

chapter three

Social health insurance financing

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The social health insurance model

Funding access to health care through social health insurance has its origins in Germany in the nineteenth century. The earliest versions of health insurance developed without any significant government intervention. Industrialization brought with it the emergence of large firms, and the workers in these firms started to organize themselves into trade unions. Sickness funds organized by the workers for mutual support often attracted support from employers, who saw benefits in their workers having access to better health care. Thus, a model arose in which health insurance was provided for some or all the workers in a firm, with much of the control remaining with the workers but with some management and financial input from employers.

The early sickness funds varied in their structures and governance but were mainly based on mutual support (in which contributions were based on income) and provided access to care based on need. In Germany, under Chancellor Bismarck, the sickness funds were formalized into a broader and more consistent system of health insurance. This led to the eventual development of territorial funds, which provided health insurance for those who were unable to obtain benefits through large formal employers (Altenstetter 1999; Busse 2000). The current arrangements in Germany have evolved slowly and in response to problems that emerged. In addition, traditions and unwritten rules have a strong role in the German system. These are just as important as the formal rules. It has continued to use the language and traditions of insurance, despite formal similarities to systems of government financing of care. It has also given priority to allowing choice of provider.

This chapter is organized into five sections. The first outlines the key features of social health insurance and how it operates. The second considers the variation in social health insurance in western Europe, in particular in France,

Germany and the Netherlands. The third section analyses recent reforms in western Europe and considers to what extent they have met their objectives. The fourth section evaluates social health insurance and presents its strengths and weaknesses, and the final part draws conclusions about the lessons from western European experience for the development of social health insurance in other countries.

There is substantial literature on the structures, operation and various technical aspects of social health insurance (Roemer 1969; Ron *et al.* 1990; Normand and Weber 1994). In this section, we outline the key features of social health insurance and how it operates.

Social health insurance has no uniformly valid definition, but two characteristics are crucial. Insured people pay a regular, usually wage-based contribution. Independent quasi-public bodies (usually called sickness funds) act as the major managing bodies of the system and as payers for health care. These two basic characteristics have certain limitations. In France's mutual benefit associations, contributions are based on income and usually split between employers and employees – but insurance is entirely voluntary (also called private social health insurance). A part of Switzerland's compulsory health insurance is not run by sickness funds but by privately owned insurance companies. We therefore use a pragmatic definition that also leaves room for innovative approaches: social health insurance funding occurs when it is legally mandatory to obtain health insurance with a designated (statutory) third-party payer through contributions or premiums not related to risk that are kept separate from other legally mandated taxes or contributions. In Figure 3.1, these two characteristics relate to the arrow C and the box 'payer/purchaser'.²

Several other characteristics are frequently found in social health insurance funding and fund management, although they are not essential features of the model.

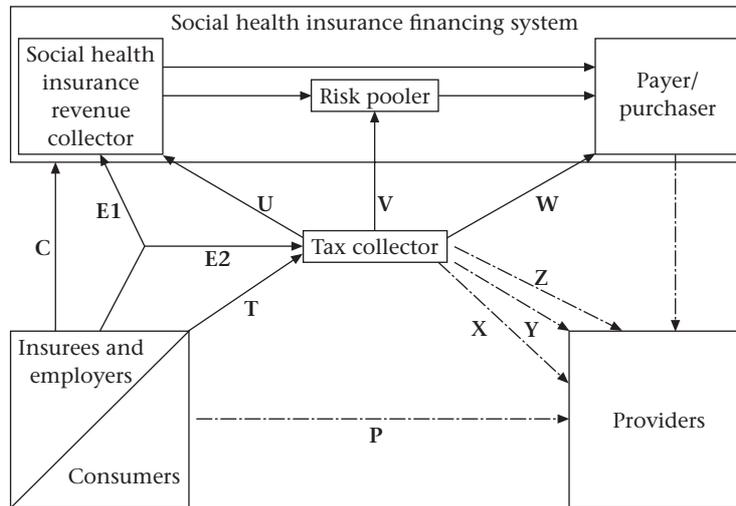
1 *Social health insurance is compulsory for the majority or for the whole population.*

Early forms of social health insurance normally focused on employees of large firms in urban areas. Over time, coverage has expanded to include small firms and, recently, self-employed people and farmers. It is today typically compulsory for most or all people, although some countries exclude people on high incomes from social health insurance (such as the Netherlands) or allow them to opt instead for private insurance (such as Germany).

2 *There are several funds, with or without choice and with or without risk-pooling.*

Some countries have more than one sickness fund but little choice, since people are assigned to funds based on their geographical location, occupation or both. In others, there is a choice among funds, which stimulates competition but may also bring potential difficulties in ensuring equal access to care for all. Four broad types of organization of sickness funds can therefore be differentiated: a single fund for the entire population of a country; single funds serving geographically distinct populations within a country; multiple funds serving the population in the same geographical area but that do not compete for insurees; and multiple competing funds. Where there is more than one (competing or non-competing) fund, risk-pooling should ensure that funds with low-cost and/or high-income members subsidize those with high-cost and/or low-income members. However, this is politically and technically difficult.

Figure 3.1 Simplified model of the financing functions and monetary flows in countries with social health insurance



Key:

- C = contributions (both income-related and non-income-related);
- E = earmarked health taxes;
- P = private expenditure (cost-sharing for social health insurance services; voluntary health insurance; and out-of-pocket payments for non-social health insurance services);
- T = (general) taxes;
- U = tax-financed contributions, such as for non-employed people;
- V = general subsidies for pooled social health insurance financing;
- W = subsidies for individual sickness funds;
- X = reimbursement of services for people not covered by social health insurance;
- Y = reimbursement for non-social health insurance services (such as public health);
- Z = non-service-related payments (such as for investment) or subsidies.

Note: The dotted lines are outside the scope of this chapter

- 3 *Contributions made by government (or special funds) on behalf of people not in employment are usually channelled through the sickness fund(s).* In any social health insurance system, some people cannot contribute directly and some people are likely to need government support. If funding for these people is channelled through the social health insurance system, this can increase the size of the risk pool. It can also ensure that all people get the same service (if there is a single sickness fund or multiple funds with a common benefit package), and there is less danger of the service for poor people becoming a poor service.
- 4 *Both employers and employees pay contributions and share responsibility for managing fund(s).* As employers make significant financial contributions to social health insurance, it may be important that they feel some control over it.

In summary, the key features of social health insurance funding of health services are that contributions are paid based on ability to pay and the system provides a separate, transparent system for the flow of funds from the contributors to the sickness fund (and on to providers of services).

Variation in systems of financing social health insurance in western Europe

This section uses the countries with social health insurance systems in western Europe (Austria, Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland) to illustrate the variability in arrangements outlined in the first section. These include the definition of 'insured', the organization of the sickness funds and the determination, collection, pooling and redistribution of contributions. The major findings are summarized in Table 3.1.

Who is insured (and are the conditions equal)?

As social health insurance has its roots in work-related insurance, population-wide coverage was not the original intention. Although coverage has been gradually expanded to non-working parts of the population in all countries, population-wide coverage was only very recently achieved in Switzerland (1996), Belgium (1998) and France (2000). An exception to this is the universal AWBZ insurance under the Exceptional Medical Expenses Act in the Netherlands, which was introduced in 1968; as the so-called first compartment, it covers long-term care and population-wide disease prevention programmes.

Austria and Luxembourg have *de facto* universal coverage, although a few people (1–3 per cent of the population) remain uninsured, mostly wealthy people in Luxembourg (Kerr 1999). Germany has a large proportion of the population (74 per cent) mandatorily insured and a small portion legally excluded,³ leaving a third group (mainly employed people with income above a threshold) with a choice between statutory and private health insurance (Busse 2000). For acute care, the Netherlands strictly separate along an income limit between the mandatory scheme governed by the Sickness Funds Act (ZFW) and private health insurance, with no choice between the two systems. The ZFW income limits in 2000 were €29,300 for people younger than 65 years and €18,700 for people older than 65 years.

Coverage does not necessarily mean insuring everybody for the same benefits. Although this is usually the case, Belgium has a two-tier system for the 88 per cent of people in the 'general regime' (with a comprehensive benefits package) and the 12 per cent in the 'regime for self-employed' (for whom the benefits package covers 'major' risks only) (Nonneman and van Doorslaer 1994).

How are the sickness funds organized (and is there any choice among them)?

The number of funds and their size and structure vary widely, as does the extent to which they compete for members. Austria, France and Luxembourg have comparatively small and stable numbers of non-competing funds, as these are defined based on occupational status and, for Austria, place of residence. Luxembourg, for example, has nine sickness funds: one each for manual

Table 3.1 Important characteristics of social health insurance systems in western Europe relating to financing, 1999 or 2000 (unless stated otherwise)

	<i>Austria</i>	<i>Belgium</i>	<i>France</i>	<i>Germany</i>	<i>Luxembourg</i>	<i>Netherlands</i>	<i>Switzerland</i>
Social health insurance coverage (percentage of population)	99%	99–100%	100%	88%	97–99%	AWBZ 100%, ZFW 64%	100%
Number of sickness funds	24	About 100 (all but 2 organized in 5 mutual benefit associations)	19	420 (in 7 associations)	9	30	109
Percentage of insured people with choice of fund	0%	About 99%	0%	96%	0%	100%	100%
Contribution rate: uniform or varying, percentage of wage (distribution employer : employee)	Varying by profession: 6.4–9.1% ^e	Uniform: 7.4% (52 : 48)	Uniform: 13.6% (94 : 6)	Varying by fund: mean 13.6% (50 : 50)	Uniform: 5.1% (50% : 50%) + 0.3–5.0% sick pay (50 : 50)	Uniform: AWBZ 10.3% (0% : 100%), ZFW 8.1% (78 : 22)	No
Ceiling on contributory income	Yes (€44,000)	No	No	Yes (west: €40,000; east: €32,000)	Yes (€70,000)	Yes (AWBZ €22,000, ZFW €29,000, €19,000 for pensioners)	Not applicable
Other personal contributions to funds (excluding co-payments to providers)	No	Plus a nominal premium per capita (varying by fund)	General social contribution 7.5% + social debt repayment contribution 0.5%	No	No	Plus premium per capita (varying by fund), mean €180 annually	Only premium per capita
Determines contributions	Government	Government ^b	Government	Individual funds	Union of Sickness Funds	Government ^b	Individual funds or insurers

Table 3.1 (cont'd)

	<i>Austria</i>	<i>Belgium</i>	<i>France</i>	<i>Germany</i>	<i>Luxembourg</i>	<i>Netherlands</i>	<i>Switzerland</i>
Collects contributions	Individual funds	National Social Security Office ^b	Local government agencies, transferred to Central Agency for Social Security Institutions	Individual funds	Union of Sickness Funds	AWBZ/ZFW Fund managed by Board for Health Care Insurance ^b	Individual funds or insurers
Mechanism for pooling or financial risk-sharing among funds	No, but funds in deficit may apply for transfers from other funds	Mainly joint expenditure; limited prospective allocation to funds (1999: 4%; 2000: 7.5%)	Subsidies from major funds (up to 42%) and government to smaller funds	Risk-structure compensation mechanism at the federal level (for > 90% of income)	Joint expenditure	Mainly joint expenditure; limited prospective allocation to funds (ZFW 35% in 1999)	Risk-structure compensation at the cantonal level
Tax financing of social health insurance (if available: percentage of fund income)	Generally no, except 23% for farmers fund: 0.5% of the total	Yes, 35–40%	Yes (up to 8%); plus special taxes (up to 34%) ^c	Generally no, except 52% for farmers' funds: < 1% of the total	Yes, maximum 40% ^d	Yes, AWBZ < 1%, ZFW 25%	Only indirect subsidies (to insurees rather than to funds)
Social health insurance expenditure as a percentage of total health expenditure	48% (1996)	62% (1994)	74% (1996)	61% (1994) ^e	75% (1997)	73% (1999): AWBZ 37%, ZFW 36%	28% (1997) ^e

^a Manual workers 7.9% (50% : 50%) + 2.1% sick pay (100% : 0%), white-collar workers 6.9% (51% : 49%), civil servants 7.1% (44% : 56%), self-employed 9.1%, farmers 6.4%.

^b Individual funds for per-capita premiums.

^c On car insurance, alcoholic drinks and pharmaceutical marketing.

^d 250% supplement on pensioners' contributions, 10% on other contributions.

^e Plus health expenditure from other social insurance schemes (4% and 7%, respectively for Germany and Switzerland).

workers, white-collar workers in the private sector, self-employed people, the agricultural sector, civil servants of the state, civil servants of local authorities, manual workers at ARBED (a private company), white-collar workers at ARBED and the Luxembourg railways.

Western European countries with competing funds have more funds, but the numbers are decreasing. In 1993, Germany had 1221 funds, but these were merged into 420 funds in 2000 and are classified into seven groups: 17 general regional funds, 12 substitute funds, 337 company-based funds, 32 guild funds, 20 farmers' funds, one miners' fund and one sailors' fund. Belgium has about 100 funds organized according to religion and political affiliation. All but two funds are members of five associations (Christian, Free and Professional, Liberal, Neutral and Socialist), the remaining ones being the Auxiliary Fund and the Fund of the Belgium Railway Company. In the Netherlands, mergers between 1985 and 1993 halved the number of sickness funds from 53 to 26. The number has since increased slightly to 30, as competition among funds was introduced in 1995. In Switzerland, sickness funds and private insurance companies offer compulsory health insurance (the companies may only profit from supplementary insurance), and the number of insurers declined from 207 in 1993 to 109 in 1999 (Minder *et al.* 2000).

The presence of more funds in a country does not necessarily mean more choice, as demonstrated by Germany, where membership of most funds was legally assigned until 1995. Since 1996, most insured people may choose which fund to join; only farmers, miners and sailors are assigned membership to the corresponding funds. Insured people in Belgium have traditionally had a choice among funds (except for railway employees) but not insured people in Austria, France and Luxembourg. If insured people are allowed to choose and switch between funds, countries need to decide how often this should be allowed. When the Netherlands opened their funds to competition in 1995, they opted for a 2 year interval but changed to an annual option from 1997. People may switch every 3 months in Belgium, every 6 months in Switzerland and every 12 months in Germany (generally). However, voluntary members earning above the threshold in Germany could always – and still can – move from one fund to another at any time with 2 months' notice. However, a decision to leave the social health insurance system and obtain private insurance cannot be revoked.

Paying contributions: rates, ceilings and supplementary contributions

Contributions are mainly based on wages and are shared between employers and employees in all countries (except Switzerland⁴). Nevertheless, there are important differences relating to:

- the uniformity of the rate;
- the distribution of contributions between employer and employee;
- the existence of an upper contribution ceiling;
- the existence of additional non-wage-related contributions.

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Insured people have the same contribution rate regardless of sickness fund and membership status in Belgium, France, Luxembourg and the Netherlands. In Austria, rates vary between 6.4 and 9.1 per cent according to employment status but not between funds for a given employment status. In Germany, the contribution rates differ among funds but not by employment status.⁵

The employer and employee each pay about half in Austria, Belgium, Germany and Luxembourg. In France, the employers paid 70 per cent for a long time, but the employees' contribution has been reduced to 6 per cent in favour of a health tax. In the Netherlands, employers cover most of the ZFW but nothing of the AWBZ; in total, employers pay 35 per cent for those insured under both schemes.

Austria, Germany,⁶ Luxembourg and the Netherlands have ceilings on contributions (differing between the insurance schemes in the Netherlands) but not Belgium and France.

Belgium, France and the Netherlands impose additional contributions to the wage-based contributions. In Belgium and the Netherlands, insured people pay a non-income-related per-capita premium on top of their contributions. These premiums, which vary among funds, are currently small in Belgium but are about €180 a year in the Netherlands (about one-tenth of the income of sickness funds) and are levied not only on sickness fund members but also on their covered dependants.

France has replaced the employee's part of the contributions with a general social contribution that is also based on non-wage income; in addition, a social debt repayment contribution is charged. The reasons for these complementary premiums differ: in France, containing costs and increasing the financial base of the funds was the driving force; in the Netherlands, the charges aimed to introduce an element of price competition among funds.

Negative supplementary contributions are also theoretically possible. For example, Germany experimented with no-claim bonuses – a refund of contributions if no services were used – after 1989 and opened up this option as a market instrument for all funds in 1997, despite evaluations demonstrating that only insurees with low utilization benefit (Malin and Schmidt 1996). As a typical instrument used by private health insurance schemes, the bonuses are no longer considered compatible with the basic philosophy of social health insurance and were abolished by a new parliamentary majority in 1998.

As contributions are based on wages, contributions for non-waged people must be determined. For the largest group, pensioners, contributions vary between countries, both regarding how much they pay and who actually pays. In most cases, pensioners pay the same rate on their pension as employees pay on their income (or, in Switzerland, the same per-capita premium). This amount is split between the pensioner and the statutory pension fund (substituting for the employer) in Germany and Luxembourg and placed entirely on the pensioner in the Netherlands. In Belgium, pensioners pay only the employees' part of 3.55 per cent; the contribution rate is more than 11 per cent for pensioners in Austria. As pensioners in Austria pay only as much as working members on average (3.75 per cent), pension funds pay two-thirds of the contribution (European Commission 2000).

Decision-making powers

Although sickness funds are self-governing in most countries, the government or parliament decisively influence the setting of contributions. In France, for example, the government, representatives of employees and employers and the social security organizations negotiate contribution rates, but the government ultimately decides. In the Netherlands, the Health Care Insurance Board (College voor zorgverzekeringen, CvZ), which runs the Central Funds of ZFW and AWBZ, recommends contribution rates for the following year to the Ministry of Health, Welfare and Sport, which sets the rates. Only Germany and Luxembourg have delegated the power to determine contribution rates to self-governing bodies subject to government approval – in Germany to the individual funds and in Luxembourg to the Union of Sickness Funds. Similarly, insurers in Switzerland set their own community-based premiums under the supervision of the Federal Office for Social Insurance. The government amends the contribution ceilings annually in all countries, taking into account changes in wages. The sickness funds in Belgium and the Netherlands set their own per-capita premiums. These differ in the Netherlands because of competition (see previously) but have mostly remained uniform in Belgium: only one fund lowered its rate from the usual €2.20 per month to €1.20 in 1998 but reverted in 1999 (Schut and van Doorslaer 1999).

Collection of contributions and other social health insurance revenue

The sickness funds collect the contributions in Austria, Germany and Switzerland. Associations of funds (Luxembourg) or government agencies may also collect contributions. In Belgium, contributions are paid directly to the National Social Security Office (RSZ/ONSS), which, in turn, redistributes the money to the respective government agencies responsible for administering different sectors of social security, such as unemployment and pensions. The agency responsible for health benefits is the National Institute for Sickness and Invalidity Insurance (RIZIV/INAMI). Similarly, in France, revenue is collected by local government agencies that collect social security and family allowance contributions. The money is passed to a national agency, the Agence Centrale des Organismes de Sécurité Sociale (Central Agency for Social Security Institutions), which manages and allocates the money to the different social security organizations and their branches.

Risk-pooling and allocation among funds

The next issue in social health insurance financing is risk-pooling among funds and (re)allocation of financial resources to the individual funds. In Belgium and the Netherlands, before the mid-1990s, complete national pooling of contributions went hand-in-hand with *de facto* joint expenditure: retrospective allocation of contributions to funds according to actual expenditure.

The reforms have led to the gradual introduction of per-capita risk-adjusted allocations to the sickness funds. In Belgium, the prospective allocation amounted to 10 per cent of the total health care budget for 1995–96 and 1996–97 and was raised to 20 per cent for 1998–99 and 30 per cent for 2000–2001. Since the funds were only financially responsible for 15, 20 and 25 per cent of that allocation in the respective years, the actual percentages ‘at risk’ amounted to only 1.5, 4.0 and 7.5 per cent. The Netherlands went ahead more rapidly, from 3 per cent in 1993–95 to 15 per cent in 1996, 27 per cent in 1997, 29 per cent in 1998 and 35 per cent in 2000 – but a special provision that expenses for extremely expensive patients are shared provides a ‘safety net’ for the funds (Schut and van Doorslaer 1999). Since the Union of Sickness Funds in Luxembourg covers directly the expenses for services delivered on a contract basis (such as hospital care), the retrospective approach is only used for services with patient reimbursement such as physicians’ services. France has both a compensation scheme among the local sickness insurance funds as well as support for some of the smaller funds (those with insured people with lower earnings) from the National Sickness Fund as well as through taxes.

Ensuring an equitable financial basis in countries where individual funds collect the contributions is much more difficult. There are two reasons for this. First, money not only has to be allocated according to some criteria but actually needs to be reallocated; the money necessary for compensating one sickness fund has to be taken from another fund. However, the better-off funds tend to regard the contributions they collect as ‘theirs’, so that the issue becomes politically contentious. The second reason is more technical: the reallocation not only has to consider ‘need’ factors (or other factors determining utilization and expenditure) but also the differing contribution bases of the funds. Thus, although revenue collection and risk-pooling are two distinct functions, the organizational forms used appear to be related.

Not surprisingly, risk-structure compensation is discussed fiercely in Germany and Switzerland. In both countries, all of the expenditure required to cover the uniform benefits basket – more than 90 per cent of all income – is liable to pooling and redistribution. The Federal Insurance Office carries out the risk-structure compensation in Germany⁷ and the joint organization of insurers offers compulsory health insurance (known as Foundation 18 based on the relevant paragraph in the health insurance law) in Switzerland. Austria has no formal mechanism for financial redistribution, but funds in financial difficulty may apply to the association of social insurance funds for financial aid from other funds.

The role of taxes in funding social health insurance

The common assumption that social health insurance countries rely mainly on contributions to finance their health systems has to be questioned. International statistics on sources of health care funding often do not specify whether expenditure through taxation includes tax-financed payments to the social health insurance financing system (U + V + W in Figure 3.1) or whether these are included as social health insurance expenditure. Austria and Switzerland,

for example, finance a substantial part of hospital care directly through taxation, and social health insurance therefore covers a relatively low proportion of expenditure. In other countries, such as the Netherlands, the sickness funds exclusively finance hospital care and, in turn, receive substantial subsidies from general taxation. Besides the Netherlands, subsidies from taxes – which are paid to a joint fund administered by the sickness funds (V in Figure 3.1) – are quite substantial in Belgium and Luxembourg. In Austria, on the other hand, as in Germany, funds receive no subsidies from taxes (except for the farmers' funds in both countries, indicated by W in Figure 3.1). France has a mixed approach. Its direct tax subsidies are rather low and limited to funds with members with a low income or high need such as the farmers' fund, but it allows the funds to accumulate sizeable deficits that were covered by the state and are now being paid off through a special social debt repayment contribution (E2 in Figure 3.1) – a mechanism by which social health insurance financing is retrospectively changed into tax financing.

Two factors have to be combined to estimate the extent to which countries rely on social health insurance contributions based on wages: the percentage of social health insurance income through contributions ($C/(C + E1 + U + V + W)$ in Figure 3.1) and the percentage of overall health expenditure covered by social health insurance ($((C + E1 + U + V + W)/(C + E + P + T))$). Based on such a calculation, Germany and the Netherlands are the only countries in western Europe that cover more than 60 per cent of total health care expenditure through wage-related contributions. Until 1997, France was the country that relied most heavily on such contributions, but since it shifted to a wider base for contributions, the share is currently below 60 per cent. Austria and Luxembourg finance a little less than 50 per cent and Belgium even less than 40 per cent of total health care expenditure through wage-related contributions (Table 3.1). In some respects, the Belgian system is more properly classified as mixed in terms of funding sources, as taxes accounted for 38 per cent of expenditure versus 36 per cent from social security contributions in 1994 (Crainich and Closon 1999).

Reforming social health insurance systems in western Europe

Since the 1980s, reforms in financing in the social health insurance countries have had several, partly conflicting objectives: to increase equity, efficiency or choice for insurees and to stabilize contributions without adversely affecting the labour market. This section discusses the reforms aiming at different objectives in the Netherlands, Germany and France.

Reforms to ensure equitable financing in the Netherlands

In the 1980s, the system of voluntary insurance for elderly and self-employed people collapsed because private insurers were offering low premiums to young

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and healthy people. High-risk groups were left with a choice between a policy with high deductibles or leaving the voluntary scheme. The government was forced to take action and introduced two acts in 1986: the Access to Health Insurance Act (WTZ) and the Act on Co-financing the Overrepresentation of Elderly People in the Sickness Fund Scheme (MOOZ).

The WTZ guarantees access to insurance, as private insurers are obliged to accept applicants from certain defined groups, and authorizes the Minister for Health, Welfare and Sport to determine a guaranteed benefits package and its associated premiums. However, premiums for this scheme were insufficient to cover expenditure. In accordance with the legislation, an equalization fund was set up, administered by representatives of the private insurers, to redistribute funds to compensate for insurees in these specific categories (corresponding to about 40 per cent of the total costs of the private schemes). The law also enforces income solidarity among privately insured people, since they have to pay a fixed amount per month to the equalization fund to compensate for the costs of the insurees covered by the standard package policy. The MOOZ requires solidarity payments to be transferred from privately insured people to the Central Fund of the ZFW scheme. This compensates for the numbers and costs of elderly people, who are over-represented in the statutory scheme.

The Council for Public Health and Healthcare (Raad voor de Volksgezondheid en Zorg 2000) has said that both the WTZ standard package and the MOOZ regulations could violate European Union (EU) law on fair competition and recommends that the role of the EU and that of EU countries in health care be redefined (Sheldon 2000).

Introducing choice of sickness fund and risk-pooling in Germany

Traditionally, most insured people in Germany were assigned to a sickness fund based on place of residence and/or occupation. This led to greatly varying contribution rates because the income and risk profiles of different occupations vary. White-collar workers had a choice of fund on joining or when changing jobs. Only voluntary members, those with an income above a certain threshold, had the right to choose among several funds and to change funds.

The Health Care Structure Act of 1993 extended the right to choose a sickness fund freely and to change funds each year (from 1996). All general regional funds and all substitute funds were legally obligated to accept all applicants for membership. The company-based funds and the guild funds may choose whether to restrict access. However, if they opt to allow unrestricted access to members, they are also obligated to accept all applicants. Only the farmers', the miners' and the sailors' funds still retain the system of assigned membership.

To ensure that all sickness funds started from an equal position when competition was introduced, a scheme for risk-structure compensation was introduced in two steps (1994 and 1995). In the second stage, retired insurees were included. Previously, funds had shared the actual expenses of retired people.

The aim of the scheme for risk-structure compensation was to reduce differences in contribution rates resulting from different income levels and expenditure because of the age and sex composition of members. The compensatory mechanism requires all sickness funds to provide or receive compensation for the differences both in their contributory incomes and in their average (standardized) expenditure (Busse 2001).

Free choice and the compensation scheme affected the social health insurance system as follows.

- Movement between funds increased. Changes in membership are correlated with contribution rates: funds with higher than average contribution rates lose members, whereas those with lower than average rates gain members (Müller and Schneider 1999).
- For people who have moved from one fund to another, 58 per cent cited lower contributions as the main motive, whereas for people considering a move, both the contribution rate and better benefits are equally important. People not considering a move regard 'better benefits' – despite almost identical benefit packages – to be more important (Andersen and Schwarze 1998).
- The risk-compensation scheme has narrowed differences in contribution rates between funds. This trend is especially observable in western Germany but recently also in the east. In 1994, 27 per cent of all members paid a contribution rate differing by more than one percentage point from the average, and this figure declined to 7 per cent in 1999.
- The movement of members between funds has not equalized the different risk structures but has segregated membership further: the healthier, younger, higher-earning people move more often and towards cheaper funds.

Replacing payroll contributions by an earmarked health tax in France

France's social security system was in constant deficit in the 1990s, with health care being the main reason. Social contributions were blamed for increasing labour costs and for adversely affecting employment. They were also considered as an insecure source of revenue, as they depend heavily on employment levels and economic activity. In an effort to address structural and financial difficulties, Prime Minister Alain Juppé presented a plan to reform the social security system in December 1995. There were three main aims: to avoid negative effects on the labour market, to reduce the public deficit and to achieve consistency between the founding principles of social security and funding mechanisms (Bouget 1998).

One of the main proposals was to widen the base of the general social tax. This tax, levied on all types of income, including savings, subsidies, pensions and capital income, was set at 1.1 per cent in 1991 and was initially allocated to family benefits. In 1996, it was earmarked for health. The employees' payroll contributions for health were largely replaced by an increase in the earmarked health tax from 1998: while the payroll contribution rate decreased

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from 5.5 to 0.75 per cent, the earmarked health tax increased from 3.4 to 7.5 per cent – thereby reducing the overall percentage but widening the base on which it has to be paid. The employer's contribution was maintained. Another measure was to create a new tax, the social debt repayment tax to clear the debt of the social security system (Lancry and Sandier 1999). Starting from 1996 and due to last for 13 years, this new tax is set at 0.5 per cent of total income and is levied on the whole population, except those receiving state benefits and disability pensions. France has three different income bases for financing the social security system: one for social contributions, a second for the earmarked health tax (E1 in Figure 3.1) and a third for the social debt repayment tax (E2 in Figure 3.1). Future debates will focus on the collective choice between proportional taxes, notably the earmarked health tax, and progressive taxes such as income tax (Bouget 1998).

Conclusion

In effect, reforms in these countries were often aimed at achieving more than one of the objectives. By introducing monetary transfers from private health insurance to statutory health insurance, the reform in the Netherlands not only improved the equity of the system but also addressed the revenue crisis within the statutory scheme. Germany's main aim was increasing choice, but the desire to increase efficiency was also important (mainly through better contracting with providers, which is not the topic of this book). Eliminating the previous inequality between white- and blue-collar workers was a third aim – and secured the support of the Social Democratic Party of Germany, which was in opposition at the time. A mix of objectives is also visible in France: widening the contributory base and increasing equity.

Nevertheless, reforms in different countries with the same objectives may lead to different outcomes; for example, the pro-competition reforms in Germany and the modified Dekker Plan in the Netherlands. In Germany, the risk-structure compensation narrowed the traditionally large differences in contributions (ensuring increased equity). In the Netherlands, however, the non-income-related per-capita premium had the effect of widening differences in contribution (decreasing equity).

Reforms within one country may have both conflicting aims and/or outcomes. For example, the WTZ and MOOZ reforms in the Netherlands increased equity in financing, but the subsequent Dekker/Simonis reform decreased equity in financing by introducing a non-income-related per-capita premium.

Strengths and weaknesses of social health insurance financing in western Europe

Properly discussing the strengths and weaknesses of social health insurance financing requires clarity on the objectives of health policy. The policy objectives considered here are financial sustainability, equity, efficiency, responsiveness and satisfaction.

Although the models of social health insurance and general taxation are similar, they differ systematically in practice. First, the separate structures for collecting and managing funds tend to result in greater transparency. However, the organizational autonomy of social health insurance funds also requires adequate systems of accountability. Second, that access to care depends on contributions to the fund gives the patient the status of a customer. The relationship between insurer and member is therefore more contractual, and thus the benefits to which the contributors are entitled have tended to be more explicitly defined. Third, revenue is determined by contributions and not by political preferences; social health insurance is thus less politicized.

Since there is no simple answer to the question of how much should be spent on health care, adequacy is best judged in the context of a country's total resources and other development priorities (Cichon *et al.* 1999). There are several reasons and some evidence to suggest that separating health care spending from other government-mandated spending can increase funding for health services. Most importantly, perhaps, greater social willingness to pay for health care seems to be associated with the hypothecation of funds inherent in a transparent arrangement for funding social health insurance. This also appears to translate into greater population satisfaction with social health insurance systems than with systems funded by general revenue or voluntary insurance (Ferrera 1993; Mossialos 1998). Separating health care financing from government financing allows people to consider separately the desirability of higher contributions for better services, secure in the knowledge that any additional contributions will not be diverted to other government programmes they may consider to be of lower priority.

Most systems of social health insurance use current employment income as the contribution base, in part because they originated as employer-sponsored systems. Since income from employment has historically been a good proxy for ability to pay, this has generally been fair. However, this narrow base is becoming less satisfactory for several reasons. First, the trend towards self-employment is increasing at the expense of employment. Second, more people have more than one job. Third, wealth affects ability to pay but is not taken into account. Fourth, capital income is an increasing proportion of income. The introduction of social health insurance in the countries of central and eastern Europe has shown that there are problems with this narrow contribution base, and ways may be needed to take into account wealth and non-employment income in assessing contributions to increase revenue and improve equity.

The issue of who actually pays for social health insurance systems is not straightforward, despite the visible division between insurees and employers. Much depends on the amount of competition in product and labour markets. If markets are very competitive, then firms will only survive if they contain the total cost of employment, so that the total amount spent on wages and insurance contributions is likely to be constant. If insurance contributions rise, then wages over time are likely to fall. Thus, in economic terms, the employers may shift their share of the payroll contribution to employees in the form of reduced wage growth. The tax treatment of insurance contributions is

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also important. If contributions are exempt from tax, then contributions cost the same for employers to pay as increasing wages and for employees to pay and in principle it makes no difference who pays.

A tax is progressive if the proportion of income paid in tax rises as income rises. In a regressive system, the proportion falls as income rises. Health care financing can be analysed similarly – funding is progressive if the proportion of income paid for health care rises as income rises. The findings of the ECuity Project (van Doorslaer *et al.* 1993; Wagstaff *et al.* 1999) suggest that social health insurance is, on average, slightly less progressive than tax financing but much more progressive than private financing arrangements. Although *The World Health Report 2000* (WHO 2000) confirms the results regarding private financing, social health insurance and tax financing do not differ systematically in financial equity according to that calculation.⁸

While differences within tax-financed systems depend on the mix between (progressive) income taxes and (regressive) indirect taxes as well as how completely they are collected, equity differences among social health insurance countries depend on several factors:

- the extent to which contributions are based on income (rather than per-capita premiums);
- whether richer and/or healthier people are paying relatively less (through income ceilings or no-claim bonuses) or are allowed to stay out of the system altogether;
- the extent to which the contributions to different funds are pooled, i.e. adjusted for differing risks; and
- the extent to which benefits are fully covered or require cost-sharing.

All these points have to be considered with special attention to including or excluding dependants: equity decreases further if per-capita premiums are charged for members and dependants. Including dependants might lead to greater inequity if a ceiling exists: an affluent couple with one non-employed spouse pays once, whereas a middle-class double-income couple pays twice.

Historically, many countries, most notably Germany, have had multiple funds but not competing funds. This is changing as the right to choose insurer has been introduced. Equity is not related to the existence or lack of competition, but rather to the existence or lack of functioning pooling mechanisms; in other words, regional monopoly funds can be inequitable if resources are not pooled and competing sickness funds can be equitable if resources are effectively pooled.

If a perfect system of risk adjustment is introduced and full allowance is made for differences in incomes, then full choice and competition between funds and full solidarity are theoretically possible. However, such mechanisms are complex and expensive, and increased diversity and choice can also increase inequality in access to care. For a more detailed discussion of risk-adjustment mechanisms between competing insurance funds, see Chapter 11 and Busse (2001) for Germany, Chinitz and Shmueli (2001) for Israel and Okma and Poelert (2001) for the Netherlands.

International comparisons show that social health insurance systems have higher expenditure than tax-funded systems. The important question is whether this higher spending reflects a higher volume of services or simply higher costs of producing care, because of higher transaction costs and/or higher provider income. The available evidence is limited and allows no clear conclusions. Again a combination of *a priori* reasoning and evidence is helpful.

Efficiency in the production of care requires structures, skills, motivation and incentives. Structures affect efficiency both through the market power of buyers and sellers and by affecting transaction costs. A serious issue in assessing the efficiency of different financing systems is how to minimize management and transaction costs. Evidence on the relationship between management costs and performance is still poor (Street *et al.* 1999). Although much of the transaction costs in social health insurance systems are related to contracting and purchasing services (and whether funds do this individually or collectively is a major determining factor), only the transaction costs of collecting, pooling and allocating contributions are relevant here. Unfortunately, the management costs of sickness funds are not broken down into collecting and pooling versus contracting and purchasing, and we do not have comparative data from tax-based systems on the transaction costs of collecting taxes and allocating them to, for example, health authorities. If, however, sickness funds are small and have differing contribution rates and different ways of collecting contributions, the danger of inefficiency is great – but there is no reason why social health insurance should necessarily involve higher transaction costs than tax financing.

However, as the desire for diversity and choice increases, the tendency to incur high costs and to reduce the downward pressure on costs is a major risk (Normand and Weber 1994). The choice of simple contracting arrangements in Germany is in part a response to the need to contain costs, although it will be interesting to see the effects of the current trend towards increasing competition between funds. Between 1995 and 1999 (since the introduction of competition), the visible administration costs of the funds as a percentage of all expenditure have increased from 5.24 to 5.76 per cent (Bundesministerium für Gesundheit 2000). To a certain extent, this results from employers shifting costs to the funds in company-based funds.

Because resources are never sufficient to satisfy all demands, some form of rationing or priority-setting is inevitable. A shift from tax financing to social health insurance does not change this. However, it may change who is responsible for choosing which services are provided and may shift blame for constraints (at least in part) away from governments.

Social health insurance systems tend to be associated with high levels of satisfaction in the population. The sources of this satisfaction are interesting, including a combination of solidarity (although less than with general revenue funding) and transparency (a clear advantage of social health insurance systems). To some extent, social health insurance may make every patient a private patient. Social health insurance systems have certainly been associated with attitudes to patients that treat them as valued customers and not simply a nuisance, as suggested by the high responsiveness ratings in *The World Health Report 2000* (WHO 2000).⁹

Conclusions

Learning from the experiences of others is positive but should not lead to copying systems originating in different settings. Social health insurance in western Europe has been very successful at meeting particular goals, especially in providing near-universal access to care. It provides services that are acceptable to the public and that have some solidarity. The details of the organization of funds and provision of care have often arisen as a result of slow evolution and adaptation of institutions to meet new challenges. There are many clear advantages. The problems are mainly in the risk of cost escalation, excessive reliance on too narrow a contributions base, and the potentially high costs of management and transactions in contracting and purchasing.

Countries that are considering developing social health insurance need to be aware of the trade-offs between costs and the range of services available, between costs and the extent of diversity and choice, and between competition and the objectives of equity and containing management costs. History and tradition have played very important roles in determining exactly how social health insurance operates. Germany's system appears to be very diverse and pluralistic but is also a uniform system, since contracting between all funds and all providers is collective. It has developed into a system of cooperation with important elements of diversity. As reforms are increasing competition, it will be interesting to see whether the (often very important) traditions and unwritten rules can withstand the changes. The recent reforms in France and the Netherlands have been grappling with the different objectives of universality, containing the costs of services and of administration (and increasing the income of the funds), while retaining the features of the systems that users value.

Social health insurance has many variants, and the performance of social health insurance systems may depend significantly on how contributions are collected, pooled and allocated to sickness funds as purchasers of care. However, the main argument in favour of social health insurance systems is that they are proportional and thus a way of collecting revenue that is relatively more equitable than private health insurance. Income ceilings limit the extent of progressivity, especially compared with general tax funding. The financial flows are more transparent, thus making (high) contributions by the public acceptable. The combination of employer and employee contributions mobilizes additional revenue but may adversely affect job mobility and economic competitiveness. Pooling funds under the control of independent bodies increases the autonomy of decision-making from the political process. The insurance relationship persists in the explicitness and transparency of benefits and the handling of patients as customers.

However, social health insurance risks becoming too dependent on the payroll for contributions at a time when the proportion of people with permanent jobs in large organizations is declining. Developing social health insurance is easier when the pattern of employment includes large firms and formal employment as the norm. Social health insurance can be emphasized as the organizational form for pooling funds and purchasing services, while general taxation (or a mix of general and payroll taxation) can be the main source of funds.

The fact that social health insurance systems have evolved and survived suggests that this model of quasi-independent funds can offer a sustainable model that can adapt to different conditions. Most systems are significantly regulated by government, and systems vary from being close to hypothecated taxes to those where government loosely supervises the independent funds. Many systems have some tax-financed components (not all of which are visible and fully acknowledged), while others have government guarantees for debt. Social health insurance countries typically spend more on health than those that use tax financing. One reason is that the financial flows are more transparent and funding for health care is more acceptable. Serious consideration has been given recently to developing competition in collecting and managing the funds. It remains to be seen whether market forces can play a useful role in forcing costs down while avoiding the potential problems of inequity and high transaction costs.

Notes

- 1 We thank Jan Bultman and Fons Berten for providing background material on social health insurance in the Netherlands and Anne-Pierre Pickaert for information on France.
- 2 The usual attribution of other characteristics to social health insurance systems, such as contracts between funds and providers or the relatively unrestricted access of patients to providers, are outside the scope of this chapter. These relationships and financing flows are therefore shown as dotted lines in Figure 3.1.
- 3 Self-employed people are excluded from social health insurance unless they have been a member previously (except those who fall under mandatory social health insurance coverage like farmers), and active and retired permanent public employees such as teachers, university professors, employees in ministries, and so on, are excluded *de facto* as they are reimbursed by the government for most of their private health care bills (most of them receive private insurance to cover the remainder).
- 4 Since compulsory health insurance was introduced in 1996, Switzerland has had a system of community-rated health insurance premiums. These differ between insurers but are community rated for all people insured by each insurer in a certain region (usually the canton).
- 5 This rule has exceptions. The largest group treated differently were pensioners (until 30 June 1997), since their contributions were based uniformly on the average contribution rate of all funds. For that purpose, the average rate on 1 January each year was applied 6 months retrospectively and 6 months prospectively (from 1 July of the previous year until 30 June of the same year). Since 1999, workers who earn less than €322 per month have been required to pay a uniform rate of 10 per cent, and this group was not mandatorily insured before. Students pay a uniform premium per person.
- 6 The only exemption being the ceiling for miners (mandatorily insured in the miners' fund), which is one-third higher than normal.
- 7 The Federal Insurance Office is charged with supervising sickness funds operating country-wide and with the risk-structure compensation mechanism between all sickness funds. Before 1994–95, Germany had a mixed system: expenditure for pensioners was covered jointly by all funds (as in Luxembourg), whereas contributions and expenditure for all other insurees were not reallocated at all (as in Austria).

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- 8 The top 12 countries in the world in fairness in financing include Austria, Belgium, Germany and Luxembourg, as well as Denmark, Finland, Ireland, Norway and the United Kingdom (whereas France, the Netherlands and especially Switzerland rank lower).
- 9 Switzerland, Luxembourg, Germany and the Netherlands rank second, third, fifth and ninth in the world in terms of responsiveness, whereas of the tax-financed systems in western Europe, only Denmark achieves a comparable position (fourth).

References

- Altenstetter, C. (1999) From solidarity to market competition? Values, structure and strategy in German health policy 1883–1997, in F.D. Powell and A.F. Wessem (eds) *Health Care Systems in Transition*. Thousand Oaks, CA: Sage Publications.
- Andersen, H.A. and Schwarze, J. (1998) GKV '97: Kommt Bewegung in die Landschaft? Eine empirische Analyse der Kassenwahlentscheidungen [Statutory health insurance 1997: is there movement in the landscape? An empirical analysis of decisions to change sickness funds], *Arbeit und Sozialpolitik*, 52(9/10): 11–23.
- Bouget, D. (1998) The Juppé plan and the future of the French social welfare system, *Journal of European Social Policy*, 8(2): 155–72.
- Bundesministerium für Gesundheit (Federal Ministry of Health) (2000) *Statistisches Taschenbuch Gesundheit 2000 [Statistical Report Health 2000]*. Bonn: Bundesministerium für Gesundheit.
- Busse, R. (2000) *Health Care Systems in Transition: Germany*. Copenhagen: European Observatory on Health Care Systems.
- Busse, R. (2001) Risk structure compensation in Germany's statutory health insurance, *European Journal of Public Health*, 11(2): 174–7.
- Cichon, M., Newbrander, W., Yamabana, H. et al. (1999) *Modelling in Health Care Finance: A Compendium of Quantitative Techniques for Health Care Financing*. Geneva: International Labour Organization.
- Crainich, D. and Closon, M-C. (1999) Cost containment and health care reform in Belgium, in E. Mossialos and J. Le Grand (eds) *Health Care and Cost Containment in the European Union*. Aldershot: Ashgate.
- European Commission (2000) *MISSOC (Mutual Information System on Social Protection in the European Union): Comparative Tables*. Brussels: Directorate-General for Employment and Social Affairs, European Commission. http://europa.eu.int/comm/employment_social/soc-prot/missoc99/english/f_tab.htm (accessed 25 February 2001).
- Ferrera, M. (1993) *EC Citizens and Social Protection: Main Results of a Collaborative Survey*. Brussels: European Commission.
- Kerr, E. (1999) *Health Care Systems in Transition: Luxembourg*. Copenhagen: European Observatory on Health Care Systems.
- Lancry, P-J. and Sandier, S. (1999) Twenty years of cures for the French health care system, in E. Mossialos and J. Le Grand (eds) *Health Care and Cost Containment in the European Union*. Aldershot: Ashgate.
- Malin, E-M. and Schmidt, E.M. (1996) Beitragsrückzahlung: keine Auswirkungen auf die Leistungsanspruchnahme [Contribution repayment: no effect on service demand], *Die Betriebskrankenkasse*, 84(8): 379–83.
- Minder, A., Schoenholzer, H. and Amiet, M. (2000) *Health Care Systems in Transition: Switzerland*. Copenhagen: European Observatory on Health Care Systems.
- Mossialos, E. (1998) *Citizens and Health Systems: Main Results from a Eurobarometer Survey*. Brussels: Directorate-General for Employment, Industrial Relations and Social Affairs, European Commission.

- Müller, J. and Schneider, W. (1999) Entwicklung der Mitgliederzahlen, Beitragssätze, Versichertenstrukturen und RSA-Transfers in Zeiten des Kassenwettbewerbs – empirische Befunde im dritten Jahr der Kassenwahlrechte [Trends in membership levels, contribution rates, types of insureds and risk adjustment transfers during the period of insurer competition – empirical findings in the third year of fund choice], *Arbeit und Sozialpolitik*, 53(3/4): 20–39.
- Nonneman, W. and van Doorslaer, E. (1994) The role of the sickness funds in the Belgian health care market, *Social Science and Medicine*, 39(19): 1483–95.
- Normand, C. and Weber, A. (1994) *Social Health Insurance: A Guidebook for Planning*, Document WHO/SHS/NHP/94.3. Geneva: World Health Organization.
- Okma, K. and Poelert, J. (2001) Implementing prospective budgeting for Dutch sickness funds, *European Journal of Public Health*, 11(2): 178–81.
- Raad voor de Volksgezondheid en Zorg (Council for Public Health and Healthcare) (2000) *Europe and Healthcare*. Zoetermeer: Raad voor de Volksgezondheid en Zorg. <http://www.rvz.net/Samenvat/Werk99/europe.htm> (accessed 25 February 2001).
- Roemer, M. (1969) *The Organization of Medical Care under Social Security*. Geneva: International Labour Office.
- Ron, A., Abel-Smith, B. and Tamburi, G. (1990) *Health Insurance in Developing Countries: The Social Security Approach*. Geneva: International Labour Organization.
- Schut, F.T. and van Doorslaer, E.K.A. (1999) Towards a reinforced agency role of health insurers in Belgium and the Netherlands, *Health Policy*, 48(1): 47–67.
- Sheldon, T. (2000) EU law makes Netherlands reconsider its health system, *British Medical Journal*, 320(7229): 206.
- Shiveli, A. and Chinitz, D. (2001) Risk-adjusted capitation: the Israeli experience, *European Journal of Public Health*, 11(2): 182–4.
- Street, A., Carr-Hill, R. and Posnett, J. (1999) Is hospital performance related to expenditure on management?, *Journal of Health Services Research and Policy*, 4(1): 16–23.
- van Doorslaer, E., Wagstaff, A. and Rutten F. (1993) *Equity in the Finance and Delivery of Health Care: An International Perspective*. Oxford: Oxford University Press.
- Wagstaff, A., van Doorslaer, E., van der Burg, H. *et al.* (1999) Equity in the finance of health care: some further international comparisons, *Journal of Health Economics*, 18(3): 263–90.
- WHO (2000) *The World Health Report 2000. Health Systems: Improving Performance*. Geneva: World Health Organization.