate of tax fell from 27% to 24% in 1998, to 22% in 2000 and to 20% in 2001. Since 2001, tax relief for VHI premiums has been granted at source (that is, instead of individuals claiming a 20% tax rebate at the end of the year, the amount paid to the insurer is simply reduced by 20%, and the onus is on the insurer to claim the tax back from the government). The Irish Revenue Commissioners have recently decided that VHI premiums for primary care products will also benefit from tax relief at the standard rate of 20% (Vhi Healthcare, 2001c).

Tax relief on VHI premiums costs the Irish government around €79 million a year (the equivalent of 2.5% of public expenditure on health in 1997), but

there are no plans to withdraw, it as it is calculated that this would increase the net cost of premiums by as much as 32% (Department of Health and Children, 1999). However, the change from the marginal to the standard rate of tax and reductions in the standard rate of income tax alone would have doubled the net cost of VHI premiums to Irish subscribers since the mid 1980s, even if the gross price had not increased at all (Harmon, Nolan, 2001). Reductions in the net value of tax relief do not appear to have negatively affected the demand for VHI in Ireland, as the proportion of the population covered by VHI has increased from 21.8% in 1979 to 37.3% in 1994 and 45.5% in 2001 (Department of Health and Children, 2001b). Nevertheless, in its submission to this study Vhi Healthcare noted that tax relief on VHI premiums may be “one of the main reasons for the high take-up of insurance in Ireland” (Vhi Healthcare, 2001c).

In 1990 the British government introduced tax relief on VHI premiums for individuals 60 and older. It was subsequently abolished by the incoming government in 1997, because research showed that in spite of annual public spending of £135 million (€14 million) on these incentives, the number of VHI subscribers rose by only 50 000 in seven years (a total increase of 1.6%) (Department of Health, 2000). Although the industry claims otherwise, it is also unlikely that the cost of this government subsidy to VHI is less than the public (NHS) expenditure saved. According to recent estimates at least an additional 1.8 million individuals would have to take out VHI (equivalent to a 28% growth in coverage) for a subsidy to all adults, equal to the basic rate of income tax, to be self-financing (Emmerson, Frayne, Goodman, 2000; Emmerson, Frayne, Goodman, 2001). However, if the health care provided by the NHS actually costs less than the health care provided by VHI (and Department of Health statistics suggest that NHS costs for treatment such as cataract extractions and hip replacements are approximately a third less than the same treatment in the private sector), then an additional 3.1 million VHI subscribers would be needed to make the tax subsidy self-financing (Emmerson et al., Frayne, Goodman, 2001). The evidence from the United Kingdom suggests that tax incentives aimed at individuals does not appear to be particularly successful in encouraging more people to purchase VHI, although the abolition of tax relief in 1997 may have caused some elderly people to give up their VHI policies. Emmerson, Frayne, Goodman use multivariate analysis to estimate that the abolition of tax relief reduced coverage among those aged 60 and older by 0.7% (a reduction in coverage of 4 000 people) (Emmerson, Frayne, Goodman, 2001). They conclude that although this would have led to some increase in demand for NHS services, it would be much less costly than the £135 million (€14 million) saved by the abolition of the government subsidy.

As we noted above, Portugal has been the only member state to increase tax incentives for individuals. In 1999 the Portuguese government passed new legislation to establish a tax-deductible amount exclusively for VHI premiums,

which had previously been capped at approximately €48 for all types of insurance premiums (Dixon, Mossialos, 2000). Twenty-five per cent of the cost of VHI premiums can now be deducted from income tax (rather than taxable income) up to a ceiling of €70 or €140 for single people and married couples respectively, plus an additional €5 for each dependant (Oliveira, 2001).

Finally, VHI may permit employers to provide employees with tax-free income where policies provided to employees (by employers) as a benefit in kind are not subject to tax. VHI policies are only subject to benefit-in-kind tax in Ireland and the United Kingdom (see below), which means that employer-paid group VHI policies in most member states provide employees with an untaxed benefit in kind.

### **Trends in tax incentives for firms**

Corporate tax relief is available for firms that choose to purchase and pay for some or all of the VHI premiums of their employees in Austria, Belgium, Denmark, France, Ireland and Spain (see Table 16). Tax incentives for firms appear to have fuelled the demand for group VHI policies in Austria, Denmark, Ireland and Spain. Corporate tax relief for employer-paid VHI premiums was abolished in Portugal in 1999 (although it is still available for employer contributions to subsystems – see Appendix A). Previously, firms could deduct employer-paid premiums from tax if the benefits were offered to all employees and by insurers established in Portugal (Oliveira, 2001).

### **Trends in tax disincentives for individuals and firms**

Tax disincentives tend to be applied to commercial and employer-paid VHI policies (see Table 17), although insurance premium tax is levied on all VHI policies in the United Kingdom at a rate of 5% (up from 1.5% when the tax was introduced in 1994). The chargeable amount includes any commission paid to (or retained by) brokers and other intermediaries (Her Majesty's Customs and Excise, 1999). Insurance premium tax on other types of insurance in the United Kingdom can be much higher. For example, travel insurance premiums are subject to the full rate of value-added tax (17.5%). Insurance premium tax is also levied on policies sold by commercial insurers in Belgium (9.25%), France (7%) and Luxembourg (4%). Policies sold by mutual and provident associations in these three countries are exempt from insurance premium tax.

Employer-paid VHI policies are treated as a benefit in kind and subject to income tax at the difference between an individual's marginal and standard rate of tax in Ireland. It has been suggested that in practice many individuals do not pay this tax (Vhi Healthcare, 2001c). In the United Kingdom, employer-paid VHI policies are also treated as a benefit in kind for employees in higher tax bands and are subject to income tax at the marginal tax rate. British employers are subject to employees' national insurance contributions (a payroll tax of 11.7%) on employ-

**Table 16. Tax incentives to purchase VHI in the European Union, 2001**

Country	Tax incentives for individuals/employees	Tax incentives for firms
Austria	Single people can deduct 25% of VHI premiums from taxable income (up to a limit of € 907) if their annual gross income does not exceed €6 336; the deductible rate declined from 50% in 1988 Sole earners can deduct 25% of VHI premiums from taxable income up to a limit of € 814; the deductible rate declined from 100% in 1988 to 25% in 1999	Firms can deduct employer-paid premiums from tax
Belgium	Self-employed people can deduct substitutive VHI premiums from taxable income	Firms can deduct employer-paid premiums from tax
Denmark	None (since 1986)	Firms can deduct employer-paid premiums from tax
Finland	None	None
France	Employees can deduct employer-paid VHI premiums from taxable income (up to the amount paid by the employer)	None
Germany	VHI premiums are deductible from taxable income, as are premiums for all other types of voluntary insurance and contributions for statutory insurance (including pensions); tax relief does not constitute an incentive to purchase substitutive VHI (because the ceiling for tax-deductible expenses decreases with rising income) or complementary or supplementary VHI (as the ceiling will have already been reached through statutory contributions)	None
Greece	VHI premiums are deductible from taxable income (since 1992) up to a maximum deductible amount of €87 per year (since 1997)	None
Ireland	VHI premiums are deductible from taxable income at the standard rate of tax	Firms can deduct employer-paid VHI premiums from tax
Italy	VHI premiums for group (but not individual) commercial policies and all mutual policies are deductible from taxable income at the standard rate of tax up to an annual ceiling for all insurance premiums (€ 250) (before 1992, premiums were deductible at the marginal rate of tax)	None
Luxembourg	Individuals can deduct mutual VHI premiums from taxable income up to a ceiling for all insurance premiums	None
Netherlands	Exceptionally high health care costs, including VHI premiums, can be deducted from taxable income once they exceed an income-related ceiling; tax incentives are not significant because this ceiling is set very high	None
Portugal	25% of VHI premiums can be deducted from income tax (rather than taxable income) up to a ceiling of €70 or €140 for single people and married couples respectively, plus an additional €35 for each dependant (since 1999)	None (abolished in 1999)
Spain	None (since 1999)	Firms can deduct employer-paid VHI premiums from tax up to a limit of €60 per person (€1 202 per family) (since 1999)
Sweden	Employees can deduct employer-paid VHI premiums from taxable income	None
United Kingdom	None (since 1997)	None

Sources: National reports prepared for this study.



er-paid VHI policies. Industry commentators in the United Kingdom claim that insurance premium tax and the benefit-in-kind tax on employer-paid VHI policies dampens the sale of group VHI policies, but as the latter tax does not apply to individuals in the lowest tax band, and the actual amounts involved are relatively small, it is unlikely to have much impact on sales.

**Table 17. Tax disincentives in select countries, 2001**

Country	Tax disincentives
Belgium	<ul style="list-style-type: none"> <li>• Commercial VHI policies are subject to insurance premium tax of 9.25%</li> <li>• All insurers pay a 10% contribution to RIZIV-INAMI for hospital coverage with benefits of more than €12.50 per day</li> </ul>
France	<ul style="list-style-type: none"> <li>• Commercial VHI policies are subject to insurance premium tax of 7%</li> <li>• VHI policies sold by mutual and provident associations are exempt from this tax</li> </ul>
Ireland	<ul style="list-style-type: none"> <li>• Employees are charged a benefit-in-kind tax on employer-paid premiums based on the difference between their marginal tax rate and their standard rate of tax</li> </ul>
Luxembourg	<ul style="list-style-type: none"> <li>• Commercial VHI policies are subject to insurance premium tax of 4%</li> <li>• VHI policies sold by mutual associations are exempt from this tax</li> </ul>
United Kingdom	<ul style="list-style-type: none"> <li>• All VHI policies are subject to insurance premium tax of 5% (up from 1.5% when it was introduced in 1994)</li> <li>• Since 1999, all benefits in kind (including employer-paid VHI premiums) are subject to employers' national insurance contributions at the rate of 11.7%</li> <li>• Employees in all but the lowest tax band are charged a benefit-in-kind tax on employer-paid premiums</li> </ul>

Sources: National reports prepared for this study.

RIZIV-INAMI: National Institute of Health and Disability Insurance.

### Tax incentives and market structure

Tax incentives can be used to influence market structure by favouring certain types of insurers over others or by encouraging the purchase of group rather than individual policies (and vice versa). As we have seen, tax incentives in Belgium, France, Italy and Luxembourg favour mutual or provident associations over commercial insurers. The exemption from insurance premium tax for mutual and provident associations in France has been valued at €457.35 million a year (Sandier, Ulmann, 2001). In March 1993 the French Federation of Insurance Associations (FFSA) lodged a complaint against the French government with the European Commission (Sandier, Ulmann, 2001). In November 2001 the European Commission asked the French government to put an end to the aid resulting from this exemption, either by abolishing the exemption or "ensuring that the aid does not exceed the costs arising from the constraints inherent in a service of general economic interest" (for further details, see section 4.3) (European Commission, 2001).

The trend towards reducing or removing tax incentives to purchase VHI in the European Union suggests that many governments have found better ways of spending this money, considering tax incentives for individuals to be expensive, regressive and largely unsuccessful in stimulating demand. Tax incentives for firms appear to enjoy greater success in encouraging employers to purchase and pay for VHI on behalf of their employees. Tax incentives that favour certain types of insurers over others can have an impact on market structure, but differential tax treatment of insurers is unlikely to be a sustainable form of national public policy as it may contravene EU competition law.

## 2.5 Insurers' costs

### 2.5.1 Claims expenditure

Between 1995 and 1998, the growth in claims expenditure (benefits paid) exceeded the growth in premium income in some member states (CEA, 2000). Nevertheless, claims expenditure as a proportion of premium income (loss ratio) did not show a significant increase during this period (see Table 18).

There is substantial variation in loss ratios among different member states and between individual and group VHI policies. In Germany, for example, the loss ratio decreased significantly from 80.0% in 1995 to 65.8% in 1999, but this decline was caused by increases in the legal requirements for old age reserves, rather than a fall in claims expenditure (Busse, 2001). Overall, loss ratios appear to be highest in Denmark (91.7% in 1998) and more than 80% in the Netherlands and Spain. However, most loss ratios are in the range of 72–76%.

The variation between loss ratios for commercial individual and group policies is much more marked, which may reflect that fact that many insurers offer group policies at reduced rates (see section 2.2.2). Commercial insurers in Belgium had a loss ratio of as low as 60.2% for individual policies in 1999, whereas group policies showed much tighter margins, with a loss ratio of 88.8% (Hermesse, 2001). Commercial individual policies had a loss ratio of 68.7% in France in 1998, compared to a loss ratio of 85.4% for commercial group policies (Sandier, Ulmann, 2001). Loss ratios were also higher for group policies in Portugal and the United Kingdom (Oliveira, 2001; Laing, Buisson, 2001).

Loss ratios in the United Kingdom decreased considerably during the 1990s. In 1985 voluntary health insurers had a loss ratio of 88%, but by 1995 the loss ratio had gone down to 81%, and in 2000 it was even lower, at 79% (Laing, Buisson, 2001). While the loss ratio for employer-paid group VHI policies in the United Kingdom was 85% in 2000, it was as low as 73% for VHI policies paid for by individuals and employees (Laing, Buisson, 2001). A recent report suggested that British insurers were “boosting profitability by increasing premiums to unprecedented levels while cutting their costs by getting tougher on claims” (Sunday Times, 2001).

In Ireland, Vhi Healthcare (the dominant insurer) has projected a loss ratio of 87% in 2002 for itself, and a loss ratio of 55% for its rival BUPA Ireland (the only major voluntary health insurer to have entered and stayed in the Irish market since it was liberalized in 1996) (Vhi Healthcare, 2001c). Vhi Healthcare has also projected profits of 25% of premium income for BUPA Ireland and 1.5% for itself. When we asked BUPA Ireland to comment on Vhi Healthcare's projected figures, its Marketing Director described them as "a complete fiction" (Murray, 2001b). However, as BUPA Ireland declined to provide us with any financial data regarding their premium income, claims expenditure and operating costs, we are unable to confirm or refute Vhi Healthcare's projections for 2002.<sup>16</sup>

**Table 18. Loss ratios of voluntary health insurers**

Country	1995 (CEA)	1998 (CEA)	Various years (national reports)
Austria	74.1%	75.8%	74.4% in 2000
Belgium	75.2%	74.1%	Commercial individual: 60.2% (1999) Commercial group: 88.8% (1999)
Denmark	90.9%	91.7%	N/A
Finland	–	69.4%	Commercial (includes accident + health) 75.2% (1998) 75.8% (1999) 72.5% (2000)
France	77.5%	78.7%	Commercial individual: 665-70% (1999) 71.9% (1989) to 68.7% (1998) Commercial group: 100% (1993) 82% (1996) 85.4% (1997) 84.5% (1998)
Germany	80.0%	70.4%	65.8% (1999)
Greece	–	–	76.6% (1999)
Ireland	–	–	Vhi Healthcare: 86% (2001)
Italy	74.1%	78.1%	75.2% (1999)
Luxembourg	–	–	Mutuals had a deficit of LUF 20 million in 2000, in 1998 they had a much larger deficit, but membership fees have since increased.
Netherlands	87.7%	89.35	81.3% (2000)
Portugal	76.3%	78.15	83-87% (1996-1999) lower for individual policies
Spain	82.0%	84.05	83%
United Kingdom	82.0%	83.35	Overall: 79% (2000) Individual: 73% (2000) Employer-paid: 85% (2000)

Sources: CEA, 1997; CEA, 2000; national reports prepared for this study.

Notes: Loss ratios are obtained by dividing benefits paid by premium income.

No data available for Sweden.

<sup>16</sup> BUPA Ireland is not obliged to publish any financial data in Ireland due to its status as a branch of BUPA International. Although BUPA Limited publishes an annual report in the United Kingdom, which includes data for business in Ireland, these data are not disaggregated from other international business. It proved impossible to obtain disaggregated data regarding business in Ireland from the Financial Services Authority (FSA), the regulatory authority in the United Kingdom. BUPA Ireland will have to provide financial data to the new Health Insurance Authority in Ireland, but these data will not be publicly available.

### 2.5.2 Administrative costs

The transaction costs of management and administration tend to be much higher under voluntary than statutory health insurance systems because of the extensive bureaucracy required to assess risk, set premiums, design benefit packages and review, pay and refuse claims. Voluntary health insurers also need to spend money on advertising, marketing, distribution (often through agents or insurance brokers) and reinsurance.

Economic theory considers high transaction costs to be inefficient if they can be avoided under an alternative system of funding and providing health care (Barr, 1992). Some commentators in the United States argue that high transaction costs are justified by innovation (Danzon, 1992), but this has been refuted by others (Barer, Evans, 1992). For example, Danzon claims that voluntary health insurers compete by devising ways to control moral hazard more effectively, including structured co-payments, utilization review, case management, selective contracting with preferred providers and provider-targeted financial incentives such as capitation and other risk-sharing forms of prospective reimbursement (Danzon, 1992). But this argument does not seem to apply to VHI markets in the European Union, where the majority of insurers do not, on the whole, adopt the above-mentioned measures to contain costs. Insurers in the European Union are more likely to compete on the basis of risk selection than through competitive purchasing, and their attempts to contain costs generally operate on the demand rather than the supply side.

Data on the administrative costs of voluntary health insurers in different member states are limited, although the available evidence suggests that these costs are high compared to those of the statutory health care system (see Table 19). Voluntary health insurers' administrative costs range from about 10% in Germany, Luxembourg (mutual associations), the Netherlands and France (mutual associations) to as much as about 25% in Austria, Belgium, Italy and Portugal. In contrast, the administrative costs of statutory health care systems are substantially lower: between 3% and 5% in most member states and even lower in others such as Denmark and Italy.

The development of voluntary health insurers' administrative costs in Ireland provides an interesting case study in the side-effects of increasing competition in VHI markets. When the Irish market was liberalized in 1994, it was expected that the entry of new insurers would stimulate competition and increase efficiency, but this does not appear to have been the case, at least where administrative costs are concerned. In 1996 the administrative costs of Vhi Healthcare (the only major voluntary health insurer in Ireland) were equal to 2% of premium income, while those of BUPA Ireland (the new market entrant) were 12% (Light, 1998). By 1999 administrative costs had risen for both insurers, probably as a result of increased expenditure on marketing by both insurers, as Vhi Healthcare now had to compete with BUPA Ireland

for new subscribers. However, Vhi Healthcare's administrative costs were still considerably lower than BUPA Ireland's (4.7% of premium income compared to 14.2%) (BUPA, 2000; Vhi Healthcare, 2000). In fact, the Department of Health and Children noted that the advent of competition has been accompanied by a marked increase in the level of advertising in the Irish market (Department of Health and Children, 2001b). According to Vhi Healthcare's latest annual report, its administrative costs for 2001 were 11.8% of premium income (Vhi Healthcare, 2001b).

**Table 19. Administrative costs as a proportion of VHI premium income compared to administrative costs in the statutory health care system, 2000 or latest available year**

Country	Voluntary health insurers	Public expenditure on administration as a % of public expenditure on health
Austria	22% (early 1990s)	3.6% (2000)
Belgium	25.8% commercial individual (1999) 26.8% commercial group (1999)	4.8% (1999)
Denmark	–	1.1%*
Finland	–	3.1%*
France	10–15% (mutual associations) 15–25% (commercial)	4–8%
Germany	10.2% (1999)	5.09% (2000)
Greece	15–18% (commercial life insurers)	5.1%
Ireland	11.8% (Vhi Healthcare in 2001) 5.4% (Vhi Healthcare in 1997)	2.8%*
Italy	27.8% (2000) 26.8% (1999)	0.4%*
Luxembourg	10–12% (mutual associations)	5%
Netherlands	12.7% (1999)	0.7% AWBZ (1999) 4.4% ZFW (1999)
Portugal	About 25%	–
Spain	About 13–15%	5%
United Kingdom	14.2% (BUPA in 1999) 16.9% (PPP in Healthcare 1998)	3.5%*

Sources: National reports prepared for this study; OECD, 2001a.

AWBZ: Algemene Wet Bijzondere Ziektekosten; ZFW: Ziekenfondswet.

Note: No data available for Sweden. \* OECD data for 1995.

---

# Section 3 Access, equity and consumer protection

This section aims to:

- discuss the ways in which different types of VHI might affect access to health care;
- examine barriers to access to VHI in different member states;
- examine the equity implications of VHI in different member states.

## 3.1 Access to health care

Facilitating access to health care involves helping people to command appropriate health care resources in order to preserve or improve their health; it has at least four dimensions (Gulliford et al., 2001):

- service availability (if an adequate supply of health services is available then a population may “have access” to health care);
- service utilization (when services are utilized, the population “gains access” to health care, but this may depend on personal, financial and organizational barriers to access and not just on the adequacy of supply);
- service relevance and effectiveness (services must be relevant and effective for a population to “gain access to satisfactory health outcomes”); and
- equity (achieving “equity of access”).

Ensuring equal access for equal need is a key principle of equity in health care (Mooney, 1983) and an implicit or explicit equity goal of health care systems in most member states. Equal access for equal need gives everyone an equal opportunity to use health care. Health care provided and utilized according to this principle should result in horizontal equity (unequal, but equitable, treatment of unequal individuals) and vertical equity (unequal treatment of unequals). As we noted in section 1.1, universal or near universal rights to health care can be found in every member state except the Netherlands. It is widely acknowledged,

however, that universal rights do not automatically ensure universal access to health care (Glennester et al., 2000). In fact, barriers to access to the statutory health care system are present in every member state of the European Union.

A major distinction between statutory and voluntary health insurance is that, in theory, access to statutory health care in member states depends on an individual's status as a citizen, resident or employee, and is usually independent of ability to pay, whereas access to health care through VHI is almost always dependent on ability to pay. Nevertheless, the recent trend in shifting health care costs from the state to individuals has given rise to concerns about inequalities in access to statutory health care in many member states. For example, the increase in user charges in Sweden's statutory health care system has had a much higher impact on access than has the market for VHI, which is relatively limited in size and scope (Whitehead et al., 1997). Access to statutory health care may also be constrained by explicit or implicit rationing of services through reductions in levels of statutory coverage or budgetary restrictions. Moreover, there may be considerable geographical inequity in the distribution of resources in the statutory health care system, and health care utilization is likely to be influenced by sociocultural factors, including different preferences, knowledge, information, incomes and opportunity costs among individuals. Any discussion of access to health care should therefore take place from a broad perspective, within the context of existing inequalities in access to statutory health care.

The extent to which VHI affects access to health care depends, in part, on the characteristics of the statutory health care system. If the statutory health care system guarantees all citizens equal access to health care for equal need (or, even better, equal utilization for equal need), then access to VHI need not be an issue of concern to policy-makers. Put another way, access to VHI may concern policy-makers in so far as VHI provides primary protection against the consequences of ill health. As the Association of British Insurers notes in its submission to this study, "the greater the role of private health insurance in providing access to services that are alternatives to the basic health care system, the larger the impact it is likely to have on access to health care" (ABI, 2001b).

Substitutive VHI may be the only source of protection against the potentially catastrophic costs of ill health for individuals who are excluded from the statutory health care system or choose to opt out of it. It therefore plays a vital role in providing access to health care and protection against some or all of the financial consequences of ill health for certain sections of the population in some member states. For example, it covers self-employed people for minor risks in Belgium, high-earning people for the costs of outpatient care and inpatient care for the first year of hospitalization in the Netherlands, high-earning employees for all types of care in Germany and some groups of professionals for all types of care in Austria (see section 2.1.1). For this reason, the third

non-life insurance directive allows the state to impose special conditions and regulatory controls on insurers providing substitutive VHI, and in recent years the Dutch and German governments have made substantial interventions in the market for substitutive VHI in order to ensure that elderly people, people with chronic illnesses and people on lower incomes have access to an adequate and affordable level of coverage (see section 2.1.1).

Unequal access to complementary VHI may be problematic where complementary VHI provides full or partial cover for necessary and effective health services that are excluded or not fully covered by the statutory health care system. There is some evidence to suggest that access to complementary VHI covering the cost of co-payments imposed in the statutory health care system is problematic for people with low incomes, particularly those who are just above the income threshold for any exemptions that may exist. Such individuals will be doubly disadvantaged in having to make co-payments in the first instance and then being unable to afford complementary VHI to cover the cost of the co-payments. This type of complementary VHI is most prevalent in France, where it covered 85% of the population in 1998 (see section 1.2.3), and where the likelihood both of being covered and of having a high quality of coverage are largely dependent on income levels, employment status and age (see section 1.3.2). In 1999, in order to address the inequalities in access to health care arising from unequal access to complementary VHI, the French government introduced a law on universal health coverage (CMU) extending complementary VHI coverage to the 15% of the population that was not already covered by it (see section 3.2.1).

Where different types of VHI available in the European Union provide some degree of protection against the consequences of ill health, it is relevant to examine the extent to which individuals have access to VHI. Access to substitutive VHI is largely on the basis of eligibility criteria set by the state. Consequently, it is only available to clearly defined groups of people in a small number of member states. In contrast, complementary or supplementary VHI is available to the whole population in every member state. However, the extent to which those who want to purchase any type of VHI are able to do so may depend less on eligibility than on demand-side factors (ability to pay) and supply-side factors relating to the way in which voluntary health insurers conduct their business (price, selection procedures, policy conditions and product differentiation). In its submission to this study, the Groupe Consultatif Actuariel Européen points out that, "in practice, access [to VHI] is determined by the operation of the insurance market" (Groupe Consultatif Actuariel Européen, 2001), recognizing that the behaviour of insurers may have a significant bearing on access to VHI.

Whether VHI affects access to health care may also depend on the extent to which it operates independently of the statutory sector. The existence of VHI could present a barrier to access in the statutory health care system by draw-



ing on public resources, to the detriment of public patients. This is most likely to happen when the boundaries between public and private health care are not clearly defined, particularly if capacity is limited, if providers are paid by both the public and the private sector and if VHI creates incentives for health care professionals to treat public and private patients differently.

Finally, there is the issue of consumer protection, which may be of interest to policy-makers.

In the following sections we explore potential barriers to access to VHI, including price and ability to pay, other non-price barriers and the possible implications of information asymmetry for access and consumer protection (risk selection, the use of genetic testing and whether product differentiation leads to consumer detriment). We also examine the equity implications of the existence of VHI in different member states, although evidence is limited in this area.

## 3.2 Potential barriers to access in VHI markets

By definition, VHI in the European Union is not compulsory for anyone. The decision to purchase VHI is a voluntary one. Unless there is a system of open enrolment in place, requiring insurers to accept all applicants, insurers will have considerable discretion in deciding whom to cover, the terms on which they provide cover and how much they charge for cover. Due to the voluntary nature of the services they provide, voluntary health insurers in some member states have traditionally enjoyed a high degree of freedom from statutory regulation. Since the third non-life insurance directive outlawed statutory price and product controls in 1994, voluntary health insurers in all member states are largely exempt from statutory regulation in this respect, although they are subject to financial scrutiny of their solvency levels. In theory, this means that they are free to select applicants, rate premiums on any basis they choose and set their own policy conditions. However, insurers offering substitutive VHI remain subject to some degree of statutory regulation with regard to the price of premiums and policy conditions (see section 1.4).

### 3.2.1 Price and ability to pay

The price of VHI premiums within a member state will vary according to the method used to set premiums (that is, community, group or risk rating). Price will also vary according to the variables used in risk rating, with insurers often charging higher premiums for older people, women and those with chronic illnesses etc. Employed people will generally have better access to lower premiums than people without employment (students, unemployed people, those in retirement), as they may benefit from policies that are group-rated and at reduced prices. Within this cohort, people with higher employment status are more likely to benefit from employer-paid group policies. VHI is therefore less likely to be purchased by elderly people, unemployed people, unskilled workers,

people on low incomes and people in poor health. The existence of tax incentives may also favour people with higher incomes, particularly if relief is granted at the marginal rate of taxation. As we noted in section 3.1, however, the importance of financial barriers to the purchase of VHI in the European Union is largely dependent on the extent to which VHI acts as a primary source of protection against the consequences of ill health. This type of VHI is currently limited in many member states.

Although eligibility for substitutive VHI depends on earning above a certain amount in Germany and the Netherlands, there may be individuals in both member states who find price an obstacle to obtaining an adequate level of substitutive VHI coverage. In the German context, where individuals can choose between the statutory health insurance scheme (GKV) and substitutive VHI, price is more likely to be problematic for those who have already made the decision to opt out and are now prevented by law from returning to the GKV, even if their income falls below the GKV threshold (see section 2.1.1). For this reason the German government has required voluntary health insurers to offer substitutive VHI policies at a standard rate (since 1994) to individuals aged 65 and older who have been voluntarily insured for a qualifying period of at least 10 years and (since 2000) at a standard rate for individuals aged 55 and older who have been voluntarily insured for at least 10 years and whose incomes drop below the contribution ceiling. Substitutive VHI policies sold at the standard rate provide benefits that match the benefits of the GKV and guarantee that premiums will not exceed the average maximum GKV contribution (or 1.5 times the contribution for married couples) (CEA, 1997).

To date, however, very few people have chosen this option (only 1 161 people in 1998 and 1 407 in 1999), which may be because price does not present a barrier to those who have already decided to opt out, but may also be because insurers do not always inform people to switch to the standard rate when they become eligible (Busse, 2001). Consequently, the Reform Act of Social Health Insurance 2000 stipulates that voluntary health insurers must notify individuals as soon as they are eligible to switch to a cheaper policy (Bundesaufsichtsamt für das Versicherungswesen, 2001). The number of people opting for standard rate policies may increase in future.

Through the WTZ scheme, the Dutch government has also taken steps to ensure that people who are excluded from the statutory health insurance scheme for outpatient care and the first year of inpatient care (ZFW) are able to purchase an adequate level of VHI coverage for a fixed premium (see section 2.1.1). The WTZ scheme allows the government to fix the premium of a “standard package policy” that provides similar benefits to the ZFW.

In theory, complementary or supplementary VHI are available to the whole population in every member state. However, it is contingent on willingness and ability to pay. As we showed in section 1.3.2, complementary and supplement-

tary VHI subscribers in many member states are more likely to come from high-income groups, which suggests that income and price may be determinants of the demand for these types of VHI. Other determinants include age, gender, occupational status, educational status and area of residence.

Unfortunately, it has not been possible to obtain comparative data on complementary and supplementary VHI premium prices in different member states. Survey data from Ireland, Spain and the United Kingdom reveal that VHI is perceived to be expensive by a significant proportion of the population. A consumer survey of 2 620 people carried out by the Irish Economic and Social Research Institute in Dublin found that very few people regard the current price of their VHI coverage as “quite cheap” (1.6%), 35% regard it as “good value”, 43.1% regard it as “expensive”, 17.7% as “very expensive” and a few found it “close to unaffordable” (2.6%) (Nolan, Wiley, 2000). Those regarding the current price as very expensive or close to unaffordable comprised more older respondents than those not giving those responses, as well as more retired people; they were also drawn less often from the top income range employed in the survey. In a survey carried out by a private consulting company in Spain in 1998, 51% of people that did not have VHI gave as a reason for this the fact that the statutory health care system “works well”, 22% had not even thought about it and 26% said that VHI was too expensive and they could not afford it (Rodríguez, 2001). A recent survey by a British consumer analyst and research group found that 58% of British subscribers considered VHI cover to be “too expensive” (BBC, 2000). The Portuguese consumers’ association DECO (Associação Portuguesa para a Defesa do Consumidor) claimed in its submission to this study that the costs of private health care and the price of VHI premiums in Portugal have risen well above the rate of inflation in the last five to seven years, making VHI seem unacceptably expensive to consumers (DECO, 2001).

Prior to 2000 the price of VHI premiums in France clearly reduced access for low-income people, who were much less likely to purchase complementary VHI and much more likely to have coverage of a lower quality than richer people (see section 1.3.2) (Sandier, Ulmann, 2001). In June 1999 the French government decided to rectify this situation by passing a law on universal health coverage (CMU) to enable those who did not benefit from any statutory health insurance (estimated on 31 December 2000 as 1.1 million people) to be covered by a basic, compulsory, statutory health insurance scheme (Sandier, Paris, Polton, 2004). CMU also facilitates access to complementary VHI for people on low incomes (less than €50 per month) who did not have any cover of this type (estimated on 31 December 2000 as 4.9 million people) (Sandier, Paris, Polton, 2004). This represents a major development in the French social security system: in addition to affiliation to a compulsory health insurance scheme, those with incomes below a certain threshold now have the right to complementary VHI coverage. CMU beneficiaries can choose complementary VHI cover from

all types of insurers, paid for by the government and by a compulsory contribution of 1.75% on the VHI premiums of all non-CMU individuals with complementary VHI.

Since the CMU settlement in January 2000, the price of VHI premiums in France is, in theory, no longer a barrier to access, except for people whose income is just above the threshold. Some insurers also provide benefits in kind to CMU beneficiaries. Survey results reveal that this system of benefits in kind, which largely benefits low-income people, increases equity in the French health care system (Sandier, Ulmann, 2001). However, there is also evidence that not everyone who should have benefited from CMU has done so, particularly those who have not had access to information about the scheme (Sandier, Ulmann, 2001). Complementary VHI now covers about 94% of the population.

### 3.2.2 Non-price barriers

There are several ways in which insurers may restrict subscribers' access to health care (see section 2.3.2). This can be achieved by requesting prior authorization of treatment, by imposing cost-sharing, by introducing no-claims bonuses, by insisting on waiting periods or moratorium underwriting, or by reimbursing subscribers rather than providing benefits in kind. With the exception of no-claims bonuses, mandatory waiting periods and moratorium underwriting, these measures to restrict access may also be present in statutory health care systems.

Non-price barriers may also be created by information failures in VHI markets. In the following sections we examine:

- whether there are information failures in markets for VHI in the European Union;
- whether insurers have incentives to select risks in a competitive environment;
- the possibility of introducing a system of risk adjustment to reduce insurers' incentives to select risks;
- existing risk-adjustment and cross-subsidization schemes in Belgium, Ireland and the Netherlands;
- the implications of genetic testing for insurance purposes; and
- whether the presence of multiple VHI products leads to consumer detriment.

### 3.2.3 Asymmetrical information, adverse selection and risk selection in VHI markets

Information is vital to buyers and sellers in a competitive insurance market. Less-than-perfect information can be problematic for insurers, who may find it difficult to distinguish between high-risk individuals and those who are merely risk averse. Asymmetrical information is a type of market failure that may give rise to adverse selection and risk selection (cream-skimming).

The information failure known as adverse selection arises when individuals purchasing VHI can conceal their level of risk from the insurer (Barr, 1998). Insurers can address this by charging a common (community-rated) premium, but that might encourage low-risk individuals to forego insurance coverage because they are unable to purchase coverage at a premium that reflects their actuarial risk. If low-risk individuals opt out, insurers will have to increase premiums, forcing more low risks to opt out. Eventually, the market will fail. Adverse selection can also be addressed by making insurance compulsory, as is the case with statutory health insurance, thereby preventing low risks from opting out.

Risk selection is the process by which insurers seek to encourage custom from individuals with below-average risk and discourage or refuse custom from individuals with above-average risk. In a competitive environment, insurers may attempt to lower their costs by risk selecting for three reasons (Oliver, 1999).

- By maintaining the same premium rate and the same quality of coverage, the lower costs can result in increased profits.
- Lower costs and the same premium rate may allow the insurer to improve the quality of coverage in order to keep the same level of subscribers or attract new subscribers.
- Lower costs and the same quality of coverage may allow the insurer to reduce its premium rate in order to keep the same level of subscribers or attract new subscribers.

It is argued that adverse selection and risk selection are more likely to take place under regulatory regimes that restrict insurers' freedom to rate premiums according to individual risk (that is, where insurers must offer community- or group-rated premiums). One way of addressing this problem is to allow insurers to adjust premiums according to individual levels of risk (risk rating), which will prevent adverse selection and reduce insurers' incentives to risk-select. From an equity perspective, risk rating may be considered unfair because people in poor health will have to pay higher premiums, and if poor health is correlated with low income it may be difficult for some people to obtain the level of coverage they desire. From the point of view of efficiency, the methods used by insurers to risk-rate premiums are limited in scope. Many insurers rely on crude indicators of future health care expenditure such as age and gender. Crude risk rating exacerbates insurers' incentives to risk-select, to the detriment of both equity and efficiency (Puig-Junoy, 1999).

One consequence of risk selection is that certain individuals may be denied access to adequate cover. However, given the high levels of statutory health coverage in the European Union, ensuring equitable access to VHI coverage may only concern policy-makers in so far as VHI does not act as a primary source of protection against the consequences of ill health.

Policy-makers may be more concerned with the effect of risk selection on efficiency. Risk selection is likely to lead to inefficiency if the financial advantages arising from risk selection outweigh potential gains from improvements in efficiency, leaving insurers with little incentive to compete on the basis of efficient management or quality (Gauthier, Lamphere, Barrand, 1995). For example, in a competitive market insurers may attempt to reduce premiums by attracting low-risk individuals rather than by increasing efficiency (van de Ven, van Vliet, 1992). This lowers the optimal level of competition in the insurance market (Puig-Junoy, 1999).

Voluntary health insurers in EU member states are likely to have incentives to risk-select if they are able to reject applications, exclude pre-existing conditions and cancel contracts. Incentives to risk-select in this way can be addressed to some extent by guaranteeing access to coverage (open enrolment) and automatic renewal of contracts, and by limiting exclusions for pre-existing conditions. As we noted in section 2.3.1, however, open enrolment policies are rare among voluntary health insurers in the European Union, and most insurers either exclude pre-existing, chronic and long-term conditions (the norm), or charge higher premiums for them. Short-term (usually annual) VHI contracts are the most common form of contract in the European Union; lifetime cover is the exception rather than the rule. Furthermore, many insurers set a maximum age limit for purchasing VHI (usually between 60 and 75 years), while some actually cancel contracts when people reach retirement age. VHI premiums also tend to rise with age, so even those eligible to purchase cover at older ages may not be able to pay for it.

Risk selection can also take place in more subtle ways, for example through market segmentation (see section 3.2.6) and selective advertising. Targeting certain groups of people, such as employees in a particular sector, may be a form of risk selection. Insurers can benefit from offering reduced premiums and favourable conditions to groups of employees because those too ill or too old to work are excluded from the workplace, allowing insurers to cover a younger, healthier, more homogeneous population. However, group insurance schemes can limit adverse selection by imposing compulsory coverage, thereby spreading risk across a wider pool of people (Deber, Guildiner, Baranek, 1999; Gauthier, Lamphere, Barrand, 1995). In the 1980s and 1990s, group policies rose substantially as a proportion of all VHI policies in the European Union (see section 2.2.2). Growth in the group policy market may be the result, among other things, of much lower premium increases than in the individual policy market, which continues to be marked by premium increases greater than the rate of inflation (see section 2.4.1). In an attempt to prevent voluntary health insurers from undercutting the individual policy market in this way, the Irish government has introduced a policy of only allowing insurers to reduce group policy premiums by up to 10% (Department of Health and Children, 2001b). Light's

comparisons of the group premiums of Vhi Healthcare's most popular policy and BUPA Ireland's competing policy in Ireland in the late 1990s showed that BUPA Ireland's premiums were 10% lower for subscribers younger than 19, 4% lower for those 19 to 49 and 20% higher for those older than 54 (Light, 1998). This pricing trend suggests that BUPA Ireland was trying to attract Vhi Healthcare's younger, and presumably healthier, subscribers, thereby following a policy of competition based on risk selection rather than quality or efficiency. BUPA Ireland has contested these figures and this suggestion, but did not provide us with any alternative data (Murray, 2001a).

Insurers may resort to less explicit tactics to avoid covering potentially high-risk individuals. A few years ago, Irish doctors expressed concern about the possibility of reduced coverage for psychiatric patients under new market conditions (Murdoch, 1995). In 2000 it was reported that BUPA Ireland insists on detailed diagnostic information before admitting psychiatric patients, including the diagnosis, prognosis and expected date of discharge, a requirement that does not apply to any of its other patients. Doctors claim that this causes serious delays in admission, as well as stigmatizing individuals with mental illnesses (Payne, 2000).

Where individuals are given a choice between statutory health insurance and substitutive VHI, risk selection may take place between the statutory health insurance scheme and substitutive VHI. It has been argued that this was the case in the Netherlands in the 1970s and 1980s and in Germany in the early 1990s, leading to situations in which the statutory health insurance schemes were insuring a disproportionately high number of elderly people (Wasem, 1995). Both the German and the Dutch government have since taken measures to address this imbalance (see section 2.1.1).

### 3.2.4 Mitigating risk selection through risk adjustment

How can risk selection be mitigated? Some analysts suggest that sophisticated risk adjustment is the only means of successfully preventing insurers from risk selection (van de Ven et al., 2000), and that risk adjustment should therefore be a permanent feature of a deregulated VHI market (Beck, Zweifel, 1998). Risk adjustment is defined as "the use of information to calculate the expected health expenditures of individual consumers over a fixed interval of time (eg a month, quarter or year) and set subsidies to consumers or health plans to improve efficiency and equity" (van de Ven, Ellis, 1999). A system of risk adjustment requires insurers with younger and healthier subscribers to compensate insurers with older or more high-risk subscribers, which may reduce incentives to risk-select in the long run.

However, sophisticated risk adjustment is not only difficult to carry out with accuracy, it is also expensive to administer. These problems may be mitigated if a central agency undertakes risk adjustment on behalf of all insurers, as hap-

pens in the statutory health care systems in Belgium, Germany and the Netherlands, but even these risk-adjustment systems are limited in scope. Evidence from the Netherlands suggests that the Dutch system of risk adjustment between competing statutory sickness funds is too simple to correct completely the consequences of adverse selection and to eradicate incentives to risk-select (van de Ven, van Vliet, 1992; Oliver, 1999). The German system also appears to suffer from limitations that leave considerable scope and incentives for statutory sickness funds to risk-select (Oliver, 1999).

A further problem with risk adjustment concerns feasibility. It is a common complaint among insurers that risk-adjustment mechanisms penalize attempts to operate efficiently and contain costs. If insurers perceive that risk adjustment will narrow their margins and limit their profitability, they may be reluctant to enter or stay in markets that introduce a system of risk adjustment. However, apart from some relatively small and theoretical trade-offs between risk adjustment and efficiency (relating to supplier-induced demand) that are unlikely to be a cause of concern for insurers, risk adjustment does not adjust for the degree of insurer efficiency in itself (Oliver, 1999).

Risk adjustment may be an option for substitutive VHI, particularly if public policy favours an expansion of this type of VHI, but whether it would be appropriate for complementary or supplementary VHI is a matter for national debate. Taken to its limit, highly sophisticated risk adjustment (using genetic testing, for example) may erode the concept of insurance as a means of pooling risk, because subscribers would end up paying the full amount of their expected costs and insurance would then be no more than a form of prepayment. This is why statutory health insurance is (usually) compulsory and contributions to it are community-rated or related to income.

Risk adjustment is rare in VHI markets in the European Union. A system of risk adjustment operates among mutual associations providing substitutive VHI in Belgium (Hermesse, 2001). The Irish government has also set up a risk equalization scheme, but has delegated responsibility for deciding when to activate it to an independent body (Department of Health and Children, 2001b). Those with substitutive VHI in the Netherlands are subject to annual solidarity contributions to support the MOOZ and WTZ schemes (Maarse, 2001). There are no risk-adjustment or cross-subsidization schemes for VHI in other member states.

### **Risk adjustment for substitutive VHI in Belgium**

As we noted in section 2.1.1, mutual associations providing substitutive VHI cover for minor risks to self-employed people in Belgium receive subsidies from the state, whereas commercial insurers do not; these state subsidies are designed to facilitate access to substitutive VHI for self-employed people (Hermesse, 2001). Since the beginning of the 1990s, the state subsidies have been capped



at 20% of premium income for this type of VHI. Until 1994 the subsidies were shared among mutual associations solely on the basis of each mutual association's premium income in the previous year. It was assumed that mutual associations with higher levels of premium income were insuring a larger proportion of self-employed people with higher risks.

In 1994 the system of distribution changed in order to adjust for differences in premium income caused by differences in risk profiles. The subsidies were adjusted on the basis of a benchmark level of expenditure that took into account age, gender and socioeconomic status. Since 1997, risk adjustment has taken place on the basis of four age groups (younger than 40, 40 to 60, 60 to 80 and older than 80 years), levels of disability and levels of urbanization. From the end of 2001, a refined risk-adjustment formula based on individual level and morbidity indicators (such as days spent in hospital) will be used, although its introduction has been delayed due to uncertainties related to outpatient drug expenditure. As a result of this change in the risk-adjustment formula, some mutual associations will receive greater subsidies than previously, and some smaller, which may have an impact on VHI premiums.

Commercial insurers offering substitutive VHI may be at a competitive disadvantage because they do not receive these state subsidies. It is claimed that they compensate for this by resorting to risk selection, mainly by excluding or limiting cover for services essential to chronically ill or elderly people, such as drugs and nursing home stays (Palm, 2001). It could be argued that the system of state subsidies and risk adjustment should be extended to commercial insurers offering substitutive VHI, in order to reduce their incentives to risk-select (Palm, 2001).

### **The case of the risk equalization scheme in Ireland**

Currently, Ireland is the only member state to pursue a system of risk adjustment that applies to all insurers in the VHI market. The Health Insurance Act of 1994, introduced by the Irish government to satisfy the requirements of the third non-life insurance directive, set out in law the three key principles that form the basis on which VHI operates in Ireland: community rating, open enrolment and lifetime cover (Department of Health and Children, 1999). The Act also permitted, but did not require, the Irish government to introduce a system of risk adjustment, referred to in Ireland as a risk equalization scheme (RES). The 1996 Health Insurance Regulations introduced such a scheme, reflecting the government's view that risk equalization was a necessary support for community rating (Advisory Group on the Risk Equalisation Scheme, 1998), and the more recent white paper on VHI set out plans to implement the scheme on the basis of age, gender and prior utilization by June 2002 (Department of Health and Children, 1999). The Health Insurance (Amendment) Act, which came into force in 2001, established an independent Health Insurance Authority, giving it discretion to recommend to the government whether or not material differences in the risk profiles of

competing insurers warrant the initiation of risk equalization transfers (Department of Health and Children 1999). New insurers can choose to exempt themselves from participating in risk equalization arrangements for a period of three years from the start of trading in Ireland (extended from the 18 months originally envisaged in the white paper). The RES has not yet been activated.

The purpose of the RES is “to make transfers between insurers with the objective of equalising their risk profiles” (Advisory Group on the Risk Equalisation Scheme 1998). In its submission to this study, the government noted that it sees the RES as:

*...a necessary provision in a community-rated/open enrolment system of voluntary private health insurance. In a market where open enrolment operates and premiums are community rated, insurers who benefit from risk selection can charge a lower community rate, and/or keep a higher profit margin. Risk equalisation provides for the equitable distribution of risk between insurers. Without risk equalisation the system of community rating/open enrolment would be inherently unstable. Those insurers who have lower risk members will be required to contribute to a central fund (called the risk equalisation fund), and insurers with higher risk members will receive compensation from the fund ... The (proposed) risk equalisation scheme is entirely concerned with a more equitable distribution of risk profile across insurers as the means of addressing the serious dangers to a community-rated system which risk selection represents. It aims to counter the effects of either inadvertent or intentional preferred risk selection, so-called ‘cherry picking’ or ‘cream-skimming’ of generally younger, healthier lives.*

*While the risk equalisation scheme has an objective of equalising risk profiles between insurers, it also aims to allow each insurer to retain its own claims management/cost containment efficiencies and to differentiate between differing benefit levels.*

*If competing health insurers have a strong incentive to select preferred risks, it would be expected that per capita claims costs would spiral for those insurers who are relatively unsuccessful at preferred risk selection or, as a result of it, are left with a high proportion of the elderly or chronically ill insured population. This, in a community rated environment, would lead to significant market instability and lack of public confidence, ultimately leading to the down-sizing of the market. Any such development which would undermine community rating, and the inter-generational solidarity upon which it is based, would be extremely inequitable. This particularly applies to the large number of older people who, having contributed for many years to community rating, could be forced to opt out for economic reasons just when they are beginning to need health insurance cover most.*

*Risk equalisation, as envisaged in Ireland, is to be neutral regarding the flow of transfers between insurers. The flow of funds between insurers under risk equalisation will be solely determined by the respective risk profiles*

*of the insurers concerned. As the market develops, conceivably the direction of such flows could change with initial net recipients becoming subscribers to the scheme and vice versa. The ultimate beneficiary of risk equalisation is the insured population, particularly the elderly and the ill, who would otherwise be vulnerable to the effects of risk selection. Risk equalisation seeks to remove an insurer's incentive to select preferred risks, but still allows for competition in many areas, including product diversity, efficiencies in relation to claims management, cost containment and customer service.*

*The risk equalisation system will not be activated unless and until material distortions emerge between the risk profiles of competing insurers. The details of risk equalisation are to be set out in a statutory scheme which will be brought forward for approval by each House of the Oireachtas (parliament). This will include the provision of significant discretion to the independent Health Insurance Authority, both as regards any commencement of risk equalisation and the calculation of any payments to be made between insurers thereunder.* (Department of Health and Children, 2001b)

In support of the RES, the government notes that there is a substantial body of objective professional and academic opinion that supports the need for risk adjustment to maintain stability in a community-rated health insurance environment (Department of Health and Children, 2001b).

However, the introduction of the RES in Ireland has been surrounded by controversy. On one hand, it is supported by the independent Advisory Group on the Risk Equalisation Scheme. In a report to the government in 1998, the Advisory Group stated that “based on its own deliberations and on the basis of the arguments made and evidence presented to it, risk equalisation is essential to underpin community rating” (Advisory Group on the Risk Equalisation Scheme, 1998). It is also supported by the dominant voluntary health insurer, Vhi Healthcare, which claims that it will guarantee a fair, equitable and stable market for VHI in Ireland, and that without it, the system of community rating will collapse (Vhi Healthcare, 2001a).

On the other hand, BUPA Ireland, the other major voluntary health insurer in the Irish market, is heavily opposed to the RES, claiming that it is an attempt to “rig the market to protect the monopoly” (BUPA Ireland, 2000). BUPA Ireland's argument against the RES is that it “penalises cost containment, is regressive from an income distribution point of view and breaches EU law” (BUPA Ireland, 2000). In BUPA Ireland's opinion, the RES would actually destabilize the market, as it would require BUPA Ireland to compensate Vhi Healthcare by about €10.2 million, an amount that would make it difficult for BUPA Ireland to remain in the market (Murray, 2001a).

BUPA Ireland has taken legal advice that suggests it could successfully challenge the government on the grounds that the RES is illegal under the third

non-life insurance directive, but it has yet to make a formal legal challenge, citing expense as a factor in the decision to delay legal action (Murray, 2001a). The issue of legality does not appear to concern the government, however, which maintains that the third non-life insurance directive permits risk equalization and loss compensation schemes in the interest of the general good (see section 5.3.1).

### **Cross-subsidization schemes in the Netherlands**

Two separate schemes in the Netherlands require individuals with substitutive VHI to make annual solidarity contributions (see section 2.1.1). One contribution goes to the ZFW (the statutory health insurance scheme for outpatient care and the first year of inpatient care) through the MOOZ scheme, which was set up to compensate the ZFW for the disproportionately high number of elderly people that it insures. The other contribution goes to the WTZ scheme, which guarantees access to substitutive VHI for specific groups of people excluded from the ZFW, providing a standard package policy that provides similar benefits to the ZFW for a fixed premium. The WTZ is implemented by voluntary health insurers. Because the fixed WTZ premium only covers half the cost of providing the standard package policy, insurers receive full compensation from a central equalization fund financed by an annual solidarity payment made by all those with substitutive VHI.

The sustainability of these schemes was raised in a report presented to the Dutch Ministry of Health by the Dutch Council for Health and Social Services (an independent governmental advisory body), which expressed concern regarding the consequences of EU insurance law for health policy objectives such as accessibility and solidarity (Raad voor de Volksgezondheid & Zorg, 2000). This issue is discussed further in section 5.3.1.

### **3.2.5 Genetic testing and insurance**

In this section we discuss the wider implications of genetic testing, review the arguments concerning the use of genetic testing for insurance purposes and provide information on the use of genetic testing for life insurance. There is limited evidence to suggest that genetic testing is currently an issue where health insurance is concerned, although information about family history of disease is a form of genetic information that is used by health insurers in some member states.

Many governments have attempted to regulate the use of genetic information derived from genetic tests in the hope that a balance can be struck between the public's fear of discrimination and stigmatization, the desire of the insurance industry to prevent fraud and financial instability, and the need of scientists to conduct research. Information about human genetics is not new and is not simply a product of recent scientific tests. Knowledge of people's family history of disease has long presented clues to their genetic inheritance, and

such information has been used routinely by insurers as a means of assessing a person's probability of making a claim. As tests become more numerous, cheaper and more accessible, many more people will have information about their genetic make-up (although not all available tests are of proven validity or accuracy) (Holtzman, 1997). In the context of the insurance market such information raises two concerns: adverse selection and the risk this poses to the insurer, and discrimination by insurers against those with high or certain probability of claiming (Murthy, Dixon, Mossialos, 2001).

There has been much deliberation in the United Kingdom about the issue of genetics and insurance. The Department of Health's Genetics and Insurance Committee (GAIC) has so far approved the use of genetic test results for Huntingtons disease by life insurers. It is currently considering the use of genetic testing for early-onset Alzheimers disease (for which there are currently two tests under scrutiny) and hereditary breast and ovarian cancer for a range of insurance products. The committee's remit is restricted to an examination of the clinical and actuarial relevance of genetic testing for insurance purposes, and it is the task of the Human Genetics Commission to determine whether other regulatory provisions need to be put in place (Genetics and Insurance Committee, 2000).

Insurers claim that disclosure of existing test results by applicants is necessary in order to avoid exploitative insurance purchasing. They fear that if applicants withhold information about their genetic status, they might act fraudulently and may insure themselves for excessively large sums of money. On the other hand, the requirement to disclose the results of genetic tests means that people with an adverse test result are open to discrimination on the basis of genetic information and may face excessive premiums and significant exclusions, or find it impossible to obtain insurance. There are already examples of people having been refused insurance on these grounds.

There is little evidence to support the insurers' view that high-risk individuals over-insure themselves in life insurance markets. It was argued that the insurance industry in the United Kingdom suffered in the 1980s, when individuals who knew they were HIV-positive took out insurance cover that they would not normally have taken out, without disclosing their HIV status. However, as the 1997 report of the country's Human Genetics Advisory Commission (operational from December 1996 to December 1999) concluded (Human Genetics Advisory Commission, 1997), "the insurance industry could currently withstand limited adverse selection that might occur as a result of non-disclosure of genetic test results for life insurance". MacDonald estimated that if life insurance companies refrain from using genetic test results in underwriting, the industry will face additional costs, but the magnitude of these costs will be nearer to 10% than 100% (1997). Thomas estimated that a 10% increase would be indiscernible within the much larger variation that already exists among rates offered by different companies (2001).

At the EU level, despite the introduction of legislation to harmonize the insurance market, there has been no binding legislation on genetics and insurance (Murthy, Dixon, Mossialos, 2001). In its 1992 Recommendation R (92) 3 on Genetic Testing and Screening for Health Care Purposes (which is not legally binding), the European Parliament states that insurers should not have the right to require genetic testing, or to enquire about the results of previously performed tests, as a precondition for the conclusion or modification of an insurance contract.

The lack of EU regulation means that it has been left to individual countries to enact legislation to limit the use of genetic information for the purposes of insurance. Table 20 provides a comparison of laws and regulations affecting the use of genetic tests in some member states, Norway and the United States. Belgium was the first country worldwide to prohibit the use of genetic testing and genetic test results; applicants are prohibited from submitting the results of genetic testing to insurers, whatever the results. The law also prohibits physicians from using genetic testing in medical examinations for insurance purposes. Use of genetic test results for the purposes of insurance is prohibited in Austria, Denmark and Sweden. Through its Civil Code, France has enacted human rights regulation that limits the use of genetic tests to medical and scientific research purposes. French insurers have also recently adopted a moratorium on the use of genetic tests for insurance purposes. In contrast, Germany requires by law that those applying to insurance companies disclose genetic test results, but the German government is currently planning to review this situation. In the Netherlands, genetic information also includes family history information about hereditary diseases, and the use of this information is not permitted except where large amounts of coverage are being sought (Murthy, Dixon, Mossialos, 2001). In the United States during the past decade, 28 states have passed laws that either restrict insurers' use of certain genetic information or completely ban the use of genetic data for underwriting purposes. These laws have sought to protect the interests of patients from the outset by shaping industry norms and attitudes (Hall, Rich, 2000).

In an attempt to overcome the problem of bad risks over-insuring themselves, a number of measures might be introduced to ensure cover for those with adverse genetic test results and at the same time protect insurers from fraudulent behaviour. The Netherlands has specified a value of life insurance up to which disclosure of genetic information is not required. A similar cut-off was defined in the British decision to allow insurers to require disclosure of Huntingtons disease genetic test results for the purposes of mortgage-related life insurance in excess of £100 000 (€159 000). Early in May 2001, insurers agreed to a new limit of £300 000 (€476 000) for life insurance, despite earlier resistance to such a change (BBC, 2001). In October 2001 the British government an-

nounced that it had struck a deal with the insurance industry to ban genetic testing when assessing all but the highest-value policies.

An alternative solution would be to subsidize life insurance through the imposition of modest premium increases levied on all subscribers, in order to ensure cover for the small minority of people requiring special consideration. Another suggestion is to establish a reinsurance fund to underwrite the policies of individuals with a genetic predisposition, although it is not clear whether such a fund should be funded by the government or not. These suggested measures arise from insurers' argument that genetic information is likely to result in adverse selection. However, the wider social and ethical implications of genetic testing for insurance purposes should also be taken into account when deciding how to regulate genetic information.

A requirement to disclose genetic information has implications for confidentiality and patient autonomy, and the fear of discrimination may deter individuals from taking a test. Genetic testing may therefore touch on privacy laws, discrimination legislation, public health and the organization of health care. Individuals will want guarantees that genetic information will not be disclosed to third parties. A balance should be struck between patient privacy, the need of medical research to access data and the right of affected relatives to know that they may also be at risk. The growing use of genetic testing will require a re-examination of current health information management protocols to prevent the misuse of test results.

The absence of such guarantees may create severe disincentives for genetic testing in general. Fears of discrimination or isolation, and now the recognition that insurance may not be available, have caused patients to forgo a test that would otherwise prove beneficial to their health (House of Commons Science and Technology Committee, 2001). The impact of a deterrent effect could be devastating for patients, the research community and the area of preventive medicine. Alternatively, people may seek such tests outside the doctor-patient relationship. This could have severe implications for both the health of the patient and the provision of health services. The nature of genetic testing makes the establishment of a single standard with regard to familial disclosure difficult, and doctors may be torn between their duty to protect a patient's confidentiality and informing family members about a potentially life-threatening disease. Fear and uneasiness may force patients to conceal their results from their physicians and families, creating negative consequences for early-detection and prevention efforts. It is also widely held that the complexity surrounding genetic testing demonstrates a clear need for extensive pretest and post-test counselling (British Medical Association, 1998).

The view of some insurers that genetic information is important in order to accurately assess the future risk of an individual making a claim also perpetuates a deterministic view of disease. In fact, defining the clinical utility of a genetic test

is a complex task. Single genes can have several mutations occurring anywhere, all with varying levels of influence. The time of onset is often unpredictable, further complicating early detection and prevention efforts using genetic test results. Furthermore, as Vineis points out, although rare and highly penetrant mutations in cancer genes could act without interacting with external factors, gene–environment interactions are intrinsic to the mode of action of low-penetrant genes (Vineis 2001). It is therefore important for policy-makers and other stakeholders to recognise that the causality between a particular gene and its associative illness may be weak.

There is a clear need for further discussion at an EU level of genetic testing and genetic information. It will need to take account of not only the implications for insurance, but also wider social and ethical implications such as confidentiality, discrimination, changes to the doctor–patient relationship and the impact of advances in genetic science on public health.

### 3.2.6 Multiple products

In this section we will review the extent to which consumers have access to clear information about the price, quality and conditions of VHI policies, how easily they can compare VHI products and whether they are able to make informed choices about the VHI product that is most appropriate for them. The information we present draws on the reports prepared by national experts in each member state. Although we sent questionnaires to consumer associations in every member state and two pan-European consumer associations, we only received information from the Consumers' Association of Ireland, the Associação Portuguesa para a Defesa do Consumidor (DECO) in Portugal and the Consumers' Association in the United Kingdom. Consumer associations in Belgium, Denmark, France, Luxembourg and the Netherlands informed us that they were unable to respond due to lack of resources.

As noted above, information is vital to buyers and sellers in a competitive insurance market. The absence of clear information about the price, quality and conditions of VHI policies is a type of market failure that prevents consumers from making informed comparisons among different products and puts them at a competitive disadvantage in the marketplace. The use of standard benefit packages allows consumers to compare insurance products in terms of value for money, but under the current regulatory framework, the VHI market is likely to be characterized by a proliferation of different types of insurance product.

In theory, product differentiation can benefit consumers by increasing the range of products available to them and by providing them with products that are tailored to meet their needs. However, it can also be used to segment the market, giving insurers greater opportunity to distinguish between good and bad risks. Regardless of the motives behind product differentiation, the presence of multiple insurance products may result in consumer confusion unless it



**Table 20. Comparison of laws and regulations affecting the use of genetic tests in select countries**

Country	Relevant laws and regulations	Scope	Impact on insurers	Oversight
Austria	1994 Gene Technology Act	Specifically regulates the provision of genetic tests addressing laboratory quality, test accuracy, consent, counselling and information access	Use of information obtained by genetic testing (defined as molecular biological investigations of human chromosomes, genes and DNA segments) is prohibited	Austrian Advisory Board on Genetic Technology and the Austrian Minister of Labour, Health and Social Affairs set guidelines and handle quality assessments
Denmark	1997 Act 413 on Insurance Agreements and Pension Funds	Regulates genetic testing in the context of insurance markets	Act 413 prohibits insurers from requiring genetic tests and requesting, obtaining or receiving genetic information	Danish Council on Ethics and the Danish Board of Health (both of the Ministry of Health) interpret existing and proposed laws and offer quality guidelines
Netherlands	1998 Medical Examinations Act	Regulates the use of all medical examinations and health assessments	Insurers cannot require or inquire about genetic tests and no questions may be asked concerning hereditary disease; an exception is made for high-coverage amounts	Dutch Health Council offers guidelines and advises Parliament
Sweden	1999 Agreement between the Swedish government and the Association of Insurance Companies	Formal agreement between regulators and insurance industry	Insurers refrain from use of information obtained by studying one's genetic characteristics	National Board of Health and Social Welfare makes recommendations to Parliament and writes quality guidelines
Norway	1994 Act Relating to the Application of Biotechnology in Medicine	Specifically regulates the provision of genetic testing, including consent, counselling and information access	Illegal to request, receive, retain or make use of information deriving from genetic tests	An advisory group of the Norwegian Board of Health assists in the interpretation of the Act and offers quality assurance guidelines
United States	State laws	State regulations specifically address the insurance industry	State prohibitions vary with the type of insurance, type of information and the use of information	State insurance commissioners; Federal Agencies under the Department of Health and Human Services (National Institutes of Health, Food and Drug Administration, Centers for Disease Control, Office for Protection from Research Risks, and the Health Care Financing Administration)
	1996 Health Insurance Portability and Accountability Act	Federal law addresses group health insurers	Federal law prohibits insurance exclusions on the basis of genetic test results	

Source: Murthy, Dixon, Mossialos, 2001.

is accompanied by a level of information sufficient to permit consumers to compare products in terms of value for money. Without the provision of sufficient information, product differentiation may reduce price competition.

A recent OECD report on private health insurance notes that “as the [British market has become more competitive and the diversity of schemes has increased, so consumers have faced increasing difficulty in comparing premiums and benefits offered” (OECD, 2001b). Evidence from some member states also suggests that the multiplicity, variability and complexity of VHI products on offer may lead to consumer detriment. Consumer detriment can be defined as the loss to consumers from making misinformed or uninformed choices or “the difference between the outcome that consumers experience with the available information and the outcome they would experience with the further information they could usefully obtain and assimilate, perhaps by additional shopping around” (Office of Fair Trading, 2000a). It may occur in three main ways:

1. consumers may not buy the product or service at the cheapest price available;
2. consumers may not buy the most appropriate product, given their tastes and preferences; and
3. consumers may purchase a product or service that is not of the quality they assumed *ex ante* (Office of Fair Trading, 1997).

Each of these results is common in markets characterized by imperfect information, although the cause of the detriment and its magnitude varies from case to case. In the context of the European Union, information asymmetry is more likely to be problematic for subscribers of complementary and supplementary VHI, as this market is largely free of price and product controls, although it can also pose problems for subscribers of substitutive VHI.

The problems caused by information asymmetry may be mitigated by some or all of the following factors:

- minimal variation among VHI products;
- the use, by insurers, of standardized terms;
- the existence of a standard package of benefits;
- the requirement of insurers to inform potential and existing subscribers of all the options open to them;
- the existence of a central source of information on the price, quality and conditions of VHI products;
- the existence of comparative information on the price, quality and conditions of VHI products that is easily accessible to all sections of the population.

As a result of the abolition of price and product controls (through the third non-life insurance directive in 1994), insurers may not have incentives to in-

crease transparency and reduce consumer confusion by introducing standardised terms or standard benefit packages. Standard benefit packages are only found in substitutive VHI markets and changes in the regulatory environment have generally been accompanied by increased product differentiation in complementary and supplementary VHI markets, giving the appearance of fierce competition and increased choice for consumers.

VHI products in Spain were relatively homogeneous until legislation was passed in 1995 to bring Spanish insurance law in line with the third non-life insurance directive. Prior to the introduction of this legislation, insurers providing benefits in kind were prevented from providing benefits in cash, but the 1995 law removed this specification. This change in the law, together with convergence in the market, has encouraged competition through product differentiation, so there is now a growing diversity in the types of VHI product offered by insurers (Rodríguez, 2001). It is not yet clear what effect this has had on consumers.

In its submission to this study, the Portuguese consumers' association (DECO) identifies consumers' lack of access to clear information about supplementary VHI policy conditions, particularly exclusions, as a "major problem". Although DECO regularly publishes comparative information about existing VHI products, it finds it difficult to cover all possibilities, as voluntary health insurers often introduce new products with subtle differences (DECO, 2001). DECO argues that the divergence of VHI products on offer makes it hard to compare prices between both products and insurers.

This also seems to be the case in the Netherlands and Greece, where potential subscribers of complementary VHI (the Netherlands) and supplementary VHI (Greece) must choose from a wide range of options as to price, levels of cover, policy conditions, payment mechanisms and quality, making comparison difficult (Maarse, 2001; Economou, 2001).

With regard to substitutive VHI, subscribers in the Netherlands do have access to information about prices and policy conditions, but again, comparison is difficult, and the market is not transparent (Maarse, 2001). Consumer associations in Germany have recently noted that people find it increasingly difficult to distinguish between necessary and superfluous VHI products (Datamonitor, 2000b). Individuals may have to buy several different policies in order to obtain comprehensive substitutive VHI coverage, as outpatient and dental benefits are offered separately from inpatient benefits. So although employees with substitutive VHI usually enjoy the same benefits as those insured by the GKV, their level of cover depends on the policies they buy (Busse, 2001). This may not be problematic where inpatient care is concerned, as inpatient benefits are clearly defined and there is not much variation among inpatient policies, but policies offering outpatient benefits vary substantially, particularly with regard to marginal benefits such as psychotherapy, alternative treatment, rehabilitation

and transport. As a result, some outpatient policies offer lower levels of coverage than would be provided by the GKV (Busse, 2001).

In order to protect substitutive VHI subscribers in Germany, the Reform Act of Social Health Insurance 2000 stipulates that voluntary health insurers must inform potential subscribers of the likelihood of increasing premiums, the possibility of limiting the increase in premiums with old age and the irreversibility of the decision to opt out of the GKV (CEA, 2000; Bundesaufsichtsamt für das Versicherungswesen, 2001). Voluntary health insurers are also required to inform policy holders of the possibility of switching to another tariff category when their premiums go up, and to advise policy holders aged 60 and older to switch to the standard rate policy (see above) or to switch to another tariff category that includes the same benefits for a lower premium (Bundesaufsichtsamt für das Versicherungswesen, 2001). Even so, for subscribers younger than 60, it can be difficult to assess all the options available, both among insurers, and among a given insurer's offerings, which is why a market for independent consumer information sources (for example, Stiftung Warentest) and independent insurance brokers has developed (Busse, 2001). The former appear to provide good value for money, although it is not clear how many people make use of their services.

The exclusions of VHI policies in the United Kingdom are numerous and often difficult to judge, and the profusion of supplementary VHI products means that both subscribers and brokers are easily confused (Calnan, 1993; Youngman, 1994). In the late 1990s the Office of Fair Trading (OFT)<sup>17</sup> launched two enquiries into the VHI sector in the United Kingdom in order to identify consumer detriment and information gaps, and produced two critical reports (OFT, 1996; OFT, 1998b). The second report noted that:

*most of the leading [voluntary health] insurers seems to have developed their own preferred policy definitions, general conditions and exclusions. Although some of the reasons are historical, we suspect that competitive market pressures have encouraged some insurers to make their products difficult to compare with those of their competitors (OFT, 1998b).*

In 1999 the OFT finally cleared the VHI industry of major competition problems, but highlighted the need for much greater clarity and accuracy in the information available to policy holders, describing the information provided by the two largest insurers as unsatisfactory (OFT, 1999).

The OFT reports recommended that voluntary health insurers should introduce "benchmark" or "core term" products (standard benefit packages); publish statistics on the average increases in their VHI premiums over the previous five years and draw these statistics to the attention of consumers; and abandon

---

<sup>17</sup>The OFT is an independent organization promoting and protecting consumer interests in the United Kingdom and ensuring that businesses are fair and competitive.

moratorium underwriting (OFT, 2000b). In response to the first recommendation, the Association of British Insurers claimed that standard benefit packages would have a restrictive effect, stifling innovation. However, the OFT argued that while innovation resulting in increased product complexity might give the appearance of fierce competition, it does little to improve the lot of subscribers, who sometimes pay more than they should and often purchase inappropriate policies (OFT, 1998a). Voluntary health insurers eventually agreed to address the issue by producing a simplified VHI “product outline” and generic product guide to the product, which the OFT hoped would enable subscribers to understand and compare policies better (Davey, 1999). In 2000 the OFT noted that VHI product literature had improved, and core benefit tables now enabled buyers to compare products (OFT, 2000b).

However, it is not clear whether the industry has succeeded in reducing subscriber confusion. For example, a table published in a consumer magazine showing the cheapest monthly comprehensive and budget VHI premiums currently on offer from 20 insurers in the United Kingdom is accompanied by no less than 69 footnotes (Knight 2000), and a 50-year-old man considering buying a VHI policy from the second largest insurer in the United Kingdom still has to choose from 90 different monthly premium options ranging from £28.67 per month (£344.04 per year) to £363.82 per month (£4365.84 per year) (CareHealth, 2000). Other major insurers in the United Kingdom also offer a high number of premium options, ranging from 18 to 54 (CareHealth, 2000).

In late 2001 the British government announced that general insurance sales (including the sale of VHI) would now come under the statutory regulation of the Financial Services Authority (FSA) (Her Majesty’s Treasury, 2001a). In making its decision, the government stated that statutory regulation of general insurance would “help true competition to flourish in this area, because it would help correct the information asymmetry that presently exists against the customer” (Her Majesty’s Treasury, 2001b).

The existence of a small number of comparable VHI products has enabled consumers in other member states to make appropriate choices. This is the case with complementary VHI in Luxembourg, complementary VHI to cover the cost of per diem hospital charges in Austria and the three most common individual supplementary VHI policies in Sweden (Schmitz, 2001; Hofmarcher, 2001; Skoglund, 2001).

Group policies may also present fewer problems than individual policies in terms of comparison, as there may be a reduced choice of product or less variation among products. For example, conditions do not vary much among group policies in France, and insurers providing group policies must provide clear and accessible information about each policy (Sandier, Ulmann, 2001). In Denmark the options open to employees subscribing to group policies are often limited. The information provided to employees may also be limited, but the involve-

ment of trade union representatives in negotiating the terms on which group policies are offered may compensate for this lack of information (Vrangbæk, 2001).

In the absence of central sources of information about the price, quality and conditions of any type of VHI, consumers in most member states may have to rely on insurers and insurance brokers to provide them with information about the VHI products they can purchase, although alternative sources of comparative information may be becoming more readily available in some member states. Such sources include consumer associations, independent web sites and other media. As we mentioned above, consumer associations are active in Germany and Portugal. Consumer associations also provide information about VHI in Austria, Belgium, France, Ireland and the United Kingdom.

Obtaining adequate information about individual VHI policies in France can be a difficult process, but web sites have recently developed that allow comparisons among the policies offered by different types of insurer. For example, the Conseil National de la Consommation (National Consumers' Council) has produced a questionnaire showing the questions a consumer should ask before purchasing VHI. By comparing responses to questions such as "How long will I have to wait before being reimbursed?", "What are the limits to the reimbursement of a single-bed room?" or "Does a third-party payer system exist?", consumers are assisted in purchasing an appropriate policy (Sandier, Ulmann, 2001).

Access to sufficient comparative information should not be a problem in Ireland, as there are only two major insurers in the market (Vhi Healthcare and BUPA Ireland), and price and product comparisons between the two insurers are commonplace in newspapers, through information provided by consumer associations and via independent web sites. However, elderly people may have less access to comparative information (particularly that provided via the Internet) and are less likely to act on it; changing from one insurer to the other is more likely to be done by employers providing group policies than by individuals. In spite of the fact that there are only two major insurers in the market, the magazine of the Consumers' Association of Ireland concludes that "on cost alone it is difficult to assess which organisation is cheaper overall as there are many variants, and savings depend on the medical requirements of the subscriber" (Consumer Choice, 1998).

Overall, it seems that inadequate effort has been made at national levels to address the problem of information asymmetry between insurers and consumers. Changes in the regulatory environment have been accompanied by increased product differentiation in some member states, which may benefit consumers by increasing the range of products available to them and by providing them with products that are tailored to meet their needs, but can also be used to segment the market. As a result of the abolition of price and product controls, insurers have little incentive to increase transparency and reduce

consumer confusion by introducing standardized terms or standard benefit packages.

### 3.3 Equity implications

In this section we examine the equity implications of VHI markets in terms of the funding and delivery of health care. Unfortunately empirical research concerning equity and VHI markets in the European Union is not extensive; much of the information we present here is based on studies by the EU-funded ECuity II Project.

#### 3.3.1 Equity in funding health care

Two ECuity studies have analysed vertical and horizontal equity in health care funding in 12 OECD countries in the early 1990s. The analysis by Wagstaff et al. (1999) of vertical equity (that is, the extent to which individuals on unequal incomes are treated unequally)<sup>18</sup> found VHI to be regressive in France, Ireland and Spain, proportionate to income in Finland and progressive in Denmark, Germany, Italy, the Netherlands, Portugal and the United Kingdom. The analysis also found that over time, VHI had become less progressive in every country except Spain. The finding that VHI was progressive in some countries can be attributed to the fact that only high earners are eligible to purchase substitutive VHI in Germany and the Netherlands, while most subscribers in the other countries come from higher income groups, as we have shown.<sup>19</sup> An accompanying study attempted to measure horizontal equity (that is, the extent to which individuals on equal incomes are treated equally) in health care funding in the same set of countries. The study's analysis of the redistributive effect of health care funding among individuals with equal incomes found that VHI caused income inequality in France and Ireland, had no redistributive effect in Denmark and had a very small redistributive effect in Germany and the Netherlands (van Doorslaer et al., 1999).

In terms of expanding VHI, it is argued that increasing levels of complementary and supplementary VHI coverage will not increase the regressivity of health care funding because individuals who take up these types of VHI will be paying twice for their health care. According to this argument, it does not matter if people pay twice. In fact, double payment may even be beneficial because it will reduce demand in the statutory health care system, enabling more public resources to be spent on those without VHI. For example, in its submission to this study, the Association of British Insurers claims that VHI "provides

---

<sup>18</sup> In a regressive funding system the poor spend a greater proportion of their income on health care than the rich; in a proportionate funding system everybody spends the same proportion of their income; and in a progressive funding system the rich spend a greater proportion of their income on health care than the poor.

<sup>19</sup> Because access to substitutive VHI is mainly determined by income, those covered by this type of insurance are expected to be high earners. The distribution of coverage for complementary and supplementary VHI should show greater overall variation; in general it does, but it is also strongly biased in favour of high-income groups.

choice to consumers and relieves pressure on the public health care system” (ABI, 2001b). Similar claims are made about tax incentives to encourage the purchase of VHI (see 2.4.2).

Initially, the idea that increased take-up of VHI will reduce demand and relieve pressure on the statutory health care system seems plausible, but it may not happen in practice, as we will discuss in the following section. Furthermore, tax relief for those who purchase VHI may be inequitable where it benefits those in employment at the expense of those without employment, and where it is applied at the marginal tax rate, thereby increasing the value of the relief to those in higher tax bands. As employer-paid VHI policies in most member states are not subject to a benefit-in-kind tax, they provide employees with a tax-free benefit in kind that is not available to those who pay for VHI themselves and that favours individuals in higher tax bands.

### 3.3.2 Equity in the delivery of health care

As we noted in the introduction to this section, the existence of VHI could present a barrier to access in the statutory health care system by distorting the allocation of public resources, to the detriment of public patients. This is most likely to happen when the boundaries between public and private health care are not clearly defined, particularly if capacity is limited, if providers are paid by both the public and the private sector and if VHI creates incentives for health care professionals to treat public and private patients differently (see section 2.3.3). Under such circumstances the total equity effect of complementary and supplementary VHI (taking into account both equity in funding health care and equity in the receipt of health care benefits) is likely to be negative.<sup>20</sup>

With regard to the argument that increasing VHI coverage reduces demand for statutory health care, the extent to which an expansion of VHI results in lower demand for statutory health care also depends on whether boundaries between public and private health care are clearly defined. In the United Kingdom, for example, where both sectors make use of the same supply of doctors, an increase in private sector activity per se may not lead to an increase in the public sector’s capacity to tackle waiting lists. In fact, increasing private sector activity might actually reduce public sector capacity.

A more recent study by the ECuity II Project attempted to assess the degree of horizontal equity achieved in health care utilization in 14 OECD countries (the United States, Canada and 12 EU member states, excluding Finland, France and Sweden); that is, the degree to which the overall use of doctor visits is distributed according to need (van Doorslaer, Koolman, Puffer, 2001). Using data from the European Community Household Panel (for the European countries), the authors found that after standardizing for need differences across the income dis-

---

<sup>20</sup> It is also difficult to see how an expansion of complementary and supplementary VHI would increase the redistributive effect of health care funding.



tribution, significant horizontal inequity in total doctor visits was only evident in Austria, Greece, Portugal and the United States. However, when doctor visits were disaggregated into visits to general practitioners and visits to specialists, it was found that in every country except Luxembourg, richer people visited specialists more often than expected on the basis of need, while the use of general practitioners was relatively closely correlated with need (and in some countries it was slightly pro-poor). "Excess" specialist visits (not correlated with need) by higher income groups were particularly high in Ireland and Portugal.

The same study found that the degree and distribution of VHI coverage and regional disparities reduced equity in the use of doctor visits, although in most countries the negative effect on equity was fairly small. However, the effect of VHI coverage on the use of specialist visits in Ireland was very high, indicating that the lack of VHI coverage does act as a barrier to specialist care for lower income groups, in spite of their entitlement to free specialist care. VHI coverage also had a considerable impact on "excess" specialist use in the United Kingdom (where supplementary VHI cover buys faster access to specialist care) and, to a lesser extent, in Spain, Belgium, Denmark, Austria, Canada and Italy.

A Spanish study suggests that the existence of VHI may increase inequality in the Spanish health care system, with negative consequences for the health of poorer people (Borràs et al., 1999). The authors found that Catalonian women with VHI showed a higher percentage of cancer screening tests than the rest of the population, perhaps because double coverage (by both the National Health System, or NHS, and VHI) provides women with more personalized care and increased involvement by physicians. An investigation into inequalities by social class in access to and utilization of health services in Catalonia found that although double coverage did not influence the social pattern of visits to health services provided by the NHS, there were social inequalities in the use of those health services provided only partially by the NHS (mostly dental care), and visits to a dentist were more frequent among those with complementary VHI (Rajmil, et al. 2000).

In the Netherlands, weak gate-keeping in the private sector (leading to fewer general practitioner contacts for VHI subscribers) has negatively affected gate-keeping in the public sector. Until recently it was compulsory for individuals with statutory health insurance to obtain a general practitioner's referral before seeing a specialist or receiving treatment in hospital, but as a result of competition from voluntary health insurers, who do not insist on referral, some public sickness funds have decided to relax their gate-keeping requirements (Kulu-Glasgow, Delnois, de Bakker, 1998).

In France, where insurers provide complementary cover for co-payments imposed by the statutory health care system, research shows that those with complementary VHI consume more health care than those without (Breuil-Genier, 2000), particularly ambulatory care, dental care and corrective lenses (Bocogna-

no et al., 2000). Individuals with complementary VHI made 1.5 visits to a doctor in a three month period (compared to 1.1 visits for individuals without complementary VHI), seeking health care once every 73 days on average, compared to once every 100 days for those without this type of insurance (Breuil-Genier, 2000).<sup>21</sup> The market for complementary VHI has grown rapidly in France, covering a third of the population in 1960, 50% in 1970, 70% in 1980 and 85% in 1998 (Sandier, Ulmann, 2001). As a result of concerns about complementary VHI exacerbating existing inequalities in access to health care, in January 2001 the French government introduced a law on universal health coverage (CMU) to extend complementary VHI coverage to the 15% of the population that was not already covered (see section 3.2.1).

There is also some evidence to suggest that higher social classes in Germany use more specialist care than lower social classes, and it is claimed that this reflects their VHI coverage (Wysong, Abel, 1990), although it may also be linked to other determinants of access to health care, such as information and educational levels.

Irish patients with VHI are able to make use of private and semiprivate beds in public hospitals and publicly salaried consultants' private services in both public and private hospitals, in spite of long waiting times for public patients in public hospitals for certain types of specialist care (Vhi Healthcare, 2001c). Private and semiprivate beds have accounted for about 20% of acute hospital beds since the process was introduced in the early 1990s (Nolan, Wiley, 2000). The results of a recent study by the Dublin-based Economic and Social Research Institute suggest that private patient usage of public hospital facilities is growing at a faster rate than that of public patients (Wiley, 2001). Data presented in the study show that for each category of hospital admission, including planned (elective), emergency and day care, utilization by private patients has been increasing at a faster rate than utilization by public patients. The study also found that private patients accounted for close to 30% of discharges in 1999 and 2000, even though only about 20% of acute beds at the national level are designated as private.

The situation in Ireland is a source of controversy, leading to a debate about the future of the public-private mix in the health care system. Voluntary health insurers are of the opinion that:

*“the level of inpatient beds set aside for private patients in public hospitals should be reviewed upwards from its current notional level of 20 per cent to reflect the enormous growth in private health insurance take up over the last decade in Ireland, and to ensure that patients who have provided for their own health care can continue to access facilities to which they are entitled”* (Vhi Healthcare, 2001c).

---

<sup>21</sup> A report on the French health care system published recently by the Organisation for Economic Co-operation and Development recommends that complementary insurers devise more appropriate methods of funding health care, in order to strike a better balance between preventive and curative care (Imai, Jacobzone, Lenain, 2000).

However, increasing use of public resources by private patients would appear to be at the expense of equity in the receipt of benefits in the overall health care system. Consequently, the Irish government's health strategy published in November 2001 proposes that all additional beds made available in public hospitals be solely for public use; that is, that there be no additional private beds made available in public hospitals (Department of Health and Children, 2001a). The government also proposes that the rules governing access to public beds be clarified and suggests that action be taken to suspend the admission of private patients for planned (elective) treatment if the maximum target waiting time for public patients is exceeded (Society of Actuaries in Ireland, 2001).

Ensuring clear boundaries between public and private health care is a matter for public policy at a national level. The equity (and efficiency) implications of voluntary health insurers' relationships with providers in different member states should also be of concern to policy-makers. Overall, however, knowledge about the equity implications of VHI is limited and more research is needed, as the available research results may not be generalizable.

---

# Section 4 Implications for the free movement of people and services in the EU

This section aims to:

- review briefly the free movement of patients in statutory health care systems;
- examine the impact of VHI on the free movement of people within the European Union; and
- examine the impact of VHI on the free movement of services within the European Union.

## 4.1 The free movement of patients in statutory health care systems

The impact of VHI on the free movement of people must be seen within the context of statutory arrangements for the provision of health care across borders. In theory, national boundaries do not exist for individuals seeking health care in another member state, in so far as people are free to move and live anywhere within the territory of the European Union<sup>22</sup>. In practice, however, national authorities responsible for health care usually confine their activities to their own country, so statutory health coverage has traditionally been limited to providers established within national boundaries. This is known as the territoriality principle. Since 1958, the European Community (EC) Treaty has provided an exemption to the territoriality principle in order to encourage the free movement of people within the European Union.

The Community mechanism for the coordination of social security systems, based on EC Regulations 1408/71 and 574/72, allows migrant workers and their dependants to obtain health care in a country in which they are living for work purposes (Council of the European Communities, 1997). These regulations have subsequently been extended to almost the whole EU popula-

---

<sup>22</sup>This principle of the free movement of persons, which is one of the cornerstones of the European Community (EC) Treaty, has evolved over time from an essentially economic right to a right of European citizens (Article 18; ex Article 8A). See also van der Mei, 2001.

tion (with the exception of nationals from non-EU countries, who are excluded from this system even if they reside in the European Union and are affiliated with a national social security system).

Currently, there are two grounds for eligibility for health care during a temporary stay abroad. They differ as to whether they incorporate the principle of “urgency”; in other words, whether their condition requires urgent investigation and treatment. People who may receive treatment regardless of whether their condition is urgent include:

- pensioners and their families;
- unemployed persons and their families who go to another member state to look for work;
- employed and self-employed persons pursuing professional activity in another member state;
- frontier workers (although their families must obtain prior authorization for non-urgent treatment if there is no agreement between the countries concerned); and
- students and those undertaking professional training and their families (since October 1997).

For all other people, the condition of urgency of treatment needs to be met (under Article 22.1 of the EC Treaty). Access to health care outside the member state of residence is therefore essentially limited to urgent health care during a temporary stay in another member state (certified by Form E111). Otherwise, those seeking planned health care in another member state, under Article 22.1 of EC Regulation 1408/71, must obtain prior authorization from their competent social security institution (certified by Form E112).

So far, however, these regulations have not resulted in widespread movement of patients, largely because member states have generally taken a restrictive approach to health care provided abroad. In 1978 and 1979, two ECJ (European Court of Justice) judgements relating to the conditions governing the granting of prior authorization under Article 22 of EC Regulation 1408/71 established the principle that authorization must be granted in all cases where it will improve the medical state of the patient, irrespective of any other considerations (ECJ, 1978; ECJ, 1979). This interpretation led the Council to restrict the scope of the relevant regulation (Council of the European Communities, 1981). Under the amended regulation, member states retain a wide discretion in defining their authorization policy, as Article 22.2.2 only states that authorization cannot be refused:

- when the treatment required by the interested party is part of the health care package covered by the social protection system in the area of health care; and

- this treatment cannot be provided in a person's country of residence within the period that is normally necessary, in view of his/her current state of health and the probable course of his/her disease.<sup>23</sup>

Member states have tended to refuse to authorize any treatment in another member state that can be provided in the original state. Even now, a country such as the United Kingdom only grants about 600 E112 forms a year, France some 200 and Sweden not more than 20. Belgium and Luxembourg have been somewhat less restrictive, relative to the size of their populations, issuing about 2000 and 7000 E112 authorizations a year respectively (Palm et al., 2000). This reluctance on the part of member states to support greater patient movement partly explains the marginal financial impact of EU cross-border care on public budgets; on average, each member state spends approximately €2 per inhabitant, representing less than 0.5% of public<sup>24</sup>.

However, other more natural obstacles also stand in the way of receiving treatment abroad, such as language differences, distance, lack of information about the type of health care provided abroad, unfamiliarity with a different health care system, the unwillingness of local doctors to refer patients to other countries, the administrative burden of the procedures involved, and travel time and costs (Mountford, 2000). The demand for cross-border health care appears to be concentrated in border areas (and very small member states like Luxembourg) and often involves high-technology health care. It also concerns a limited group of people, in particular those with access to sufficient information (Hermesse, 1999). But even in the cross-border "Euregios", where the potential for cross-border health care is greatest, or between Northern Ireland and the Republic of Ireland, where patient movement is being promoted as part of the Irish peace process (Jamison et al., 2001), there is a lack of adequate information available to potential cross-border patients (Hermans, 2000). The practical and legal obstacles to cross-border care are likely to remain considerable for some time (Coheur, 2001).

Nevertheless, the demand for cross-border care will almost certainly increase in future, as the experience of the Euregios shows (Hermans, 2000) and as evidenced by the various claims before national courts and the ECJ, as well as by growing public interest in this issue. Several factors may further stimulate this demand, including:

- the increasing movement of people in general;
- increasing shortages of human and financial resources creating waiting lists and other access problems;

---

<sup>23</sup>It has been argued that this second condition was put in place in order to prevent patients from bypassing waiting lists by seeking authorization for treatment abroad (van der Mei, 2001), although this view could be contested on the grounds that waiting lists were not an issue in 1981.

<sup>24</sup>Luxembourg is a notable exception, spending €16 per inhabitant on EU cross-border care (9% of its public expenditure on health). This is largely due to Luxembourg's limited medical infrastructure, leading to much greater use of authorized health care abroad than in other member states.

- the development of new experimental treatments in some member states;
- increased information among patients;
- growing integration in border areas;
- the increased ability to compare prices due to monetary union;
- the possibility of distance selling; and
- the likelihood of further claims before the Court, in the light of recent ECJ rulings.

Discussion about access to health care abroad has traditionally been based on the principle of the free movement of people within the European Union, but in 1998 the European Court of Justice was required to assess the rules regarding access to health care abroad in the light of the free movement of goods and services. Through the Kohll and Decker rulings of 1998, the Court appears to have established a dual system of social protection for non-urgent health care received in another member state, giving EU citizens a choice of two options for coverage of health care abroad (ECJ, 1998a; ECJ, 1998b; Palm et al., 2000). On one hand, the Court upheld the classic E112 procedure governed by EC Regulation 1408/71, in which patients who have received prior authorization from their social security institution is accepted by the social protection system of the country in which they receive the medical treatment “as though [they] were insured with it” (Article 22.1.c). This implies that the patient is subject to the same arrangements regarding, for example, cost-sharing and referral for specialist care, and that any health care costs are settled between both social security systems according to the tariffs of the country in which the treatment was delivered. On the other hand, the Court created an alternative (Kohll and Decker) procedure, based directly on the EC Treaty, by which patients receiving treatment abroad without prior authorization are not integrated into the social security system of another member state, but can claim reimbursement from their own social security system “as if they received the treatment there”. This would mean that reimbursement in the home state is subject to the conditions and according to the tariffs applicable there.

The Kohll and Decker rulings established clearly, for the first time, that the economic rules regarding the free movement of goods and services within the European Union can be applied to health care systems. However, they also led to confusion on two issues. First, whether they applied to hospital as well as ambulatory care, and second, whether they applied to all types of health care system, and not just to the reimbursement systems of France, Belgium and Luxembourg. Subsequent cases brought before the European Court of Justice in July 2001 provided the necessary clarification. In Smits–Peerbooms and Vanbraeckel the Court successfully answered the two questions raised by Kohll and Decker (ECJ, 2001a; ECJ, 2001b). First, hospital services are considered services in the sense of Article 50 of the EC Treaty and are not, therefore, exempt from the rules on the freedom to provide services. Second, the Kohll and Decker rul-

ings apply to all types of health care systems, including systems that provide benefits in kind.

These ECJ rulings have broadened the scope for patients to be treated in other member states at the expense of the social security system in their home member state, although in the case of *Smits–Peerbooms*, the Court noted that member states would be justified in requiring prior authorization where there was a possibility of seriously undermining a social security system's financial balance and a need to guarantee a rationalized, stable, balanced and accessible supply of hospital services through planning and contracting (ECJ, 2001b).

It is generally considered that the ECJ rulings do not concern VHI, except where national legislation governing VHI restricts free movement, where voluntary health insurers are responsible for providing statutory protection, and where their practices hinder free movement (Palm, 2001).

## 4.2 VHI and potential barriers to the free movement of people

The *Kohll*, *Decker*, *Smits–Peerbooms* and *Vanbraekel* rulings of the ECJ have broadened the scope for patients seeking health care in other member states to be reimbursed by the social security system of their home member state. In theory it is now easier for EU citizens to obtain health care in other member states (notwithstanding the non-legal barriers to the free movement of patients noted above: language differences, distance, lack of information, unfamiliarity with a foreign health care system, the unwillingness of local doctors to refer patients to other countries, the administrative burden of the procedures involved, and travel time and costs). In practice the number of people treated abroad remains small.

VHI becomes relevant to this debate when possible gaps in statutory coverage are taken into account. These might include substantial co-payments, long waiting times for treatment and exclusions from statutory coverage. Individuals living in a member state with few gaps in coverage could find, on moving to a member state with larger gaps in coverage, that the level of protection they were accustomed to can only be obtained with the additional assistance of VHI. For example, individuals moving to France would require complementary VHI to cover the cost of co-payments in the statutory health care system; individuals moving to Ireland might require complementary and supplementary VHI to avoid long waiting times and to cover the costs of consultants' fees and outpatient care; and self-employed individuals moving to Belgium or Germany would need to purchase substitutive VHI because statutory coverage for some (Belgium) or all (Germany) health services would not be available to them.

In order to ascertain whether VHI facilitates or hinders the mobility of EU citizens in this respect, we need to address the following questions.



- To what extent are voluntary health insurers able and willing to provide cover for health care obtained in other member states? That is, to what extent are VHI benefits portable?
- Perhaps more importantly to what extent are individuals who move to another member state to work or live (for example, migrant workers or those who retire abroad) able to obtain VHI cover in the host member state on the same terms as those already living there?

A major obstacle to addressing these questions on an empirical basis is the lack of documented evidence concerning cases in which individuals' freedom of movement has been hindered by the non-portability of VHI benefits. On the basis of complaints it has received, the European Commission has identified the portability of VHI benefits as a key issue for migrant workers and individuals who wish to move to another member state on retirement, noting that the arrangements for complementary and supplementary VHI do hinder mobility in the European Union (Directorate-General for the Internal Market, 2001). However, we are unable to assess the nature of these complaints, as the European Commission has not been able to provide us with the details of specific cases for reasons of confidentiality.

One option for people who are already covered by VHI in their home member state would be to extend or transfer this coverage to the host member state, but not all insurers are able or willing to do this. The responses we received from voluntary health insurers with regard to the impact of VHI on the free movement of people indicate that most insurers do not consider VHI to have much effect on mobility within the European Union. However, there was a degree of divergence between the response of mutual associations and the response of commercial insurers. The *Fédération Nationale de la Mutualité Française* (FNMF) observed that complementary and supplementary VHI do not allow much portability of benefits (although substitutive VHI might be able to provide a greater degree of portability) (FNMF, 2001). While FNMF members attempt to overcome this problem by offering some reimbursement of cross-border care under certain circumstances, on the whole, mutual associations feel constrained by their national rules (AIM, 2001).

In contrast, commercial insurers do not find that the free movement of people poses many problems, provided that the use of providers in other member states does not cause costs to escalate. The German Association of Private Health Insurers (PKV) noted that they consider VHI as "well placed to guarantee these freedoms: contracts offered by private health insurers to persons living permanently in Germany are valid throughout Europe. When the person moves his/her permanent residence to another member state of the European Union, the contract can be transferred" (PKV, 2001). CEA also commented that VHI is a natural ally of the free movement of people, based as it is on reimbursement rather than the provision of benefits in kind (CEA, 2001). CEA did

acknowledge, however, that this potential has rarely been borne out in practice.

From the commercial insurers' perspective, the provision of cross-border care may not be problematic because they will provide additional cover as long as people are willing to pay for it. However, anecdotal evidence suggests that individuals insured with some commercial insurers will have to cancel their existing contract (in the home member state) and take out a new contract (in the host member state) provided by the same insurer. The new contract may not take into account their previous history of coverage, even though it is with the same insurer.

Even if insurers are prepared to extend coverage to another member state, the extension of coverage is likely to come at an additional cost, and some subscribers may find themselves being charged higher premiums for the same level of coverage. As commercial VHI premiums are generally calculated on an actuarial basis, subscribers seeking cover abroad could be required to pay extra charges if the costs of health care in the member state of treatment substantially exceed calculated costs (PKV, 2001).

There is evidence to suggest that some voluntary health insurers do seek to provide cover for subscribers who regularly travel across national borders (Luginland, 2001), but this evidence is limited, and as CEA pointed out, the role of VHI in providing coverage for health care provided beyond national boundaries is, at present, extremely small.

The second question, concerning the extent to which individuals are disadvantaged when they purchase VHI in another member state (relative to those already covered by VHI there), may be of more concern. As we noted above, empirical observations with respect to this issue are lacking. Nevertheless, as the European Commission notes, VHI benefits are rarely portable without some disadvantage to the subscriber, and it is possible to highlight areas of potential difficulty.

A key issue concerns the non-legal barriers we have already mentioned, such as language, information and familiarity barriers. Although these barriers are not specific to VHI, they may be a cause for concern when the inherent problems of information in VHI markets are taken into account (see section 3.2.6), particularly if VHI contracts are written in a language the subscriber does not understand. This problem may be mitigated to some extent by the use of agents and brokers.

Other areas of potential difficulty revolve around the status of those applying for VHI coverage in host member states. If applicants are treated as new entrants to the market, without consideration of their previous history of VHI coverage, they may be subject to higher premiums, the exclusion of pre-existing conditions and waiting periods. This may disadvantage people of all ages, but it is most likely to be a significant barrier for older people. According to the Eu-

ropean Commission, people moving to another member state up on retirement often find that they are regarded by voluntary health insurers as new and high-risk subscribers due to their age; consequently, they may be required to pay extremely expensive premiums.

The Society of Actuaries in Ireland raised the issue of premium loading as a penalty for late entry in its submission to this study. In 2001 the Irish Health Insurance (Amendment) Act came into force. This Act introduces the concept of lifetime community rating, which allows voluntary health insurers to impose a premium loading on any individual who purchases VHI after the age of 35 (Society of Actuaries in Ireland, 2001). The Society questions whether such penalties should be applied to individuals who have been living in another member state. It is their view that:

*if a person can provide evidence of time spent abroad, consideration should be given to requiring this period to be taken into account in calculating the maximum late entry penalty. Depending on the country the person lived in, health insurance may not have been required, affordable, available or normal practice. In this circumstance it would seem unfair to apply a penalty to the person for not having had health insurance while abroad. However, it could also be regarded as unfair that a person who has lived abroad is treated more favourably than a person who has always lived in Ireland, when neither person has had health insurance before (Society of Actuaries in Ireland, 2001).*

The same issue applies to risk-rated premiums. As we showed in Table 11 (see Section 2.3.1), age is used as a variable to rate premiums by many voluntary health insurers in most member states, so where individuals are treated as new risks, they will generally have to pay higher premiums than those of the same age who have been insured for longer.

Treating applicants as new risks will also put them at a disadvantage if pre-existing conditions are excluded. This is likely to be particularly burdensome for older people, who are more likely to have developed conditions over time that their home member state policy would have covered. Mandatory waiting periods may pose a similar disadvantage. For example, voluntary health insurers in Ireland are allowed to impose waiting periods on new subscribers (currently 12 months for any treatment and up to 10 years for pre-existing conditions). The Society of Actuaries in Ireland note that “it is not currently a requirement that time spent living in another EU country is recognised for the purpose of determining whether a person is new to health insurance and therefore whether a waiting period can be applied to them” (Society of Actuaries in Ireland, 2001).

Finally, older people can be even further disadvantaged if they are unable to obtain any VHI coverage at all because they have passed the age limit for cov-

erage. Table 12 (in section 2.3.1) shows that the majority of insurers in most member states restrict the purchase of VHI to those younger than 60, 65 or 70.

Some of these problems could be avoided if voluntary health insurers offered open enrolment and lifetime cover, or at least made reciprocal arrangements for migrant workers and people retiring abroad. However, some insurers might argue that this would undermine actuarial fairness, and within the current EU framework for the regulation of VHI markets, insurers may not have much incentive to facilitate the free movement of people in this way.

Once complaints made to the European Commission have been made public, these issues may be studied further. Although they are unlikely to present major barriers to the free movement of people, they should be subject to greater scrutiny. In its 2000 resolution on supplementary health insurance, the European Parliament justifies Community action in the area of health insurance on the grounds that the differences between health insurance systems (both statutory and voluntary) may create serious obstacles to the free movement of people (European Parliament, 2001). The European Parliament therefore emphasizes the need to ensure that individuals can retain their VHI benefits when staying or living in another member state. It also urges voluntary health insurers to be more flexible in their approach to reimbursing health care provided in other member states.

### 4.3 VHI and potential barriers to the free movement of services

Since the third non-life insurance directive put in place the framework for a single market for VHI, there are no significant barriers (in theory) to the free movement of voluntary health insurers within the European Union. The principle of home-country control specifically aims to prevent national regulators from erecting barriers to the entry of insurers from other member states (Rees, Gravelle, Wambach, 1999), but in practice, a number of difficulties remain. Commonly cited problems relating to the proper functioning of a single market for VHI include:

- differences in the design and availability of VHI caused by differences in statutory entitlements to health care;
- the high cost of technical investments;
- lack of harmonization in certain areas (particularly differential tax treatment); and
- bureaucratic procedures.

In their submissions to this study, several insurers and insurers' associations considered that the most significant barrier to the free movement of services in the European Union is the differences among statutory health care systems, rather than anything specific to the market for VHI. For example, a VHI product marketed in one member state will typically be designed to complement its

existing gaps in statutory coverage, whether those gaps involve co-payments, long waiting times for treatment or the exclusion of certain groups from statutory coverage. It will also be designed to fit in with national structures of health care provision. What this means in practice is that a VHI product marketed in one member state may be unsuitable for sale in another member state. This is clearly the case where substitutive VHI is concerned, but it also applies to complementary VHI and, to a lesser extent, supplementary VHI.

At the same time, some insurers have claimed that VHI is “well placed to guarantee [the] freedoms” set out in the EC Treaty (PKV, 2001), and their propensity to develop new products for the home market suggests that they would not find it impossible to develop products for other markets. However, the cost of these developments and the technical investments required may be a significant barrier to entering new markets, as the European Commission has noted (European Commission, 1997). In order to rate premiums according to individual risk, voluntary health insurers planning to undertake business in member states other than their own need to invest in technical, commercial and actuarial studies; this investment may prove too expensive for an insurer to justify selling insurance policies outside its home market.

To date, cross-border VHI has been limited, as the Groupe Consultatif Actuariel Européen noted in its submission to this study. The few insurers that do sell VHI in several member states do so from distinct host member state operations and very rarely on a home member state freedom-to-provide-services basis (Groupe Consultatif Actuariel Européen, 2001). Most market expansion across borders has therefore occurred through cross-border mergers and acquisitions rather than through increases in cross-border sales or the establishment of branches in other countries. Although there have been some notable cross-border mergers and acquisitions in the market for VHI, it seems that insurers have been reluctant to sell VHI products across national borders without a branch presence in another member state, and individuals have been reluctant to purchase VHI products in countries other than their own.

While the growth of Internet-based insurance may promote cross-border sales in future, the lack of harmonization in certain areas could pose problems for market expansion across borders. The Group Consultatif Actuariel Européen commented that both inbound and outbound cross-border trading is difficult in member states whose VHI markets do not harmonize with all aspects of the third non-life insurance directive (Groupe Consultatif Actuariel Européen, 2001). According to insurers' submissions to this study, difficulties are most likely to arise in two areas: risk equalization and the differential tax treatment of non-profit and for-profit insurers.

The issue of risk equalization specifically relates to the situation in Ireland, where the government has put in place a risk equalization scheme (RES) to support community rating in its market for VHI (see section 3.2.4 for details). Al-

though the RES has not yet been activated, some argue that it represents a significant barrier to entering the Irish market and is likely to prevent new insurers from attempting to sell VHI products in Ireland on a branch or freedom-to-provide services basis. However, the RES permits new insurers to exempt themselves from participating in the RES for a period of three years from the start of trading in Ireland (extended from the 18 months originally envisaged in the government's White Paper on VHI (Department of Health and Children, 1999). In 1996 a major British insurer established a branch in Ireland. It claims that it could successfully challenge the Irish government on the grounds that the RES is illegal under the third non-life insurance directive, but it has yet to do so (Murray, 2001a), and the issue of legality does not appear to concern the government, which states that the third non-life insurance directive permits risk equalization and loss compensation schemes in the interest of the general good.

Differential tax treatment of voluntary health insurers may be a more forceful restraint on insurers' freedom of movement. The Association of British Insurers (ABI) points out that differences in tax regimes within the European Union "complicate the position for those moving between EU countries and for insurers aiming to offer a product in more than one country" (ABI, 2001b). The Groupe Consultatif Actuariel Européen and the Swedish Insurers' Association also make this point (Groupe Consultatif Actuariel Européen, 2001; Sveriges Försäkringsförbund, 2001).

The third non-life insurance directive does not distinguish among different types of insurer and specifically outlaws the preferential treatment of one type of insurer over another. Member states that use national tax laws to favour non-profit over commercial insurers may contravene this aspect of the directive. Examples of tax regimes that discriminate in favour of mutual or provident associations can be found in Belgium, France and Luxembourg (see section 2.4.2). It is argued, on one hand, that preferential tax treatment of mutual and provident associations prevents foreign commercial insurers from entering the market on the same terms as domestic mutual or provident associations (Datamonitor, 2000a). On the other hand, mutual associations argue that their commitment to solidarity results in increased costs, as they are less likely to reject applications, exclude pre-existing conditions or increase premiums as subscribers age. In its submission to this study, AIM referred to its members' adherence to solidarity principles and their ambition of "mutually improving social conditions", stating that mutual associations "are committed to guarantee[ing] lifelong affiliation and non-selection of risks", which it argues justifies special status under national laws (AIM, 2001).

In 1993 the French Federation of Insurance Companies (FFSA) lodged two complaints against the French authorities for their discriminatory tax policy. Eventually, in November 2001, the European Commission asked the French government to put an end to this discrimination either by abolishing mutu-

al and provident associations' exemption from insurance premium tax or "ensuring that the aid does not exceed the costs arising from the constraints inherent in a service of general economic interest" (European Commission, 2001). The European Commission found that the existing aid in the form of exemption from the tax on insurance policies "introduces a distortion of competition to the benefit of mutual and provident societies, a distortion [that] is no longer compatible with the development of the common market" (European Commission, 2001). It also noted that the French authorities did not provide any evidence of special costs incurred by mutual and provident associations in their performance of a general interest task.

In spite of this recent action against the French government, the European Commission acknowledges that legislative measures to abolish the obstacles presented by differential taxation in general may not be adopted for some time, given that such measures would require unanimous approval by the European Council of Ministers (European Commission, 1997).

With regard to bureaucratic procedures and their impact on insurers' freedom to provide services, BUPA Limited commented that the rules for host-country notification of cross-border services can act as a restraint on the growth of such services in certain member states (BUPA, Limited 2001). CEA also claimed that these rules create legal uncertainty and that greater clarity is needed on questions relating to the laws that apply to cross-border contracts (CEA, 2001). For example, German insurers are required to provide information in French for French subscribers, which CEA argues poses a financial burden for smaller insurers wanting to operate in other member states (Pierotti, 2001). In this particular case, however, it is hard to see how the balance between consumer protection and costs to insurers could be tipped in favour of insurers. The requirement to publish contracts in the language of the member state where services are provided is a key element of consumer protection.

On balance, it would seem that some barriers to the free movement of services persist, in spite of the introduction of a framework for a single market in VHI. This is particularly evident in the area of tax harmonization, although the European Commission has taken steps to address this issue. However, there may be reasons unrelated to the freedom to provide services that have restrained the growth of cross-border VHI in the European Union. It is possible that consumers in different member states prefer to purchase VHI from well-established insurers with whom they are familiar, which may partially explain why so much of the existing market expansion has occurred through cross-border mergers and acquisitions rather than through increases in cross-border sales or the establishment of branches in other countries.

---

# Section 5 Trends and challenges

This section aims to:

- review trends and challenges in the market for VHI
- review trends and challenges in public policy
- review trends and challenges in EU regulation.

## 5.1 Market trends and challenges

### 5.1.1 Demand

Sustained economic growth and cutbacks in public expenditure on health care during the 1980s led to increasing demand for VHI in many member states. In some member states, rising demand was fuelled by an increase in policies purchased by employers as a fringe benefit for their employees. Between 1980 and 1990, spending on VHI as a percentage of total expenditure on health care rose in every member state except Luxembourg (see Table 2 in section 1.2.1). Rises in spending on VHI were substantial in Italy (+350.0%), Portugal (+300.0%), the United Kingdom (+153.8%), Belgium (+100.0%) and France (+93.1%). Spending on VHI continued to rise in most member states throughout the 1990s, but with the exception of the Netherlands the rate of growth was much slower, and spending declined in Spain, Ireland, Austria and Germany. Levels of expenditure on VHI do not necessarily correlate with demand, as increased expenditure may reflect price increases rather than higher levels of coverage.

Levels of coverage grew in some member states during the 1990s, although a large part of this growth may be attributed to increases in group-purchased policies (see section 2.2.2). In the United Kingdom, for example, the number of subscribers with employer-paid policies grew by an estimated 23% between 1990 and 2000, while the number of subscribers paying for their own policies fell by 6%. In 1999 the number of UK subscribers fell by 4.5%, with the fall in demand concentrated solely in individual/employee-paid policies; employer-



paid policies grew by 1.2%, but individual/employee-paid policies were down by 5% (Laing, Buisson, 2000). These figures may to some extent reflect the fact that the average price of individual policies in the United Kingdom rose by 12% a year between 1994 and 1998, whereas the average price of group policies rose by less than 3% a year (Datamonitor, 2000a).

Although levels of VHI coverage were fairly stable in most member states during the 1990s, there have been some notable exceptions. As a result of changes in French legislation leading to the extension of complementary VHI coverage to the whole population from 2000 (CMU), the proportion of people covered by complementary VHI has risen from 85% in 1998 to 94% in 2001. VHI markets in Denmark, Finland and Sweden have always been relatively small, but recent trends suggest that the demand for supplementary VHI is rising, partly due to dissatisfaction with levels of public provision and partly due to increases in the purchase of policies by employers.

The challenge for voluntary health insurers in many member states is to sustain demand in markets that appear to have reached the saturation point. Some industry commentators predict that future growth in the market for VHI is more likely to come through increases in price than increases in coverage (Datamonitor, 2000a).

### 5.1.2 Buyer characteristics and premium trends

The generally low level of individual demand for VHI in many member states has forced insurers to rely more heavily on sales to groups. The 1980s saw rapid expansion of the market for group policies, and during the 1990s, group policies continued to gain an increasing share of the VHI market in many member states. Group policies currently account for almost all VHI policies in Sweden, Ireland, Portugal, Greece and the United Kingdom, more than half of all policies in the Netherlands, and about half of all policies in France (see Table 10 in section 2.2.2). The rising proportion of group VHI policies is partly due to economic growth and the provision of VHI as a fringe benefit for employees, but it is also the result of many insurers offering employers group-rated premiums, discounted prices and less-stringent policy conditions. Not only have groups benefited from discounted premiums, but price increases for group premiums have been substantially lower than price increases for individual premiums, which suggests that individual subscribers may have subsidized the cost of policies purchased by groups and usually (but not always) paid for by employers. The suggestion is supported by the fact that insurers' margins are often much tighter for group-purchased than individually purchased VHI (see section 2.5.1).

It was expected that the creation of a framework for a single market for VHI in the European Union would increase competition among insurers, leading to greater choice and lower prices for consumers. However, increased competition

does not appear to have reduced the price of VHI premiums, which have often risen faster than health care expenditure in general (see section 2.4.1). Real compound annual increases in the price of VHI premiums in several member states have been considerably higher (between 2.3% and 12.0%) than the average annual growth rate of total expenditure on health care deflated by the GDP deflator (between -1.1% and 2.7%) (see Table 15 in section 2.4.1).

The industry often argues that premium rises are the unavoidable consequence of ever-increasing claims, the rising costs of health care, the high cost of medical technology and the ageing of the population (Datamonitor, 2000a). However, while the growth in claims expenditure (benefits paid) exceeded the growth in premium income in some member states between 1995 and 1998, loss ratios (benefits paid divided by premium income) did not show a significant increase during this period (see Table 18 in section 2.5.1) (CEA, 2000). In member states such as the United Kingdom annual average increases of 12% in the price of premiums for individual VHI policies between 1994 and 1999 (Datamonitor, 2000a) have been accompanied by declining loss ratios (Laing, Buisson, 2001). In 1985, insurers in the United Kingdom had an overall loss ratio of 88%, but by 2000 the loss ratio had gone down to 79% (Laing, Buisson, 2001). Disaggregating the loss ratio for 2000 shows that it was 85% for employer-paid group VHI policies and as low as 73% for VHI policies paid for by individuals and employees (Laing, Buisson, 2001).

Data on the administrative costs of voluntary health insurers in different member states suggest that these costs are high compared to those of the statutory health care system (see section 2.5.2). Voluntary health insurers' administrative costs range from about 10% in Germany, Luxembourg (mutual associations), the Netherlands and France (mutual associations) to as much as about 25% in Austria, Belgium, Italy and Portugal. In contrast, the administrative costs of statutory health care systems are substantially lower: between 3% and 5% in most member states and even lower in others such as Denmark and Italy (see Table 19 in section 2.5.2).

### 5.1.3 Consumer choice

The abolition of price and product controls for complementary and supplementary VHI in 1994 has been accompanied by higher levels of product differentiation in some member states. As we noted in section 3.2.6, product differentiation can benefit consumers by increasing the range of products available to them and by providing them with products that are tailored to meet their needs. However, it can also be used to segment the market, giving insurers greater opportunity to distinguish between good and bad risks. Either way, the presence of multiple insurance products may reduce price competition unless it is accompanied by a level of information sufficient to permit consumers to compare products in terms of value for money.

Although EU consumers seem to have a wide choice of VHI products (at least in some member states), it is not clear that such choice always works to their advantage. Evidence from several member states suggests that consumers may not have sufficient access to comparable information about VHI products (particularly complementary and supplementary VHI products), which may lead to consumer detriment (see section 3.2.6).

Information asymmetry arising from the proliferation, variability and complexity of VHI products can be mitigated by the use of standardized terms, the existence of a standard package of benefits, an obligation for insurers to inform potential and existing subscribers of all the options open to them and easily accessible and centralized sources of comparable information on the price, quality and conditions of VHI products. However, under the current regulatory framework, insurers have no incentive to reduce consumer confusion and increase transparency by introducing standardized terms or standard benefit packages, so while standard benefit packages may be required for substitutive VHI in some member states, they are rarely found in complementary and supplementary VHI markets.

Some insurers claim that regulation requiring them to offer standard benefit packages has a restricting effect and stifles innovation, but the competition watchdog in the United Kingdom (the Office of Fair Trading, or OFT) points out that innovation resulting in increased product complexity does not benefit subscribers, who sometimes pay more than they should and often purchase inappropriate policies (OFT, 1998a). A recent OECD report on private health insurance also notes that, “as the [British] market has become more competitive and the diversity of schemes has increased, so consumers have faced increasing difficulty in comparing premiums and benefits offered” (OECD, 2001b).

In its submission to this study, BUPA Limited argued that:

*in the United Kingdom there have been claims that private health insurance schemes have become hard for consumers to understand, and that ‘best value’ premiums are hard to compare. This seems an inevitable consequence of competitive innovation, both in contract structures and ‘cost containment’ procedure, and there is already ‘good practice’ pressure on insurers to facilitate comparisons. We would respond that it is the competitive environment itself that keeps all propositions relatively efficient, and contracts must balance desirable simplicity against legal effectiveness.* (BUPA Limited, 2001)

Nevertheless, the British government announced in late 2001 that general insurance sales (including the sale of VHI) would now come under the statutory regulation of the Financial Services Authority (FSA) (Her Majesty’s Treasury, 2001a). In making its decision the government stated that statutory regula-

tion of general insurance would “help true competition to flourish in this area, because it would help correct the information asymmetry that presently exists against the customer” (Her Majesty’s Treasury, 2001b).

Elsewhere in the European Union, inadequate effort has been made at national levels to address the problem of information asymmetry. Under the current regulatory framework, without requirements for the provision of standard benefit packages, or even the use of standardized terms, more effort may be needed to ensure that the sale of VHI products is monitored and that consumers have access to clear and comparable information.

A key feature of VHI in the European Union is its ability to give subscribers access to a wider range of health care providers. This is particularly true of supplementary VHI, but it may also be the case for complementary and substitutive VHI. Unlike in the United States, where VHI subscribers’ choice of provider has been severely restricted by the dominance of integrated care through health maintenance organizations (HMOs) and preferred provider networks (PPNs), subscribers to VHI in the European Union still enjoy considerable provider choice (see section 2.3.2).

The extent to which EU subscriber choice is restricted in this way varies considerably among member states. In general, integrated care and PPNs continue to play a minor role in most member states, although there is a tendency towards some forms of vertical integration among the largest insurers in the United Kingdom and Spain, and the largest insurers in Portugal have been investing heavily in the creation and development of PPNs. Experiments in integrated care have met with limited success in France and Belgium, partly due to consumers’ suspicion of American-style HMOs, but in future voluntary health insurers may be inclined to make greater use of this option as a means of reducing costs.

#### 5.1.4 Market structure

In many member states the 1990s have seen a clear trend towards increasing concentration in the market. The available data show that market consolidation has taken place in Austria, Greece, Italy, Luxembourg, Portugal (as a result of concentration in the banking and insurance sectors) and Spain (see section 2.2.1).

In theory, a degree of market consolidation should lead to efficiency gains for insurers and benefits for consumers if price competition is maintained. In practice, however, it is not evident that increasing concentration has resulted in efficiency gains (and the paucity of available data makes this difficult to determine). If there have been efficiency gains, it is unclear whether they have been passed on to consumers in the form of lower VHI premiums.

For largely historical reasons, some of the most extensive VHI markets in the European Union are currently dominated by non-profit mutual and provi-

dent associations (see section 2.2.1). In recent years their share of the VHI market has declined in some member states, and in future they may lose further market share to commercial insurers. As there is some variation in the extent to which solidarity principles are pursued by mutual or provident associations in different member states, we cannot make assumptions about insurers' conduct on the basis of their legal and non-profit status.

### 5.1.5 The free movement of people and services

Whether or not VHI restricts the free movement of people within the European Union largely depends on the extent to which the benefits provided by VHI are portable. Mobility may be limited if insurers are unwilling to provide cover for health care obtained in another member state or if individuals who move to another member state to work or live are unable to obtain cover on the same terms as those already living in the host member state.

Although some voluntary health insurers do seek to provide cover for subscribers who regularly travel across national borders, the role of VHI in covering health care provided beyond national boundaries is, at present, extremely small. Even if insurers are prepared to extend coverage to another member state, the extension of coverage is likely to come at an additional cost, and some subscribers may find themselves being charged higher premiums for the same level of coverage.

The problems involved in obtaining VHI coverage in the host member state include non-legal barriers such as language, information and familiarity barriers (which may be a cause for concern when the inherent problems of information in VHI markets are taken into account), as well as the extent to which applicants are treated as new risks, without any consideration of their previous history of coverage, and are therefore subject to higher premiums, the exclusion of pre-existing conditions, and mandatory waiting periods. These factors may disadvantage people of all ages, but they are most likely to be a significant barrier for older people.

To date, cross-border sales of VHI have been limited, and the few insurers that do sell VHI in multiple member states do so from distinct host member state operations and very rarely on a home member state freedom-to-provide-services basis. Although there have been some notable cross-border mergers and acquisitions in the market for VHI, it seems that insurers have been slow to sell VHI products across national borders without a branch presence in another member state, and individuals have been slow to purchase VHI products in countries other than their own.

Commonly cited barriers to the free movement of services include differences in the design and availability of VHI caused by differences in statutory entitlements to health care, the high cost of technical investments, lack of harmonization in certain areas (particularly differential tax treatment) and bureaucrat-

ic procedures. The extent to which some of these factors present genuine obstacles to free movement is debatable.

### 5.1.6 Data availability

Our attempt to provide detailed country-specific information and data has been hindered by poor and uneven data availability. As we noted in the introduction to this study, the availability of information generally reflects the size of a member state's market for VHI, so there may be less information on member states with small markets, but even in countries with significant markets for VHI it is difficult to find complete and reliable data on the most basic variables, such as the number of insured people.

National experts in several member states have commented on the absence of transparency in the VHI market. Data are collected on an ad hoc basis and by different types of organization. In the United Kingdom, industry statistics are collected by a private company, whereas in Germany they are collected by the PKV (the German Association of Private Health Insurers). Data may not be collected at all in some member states. In Spain, for example, industry officials acknowledge the lack of reliable data, but blame it on technical difficulties rather than ill will (Rodríguez, 2001).

There is a need for better and more systematic collection of data on VHI in the European Union, but it is not clear who is able or willing to collect it. Governments in most member states have shown little interest in collecting data on VHI, probably because it is not a dominant source of health care funding in any member state, and the current regulatory framework does not require insurers to collect or publish anything other than data relating to financial solvency. The data we present in this study have been obtained from insurers, insurers' associations, market research reports, household surveys and academic research rather than official statistics. Eurostat, the statistical office of the European Commission, provides general information on insurance business in the European Union, but does not publish more detailed information on specific markets, such as VHI.

## 5.2 Trends and challenges in public policy

As we noted in section 1.1, public policy in the European Union has generally aimed to preserve the principle of health care funded by the state or social insurance and made available to all citizens, regardless of ability to pay. This has led to the development of health care systems broadly characterized by near-universal coverage, mandatory participation, the provision of comprehensive benefits and high levels of public expenditure. These characteristics have been important determinants of the scope and size of the VHI markets in different member states.

### 5.2.1 Health care expenditure

We also noted that although the last 20 years have seen some growth in levels of private expenditure as a proportion of total expenditure on health care in the European Union, this growth has been influenced more by substantial increases in cost-sharing through user charges than by the expansion of VHI markets. Furthermore, recent trends have shown a tendency for governments in some member states to increase levels of public expenditure on health care, particularly in France (through the CMU) and the United Kingdom. At the present time, therefore, it seems that member states remain committed in principle to publicly funded health care for all citizens.

Nevertheless, the sustainability of funding health care from public sources continues to be called into question. It is often suggested that factors such as the ageing of the population, the high cost of new technology and rising public expectations will increase demand for health care, causing expenditure on health care to escalate beyond the willingness or ability of citizens to pay for it (particularly through collective means such as taxation or social insurance). As a result, governments may no longer provide sufficient levels of health care to the whole population, and citizens may be forced to rely on additional methods of funding the health care they require. In such a situation, there would be significant opportunity for VHI to play a more substantial role in funding health care.

It is beyond the scope of this study to examine in detail the likely effect of the potential cost-drivers mentioned above on future levels of public expenditure on health care. However, we can make the following points.

First, although ageing is likely to have a significant impact on statutory pension schemes, recent studies have shown that it is unlikely to put much pressure on health care expenditure (Fuchs, 1998; Harrison et al., 1997; Lubitz, Beebe, Baker, 1995; Evans, 1985; Getzen, 1992). Analyses of the determinants of health care expenditure growth find the impact of ageing to be incremental rather than substantial, leading to relatively modest annual increases in health care expenditure (Fahey, Fitz Gerald, 1997). This suggests that while there may be a link between ageing and expenditure, demographic trends alone do not imply cost increases in excess of what can be readily sustained by normal economic growth (Barer et al., 1987). In the last five decades, EU member states have already witnessed large increases in life expectancy; these increases have not brought statutory health care systems to the brink of collapse. In coming decades expected rises in the number of older people, particularly the old old, may have an impact on health care costs, but they are much more likely to affect the costs of long-term care (McGrail et al., 2000). An analysis of future demand for long-term care and long-term care insurance is outside the terms of reference of this study.

Second, although several studies have attempted to calculate the impact of new technology on health care costs, its impact is difficult to measure and re-

mains largely unquantified. It cannot therefore be used as an accurate predictor of future expenditure on health care (Sassi, Abel-Smith, Mossialos, 1996).

Third, while public expectations may increase the demand for health care, it is neither evident nor logical to assume that a country's ability to sustain a given level of expenditure on health care is increased by raising money through one funding source (private health insurance) rather than another (tax or social insurance) (Evans, 2002). In this respect it is worth noting that although health care is mainly provided through private health insurance in the United States, the level of public expenditure on health care in the United States is substantial: 44.8% of total expenditure on health care in 1998 or 5.8% of GDP (compared to an EU average of 5.9%) (OECD, 2001a). Overall spending on health care is much higher in the United States than in any EU member state (12.9% of GDP in 1998, compared to an EU average of 7.9%) (Maynard, Dixon, 2002; OECD, 2001a).<sup>25</sup> Moreover, a significant proportion of the American population is not covered by any type of health insurance (Maynard, Dixon, 2002). Therefore it does not follow that expanding VHI will automatically result in reduced levels of public spending on health care or increased levels of overall coverage. The view that current levels of public expenditure on health care will be unsustainable in future also implies that governments cannot achieve efficiency gains in the health sector.

Is there scope for VHI to play a greater role in funding health care in the European Union in future? We identify three policy options that might influence the future expansion of VHI markets in different member states: allowing more individuals to opt out of the statutory health care system, further excluding specific health services from statutory cover (either explicitly or through non-explicit rationing) and introducing or increasing tax incentives to purchase VHI.

## Opting out

As we noted in section 2.1.1, individuals or groups of people in some member states are either excluded from participating in the statutory health insurance scheme or exempt from contributing to it if they choose to opt out of it. The most recent legislative changes allowing individuals or groups to opt out of the statutory health care system have taken place in Portugal (1993) and Austria (1999), but opting out has always been a possibility for high-earning German employees. High-earning individuals in the Netherlands are excluded from statutory cover for outpatient care and the first year of inpatient care, and self-employed people in Belgium are excluded from statutory cover of "minor risks". These individuals have the option of purchasing substitutive VHI. At the beginning of the 1990s the Italian government suggested allowing individuals to opt out of the statutory health care system, but finally decided against it (Fattore, 1999).

Allowing people to opt out of some or all parts of the statutory health care system is therefore relatively limited in the European Union, and while it may

<sup>25</sup> OECD figures for total expenditure on health care in the United States do not include tax subsidies for private health insurance, which totalled \$111.2 billion (€117.7 billion) in 1998 and mainly benefited the rich (see section 1.3.1) (Sheils, Hogan, 1999).



occasionally emerge in debates about health care reform, it is rarely considered as a serious alternative to universal coverage. In addition to many governments' reluctance to reduce levels of statutory coverage in this way, there may be two further reasons why opting out has not been a popular policy option.

First, where individuals are actually excluded from statutory coverage, as in the Netherlands and Belgium, governments are forced to intervene in the market for substitutive VHI in order to ensure that these individuals have access to an adequate and affordable level of VHI cover. The Belgian government has introduced a system of risk adjustment for mutual associations providing substitutive VHI and stipulates that the substitutive benefits they provide must match the benefits of the statutory health insurance scheme. Substitutive VHI subscribers in the Netherlands are subject to two cross-subsidization schemes that transfer annual solidarity contributions to the statutory health insurance scheme (the ZFW) and to the WTZ scheme for individuals who are excluded from the ZFW but cannot afford substitutive VHI.

Recent developments in Belgium and the Netherlands suggest that governments in both member states find the current situation problematic. A working group of senior government officials, led by an academic, was set up to examine the social security status of self-employed people in Belgium. In January 2001 they proposed that self-employed people should either be covered by the statutory health insurance scheme for minor risks or obliged by law to purchase substitutive health insurance (Cantillon, 2001). For various reasons, the current system of health care funding in the Netherlands is increasingly seen as a source of inefficiency and inequity (Maarse, 2001). In 2001 the Dutch government announced widespread reform of the health care sector, including the possibility of merging the existing health insurance schemes into one universal, public health insurance scheme (Ministry of Health, Welfare and Sport, 2001). The Dutch government's decision to opt for a public rather than a private insurance scheme was based on the premise that a private scheme would be subject to the third non-life insurance directive, whereas a public one would not.

Second, evidence suggests that given the choice to opt out (as in Austria, Portugal and Germany), most individuals prefer to stay where they are. Very few individuals or groups of employees have opted out in Portugal (Oliveira, 2001) and fewer than a quarter of high-earning employees who can choose to opt out of the statutory health insurance scheme in Germany (the GKV) actually do so. As we noted in section 1.3.2, those most likely to opt out of the GKV are young single people or young married couples with double incomes (Datamonitor, 2000a). Another industry report notes that substitutive VHI is growing in popularity among young and affluent Germans (Datamonitor, 2000b). This leaves the GKV to insure a disproportionately high number of elderly people and people with large families. There has also been a tendency, in the past, for people to opt out when they were young and healthy and then attempt to return to the GKV as they got old-

er and substitutive VHI premiums increased. The German government has introduced two reforms to address these issues (in 1994 and 2000), making it harder for those who have opted out to return to the GKV, but also ensuring that those who have opted out and cannot return have access to an adequate and affordable level of substitutive VHI cover (see section 2.1.1 for details).

Opting out in Germany and the exclusion of high earners from statutory coverage in the Netherlands are the result of historical artefact rather than deliberate policy choice. Where a deliberate policy choice has enabled individuals to choose to opt out (as in Portugal and Austria), the number of people opting out has been relatively small, and it is still too early to assess any potential long-term implications. Allowing people to opt out of the statutory health care system does not appear to be a growing trend in the European Union. In fact, if the Dutch government goes ahead with its intended reforms and the Belgian government decides to extend statutory coverage of minor risks to self-employed people, the level of opting out will be significantly reduced.

### **Excluding specific health services from statutory cover**

Excluding specific health services from statutory cover is another option open to governments in some member states. Explicit reductions in statutory coverage of some health services could increase demand for complementary VHI, while less explicit reductions through rationing might increase demand for supplementary VHI (as has been the case in Denmark, for example). However, increased demand for complementary VHI may not always be met, as VHI cover for some services will be less profitable for insurers to provide. The provision of pharmaceuticals is the most commonly excluded type of major health service in many member states, but VHI markets do not always cover pharmaceutical costs. Although co-payments for drugs are the only existing user charge in the Spanish statutory health care system, VHI products to cover these co-payments have not yet emerged. Insurers may find it easier to respond to statutory reductions in other clearly defined health services, such as dental care.

Voluntary health insurers may only be able to meet increased demand for supplementary VHI where there is sufficient private sector capacity. This is currently an issue in member states with low capacity in the private sector, such as Denmark. Lack of capacity more generally may encourage governments to address the equity implications of further developments in supplementary VHI, in order to prevent the exacerbation of existing inequalities in access to statutory health care and the distortion of public resource allocation.

### **Tax incentives**

Introducing or increasing tax incentives for individuals and firms to purchase VHI could stimulate demand for VHI. In its submission to this study, the Irish mutual association Vhi Healthcare notes that tax relief on VHI premiums may

be “one of the main reasons for the high take-up of insurance in Ireland” (Vhi Healthcare, 2001c). The Spanish insurers’ association Union Española de Entidades Aseguradoras y Reaseguradoras (UNESPA) claims that “the lack of specific tax deductions/incentives is a major barrier for the development of private health insurance in the European Union ... [and] a barrier to competition” (UNESPA, 2001). However, the evidence suggests that existing tax incentives targeted at individuals do not have a significant impact on the take-up of VHI, although tax incentives for firms appear to have fuelled the demand for group VHI policies in Austria, Denmark, Ireland and Spain (see section 2.2.2).

The argument that tax relief for VHI works in the public interest because increasing the demand for VHI reduces the demand for statutory health services (and therefore relieves upward pressure on public expenditure) is not substantiated in practice (see section 2.4.2). Furthermore, tax relief for VHI may give rise to equity concerns where it benefits those in employment at the expense of those without employment and where it is applied at the marginal tax rate, thereby increasing the value of the relief to those in higher tax bands. It could be argued that governments should target tax relief at low-income groups in order to improve access to VHI, but it is questionable whether this would be a prudent use of government resources. Resources devoted to tax relief might be better spent on improving the quantity and quality of statutory health care.

The current trend in the European Union is to reduce or remove tax incentives for the purchase of VHI. In recent years, governments in Austria, Greece, Ireland, Italy, Spain and the United Kingdom have taken measures to reduce or reverse the direction of tax incentives; Portugal is the only member state to have increased tax incentives for VHI. Tax incentives that favour certain types of insurers over others can have an impact on market structure, but differential tax treatment of insurers is unlikely to be a sustainable form of national public policy as it may contravene EU competition law.

### 5.2.2 Access and consumer protection

As we noted in section 3.1, the extent to which VHI affects access to health care depends, in part, on the characteristics of the statutory health care system. Access to VHI mainly concerns policy-makers in so far as VHI provides primary protection against the consequences of ill health. While this is usually the case for substitutive VHI, it may also apply to complementary VHI covering co-payments in the statutory health care system and necessary and effective health services excluded or only partially provided by the state. Supplementary VHI may create barriers to access in the statutory health care system if it distorts the allocation of public resources.

Voluntary health insurers’ incentives to risk-select can be addressed to some extent by guaranteeing access to coverage (open enrolment), providing automatic renewal of contracts and limiting exclusions for pre-existing conditions.

As we noted in section 2.3.1, however, open enrolment policies are rare among voluntary health insurers in the European Union, and most insurers exclude pre-existing conditions (the norm) or charge higher premiums for them. Short-term (usually annual) contracts are the most common form of VHI contract in the European Union; lifetime cover is the exception rather than the rule. Furthermore, most insurers set a maximum age limit for purchasing VHI (usually between 60 and 75 years), while some actually cancel contracts when people reach retirement age. VHI premiums tend to rise with age, so even those eligible to purchase cover at older ages may not be able to pay for it.

Incentives to risk-select can also be reduced by the introduction of risk-adjustment mechanisms, but these are rare in the European Union. In fact, they are only found in Ireland (where a risk equalization scheme is in place but has not yet been activated) and Belgium (for substitutive VHI provided by mutual associations). Although the implementation of risk-adjustment mechanisms can be problematic (see section 3.2.4), risk adjustment may be an option for substitutive VHI, particularly if public policy favours an expansion of this type of VHI. Whether it would be appropriate for complementary or supplementary VHI is a matter for national debate.

Genetic testing is not yet an issue where VHI is concerned, as to date it has only affected life insurance, but it may emerge as a problem in future. Many insurers (mostly, but not exclusively, commercial insurers) require applicants to provide details of their medical history. Some insurers also require information about family history of disease, which is a type of genetic information. The issue of genetic testing requires further debate at an EU level.

The Belgian, German and Dutch governments have all taken substantial steps to increase access to substitutive VHI for people with low incomes, elderly people and those with pre-existing conditions (see section 2.1.1).

Where non-substitutive VHI is concerned, the Irish government has applied stringent measures to ensure access to affordable complementary and supplementary VHI, obliging voluntary health insurers to offer open enrolment, lifetime cover, community-rated premiums, maximum waiting periods and a minimum level of benefits, and subjecting insurers to a system of risk adjustment through the (not yet activated) risk equalization scheme. Other member states have taken steps to protect consumers by prohibiting insurers from refusing to insure people with chronic illnesses (Austria and France). Insurers in Sweden have voluntarily agreed to refrain from requesting information about family history of disease (a type of genetic information). In Austria, insurers are prohibited from requiring medical examinations. Insurers in Germany (substitutive VHI) and the United Kingdom are required to warn subscribers of the likelihood of premium increases above the rate of inflation.

With regard to consumer protection in the United Kingdom, in late 2001 the government announced that general insurance sales (including the sale of

VHI) would now come under the statutory regulation of the Financial Services Authority (FSA) (Her Majesty's Treasury, 2001a). In making its decision, the government stated that statutory regulation of general insurance would "help true competition to flourish in this area, because it would help correct the information asymmetry that presently exists against the customer" (Her Majesty's Treasury, 2001b). More could be done to address this issue in other member states.

However, the most radical measures to improve access to VHI have been taken in France. In June 1999 the French government passed a law on universal health coverage (CMU) to enable those who did not benefit from any health insurance (1.1 million people at the end of 2000) to be covered by a basic, compulsory, statutory health insurance scheme (Sandier, Paris, Polton, 2004). CMU also facilitates access to complementary VHI for people on low incomes (less than €50 per month) who do not have any cover of this type (4.9 million people at the end of 2000) (Sandier, Paris, Polton, 2004). In addition to affiliation with a compulsory health insurance scheme, those with incomes below a certain threshold now have the right to complementary VHI coverage.

## 5.3 Trends and challenges in EU regulation

### 5.3.1 The impact of the third non-life insurance directive

With the introduction of the third non-life directive in 1994, the European Commission was finally able to achieve its aim of creating a framework for a single market for VHI in the European Union (see section 1.4). Where necessary, most member states amended existing legislation or passed new legislation to bring national insurance laws in line with the directive. While legislative changes have generally involved the introduction of tighter solvency controls, they may also have resulted in the loosening or outright abolition of price and product controls.

The directive's impact on VHI markets has been varied. Legislation transposing the directive into national law seems to have had the effect of increasing concentration in the market and increasing product differentiation, particularly in the commercial VHI sector. The available data suggest that these trends have taken place in Austria, Greece, Italy, Portugal (as a result of concentration in the banking and insurance sectors) and Spain. It does not appear to have had any direct impact in other member states, such as Belgium, Finland, Luxembourg, Sweden and the United Kingdom (Hermesse, 2001; Schmitz, 2001; Engemann, 2001; Skoglund, 2001; Hockley, 2001).

However, implementation of the directive has been problematic in a small number of member states, at least from the perspective of certain stakeholders. The Groupe Consultatif Actuariel Européen observed, in its submission to this study, that the impact of the third non-life directive has been diluted "be-

cause member states who might otherwise have been more affected have maintained national legislation that is not fully harmonised with this directive. Germany and Netherlands have been mentioned as two such examples and there is good justification for local variations” (Groupe Consultatif Actuariel Européen, 2001). Some member states initially refused to implement the directive, although by 1997 Spain was the only member state in this position, and the European Commission subsequently referred it to the European Court of Justice (European Commission, 1997). Others selectively incorporated those aspects of the directive that posed the least political difficulty; as a result, the European Commission has referred France and Germany to the European Court of Justice for infringement of the directive.

In the following sections we review the main issues arising from the implementation of the third non-life directive in Belgium, Germany, the Netherlands, Ireland and France.

## Belgium

In Belgium, insurance laws incorporating the directive do not apply to mutual associations, which the commercial insurers claim creates a significant distortion in competition (Union Professionnelle des Entreprises d'Assurances, 2001). This issue has not yet been resolved.

## Germany

The German government has taken full advantage of both parts of Article 54 of the directive. Article 54.1 permits a member state to take measures to protect the general good where contracts covering health risks serve as a partial or complete alternative to health cover provided by the statutory social security system, and allows the general and special conditions of such insurance to be communicated to the competent authorities of that member state before use (European Commission, 1992). Article 54.2 allows a member state to require substitutive VHI to be administered on a technical basis similar to that of life insurance (European Commission, 1992). As a result, the German government still requires the general policy conditions for substitutive VHI to be submitted to the Federal Supervisory Office for the Insurance Sector before they are implemented and every time there is an amendment. Insurance undertakings registered in Germany must also submit their premium calculations to the Federal Supervisory Office for the Insurance Sector (see section 2.1.1).

Employers in Germany can only contribute to substitutive VHI policies offered by voluntary health insurers that specialize in health. Traditionally, the German supervisory body has permitted only insurers specializing in health to sell VHI products, in order to protect policy holders from insolvency arising from other business. The legislation transposing the third non-life insurance directive into German law formally abolished this rule (Recital 25), but the Ger-

man government added a new provision to German social law, prohibiting employees from benefiting from employers' contributions if the insurer combined health with other types of insurance. The European Commission considered this to be an indirect infringement of the directive and sent a "reasoned opinion" to Germany in 1996 (European Commission, 1996). In the absence of a satisfactory response from the German government, the European Commission has referred Germany to the European Court of Justice (Case C-298/01).

### The Netherlands

Like the German government, the Dutch government has also taken advantage of Article 54.1, but some aspects of health insurance in the Netherlands have raised concerns about their compatibility with the third non-life insurance directive.

Commentators in the Netherlands have questioned the legality (and therefore the sustainability) of the MOOZ and WTZ schemes, which require all those with substitutive VHI to make an annual solidarity contribution to the ZFW (statutory health insurance scheme for acute care) and the WTZ, respectively (see section 2.1.1). The issue of whether or not these schemes were legal under EU law was raised in a report presented to the Dutch Ministry of Health by the Dutch Council for Health and Social Services (an independent governmental advisory body) (Raad voor de Volksgezondheid & Zorg, 2000). Broadly, the report suggested that these compulsory solidarity contributions contravened the third non-life insurance directive; the report also expressed concern regarding the consequences of EU law for health policy objectives such as accessibility and solidarity.

However, it has been argued that the obligation to provide WTZ policies is limited to insurers based in the Netherlands and does not therefore constitute a barrier to the freedom to provide services; in some cases, even Dutch insurers can opt out of it (if they obtain special permission) (Palm, 2001). If the MOOZ contributions were regarded as a form of earmarked tax on substitutive VHI policies, they would fall under the fiscal competence of the Dutch government, rather than single market legislation, and therefore be exempt from EU competition law (Palm, 2001).

Statutory and voluntary health insurance may be provided by the same insurer in the Netherlands. Some complementary and supplementary VHI policies specify that an insurer will automatically terminate the contract if a subscriber switches to another insurer for his or her statutory coverage. This practice is known as conditional sale and may prove to be illegal under EU law because it poses a barrier to competition (Maarse, 2001).

### France

The transposition of the third non-life insurance directive into French law has been particularly problematic. Mutual associations in France come under a

special Code de la Mutualité. The directive appeared to be incompatible with the French concept of mutuality, enshrined in the Code de la Mutualité, and by 1999 the French government had failed to transpose the directive with regard to mutual associations. In December of the same year, the European Court of Justice ruled against this incomplete transposition (European Commission, 2000b).

The four main areas of incompatibility concern the contractual relation between insurer and insured, the speciality principle, the freedom of reinsurance and the free transfer of portfolio (Palm, 2001). Contractual relations differ from the mutual principle of membership of a democratically structured society. Also, the directive's obligation for insurers to specialize in insurance activity prohibits French mutual associations from managing their own social and health care facilities within the same structure. Furthermore, many French mutual associations operate on a small scale and would not be able to meet the directive's solvency requirements without further reinsurance, but the directive does not permit reinsurance to be confined to other mutual associations, unless mutual associations can show that it is in the general interest. Finally, under the directive, the transfer of portfolio can only be restricted on the grounds of solvency margins, unless mutual associations can show that this is in the general interest.

After the ECJ ruling in December 1999, the French government agreed to bring national law in line with the directive, although the legislation will not be implemented until the beginning of 2003 (European Commission, 2000b). In the meantime, the government has adopted a revised Code de la Mutualité, which tightens the solvency requirements for mutual associations and increases the powers of the supervisory authority. Previously, mutual associations under the Code were subject to less rigorous rules on financial, prudential and accountability matters than commercial insurers or provident associations (Sandier, Ulmann, 2001).

France also contravenes the directive by continuing to insist on systematic notification of policy conditions, obliging insurers to fill in an information sheet whenever they launch a new insurance product. The European Court of Justice ruled against this in May 2000, and continued infringement of the directive is likely to result in the imposition of fines (European Commission, 2000b).

Finally, France may be contravening EU competition law by treating mutual and provident associations differently from commercial insurers in matters of taxation (see section 4.3). In 1993 the French Federation of Insurance Companies (FFSA) lodged two complaints against the French authorities for their discriminatory tax policy. Their complaints were eventually upheld by the European Commission in November 2001.



## Ireland

Prior to the completion of the Irish regulatory framework for VHI in 1996, it was established that the European Commission accepted, in principle, the Irish government's entitlement to avail of Article 54.1 of the directive, permitting legislation to protect the general good. However, BUPA Ireland has taken legal advice that suggests they could successfully challenge the government on the grounds that the (not yet activated) risk equalization scheme (RES) contravenes the third non-life insurance directive although they have yet to make a formal legal challenge (see section 3.2.4) (Murray, 2001a).

The issue of legality does not appear to concern the government, however, which states that the third non-life insurance directive permits risk equalization and loss compensation schemes in the interest of the general good. The Department of Health and Children notes that "the changes now in train in relation to the framework for risk equalisation under the 2001 [Health Insurance Amendment] Act have particular regard to the need for proportionality in legislating to protect the common good" (Department of Health and Children, 2001b). It is the Department's view that the directive:

*should continue to recognise the basis for adopting specific legal provisions to protect the common (general) good where the conduct of health insurance business is concerned. It is important that it should be open to member states to adopt such measures in relation to the organization of their health care systems, while also taking account of the fundamental principles of EU law. It is considered that any future change to the EU regulatory framework should retain the basis for the reasonable exercise of discretion of this nature by member states.* (Department of Health and Children, 2001b)

### 5.3.2 The equal treatment of insurers

The third non-life insurance directive does not distinguish among different types of insurer and specifically outlaws the preferential treatment of one type of insurer over another. Historically, however, national laws in many member states have made a distinction between non-profit and for-profit entities, including entities in the VHI sector.

Commercial insurers in some member states, such as Belgium and France, resent what they regard as discriminatory treatment under national law, both in terms of failure to incorporate the third non-life insurance directive with regard to mutual associations and in terms of favourable tax treatment of mutual and provident associations (see the sections on Belgium and France above). National tax laws also favour mutual associations in Luxembourg (see section 2.4.2), but the existence of a "gentleman's agreement" between mutual associations and commercial insurers has prevented the latter from lodging a complaint with the European Commission (Schmitz, 2001). This informal 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.

AIM<sup>26</sup> defends such laws on the basis of mutual associations' commitment to solidarity and their ambition of "mutually improving social conditions" (AIM, 2001). It states that mutual associations are typically committed to open enrolment, lifelong affiliation and non-selection of risks. It argues that this justifies special status under national laws that explicitly acknowledge mutual associations' more comprehensive role, including their involvement in activities related to prevention, health education, social cohesion, solidarity and reducing social inequalities in health (AIM, 2001; Palm, 2001). Because commercial insurers do not aim to provide access to more deprived groups and generally exclude coverage for mental health care and chronic illnesses, they fail to cover the full range of health care (Palm, 2001).

Through the creation of a single market for VHI, the open and unregulated confrontation of these different approaches to protection against the negative consequences of ill health may be detrimental to VHI provided by mutual associations, as low risk individuals could be siphoned off from mutual associations' riskpool by insurers who rate premiums according to individual risk, leading to premium increases for those still insured by mutual associations. The end result would be a forced shift towards lowest-common-denominator market practices, with potentially serious consequences for vulnerable groups of people such as those with low incomes or those in poor health (particularly where substitutive and complementary VHI are concerned).

It is not clear whether the European Commission anticipated harmonization towards the lowest common denominator when it set in place the framework for a single VHI market in the European Union. However, the principle of home country control specifically aims to prevent national regulators from erecting barriers to the entry of insurers from other member states, which may bring national regulatory regimes into competition by placing insurers in a strictly regulated member state such as Germany at a competitive disadvantage in relation to insurers in member states with more liberal regulatory regimes (Rees, Gravelle, Wambach, 1999). AIM argues that the third non-life directive demonstrates an unwelcome assumption "that the fundamental mechanism of the market economy is the ideal instrument for [ensuring] best quality services and goods at the best price" (AIM, 2001). It would prefer an alternative in which all voluntary health insurers observe "commonly agreed rules of general interest".

Policy-makers could debate whether the equal treatment of commercial insurers and mutual or provident associations in the VHI sector is an issue that

---

<sup>26</sup> An international grouping of autonomous health insurance and social protection bodies operating according to the principles of solidarity and non-profit-making.

needs to be addressed at an EU level. As we noted in section 2.2.1, the distinction between non-profit and for-profit entities is important in so far as an insurer's profit status determines its motivation and influences its conduct. We also note that because there is variation in the extent to which solidarity principles are pursued by mutual or provident associations in different member states (even among AIM member organizations) it is not possible to make assumptions about insurers' conduct solely on the basis of their legal and non-profit status. However, it may be that insurers offering greater access to VHI (particularly substitutive and complementary VHI) through open enrolment, lifetime cover and community rating should be distinguished in law from insurers that operate on the basis of individual risk and exclude people with pre-existing conditions. Policy responses to this issue should not be based on technical considerations alone, but should also take into account the principles and values of health care systems in the European Union.

### 5.3.3 Clarification of the general good

There seems to be a consensus, among stakeholders making submissions to this study, that the third non-life insurance directive's lack of a clear definition of the general good has created legal uncertainty, and that there is a need for greater clarity in this area (see section 1.4 for a more detailed discussion of the general good). While it is clear that the directive permits application of the general good to substitutive VHI (with due respect to the principle of proportionality), it is much less clear whether (and how) the general good may be applied to complementary and supplementary VHI.

In its submission to this study, BUPA Limited noted that the enforcement of the general good should be simplified, stating that:

*the process of testing [the questionable use of the 'general good' provision] either through Commission Services or the ECJ has proved prohibitive – typically the Commission declines to rule in a socially sensitive area and the time scales for the ECJ make reference unattractive. The insurer can face a dilemma, where a successful launch requires market confidence, while any challenging of doubtful rules is portrayed by the media as challenging fairness – and therefore confidence. This can act as a serious barrier to cross-border competition (BUPA Limited, 2001).*

BUPA Limited suggested that:

*national measures taken 'in the general interest' should be subject to scrutiny, if necessary, on the 'case by case' basis preferred by the ECJ – health insurance in the European Union is too diverse for very general principles to be workable. Our concern is that in practical matters, influencing market*

*evolution in the interests of the citizen, the delays in obtaining ECJ judgement are themselves barriers to the development of a single market. More interpretative guidance from the Commission on the application of 'general good' criteria to non-state health insurance could be welcome, in the interests of 'legal certainty'.* (BUPA Limited, 2001)

CEA also pointed out that, while guidance on the general good is not clear enough, its definition should be left to member states rather than the European Commission (Pierotti, 2001). Its recommendation is for the European Commission to provide a central register of information on measures taken by member states to protect the general good in the health insurance sector.



---

# Section 6 Concluding remarks

In this study we have reviewed the following: the types of VHI available in the European Union; demand and levels of VHI coverage; the EU framework for regulating VHI; the operation of VHI markets; the role of these markets in providing access to health care; their impact on the free movement of people and services; and recent trends and challenges for voluntary health insurers and policy-makers at national and EU levels.

The remarks we make in this section should be seen in the context of public policy objectives for health care systems (equity, efficiency, responsiveness, choice). We should also emphasize that the operation and impact of VHI markets are under-researched areas.

There is a need for greater scrutiny of VHI markets in the European Union. The third non-life insurance directive established a framework for a single market in VHI, in the expectation that increased competition among voluntary health insurers would lead to efficiency gains for insurers and benefits for consumers in terms of greater choice and lower prices. In the absence of careful monitoring of VHI markets, it is not possible to say whether these expectations have been fulfilled. If policy-makers are to be persuaded that the current regulatory framework works to the advantage of consumers (and not just insurers), they must have access to better information about how the market operates, and in whose interest.

Current levels of data availability are inadequate. A more systematic collection of data would assist policy-makers in monitoring the extent to which the current regulatory framework has increased competition and the extent to which the expected benefits of a competitive VHI market have been passed on to consumers.

Better coordination of and cooperation among supervisory authorities would assist efforts to collect data and might have the added advantage of facilitating the removal of some barriers to the free movement of people and

services across national borders. At the EU level, a centralized source of information could enhance the clarification of existing rules and reduce the confusion caused by differential application of these rules at the member state level.

There is also a need for greater transparency in VHI markets. Policy-makers should encourage voluntary health insurers to be more open in the way they operate. VHI markets in some member states are characterized by a proliferation of varied and complex insurance products. Product differentiation can benefit consumers by increasing the range of products available to them and by providing them with products that are tailored to meet their needs, but it can also be used to segment the market, giving insurers greater opportunity to distinguish between good and bad risks. Either way, the presence of multiple insurance products may reduce price competition unless it is accompanied by a level of information sufficient to permit consumers to compare products in terms of value for money. As noted by the OECD, the competition watchdog in the United Kingdom (the Office of Fair Trading) and consumer associations, consumers may be easily confused by multiple VHI products and may therefore purchase inappropriate policies. It is not clear that the current regulatory framework gives insurers incentives to provide adequate levels of information. Policy-makers should consider whether consumers would benefit from the use, by insurers, of standardized terms; a requirement for insurers to inform potential and existing subscribers of all the options open to them; and the introduction of accessible centralized sources of comparable information about the price, quality and conditions of VHI products.

The possibility of addressing voluntary health insurers' incentives to select risks is a further issue for policy debate. Despite insurers' protestations to the contrary, a competitive environment is likely to create incentives to resort to risk selection. The absence of adequate data availability and greater transparency will continue to provoke suspicion in this area. Risk selection may raise equity concerns in some VHI markets (particularly where substitutive VHI is concerned), and it may have serious implications for efficiency in all VHI markets. Incentives to risk-select in substitutive VHI markets may be reduced by sophisticated risk-adjustment mechanisms, although it is unlikely that voluntary health insurers will agree to be subject to such mechanisms.

Policy-makers should consider making better use of policy tools to encourage voluntary health insurers to operate in a way that is more conducive to social goals. Currently, insurers are permitted to set age limits for the purchase of VHI, require applicants to provide detailed medical information, including information on family history of disease (a type of genetic information), exclude pre-existing conditions, impose mandatory waiting periods and cancel contracts. This may result in discrimination against elderly people, people with pre-existing conditions and people with a history of family disease. The importance of such discrimination and the magnitude of the barrier it presents to ac-

cess are dependent on the extent to which VHI acts as a substitute for statutory coverage, provides cover for necessary and effective services fully or partially excluded from statutory coverage, and provides faster access to treatment. It may also restrict citizens' mobility within the European Union.

Genetic tests for insurance purposes may emerge as an issue for VHI in future, and debate about the appropriate use of such technology should be initiated at an EU level.

VHI in the EU is sold by mutual and provident associations as well as commercial insurers. The issue of whether certain types of VHI based on solidarity principles should be subject to EU single market and competition law needs to be examined further. Policy responses to this issue should not be based on technical considerations alone, but should also take into account the principles and values of health care systems in the European Union.

Policy-makers should pay attention to the equity (and efficiency) implications of the existence of VHI for statutory health care systems, particularly when considering any expansion of VHI markets. The existence of VHI may create or exacerbate inequalities in access to statutory health care for some individuals and population groups if it results in a distortion of public resource allocation for health care. This is most likely to happen where the boundaries between public and private health care are not clearly defined, particularly if capacity is limited, if providers are paid by both the public and the private sector and if VHI creates incentives for health care professionals to treat public and private patients differently. More research is needed in this area.

Most member states do not use tax incentives to encourage individuals to purchase VHI. Arguments in favour of tax relief for VHI on the grounds that increasing demand for VHI reduces demand for statutory health care are not substantiated by evidence. Tax relief for VHI may give rise to equity concerns where it benefits those in employment at the expense of those without employment and where it is applied at the marginal tax rate, thereby increasing the value of the relief to those in higher tax bands. Tax relief may lead to inefficiency because it distorts price signals, generates additional transaction costs and can create opportunities for tax avoidance or evasion. If tax relief for VHI is as expensive, regressive and unsuccessful in stimulating demand as the evidence from some member states suggests, policy-makers should consider whether resources devoted to tax relief might be better spent on improving the quantity and quality of statutory health care.

VHI does not appear to pose a major barrier to the free movement of people in the European Union, as long as adequate access to health care is available in the statutory health care system so that people do not have to purchase VHI when they move to another member state. Some barriers may persist with regard to the free movement of services. Further clarification of the concept of the general good and its application with regard to all types of VHI might go



some way to reducing barriers to the free movement of services. It might also benefit member states in their attempts to protect the general interest.

Facilitating access to health care involves helping people to command appropriate health care resources in order to preserve or improve their health. Access to health care includes at least four dimensions: service availability, service utilization, service relevance and effectiveness, and equity. No discussion of the access implications of the existence of VHI and the way in which VHI markets operate would be complete without a broader consideration of access to statutory health care. Policy-makers should take into account the wider determinants of unequal access to health care and existing inequalities arising from the way in which statutory health care is funded and provided. Measures such as the imposition of user charges may also pose financial barriers to health care and therefore require further study.

---

# Appendices

## Appendix A – Background information and methodology

In October 2000 the European Parliament adopted a report on supplementary health insurance written by the Parliament's Committee on Employment and Social Affairs (European Parliament, 2000). The report highlighted the difficulty of sustaining access to good quality health care for all in light of the ageing of the population and the rising costs of health care, and underlined the growing importance of VHI in providing access to health care in the European Union. It also raised questions about the extent to which differences among VHI systems might create barriers to the free movement of people and services within the European Union. Finally, the report identified a need for further research into voluntary (as opposed to statutory) health insurance systems in the European Union.

At the request of the European Parliament, the European Commission's Directorate-General for Employment and Social Affairs commissioned this study in July 2001, with the aim of:

- responding to some of the questions raised by the European Parliament's report;
- forming a basis for any further research or other initiatives the Commission may take in this area; and
- stimulating debate among the key actors involved.

### Terms of reference

The study's terms of reference required us to:

- characterize supplementary health insurance systems in the European Union, taking into account their relations with statutory and legal health insurance systems, the size and characteristics of groups covered by supple-

- mentary health insurance and the benefits they provide;
- identify the trends, challenges and threats facing supplementary health insurance systems in the European Union today;
- analyse the role supplementary health insurance systems play in providing access to health care for all (using national and international indicators where available); and
- address the issue of the difficulties and barriers to the free movement of people and services within the European Union potentially caused by the diversity and the characteristics of supplementary health insurance systems in the European Union, with respect to the subsidiarity principle and in agreement with Articles 18, 39, 42, 43, 136, 137 and 152 of the EC Treaty.

## Definitions

Although the European Parliament's report refers both to voluntary and supplementary health insurance systems, in this study we prefer to use the term voluntary, as it covers all types of non-statutory health insurance in the European Union. We define voluntary health insurance as health insurance that is taken up and paid for at the discretion of individuals or employers on behalf of individuals. VHI can be offered by public and quasi-public bodies and by for-profit (commercial) and non-profit private organizations.

VHI can be classified in many different ways, as demonstrated by the numerous definitions in current usage. Traditionally, the literature on VHI has distinguished between insurance that *duplicates* statutory insurance and insurance that constitutes the *principal* means of protection for sections of the population (Couffinhal, 1999). In the context of the European Union we find it more appropriate to classify VHI according to whether it:

- *substitutes* for cover that would otherwise be available from the state;
- provides *complementary* cover for services excluded or not fully covered by the state (including cover for co-payments imposed by the statutory health care system); or
- provides *supplementary* cover for faster access and increased consumer choice.

## Sources of information

The information and analysis presented in our study are based on the following:

- a comprehensive review of the literature in several languages;
- the participation of independent national experts in the following member states who completed detailed standard questionnaires: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom;
- study visits to two member states (Ireland and Luxembourg);
- collection of statistical data;

- a survey of national and EU-wide industry representatives;
- a survey of national and EU-wide consumer associations;
- a survey of regulatory bodies in France, Germany, Ireland, the Netherlands and the United Kingdom;
- interviews with European Commission officials in Luxembourg and Brussels; and
- interviews with the Association Internationale de la Mutualité (AIM) and the Comité Européen des Assurances (CEA) in Brussels.

### *Review of the literature*

In addition to literature identified by the national experts, literature was identified from Internet searches, the web sites of relevant organizations, government reports, market research reports and the following databases:

- **International Bibliography of the Social Sciences (IBSS)**: comprehensive references to journal articles, book reviews, book monographs and select book chapters in the social sciences;
- **PubMed**: a service of the National Library of Medicine providing access to citations from MEDLINE and additional life science journals;
- **EconLit**: a comprehensive indexed bibliography with select abstracts of the world's economic literature produced by the American Economic Association;
- **Decomate II**: the European electronic digital library for economics;
- **Social Science Information Gateway (SOSIG)**: Internet resources in the social sciences selected and described by subject specialists; and
- **Electronic Access to Subject Information (EASI)**: a service provided by the British Library of Political and Economic Science.

### *National reports*

We identified experts from independent organizations in Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain and the United Kingdom to complete a detailed questionnaire on VHI (see Appendix C for their affiliations). The questionnaires were standardized to facilitate systematic comparison among member states, but they were flexible enough to allow the analysis of country-specific characteristics and developments.

### *Study visits*

We made study visits to Ireland and Luxembourg, where the following kindly agreed to be interviewed:

- Sean Murray, Marketing Director of BUPA, Ireland;
- John Armstrong, Actuarial Executive, Vhi Healthcare, Ireland;
- Tara Buckley, General Manager, Corporate Communications, Vhi Healthcare, Ireland;
- Patrick O'Barrett, Health Insurance Unit, Department of Health and Children, Ireland;

- Colm Keenan, Principal Officer, Health Insurance Unit, Department of Health and Children, Ireland;
- Michel Schmitz, President, Conseil Supérieur de la Mutualité, Luxembourg; and
- Olaf Engemann, Director, Le Foyer Santé, Luxembourg.

### *Collection of statistical data*

Statistical data was obtained from the following sources:

- OECD's *Health data 2001*
- CEA
- AIM
- Eurostat
- government reports
- market research reports
- national statistical data.

### *Surveys*

We sent brief, standard questionnaires to the following organizations:

- CEA and its member organizations in the European Union;
- AIM and its member organizations in the European Union;
- Maison Européenne de la Protection Sociale (MEPS)/European Social Insurance Partners (ESIP);
- Consumers International, Bureau Européen des Unions de Consommateurs (BEUC) and consumer associations in each EU member state;
- regulatory bodies in France, Germany, Ireland, the Netherlands and the United Kingdom.

The organizations that responded to our questionnaires are listed below.

### *Meetings and interviews*

We met with European Commission officials from the Directorate-General for Employment and Social Affairs (DG EMPL) and the Directorate-General for Health and Consumer Protection (DG SANCO). The authors also submitted a written questionnaire to the Directorate-General for the Internal Market (DG MARKT). We interviewed representatives from CEA, AIM and European Social Insurance Partners. The purpose of these meetings and interviews was to obtain further information and clarification.

## List of organizations making submissions to the study

### *International organizations*

Association Européenne des Institutions Paritaires (AEIP)

Association Internationale de la Mutualité (AIM)

Comité Européen des Assurances (CEA)

Maison Européenne de la Protection Sociale (MEPS)/European Social Insurance Partners (ESIP)

### *Regulatory bodies*

Bundesaufsichtsamt für das Versicherungswesen (BAV) (Germany)

Insurance Financial Supervision Section of the Department of Health and Children (Ireland)

The Office of Fair Trading (OFT) (United Kingdom)

### *Actuarial bodies*

Groupe Consultatif Actuariel Européen

The Society of Actuaries in Ireland

### *Consumer associations*

Associação Portuguesa para a Defesa do Consumidor (DECO)

The Consumers' Association of Ireland (CAI)

Consumers' Association (CA) (United Kingdom)

### *AIM member organizations*

BUPA Ltd

Danmark Sygeforsikring (DS)

Fédération Nationale de la Mutualité Française (FNMF)

Kontaktkommissie Publiekrechtelijke Ziektelkostenregelingen voor Ambtenaren (KPZ)

Union Nationale des Mutualités Socialistes (UNMS)

Vhi Healthcare

Zorgverzekeraars Nederland (ZN)

### *CEA member organizations*

Association des Compagnies d'Assurances du Grand-Duché de Luxembourg (ACA)

The British Insurers' European Committee (BIEC) of the Association of British Insurers (ABI)

BUPA Ltd (represented via the BIEC)

Forsikring og Pension

PKV (on behalf of Gesamtverband der Deutschen Versicherungswirtschaft)

Sveriges Försäkringsförbund

Unión Española de Engidades Aseguradoras y Reaseguradoras (UNESPA)

Union Professionnelle des Enterprises d'Assurances (UPEA)

Verband der Versicherungsunternehmen Österreichs (VVO)

Zorgverzekeraars Nederland (ZN)

### Study limitations

This study aims to provide an overview of voluntary health insurance systems in the European Union, covering the four areas outlined in the terms of reference. The European experience of VHI is poorly documented in the literature; most literature on VHI focuses on the United States. To date, the only attempt to provide an overview of VHI in the European Union was made by BASYS in 1995 (Schneider, 1995). The information and analysis we present in this study therefore represents a contribution to the literature. However, we should draw attention to limitations in the information we present.

First, we must emphasize that much of the variation among VHI systems in the European Union is caused by the influence of sociopolitical and cultural factors on the historical development of health care systems in different member states. An analysis of these factors is beyond the terms of reference of this study.

We should also point out that VHI markets in the European Union are diverse and offer a wide range of different products. It is important to note that what happens in one member state may be quite different from what takes place in other member states. This is particularly true of complementary VHI, which exists to provide cover for services that are excluded from the statutory health care system. Excluded services will differ from country to country, although there may be some commonly excluded services, such as dental care. It is therefore impossible to generalize from the experience of some countries.

Where possible, we have attempted to provide country-specific information, but our attempt has been hindered by poor and uneven data availability. The quality and quantity of the data we present varies from country to country, leading to problems of comparability. The availability of information generally reflects the size of a member state's market for VHI, so there is less information on member states with small markets. But even in countries with significant markets for VHI, it is difficult to find complete and reliable data on the most basic variables, such as the number of insured people. The lack of detailed data does impede attempts to provide a rigorous analysis of VHI markets in the European Union.

There is a need for better and more systematic collection of data on VHI in the European Union, but it is not clear who is able or willing to collect it. Governments in most member states have shown little interest in collecting data on VHI, probably because it is not a significant source of health care funding in any member state, and the current regulatory environment does not require in-

---

urers to collect or publish anything other than data relating to solvency margins. The data we present in this study have been obtained from insurers, insurers' associations, market research reports, household surveys and academic research rather than official statistics. Eurostat, the statistical office of the European Commission, does not collect the required data.



## Appendix B – Voluntary health insurance in Spain and Portugal

Spain and Portugal are sometimes listed as member states in which it is possible to purchase substitutive VHI. Since 1993 individuals and groups of employees have been allowed to opt out of the statutory health care system in Portugal. However, as the Portuguese health care system is organized in the form of a National Health Service (NHS) and largely funded through taxation, those who opt out are not so much exempt from contributing to the statutory health care system as exempt from using the services provided by the statutory health care system. The health services they use continue to be funded by the state, through their fixed annual contribution to a third party, but such services are provided by the private sector (and sometimes the public sector). In Spain, civil servants are covered by a compulsory health insurance scheme run by public bodies and funded by social security contributions, but they have the choice of obtaining all health services from the state, through the National Health System, or from the private sector, via a voluntary health insurer. The choice offered to those who opt out in Portugal and to civil servants in Spain is essentially a choice of provider. As these groups are neither excluded from the statutory health insurance scheme nor exempt from contributing to it, they do not fall within our definition of substitutive VHI.

### Opting out in Portugal

The Portuguese health care system is organized in the form of a National Health Service with universal coverage. In theory, health care is funded through general taxation and is free at the point of use, but the Portuguese health care system is characterized by a public/private mix of health care funding and provision; a high level of private expenditure (at 33.1% of total expenditure on health in 1998 it has been the highest in the European Union after Greece (OECD, 2000)), and double/triple coverage (under the public and private sectors) of a significant part of the population. The pattern of double/triple coverage is explained by the presence of occupation-based "subsystems" and, more marginally, a market for VHI. Most private expenditure goes towards co-payments for pharmaceuticals and out-of-pocket payments to private providers.

The occupational subsystems, which existed before the introduction of the National Health Service (NHS) in 1979, are health insurance schemes organized mainly by state corporations in the financial, military and telecommunications sectors (although many of these corporations were privatised in the 1990s). It was originally intended that they would be integrated into the NHS after 1979, but this has not happened, and subsystems continue to provide their beneficiaries with a choice of health care provider, while those in the NHS are assigned to a family doctor and only have access to NHS (or NHS-contracted) health services. Subsystems currently cover about 20-25% of the population (Baptista, 1999; Barros, 1997; OECD, 1998b). Payment by subsystems to the NHS for

any health services used by their beneficiaries is a controversial issue in Portugal (Pinto, Oliveira, 2001). Although subsystems are required by law to pay the NHS for these services, many of them systematically refuse to do so on the grounds that their activities complement to the NHS and their beneficiaries continue to pay taxes.

Since 1993 individuals and groups of employees have been allowed to opt out of the statutory health care system. The decision to allow people to opt out represented a major change in the system, but so far only three subsystems have decided to opt out (the Portugal Telecom subsystem in 1997, the Portuguese Post Office in 1999 and, more recently, SAMS) (Oliveira, 2001). This is largely because commercial insurers have been reluctant to accept the conditions attached to opting out (Pereira et al., 1999). For a fixed capitation fee of €145 per beneficiary per year, paid by the state to the subsystem, the subsystem must provide its beneficiaries with all health services. Individuals that opt out of the statutory health care system may still have access to statutory health services, but their insurer will have to pay for their use of these services. The number of people covered by the subsystems that have opted out is very small (Oliveira, 2001).

Due to the compulsory nature of almost all participation in subsystems, including those that have opted out, we do not consider them as VHI as defined in this study.

### **The scheme for civil servants in Spain**

The Spanish health care system is also organized as a national health service, known as the National Health System (also NHS). It provides near-universal coverage (99% of the population) and is largely financed through general taxation (Rico, 2000). Civil servants are covered by a compulsory health insurance scheme run by three mutual associations: MUFACE for ordinary civil servants, MUJEGU for civil servants in the judiciary and ISFAS for members of the armed forces (Rodríguez, 2001). All three mutual associations are public bodies under the jurisdiction of the Ministry of Public Administration, the Ministry of Justice and the Ministry of Defence respectively, and funded by social security contributions fixed each year and deducted automatically from civil servants' wages. In January every year each civil servant can choose to obtain health services from the NHS or from a voluntary health insurer. Approximately 85% of civil servants choose the latter option (95% of civil servants working in the Ministry of Health (Rico, 2000), while the rest choose the NHS (Rodríguez, 2001). The social security contributions for health are passed on to the mutual associations and from there to the NHS or voluntary health insurers in the form of a flat fee per civil servant (equal to the NHS's per capita health care expenditure). The flat capitation fee must also cover dependants, even though it is not adjusted to take into account the number of dependants. Only voluntary health insurers

willing to accept this fee participate in the scheme, and for this fee they must provide benefits equal to the benefits provided by the NHS.

Civil servants do not have any financial incentive to choose health services provided by voluntary health insurers rather than health services provided by the NHS. The reason why so many civil servants choose health services provided by voluntary health insurers is the same reason other Spanish people purchase VHI: for faster access to health care, perceived better service and greater choice of provider. The 15% of civil servants who choose NHS provision are generally people who value the public sector's alleged higher technical capacity (including a substantial proportion of health economists working in universities) (Rodríguez, 2001).

Data published by voluntary health insurers in Spain do not always distinguish between policies purchased through these civil servants' mutual associations and policies purchased by other Spanish people. However, we do not consider policies purchased through MUFACE, MUJEGU or ISFAS to be VHI as defined in this study.

The establishment of the MUFACE system for civil servants in 1975 gave the VHI market a considerable boost, and voluntary health insurers have often argued in favour of extending this system to the rest of the Spanish population. This extension has been opposed by those who prefer a purely public system of health care and by academics who argue that the insurance companies have not demonstrated adequate capacity to manage efficiently an enlarged market. Voluntary health insurers claim to be more efficient than the public sector, but this claim can be challenged on several grounds.

First, the VHI industry has been very opaque; it is almost impossible to find a series of complete and reliable data about basic variables, such as the number of insured people. The lack of detailed data has impeded any rigorous analysis of comparative efficiency. For example, while diagnostic-related groups (DRGs) are calculated for case-mix appraisal in the public sector, no insurance company is able to provide the same information for its own business. Industry officials recognize the lack of reliable data, but blame it on technical difficulties rather than ill will.

Second, the fact that most people with VHI do not rely on it for all their health care makes it hard to see how voluntary health insurers would fare if they were responsible for providing all health services for the people they insure. There is some evidence to suggest that civil servants in the MUFACE scheme use their MUFACE coverage for minor health problems, but turn to the NHS for more serious (and therefore more expensive) problems or for high technology interventions, even though statutory regulation explicitly prohibits this (Puig-Junoy, 1999; Rico, 2000). In effect the state pays twice for these individuals: first, when it transfers the flat capitation fee to MUFACE and second, when they make use of the NHS.

---

Third, MUFACE itself has in the past been unable or unwilling to provide detailed data on its members, so that no sound economic analysis has been possible. The conclusions of the one Ph.D. thesis on this issue (Pellisé, 1994) were tentative due to weak data (Rodríguez, 2001).

For these reasons it is difficult to make an evidence-based assessment of the effects of expanding the MUFACE system to the rest of the population.

## Appendix C – List of contributors and their affiliations

### **Reinhard Busse (Germany)**

Professor of Health Care Management, Institute of Public Health, Faculty of Economics and Management, Technical University, Berlin

### **Charalambos Economou (Greece)**

Senior Research Fellow, Department of Health Economics, National School of Public Health, Athens

### **Margherita Giannoni-Mazzi (Italy)**

Senior Researcher in Public Finance, Department of Economics, University of Perugia

### **Jean Hermesse (Belgium)**

Professor, School of Public Health, Université Catholique de Louvain  
National Secretary, Alliance Nationale des Mutualités Chrétiennes

### **Tony Hockley (United Kingdom)**

Director, The Policy Analysis Centre

### **Maria M Hofmarcher (Austria)**

Economist and Consultant to the World Bank  
Research Associate and Group Head, IHS-HealthEcon, Department of Economics and Finance, Institute for Advanced Studies, Vienna

### **Hans Maarse (Netherlands)**

Full Professor in Policy Science (with special reference to health care), Faculty of Health Sciences, University of Maastricht

### **Hennamari Mikkola (Finland)**

Researcher in Health Economics, National Research and Development Centre for Welfare and Health (STAKES), Helsinki

### **Elias Mossialos (United Kingdom)**

Research Director, European Observatory on Health Systems and Policies  
Brian Abel-Smith Professor of Health Policy, Department of Social Policy, and Co-Director, LSE Health and Social Care, London School of Economics and Political Science

**Monica Oliveira (Portugal)**

Researcher, LSE Health and Social Care, London School of Economics and Political Science

**Marisol Rodríguez (Spain)**

Associate Professor, Department of Economic Policy, University of Barcelona

**Simone Sandier (France)**

Research Director, Arguments Socio-Economiques pour la Santé (ARgSES), Paris

Formerly Research Director of the Centre for Research and Documentation in Health Economics (CREDES), Paris, 1985–1997

**Caj Skoglund (Sweden)**

Managing Director, BCS Kompetensutveckling AB

Project Manager, The Swedish Welfare Group

**Sarah Thomson (United Kingdom)**

Research Officer, European Observatory on Health Care Systems

Research Associate in Health Policy, LSE Health and Social Care, London School of Economics and Political Science

**Philippe Ulmann (France)**

Assistant Professor, Department of Economics and Management of Health Services, Conservatoire National des Arts et Métiers, Paris

**Karsten Vrangbæk (Denmark)**

Assistant Professor, Department of Health Services Research, Institute of Public Health and Institute of Political Science, University of Copenhagen



---

# References

- Advisory Group on the Risk Equalisation Scheme (1998). *Report of the Advisory Group on the Risk Equalisation Scheme: the Minister for Health and Children's independent review of the Risk Equalisation Scheme*. Dublin, Advisory Group on the Risk Equalisation Scheme.
- Anell A, Svarvar P (1999). Health care reforms and cost containment in Sweden. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Associação Portuguesa para a Defesa do Consumidor (DECO) (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Lisbon, DECO.
- Association Internationale de la Mutualité (AIM) (1999). *Health protection systems today: structures and trends in 15 countries*. Brussels, AIM.
- Association Internationale de la Mutualité (AIM) (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Brussels, AIM.
- Association of British Insurers (ABI) (2000). *The private medical insurance market*. London, ABI.
- Association of British Insurers (ABI) (2001a). *Are you buying private medical insurance? Take a look at this guide before you decide*. London, ABI.
- Association of British Insurers (ABI) (2001b). *Submission to the European Commission's study on voluntary health insurance in the European Union*. London, ABI.
- Baptista C (1999). *Uma abordagem quantitativa – os subsistemas de saúde, compromisso na eficácia e na qualidade. O papel dos sistemas privados de saúde num sistema de mudança [Paper on private systems in a changing health system]*. Lisbon, Associação Nacional de Sistemas de Saúde.
- Barer M, Evans R (1992). Interpreting Canada: models, mind-sets and myths. *Health Affairs*, 11:44–61.



- Barer ML et al. (1987). Aging and health care utilization: new evidence on old fallacies. *Social Science & Medicine*, 24:851–862.
- Barr N (1992). Economic theory and the welfare state: a survey and interpretation. *Journal of Economic Literature*, 30:741–803.
- Barr N (1998). *The economics of the welfare state*. Oxford, Oxford University Press.
- Barros PP (1997). O papel dos seguros de saúde [Paper on health insurance]. *Revista Portuguesa de Saúde Pública*, 15:47–58.
- BBC (2000). Private medical insurance «too expensive”. *BBC News*, 5 October 2000 (<http://news6.thdo.bbc.co.uk/hi/english/health/newsid%5F957000/957844.stm>, accessed 5 January 2002).
- BBC (2001). Insurers bow to gene test pressure. *BBC News*, 1 May 2001 (<http://news.bbc.co.uk/1/low/health/1307175.stm>, accessed 17 April 2004).
- Beck K, Zweifel P (1998). Cream-skimming in deregulated social health insurance: evidence from Switzerland. *Developments in Health Economics and Public Policy*, 6:211–227.
- Bennett C, Schwarz B, Marberger M (1993). Health care in Austria: universal access, national health insurance and private health care [Letter from Vienna]. *Journal of the American Medical Association*, 269:2789–2794.
- Besley T, Hall J, Preston I (1998). Private and public health insurance in the UK. *European Economic Review*, 42:491–497.
- Besley T, Hall J, Preston I (1999). The demand for private health insurance: do waiting lists matter? *Journal of Public Economics*, 72:155–181.
- Blanpain N, Pan Ké Shon J-L (1997). L'assurance complémentaire maladie: une diffusion encore inégale. *INSEE Première*, 523.
- BMI Europe (2000). *Medical insurance* (<http://www.bmieurope.com/cover/medical.html>, accessed 5 January 2002).
- Bocognano A et al. (2000). *Which coverage for whom? Equity of access to health insurance in France*. Paris, Research and Information Center for Health Economics (CREDES).
- Borràs J et al. (1999). Educational level, voluntary private health insurance and opportunistic cancer screening among women in Catalonia (Spain). *European Journal of Cancer Prevention*, 8.
- Breuil-Genier P (2000). Généraliste puis spécialiste: un parcours peu fréquent. *INSEE Première*, 709.
- British Medical Association (1998). *Human genetics: choice and responsibility*. Oxford, Oxford University Press.
- Buck G, Jenkins P, Leonard A (1997). *Strategic analysis of UK non-life insurance*. London, FT Financial Publishing.
- Bundesaufsichtsamt für das Versicherungswesen (2001). *Submission to the European Commission's study on voluntary health insurance in the EU*. Berlin, Bundesaufsichtsamt für das Versicherungswesen.

- BUPA (2000). *Report and accounts 1999*. London, BUPA.
- BUPA Ireland (2000). *BUPA Ireland chief calls for healthy competition: risk equalisation "rigs the market"* (<http://www.bupaireland.ie/whatsnew/press1.jsp>, accessed 5 January 2002).
- BUPA Limited (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. London, BUPA Limited.
- Burchardt T, Hills J, Propper C (1999). *Private welfare and public policy*. York, Joseph Rowntree Foundation.
- Busse R (2000a). *Health care systems in transition: Germany*. Copenhagen, European Observatory on Health Care Systems.
- Busse R (2000b). Personal communication.
- Busse R (2001). *Voluntary health insurance in Germany: a study for the European Commission*. Madrid, European Observatory on Health Care Systems.
- Calnan M, Cant S, Crabe J (1993). *Going private: why people pay for their health care*. Buckingham, Open University Press.
- Cantillon B (2001). *Rapport du groupe de travail des fonctionnaires dirigeants dirigé par Bea Cantillon, 17 January 2001*. Brussels, Cabinet des Affaires Sociales.
- CareHealth (2000). *Criticisms of private medical insurance by the Office of Fair Trading*. CareHealth (<http://www.carehealth.co.uk/vhicrit.htm>, accessed 5 January 2002).
- Coheur A (2001). *Cross-border care: new prospects for convergence* [unpublished paper]. Brussels, AIM.
- Comité Européen des Assurances (CEA) (1997). *Health insurance in Europe 1997*. Paris, CEA.
- Comité Européen des Assurances (CEA) (1999). *Annual report 1999*. Paris, CEA.
- Comité Européen des Assurances (CEA) (2000). *Health insurance in Europe: 1998 data, CEA ECO 12 (July 2000)*. Paris, CEA.
- Comité Européen des Assurances (CEA) (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Paris, CEA.
- Commission on Health Funding (1989). *Report of the Commission on Health Funding*. Dublin, Stationery Office.
- Commission on Taxation (1982). *First report of the Commission on Taxation*. Dublin, Stationery Office.
- Consumer Choice (1998). Healthy competition. *Consumer Choice*, May 1998:171–173.
- Costa J, García J (2000). Demand for private health insurance and health care quality: which quality matters? [working paper]. *9th European Workshop on Econometrics and Health Economics, Amsterdam, 13–16 September 2000*.
- Couchman A (1999). *UK health and welfare insurance: management reports 1999*. London, Financial Times Finance.

- Couffinhal A (1999). *Concurrence en assurance santé: entre efficacité et sélection [Competition in health insurance: between efficiency and selection]* [Ph.D. dissertation]. Paris, Université Paris IX-Dauphine.
- Council of the European Communities (1981). Council Regulation (EEC) No 2793/81 of 17 September 1981 amending Regulation (EEC) No 1408/71 on the application of social security schemes to employed persons and their families moving within the Community and Regulation (EEC) No 574/72 fixing the procedure for implementing Regulation (EEC) No 1408/71. *Official Journal of the European Communities "L" Series*, 275.
- Council of the European Communities (1997). Consolidated version: Council Regulation (EC) 118/97 dated 2 December 1996, modifying Council Regulation (EC) 1408/71 dated 14 June 1971 on the application of social security plans to workers, self-employed people and members of their families relocating within the Community and Council Regulation (EEC) 574/72 dated 21 March 1972 defining the procedure for the implementation of Regulation (EEC) 1408/71. *Official Journal of the European Communities "L" Series*, 28.
- Danzon PM (1992). Hidden overhead costs: is Canada's system really less expensive? *Health Affairs*, 11:21–43.
- Databank (1999). Le polizze malattia in Italia [Health policy in Italy] [seminar talk]. *Il ruolo della mutualità nel Sistema Sanitario Nazionale [The role of the mutual associations in the National Health System]*, Fondazione Cesar, Bologna, 2 December 1999.
- Datamonitor (2000a). *European health insurance 2000: what's the prognosis, doctor?* London, Datamonitor.
- Datamonitor (2000b). *Long term care and health insurance in Germany 2000: caring for the future?* London, Datamonitor.
- Davey B (1999). *A presentation to the Laing and Buisson health insurance conference, London, 29 September 1999* (<http://www.oft.gov.uk/html/rsearch/sparch/spe21-99.htm>, accessed 5 January 2002).
- Davies P (1999). The role of health insurance in New Zealand: health insurance in New Zealand. *Healthcare Review – Online*, 3 ([http://www.enigma.co.nz/hcro\\_articles/9904/vol3no4\\_002.htm](http://www.enigma.co.nz/hcro_articles/9904/vol3no4_002.htm), accessed 5 January 2002).
- Deber R, Gildiner A, Baranek P (1999). Why not private health insurance? 1. Insurance made easy [Education]. *Canadian Medical Association Journal*, 161: 539–542.
- DECO, see under Associação Portuguesa para a Defesa do Consumidor.
- Department of Health (2000). *The national plan*. London, Department of Health.
- Department of Health and Children (1999). *White paper on private health insurance*. Dublin, Government of Ireland.
- Department of Health and Children (2001a). *Quality and fairness: a health system for you: the Department of Health and Children's health strategy 2001*. Dublin, Department of Health and Children.

- Department of Health and Children (2001b). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Dublin, Department of Health and Children.
- Directorate-General for the Internal Market (2001). *Submission to the European Commission's study on voluntary health insurance in the EU*. Brussels, Directorate-General for the Internal Market.
- Dirindin N (1996). *Chi paga per la salute degli italiani? [Who pays for the health of Italians?]* Bologna, Il Mulino.
- Dixon A, Mossialos E (2000). Has the Portuguese NHS achieved its objectives of equity and efficiency? *International Social Security Review*, 53:49–78.
- Economou C (2001). *Voluntary health insurance in Greece: a study for the European Commission*. Athens, National School of Public Health.
- Emmerson C, Frayne C, Goodman A (2000). *Pressures in UK healthcare: challenges for the NHS*. London, Institute for Fiscal Studies.
- Emmerson C, Frayne C, Goodman A (2001). Should private medical insurance be subsidised? *Health Care UK*, 51:49–65.
- Engemann O (2001). Personal communication.
- European Commission (1973). Council Directive 73/239/EEC of 24 July 1973 on the coordination of laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of direct insurance other than life assurance [first non-life insurance directive]. *Official Journal of the European Communities "L" Series*, 228:3–19.
- European Commission (1988). Council Directive 88/357/EEC of 22 June 1988 on the coordination of laws, regulations and administrative provisions relating to direct insurance other than life assurance and laying down provisions to facilitate the effective exercise of freedom to provide services and amending Directive 73/239/EEC [second non-life insurance directive]. *Official Journal of the European Communities "L" Series*, 172:1.
- European Commission (1992). Council Directive 92/49/EEC of 18 June 1992 on the coordination of laws, regulations and administrative provisions relating to direct insurance other than life assurance and amending Directives 73/239/EEC and 88/357/EEC [third non-life insurance directive]. *Official Journal of the European Communities "L" Series*, 228:1–23.
- European Commission (1996). *Insurance: infringement proceedings against Germany and Spain*. Dated 1 August 1996. Brussels, European Commission ([http://europa.eu.int/comm/internal\\_market/en/finances/infr/760.htm](http://europa.eu.int/comm/internal_market/en/finances/infr/760.htm), accessed 5 January 2002).
- European Commission (1997). *Liberalisation of insurance in the single market – an update*. Dated 15 October 1997. Brussels, European Commission ([http://europa.eu.int/comm/internal\\_market/en/finances/insur/87.htm](http://europa.eu.int/comm/internal_market/en/finances/insur/87.htm), accessed 5 January 2002).

- European Commission (2000a). *Freedom to provide services and the general good in insurance, interpretive communication C(1999)5046*. Dated 2 February 2000. Brussels, European Commission.
- European Commission (2000b). *Insurance: infringement proceedings against France concerning mutual societies and the requirement of a marketing information sheet*. Dated 28 July 2000. Brussels, European Commission.
- European Commission (2001). *Commission calls for the tax discrimination in favour of French mutual and provident societies to be brought to an end*. Brussels, European Commission.
- European Court of Justice (ECJ) (1978). Judgment of the court of 16 March 1978: *Bestuur van het Algemeen Ziekenfonds Drenthe-Platteland v G. Pierik* [Case 117/77] [Pierik I]. *European Court Reports*, 1978:825.
- European Court of Justice (ECJ) (1979). Judgment of the court of 31 May 1979: *Bestuur van het Algemeen Ziekenfonds Drenthe-Platteland v G. Pierik* [Case 182/78] [Pierik II]. *European Court Reports*, 1979:1977.
- European Court of Justice (ECJ) (1996). Judgment of the court of 26 March 1996: *José García and others v Mutuelle de Prévoyance Sociale d'Aquitaine and others* [Case 238/94]. *European Court Reports*, 1996:I-1673.
- European Court of Justice (ECJ) (1998a). Judgment of the court of 28 April 1998: *Nicholas Decker v Caisse de Maladie des Employés Privés* [Case 120/95]. *European Court Reports*, 1998:I-1831.
- European Court of Justice (ECJ) (1998b). Judgment of the court of 28 April 1998: *Raymond Kohll v Union des Caisses de Maladie* [Case 158/96]. *European Court Reports*, 1998:I-1931.
- European Court of Justice (ECJ) (2001a). Judgment of the court of 12 July 2001: *Abdon Vanbraekel and Others v Alliance National des Mutualités Chrétiennes (ANMC)* [Case 368/98]. *European Court Reports*, 2001:I-5363.
- European Court of Justice (ECJ) (2001b). Judgment of the court of 12 July 2001: *B.S.M. Geraets-Smits v Stichting Ziekenfonds and H.T.M. Peerbooms v Stichting CZ Groep Zorgverzekeringen* [Case 157/99]. *European Court Reports*, 2001: I-5473.
- European Parliament (2000). *Report on supplementary health insurance: 2000/2009(INI)* [A5-0266/2000]. Brussels, European Parliament.
- European Parliament (2001). European Parliament resolution on supplementary health insurance (2000/2009(INI)). Adopted 16 November 2000. *Official Journal of the European Communities "C" Series*, 223:339–344.
- Eurostat (1997). *Insurance services statistics*. Luxembourg, Office for Official Publications of the European Communities, 1997 (Statistics in focus: distributive trades, services and transport [series]).
- Evans RG (1985). Illusions of necessity: evading responsibility for choice in health care. *Journal of Health Politics, Policy and Law*, 10:439–467.

- Evans RG (2002). Financing health care: taxation and the alternatives. In: Mossialos E et al., eds. *Funding health care: options for Europe*. Buckingham, Open University Press.
- Fahey T, Fitz Gerald J (1997). *Welfare implications of demographic trends*. Dublin, Oak Tree Press/Combat Poverty Agency.
- Fattore G (1999). Cost containment and reforms in the Italian National Health Service. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Fédération Nationale de la Mutualité Française (FNMF) (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Paris, FNMF.
- Freeman S (1994). Health care provision in the EC. *AIDA Information Bulletin*, 47:120–122.
- Freire J (1999). The new tax status of PHI. *Gaceta Sanitaria*, 13:233–236.
- Fuchs V (1998). Provide, provide: the economics of aging. *Issue Brief (George Washington University, National Health Policy Forum)*, 1–3.
- Gauthier A, Lamphere J, Barrand N (1995). Risk selection in the health care market: a workshop overview. *Inquiry*, 32:14–22.
- Genetics and Insurance Committee (2000). *Decision of the Genetics and Insurance Committee concerning the application for approval to use genetic test results for life insurance risk assessment in Huntington's Disease*. London, Department of Health.
- Getzen TE (1992). Population aging and the growth of health expenditures. *Journal of Gerontology*, 47:S98–S104.
- Giannoni-Mazzi M (2001). *Voluntary health insurance in Italy: a study for the European Commission*. Perugia, University of Perugia.
- Glennerster H et al. (2000). *Paying for health, education and housing: how does the centre pull the purse strings?* Oxford, Oxford University Press.
- Groupe Consultatif Actuariel Européen (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Oxford, Group Consultatif Actuariel Européen.
- Gulliford MC et al. (2001). *Access to health care: a scoping exercise*. London, National Health Service (NHS) Service Delivery and Organisation Research and Development Programme.
- Häkkinen U (1999). Cost containment in Finnish health care. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Häkkinen U (2002). Change in determinants of use of physician service in Finland between 1987 and 1996. *Social Science and Medicine*, 55(9):1523–1537.
- Hall MA, Rich SS (2000). Laws restricting health insurers' use of genetic information: impact on genetic discrimination. *American Journal of Human Genetics*, 66:293–307.

- Harmon C, Nolan B (2001). Health insurance and health services utilization in Ireland. *Health Economics*, 10:135–145.
- Harrison A et al. (1997). Funding the NHS: can the NHS cope? *British Medical Journal*, 314:139–142.
- Her Majesty's Customs and Excise (1999). *A general guide to IPT*. London, Her Majesty's Customs and Excise.
- Her Majesty's Treasury (2001a). *Consumers and industry to benefit from changes to banking, mortgage and general insurance regime* [press release]. Dated 12 December 2001. London, Her Majesty's Treasury.
- Her Majesty's Treasury (2001b). *Mortgages and general insurance regulation: regulatory impact assessment*. London, Her Majesty's Treasury.
- Hermans HEGM (2000). Cross-border health care in the European Union: recent legal implications of "Decker and Kohll". *Journal of Evaluation in Clinical Practice*, 6:431–439.
- Hermesse J (1999). The opening of frontiers to patients: what economic consequences? In: *Health care without frontiers within the European Union? Free movement of goods and services in the health care sector: documents from the international symposium, Luxembourg, 18 November 1998*. Brussels, Association Internationale de la Mutualité (AIM).
- Hermesse J (2001). *Voluntary health insurance in Belgium: a study for the European Commission*. Brussels, Université Catholique de Louvain.
- Hockley TC (2001). *Voluntary health insurance in the United Kingdom: a study for the European Commission*. London, London School of Economics and Political Science.
- Hofmarcher M, Rack H (2001). *Health care systems in transition: Austria*. Copenhagen, European Observatory on Health Care Systems.
- Hofmarcher MM (2001). *Voluntary health insurance in Austria: a study for the European Commission*. Vienna, Institute for Advanced Studies.
- Holtzman NA et al. (1997). Predictive genetic testing: from basic research to clinical practice. *Science*, 24:602–605.
- House of Commons Science and Technology Committee (2001). *Genetics and insurance: fifth report*. London, Stationery Office.
- Human Genetics Advisory Commission (1997). *The implications of genetic testing for insurance*. London, Human Genetics Advisory Commission.
- Imai Y, Jacobzone S, Lenain P (2000). *The changing health system in France*. Paris, Organisation for Economic Co-operation and Development (OECD) (Economics Department Working Papers No. 269).
- Instituto Nacional de Estadística (INE) (1998). *Encuesta de Presupuestos Familiares [Family Expenditure Survey]*. Madrid, INE.
- Jamison J et al. (2001). *Cross-border co-operation in health services in Ireland*. Armagh, Centre for Cross-Border Studies.

- Kennedy A (1995). Private health insurance in the Republic of Ireland. *Benefits and Compensation International*, January/February:29–32.
- King D, Mossialos E (2001). *The determinants of private medical insurance prevalence in England*. London, LSE Health and Social Care (LSE Health and Social Care Discussion Paper 3).
- Knight J (2000). Private medical insurance: how to get the best care and treatment for you and your family at the lowest price. *Moneywise*, July.
- Kulu-Glasgow I, Delnoij D, de Bakker D (1998). Self-referral in a gatekeeping system: patients' reasons for skipping the general practitioner. *Health Policy*, 45: 221–223.
- Laing & Buisson (1999). *Private medical insurance: UK market sector report 1999*. London, Laing & Buisson.
- Laing & Buisson (2000). *Private medical insurance: UK market sector report 2000*. London, Laing & Buisson.
- Laing & Buisson (2001). *Private medical insurance: UK market sector report 2001*. London, Laing & Buisson.
- Lancry P-J, Sandier S (1999). Twenty years of cures for the French health care system. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Light D (1998). Keeping competition fair for health insurance: how the Irish beat back risk-rated policies. *American Journal of Public Health*, 88:745–748.
- Lippi Bruni M (2001). Il ruolo dei fondi integrativi nel nuovo assetto del SSN [The role of the integrated funds in the new structure of the SSN]. In: Fiorentini G, ed. *I servizi sanitari in Italia: 2001 [Health services in Italy: 2001]*. Bologna, Il Mulino.
- Lopez i Casanovas G (1999). Health care and cost containment in Spain. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Lubitz J, Beebe J, Baker C (1995). Longevity and Medicare expenditures. *New England Journal of Medicine*, 332:999–1003.
- Luginsland M (2001). Les Assurés chouchoutent les travailleurs frontaliers. *L'Argus de L'Assurance*, 6744.
- Maarse H (2001). *Voluntary health insurance in the Netherlands: a study for the European Commission*. Maastricht, University of Maastricht.
- MacDonald AS (1997). How will improved forecasts of individual lifetimes affect underwriting? *Philosophical Transactions of the Royal Society of London, Series B: Biological Sciences*, B352:1067–1075.
- McGrail K et al. (2000). Age, costs of acute and long-term care and proximity to death: evidence for 1987–88 and 1994–95 in British Columbia. *Age and Ageing*, 29:249–253.
- Manning WG, Marquis MS (1989). *Health insurance: the trade-off between risk pooling and moral hazard*. Santa Monica, RAND Corporation (Pub. No. R-3729-NCHSR).



- Marquis MS, Long SH (1995). Worker demand for health insurance in the non-group market. *Journal of Health Economics*, 14:47–63.
- Mastrobuono I (1999). *Il finanziamento delle attività e delle prestazioni sanitarie [Health financing]*. Rome, Il Pensiero Scientifico Editore.
- Maynard A, Dixon A (2002). Voluntary health insurance and medical savings account: theory and experience. In: Mossialos E et al., eds. *Funding health care: options for Europe*. Buckingham, Open University Press.
- Mikkola H (2001). *Voluntary health insurance in Finland: a study for the European Commission*. Helsinki, National Research and Development Centre for Welfare and Health (STAKES).
- Ministry of Health, Welfare and Sport (2000a). *Health insurance in the Netherlands*, 5th edition, 7 July 2000. The Hague, Ministry of Health Welfare and Sport (<http://www.minvws.nl>, accessed 5 January 2002).
- Ministry of Health, Welfare and Sport (2000b). Personal communication. Public Information Office, Ministry of Health, Welfare and Sport.
- Ministry of Health, Welfare and Sport (2001). *Vraag aan bod: hoofdlijnen van vernieuwing van het zorgstelsel, Tweede Kamer, 2000–2001 [Key elements of the health care reforms, House of Commons, 2000–2001]*. The Hague, Ministry of Health, Welfare and Sport (27 855, nrs 1–2).
- Mooney GH (1983). Equity in health care: confronting the confusion. *Effective Health Care*, 1:179–185.
- Mossialos E, Dixon A (2001). Genetic testing and insurance: challenges and opportunities for society. *Trends in Molecular Medicine*, 7:323–324.
- Mossialos E et al., eds (2002). *Funding health care: options for Europe*. Buckingham, Open University Press.
- Mossialos E, Le Grand J (1999). Cost containment in the EU: an overview. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Mountford L (2000). *Health care without frontiers? The development of a European market in health services?* London, Office of Health Economics.
- Move to Ireland (2001). *Private health insurance*. Ireland, Ambit Ireland Internet Services (<http://www.movetoireland.com/movepag/medpriva.htm>, accessed 5 January 2002).
- Murdoch A (1995). Irish psychiatrists are worried about foreign insurers. *British Medical Journal*, 311:527.
- Murillo C, González B (1993). El sector sanitario en España: situación actual y perspectivas de futuro [The health sector in Spain: current situation and future perspectives]. *Hacienda Pública Española*, 119:41–58.
- Murray S (2001a). Personal communication. *BUPA Ireland*.
- Murray S (2001b). Personal correspondence, 4 December 2001. *BUPA Ireland*.

- Murthy A, Dixon A, Mossialos E (2001). Genetic testing and insurance: implications of the UK Genetics and Insurance Committee (GAIC) decision. *Journal of the Royal Society of Medicine*, 94:57–60.
- Natarajan K (1996). *European health insurance markets: opportunity or false dawn?* London, FT Financial Publishing/Pearson Professional.
- Navarro V (2000). Assessment of the World Health Report 2000. *Lancet*, 356: 1598–1601.
- Nolan B, Wiley MM (2000). *Private practice in Irish public hospitals*. Dublin, Oak Tree Press/Economic and Social Research Institute.
- Office of Fair Trading (OFT) (1996). *Health insurance: a report by the Office of Fair Trading*. London, OFT.
- Office of Fair Trading (OFT) (1997). *Consumer detriment under conditions of imperfect information*. London, OFT.
- Office of Fair Trading (OFT) (1998a). *Final warning to health insurers* [press release]. Dated 28 May 1998. London, OFT.
- Office of Fair Trading (OFT) (1998b). *Health insurance: a second report by the Office of Fair Trading*. London, OFT.
- Office of Fair Trading (OFT) (1999). *VHI and PMS markets are competitive says OFT but better information for policy holders is needed* [press release]. Dated 5 November 1999. London, OFT.
- Office of Fair Trading (OFT) (2000a). *Consumer detriment*. London, OFT.
- Office of Fair Trading (OFT) (2000b). *Health insurers improve consumer information* [press release]. Dated 3 July 2000. London, OFT.
- Oliveira M (2001). *Voluntary health insurance in Portugal: a study for the European Commission*. London, London School of Economics and Political Science.
- Oliver AJ (1999). *Risk adjusting health care resource allocations*. London, Office of Health Economics.
- Organisation for Economic Co-operation and Development (OECD) (1998a). *Competition and related regulation issues in the insurance industry*. Paris, OECD.
- Organisation for Economic Co-operation and Development (OECD) (1998b). *OECD economic surveys 1997–1998: Portugal*. Paris, OECD.
- Organisation for Economic Co-operation and Development (OECD) (2000). *Health data 2000*. Paris, OECD.
- Organisation for Economic Co-operation and Development (OECD) (2001a). *Health data 2001*. Paris, OECD.
- Organisation for Economic Co-operation and Development (OECD) (2001b). *Private health insurance in OECD countries: compilation of national reports*. Paris, OECD.
- O'Shea D (2000). Private bed charges to increase by £35 million. *Irish Medical Times*, 34:24.

- Palm W (2001). *Voluntary health insurance and EU insurance directives: between solidarity and the market*. Brussels, Association Internationale de la Mutualité (AIM).
- Palm W et al. (2000). *Implications of recent jurisprudence on the co-ordination of health care protection systems: general report produced for the Directorate General for Employment and Social Affairs of the European Commission*. Brussels, Association Internationale de la Mutualité (AIM).
- Papworth J (2000). Take more care of yourself. *Guardian* (London), 5 August.
- Payne D (2000). Health insurer delays psychiatric admissions. *British Medical Journal*, 320:1162.
- Pellisé L (1994). Reimbursing insurance carriers: the case of "MUFACE" in the Spanish health care system. *Health Economics*, 3:243–253.
- Pereira J et al. (1999). Health care reform and cost containment in Portugal. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Pierotti C (2001). Personal communication. Comité Européen des Assurances (CEA).
- Pinto CG, Oliveira M (2001). The Portuguese health care system: current organization and perspectives for reform. In: Centro de Investigação Sobre Economia Portuguesa, ed. *Como está a economia portuguesa? [How is the Portuguese economy?]* Lisbon, Europress.
- PKV, see under Verband der privaten Krankenversicherung.
- PPP Healthcare (2000). *PPP healthcare update – 09/11/1999*. PPP Healthcare (<http://www.axa.co.uk>, accessed 5 January 2002).
- Propper C (1993). Constrained choice sets in the UK: demand for private medical insurance. *Journal of Public Economics*, 51:287–307.
- Puig-Junoy J (1999). Managing risk selection incentives in health sector reforms. *International Journal of Health Planning and Management*, 14:287–311.
- Raad voor de Volksgezondheid & Zorg (Council for Public Health and Health Care) (2000). *Europe and healthcare, 11 January 2000*. Raad voor de Volksgezondheid & Zorg (<http://www.rvz.net/Samenvat/Werk99/europe.htm>, accessed 5 January 2002).
- Rajmil L et al. (2000). The quality of care and influence of double health care coverage in Catalonia (Spain). *Archives of Disease in Childhood*, 83:211–214.
- Rees R, Gravelle H, Wambach A (1999). Regulation of insurance markets. *The Geneva Papers on Risk and Insurance – Theory*, 24:55–68.
- Rico A (2000). *Health care systems in transition: Spain*. Copenhagen, European Observatory on Health Care Systems.
- Robinson R (1999). *Health care systems in transition: United Kingdom*. Copenhagen, European Observatory on Health Care Systems.

- Rodríguez M (2001). *Voluntary health insurance in Spain: a study for the European Commission*. Barcelona, University of Barcelona.
- Rupprecht F, Tissot B, Chatel F (2000). German health care system: promoting greater responsibility among all system players. *INSEE Studies*, 42.
- Sandier S, Paris V, Polton D (2004). *Health care systems in transition: France*. Copenhagen, European Observatory on Health Systems and Policies.
- Sandier S, Ulmann P (2001). *Voluntary health insurance in France: a study for the European Commission*. Paris, Arguments Socio-Économiques pour la Santé (ArgSES)/Caisse Nationale d'Assurance Maladie (CNAM).
- Sassi F, Abel-Smith B, Mossialos E (1996). *The economic and ethical aspects of new biomedical technologies* [workshop]. Brussels, Scientific and Technological Options Assessment (STOA).
- Schmitz M (2001). Personal communication.
- Schneider M, ed. (1995). *Complementary health schemes in the European Union: European Commission seminar, Prien am Chiemsee, Bavaria, 14–16 October 1992*. Augsburg, Beratungsgesellschaft fuer angewandte Systemforschung (BASYS).
- Schneider M et al. (1992). Health care in the EC member states. *Health Policy*, 20: 1–251.
- Sheils J, Hogan P (1999). Cost of tax-exempt health benefits in 1998. *Health Affairs (Project Hope)*, 18:176–181.
- Sissouras A, Karokis A, Mossialos E (1999). Health care and cost containment in Greece. In: Mossialos E, Le Grand J, eds. *Health care and cost containment in the European Union*. Aldershot, Ashgate.
- Skoglund C (2001). *Voluntary health insurance in Sweden: a study for the European Commission*. Stockholm, BCS Kompetensutveckling AB.
- Smosarski G, Jack A (1998). *Insurance in France*. London, Financial Times Business.
- Society of Actuaries in Ireland (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Dublin, Society of Actuaries in Ireland.
- Stevens Y, et al. (1998). Issues in complementary health insurance in Belgium. *International Social Security Review*, 51:71–91.
- Sunday Times (2001). Health insurers cash in on NHS delays by pushing prices up 18%. *Sunday Times* (London), 3 June 2001, Money:1.
- Sveriges Försäkringsförbund (Swedish Insurers' Association) (2001). *Submission to the European Commission's study on voluntary health insurance*. Stockholm, Sveriges Försäkringsförbund.
- Taroni F (2000). Devolving responsibility for funding and delivering health care in Italy. *Euro Observer*, 2:1–2.
- Thomas RG (2001). *Comments regarding additional information requested from the insurance industry: response to the Human Genetics Advisory Commission Public Consultation*. London, Human Genetics Advisory Commission.

- Union Española de Entidades Aseguradoras y Reaseguradoras (UNESPA) (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Madrid, UNESPA.
- Union Professionnelle des Entreprises d'Assurances (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Brussels, Union Professionnelle des Entreprises d'Assurances.
- Van de Ven WPMM, Ellis RP (1999). Risk adjustment in competitive health plan markets. In: Newhouse JP, Culyer AJ, eds. *Handbook of health economics*. Amsterdam, Elsevier.
- Van de Ven WPMM, van Vliet R (1992). How can we prevent cream skimming in a competitive health insurance market? The great challenge for the 90s. In: Zweifel P, Frech III H, eds. *Health economics worldwide*. Amsterdam, Kluwer.
- Van de Ven WPMM et al. (2000). Access to coverage for high-risks in a competitive individual health insurance market: via premium rate restrictions or risk-adjusted premium subsidies? *Journal of Health Economics*, 19:311–339.
- Van der Mei AP (2001). *Free movement of persons within the European Community: cross-border access to public benefits*. Maastricht, University of Maastricht.
- Van Doorslaer E, Koolman X, Puffer F (2001). *Equity in the use of physician visits in OECD countries: has equal treatment for equal need been achieved?* Rotterdam, ECuity II Project (ECuity II Project Working Paper No. 3).
- Van Doorslaer E et al. (1999). The redistributive effect of health care finance in twelve OECD countries. *Journal of Health Economics*, 18:291–313.
- Vektis (1993). *Jaarboek 93 [Yearbook '93]*. Zeist, Vektis.
- Vektis (2000). *Zorgmonitor*. Zeist, Vektis.
- Vektis (2001). *Zorgthermometer 2001*. Zeist, Vektis.
- Vera-Hernández A (1999). Duplicate coverage and demand for health care: the case of Catalonia. *Health Economics*, 8:579–598.
- Verband der privaten Krankenversicherung (German Association of Private Health Insurers, or PKV) (1994). *Private health insurance: facts and figures 1992/93*. Cologne, PKV.
- Verband der privaten Krankenversicherung (German Association of Private Health Insurers, or PKV) (1999). *Private health insurance: facts and figures 1998/99*. Cologne, PKV.
- Verband der privaten Krankenversicherung (German Association of Private Health Insurers, or PKV) (2000). *Private health insurance: facts and figures 1999/2000*. Cologne, PKV.
- Verband der privaten Krankenversicherung (German Association of Private Health Insurers, or PKV) (2001). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Cologne, PKV.
- Vhi Healthcare (2000). *Annual report 2000*. Dublin, VHI Healthcare.

- Vhi Healthcare (2001a). *Ensuring lifelong affordable health insurance in Ireland: the case for community rating and risk equalisation*. Dublin, VHI Healthcare.
- Vhi Healthcare (2001b). *It's all about living: annual report and accounts 2001*. Dublin, VHI Healthcare.
- Vhi Healthcare (2001c). *Submission to the European Commission's study on voluntary health insurance in the European Union*. Dublin, VHI Healthcare.
- Vineis P (2001). Misconceptions about the use of genetic tests in populations. *Lancet*, 357:709–712.
- Vrangbæk K (2001). *Voluntary health insurance in Denmark: a study for the European Commission*. Copenhagen, University of Copenhagen.
- Wagstaff A et al. (1999). Equity in the finance of health care: some further international comparisons. *Journal of Health Economics*, 18:263–290.
- Wasem J (1995). Regulating private health insurance markets. In: Okma K, ed. *Four country conference on health care reforms and health care policies in the United States, Canada, Germany and the Netherlands, Amsterdam, February 23–25 1995*. Amsterdam, Ministry of Health, Welfare and Sport.
- Whitehead M et al. (1997). As the health divide widens in Sweden and Britain, what's happening to access to care? *British Medical Journal*, 315:1006–1009.
- Wieninger PR (1997). Eine vergleichende ökonomische Analyse zwischen sozialer Krankenversicherung und privater Krankenversicherung. *Soziale Sicherheit, Fachzeitschrift der österreichischen Sozialversicherung*, 10:901.
- Wiley MM (2001). Reform and renewal of the Irish health care system: policy and practice. In: *Proceedings of a conference held on 9 October 2001*. Dublin, Economic and Social Research Institute.
- Williams A (2001). Science or marketing at WHO? A commentary on World Health Report 2000. *Health Economics*, 10:93–100.
- World Health Organization (WHO) (2000). *The World Health Report 2000: health systems – improving performance*. Geneva, WHO.
- Wysong JA, Abel T (1990). Universal health insurance and high-risk groups in West Germany: implications for US health policy. *Milbank Quarterly*, 68:527–560.
- Youngman I (1994). *The health insurance opportunity: a worldwide study of private medical insurance markets*. Dublin, Lafferty.
- Zweifel P (1987). Bonus systems in health insurance: a microeconomic analysis. *Health Policy*, 7:273–288.



---

# Index

## A

- access 16, 18, 19, 20, 23, 26, 35, 39, 43, 52, 54, 56, 58, 62, 64, 67, 68, 69, 75, 79, 86, 88, 101, 102, 104, 106, 107, 108, 111
- administrative costs 12, 15, 36, 88, 99, 100, 145
- adverse selection 107, 108, 109, 111, 116, 118
- ageing reserves 57, 59
- AIM 7, 8, 9, 52, 53, 67, 69, 136, 141, 161, 162, 171, 172, 173, 183, 185, 190, 193
- ambulatory care 58, 66, 86, 128, 134. *See also* outpatient care
- Austria 16, 26, 28, 29, 30, 31, 32, 33, 34, 36, 38, 52, 53, 66, 68, 69, 70, 71, 72, 73, 76, 77, 78, 79, 80, 81, 83, 85, 86, 87, 91, 94, 99, 100, 102, 117, 120, 124, 125, 128, 143, 145, 147, 151, 152, 153, 154, 156, 170, 171, 180, 184, 190
- AWBZ 9, 60, 61, 63, 64, 65

## B

- Belgium 16, 19, 21, 22, 26, 27, 28, 29, 30, 32, 33, 34, 36, 51, 52, 53, 55, 66, 68, 69, 70, 71, 72, 73, 75, 76, 77, 79, 80, 81, 83, 84, 86, 87, 94, 95, 96, 97, 98, 99, 100, 102, 107, 111, 117, 119, 125, 128, 133, 134, 135, 141, 143, 145, 147, 151, 152, 155, 156, 157, 160, 170, 171, 180, 190, 195
- benefits 5, 11, 15, 18, 20, 25, 26, 29, 31, 33, 35, 36, 37, 45, 51, 54, 56, 57, 58, 59, 60, 62, 63, 65, 66, 67, 68, 71, 74, 76, 80, 82, 83, 90, 94, 96, 97, 98, 105, 107, 115, 121, 122, 123, 127, 130, 135, 136, 137, 139, 145, 146, 147, 148, 149, 152, 154, 155, 165, 167, 170, 178, 195, 196



## C

CEA 8, 33, 36, 46, 48, 49, 58, 59, 70, 72, 75, 92, 97, 105, 123, 136, 137, 142, 145, 163, 171, 172, 173, 185

choice 6, 16, 17, 18, 22, 23, 26, 33, 43, 45, 50, 52, 55, 56, 67, 68, 83, 84, 86, 89, 110, 119, 121, 122, 124, 125, 127, 134, 144, 145, 146, 147, 152, 153, 165, 170, 176, 178, 184, 185, 188, 194

claims 5, 12, 44, 51, 58, 79, 81, 83, 93, 97, 98, 99, 107, 113, 114, 126, 127, 133, 134, 141, 145, 146, 154

CMU 9, 19, 28, 103, 106, 107, 129, 144, 150, 156

co-payments 16, 19, 22, 26, 27, 30, 34, 52, 54, 66, 68, 83, 84, 99, 103, 128, 135, 140, 153, 154, 170, 176. *See also* cost-sharing, user charges, deductibles, excesses

commercial insurers 19, 39, 40, 41, 53, 54, 66, 69, 70, 71, 75, 76, 94, 96, 97, 111, 112, 136, 137, 141, 148, 155, 157, 159, 160, 161, 167, 177

community rating 19, 76, 112, 113, 114, 138, 140, 162, 196

complementary VHI 16, 19, 22, 26, 30, 33, 34, 35, 36, 39, 41, 42, 66, 74, 76, 103, 106, 107, 122, 124, 128, 129, 135, 140, 144, 153, 154, 156, 161, 162, 174

consumer protection 5, 6, 13, 47, 49, 59, 101, 104, 142, 154, 155

cost-sharing 17, 34, 35, 76, 78, 80, 83, 107, 134, 150

cost containment 113, 114, 146, 183, 189, 191, 192, 194, 195

cross-border sales 21, 140, 142, 148

## D

deductibles 58, 65, 83

demand for VHI 5, 17, 25, 35, 36, 37, 38, 42, 44, 45, 72, 91, 93, 143, 144, 153, 154, 167

Denmark 16, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 38, 39, 66, 67, 68, 69, 71, 72, 73, 75, 76, 77, 79, 80, 81, 83, 86, 87, 91, 94, 95, 97, 98, 99, 100, 117, 119, 120, 124, 126, 128, 144, 145, 153, 154, 170, 171, 181, 197

dental care 26, 35, 45, 53, 54, 58, 60, 66, 68, 80, 86, 128, 153, 174

double coverage 26, 67, 84, 128

## E

efficiency 14, 18, 20, 23, 65, 85, 86, 87, 99, 108, 109, 110, 111, 130, 147, 151, 165, 166, 167, 178, 186, 187

elasticity  
income 37  
price 36

equity 5, 6, 13, 15, 18, 20, 23, 45, 85, 86, 87, 101, 104, 107, 108, 110, 126, 127, 128, 130, 153, 154, 165, 166, 167, 168, 184, 187, 192, 196, 197

European Commission 8, 13, 21, 45, 46, 47, 48, 49, 50, 70, 96, 136, 137, 139, 140, 141, 142, 149, 156, 157, 158, 159, 160, 161, 163, 169, 171, 172, 175, 183, 184, 185, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197

European Court of Justice 9, 21, 47, 48, 70, 132, 133, 134, 135, 157, 158, 159, 188

European Parliament 13, 117, 139, 169, 170, 188

excesses 83

exclusions 18, 78, 80, 109, 116, 120, 122, 123, 135, 154

expenditure on health care 21, 22, 27, 64, 150, 151

  private 27, 30, 32, 35

  public 17, 22, 27, 28, 143, 150, 151

  total 16, 17, 27, 28, 29, 30, 31, 32, 42, 57, 69, 88, 89, 143, 145, 150, 151

## F

family history of disease 20, 63, 76, 77, 115, 155, 166

Finland 2, 18, 78, 80, 109, 116, 120, 122, 123, 135, 154

France 17, 19, 21, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 39, 53, 66, 68, 69, 70, 71, 72, 73, 75, 77, 79, 80, 81, 83, 84, 85, 86, 87, 91, 94, 95, 96, 97, 98, 99, 100, 103, 106, 107, 117, 119, 124, 125, 126, 127, 128, 129, 133, 134, 135, 141, 143, 144, 145, 147, 150, 155, 156, 157, 158, 159, 160, 170, 171, 172, 181, 184, 188, 190, 194, 195

free movement 15, 21, 131, 134, 135, 139, 149, 190, 196

  people 15, 20, 23, 131, 134, 135, 136, 139, 148, 165, 167, 169

  people and services 131, 148, 170

  services 20, 21, 131, 139, 142, 148, 167, 168

## G

general good 6, 15, 20, 21, 23, 131, 133, 134, 135, 136, 137, 139, 141, 142, 148, 149, 165, 167, 168, 169, 170

genetic testing 6, 15, 20, 21, 23, 131, 133, 134, 135, 136, 137, 139, 141, 142, 148, 149, 165, 167, 168, 169, 170

Germany 6, 15, 20, 21, 23, 131, 133, 134, 135, 136, 137, 139, 141, 142, 148, 149, 165, 167, 168, 169, 170

GKV 6, 15, 20, 21, 23, 131, 133, 134, 135, 136, 137, 139, 141, 142, 148, 149, 165, 167, 168, 169, 170

Greece 6, 15, 20, 21, 23, 131, 133, 134, 135, 136, 137, 139, 141, 142, 148, 149, 165, 167, 168, 169, 170

group rating 6, 15, 20, 21, 23, 131, 133, 134, 135, 136, 137, 139, 141, 142, 148, 149, 165, 167, 168, 169, 170

**H**

harmonization 6, 15, 20, 21, 23, 131, 133, 134, 135, 136, 137, 139, 141, 142, 148, 149, 165, 167, 168, 169, 170  
health cash plans (United Kingdom) 45  
health maintenance organizations 147  
hospital care 43. *See also* inpatient care

**I**

informal payments 35  
information asymmetry 18, 104, 121, 124, 125, 147, 156  
inpatient care 14, 42, 52, 66, 102, 105, 115, 122, 151. *See also* hospital care  
insurance directives 45, 46, 193. *See also* third non-life insurance directive  
insurance premium tax 70, 90, 94, 96, 142. *See also* tax incentives  
Ireland 7, 8, 17, 19, 21, 25, 26, 28, 30, 31, 32, 33, 34, 40, 66, 68, 69, 71, 72, 73, 74, 76, 77, 78, 79, 80, 81, 85, 86, 87, 88, 89, 91, 92, 93, 94, 95, 96, 98, 99, 100, 106, 107, 110, 112, 113, 114, 119, 125, 126, 128, 129, 130, 133, 135, 138, 140, 141, 143, 144, 154, 155, 157, 160, 170, 171, 172, 173, 185, 186, 190, 191, 192, 195, 196  
Italy 16, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 41, 66, 67, 68, 70, 71, 73, 76, 77, 79, 80, 81, 84, 86, 87, 88, 89, 91, 92, 95, 96, 98, 99, 100, 126, 128, 143, 145, 147, 154, 156, 170, 171, 180, 189, 195

**L**

lifetime cover 19, 48, 76, 79, 109, 112, 139, 155, 162  
loss ratios 15, 97, 145  
Luxembourg 7, 8, 16, 25, 26, 27, 28, 30, 31, 32, 33, 34, 41, 42, 66, 67, 68, 69, 70, 71, 72, 73, 76, 77, 78, 79, 80, 81, 85, 86, 87, 91, 94, 95, 96, 98, 99, 100, 119, 124, 128, 133, 134, 141, 143, 145, 147, 156, 160, 170, 171, 172, 173, 188, 190

**M**

market segmentation 109  
market structure 5, 6, 67, 147  
medical questionnaires 76  
MOOZ 9, 62, 63, 64, 111, 115, 158  
moratorium underwriting 76, 81, 82, 83, 107, 124  
mutualités 173, 180, 188  
mutual associations 19, 36, 39, 41, 53, 54, 66, 69, 70, 75, 76, 78, 85, 96, 99, 100, 111, 112, 136, 141, 145, 152, 155, 157, 159, 160, 161, 177, 178  
mutuelles 69

## N

- National Health Service (Portugal) 9, 67, 176, 177  
 National Health Service (United Kingdom) 9, 27, 67, 189  
 National Health System (Spain) 9, 67, 128, 176, 177  
 Netherlands 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 42, 51, 52, 53, 60, 61, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 79, 80, 81, 83, 84, 85, 86, 87, 88, 91, 95, 97, 98, 99, 100, 101, 102, 105, 107, 110, 111, 115, 117, 119, 122, 126, 128, 143, 144, 145, 151, 152, 153, 157, 158, 170, 171, 172, 180, 191, 192, 197  
 non-life insurance 6, 17, 20, 21, 30, 45, 46, 47, 48, 49, 50, 69, 70, 71, 75, 103, 104, 112, 115, 121, 122, 139, 140, 141, 152, 156, 157, 158, 160, 162, 165, 184, 187  
 Norway 117, 120

## O

- OECD 9, 26, 27, 28, 31, 32, 33, 57, 71, 89, 100, 121, 126, 127, 146, 151, 166, 176, 190, 193, 196  
 Office of Fair Trading 9, 82, 121, 123, 146, 166, 173, 185, 193  
 open enrolment 18, 19, 21, 48, 76, 78, 80, 104, 109, 112, 113, 139, 154, 155, 161, 162  
 opting out 151, 153, 176  
 outpatient care 42, 52, 53, 66, 68, 102, 105, 115, 135, 151. *See also* ambulatory care

## P

- pharmaceuticals 26, 27, 58, 66, 86, 153, 176  
 PKV 9, 40, 55, 56, 59, 61, 136, 137, 140, 149, 173, 194, 196  
 policies  
   group 17, 44, 61, 72, 73, 74, 75, 76, 80, 81, 88, 89, 95, 97, 104, 109, 124, 125, 144  
   individual 19, 41, 72, 73, 75, 76, 80, 88, 89, 96, 97, 98, 124, 144  
 policy conditions 5, 15, 17, 19, 47, 51, 59, 60, 64, 75, 103, 104, 122, 144, 157, 159  
 Portugal 6, 9, 17, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 42, 66, 67, 68, 70, 71, 72, 73, 76, 77, 78, 79, 80, 81, 82, 84, 85, 86, 87, 88, 89, 91, 93, 94, 95, 97, 98, 99, 100, 106, 119, 125, 126, 128, 143, 144, 145, 147, 151, 152, 153, 154, 156, 170, 171, 176, 177, 181, 193, 194  
 pre-existing conditions 18, 19, 20, 38, 56, 62, 76, 78, 80, 81, 82, 109, 137, 138, 141, 148, 154, 155, 162, 166  
 preferred provider networks 83, 84, 147

premiums  
   price 104, 108, 109  
   rating 104, 108. *See also* community/group/risk rating  
 premium income 5, 12, 25, 29, 30, 32, 73, 97, 98, 99, 100, 112, 145  
 private beds 45, 67, 68, 86, 87, 129, 130  
 private sector 20, 23, 86, 93, 104, 127, 128, 153, 167, 176  
 product controls 17, 18, 75, 104, 121, 125, 145, 156  
 product differentiation 17, 103, 104, 119, 121, 122, 125, 145, 156  
 provident associations 19, 39, 67, 69, 75, 94, 96, 141, 142, 147, 148, 159,  
   160, 161, 162, 167  
 providers 5, 20, 26, 35, 56, 58, 65, 68, 83, 84, 85, 86, 87, 88, 99, 104, 127,  
   130, 131, 136, 147, 167, 176  
 public sector 56, 68, 83, 86, 87, 127, 128, 176, 178

## R

regulation 6, 18, 46, 47, 49, 50, 58, 65, 75, 82, 104, 117, 124, 132, 139,  
   143, 146, 156, 178, 190, 193  
 regulatory framework 5, 21, 45, 119, 146, 147, 149, 160, 165, 166  
 reimbursement 22, 34, 54, 58, 65, 66, 68, 81, 82, 83, 85, 99, 125, 134, 136  
 risk adjustment 6, 20, 107, 110, 111, 112, 114, 152, 155  
 Risk Equalisation Scheme 112, 113, 114, 183  
 risk rating 63, 76  
 risk selection 5, 6, 18, 19, 64, 99, 104, 107, 108, 109, 110, 112, 113, 114,  
   166, 194

## S

selective contracting 86, 99  
 sickness funds 60, 71, 111, 128  
 social health insurance 58, 59, 105, 123  
 solidarity 19, 62, 63, 64, 67, 69, 111, 113, 115, 141, 148, 152, 158, 161,  
   162, 167, 193  
 solvency 47, 50, 65, 104, 149, 156, 159, 175  
 Spain 6, 9, 17, 21, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 42, 43, 53,  
   66, 67, 68, 71, 72, 73, 76, 77, 79, 80, 81, 83, 84, 85, 86, 87, 89, 91,  
   92, 94, 95, 97, 98, 100, 106, 122, 126, 128, 143, 147, 149, 154, 156,  
   157, 170, 171, 176, 177, 178, 181, 184, 187, 191, 194  
 statutory health care system 5, 6, 12, 15, 16, 19, 20, 21, 22, 25, 26, 29,  
   30, 32, 34, 35, 37, 38, 43, 44, 52, 53, 63, 66, 75, 83, 86, 87, 99, 100,  
   102, 103, 106, 107, 111, 126, 127, 128, 131, 135, 139, 145, 150, 151,  
   153, 154, 167, 170, 174, 176, 177  
 subscriber characteristics 5, 38, 39  
 substitutive VHI 5, 40, 52, 53, 55, 56, 58, 60, 61, 65, 78, 82, 102, 105, 152  
 subsystems (Portugal) 94, 176

supplementary VHI 5, 11, 16, 17, 19, 22, 23, 26, 33, 37, 38, 39, 40, 41, 42, 43, 51, 52, 56, 58, 61, 66, 67, 68, 71, 76, 78, 83, 86, 88, 95, 103, 105, 106, 111, 121, 122, 123, 124, 126, 127, 128, 135, 136, 140, 144, 145, 146, 147, 153, 155, 158, 162

Sweden 2, 17, 20, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 43, 66, 67, 68, 71, 72, 73, 76, 77, 78, 79, 80, 81, 85, 86, 87, 91, 95, 98, 100, 117, 120, 124, 127, 133, 144, 155, 156, 170, 181, 183, 195, 197

Switzerland 25, 184

## T

taxation 22, 26, 105, 142, 150, 159, 176, 177, 189

tax expenditure. *See* tax incentives

tax incentives 15, 22, 23, 51, 90, 91, 93, 94, 95, 96, 97, 105, 127, 151, 153, 154, 167

tax relief. *See* tax incentives

types of insurer 15, 51, 67, 70, 96, 97, 107, 125, 141, 154, 160

types of VHI 15, 29, 33, 51, 57, 76, 92, 101, 103, 106, 122, 126, 165, 167

## U

United Kingdom 9, 17, 18, 25, 26, 27, 28, 30, 34, 36, 37, 38, 43, 44, 45, 46, 67, 68, 69, 70, 71, 72, 73, 74, 76, 78, 80, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 93, 94, 96, 97, 98, 106, 116, 119, 123, 124, 125, 126, 127, 128, 133, 143, 144, 145, 146, 147, 149, 150, 154, 155, 156, 166, 170, 171, 172, 173, 180, 190, 194

United States 22, 25, 37, 84, 99, 117, 120, 127, 128, 147, 151, 174, 197

universal coverage 15, 25, 149, 152, 176, 177

user charges 17, 23, 30, 102, 150, 168. *See also* cost-sharing, co-payments

## V

vertical integration 84, 147

VHI coverage 11, 16, 17, 19, 20, 33, 34, 35, 36, 38, 40, 42, 43, 44, 45, 56, 66, 72, 103, 105, 106, 108, 122, 126, 127, 128, 129, 137, 138, 144, 148, 156, 165

## W

waiting lists 37, 43, 44, 45, 67, 127, 133, 184

waiting periods 20, 76, 81, 82, 107, 137, 138, 148, 155, 166

waiting times 38, 44, 67, 87, 129, 135, 140

WHO 37, 197

WTZ 9, 11, 34, 60, 61, 62, 63, 64, 65, 105, 111, 115, 152, 158

**Z**

ZFW 9, 11, 33, 42, 60, 61, 62, 63, 64, 65, 100, 105, 115, 152, 158

### **Voluntary health insurance in the European Union**

This study provides an overview of markets for private or voluntary health insurance in the European Union. It examines the role voluntary health insurance plays in different EU member states and covers issues such as the determinants of demand for voluntary health insurance; the structure, conduct and performance of national markets; access, equity and consumer protection in these markets; the impact of voluntary health insurance on the free movement of people and services across the European Union; and recent trends and challenges for voluntary health insurers and policy makers at national and EU levels.

#### **Authors**

*Elias Mossialos* is Brian Abel-Smith Professor of Health Policy, Department of Social Policy, London School of Economics and Political Science and a Research Director of the European Observatory on Health Systems and Policies.

*Sarah Thomson* is Research Officer in Health Policy at LSE Health and Social Care and a Research Associate of the European Observatory on Health Systems and Policies.

#### **Contributors**

Reinhard Busse, Charalambos Economou, Margherita Giannoni-Mazzi, Jean Hermesse, Tony Hockley, Maria M Hofmarcher, Hans Maarse, Hennamari Mikkola, Monica Oliveira, Marisol Rodríguez, Simone Sandier, Caj Skoglund, Philippe Ulmann, Karsten Vrangbæk

European  
**Observatory**

on Health Systems and Policies



ISBN 92 890 1065 7



9 789289 010658