Private Health Insurance in Social Health Insurance Countries – Market Outcomes and Policy Implications

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Diskussionspapier 01/2002

Februar 2002

Lehrstuhl
für
Allgemeine Betriebswirtschaftslehre und Gesundheitsmanagement
der
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[1] The authors would like to thank Francesca Colombo, Agnes Couffinhal, Revital Gross, Maria M. Hofmarcher, Ralf Kocher and Michel Yahiel for their valuable comments on earlier versions of this paper. This paper is part of a book project by the European Observatory of Health care on Social Health Insurance in Western Europe (Austria, Belgium, France, Germany, Netherlands, Switzerland) and Israel. Thus, we focus our analysis on these countries. We appreciate the opportunity to publish our complete research results in this paper, since the final version for the Observatory book will be much shorter. For more information on this and other Observatory books see http://www.euro.who.int/observatory/Studies/TopPage.

1 Introduction

Private health insurance serves several functions (Timmer 1990; Schneider 1995; Wasem/Greß 2002).[2] The first one is the *alternative* for mandatory social health insurance arrangements. In some countries, certain population groups that are not covered by the mandatory social insurance have to seek insurance in the private market. In other countries, insured have the choice between joining private health insurance and to remain in the social health insurance even when their incomes surpass the eligibility ceiling. Second, private health insurance offers coverage for those services that are not covered by the social insurance, for example dental care for adults, homeopathic drugs or cosmetic surgery. This form of *supplementary* private insurance exists in almost all OECD countries. Furthermore, insured can take out supplementary insurance to cover the financial risks of co-payments and coinsurance. This form of PHI is common in France and Belgium but prohibited in some other countries. In some countries people can take out private insurance even while they have to take part in existing social schemes. In this case, for example in the UK, they pay *double cover* via their general taxation and their private premiums. We also call this function of private health insurance *complementary* PHI. In this paper we do not investigate double cover PHI since it mostly is prevalent in tax financed countries with a separate, privately financed system parallel to the public sector.

The countries studied in this paper all have a mix of public and private funding of their health care systems with a dominant role of the social health insurance. There is alternative PHI only in Germany and the Netherlands.[3] Supplementary PHI for services not covered in the basic benefits package of SHI is prevalent in all countries.[4] Supplementary PHI to cover co-payment is common only in France and Belgium. Not only form and function but also extent of private health insurance differs quite significantly. Expenditures of private health insurance measured as share of total health care expenditures vary from less than five percent in Belgium to almost 18 percent in the Netherlands (OECD Health Data 2001; Comité European des Assurances 2000).[5]

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[2] It is important to note that historically, social and private health insurance have similar roots in the income protection schemes of the medieval guilds and the 18th and 19th friendly societies and mutual funds providing income protection to their members in case of sickness, disability, death and old age. The introduction of the first social protection law by the German Chancellor Bismarck in 1883 marked the shift from voluntary income solidarity with risk pooling between smaller defined population groups towards mandatory participation in state sponsored risk pooling arrangements for larger regional or vocational population groups.

[3] There is one exception: Self-employed in Belgium do not have access to SHI for non-catastrophic risks and may take out alternative PHI at sickness funds or for-profit insurers (Hermesse 2001). However, we do not feel that this minor exception warrants special consideration in this paper.

[4] Switzerland is a special case with regard to this distinction, because basic health insurance is obligatory for the whole population and every individual can choose between social and private health insurers. In fact, only a small minority of the insured takes that mandatory insurance with private health insurers – which is mostly due to the fact that only one private health insurer so far has chosen to offer basic insurance which not for profit by law. Thus, we do not deal with Switzerland as a case of alternative PHI in this paper.

[5] We are aware of the methodological problems of comparing parameters like that across countries. Thus, this parameter is supposed to be only a rough indicator of the importance of private health insurance in individual countries.

Health policy makers face several key challenges when regulating PHI markets depending very much on the function PHI fulfils. The necessity for regulation usually is much higher for alternative PHI than for supplementary PHI (Jost 2001). If PHI is to be compatible with prevalent value systems for solidarity in health care systems (see above), regulation has to ensure access to private insurance cover for bad risks such as the chronically ill.[6] At the same time, premiums have to be affordable especially for ageing policy holders. Furthermore, regulation has to make sure that PHI provides cost-effective health care for their insured (Wasem/Greß 2002). Therefore, in section 2 we analyse how regulation in the Netherlands and in Germany tries to solve these problems for alternative PHI.

The market for supplementary health insurance depends very much on the extent of the basic benefits package in social health insurance – both in terms of services and in terms of co-payments. If benefits of SHI are rather comprehensive and of good quality and co-payments are low, supplementary PHI basically covers luxury goods (e.g. more comfortable board and lodging in hospitals). As a consequence, a smaller degree of regulation for supplementary PHI than for alternative PHI is more justifiable in terms of social acceptability. In section 3 we analyze supplementary private health insurance in Austria, Belgium, Germany, Israel, the Netherlands and Switzerland. We structure this analysis by paying close attention to access problems resulting from supplementary PHI and possible recuperations between SHI and supplementary PHI.

[6] The term bad risk does not involve any value judgement but refers to a technical term in insurance.

2 Alternative Private Health Insurance

In this section alternative PHI in Germany and the Netherlands is the focus of our attention. In both countries governments quite extensively regulate alternative PHI in order to assure access and affordable premiums for bad risks. Both governments require private health insurers to offer standard contracts, both also regulate market activities in many other ways. Before we analyse the regulation and its effects in detail, we describe the manner of premium calculation in PHI as opposed to calculation of contributions in SHI.

2.1 Calculation of Premiums in PHI vs. Calculation of Contributions in SHI

One of the most important differences between social and private health insurance usually is the setting of premiums (private health insurers) and contributions (social health insurers). Exhibit 1 displays the basic methods of premium calculation. What is the meaning and what are the consequences of these methods?

Exhibit I: Calculation of premiums for alternative PHI and SHI-contributions

<table>
<tr><th></th><th>Income-related contributions</th><th>Community rating</th><th>Risk-related premiums</th></tr>
<tr><td rowspan="2">Pay-as-you go</td><td>SHI Germany</td><td>PHI Netherlands
(standard contracts)</td><td rowspan="2"></td></tr>
<tr><td colspan="2">SHI Netherlands
(income related contribution plus nominal payment)</td></tr>
<tr><td>Age-group-specific pay-as-you-go</td><td></td><td></td><td>PHI Netherlands</td></tr>
<tr><td rowspan="2">Capital funded</td><td rowspan="2"></td><td></td><td>PHI Germany</td></tr>
<tr><td colspan="2">Private mandatory long-term care insurance Germany
PHI Germany (standard contracts)</td></tr>
</table>

(Wasem 2000)

Pay-as-you-go means that premiums or contributions of all insured persons of this year finance the benefits of health insurance of this year. Because of the fact that on average health care costs rise with age, this model in most circumstances leads to a redistribution from the young to the elderly at each point in time. On average the elderly pay contributions which are lower than the value of services they receive, whereas the younger pay a contribution higher than the value of services they receive. Parts of the contributions of the young are used there-

fore to subsidise the elderly. This is a bit different in *age-group-specific pay-as-you-go* systems: the premiums of all insured within one age group of this year are used to finance the benefits of the private health insurer for this age group. Because of the fact that health care costs rise with age this approach leads to premiums which rise with age. The young age groups pay lower premiums than older age groups, each so that the benefits are covered by the premiums. In such an approach there is no redistribution from the young to the elderly. In *capital funded* systems, premiums paid by the young finance their health care benefits today, but also include a saving component in order to finance part of the higher health care costs for older age. This system is only used in some private health insurance systems, most predominantly in Germany. With this approach, premiums typically rise with the age in which the insured person enters the contract.

Income-related contributions are not related to individual health risks but to the income of the insured. A certain percentage of income is paid as contribution to the social health insurer. High income people therefore pay higher premiums than low income people. This method of premium calculation leads to a redistribution from high income people to low income people and therefore leads to income solidarity. There is also risk solidarity - because healthy people pay the same percentage of contributions as sick people - and solidarity between generations since social health insurers usually calculate on a pay-as-you-go basis. *Community-rated* premiums or contributions are the same for all insured of one health insurer. This method realises risk solidarity because it leads to redistribution between the healthy and the sick. However, it does not achieve income solidarity. *Risk-related* premium calculation typically is applied by private health insurers. Ideally, each individual pays a premium according to individual risk – people with high health risks (the sick and chronically ill) pay high premiums, people with low health risks (the healthy) pay low premiums.

Ideally private health insurers calculate risk related premiums either in a pay-as-you-go system, a capital funded system or something in between. Social health insurers ideally raise income-related contributions on a pay-as-you-go basis. This is only partly true for real world alternative PHI in Germany and the Netherlands. Social health insurers in Germany and in the Netherlands charge income related contributions on a pay as you go basis. However, a small part of contributions in the Netherlands are community-rated. Private health insurers charge risk-related premiums, either capital funded (Germany) or on a age group specific pay as you go basis Netherlands. However, in both countries private health insurers are influenced by society's and consequently government's view on solidarity and thus have to offer standard contracts with community rating (Netherlands) or limited risk rating (Germany).[7]

2.2 Markets for Alternative PHI

Although Germany and the Netherlands share some common characteristics of alternative PHI there are also some important differences. We analyse common characteristics as well as differences with regard to the extent of the market for alternative PHI, the determination of premiums and benefits in non-standard as well as in standard contracts and with regard to the relationship of alternative PHI to providers.

[7] Another special case is the obligatory private long-term-care insurance in Germany. People with private (alternative) insurance have to take out long-term-care insurance with a fixed benefits package and fixed maximum premiums. This is another illustration that private insurance can be heavily regulated and thus it will be analysed in this paper.

2.2.1 Market Structure

In the *Netherlands* residents who are not eligible for sickness fund insurance (because their income has passed a threshold) may opt to take out private health insurance with one of the 40 or so private health insurance companies. Although this is not mandatory, it is remarkable that the vast majority of the population has actually done so.[8] Less than one percent of the Dutch population does not have any health insurance at all. This group consists mostly of illegal residents and groups refusing insurance because of religious reasons. Like sickness funds, private health insurers are legally independent enterprises. By law, they cannot produce or sell other services outside insurance (even including the management of social health insurance). Mid-2001, there were 24 for-profit and 17 not-for-profit private health insurers offering alternative PHI. There are no significant differences of actual market behaviour between both groups.

In the last decade private health insurers have strengthened their collaboration with the sickness funds for several reasons. Even while they are obliged to keep separate legal entities because of different supervisory rules, they have joined forces under the umbrella of larger financial banking and insurance conglomerates. In doing so, they have gained access to the addresses of the sickness fund insured to whom they can offer other insurance. They also benefit from very long experience of sickness funds in local and regional contracting with providers of the funds. Similarly, sickness funds benefit from the administrative experience of the private health insurance business. Next, they started expanding traditional health insurance to a wider range of collective insurance and employee benefits packages, both for the sickness fund insured and privately insured, under the umbrella of larger conglomerates. Such packages have gained importance in the Dutch market, in particular after recent changes in other social insurance legislation shifted some of the financial risks for sickness and disability from social insurance to the employers, who in turn started seeking insurance coverage for their risks (Greß 2000).[9]

Although private health insurers and sickness funds collaborate extensively and are even represented by the same peak organization of health insurers, formally private health insurance continues to exist separately from social health insurance. Government plans in the late 1980s and early 1990s to formally abolish the distinction of private and social health insurers within a framework of managed competition have been thwarted by employers and private insurers themselves (Okma 1997). However, a recent white paper by the Dutch Ministry of Health announced renewed efforts to integrate the fragmented insurance system (Ministerie van Volksgezondheid Welzijn en Sport 2001).

One of the founding principle of SHI in *Germany* was to cover only those persons who require protection – originally blue-collar manual workers. The rest of the population was covered by self-governed non-profit co-operative insurance, private insurance or had to rely on individual savings. Over time the share of the population covered by social health insurance increased dramatically as more and more occupational and demographic groups were madatorily included into the scheme through several pieces of legislation (Klingenberger 2001). However, the significant share of alternative PHI in Germany still reflects the principle that not all individuals require protection with regard to health insurance.

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[8] This is not only due to the fact that the Dutch population is highly risk averse which is also reflected in high coverage in other insurance markets. Alternative PHI is not very expensive (at least compared to alternative PHI in Germany) and the legal provision for standard contracts provides affordable access even for bad risks.

[9] For example, the employer on the one hand are responsible for paying cash benefits for sick days and on the other hand for prevention at the workplace.

The borderline between private and social health insurance in Germany has been stable since the 1970s when the last major occupational group (agricultural workers) was brought into the system of social health insurance. While about 90 percent of the population is socially insured, around eight percent (or 7.5 million persons in 2000) are covered by alternative PHI. They consist of three major groups: the self-employed, civil servants and employees above the income threshold. There is a significant difference to the situation in the Netherlands – all three groups can choose to stay as voluntary members in social health insurance when their income surpasses the income ceiling. If they opt for private insurance when becoming self-employed, civil servants or when surpassing the income threshold (or later on), they are more or less prohibited from returning to a social insurer in the future.

In 1999 there were 30 for-profit and 22 not-for-profit private insurers. However, there are no significant differences in market strategies of both groups. Both groups have about the same market share. Due to the manner of premium calculation private health insurers (for profit as well not-for-profit) compete extensively for new contracts but it is not profitable for insured persons to switch to another private health insurer after having been insured privately for some time, because they lose the capital which has been built up in the capital-funded scheme. Private and social insurers compete for high-earning employees with income above the income threshold.

2.2.2 Premiums and Coverage

In the *Netherlands* private insurers are free to accept or decline applicants, set financial conditions, determine their range of benefits and to adjust their premiums according to the risk structure of their insured. In fact, they offer a wide range of insurance policies, with varying coverage, deductibles and eligibility criteria. In general, the coverage is at least as wide as that of the social health insurance ZFW and includes medical care, hospital stay, drugs and medical aids and some other services. As there is no standardised package of entitlements, the coverage varies. Furthermore, private health insurers can exclude pre-existing conditions from coverage. There is no government regulation of premiums or coverage, but the peak association of the health insurers, *Zorgverzekeraars Nederland* consults each year with its members in an effort to avoid excessive cost increases.

It is remarkable that the Dutch private insurers have never charged fully risk-related premiums.[10] Until the 1970s, most if not all charged community based premiums for all of their insured. In the early 1970s, one of the private companies started to offer cheap policies to students. Other companies followed, and then charged higher rates to elderly insured. They also started to refuse acceptance to high risk groups, or to exclude pre-existing conditions from coverage. This triggered a spiral of premium differentiation and risk selection. After the private insurers failed to implement an informal agreement to solve these problems, the Dutch government felt obliged to step in and to take measures to counteract the newly created access barriers to private health insurance (Okma 1997).

[10] This is due to due three main factors. First, private health insurer were always keen to deprive the government to arguments to expand the scope of social health insurance. Second, for-profit non-specialist health insurers preferred a quiet market in order to focus on more profitable lines of business – private health insurance for them mainly is a means to sell other products. Finally and maybe most importantly health insurers founded by sickness funds have a significant market share in alternative PHI and refrain from applying strict risk rating and underwriting. For an in-depth analysis of the PHI market in The Netherlands in terms of structure, behaviour and conduct see chapter 4 of (Schut 1995).

It is important to note that the incentives for cream skimming are further reduced by the fact that so-called catastrophic risks and long-term care are not covered by the insurance policies offered by private health insurers or by sickness funds. These risks are covered by the separate insurance scheme AWBZ which is obligatory for the whole population. Social as well as private health insurers simply administer this scheme on behalf of their insured but face no financial risk in doing so. Premiums are income-dependent and uniform across the country. The insurance agencies receive full compensation for their costs so they have no incentive for risk selection.

Premium calculation of alternative PHI in *Germany* is capital funded and risk related. Although in theory premiums are not supposed to be increased in later life, in fact they are adjusted from time to time to account for increasing health care expenditures as the first premium calculation when joining the insurance is done on the then existing level of health care costs. In order to avoid an excessive increase of premiums especially for the elderly, since 2000 private health insurers have to add a flat 10 percent on individual premiums for new contracts to compensate for increasing health care expenditures; this additional premiums has to be saved by the insurer and shall be used to finance rising health care costs when the insured have passed the age of 65. Government regulation restricts the degree of risk rating. The insurer assesses the risk of the insured once, at the beginning of the insurance contract in an process called *underwriting*. However, insurers are not allowed to re-assess the health risk during the insurance contract or to cancel the contract. Consequently, changes of health risk after concluding the contract can not lead to changes of the premiums to be paid by the insured.[11]

In Germany high income employees and (under certain conditions) self-employed can leave social health insurance and opt for alternative PHI (whereas average and low income employees can not switch). Consequently, high income employees and self-employed normally do not leave SHI if they have a bad health status, because they would have to pay higher premiums in alternative PHI. From the self-employed with good health status only the high income people leave SHI, because for low income people social health insurance provides the cheaper benefit package. It is also unattractive to switch to alternative PHI if there are several children and a non-working spouse in the family. In social health insurance these dependants are covered by the contributions of the employee or self-employed while in private health insurance they are covered individually and according to risk. Thus, private health insurance is more attractive to single people and double income couples. While it is quite easy to switch to private health insurance for those who are no longer mandatorily insured with SHI, since the 2000 Health Reform Act it has become extremely difficult to switch back to social health insurance, especially for persons who are over fifty-five with a dropping income. However, in the same Health Reform Act, coverage for the standard policy has been expanded (see below). Less than a quarter of persons with earnings above the income ceiling actually switch to private insurance (Thomson/Mossialos 2001). According to a recent study, half of the individuals who opt for alternative private health insurance are young, single, high earners or married couples with double incomes, and half are civil servants (Mossialos/Thomson 2001).[12]

While private insurers are free to offer a large variety of tariffs with different benefit packages, cost-sharing arrangements and premiums, the policy conditions of health insurance policies must be approved by an independent trustee. An independent trustee also checks if the

[11] A “maximum” version of risk rating would imply that the insurer may re-assess the health risk at any time, at least at regular intervals (for instance once a year). The more completely the model is applied, the less *risk solidarity* is in the system; *income solidarity* is by no means achieved (and it is not intended).

[12] There is no separate insurance scheme for civil servants. All of them are accepted by private insurers regardless of risk. However, surcharges of up to 100 percent are charged to high-risk applicants.

premium calculation complies with the legal provisions on calculations designed to ensure that the interests of the insured are protected. Waiting periods may last only three months before coverage begins.[13] Newborns of insured must be covered immediately, regardless of their health status. No waiting periods are allowed with regard to persons switching from social health insurance funds. In general, children are charged a fixed premium.
Since 1995 all privately insured are required to take out a compulsory long-term care insurance with their insurer. The benefits package of this compulsory long-term care insurance is highly regulated and equal to that offered under social long-term care insurance in terms of type and scope. The premium is calculated on a capital-funded basis and depends on the age of the insured at the time of entry. It is the same for men and women. Private insurers have to accept all applicants but are allowed to calculate risk related premiums. After five years of pre-insurance the maximum premium for insured may not surpass the maximum contribution for social long-term care insurance. All private insurers underwriting private long-term care insurance do so using a joint calculation basis. All those people with private health insurance, who already needed long-term care when the insurance was introduced in 1995 got access to the insurance benefits; also all elderly, who could not build up capital reserves were included. As a result, private long-term care insurance for the elderly and those already in need of services when introducing the insurance is financed through subsidies from the young privately insured. A financial pool is established between the insurers to distribute the burden of these subsidies between the insured of the different companies, because otherwise young insured in companies with many elderly would have to carry a larger burden than those young insured who belong to companies without any elderly.

2.2.3 Standard Contracts

In principle, all applicants have a free choice of insurers of alternative PHI. However, in practice this freedom is curtailed by risk selection practices of the insurers. As there is in both countries no legal obligation to accept anyone seeking insurance, private insurers may refuse individuals trying to get cover, charge higher premiums to high risk groups or exclude preexisting conditions altogether. Insurers also offer collective contracts to certain groups they see as attractive, e.g. white collar office workers. This means that in practice, the freedom of choice is limited to young and healthy persons. Thus, the elderly or people perceived as high risk because of genetic disposition, family history of chronic illness or past experience, face access barriers in seeking health insurance.
In the *Netherlands* private insurers have engaged in selective activities, but they also have shown constraint in this regard, realising that such practice is strongly criticised in the egalitarian Dutch society that sees access to health insurance and health care as a fundamental and universal right. As a consequence of this public perspective, the Dutch government passed regulation concerning standard contracts with private insurers.[14] The government determines coverage and cost-sharing arrangements of the WTZ (*Wet op de Toegang tot Ziektekostenverzekering,*Health Insurance Access Act) standard contract scheme. Benefits are (almost) identical to the sickness fund insurance coverage. In 1998 some 600.000 persons or 14 percent of all privately insured were covered by the WTZ-policy. Illustrating the importance of the WTZ as a risk pooling mechanism for high risk groups in the private market, the share of PHI ex-

[13] There are some exceptions for certain kinds of care such as maternity care or psychotherapy where waiting times may last up to eight months.

[14] For an in-depth analysis for the process leading to the implementation of this regulation see chapter 5 of (Okma 1997).

penditure financed by PHI under the standard contract is much higher - around 30 percent in 1998 (Vektis 2000).
Eligible for the standard contract are:

1. Persons who are required to leave the social health insurance program when their incomes surpass the eligibility ceiling; they have to register within one year;
2. Persons who are uninsured and did not know or reasonably could not be expected to know that they presented above-average risks;
3. Persons moving to the Netherlands previously insured elsewhere;
4. Persons over the age of 65 who previously had some other kind of private insurance;
5. Privately insured persons who pay more than the maximum standard policy premium for their age group;
6. Privately insured students.

The insured with standard contracts pay government-controlled premiums. As this premium does not fully cover the average cost of the WTZ-insured, all other privately insured participate in a mandatory cost-sharing system by paying an additional premium each year. The government adjusts the premium each year by looking at the average costs over a moving three year average, but may deviate from this adjustment because of other financial considerations. In 2001 government-controlled premiums are at a maximum of Dfl. 250 or Euro 115 per person per month. As a consequence of mandatory cost-sharing, private health insurers do not have any incentives to improve cost-effectiveness of health care provision for standard contracts. For a substantial part of their customers they have become purely administrative bodies – even more so than sickness funds.

Private health insurers in *Germany* are not obliged to offer standard contracts by law. However, they only are eligible to receive half of the premium for employees by their respective employers if they do so. Eligible for the standard contract are (Verband der privaten Krankenversicherung e. V. 2000b):

1. Persons 65 years of age and older. They have to have pre-insurance in any alternative private health insurance of at least ten years (supplementary insurance does not count);
2. Persons 55 years of age and older if they have pre-insurance (same as 1.) or have an income below the income ceiling (ca. 40000 Euro);
3. Civil servants under the same conditions as 1. and 2;
4. Persons under the age of 55 if they receive disability pension have an income below the income ceiling as in 2. and have pre-insurance as in 1;
5. High-risk civil servants who would have to pay risk premiums for alternative private health insurance.

Deficits incurred by standard policies are compensated across all private health insurers; the pooling mechanisms leaves some incentives for efficiency for the insurers. According to the law, benefits of the standard policy have to be comparable to the standard package of social health insurance.[15] In fact they are not exactly the same but quite similar and uniform across

[15] SGB V, § 257.2b

all private health insurers; the Federal Insurance Supervisory Office controls the comparability of the benefits package as well as the pooling mechanism.

While at the end of the year 1999 only 1400 persons were covered by the standard policy, this number has increased to 3000 (or 0.04 percent of all persons with alternative PHI) at the end of the year 2000 (Verband der privaten Krankenversicherung e. V. 2001) – which still is very modest compared to the number of holders of the standard policy in the Netherlands. The small number of insured covered by the standard policy is probably due to the fact that the maximum premium for the standard policy is pegged to social health insurance levels and is based on the average contribution rate of social health insurers of the year before. The maximum premium of the standard contract is calculated by applying that average contribution rate to the income ceiling of social health insurance. Spouses pay 50 percent of the maximum premium if household income is below the income ceiling. Furthermore, there is no obligatory pre-insurance in the Netherlands which is a major obstacle to switch to standard contracts in Germany.

2.2.4 Relationship with Providers

Unlike sickness funds, private insurers in the *Netherlands* are not obliged to contract providers. However, they increasingly do so. If they do contract providers they face the same kind of price regulation as sickness funds. Within legal limits (maximum prices) private insurers and sickness funds negotiate with health care providers about prices and tariffs. In practice they normally agree on the maximum price. Usually private insurers determine in their policy conditions that a referral by a general practitioner for medical treatment by specialists or in a hospital is required but because of competitive pressure, they have been reluctant to enforce that rule. Referrals are quite difficult to control (Okma 1997). Traditionally, privately insured pay their general practitioner, medical specialists and other health care services by fee for service, handing in their bills to their insurer for reimbursement. In recent years PHI companies increasingly have arranged to pay the providers directly. The fees for the medical specialists used to be more than twice as high as for social health insurance but in 1997 government passed a law eliminating this difference.

Private health insurers do not have contractual relationships with health care providers in *Germany*. Thus, insurers do not negotiate with providers about tariffs and prices. However, the Ministry of Health regulates the maximum tariff physicians or dentists may charge for the treatment of privately insured persons. This maximum amount is much higher than the payments health care professionals receive from social health insurers.[16] In hospital, charges are the same for standard treatment, but extra charges have to be paid for private room and for seeing the chief medical officer privately. With regard to drugs, prices for those privately insured are 5 percent higher than for SHI-patients, because pharmacies have to give a rebate of 5 per cent to SHI. With regard to long-term care insurance, prices for standard treatment are the same for insured of SHI and PHI. Payment modalities of health care providers are the same for all private insurers. The insurer reimburses the expenses of the patient. Thus, direct contractual relations are established between the patient and the provider, allowing the patient to make a free choice of provider without the need for approval of the health insurer.

[16] Prices in ambulatory care can be up to three times as high for privately insured as for socially insured (by law this not possible for insured with a standard policy).

2.3 Market Outcome of Alternative PHI

This section analyses the market outcomes of alternative PHI. It focuses on equity in finance as well as in delivery of health care services. We also consider effects on cost containment.

2.3.1 Effects on Equity in Health Care Finance

The last decades have seen extensive discussion of the equity effects of funding schemes for health care (Janssen/van Doorslaer/Wagstaff 1994; van Doorslaer/Wagstaff 1999; Wagstaff/van Doorslaer 2000). Much of that debate focuses on the concept of equity measured as the progressive, proportional or regressive nature of the distribution of health care costs. Most of these studies imply that only progressive or proportional payments can be seen as equitable, e.g. payments out of general taxation or income-related social health insurance contributions. In that perception, community-rated-rated or risk-related premiums as well as direct patient payments are inequitable. In practice, all OECD countries have developed elaborated and complex payment schemes consisting of a mix of progressive (out of general taxation), proportional (out of income-related contributions) and regressive payments (out of flat rate or risk premiums, co-payment and coinsurance). Such schemes have developed out of a variety of policy concerns including solidarity and fairness in payment, universal access, control of public expenditure and others.

Like other OECD countries, health care in the Netherlands and in Germany is funded out of a complex mix of sources. Privately insured pay risk-related premiums that in general have a regressive effect. In this case there is no income solidarity and no risk solidarity. There is risk solidarity but still no income solidarity if premiums are community-rated or pooled mandatorily to pay for the deficit of standard contracts. However, risk solidarity does not mitigate the regressive effect of nominal premiums in comparison to income related contributions which shows the limits of this concept of equity.

In Germany, self-employed and high-income insured in Germany who have chosen to stay in social health insurance may be subsidised by those average and low income employees who are mandatorily insured in social insurance and cannot switch to private insurance.[17] It is not unlikely that those groups who profit individually from leaving social health insurance do so (healthy people with high income) while for example high income people with bad health status remain in social health insurance. In terms of fairness and social justice the consequences of this situation are rather undesirable.

In the Netherlands it is also clear that forcing all high income employees to leave social health insurance has negative consequences with regard to equity. Private health insurers have to pay a solidarity contribution into the sickness fund system, which is primarily meant to adjust for the better age structure of the insured in the private system (see below).

2.3.2 Effects on Equity in Health Care Delivery

Access to health services is almost identical for sickness fund members and private insured in the *Netherlands*. The Dutch society values equality in access very highly.[18] However, in the

[17] Due to a lack of data, this can not be proven clearly.

[18] From an economic point of view, there are some incentives for preferential treatment of patients with private PHI by general practitioners due to differences in remuneration (fee-for-service for alternative PHI, capitation for SHI). However, there are no incentives for preferential treatment by specialists, since the same fee-for-service tariffs apply for both groups.

second half of the 1990s, there has been a quite heated discussion about preferred access to health care facilities for employees. Employers facing increased financial risks of absenteeism of disabled and sick workers were seeking ways to circumvent waiting lists for specialist and for some elective procedures in hospitals in order to get them back to work (Brouwer/Hermans 1999; Brouwer/Schut 1999). In some cases the costs of such priority access was covered by the wider employee benefit schemes offered by the health insurance conglomerates.
Although there is no clear evidence available, there is a much clearer tendency for privately insured in *Germany* to receive more comprehensible and faster treatment than persons with social insurance than in the Netherlands. This is due to the fact that there are tight budgets for ambulatory and hospital care financed by sickness funds. Providers have substantial incentives to treat privately insured patients preferentially since first they can charge higher prices and second this income does not decrease their budget. Of course, the behaviour of health care professionals is not determined by economic incentives only, but several surveys point out that privately insured persons feel that their relationship with providers is to a much lesser extent determined by the economic setting than socially insured persons do (Braun 2000).

2.3.3 Effects on Cost Containment

Expenses of private health insurers in the *Netherlands* are measured as part of the public health expenditure; in fact that reflects the way employers and government perceive (private and social) health insurance as part of the wage costs. Furthermore private health insurers are required to contribute to a solidarity pool (MOOZ) to subsidize social health insurers due to the overrepresentation of elderly insured in social health insurance. Apart from the direct subsidies there are no indirect subsidies via health care providers. It is not uncommon in countries with a large private health care sector that providers charge higher prices for privately insured in order to compensate for lower prices for socially insured (Germany, USA). This is not common practice in the Netherlands, since reimbursement of private insurers to providers is regulated by government and private insurers are not allowed to pay higher fees for their insured – which also reduces the incentives for preferential treatment of privately insured compared to socially insured.
Cost containment of social health insurers in *Germany* is affected by the existence of alternative private health insurance in several ways (Greß/Wasem 2001; Klingenberger 2001). However, the net effect is unclear. From the perspective of social health insurers, private health insurers are quite successful in picking good risks while at the same time bad risks remain in social health insurance. This is due to differences in premium calculation described above. Since social health insurers calculate income-related contribution rates and it is only possible to switch if income is above the income ceiling, loss of income for social health insurers is quite substantial. At the same time on average people who switch incur less expenses than persons who do not and social health insurers have to cover the bad risks remaining. Consequently, the financial situation of social health insurers would improve substantially if ceteris paribus all people above the income ceiling had to remain in social health insurance.
However, there are several factors counteracting this tendency. First of all, providers are reimbursed by private health insurance on a much higher level than by social health insurers. This in fact leads to cross-subsidies back to social health insurance. Many providers probably were on the brink of bankruptcy if they had only patients covered by social health insurers. Second, all civil servants including high-risk civil servants are privately insured. Since civil servants have a lower than average income this leads to relief for social health insurance. Third, the standard policy especially for older persons and severe restrictions to return to so-

cial health insurance when reaching the age of 55 increases the share of older persons in private health insurance. Finally it is argued that people leaving SHI now will decrease the financial burden of social health insurance in 2030/2040, when contribution rates will grow due to the demographic developments in the SHI system (Hof 2001). Unfortunately, there are no reliable calculations whether alternative private health insurance in Germany leads to higher or to lower contribution rates for social health insurers.
It is quite clear though that alternative PHI is less effective with regard to cost containment than social health insurance, especially in ambulatory care. Between 1991 and 1999 per capita expenditure for ambulatory care rose by 62 per cent in the private sector compared to 25 per cent in the public sector, the one of pharmaceuticals by 56 per cent and 13 per cent respectively. Hospital expenditures increased more or less at the same degree (Verband der privaten Krankenversicherung e. V. 2000c). The reasons for this disparate development seem to be quite clear – higher prices for services and less budgetary restraints in alternative private health insurance. In contrast to SHI administrative and marketing costs range between 11 and 13 percent of premium income (Verband der privaten Krankenversicherung e. V. 2000a). Administrative costs for sickness funds are about five percent.

3 Supplementary Private Health Insurance

Whereas the analysis of the alternative PHI is restricted to the Netherlands and Germany, supplementary PHI is available in the other SHI countries covered by this paper as well. This section consists of two parts. First, we summarise the way supplementary PHI is organised in Austria, Belgium, France, Germany, Israel, the Netherlands and Switzerland following common criteria. Second, we analyse the effects of supplementary PHI, especially with regard to access and to recuperations with the SHI system.

3.1 Markets for Supplementary PHI

The size of the market for supplementary PHI differs significantly in the seven countries. The share of supplementary PHI of total health care expenditures in 1998 was less than five percent in Belgium, Germany ,Israel and the Netherlands (Comité European des Assurances 2000; Vektis 2000; Verband der privaten Krankenversicherung e. V. 2000c; Gross 2001). The respective shares of expenditures are much higher in France and in Switzerland: between 12 and 13 percent of total health care expenditures (OECD Health Data 2001; (Colombo 2001)). Austria is in between those two groups of countries – the share for supplementary PHI in this country is around seven percent (OECD Health Data 2001).[19] Data for annual growth rates of supplementary PHI are incomplete. However, there is definitely no uniform development in the seven countries. Annual premium income is increasing steadily in France, in Germany and to a lesser extent in the Netherlands. There is an exorbitant increase of premium income of supplementary PHI in Belgium. Annual growth rates from 1995 to 1998 ranged around 15 percent. Premium income is decreasing slowly in Austria although coverage for SHI has been reduced – which may be due to a high propensity of Austrians to accept out-of-pocket pay-

[19] Another possibility to determine the size of the market for supplementary PHI is to measure the share of the population with SHI and some kind of supplementary PHI. However, the extent of cover differs widely so a comparison over time or between countries does not make much sense.

ments (Hofmarcher/Riedel 2001).[20] The introduction of a new Health Insurance Law in Switzerland has led to an increased basic benefits package in SHI and to a subsequent decrease of premium income of supplementary PHI of 15 percent (Colombo 2001).[21]

The market structure of supplementary PHI also differs in the seven countries. Both for-profit and not-for-profit insurers offer supplementary PHI in Belgium, France, Germany, Israel and the Netherlands. In Austria for-profit insurers dominate the market completely.[22] In other countries the market shares of for-profit insurers range from around 25 percent (Belgium, France, Israel) to 50 percent (Germany, Netherlands).[23] There is no general tendency as to market behaviour of for-profit-insurers and not-for-profit insurers. In France non-profit mutual insurance companies (*mutuelles*) existed long before the social security scheme was created in 1945 and their traditional market was partially taken away from them at that time. They claim to be less inclined toward risk selection. For-profit insurers came into the market only in the 1980s. They position themselves as risk managers, their premiums seem to vary more with risk than those of the *mutuelles* (Couffinhal 2001). The situation is very similar in Belgium. *Mutuelles* (sickness funds) in Belgium usually apply the same principles in supplementary PHI as in SHI (community-rated premiums, acceptance of all applicants) whereas for-profit insurers calculate risk-related premiums and offer individual or collective contracts (Hermesse 2001). In Germany and the Netherlands there are no significant differences in market behaviour of for-profit and not-for-profit insurers.

In most countries both specialist health insurers and non-specialist insurers offer supplementary PHI. In Austria and Germany by law only specialist health insurers may offer supplementary PHI. Regulation does not allow sickness funds to offer supplementary PHI in Austria, Germany and the Netherlands.[24] In all other countries sickness funds offer supplementary PHI. Group contracts are rare in Germany, while they are rare but growing in the Netherlands, more common in Austria, Switzerland (around 20 percent) and Israel (60 percent of all contracts of for-profit-insurers) and very common in France (61 percent) and Belgium (74 percent)(Comité European des Assurances 2000).

Public regulation in EU-countries differs significantly from non-EU-countries. The third non-life directive of the European Union allows only financial regulation in supplementary PHI.[25] Most countries have adapted national regulation, although the French government has been quite reluctant to let go of tax exceptions for not-for-profit insurers (*mutuelles*) and the re-

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[20] Fur further research it might be interesting to address the question what determines the propensity of consumers to substitute out-of-pocket expenditures with taking out private health insurance contracts.

[21] An increase in premium income can be due to an increase in coverage or due to premium increases.

[22] Formally this is also true for Switzerland where the complete market for supplementary PHI is for-profit. However, sickness funds dominate the market for supplementary PHI who are not allowed to make profits in basic insurance.

[23] Different agencies are responsible for supervising for-profit-insurers and not-for-profit insurers in mot countries (e. g. Switzerland, France and Israel)

[24] In the Netherlands sickness funds have found creative ways to circumvent this regulation by creating separate legal entities (Greß/Okma/Hessel 2001).

[25] Material regulation is based on the premise that if insurers are sufficiently controlled in the type of business they operate and the level of premiums they charge, there can be no doubt of insolvency. Financial regulation attempts to ensure that the insurance company remains solvent; the regulatory body's role is restricted to examining detailed financial data of the insurer. Only if national governments can invoke a *general good* to justify premium and coverage regulation there can be exceptions. Usually regulation on alternative private health insurance, which is given is special status through Article 54 of the third directive, is considered within the real of the general good while regulation on supplementary health insurance is not. However, the absence of a clear definition of the *general good* has led to confusion and tension between the European Commission, member states and insurance companies (Mossialos/Thomson 2001).

quirement for the notification of new policies (Europäischer Gerichtshof 1999). In contrast, the non-EU country Switzerland requires even the approval of new policies. In Israel, regulation requires the approval of new policies, proscribes surcharges for bad risks and does not allow not-for-profit insurers to reject new applicants (Shmueli 2001). In all countries insurers calculate risk-related premiums for supplementary PHI and make available a large variety of arrangements for co-payments and deductibles. Only in Israel there are no deductibles available. In Switzerland there can be a time limit for contracts and insurers are allowed to terminate contracts in case of damages.[26] In all other countries, only the insured can cancel the individual insurance contract.[27]

Benefits in supplementary PHI differ widely and mostly depend on the extent of coverage in SHI. The most common benefit is upgraded hospital accommodation which is prevalent to a different degree in all countries. Very common are also benefits for dental care which are not part of the benefits package in SHI in a number of countries (Switzerland) or are only partly covered (Germany, France, Israel, the Netherlands). With the exception of France and Belgium, the market for supplementary PHI to cover co-payments is not substantial in the seven countries, Switzerland even prohibits coverage of SHI co-payments by supplementary PHI.[28] However, increases in cost sharing which were implemented in the hope of curbing consumption and expenditures have stimulated growth of supplementary PHI in France (Imai/Jacobzone/Lenain 2000), causing coverage for the reimbursement of co-payments to rise from 69 percent of the population in 1980 to 85 percent in 1997 (Bocognano/Couffinhal/Dumesnil/Grignon 2000).[29]

In most countries insurers covering supplementary PHI do not have direct contractual relations with providers. Usually, providers charge fee-for-service and patients are reimbursed by their insurers (Belgium, France, Germany, Netherlands). In Austria insurers mostly pay providers directly based on regional contracts. In Switzerland insurers apply a mix of methods and some insurers in France provide quality incentives in contracts with providers of dental care. In Israel not-for-profit insurers offer benefits in kind while for-profit insurers reimburse patients.

3.2 Market Outcome of Supplementary PHI

We have shown that regulation of supplementary PHI in all countries is much less stringent than regulation of alternative PHI in the Netherlands in Germany. Different regulation in the European Unions for both functions of PHI illustrates this difference very clearly. However, if there is no or very little regulation bad risks may be denied access or have to pay unaffordable premiums. Furthermore PHI may not provide cost-effective care or may counteract policy measures in SHI. These market outcomes are only acceptable to society if supplementary PHI predominantly covers what may be called luxury care (Wasem/Greß 2002). Therefore, in this

[26] However, both for-profit and not-for-profit insurers refrain from doing so (Kocher 2001).

[27] This is not the case in group contracts; however in some countries (e.g. Germany) the individual has a right to continue the contract.

[28] One major sickness fund started to offer supplementary PHI-policies for the coverage of co-payments in SHI in 1997. The supervising authority immediately banned these kind of policies. They are banned by law since 2001. The reasons are twofold and straightforward. First, risk related premiums for co-payments in supplementary PHI counteract the solidarity principle in SHI. Second, the coverage of co-payments counteracts incentives to decrease moral hazard on the demand side (Kocher 2001).

[29] According to a recent study, patients on average have to finance 24 percent of all costs for physicians privately. The rates are higher for dental care (65 percent) and drugs (37 percent) and is lower for hospitals (9 percent)(Couffinhal/Paris 2001).

section we examine empirical evidence of access problems to supplementary PHI and recuperations with the SHI system.
Furthermore, supplementary PHI is closely related to SHI. Thus, there are several possible market outcomes of supplementary PHI which may have unwanted and/or unexpected effects on SHI. Recent research shows that this is the case in at least two areas. First, consumer mobility in SHI may be adversely affected. Second, effects on cost containment in SHI are to be expected.

3.2.1 Effects on Equity in Health Care Delivery

Access problems to supplementary PHI are extremely prevalent in France. Obviously high co-payments for basic services cannot be considered as coverage for luxury services. Access to supplementary PHI in France varies according to income and social class. Those who have little or no access to supplementary private health insurance are much more likely to be from the lowest social classes. While low-income-groups comprise 63 percent of the uninsured (with regard to supplementary insurance) and only 13 percent of them have access to high-coverage supplementary insurance for dental care, for high-income groups it is the other way around. As a consequence, consumption of ambulatory care, dental care and glasses is much smaller in low-income-groups. The French system also appears to discriminate against foreigners, young people aged between 20 and 24, and those over 70 years old, all of whom are less likely to be covered by supplementary health insurance. While 59 percent of unskilled workers have little or no supplementary PHI, the same is true for only 24 percent of all executives (Bocognano/Couffinhal/Dumesnil/Grignon 2000).
In Israel, carriers of supplementary PHI are healthier, have higher economic status and are more highly educated than non-owners. 18 percent of the lowest income quintile has access to supplementary PHI, compared to 42 percent of the other income groups (Gross/Rosen/Shirom 2001). Furthermore, men and employed individuals are over-represented among the owners. A recent study has shown that ownership is not identical to demand. Individuals with poor health are much more likely to apply for supplementary PHI but are also more likely to be rejected by the insurers (Shmueli 2001).[30]
More than 20 per cent of those insured in German SHI have additional coverage by supplementary private health insurance. Those with high income are much more likely to have supplemental insurance than those with average or low income (Forsa 1996; Föste/Janßen 1997).
In France, research shows that persons with supplementary PHI consume more health care than those without, particularly ambulatory care, dental care and spectacles. Persons with supplementary private health insurance made 1.5 visits to a doctor in a three month period (compared to 1.1 visits for individuals without supplementary private health insurance), seeking health care once every 73 days on average, compared to once every 100 days for those without this type of insurance (Mossialos/Thomson 2001). On the other hand, research in the Netherlands has shown that so far there has been no significant decline of consumption of dental care of persons without supplementary health insurance after the exclusion of dental care for adults from the basic benefits package of social health insurance

[30] An average individual aged 45-65 with one chronic condition has a 50 percent probability to apply and a 30 percent probability to be accepted. With three chronic conditions the probabilities are 85 percent to apply and 15 percent to be accepted. The chances to be accepted drop below 10 percent for individuals with more than three chronic conditions (Shmueli 2001).

(Abraham/Bronkhorst/Truin/Severens/Felling 2001).[31] This finding contradicts earlier studies that assumed lower consumption of persons without supplementary PHI (Friele/Bakker/Vaessen 1996) and may be due to the good economic situation in the Netherlands and a high willingness to pay for dental care in the Dutch population (Abraham/Bronkhorst/Truin/Severens/Felling 2001). Furthermore, after the exclusion of dental services from the basic benefits package private insurers informally agreed on a generous acceptance policy and non-risk related uniform premiums (Godfried/Oosterbeek/Tulder 2001).

The above access problems prompted the French government to take action. It introduced a means-tested, public supplementary insurance program called CMU (*Couverture maladie universelle*) in 2000 to ensure access to health care for the poor. For those whose income is below a certain threshold (about 10 percent of the population is eligible), this insurance covers all public co-payments and offers lumps-sum reimbursements for glasses and dental prostheses (Imai/Jacobzone/Lenain 2000). Health professionals are not allowed to charge more than the public tariff or the lump-sum for CMU beneficiaries, which means that in theory, access to care is free of charge (Couffinhal 2001). There still are access problems for people with income just above the one allowing access to CMU. This especially true for the so called working poor (Yahiel 2001).[32] 4.5 million people (around 7 percent of the population) benefited from the CMU at the end of June 2001. Even if it seems that some providers do not respect their obligations towards CMU beneficiaries and do not treat them at the expected prices, it is most likely that the CMU will tremendously decrease the deterring effect co-payments had on access to care (Couffinhal/Paris 2001).[33]

In contrast to this public solution in France, some not-for profit market actors have found an innovative approach for the access problem in Belgium. In Belgium there is an increase of health care costs that are not covered by SHI and thus has to be paid by the patients. This is the main reason for the considerable increase of premium income of supplementary PHI. Especially supplementary PHI covering co-payments for hospital costs is very popular. An example is a new insurance for hospital co-payments that has been introduced by the Walloon branch of the not-for-profit Christian sickness funds. This insurance is called *Hospi solidaire*. It provides coverage for additional hospital costs with a deductible of 400 € and covers accomodation in a two person room. This *Hospi solidaire* is part of the supplementary PHI that every insured person of the sickness funds is obliged to purchase. All applicants have to be accepted and premiums are community-rated. Thus, *Hospi solidaire* is not part of the basic coverage of SHI, but everybody choosing this particular fund voluntarily is obliged to buy this kind supplementary PHI. The association of for-profit private insurance companies has attacked this insurance in court but was rejected. The court ruled that sickness funds fall outside the scope of commercial law, since their legally assigned task is to insure people in a way compatible to societal standard of solidarity (Hermesse 2001).

Another market solution to mitigate access problems is the establishment of group contracts. The exclusionary effects of risk-related premiums and underwriting procedures for individual

[31] Around 75 percent of persons insured in SHI have taken out supplementary PHI for dental care for which there are co-payments of 25 percent (Abraham/Bronkhorst/Truin/Severens/Felling 2001).

[32] At the end of 2001, the French parliament has adopted a law which also entitles the so-called working poor to lump-sum payments (Yahiel 2001).

[33] Regulation in Switzerland is much more simple. In 1997 one major sickness fund started to offer supplementary PHI-policies for the coverage of co-payments in SHI. The supervising authority immediately banned these kind of policies. They are banned by law since 2001. The reasons are twofold and straightforward. First, risk related premiums for co-payments in supplementary PHI counteract the solidarity principle in SHI. Second, the coverage of co-payments counteracts incentives to decrease moral hazard on the demand side (Kocher 2001).

contracts in supplementary PHI are mitigated to a considerable degree when insurance is sold to employment-related groups with community-rated premiums (Jost 2001). The risks of the individuals concerned are pooled. Moreover, the average risk structure of employees is better than that of non-employees so that group contracts are attractive for insurers. Consequently, group contracts do not solve access problems for non-employees or employees in companies with worse than average risks which are not attractive for insurers.
The absence of regulation for premiums and coverage of supplementary PHI following the third non-life directive has led to a proliferation of tariffs for supplementary health insurance giving the appearance of fierce competition. In practice, this development has caused information problems. Subscribers do not have access to transparent information. A recent report on private health insurance in the EU by the European Parliament's Committee on Employment and Social Affairs concluded that most consumers found the content of policies difficult to understand and that variation between policies made them difficult to compare in terms of value for money (Rocard 2000). Following the arguments of the so-called Rocard-report, the European Parliament passed a resolution arguing that the decreasing share of public expenditures increases the reliance of health care systems in the European Union on supplementary PHI. The Parliament asked the European Commission to inquire whether more extensive regulation of supplementary PHI may be in order. In reaction, the Commission has commissioned a study in order to gather knowledge about this topic. A fierce discussion about the outcome of the study and possible further regulation of supplementary PHI in the European Union is to be expected. First, insurance companies categorically oppose material regulation for supplementary PHI. Second, the issue becomes even more relevant since possible new member states from Eastern Europe such as Poland and Hungary have a high share of informal co-payments – supplementary PHI for non-luxury services for them might be preferable (Kornai/Eggleston 2001; Tymowska 2001).

3.2.2 Effects on Consumer Mobility in SHI

Belgium, Germany, the Netherlands, Switzerland and Israel government have implemented some kind of regulated competition in SHI (Schut/van Doorslaer 1999; Greß/Okma/Hessel 2001; Gross/Harrison 2001). Sickness funds are supposed to compete for consumers by attaining cost-effective care. There are several crucial assumptions of the managed competition model. Insurers are to refrain from risk selection and consumers are to have free choice of sickness funds (Greß/Groenewegen/Kerssens/Braun/Wasem 2001). However, the tie-in of SHI with supplementary PHI may undermine some of the policy measures in SHI by providing greater opportunities for risk selection of insurers and resulting in low mobility of consumers. In SHI, sickness funds can risk select if they tie the conditions of supplementary PHI cover to the possession of a social health insurance contract at the same insurer. Premiums for supplementary health insurance can be more expensive if people are not insured by the same fund for social health insurance. Bad risks may face a substantial premium increase if they switch sickness funds for basic or supplementary insurance, which may discourage them from switching altogether. If individuals want to buy cover for SHI as well for supplementary PHI, sickness funds can assess individual risks through the questionnaire compiled when individuals apply for complementary health insurance (Shmueli 1998). They can discourage bad risks in SHI by reducing service quality selectively, delaying reimbursements, reducing information disclosure and deteriorating customer assistance in supplementary insurance (Colombo 2001).
Immediately after the introduction of the new Health Insurance Law in *Switzerland* some sickness funds forced individuals who were changing their basic insurer to terminate their

contracts for supplementary PHI, too. While such strategies now are forbidden explicitly in Switzerland, interviews with consumers associations suggest that some people continue to experience similar problems. Many people complained that reimbursement times deteriorated after they separated social health insurance and supplementary PHI (Colombo 2001).[34] Additionally, this kind of separation is very inconvenient for providers who prefer not to bill separately for services included under two different covers (Stürmer/Wendland/Braun 2000). Evidence from the *Netherlands* also points to a certain degree of tie-in of supplementary PHI and SHI, although sickness funds formally are forbidden to sell supplementary PHI. Therefore, they do so by using subsidiaries and consumers are more aware of differences with regard to price and coverage in supplementary PHI than in SHI (Greß/Groenewegen/Kerssens/Braun/Wasem 2001; Schut 2001). In *Belgium*, sickness funds even require their insured to take out supplementary insurance at the same sickness fund they have basic social health insurance (Vandevoorde 2001).

3.2.3 Effects on Cost Containment in SHI

The effects of supplementary PHI on cost containment in SHI are difficult to measure. Existing evidence is rather ambiguous. On one hand, governments in all seven countries increasingly rely on supplementary PHI to fill gaps left by the decreasing share of public expenditures of total health care expenditures – at least rhetorically. Furthermore, governments can implement cost-containment policies in SHI more easily since supplementary PHI generates additional revenues for providers who face tight budgets in SHI and thus decreases opposition of providers. Profits from supplementary PHI in Israel are even used to partly cover deficits in the SHI budget of sickness funds (Gross 2001). In Germany, the hospital financing regulation relies on charges for better amenities in hospitals which are covered by supplementary PHI to subsidize general hospital budgets.

On the other hand, due to cost containment measures it sometimes takes a long time before new drugs, treatments or a new technology are included in SHI. Supplementary PHI puts pressure on SHI in Belgium and France, since insurers covering supplementary PHI include these innovative therapies in their coverage (Vandevoorde 2001; Yahiel 2001). This tendency may in fact act as a cost driver in SHI. Also, the coverage of co-payments by supplementary PHI obviously counteracts the intention of reducing expenditure in the SHI sector by decreasing moral hazard in France and Belgium. The prime motivation behind the increase of public co-payments was to curb public health expenditures. Government argued that co-payments were intended to make patients consume more responsibly. However, as supplementary PHI started to grow and increasingly covered public co-payments, any impact these measures may have had on moral hazard was counteracted. An attempt was made in 1967 to forbid the re-insurance of public co-payments but the attempt failed. Since then it became clear that increases in co-payments in France were essentially a policy tool to privatise public expenditures (Couffinhal/Paris 2001).

[34] In Switzerland, only seven percent of individuals keep supplementary PHI at an insurer different from the sickness fund providing SHI. Individuals with both covers at the same fund often receive one contract where SHI and supplementary PHI are not clearly separated (Colombo 2001).

4 Policy Implications

First of all our analysis clearly illustrates that all seven countries struggle to balance the need for universal access to good quality care, fairness in the allocation of the financial burden and the need to control public expenditure; and that they have developed a variety of actual arrangements to reach underlying policy goals. There is no single best model. This particularly true for the regulation of PHI.

The need for regulating alternative PHI is particularly large since an unregulated market might not safeguard access to adequate health insurance for persons without access to social health insurance (Schut 1995; Wasem 1995; Jost 2001). Accordingly, governments in Germany and the Netherlands regulate alternative PHI extensively. Density of regulation is even higher in the Netherlands than in Germany - the standard contract to ensure access for bad risks is much more attractive for bad risks, deficits are pooled between all private health insurers. The higher degree of regulation in the Netherlands does reflect the fact that a large share of the population does not have access to social health insurance – while in Germany there is only an option to exit SHI with almost no possibility to re-enter SHI. Insofar the separation between SHI and alternative PHI is much clearer in the Netherlands than in Germany. Moreover, the clear separation between alternative PHI and SHI in the Netherlands prevents some of the market outcomes of alternative PHI in Germany. Private health insurers in the Netherlands are unable to attract actively or passively insured from SHI with good health and high income - as German private health insurers are able to and do intensively. Also there are no indirect subsidies of alternative PHI to SHI in the Netherlands. This is due to the fact that providers are not able to charge higher bills for PHI patients than for SHI patients – as providers in Germany are able to. Direct subsidies to SHI such as the MOOZ scheme in the Netherlands are more transparent than indirect subsidies. Additionally equal remuneration schemes for PHI and SHI insured to a certain degree prevent access problems that are prevalent in Germany due to preferential treatment of PHI patients.[35]

All things considered the regulatory framework for alternative PHI is much more consistent in the Netherlands than in Germany and thus avoids the adverse consequences of the opting-out provision for high-income employees in Germany. However, in regulating alternative PHI there is a trade-off between autonomy of consumers and density of regulation (Wasem/Greß 2002). Regulation seems to follow a progression – beginning with restrictions on pre-existing conditions exclusion clauses or minimal coverage mandates through community ratings requirements or other bans on risk underwriting and ending up with high risk pooling between insurers. The arguable potential benefits of private health insurance – its flexibility and potential for innovation – are crippled as governments increasingly dictate the terms of insurance contracts. To their already considerable administrative costs, private health insurers now must add regulatory compliance costs (Jost 2001). Moreover, the more regulated alternative PHI becomes in order to safeguard access and to attain cost-effective care and the less regulated SHI becomes in order to become more cost-effective without jeopardising access less distinguishable both types of insurance become. Again this is true more so in the Netherlands than in Germany and is reflected in the persistent attempts of the Dutch government to integrate

[35] Ceteris paribus budgeted providers still would prefer PHI patients, since even the smaller PHI income would be extra income.

social health insurance and alternative private health insurance.[36] But also in Germany there is a discussion on convergence of the systems since they become more similar (Wasem 1995b).
If supplementary PHI basically covers luxury goods a smaller degree of regulation for supplementary PHI than for alternative PHI is justifiable in terms of social acceptability. If that is so, still information on insurance policies for consumers is quite confusing and some standardisation of benefits packages might make it easier for consumers to compare value for money. However, it is not quite clear that supplementary PHI covers only luxury care. The validity of this argument depends not only on the range of benefits in SHI but also on the level of co-payments and on the quality of the provision of these benefits. As we have seen, within the European Union the Parliament is very much worried about the decreasing share of public expenditures on health care. In all EU countries, there is extensive debate on the consequences of EU law on both PHI and SHI and that debate has not yet finished but clearly is reshaping the health insurance landscape. The French government only recently introduced a scheme to increase access of low-income persons to supplementary PHI. In Israel, in some areas the quality of care in SHI is not satisfactory thus regulation of the market of supplementary PHI to avoid risk selection and to control premiums is justified (Shmueli 2001). Further regulation may actually transform supplementary PHI into some kind of social health insurance.
In both alternative and supplementary PHI the link between the legal status of insurers (for-profit or not-for-profit) and market outcomes is surprisingly low. The link is much stronger between the regulation allowing sickness funds to offer supplementary PHI and market outcomes. While the market behaviour of sickness funds may mitigate access problems on the one hand (e.g. Belgium) it may also counteract policy measures in SHI by (e.g. free choice of consumers). In order to avoid risk selection of social health insurers via supplementary PHI there are two major policy options. First, a strict separation of SHI and supplementary PHI is preferable to a situation where social health insurers or their subsidiaries can use supplementary PHI for attracting good risks. The formal or informal conglomerates of private and social health insurers in the Netherlands are more suitable for risk selection strategies than the strictly separated sickness funds and private insurers offering supplementary PHI in Germany. Second, regulation for supplementary PHI and social health insurance is equalised (no pre-existing conditions exclusion clauses, minimal coverage mandates through community ratings requirements or other bans on risk underwriting, risk pooling, etc.) in order to avoid incentives for risk selection. Again, this might transform supplementary PHI in some kind of social health insurance.
But what is so bad about that? Transaction costs of private health insurance are almost by definition much higher than those of SHI due to marketing and underwriting costs. Thus we have to ask for the added value that justifies the inevitable added costs of private health insurance (Jost 2001: 428). There may be some added value for consumers in the enhanced freedom of choice and for governments in cost shifting form social to private health insurance. However, the added values of social health insurance consists of lower administrative costs, mostly lower health care costs, incentives for cost containment on both the demand and the supply side and last but not least in less access problems. If governments give more free choice to consumers in social health insurance the added value of private health insurance is definitely too low to warrant the inevitable costs. In an ideal world it is much more preferable to integrate both systems into some kind of regulated competition framework. In a real world this might be too much to ask for and day-to-day solutions will persist.

[36] Thus Swiss government has already done so by allowing private health insurers to cover basic health insurance and by allowing social health insurers to offer supplementary health insurance.

5 References

Abraham, D./E. M. Bronkhorst/G.-J. Truin/J. L. Severens/A. Felling (2001). Insurance reform related changes in dental care in the Netherlands. Nijmegen, unpublished manuscript.

Bocognano, A./A. Couffinhal/S. Dumesnil/M. Grignon (2000). Which Coverage for whom ? Equity of Access to Health Insurance in France. Paris, Presentation at the European Public Health Association Congress, Paris Dec 14-16 2000.

Braun, B. (2000). Rationierung und Vertrauensverlust im Gesundheitswesen - Folgen eines fahrlässigen Umgangs mit budgetierten Mitteln? St. Augustin, Asgard.

Brouwer, W./H. Hermans (1999). "Private clinics for employees as a Dutch solution for waiting lists: economic and legal arguments." Health Policy **47**(1): 1-17.

Brouwer, W./F. Schut (1999). "Priority care for employees: a blessing in disguise?" Health Economics **8**(1): 65-73.

Colombo, F. (2001). Towards more choice in Social Protection? Individual choice of insurer in basic mandatory health insurance in Switzerland. Labour Market and Social Policy Occasional Papers No. 53. Paris, OECD.

Comité European des Assurances (2000). "Health Insurance in Europe - 1998 Data." CEA eco(12).

Couffinhal, A. (2001). Personal Communication. Paris, Credes.

Couffinhal, A./V. Paris (2001). Utilization Fees imposed on Public Health Care Systems Users in France. Paris, Credes.

Europäischer Gerichtshof (1999). Urteil des Gerichtshofs (Fünfte Kammer) vom 16. Dezember 1999: Vertragsverletzung - Nichtumsetzung der Richtlinien 92/49/EWG und 92/96/EWG - Direktversicherung mit Ausnahme der Lebensversicherung und Direktversicherung (Lebensversicherung), Rechtssache C-239/98. Straßburg, Europäischer Gerichtshof.

Forsa (1996). Einstellungen zum Deutschen Krankenversicherungssystem, DAK-Gesundheitsbarometer. 4./5. März 1996, Tabelle 2.

Föste, W./P. Janßen (1997). Finanzierungs- und Belastungsgrenzen des Sozialstaats im Urteil der Bevölkerung. Köln, FiO Forschungsinstitut für Ordnungspolitik, Tabelle A39.

Friele, R./R. Bakker/Y. Vaessen (1996). "NIVEL onderzocht tandartsenbezoek in 1995 (NIVEL untersucht Zahnarztbesuche des Jahres 1995)." Nederlands Tandartsenblad **51**(9): 440-43.

Godfried, M./H. Oosterbeek/F. v. Tulder (2001). "Adverse Selection and the Demand for Supplementary Dental Insurance." De Economist **149**(2): 177-90.

Greß, S. (2000). Der Nachbar als Herausforderung? - Zur Vorbildfunktion des niederländischen Modells. Bremen, ZeS-Arbeitspapier 1/2000, Zentrum für Sozialpolitik.

Greß, S./P. Groenewegen/J. Kerssens/B. Braun/J. Wasem (2001). Free choice of sickness funds in regulated competition: evidence from Germany and the Netherlands. Health Policy**:** in print.

Greß, S./G. H. Okma/F. Hessel (2001). Managed Competition in Health Care in The Netherlands and Germany - Theoretical Foundation, Empirical Findings and Policy Conclusions. Greifswald, Diskussionspapier 04/2001 der Rechts- und Staatswissenschaftlichen Fakultät der Ernst-Moritz-Arndt-Universität Greifswald.

Greß, S./J. Wasem (2001). Die Abschaffung der Exit-Option für freiwillig Versicherte in der GKV - Realistische Finanzierungsalternative oder Einschränkung von Wahlmöglichkeiten? Der Preis der Gesundheit: Wissenschaftliche Analysen, politische Konzepte - Perspektiven zur Gesundheitspolitik. W. Michaelis. Landsberg, ecomed.

Gross, R. (2001). Supplemental Health Insurance in Israel. Personal Communication. Jerusalem, JDC-Brookdale Institute.

Gross, R./M. Harrison (2001). “Implementing managed competition in Israel.” Social Science and Medicine **52**: 1219-31.

Gross, R./B. Rosen/A. Shirom (2001). “Reforming the Israeli health system: findings of a 3-year evaluation.” Health Policy **56**: 1-20.

Hermesse, J. (2001). Supplementary Private Health Insurance in Belgium. Brussels, Alliance Nationale des Mutualités Chrétiennes.

Hof, B. (2001). Auswirkungen und Konsequenzen der demografischen Entwicklung für die gesetzliche Kranken- und Pflegeversicherung. Köln, Verband der privaten Krankenversicherung e. V.

Hofmarcher, M. M./M. Riedel (2001). Health Expenditure in EU: No Public Sector Without the Private One, Focus: The Austrian Hospital Sector - One System or Nine? Health System Watch, Spring 2001, Institute for Advanced Studies IHS Health Econ. Federation of Austrian Social Security Institutions. Vienna.

Imai, Y./S. Jacobzone/P. Lenain (2000). The changing health system in France. Economics Department Working Papers No. 269. Paris, OECD.

Janssen, R./E. van Doorslaer/A. Wagstaff (1994). “Health insurance reform in the Netherlands: Assessing the progressivity consequences.” The Economic and Social Review **25**: 303-20.

Jost, T. S. (2001). “Private or public approaches to insuring the uninsured: lessons from international experience with private insurance.” New York University Law Review **76**(2): 419-93.

Klingenberger, D. (2001). Die Friedensgrenze zwischen gesetzlicher und privater Krankenversicherung: Ökonomische und metaökonomische Kriterien einer optimierten Aufgabenabgrenzung zwischen Sozial- und Individualversicherung. Kölner Schriften zur Sozial- und Wirtschaftspolitik, Bd. 21. Regensburg, Transfer Verlag.

Kocher, R. (2001). Personal Communication. Bern, Bundesamt für Sozialversicherung.

Kornai, J./K. Eggleston (2001). "Choice and solidarity: The health sector in Eastern Europe and proposals for reform." International Journal of Health Care Finance and Economics **1**(1): 59-84.

Ministerie van Volksgezondheid Welzijn en Sport (2001). Zorgnota Vraag aan Bod. Den Haag, Ministerie van Volksgezondheid Welzijn en Sport.

Mossialos, E./S. Thomson (2001). Voluntary health insurance in the European Union. London, London School of Economics, Discussion Paper No 19.

Okma, K. G. H. (1997). Studies on Dutch health politics, policies and law. Utrecht, Ph. D. thesis.

Rocard, M. (2000). Report on supplementary health insurance (A5-0266/2000). Brussels, European Parliament.

Schneider, M., Ed. (1995). Complementary Health Schemes in the European Union. Augsburg, BASYS.

Schut, F. (2001). "Prijsconcurrentie ziekenfondsen nog niet effectief." Economisch Statistische Berichten **86**: 172-175.

Schut, F. T. (1995). Competition in the Dutch health care sector. Ridderkerk, Ridderprint. Dissertation

Schut, F. T./E. K. A. van Doorslaer (1999). "Towards a reinforced agency role of health insurers in Belgium and the Netherlands." Health Policy **48**(1): 47-67.

Shmueli, A. (1998). "Supplemental Health Insurance Ownership in Israel: An Empirical Analysis and Some Implications." Social Science and Medicine **46**(7): 821-29.

Shmueli, A. (2001). "The effect of health on acute care supplemental insurance ownership: an empirical analysis." Health Economics **10**: 341-50.

Stürmer, W./D. Wendland/U. Braun (2000). Veränderungen im Bereich der Zusatzversicherung aufgrund des KVG. Bern, Beiträge zur Sozialen Sicherheit 4/00, Bundesamt für Sozialversicherung.

Thomson, S./E. Mossialos (2001). "The demand for private health insurance in Germany." Euro Observer **2**(4): 6-7.

Timmer, H. G. (1990). Technische Methoden der privaten Krankenversicherung in Europa: Marktverhältnisse und Wesensmerkmale der Versicherungsmathematik. Karlsruhe,

Verlag Versicherungswirtschaft.

Tymowska, K. (2001). “Health care under transformation in Poland.” Health Policy **56**: 85-98.

van Doorslaer, E./A. Wagstaff (1999). “The redistributive effect of health care finance in twelve OECD countries.” Journal of Health Economics **18**(3): 291-313.

Vandevoorde, C. (2001). Private health insurance in Belgium. Personal Communication, Leuven.

Vektis (2000). Financiering van de zorg in 1999: jaarboek 2000. Zeist, Vektis.

Verband der privaten Krankenversicherung e. V. (2000a). Die private Krankenversicherung - Zahlenbericht 2000/2001. Köln, Verband der privaten Krankenversicherung e. V.

Verband der privaten Krankenversicherung e. V. (2000b). PKV-Info: Der Standardtarif - nach der Rechtslage vom 1. Juli 2000. Köln, Verband der privaten Krankenversicherung e. V.

Verband der privaten Krankenversicherung e. V. (2000c). Private Health Insurance - Facts and Figures 1999/2000. Köln, Verband der privaten Krankenversicherung e. V.

Verband der privaten Krankenversicherung e. V. (2001). Rechenschaftsbericht 2000: Bestandszuwachs im Trend des Vorjahres, verhaltener Kostenanstieg. Köln, Pressemitteilung des Verbandes der privaten Krankenversicherung e. V. vom 5.6.2001.

Wagstaff, A./E. van Doorslaer (2000). Equity in Health Care Finance and Delivery. Handbook of Health Economics. A. J. Culyer, J. Newhouse. Amsterdam, Elsevier. **2A:** 1803-57.

Wasem, J. (1995). Regulating private health insurance markets. Amsterdam, Presentation at the Four-Country-Conference on Health Care Reform and Health Care Policies in the United States, Canada, Germany and the Netherlands, Amsterdam/Rotterdam February 23-35 1995.

Wasem, J. (1995b). "Gesetzliche und private Krankenversicherung - auf dem Weg in die Konvergenz?" Sozialer Fortschritt **44** (4): 89-96.

Wasem, J. (2000). A framework for analysis of opting out provisions. Greifswald, unpublished manuscript.

Wasem, J./S. Greß (2002). Regulation of private health insurance markets. Comparative Studies and Modern Medical Care: Learning Opportunity Or Global Mythology. T. Marmor, K. Okma. New Haven, Yale University Press, in print.

Yahiel, M. (2001). Personal Communication. Paris, Inspection generale des affaires sociales (IGAS).

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