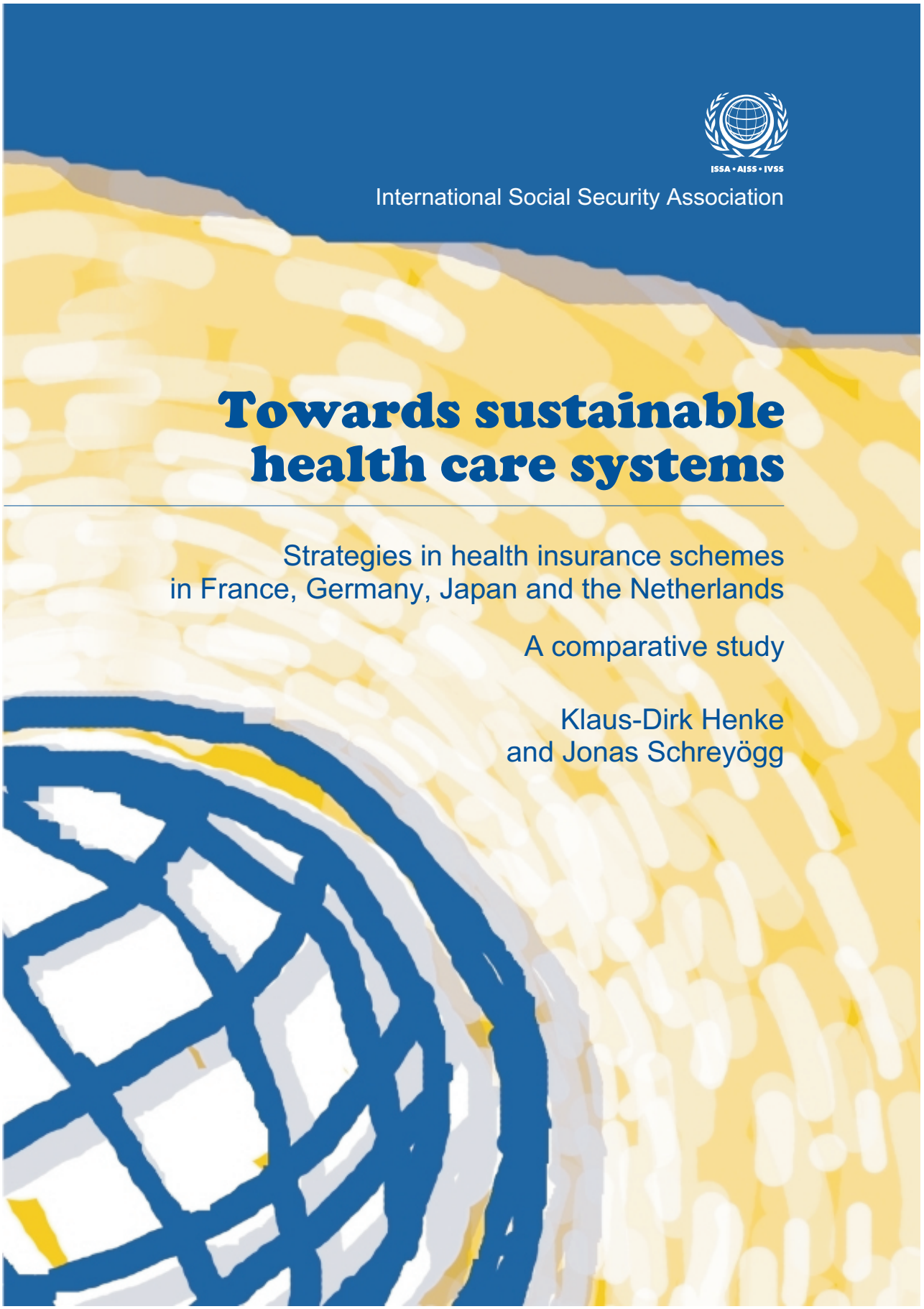
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International Social Security Association
Towards sustainable health care systems
Strategies in health insurance schemes in France, Germany, Japan and the Netherlands
A comparative study
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A comparative study

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Foreword

Sickness insurance systems throughout the world are facing problems of financial equilibrium. Worse still, current forecasts leave no room for hope of a natural upturn. All the data now available, including demographic and economic indicators and the impact of technological evolution, indicate that leaving the situation as it is now, can only lead to a deterioration.

In this area, reforms are required in order to guarantee the long-term survival of sickness insurance schemes. The Japanese member organizations of the ISSA have financed a four-country survey on this subject, in order to produce a comparative review of the causes and the measures introduced to resolve these problems. In addition to Japan, the survey covers sickness insurance systems in Germany, France and the Netherlands.

The Development, Communications and Research Branch of the ISSA coordinated this survey, and Professor Klaus Dirk Henke, of the University of Berlin, was asked to provide a synthesis of the four national monographs that were produced. The quality of both the document itself and the observations and conclusions drawn, have led the ISSA to publish and disseminate it widely, thus taking the debate on this major issue, which is of vital importance for the future of social security, yet another step forward.

This survey is one of the many publications issued as a result of the ISSA Initiative project. In fact, it launched the theme *Assessing the Coverage Gap*, which was tasked to review social protection currently available throughout the world as well as pinpointing factors which reduce the cover provided by existing systems, while proposing corrective measures.

The ISSA would like to thank its Japanese member organizations for their contribution to this project which, it is expected, will make a valuable contribution towards the long-term survival of high quality health care for beneficiaries of sickness insurance systems. We would also like to thank the sickness insurance funds in the four countries studied who, as member organizations of the ISSA, provided the Association with the support which was indispensable for the successful completion of this major project.

Dalmer D. Hoskins

Secretary General

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1 Executive summary

In France, Germany, Japan and the Netherlands, health care expenditures grow while revenue remains at the same level or even shrinks, and medical progress, ageing and other factors are widening this gap over time. The pay-as-you-go approach is reaching limits, either with rising employer and employee contribution rates in the "Bismarck systems" or with higher taxes in the "Beveridge systems." Neither of these systems is able to regulate itself quasi-automatically. Political interventions are needed with increasing frequency, and patchwork repair is evident everywhere. Major reforms are either too difficult or politically unmanageable in the highly sensitive and complex area of health care. This situation explains why in Europe and Japan, the public is calling for more substantial and longer lasting reforms.

The solution to this situation is relatively easy. The nations facing financial gaps can:

- Cut back expenditures through budgets, exclusion of benefits and services or both.
- Increase revenue through higher contribution rates, a broader base for financing, higher co-payments and out-of-pocket-expenditures or some combination of these mechanisms.
- Institute major structural reforms to close the financial gap. These reforms can be accomplished through the ability-to-pay-principle or the benefit or insurance principle.

All four nations examined in this report implement these theoretical approaches at one time or another, but there are differences in the way they do so. A comparison of their approaches might be beneficial to them as they face continuing challenges in closing the gap between health care expenditures and revenue.

Impacts on health care systems

Health care expenditures have risen considerably in the past 10 years in all four countries. Between 1992 and 2001, yearly increases in total health expenditures averaged 3.48 per cent in Japan, 3.75 per cent in Germany and 3.98 per cent in France, but health care expenditures in the Netherlands rose an average of 6.18 per cent per year during the same period. The percentage of gross domestic product (GDP) spent on health care services also increased over the last decade in all four countries, with Japan experiencing the largest increase, from 6.2 per cent in 1992 to 7.6 per cent in 2000.

Demographic characteristics

Changes in demographic characteristics are one major cause of recent expenditure growth in all four countries. A higher life expectancy combined with lower birth rates led

to an ageing population in most industrial countries. In Japan, the number of people above the age of 65 years rose from 5.7 per cent of the total population in 1960 to 17.4 per cent in the year 2000. The changes in the three European countries were not so dramatic, but the number of people above the age of 65 years increased as well during the same period: from 11.6 per cent to 16.4 per cent in Germany, from 11.6 per cent to 16.1 per cent in France and from 9.0 per cent to 13.6 per cent in the Netherlands.

Changing patterns of disease

Changing patterns of disease are partially linked to the demographic changes that have a direct impact on the provision of health care and therefore on health expenditures. First, a shift to chronic diseases can be observed. Allergies, asthma and diabetes are becoming widespread. Second, an improved standard of living is making excessive weight a widespread health problem. For example, the number of people in France considered to be overweight, as measured by body mass index, rose from 5.8 per cent in 1990 to 9 per cent in 2000. The Netherlands and Japan have similar problems. This development is alarming because diseases associated with the skeleton, muscles and circulatory system are expected to increase as a result of this increase in excess weight. Nevertheless, life expectancy and healthy life expectancy have increased in all four countries over the past 40 years. In the year 2000, Japan had the highest life expectancy at birth of 81.3 years, followed by France with 79.0 years and the Netherlands with 78.0 years. Germany has had the lowest average life expectancy at birth of all four countries for more than 30 years.

Technological progress

New technologies have significantly increased the effectiveness of health care services, reducing the duration of treatments, improving outcomes and curing illnesses that were formerly incurable. The need for inpatient care also decreased. Between 1990 and 2000, the average length of stay in a hospital dropped by 26 per cent from 2.4 days per person per year to 1.9 days in both France and Germany. Additionally, technological progress has had an impact on longevity. Between 1975 and 1995, the number of life years lost because of diseases was reduced by 40.5 per cent in Japan, 45.3 per cent in Germany, 34.8 per cent in France and 31.3 per cent in the Netherlands.

Economic situation

In all four countries, the increase of health care expenditures as a percentage of GDP is due partially to the deceleration of economic growth. Japan experienced a decline in annual average GDP growth rate from 4.5 per cent between 1970 and 1990 to 2.2 per cent in 2000 and –0.8 per cent in 2001. Germany also is on the verge of a recession, with a decline in GDP growth rate from 2.9 per cent in 2000 to 0.8 per cent in 2001 and 0.2 per cent in 2002. In 2002, the GDP growth rate was 1.2 per cent in France and increased by only 0.2 percent in the Netherlands. Because health care systems that follow the Bismarckian approach, as all four countries in this report do, are linked mostly to wages and salaries as the base for contributions, high unemployment rates contrib-

uted to the financial constraints of their sickness funds. Although unemployment rates increased sharply between 2000 and 2002 in Japan (4.7 per cent to 5.4 per cent) and Germany (7.8 per cent to 8.6 per cent), the French unemployment rate dropped slightly from 9.3 per cent to 8.8 per cent, and the Netherlands managed to keep unemployment at a low level.

Changes in needs and demands

The changes in health care needs and the occurrence of new demands can generally be regarded as positive developments because they create new supply and therefore economic growth. Because many of these new services and products are reimbursed by the sickness funds in the four countries, however, this increased demand also means higher health expenditures and thus higher contribution rates for the social health insurance systems.

Structural weaknesses of the system

All social health insurance systems contain various disincentives, as well as some fundamental weakness in their structures, such as the separation of inpatient and outpatient sectors in Germany. Such flaws have a direct impact on health expenditures and result in higher insurance contributions. In the case of moral hazard, there is an imminent increase in the redistribution of insurance funds from nonusers to users.

Institutional and organisational framework

The institutional framework of social health insurance and its organisation in the four countries have developed according to national and cultural needs and are sometimes quite far from the original ideas that prevailed at the beginning of social security systems under Bismarck. The categories below facilitate comparisons among the four countries, given the complexity of the different institutional settings.

■ Membership, enrolment and coverage

All compared countries have a social health insurance system based on several sickness fund schemes that cover the majority of the population with health insurance protection. Membership in sickness fund schemes is compulsory; only in Germany and the Netherlands are segments of the population exempted from this obligatory membership.

Benefits

The extent of granted services differs among the countries. Although the sickness fund schemes in Japan and France cover almost the entire population, the granted services are more comprehensive in Japan. For this reason, nearly 90 per cent of the French population is insured by supplementary private insurance, whereas the Japanese popu-

lation has no need to be privately insured, which holds down the market share of private health insurance in Japan. Germany's social health insurance is as comprehensive as Japan's, but it covers only 89 per cent of the population.

Benefits granted by sickness funds in the Netherlands differ completely from those of the other three countries, because the Netherlands has one scheme for long-term care and high-cost treatments, the Algemene Wet Bijzondere Ziektekosten(AWBZ), and it covers the entire population. Another scheme for normal medical care, the Ziekenfondswet(ZFW), covers 63 per cent of the population. As much as 30.2 per cent of the population substitutes the sickness funds scheme (ZFW) with comprehensive private health insurance.

Ownership of sickness funds and freedom of choice

The ownership of the sickness funds in the four countries varies from governmental to nearly private. In France, the financial risk of the sickness funds is carried solely by the state, whereas the Japanese state carries only the deficits of certain schemes and offers the possibility to privately fund sickness funds. In the Netherlands, the sickness funds of the ZFW (normal medical care) increasingly are carrying financial risks on their own. They can also apply for the management of the AWBZ in one region.

Regarding choice, in France membership in one of the three large sickness funds is determined strictly by the type of employment. Japan has a similar arrangement whereby employees in bigger companies of a certain size are insured by society-managed sickness funds, which often belong to the company itself. Employees of smaller companies are insured in one of the sickness fund schemes for special occupations or in the government-managed scheme. All other citizens are compulsorily insured by the municipal insurance scheme called National Health Insurance. In 2000, Japan had a total of 5,192 different sickness funds. In Germany, all citizens are able to choose among a variety of sickness funds, which are organised on a regional or nationwide basis. There were 319 sickness funds in Germany in 2003. The sickness funds are competing with each other on the basis of different contribution rates. Because the Netherlands' AWBZ scheme for long-term care and high-cost treatments consists of only one sickness fund in each region, Dutch citizens have no choice in this segment. In the ZFW scheme for normal medical care, they can choose among 25 different funds.

Competition and risks structure compensation

To spread the financial risks among the different funds and provide fair competition, three countries have implemented a risk structure compensation scheme. Japan does not have such a scheme; instead, the government subsidizes municipal sickness funds because Japan has more retired persons and therefore a more negative risk structure. In Germany, after each calendar year standard expenditures are calculated according to income, age, sex and invalidity. On this basis, certain sickness funds pay into this scheme and other funds receive from the pool. In 2001, Germany introduced a morbidity-oriented risk structure compensation scheme, in effect through the year 2007.

In the Netherlands, the risk structure compensation scheme compensates funds of the ZFW. It comprises both a prospective and a retrospective calculated component. The prospective component is paid to sickness funds as a capitation according to the risk adjusters age, gender, employment/social security status and region. The retrospective component consists of two different mechanisms. First, the sickness funds share any difference between the allocated budget and the actual costs to a certain percentage, called the equalisation percentage. Second, sickness funds are compensated for a certain percentage of the difference between the budget allocated to all sickness funds and the actual expenditure arising from cost drivers that cannot be influenced by the sickness funds. In France, one risk structure compensation scheme compensates differences between the general scheme and small schemes according to the criteria of age and income. Another risk structure compensation scheme adjusts the differences between the three main schemes on the basis of age. Although the introduction of competition in Germany and the Netherlands was also targeted at bringing down the administration costs of sickness funds, the costs are even higher than in France and Japan, which have no competition among sickness funds.

Funding

When Bismarck first introduced social insurance schemes, they were meant to provide sickness benefits and primary care for the needy. Over the years, the provision of primary care was extended to most parts of the population. Although it is under increasing pressure, the pay-as-you-go-principle has remained untouched in all four countries. Instead, the countries have extended the benefits they provide, changed their contribution assessment bases and amended their structure of financing health care.

Contribution rates, income ceiling and contribution assessment bases

In the Netherlands, the contribution rate for the AWBZ is set at 12.3 per cent and is paid completely by the employees with a yearly income ceiling of €27,009 (2003). The contribution rate of 8.45 per cent for the ZFW is paid by the employer (6.75 per cent) and by the employees (1.7 per cent). The income ceiling for the ZFW for 2003 was set at €28,188. Germany has a higher income ceiling at €41,850 (2003). The average contribution rate of 14.3 per cent (2003) is lower in Germany than in the Netherlands and is shared equally between employers and employees. Although the average contribution rates in Japan are nearly the same for the society-managed sickness funds (8.6 per cent in 2003) and the government-managed sickness funds (8.5 per cent in 2003), the rates for the municipal funds vary greatly. As in Germany, the contribution for the Japanese government-managed sickness funds is shared in equal parts by employers and employees, but for the society-managed sickness funds, employers pay 4.8 per cent and employees pay only 3.8 per cent of their income. In France, the contribution rate for the general employee scheme (CNAMTS) is currently 13.55 per cent of wages and salaries and therefore higher than in Japan. The employer carries 12.8 per cent; employees pay only 0.75 per cent. In addition, every employee also pays a tax of 5.25 per cent into

the CSG (Generalised Social Contribution), a state fund with a different contribution assessment base, which is channelled into the sickness fund schemes.

Contribution of pensioners

Every country has its own strategy to handle the growing number of pensioners and the increasing demand for long-term care. In Japan, pensioners have to join the municipal funds, which receive compensation for increased expenditures resulting from the old age structure. In the other countries, pensioners are staying in their former sickness fund schemes but sometimes under changed conditions. In France, they are paying a reduced rate for the CSG of 3.95 per cent, whereas the Netherlands has initiated a lower income ceiling of €19,550 for sickness funds in the ZFW for pensioners. In Germany, pensioners are paying half of the average contribution rate of all sickness funds; the other half is paid from the pension scheme.

Separation of health and long-term care

As a strategy to cope with rising demand for long-term care, Germany and Japan have separated funding for health care and long-term care institutionally. In both countries, risks for long-term care are countries insured under a long-term care insurance with payroll-deducted contributions. In the Netherlands, long-term care is covered by the AWBZ; in France, it is insured under the normal social health insurance, although long-term care insurance will soon be introduced.

■ Burden sharing by income levels and between employers and employees

With contribution rates of 18.8 per cent and without an income ceiling, French residents pay the highest contributions, although it has to be considered that the French social health insurance contributes a higher share to the total health expenditure. Whereas in France social health insurance contributes 76 per cent to the total health expenditures, it contributes only 57 per cent in Germany and 45.2 per cent in Japan. In the Netherlands, its contribution to the total health expenditure is similar to that in France (79 per cent), but Dutch residents pay an even higher rate of 20.75 per cent, and unlike France, the Netherlands has an income ceiling. Under the Dutch design of contributions, persons with incomes up to €30,000 pay more contributions than in France, but those with higher incomes pay less. Japan has the lowest contributions up to an income of €67,500, but the Japanese social health insurance contributes less than the other three countries to the total health expenditure. Germany has the second lowest contribution burden for persons with low incomes up to €41,850 and high incomes from €70,000 and higher.

Employees in the Netherlands pay the highest contributions up to an income of about €65,000 (2003). For higher incomes, the French contributions show more progressiveness. Japanese employees pay the lowest contributions for the lower incomes, and German employees pay the lowest contributions for incomes higher than about €80,000.

Government subsidies for sickness funds and out-of-pocket payment

Social health insurance in every country is partially subsidised by the state. The Japanese state pays for the administrative costs of the government-managed sickness fund scheme, partially subsidises the administrative costs of the society-managed sickness fund scheme and supports the society-managed sickness fund scheme in case of financial difficulties. The society-managed sickness funds had a financial deficit of €2.4 billion in 2002. Unlike Japan, the German state does not cover any financial deficits of sickness funds, although they also were running deficits of €3.1 billion in 2002, but it subsidises them for extraordinary expenditures (e.g., long-term unemployed) with €4.06 billion. France and the Netherlands are also subsidising their sickness funds: in 2000, France with €6.2 billion; and in 2002, the Netherlands with €6.9 billion Euro. The reimbursement percentage for out-of-pocket expenditures varies significantly among the four countries, with the Netherlands showing the smallest and Japan the highest percentage.

Provision and purchasing of health services

Expenditures for each type of service vary according to the design of the health care system. It is difficult to compare overall expenditures for outpatient and inpatient care, but some categories can be compared. It is striking that services reimbursed in some countries by sickness funds or other carriers are in greater demand and therefore represent a higher share of total health expenditures than in countries that do not include them in their benefit catalogue. The Netherlands, for example, spends a significantly lower percentage (3.8 per cent in 2001) of its total health expenditure for dental care than the other three countries, because its dental provision is limited to preventive services for children and surgical care for adults. Another major difference is in long-term care. Outpatient care (7.3 per cent in 2001) and inpatient care (9.5 per cent in 2001) represent a far higher share of total health expenditures in the Netherlands than in any of the other countries.

Hospital care

Ownership. As in the Dutch institutional organisation of the social health insurance, the Netherlands also takes a leading role in privatising hospital infrastructure. More than 90 per cent of the hospital beds in the Netherlands are in private or non-for-profit institutions. (It must be noted that private or-profit management is prohibited in the Netherlands.) In Germany, the share of beds owned by private for-profit and not-for-profit hospitals is steadily increasing (from 37.2 per cent in1990 to 46.8 per cent in 2001). In Japan the share of beds owned by private not-for-profit hospitals is lower than in the Netherlands but still high compared with France and Germany because of the establishment of private “Medical Care Corporations,” which are managed as nonprofit organisations and account for 48.8 per cent of all hospital beds. Compared with the other countries, the share of beds in public hospitals is quite high in France, with 64.8 per cent of all beds. But France also has 21.8 per cent of its beds in private hospitals — a higher

percentage than in Germany, where private nonprofit hospitals are historically more dominant than private hospitals.

Access to *services.* Despite different ownership structures in the four countries, patients insured under social health insurance generally have access to all types of hospitals. Although all patients have access to outpatient services in hospitals, some countries regulate access by establishing referral systems. In the Netherlands, secondary and tertiary care is provided primarily by medical specialists in hospital outpatient care units. Patients have to be referred to these facilities by a general practitioner. Germany also uses a referral system, but specialists outside of hospitals also provide secondary and sometimes even tertiary care. Japan and France have not established a referral system for outpatient services in hospitals; therefore, patients are free to visit any outpatient unit in hospitals. The Netherlands is the only country that is reporting waiting lists for certain diagnostic procedures and treatments in hospitals.

Hospital planning and contracting. Capacities for hospital care are planned on a regional government level by the Läender in Germany and the prefectures in Japan and by the central government in the Netherlands. In France, Regional Hospital Agencies plan hospital capacities. Hospitals included in the regional or central hospital plans usually have contracts with the sickness funds for reimbursement. In terms of hospital infrastructure, the number of personnel per bed has increased and the average length of stay has decreased in all four countries.

Reimbursement and spending control. Regarding reimbursement of hospital services, diagnosis-related groups (DRG's) seem to be the dominant reimbursement method of the future. A system of DRG's has already been introduced in Germany, and one is planned for introduction in the Netherlands and France in 2004. In Japan, a capitation system based on diagnosis procedure combinations (DPC's) was introduced in 2003 for hospitals with specified functions that provide advanced medical care and other services.

User charges. Japan charges the highest co-payment rate for hospital care, at 30 per cent of costs for citizens below the age of 70 years, 20 percent for those above age 70 but only 10 percent for low-income citizens above age 70. France follows a different strategy, with co-payments of 20 per cent for the first 31 days of hospital care and a ceiling of €200, and an additional €10.67 per day for accommodations. Germans pay the lowest user charges for hospital care with a fee of €10 per day, but that amount is limited to a maximum of 28 days per year. The Netherlands is the only country that requires no co-payments at all for hospital care.

Ambulatory care

Employment status and organisation. In Germany and France, the majority of physicians are self-employed and in solo practices. In the Netherlands, ownership and organisation of practice differ according to the field of medical services. Half of the general practitioners are self-employed in solo practices, and the other half are working

in group practices or in health centres. Specialists in the Netherlands usually practice in outpatient departments of hospitals. In other contrast to countries, physicians in Japan practice in all forms of organisations. They are employed by hospitals and practice in outpatient departments or work as self-employed physicians in single practices or clinics, which are similar to health centres in other countries.

Manpower planning. All four countries limit the admission of medical students by quota. Unlike France and Japan, Germany and the Netherlands have limited the number of physicians practicing in ambulatory care by medical specialty and region. Apart from Japan, all other countries legally define the field of medical services physicians are allowed to offer as ambulatory care. In Japan, physicians can freely claim any field of medical services they would like to provide. As in France in Germany, Japan has no gatekeeper system; patients have free choice between general practitioners and any kind of specialists. The Netherlands is the only country of the four that has an institutionalized, mandatory gatekeeper system.

Contracting. In Japan, Germany and France, the sickness funds are obliged to contract collectively with all providers of ambulatory care. In contrast, the Netherlands established a system of selective contracting in 1994. The sickness funds now have a choice whether to contract with certain providers or not.

Reimbursement fees. Physicians are reimbursed for the services they provide in different ways in all four countries. In Japan and Germany, physicians claim their payments from institutionalised bodies that administer the payments for physicians. In Germany, the Associations of Sickness Funds Physicians process claims and reimburse physicians on a regional basis. Unlike Japan, sickness funds in Germany do not reimburse the Associations of Sickness Funds Physicians according to each claim but pay negotiated capitations that differ significantly among sickness funds. The Netherlands has no administrative body for processing claims, but physicians are asked to claim payments directly from the AWBZ, ZFW or voluntary health insurances. French physicians generally claim their fees directly from the patients on a cost-reimbursement basis.

Reimbursement method. Although it is widely accepted that fee-for-service reimbursement leads to an oversupply of services, all four countries still use this method of reimbursement at least partially. Japan and Germany combine the fee-for-service payment with a point system under which physicians receive a certain number of points for each service delivered. In France, services are reimbursed on a fee-for-service basis as in Japan, although some services are reimbursed on a capitation basis. In the Netherlands, reimbursement methods differ between general practitioners (capitations) and specialists (fee-for-service).

Long-term care

Planning. Planning for long-term care capacities takes place on the local, provincial and central levels in the four countries. In general, the planning of resources is espe-

cially conducted for institutional care. In Japan, municipalities (local communities) determine care plans under the supervision of prefectures (provinces). In France, the planning of long-term care capacities is the responsibility of local communities, whereas in Germany, the Länder (provincial) governments plan for long-term care capacities. In the Netherlands, the central government also has the function of planning for institutional care.

Benefits. The statutory long-term care insurance provided by statute in Germany and Japan is paying for institutional as well as home care services. In the Netherlands, institutional and home care services are also fully covered by the AWBZ. Unlike the three other countries, France has no separate long-term care insurance; therefore, the sickness funds are paying for long-term care. However, long-term insurance will be introduced in France soon.

Lessons towards sustainable social health insurance

Competition vs. regulation of sickness funds

For several years, a trend towards enforcing competition among sickness funds has been evident in the Netherlands and Germany. Sickness funds in both countries have opened up, and their risk structure compensation schemes are further developed step by step to ensure fair competition among sickness funds. It is difficult to assess the effect of competition in these countries empirically. Thus far, sickness funds in both countries have not been sufficiently able to influence the decisive parameters for competition such as contribution rates, the services provided and the quality of those services. Therefore, it is yet to be proved that competition among sickness funds is more successful.

Separation of long-term care and high-cost medical care

In view of ageing societies, the rising demand for long-term care and the resulting problems for social health insurance systems, all counties are increasingly concerned with different strategies for financing long-term care. Apart from France, all countries have separated their social health insurance from long-term care by introducing mandatory long-term care insurance. In Germany and Japan, long-term care insurance solely reimburses long-term care services primarily for elderly citizens. The Netherlands has chosen an even more comprehensive approach. This long-term care insurance (AWBZ) supports a smooth transition from hospital care to long-term care, and therefore reduces durations of hospital stays. Because it also separates high-cost medical care and long-term care from normal medical care, it could serve as an example for future organisation of social health insurance.

Private health insurance

With the exception of Japan, the compared countries increasingly rely on the integration of private health insurance with the social health insurance systems. Private health insurance is used either on a supplementary basis to cover certain services not included in social health insurance or on a complementary basis to substitute for social health insurance. Complementary private health insurance might be an option to enforce more service orientation and competition among sickness funds, although in the case of Germany, administrative costs are higher for private health insurance. Supplementary health insurance could be an important element in the design of more sustainable social health insurance systems because it could immediately replace services excluded from sickness funds. In this way, it helps social health insurance to concentrate on its major task, which is to provide risk pooling that prevents citizens from being exposed to financial risks.

User charges

The comparison of the four countries reveals sharp differences in user charges. Japan relies more on user charges for hospital as well as for ambulatory care; the Netherlands does not charge any user fees. Because Japan's ceiling on user charges differs according to income, it has in a certain way a progressive effect similar to that of income-tiered contributions. But it should be noted that user charges can be implemented in a manner that provides an economic incentive (for example, on the basis of patient contact) and therefore prevents an overuse of services. For this reason, user charges as applied in Japan are probably the best solution to generate revenue and create economic incentives at the same time.

Reimbursing hospital care with DRG's

All four countries are working to introduce a system similar to that of DRG's for reimbursement of hospital care. Although Japan appears to be farthest along in this regard, the Netherlands plans the most comprehensive DRG-like system, including both inpatient and outpatient care. Such a comprehensive reimbursement system would integrate these two sectors not only institutionally but also financially. Generally, such a system would facilitate the transition from inpatient to outpatient care and generate cost savings to a certain extent. It would therefore encourage the introduction of integrated care, especially disease management programs, which are gaining importance in view of rapidly ageing populations.

■ Further developments

Certain developments can be anticipated for the future of social health insurance systems. Most countries wish to introduce an integrated health care system while setting priorities in health care. This a consistent topic, and it is the basis on which day-to-day-adjustments take place in all four countries compared in the report. In line

with these corrections and more comprehensive ideas of a health care network, health services in the future may need to be financed differently than in the past. For these new approaches, some financing options exist. They could be modeled on the systems of France, Germany, Japan and the Netherlands, with their customs and historical experiences. Finally, the future of the European welfare state within the European Union, with its growing importance for national and European economic and social policy, has to be taken into account.

2 Introduction

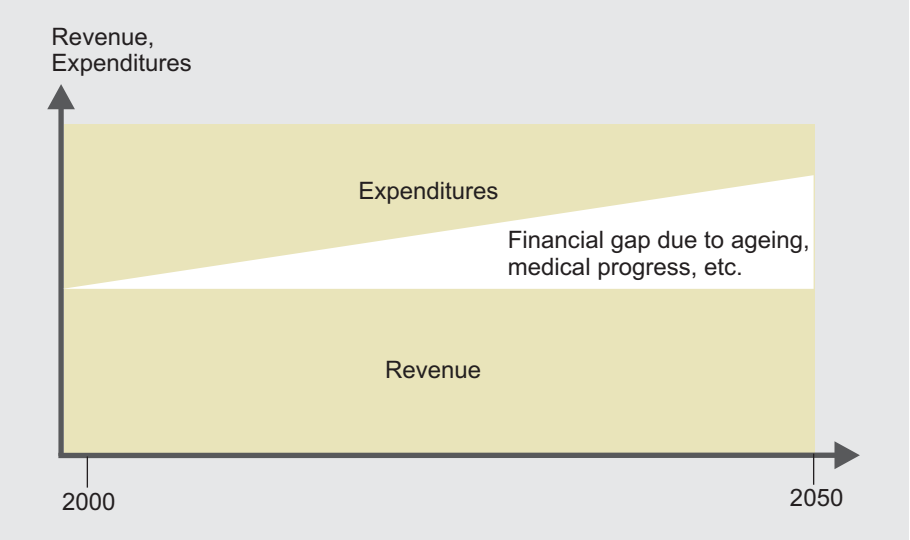
Notwithstanding the differences in the health care systems of France, Germany, Japan and the Netherlands, starting points for discussing health care reform are similar in each country. They include:

- The financial gaps in health insurance systems and other current problems in the four countries (figures 2.1 and 2.2).
- The bases for financing and providing health care are: theoretical approaches to risk management and social welfare. Their basic forms and arrangements are essentially the same for all countries (figure 2.3).
- The goals of social security in general and entitlements to health care in particular are often codified in social laws and provide the foundations for health policy (figures 2.4 and 2.5) and
- The elements of health care reforms which need to be analyzed (figure 2.6).

Financial and other current problems

In figure 2.1 the financial gaps are easily seen: health care expenditures grow while revenues remain at the same level or even shrink in many cases. Due to medical progress, aging and many other factors the gap is widening over time. The overall solution to

Figure 2.1 Financing gaps in social health insurance systems



address this situation is relatively easy and consists of three approaches**:** nations facing financial gaps may first cut back expenditures through budgets and/or exclusion of benefits and services; secondly, they can increase revenues by imposing higher contribution rates, using a broader base for financing and/or through higher co-payments and out-of-pocket-charges, and thirdly, major structural reforms could be the answer to close the financial gap. These reforms can be accomplished, from an overall perspective, on the basis of the ability-to-pay-principle or with the help of the benefit or insurance principle. These approaches are used in all nations. They offer not much more than a simple restructuring of the overall problem that all nations face. But there might be differences, depending on how nations are financing health services. Tax-financed systems may encounter more serious financial problems than the social health insurance systems in France, Germany, Japan and the Netherlands

There are other, specific problems the four health care systems are faced with in both the short and long term. Technological change, medical progress and demographic development were already mentioned. Given the demographic challenge, there exists an intergenerational equity problem which must be solved. In addition, the pay-as-you-go-method is encountering limits, either rising employer and employee contribution rates (in the so-called Bismarck-Systems) or higher taxes (the so-called Beveridge systems). Neither of the two systems is able to regulate themselves quasi-automatically. The number of political interventions has increased, and more patchwork repairs are evident. Major reforms are either too difficult in an increasingly complex area or are politically unmanageable in a highly sensitive area such as health care.

This situation describes in brief why the public is calling for more substantial and longer lasting reforms in Europe and Japan. Sustainability in health care systems has become more than a mere phrase used by the media. Muddling through on a comparatively high level characterizes the situation we are facing in France, Germany, Japan and the Netherlands.

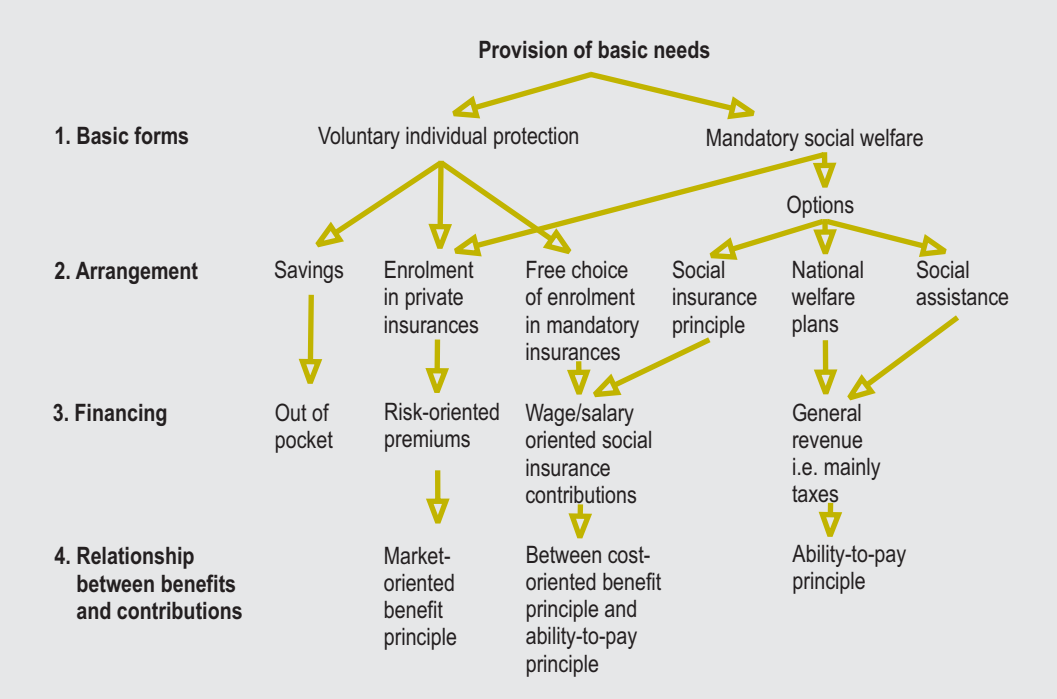
Figure 2.2 The current situation of the four health care systems

- Demographic development, technological change, medical progress
- Pay-as-you-go method running up against limits with rising employer and employee contribution rates
- Systems are no longer able to regulate themselves
- Spiral of political interventions and patchwork solutions has not solved basic problems
- European and Japanese citizens are calling more emphatically for basic, lasting reform, i.e. sustainability in health care systems.

Risk management in theory

The analytical background for overall risk management in social welfare is the same for all countries. Provision for basic needs may be divided into two general forms: a more private or a more public approach, each of which has different arrangements and financing methods.

Figure 2.3 Risk management and social welfare



Source: Zimmermann and Henke (2001).

In all systems the existence of social assistance for the unemployed and those who need support for other reasons is essential. Funds for social assistance originate in all systems from general revenue, i.e., mainly taxes. Health expenditures in countries like the United Kingdom or the Scandinavian countries with national welfare systems are financed mainly through taxes on the basis of budgetary decisions taken year by year by their parliaments. Although nations with social insurance systems are also mandatory social welfare systems, they are financed differently. Their revenue stems from so-called payroll taxes, which are levied on the basis of wages and salaries as employer and employee contributions. The public perceives the payroll-tax rates as labour-costs and they are relevant in the context of international competition between nations. In addition to the parliamentary system some countries, e.g. Germany, have institutionalised so-called self-governmental structures trying to discuss and solve health policy issues outside the parliament and the market.

Apart from the different options within mandatory social welfare systems, many nations offer substitutive or complementary individual protection against the risks of life. Thus, enrolment in private insurance may be mandatory for all or part of the population. It could also be a free choice to enrol in mandatory insurance or in private insurance, each of which is, in general, more risk- and less income-related regarding their financing mechanisms.

Whilst risk management on the basis of private insurance relates merely to the functions of insurance, risk management in payroll- or tax-financed systems generally includes elements of income and family redistribution as well. Allocation and distribution are thus not separated from each other. This relationship between benefits and contributions may be described through the market-oriented benefit principle, on one hand, or the ability-to-pay-principle, on the other. Many systems operate somewhere between these two principles of risk management in social welfare.

Health policy: goals and entitlements

The goals of Social Security are viewed in close relation with more theoretical background in figure 2.4. These goals are probably the most basic elements underlying all systems. They are relatively general and thus are supported by all four nations (figure 2.4.). But problems will definitely arise when people or politicians must decide how “equitable distribution“, “optimal prevention and rehabilitation“ or the scope and content of the “most important risks of life“ is interpreted. Even if this is resolved, parliament or other bodies must determine the weight of the different criteria for the respective goals. Thus, value judgements play a significant role in health care issues and in setting health policy agenda.

Figure 2.4 Goals of social security

- Adequate coverage of the population against the most important risks to life
- No arbitrary discrimination
- As much transparency as possible
- Optimal prevention and rehabilitation
- Self-responsibility
- Equitable distribution of burdens
- Maximum efficiency and
- Minimization of administrative costs

In German Social Security Law, the legislation wanted to be more precise and codified the six prerequisites in figure 2.5 for health care in the German setting. Again, everyone will probably respond positively to these postulates in figure 2.5 and agree with them. But problems arise when one tries to operationalise them. What is the “current state of medical science“ in a nation and what is it in the growing European common market? Are patients’ needs the same everywhere? And are adequate services equivalent in France, Germany, Japan and the Netherlands? At what point do health services exceed what is necessary? There are more questions than answers. Nevertheless, these goals have been codified and are the legal basis for claims of the insured population in general and patients in particular. Thus, the courts of justice play more than a minor role in these decisions.

Figure 2.5 Entitlements to health care

- Focus on patient’s needs
- Be equally accessible to all
- Correspond to the current state of medical science
- Provide adequate services
- Be appropriate, effective and humane
- Not exceed the necessary level of care

Elements of health care reform

In all countries the health care is a labour intensive growth sector. About 10 per cent of the working population is employed in this segment of the economy, where many new professions have developed over the years. Good health, fitness, wellness and healthy aging are key concepts in an aging society. The numbers also impressively demonstrate a desirable trend: the paradigm of the health care system is changing from a cost factor to a fast-growing service sector. While economic growth and increasing employment are generally seen as desirable goals for an economy, mounting health care expenditures are usually seen in a negative light and are always associated with “cost explosion“ and an undesirable oversupply of services.

Another point of departure for health care reform is the fact that there is no overall rationality in a given system. The interests of all the participants and other driving forces, e.g., the media, drive health care reforms. The ability to gain acceptance for proposed reforms does not by any means depend solely on the diverse professional and personal interests of doctors, economists, lawyers and commission members. The driving forces also influence reforms in the health care system — the health insurance associations and the ministry bureaucracies. In addition to the political atmosphere, the pending elections should be considered. Ultimately, the right “chemistry“ must exist among the few

persons who ultimately must pull together under strong, statesmanlike leadership and achieve a politically acceptable, viable, sustainable solution.

In addition, there are three economic prerequisites for health care reform. One of them is valid everywhere and at all times: The mobilization of efficiency reserves. There is always structural change, medical progress and political pressure for reform, which means that permanent adjustments will take place in order to avoid an inefficient allocation of resources on the different micro, meso and macro levels. Thus, the mobilisation of efficiency reserves is a permanent challenge and not the panacea for correcting financing problems in health care.

Figure 2.6 Elements of health care reform

- Labour-intensive service sector
- Interest-driven system
- Risk-structure-equalization
- Moral-hazard, adverse selection, asymmetric information
- Mobilisation of efficiency reserves

Furthermore, there is agreement that two forms of misbehaviour — moral hazard and adverse selection — should be avoided everywhere and within all reforms. Moral hazard ex ante takes place through an unhealthy lifestyle or a behaviour which provokes the event insured against. Ex-post moral hazard occurs when a doctor does more out of income interest than is necessary. The patient requires unnecessary services because he has paid his contribution and wants to obtain the most services as a result.

Finally, a risk compensation scheme is necessary to avoid adverse selection and to allow fair competition within health care. In addition, a mandatory minimum coverage for all is necessary and obligatory so that all sickness funds must accept applicants without individual risk review.

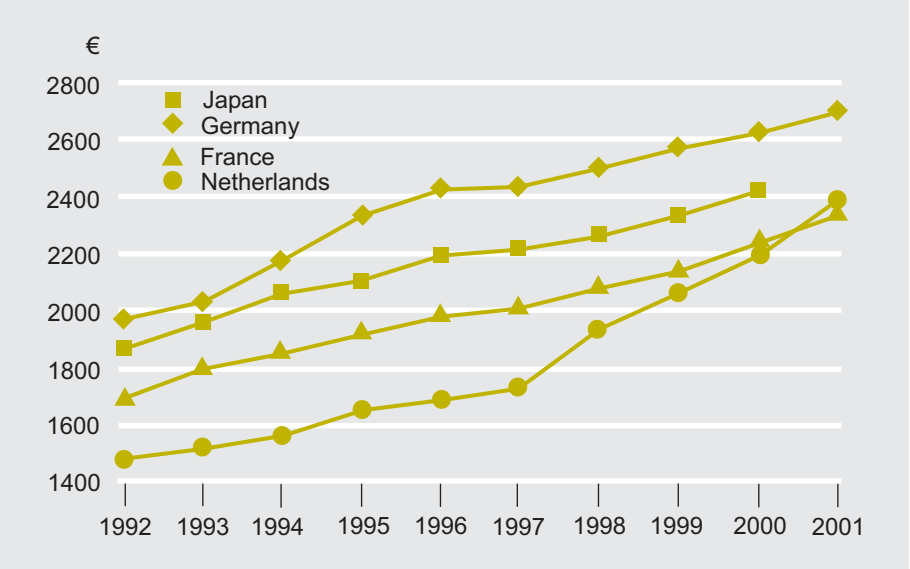
In chapter 3, impacts on health care systems are analyzed on the basis of expenditure trends in the different countries. This will be followed by a classical comparison of France, Germany, Japan and the Netherlands in the areas of health care financing, provision and purchasing health services in different sectors with the help of selected criteria (chapter 4). The conclusion in the final chapter provides suggestions for the future development of the four systems compared and of course for other systems as well (chapter 5).

3 Challenges for health care systems

3.1 Trends in expenditures for health care

Health care expenditures have risen considerably in the past ten years in all four countries compared. However, there are significant differences regarding the scope and the structure of these changes. While Japan, Germany and France experienced an average yearly increase in total health expenditures between 1992 and 2001 of 3.48 per cent, 3.75 per cent and 3.98 per cent, health care expenditures in the Netherlands rose an average of 6.18 per cent per year in this period.[1] Nevertheless, expenditures per inhabitant in the Netherlands have still not reached the spending level dedicated to health care in Japan or Germany as shown in figure 3.1.

Figure 3.1 Total health expenditures per capita



Source: OECD Health Data (2003).

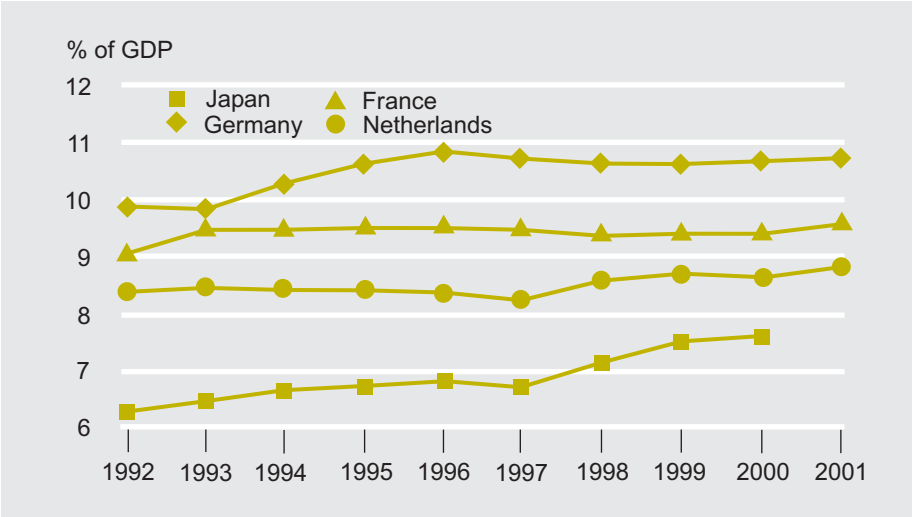
It should be pointed out that the increase in health care expenditures in each of the four systems is due to different reasons. Between 1992 and 2000 total spending for outpatient care remained nearly the same in Japan (+2 per cent) while at the same time it

[1] Based on OECD Health Data 2003 and own calculations.

dramatically increased in Germany (+37 per cent), France (+27 per cent) and the Netherlands (+62 per cent). During the same period pharmaceutical expenditures, for instance, even decreased in Japan (–5 per cent), but increased considerably in the three European states (Germany: +25 per cent, France +60 per cent, Netherlands +50 per cent). All four countries experienced increased expenditures for in-patient care between 1992 and 2000. In Japan it increased by 52 per cent, followed by the Netherlands (+39 per cent), Germany (+37 per cent) and France (27 per cent)[2] (see also figure 3.1).

Although changes (i.e., increases) in health care spending might be attributable to varying types of institutional provision or due to differing priorities in health care policy they might also be indications of whether certain government actions or the sickness funds themselves have been successful in containing health care expenditures.

Figure 3.2 Total health expenditures in per cent of GDP



Source: OECD Health Data (2003).

As shown in figure 3.2, the percentage of GDP spent on health care services is increasing in all four countries while Japan experienced the highest rise — from 6.2 per cent in 1992 to 7.6 per cent in 2000. Therefore, health care is obviously gaining in importance. Nevertheless, a slight tendency towards reduction of the public share of total health care expenditures is observable. Public health expenditures in the Netherlands, which include sickness funds expenditures as a percentage of total health expenditures, dropped by 9.5 per cent from 72.8 per cent to 63.3 per cent between 1992 and 2000. The German government reduced its public share by 2 per cent while the Japanese and the French public share remained at the same levels.

[2] Based on OECD Health Data 2003 and own calculations.

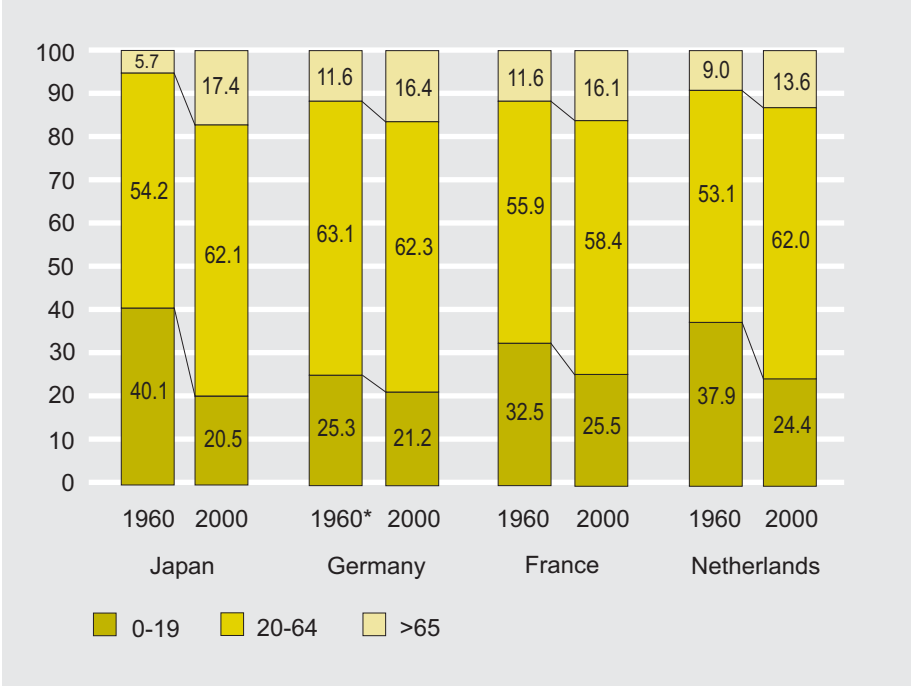
3.2 Causes for expenditure trends

There are many factors which contribute to rising health expenditures although, due to the complexity of health care systems, it is hardly possible to identify the impact of each of them individually.

3.2.1 Demographic characteristics

One major reason for recent growth in expenditures in all four countries is changes in demographic characteristics. A higher life expectancy combined with lower birth rates led to an aging population in most industrialized countries. In Japan, the proportion of people above the age of 65 has risen from 5.7 per cent, as a percentage of the total population in 1960, to 17.4 per cent in 2000. At the same time, the proportion of young people between 0 and 19 years has decreased from 40.1 per cent to 20.1 per cent of the total population. The changes in the three European countries have not been that drastic, but nevertheless the number of people above the age of 65 has increased as well, from 11.6 per cent to 16.4 per cent in Germany, from 11.6 per cent to 16.1 per cent in France and from 9.0 per cent to 13.6 per cent in the Netherlands as percentage of the

Figure 3.3 Ageing of population in the four countries



* Germany 1960: 0-19; 19-65; >65
Source: OECD Health Data 2003; Federal Statistical Office of Germany: *Statistical Yearbook*, 2002.

total population in 2000. The percentage of young people between the ages of 0 and 19 has decreased from 25.3 per cent to 21.2 per cent in Germany, from 32.5 per cent to 25.5 per cent in France and from 37.9 to 24.4 per cent in the Netherlands as displayed in figure 3.3.[3]

Until now, this demographic development had only minor effects on the labour markets, since the number of people of working age in the four countries stayed about the same. Other factors, such as an increasing number of women in the workforce and increasing immigration are counter-balancing the labour market shortfalls but are not able to fully compensate for these demographic changes.

In the near future, however, it can be predicted that pay-as-you-go systems will face severe problems in all four countries. Age groups representing low birth rates will soon be entering the labour market while age groups representing high birth rates will be retiring from work. This development will continue over the next decades because births per woman in all four countries are below 2.00 (Germany 2001: 1.29; Japan 2000: 1.41; Netherlands 2001: 1.69 and France 2001: 1.90)[4]. As a consequence, the proportion of the total population over 60 years of age is constantly growing and this population group is, to a significant extent, no longer part of the labour force. Since, however, the pay-as-you go approach operates on the basis of an inter-generational redistribution and the major part of the contributions is funded by those members of the population who are still employed, an increasing volume of health care services will be funded in these systems by a decreasing number of employed people.

Table 3.1 Population and population density in 2001 and 2050

	Japan	Germany	France	Netherlands
Population in 1,000 (2001)	127,130	82,350	59,188	16,046
Estimated population in 1,000 (2050)	100,496	64,973	64,032	18,000
Population density (per km²)	336	230	109	386
Estimated population density in 2050	265	182	118	433
Size of area (in km²)	377,835	357,026	543,965	41,526

Sources: OECD Health Data (2003); Federal Statistical Office of Germany (2000); National Institute of Population and Social Security Research; Institut National de la Statistique et des Etudes Economiques (France).

A third factor combined with the demographic challenge is population development. As presented in table 3.1 the population for Germany and Japan is predicted to shrink until 2050 while French and Dutch populations are estimated to rise slightly. A shrinking

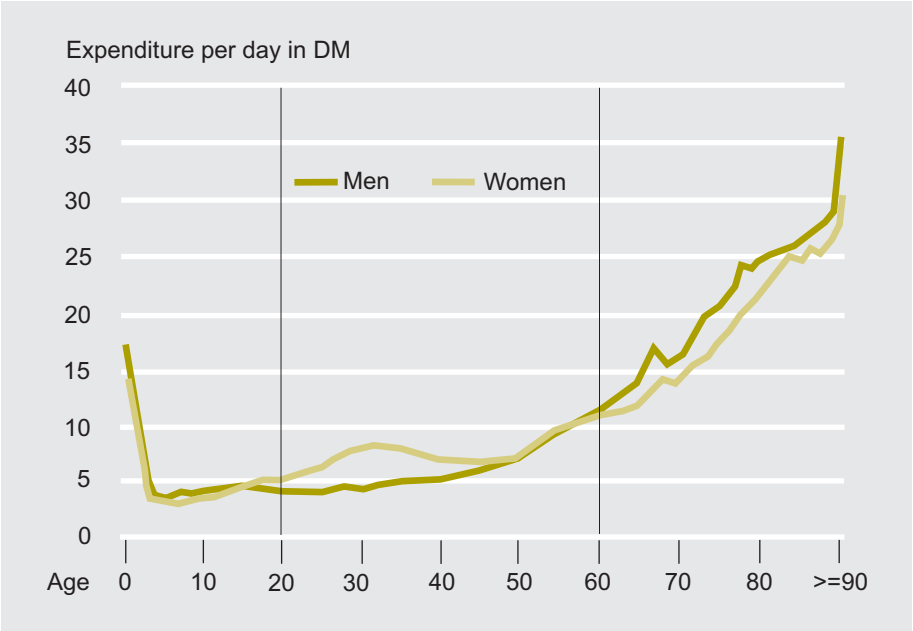
[3] OECD Health Data (2003).

[4] OECD Health Data (2003).

population has implications for providing the necessary health care infrastructure. It means, for instance, that in Japan, fewer hospitals will be needed if this development is not offset by a much higher demand for health care for the elderly. At the same time, a shrinking population also leads to lower population density which could in Japan's case lower the risk of epidemics.

It is difficult to anticipate the impact on the health care system, as cost developments, especially for the elderly, are not reliably predictable. On the one hand, cross-sectional data show a clear correlation between health care costs and age in the case of Germany, as shown in figure 3.4[5]. It can be seen that in Germany expenditures for people over 60 are almost three times as high as costs for those between 20 and 60. On the other hand, much of this age-accompanied increase can be attributed to the larger percentage of persons in their final year(s) of life for whom health care is especially costly. If life expectancy is increasing, this portion of the costs will be shifted upwards. However, currently applied age limits for using certain diagnostic or therapeutic procedures will also be shifted upwards with the increasing health (and life expectancy) of older people, which increases costs. This effect can be seen by the so-called "steepening" of the age-cost curve over time.

Figure 3.4 Standardized expenditures in Germany according to age and gender



Source: Bundesversicherungsamt (2002).

[5] This hypothesis is not undisputed in the literature. Some authors argue that rising costs do not primarily depend on age but on time of death since they reach the highest level in the period before death. Zweifel, Meier and Felder (1999).

Finally, it is very likely that in pay-as you-go systems demographic development will lead to the problem of an increasing number of net-benefit-receivers, accompanied at the same time by a decrease in the number of net-payers.

3.2.2 Changes in disease structure

Changes in disease structure are partially linked to demographic development, having a direct impact on the provision of health care and therefore on health care expenditures. First, a shift to chronic diseases can be observed. Allergies, asthma and diabetes are becoming widespread. This is due partly to aging, but also due to changes in the environment. Environmental pollution in the past decades has generally decreased, but there is a time lag between the uptake of harmful substances and the effects on the health of an individual and the total health care system. For example, the long term effects of pollution in the 1960s and 1970s are affecting health care systems today, while the effects of stronger ultraviolet radiation in the 1980s and 1990s will be experienced in the future.

Due to increasing affluence, obesity is becoming a widespread condition with several potentially harmful consequences. Measured as body mass indices, the number of people considered to be overweight in France, for example, has risen from 5.8 per cent in 1990 to 9 per cent in 2000. The Netherlands and Japan have similar problems as displayed in table 3.2. This development is alarming since cardiovascular, skeletal and circulatory diseases are expected to increase as a result.

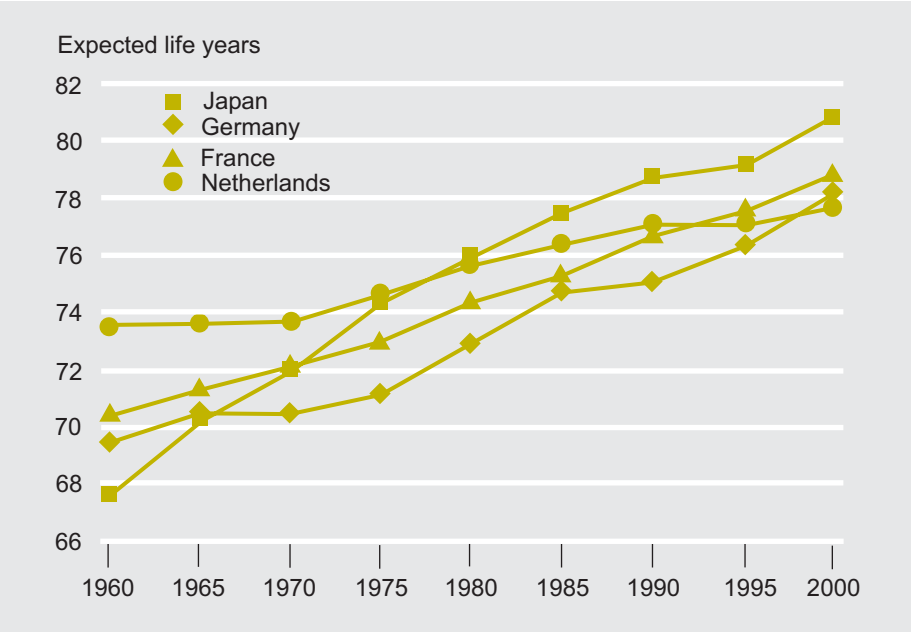
Table 3.2 Body mass index in the four countries

	Japan		Germany		France		Netherlands	
	25< BMI >30	BMI >30	25< BMI >30	BMI >30	25< BMI >30	BMI >30	25< BMI >30	BMI >30
1980	17.5	2.0						
1985	18.0	1.9					28.0	5.0
1990	19.7	2.3	33.0	18.0	23.9	5.8	28.8	6.1
1995	19.6	2.6			26.4	7.0	31.0	6.9
2000	21.0	2.9	39.4	29.2	27.2	9.0	34.7	9.4

Sources: OECD Health Data (2003); Bundesgesundheitssurvey, 1998; Deutsche-Herz-Kreislauf-Präventionsstudie, 1990

In spite of this development, life expectancy and healthy life expectancy have increased in all four countries over the last forty years (figure 3.5; table 3.3). As revealed in figure 3.5 below, Japan has the highest average life expectancy at birth, 81.3 years

Figure 3.5 Average life expectancy at birth in the four countries



Source: OECD Health Data (2003).

(2000) followed by France, 79.0 years (2000) and the Netherlands, 78.0 years (2000). Germany had, for several years, the lowest average life expectancy at birth of all four countries, but since 2000 has had a higher average life expectancy than the Netherlands, 78.4 years.

As far as healthy life expectancy (HALE) is concerned, the situation changes as shown in table 3.3. Healthy life expectancy in Japan is even 2.3 years higher than in France which has the second-highest healthy life expectancy. These conclusions are supported by data in columns 4 and 5 with respect to Japan. Column 4 shows that Japan has the lowest expectation of lost healthy years at birth in 2001 while column 5 shows that it also has the lowest number of healthy life years lost as per cent of total life expectancy.

3.2.3 Technological progress

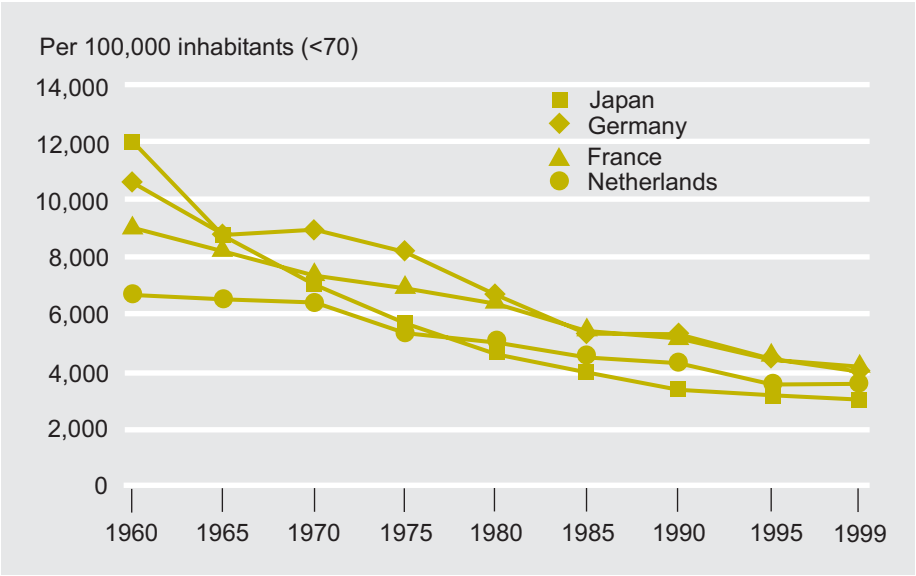
According to several macroeconomic studies, a major force behind rising health expenditures is the diffusion of new technologies and medical progress. Some authors even attribute about 50 per cent of total expenditures to new technologies. Patterns of diffusion of new technology within health care systems are in many cases subject to supply-side economic incentives. In view of the proposed possibilities, health care providers often adopt technologies that de facto only contribute minimally to improve-

Table 3.3 Healthy life expectancy (HALE) from WHO at birth and at age 60, estimates for 2000 and 2001

Country	Total population		Males 2001		Females 2001		Expectation of lost healthy life years at birth in 2001 (years)		Healthy life years lost as per cent of the total life expectancy	
	(1)		(2)		(3)		(4)		(5)	
	At birth 2000	At birth 2001	At birth	At age 60	At birth	At age 60	♂	♀	♂	♀
Japan	73.5	73.6	71.4	17.1	75.8	20.7	6.5	8.9	8.3	10.6
Germany	70.1	70.2	68.3	15.0	72.2	17.7	6.8	8.9	9.1	10.9
France	71.1	71.3	69.0	16.1	73.5	19.1	6.6	9.5	8.7	11.4
Netherlands	69.7	69.9	68.7	15.0	71.9	17.3	7.1	9.6	9.4	11.9

Source: *World Health Report* (2002).

Figure 3.6 Potential years of life lost due to diseases in the four countries



Source: OECD Health Data (2003).

ments in the provision of medical care.[6] In addition, this technology-push effect is encouraged by the propensity of government and sickness funds to pay for those "innovations". Even if technologies are assessed in medical trials their subsequent use might be well beyond the range of initial efficacy since they are often used for groups of patients beyond the initial indications.[7] Therefore, they often produce marginal benefits in terms of quality but significantly increase health care expenditures.

At the same time, invention, innovation and imitation of technologies have significantly increased the effectiveness of health care services. Therefore, the duration of treatments has been reduced, outcomes have been improved and incurable illnesses can now be cured. Former inpatient care has been substituted by, or transferred to, the outpatient sector. The need for inpatient care has already decreased over the last ten years as the average length of stay in a hospital per person per year dropped between 1990 and 2000 in Germany and France by 26 per cent from 2.4 to 1.9 days in both countries.[8] Hence, some technologies, especially process innovations such as keyhole surgery, have also contributed to reduced costs.

Additionally, technological progress has had an impact on life expectancy and the working capabilities of the population. Better health care leads to a healthier workforce

[6] Weisbrod (1991).

[7] Phelps (1997); Jacobzone (2003); McClellan (1996), OECD 2003.

[8] OECD Health Data (2003).

and therefore increases productivity, which influences the country's economic growth rate. The number of lost life years due to diseases for persons below the age of 70 years has decreased greatly, which can also be attributed to new technologies and new opportunities for medical treatment.[9] Between 1975 and 1995 the number of life years lost due to diseases was reduced by 40.5 per cent in Japan, 45.3 per cent in Germany, 34.8 per cent in France and 31.3 per cent in the Netherlands. Trends in lost life years due to diseases are displayed in figure 3.6.

3.2.4 Economic situation

Increases in health care expenditures, as a percentage of GDP in the four countries, is not due entirely to an increase in total health expenditures, but also due to the deceleration of economic growth. Japan has experienced a decline in growth rates from an annual average GDP growth of 4.5 per cent between 1970 and 1990[10] to 2.2 per cent in 2000 and –0.8 per cent in 2001[11]. Germany is also on the verge of a recession; GDP growth rates have decreased from 2.9 per cent in 2000 to 0.8 per cent in 2001 and 0.2 per cent in 2002. The French GDP growth rate was 1.2 per cent in 2002 and the GDP of the Netherlands increased only slightly, by 0.2 per cent in 2002.

For historical reasons, financing health care in systems following the Bismarckian approach is mostly linked to wages and salaries as the basis for contributions. Capital income, interest earnings and income from self-employment are usually not included in the contribution assessment base (although they are partially included in France, as explained in 3.2).

In addition, high unemployment rates contributed to financial constraints on sickness funds. While the average unemployment rate for all OECD countries rose from 6.3 per cent in 2000 to 7.0 per cent in 2002, Japan and Germany – though having started at different levels – also experienced sharp increases as shown in figure 3.7. The unemployment rate in Germany rose from 7.8 per cent (2000) to 8.6 per cent (2002) and the Japanese unemployment rate rose from 4.7 per cent (2000) to 5.4 per cent (2002). The French unemployment rate dropped slightly, from 9.3 per cent in 2000 to 8.8 per cent in 2002. The Netherlands managed to keep unemployment at a low level by encouraging part time work. Nevertheless, this development is two-sided, because part time work leads to an increase in low-income earners, who are unable to contribute to social security systems as much as full-time workers.

While low economic growth rates and the labour market situation results in eroding revenues for sickness funds, balancing state budgets represents another difficulty. Therefore, it is nearly impossible to subsidise health care from the ordinary state budget without raising taxes or increasing public debt. Additionally, the three European countries are required to comply with the European growth and stability pact suggesting a

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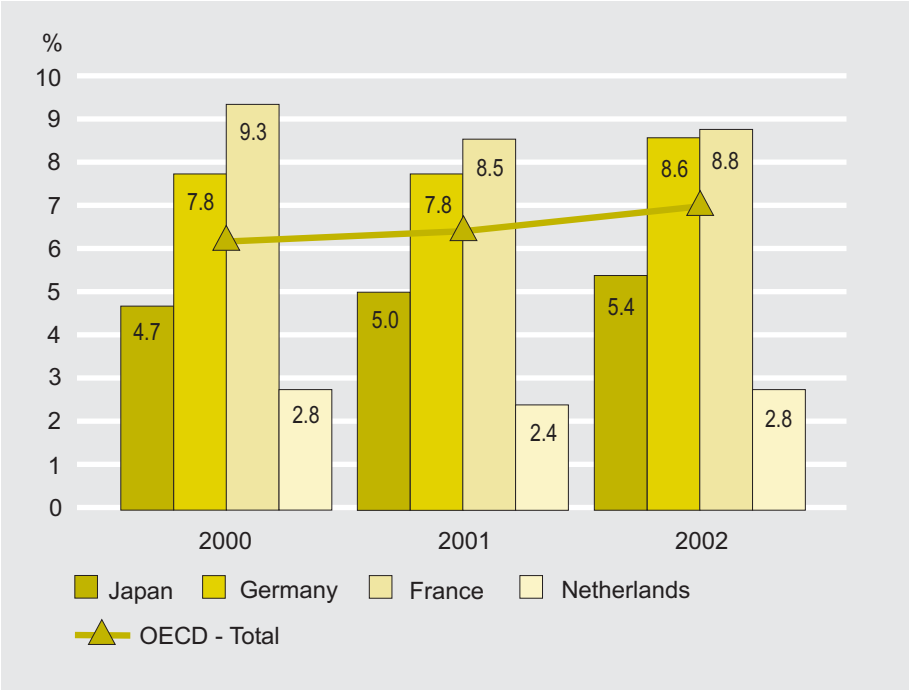
[9] Nolte et al. (2002).

[10] Calculation based on World Bank, *World Development Indicators*, 1997.

[11] World Bank, Economic Policy and Prospect Group.

Figure 3.7 Standardised unemployment rates in the four countries



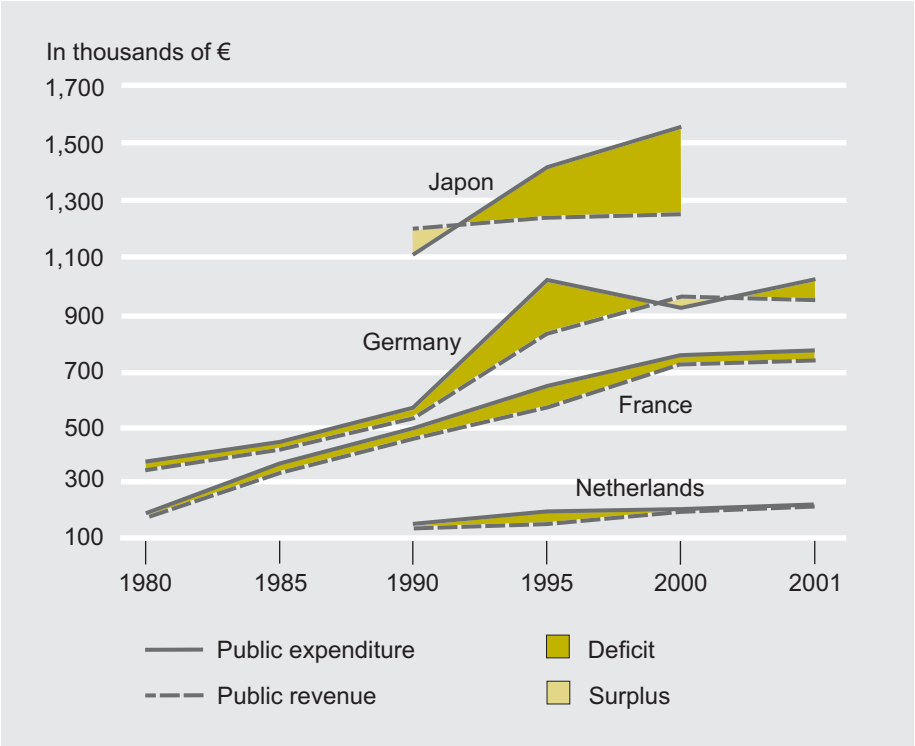
Source: OECD, *Main Economic Indicators*, Oct. 2003.

balanced budget and limiting yearly deficits to 3 per cent of the GDP. The Netherlands' budget was balanced in 2002, but Germany and France each reported deficits of 3.5 per cent and 3.1 per cent, respectively, of their GDPs to the European Commission. Forecasts for 2003 have again been above the limit for both countries, putting them in a difficult situation as they might be subject to sanctions imposed from Brussels. The Japanese budget is unbalanced, as well. Having generated surpluses in the early nineties the government decided to switch to deficit spending in order to generate economic growth. According to OECD, the Japanese deficit accounted for 7.4 per cent of GDP in 2000. Budget deficits or surpluses of the four countries over the last 20 years are displayed in figure 3.8.[12]

As increases in health care costs are expected to continue, the four countries seem to be in a vicious circle: On the one hand, a rise in contribution rates or taxes leads either to an increase in ancillary wage costs or to a loss of purchasing power at the consumer level, thus implying negative effects on growth rates and employment. On the other hand, cutting down expenditure or restricting care provision will have a negative impact on employment as the health care sector is very labour intensive.

[12] OECD Health Data (2003).

Figure 3.8 Development of state budgets in the four countries



Source: OECD Health Data (2003).

3.2.5 Changes in preferences

Rarely mentioned but also important are changes in consumer behaviour and preferences over the last several years as part of the post-materialistic change in values. Maslow's hierarchy of needs pyramid, shown in figure 3.9, illustrates changing preferences at the individual and societal levels. Basic physiological needs at the first level such as food, housing or medical care are taken care of first. As soon as the needs at this level are satisfied, the second level is activated and additional needs develop. The top of the pyramid is the need for self-actualization, which is evidenced in the health market by trends such as the growing demand for wellness, fitness, and lifestyle drugs and new, sophisticated treatment methods widening the scope and objectives of health care provision.

Changing needs and the growth of new demands can generally be regarded as a positive development, since it also creates new supply and therefore economic growth. But as many of these new services and products are reimbursed by sickness funds in the four countries, this increased demand also means higher health care expenditures and

Figure 3.9 Maslow's hierarchy of needs pyramid

Source: Maslow (1970).

subsequently higher contribution rates for social health insurance systems. As long as the population is aware that in social health insurance systems growing demand is automatically related to higher contributions, there is no problem; however, if increased contribution rates induce a rise in expectations of the system, this creates a vicious circle. New forms of financing health care must be developed.

With regard to changing preferences, it should be noted that patients tend to be better informed and demand more information about treatments and diseases. At the same time, patient empowerment is gaining increasing importance in public discussions. Sickness funds are generally expected to support this development, since better-informed patients are also more likely to comply with a prescribed treatment or are able to prevent certain risks in order to avoid diseases. Although increased patient empowerment may potentially reduce health expenditures, encouragement of this development has still lagged in all four countries (although the Netherlands and, just recently, Germany made some progress regarding increased participation of patients in decision-making processes).

3.2.6 Structural weaknesses of the systems

All social health insurance systems contain certain disincentives or weaknesses. They are, of course, not without impact on health expenditures. The fundamental problem arising from all these weaknesses and disincentives is a reduction in welfare owing to the breach of pareto-optimal allocation. This loss of welfare leads to rising insurance contributions and consequently to an immanent increase in the redistribution of insur-

ance funds from users to non-users of the insurance benefits. Thus, health care costs are higher than really necessary and the resources are inefficiently allocated.

This loss of welfare is due to numerous factors. First, misconduct by various actors in the health care system, activated by certain disincentives such as moral hazard, can lead to an overuse of services or resources. Weisbrod (1991) argues that health insurance systems with extensive health benefits coverage, and the resulting problems of moral hazard, have steered progress in medicine and medical technology in the wrong direction. In view of the possibilities offered by seemingly unlimited resources, technologies have frequently been promoted that, de facto, constitute only a minimal improvement in the provision of medical care (see above 3.2.3). There are numerous other examples of disincentives in health care systems such as adverse selection and external effects leading to rising health expenditures.[13]

Furthermore, every system contains certain structural weaknesses, e.g., the separation of inpatient and outpatient sectors in Germany, which are not necessarily due to misconduct of actors but more to a simple misconception of the design of the individual system.

[13] Weisbrod (1991).

4 Comparison among the social health insurance systems of France, Germany, Japan and the Netherlands

4.1 Institutional and organisational framework

The institutional framework and organisation of social health insurance varies widely across the four countries, thus making comparisons among them difficult. Over time, they have developed according to national and cultural needs; sometimes, they have veered away from the original ideas prevailing at the inception of social security systems under Bismarck. Even within each country, various mixtures of regional and occupational insurance schemes coexist with one another. Some insurance companies are public corporations, while others are privately owned. Furthermore, some countries place their trust in competition between funds for the provision of health care while others do not. In some countries, office-based physicians are self-employed, while in others they are employed.

Due to the complexity of a variety of institutional settings, it is necessary to select certain criteria in order to make comparisons possible. Different institutions (e.g., OECD, the World Bank, WHO) choose different approaches and indicators for describing and analysing the functions and performance of health care systems.[1]

Table 4.3 displays certain criteria which have been chosen for this comparative study to underline the differences and similarities between the institutional settings of social health insurance systems of the four countries.

Membership, enrolment, coverage

All of the countries have a social health insurance system based on several sickness fund schemes covering the majority of the population with health insurance. Membership in sickness funds schemes is not compulsory for the whole population in every country. Segments of the population, particularly in Germany and the Netherlands, are allowed to join private health insurance plans instead, if they are above a certain income level. In Germany, employed persons are exempted if their income exceeds €41,850 per person (2003) and social health insurance is not compulsory for public servants or

[1] Dunlop and Martins (1995), Staines, V.S. (1999), Leidl, R. (1998), Sinn H.W. (2003), World Health Organisation (2000), European Observatory on Health Care Systems (2002), European Observatory on Health Care Systems, Health in transition profiles, OECD Health Data (2003).

the self-employed. In contrast to Germany, social health insurance in the Netherlands is compulsory for the self-employed if their income does not exceed €20,250 and for employees if it does not exceed €31,750 (2003). In Japan and France, membership in one of the sickness fund schemes is compulsory for the entire population. Due to these differences, levels of population coverage by sickness funds schemes in Germany and the Netherlands is lower than in Japan and France.

Benefits

In comparing population coverage of sickness fund schemes in the four countries, differences in covered services among the four countries also need to be considered. Although nearly the entire populations of both Japan and France are covered by sickness funds schemes, covered services are more comprehensive in Japan. For this reason, nearly 90 per cent of the French population is insured by supplementary private insurance which is not compulsory and varies by price and covered services. For the poorest 10 per cent of the population, private health insurance with a fixed minimum basket of services is provided free of charge, financed by the federal government. In contrast, the Japanese population has no need to be privately insured. Therefore the market share of private health insurance in Japan is very low.

Germany and Japan's systems of social health insurance are both comprehensive, but only 89 per cent of the German population is covered, compared with the entire Japanese population. In Germany, certain groups are not subject to compulsory coverage by social health insurance and therefore 9 per cent is insured by comprehensive private health insurance. The Netherlands differs completely from the three other countries regarding benefits covered by sickness funds since there is one scheme for long-term care and high-cost treatments (AWBZ). The domain of the AWBZ is designated as the first compartment. It covers long-term nursing care and home care for the elderly and handicapped (as from day of indication), and hospital costs after one year of hospitalisation. It covers the whole population and its contributions are obligatory for every Dutch citizen. Another scheme for normal medical care (ZFW) covers 63 per cent of the population. Comprehensive private health insurance is substituted for the sickness funds scheme (ZFW) by 30.2 per cent of the population. ZFW and substitutive private health insurance together are designated the second compartment. In addition, most people have supplementary private insurance covering dental care, physiotherapy and other types of care not covered by the packages of ABWZ and ZFW. This is designated the third compartment. Only very few people have supplementary private insurance reimbursing first-class hotel services during hospitalization.

Ownership, number of sickness funds and freedom of choice

Ownership of sickness funds in the four countries varies from governmental to nearly private. While in France the financial risk of sickness funds is carried solely by the state, Japan carries only the deficits of certain schemes, such as government-managed health insurance and the municipal funds. But Japan provides the opportunity to estab-

Table 4.1 Membership in different sickness funds as per cent of total population

		1995	1998	1999	2000	2001	2002
Japan	EHI (governmental)	30.1	30.2	29.9	29.5	29.1	28.7
	EHI (society managed)	26.0	26.3	25.8	25.6	25.1	24.5
	NHI (municipal)	34.2	35.2	36.1	36.8	37.7	38.7
	Other schemes	9.7	8.3	8.2	8.1	8.1	8.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0
Germany	Public sickness funds						
	AOK (regional)	36.0	33.5	33.2	32.6	31.9	
	BKK (company based)	9.8	11.0	11.9	13.7	15.2	
	IKK	4.8	5.2	5.2	5.2	5.1	
	Substitute funds	33.4	34.0	33.2	32.1	30.9	
	Other sickness funds	3.6	3.2	3.3	3.0	3.0	
	Private insurance	8.5	8.8	9.0	9.1	9.4	
	Other (incl. uninsured)	3.9	4.3	4.2	4.3	4.5	
	Total	100.0	100.0	100.0	100.0	100.0	
France	Public sickness funds						
	General	81.6			80.0		
	Agricultural	9.0			9.0		
	Self-employed	4.2			6.0		
	Others	5.2			5.0		
	Total	100.0			100.0		
Netherlands	ZFW	63.0		63.0	64.5	64.1	63.0
	Private insurances	30.4		30.3		29.1	30.2
	Public servants insurance	5.6		5.1	4.9	4.9	4.8
	Other (incl. uninsured)	1.0		1.6		1.9	2.0
	Total	100.0		100.0		100.0	100.0

Sources: Based on ISSA country reports.

lish a private sickness fund, the so- called society-managed sickness fund, if an entrepreneur can provide at least 700 insured persons as an initial risk pool. Although the state covers part of the administrative costs and provides financial support in case of liquidity problems, the risk is carried privately. Thus, society-managed sickness funds can also set contribution rates independently (within a range of 3.0-9.5 per cent) and can also become insolvent.

In Germany, all sickness funds are operated on a not-for-profit basis by management and a supervisory board. They can autonomously set their contribution rates as long as the Ministry of Health and its supervisory board do not intervene. In the Netherlands, the

Table 4.2 Number of sickness funds according to different schemes

	1992	1994	1996	1998	2000	2002
Japan						
Total	5,244	5,236	5,235	5,229	5,192	5,124
EHI (government-managed)	1	1	1	1	1	1
EHI (society-managed)	1,823	1,817	1,819	1,813	1,780	1,722
NHI (municipal-managed)	3,420	3,418	3,415	3,415	3,411	3,401
Germany						
Total	1,209	1,152	642	482	420	355
AOK (regional)	271	235	20	18	17	17
BKK (company-based)	741	719	532	386	337	287
IKK (guild funds)	173	160	53	43	32	24
Substitute funds	15	15	15	13	12	12
Other funds	21	21	20	20	20	13
France						
Sickness funds						
main	3	3	3	3	3	3
special	11	11	11	11	11	1
Netherlands						
Sickness funds (ZFW)	30	34	29	30	27	25

Source: Based on ISSA country reports.

AWBZ is managed by one sickness fund (ZFW funds) in each of 31 regions. Concessions for the management of the AWBZ are put out to tender for 5 years each. In most cases the sickness fund with the highest number of insurants in one region receives the concession. Sickness funds receive full financial compensation for the management of the AWBZ. Unlike Germany, the sickness funds of the ZFW (normal medical care) are carrying more financial risks. Until 1995, sickness funds only had to carry 2.5 per cent of the difference between planned and real costs but in 1997 this share was increased to 27 per cent and is projected to be 65 per cent in the future. At the same time, contribution rates are the same for every fund and cannot be increased independently.

The question of ownership is closely related to the number of sickness funds, the option to choose between different funds and finally the nature of competition among different funds in the four countries. The number of sickness funds as well as the membership in each country as a per cent of the total population is displayed in tables 4.1 and 4.2.

In France, membership in one of the three large sickness fund schemes, (the general scheme, CNAMTS, covering salaried employees in commerce and industry and their families, the agricultural scheme, and the scheme for the self-employed) or in several

small schemes for special occupations (e.g., seaman, civil servants) is strictly determined by type of employment. Therefore, there is no choice for insurants and no competition among sickness funds in France. This kind of institutional organisation is quite similar to that found in Japan, where membership in certain sickness funds is at first also determined by occupational status. Citizens who are employed in bigger companies of a certain size are usually insured by society-managed sickness funds which often belong to the company itself. Employees of smaller companies without attached sickness funds are either insured by one of the sickness fund schemes for special occupations or, if not, they covered by the Government-managed scheme. All other citizens who are not insured by occupation, such as the self-employed, retirees and others are compulsorily insured by the municipal insurance scheme of their local community (also classified as NHI "National Health Insurance"). Altogether, there are 5,192 (2000) different sickness funds in Japan which, unlike other countries such as Germany, have increased over the last decades while decreasing over the last years. As in France there is so far no free choice between funds and no competition among them.

Some years ago in Germany the method of assigning different occupational groups to certain sickness funds was very similar to the current system in Japan, but since 1997 sickness funds have been opened to all citizens. They are now able to choose between a variety of sickness funds. They are organised on a regional or a nationwide basis and can be divided into general regional funds, substitute funds, company-based funds, guild funds and some smaller funds. All in all there were 319 sickness funds in Germany in 2003, but not all of them have yet opened up to everyone. The sickness funds compete with each other on the basis of different contribution rates, since the mandatory range of services offered, permits only few variations. As a result of competition the number of sickness funds has been sharply reduced from more than 1,200 in the nineties to 319 (2003) and a further reduction is expected. The number of private insurance companies has increased by 20 over the last 20 years and is currently stable, numbering approximately 50.[2]

Competition in the Netherlands operates differently than it does in Germany. Since the AWBZ scheme for long term care and high cost treatments is managed by only one sickness fund in each region there is no choice for Dutch citizens in this segment. Among the ZFW schemes for normal medical care, they are currently able to choose from among 25 different funds. In the early nineties the number of funds increased to 34 (1994) after admission rules were softened, but decreased since then due to mergers among sickness funds. In contrast to Germany, competition between ZFW sickness funds does not operate on the basis of contribution rates, which are fixed, but on the basis of service and flat-rate-premiums (in addition to fixed contribution rates) which can be set by each sickness fund individually. Budgetary responsibility only applies to those cost drivers which can be directly influenced by the management of each fund, e.g. drugs, general practitioner care etc. Fixed costs such as hospital capital expenditures are therefore excluded.

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[2] According to information from the German Association of Private Health Insurance Companies in January 2004.

Competition and risk structure compensation

To spread financial risks among the different funds and ensure fair competition between sickness funds, three of the four countries have created different kinds of risk structure compensation schemes. These schemes have gained importance, especially in view of the rapidly aging European populations. Japan has no risk structure compensation scheme but as explained below in 4.1.2 the government subsidises municipal sickness funds since they have a more negative risk structure due to the fact that retired persons are required to join these funds. The three other countries have certain schemes varying according to the risk adjusting criteria reflected in the schemes.

A risk structure compensation scheme was introduced in Germany in 1994/1995. After each calendar year, standardized expenditures are calculated on the basis of the criteria of age, sex and invalidity. In addition standardized contributions are calculated on the basis of income. Thus, standardized contributions and expenditures indicate if sickness funds are below or above the line with their respective contributions and expenditures. According to these results they are either paying into the scheme or receiving out of the pool. Although this scheme prevents large-scale differences in contribution rates between the sickness funds it does not completely equalise the risk structures of the different funds. For this reason, the government passed an act in 2001 to include the additional criteria of morbidity into the risk structure compensation scheme until 2007. Until then, the existing scheme should be supplemented by a high-risk pool which compensates sickness funds for 40 per cent of all expenses for a particular person beyond a certain limit, the so-called Disease Management Programmes[3].

The risk structure compensation scheme of the Netherlands is only used for compensating funds of the Ziekenfondswet (ZFW). It is somewhat different than the German scheme since all contributions first flow into a central fund on the basis of which resources are allocated to different sickness funds according to certain criteria. The risk structure mechanism consists of a prospective and a retrospective calculated component. The prospective component is paid to sickness funds as a capitation according to the risk adjuster's age, gender, employment/social security status and region. The retrospective risk adjustment component consists of two different mechanisms. First, any difference between the allocated budget and the actual costs of each sickness fund is shared between the sickness funds up to a certain percentage, termed the equalisation percentage. Therefore, resources are shifted from sickness funds with low expenditures to sickness funds with high expenditures. Secondly, sickness funds are compensated for a certain percentage of the difference between the overall allocated budget to all sickness funds and the actual expenditures arising from cost-drivers. This compensation is termed the recalculation percentage.[4]

The French risk structure compensation mechanism is completely different, since it consists of two different risk structure compensation schemes. One scheme compen-

[3] For more details see for example: Buchner and Wasem (2003), pp. 21-36; Busse (2001), pp. 174-177.

[4] Lamers, van Vliet and van de Ven (2003), pp. 49-62.

Table 4.3 Comparison of the institutional and organisational framework of social health insurance on the basis of selected criteria

	Japan	Germany	France	Netherlands
Compulsory membership	Yes	Below €41,850 income per year/ not compulsory for self-employed and public servants	Yes	AWBZ: Yes ZFW: Below income of €31,750 for employees (€20,250 self-employed)
Enrolment in sickness funds schemes	Full	89 per cent	99 per cent	AWBZ (full) ZFW (63 per cent)
Granted services under social health insurance	Full coverage but exclusion of long-term care	Full coverage but exclusion of long-term care	Full coverage, but high co-payments, exclusion of osteo-pathy, inclusion of long-term care	AWBZ: long-term care and high-cost treatments (hospita-lisation costs after 1 year) ZFW: Full coverage of medical care (hospitalisation costs until 1 year)
Supplementary or comprehensive private health insurance (popu-lation coverage)	Supplementary (very low)	Comprehensive (9 per cent)	Supplementary, especially for high co-payments (90 per cent; free of charge for poorest 10 per cent called CMU)	Comprehensive substituting ZFW (30.2 per cent) and supplementary (low coverage)
Ownership (risk)	Semi-private; governmental	Semi-private	Governmental	Governmental; semi-private
Number of sickness funds	5,192 (2000)	319 (2003)	3 large funds; several small funds (2003)	1 fund in each region for AWBZ 24 for ZFW (2003)
Free choice of sickness funds	No	Yes	No (affiliated by occupational status)	Yes
Main sickness fund schemes in each country (population coverage)	Government-managed funds (29.1 per cent, 2000)	AOK-Regional sickness funds (31,9 per cent, 2001)	CNAMTS-General scheme (80 per cent, 2000)	AWBZ (100 per cent, 2002)
	Society-managed funds (25.1 per cent, 2000)	Ersatzkassen-White collar funds (30,9 per cent, 2001)	Agricultural scheme (9 per cent, 2000)	ZFW (63.0 per cent, 2002)
	Municipal funds (National Health Insurance (37.7 per cent, 2000))	BKK-Company-based funds (15,2 per cent, 2001)	Self-employed scheme (6 per cent, 2000)	Private insurance (30.2 per cent, 2002)

Table 4.3 *(Contd.)* Comparison of the institutional and organisational framework of social health insurance on the basis of selected criteria

	Japan	Germany	France	Netherlands
Competition among sickness funds	No	Yes	No	Yes for ZFW
Risk structure compensation scheme (included characteristics)	No	Yes (income, age, gender, invalidity; morbidity planned for 2007)	Between large and small funds (age and income); between large funds (age)	Yes (age, gender, employment; social security status and region)
Administrative costs as percentage of SHI expenditure	2.2 per cent (2000)	5.4 per cent (2001)	1.9 per cent (2001)	4.3 per cent (2001)

Sources: ISSA country reports; Sandier, Polton, Paris and Thomson (2002); Busse (2002a); OECD Health Data (2003).

sates differences between the general scheme and small schemes according to the criteria of age and income. Therefore, contributions and expenditures of small schemes are calculated as if their level were the same as the general scheme. Transfers from the general scheme to the small schemes and vice versa compensate for certain losses. Another risk structure compensation scheme adjusts differences between the three main schemes, based on the criteria of age. The result is that the general scheme pays out to the self-employed and agriculture schemes, whose populations are much older.

Although the introduction of competition in Germany and the Netherlands was targeted at reducing the administrative costs of sickness funds, costs are even higher than in France and Japan, which have no competition among sickness funds. While France has by far the lowest administrative costs (1.9 per cent as a percentage of sickness funds expenditures), Japan has the second lowest cost at 2.2 per cent. The Netherlands has administrative costs of 4.3 per cent and in Germany institutional administration of sickness funds is most expensive with 5.4 per cent of sickness funds expenditures.

In interpreting these differences, it should be kept in mind that in some countries (e.g., France) there is more activity on the state level regarding the administration of sickness funds than in Germany, where most sickness funds are self-administered. Thus, interpretation of these differences depends a great deal on how administrative costs are defined. In Germany, the collection of the contribution is done free of charge by the employer and in the case of partially tax-financed systems, collection costs are be dealt with differently. Table 4.3 summarises the institutional settings in the four countries according to the selected criteria.

4.2 Funding

Compared to changes in the scope and objectives of institutional organisation, funding of social insurance systems has undergone only minor alterations in the past. When Bismarck first introduced social insurance schemes, they were meant to provide sickness pay and primary care for those who could not provide for themselves. Over the years the provision of primary care was extended further while covering most segments of the population. Although the systems are under increasing pressure, the pay-as-you-go-principle as the main feature of social health insurance has remained untouched in all four countries. Instead, the countries have extended their covered benefits, changed their contribution assessment bases and amended their structure of financing health care over the last several years.

Contribution rates, income ceiling and contribution assessment bases

The contribution assessment base should be seen in the context of the income ceiling and contribution rates set by the four countries. Contribution rates vary among the countries as well as between different sickness fund schemes in each country. In the Netherlands the contribution rate for the Algemene Wet Bijzondere Ziektekosten (AWBZ) is set at 12.3 per cent and is paid entirely by the employees, in the form of deductions from their wages and salaries with a yearly income ceiling of €27,009 (2003). The contribution rate of 8.45 per cent for the ZFW is shared by both the employer (6.75 per cent) and the employee (1.7 per cent). The income ceiling for the ZFW is currently set at €28,188 in the same year. As previously mentioned under 3.1.1, all contributions for ZFW are first received by the central fund and then allocated to different sickness funds. The only other country with an income ceiling is Germany, but at €41,850 (2003) set much higher than in the Netherlands. On the other hand the average contribution rate of 14.3 per cent (2003) is lower in Germany than in the Netherlands although it should be kept in mind that the contribution rate in Germany varies between 11.8 per cent and 15.5 per cent for the different sickness funds. The contribution in Germany is shared equally between employers and employees who both pay on average of 7.15 per cent (2003) of the employees' income.[5]

Unlike Germany and the Netherlands, France and Japan have no income ceiling and in Japan even bonus payments, which play an important role for the remuneration of Japanese employees, are included into the contribution assessment base. While the contribution rates in Japan are nearly the same for the society-managed sickness funds (at an average rate of 8.6 per cent) and the Government-managed sickness funds (at a rate of 8.5 per cent) (2003), the variability in rates for the municipal funds is so high that it does not make sense to calculate an average.[6] As in Germany, employers and employees at a rate of 4.25 per cent each share the contribution for the Japanese Government-

[5] Based on ISSA country reports; Federal Statistical Office of Germany (2003); European Observatory on Health Care Systems (2002).

[6] Based on ISSA country reports; National Federation of Health Insurance Societies (Kemporen) (2003).

managed sickness funds equally. For the society-managed sickness funds employers contribute at a rate of 4.8 per cent while employees only pay 3.8 per cent of their income.

In France the contribution rate for the general employee scheme (CNAMTS), covering about 80 per cent of the population, is currently 13.55 per cent of wages and salaries and therefore higher than in Japan. The employer pays 12.8 per cent while employees pay only 0.75 per cent. In addition, it should be considered that since 1998 every employee also pays a tax of 5.25 per cent into the CSG (Generalised Social Contribution), a state fund channelled into the sickness fund schemes. It is important to note that the contribution assessment base for the CSG differs from the sickness funds schemes since it also includes unearned income (capital gains and interest, e.g., from investments) while for other schemes only earned income (wages and salaries) is considered. Including the CSG, the employee contribution rate finally totals 6.0 per cent (at different contribution assessment bases) with no income ceiling.[7]

Contribution of pensioners

Every country has its own strategy to handle the growing number of pensioners and the increasing demand for long-term care. In Japan pensioners are required to join the municipal funds which receive certain subsidies by the state as compensation for increased expenditures resulting from the old age demographic structure. Pensioners who are insured by the municipal funds pay the same contribution rates as other insurants. In the other countries pensioners stay with their former sickness funds schemes but sometimes under changed conditions. In France, pensioners pay a reduced rate for the CSG of 3.95 per cent, while in the Netherlands a lower income ceiling of €19,550 for sickness funds in the ZFW has been instituted for pensioners. In Germany, pensioners pay half the average contribution rate for all sickness funds; the other half is paid from the pension scheme. In most countries, health expenditures for people over 60 are, on average, more than two times that of expenditures for the insured population between the ages of 20 and 60. Additionally, the retired population on average pays less than the working population, since the income which usually serves as the contribution assessment base is lower (see above figure 3.4).[8]

Separation of health and long term care

As a strategy to cope with rising demand for long-term care, Germany and Japan have institutionally separate funding for health care and long- term care. In both countries, risks for long-term care are insured under long-term care insurance which is also financed by payroll- deducted contributions. In the Netherlands long term care is covered by the AWBZ while in France it is insured under the normal social health insurance system. However, certain long-term services are supplemented by the newly established tax-financed benefit scheme APA, which pays allowances to the elderly.

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[7] Based on ISSA country reports; European Observatory on Health Care Systems (2002).

[8] European Observatory on Health Care Systems (2002); National Federation of Health Insurance Societies (Kemporen) (2003); Based on ISSA country reports.

Burden of contributions at different income levels

With contribution rates of 18.8 per cent and with no income ceiling, French residents pay the highest contributions of all four countries, especially at higher income levels, as shown in figure 4.1. Furthermore, it should be kept in mind that 90 per cent of the French population is paying an additional amount for supplementary private insurance. At the same time, however, the French social health insurance scheme contributes a higher share to total health expenditures than those in countries with lower contributions, such as Germany and Japan. While social health insurance contributes 76 per cent to total health expenditures in France, social health insurance contributes only 57 per cent and 45.2 per cent, respectively, in Germany and in Japan. Therefore, in these countries a significant proportion of total health expenditures are financed by other sources as separate long-term care insurance. Sources of funding as a percentage of total health expenditures for each country are displayed in figure 4.1. In the Netherlands the funding arrangement is similar to that found in France. Social health insurance contributes a similar share (79 per cent) to total health expenditures while the contribution rate is even higher at 20.75 per cent, although in contrast to France the Netherlands has income ceilings for both the AWBZ and the ZFW.

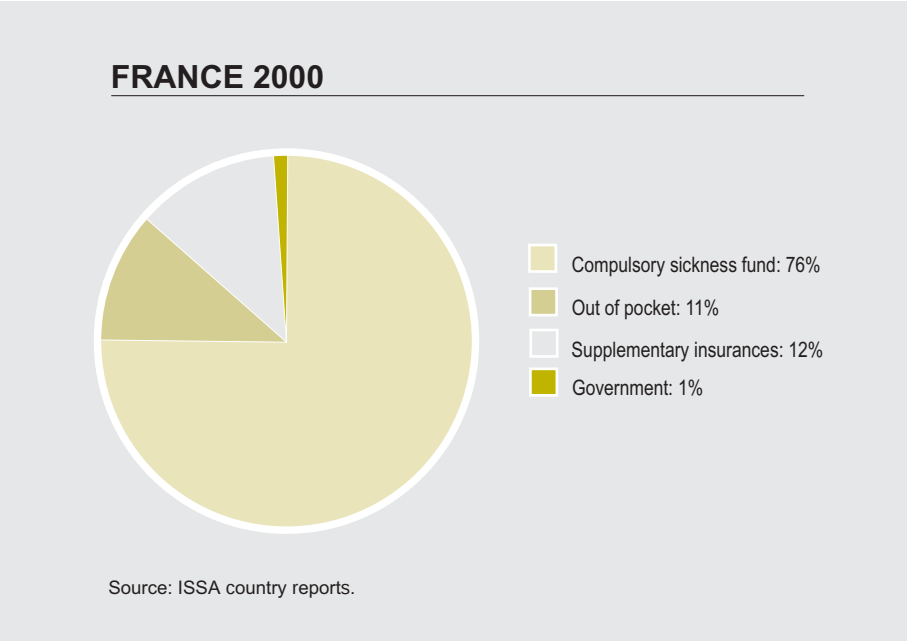
As shown in figure 4.2, the Dutch design of raising contributions has the effect such that persons with incomes up to €30,000 pay even more contributions than in France, while those with higher incomes pay less. In addition, it should be kept in mind that ZFW funds in the Netherlands charge low flat-rate premiums, varying among sickness funds which are not taken into account. Japan obviously has the lowest contributions, at least up to an income of €67,500 although it should be considered that per capita income in Japan is generally higher than in the other three countries. At the same time, Japanese social health insurance contributes less than the other three countries to total health expenditures. For Germany, figure 4.2 shows that contributions are not particularly high. The contribution burden in Germany is the second lowest of all four countries, especially for those with lower incomes up to €41,850, and higher incomes from €70,000 upwards.

Burden sharing between employers and employees

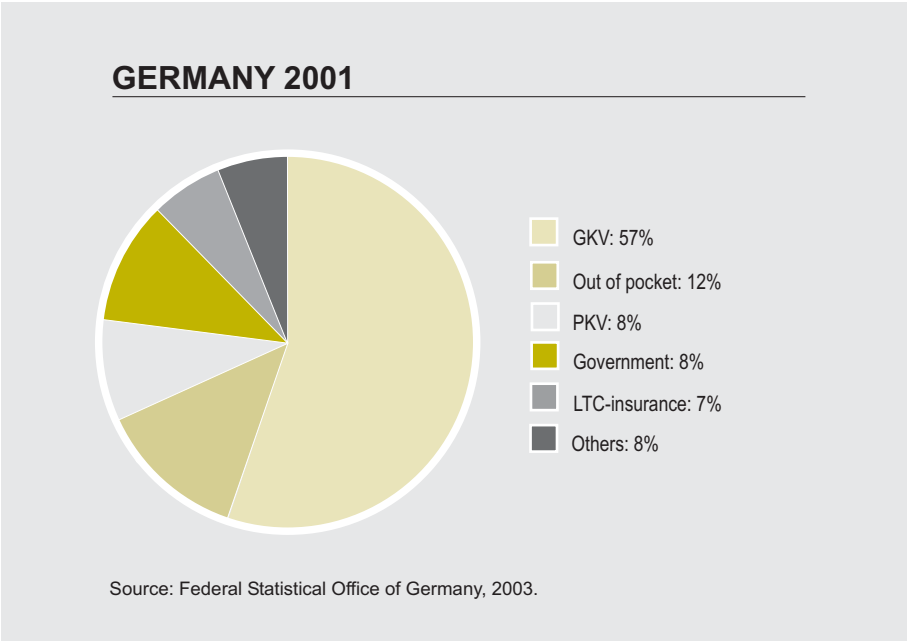
Since employer and employee in all four countries share contribution rates, it is worth looking at the different contributions employees must pay in each country. As displayed in figure 4.3, employees in the Netherlands contribute the most, up to about €65,000 (2003). French contributions are more progressive, at least for higher amounts. It is also evident that Japanese employees pay the lowest contributions for lower incomes, while German employees pay the lowest contributions for incomes higher than about €80,000. It should also be kept in mind that economists often emphasise that the employer's contribution is in most cases subtracted from the wages of employees anyway and could therefore be regarded as an employee's contribution. It might thus be more accurate to examine total contributions rather than the employee's share.

As an overview, figure 4.4 displays the burden sharing between employee and employer in each of the four countries.

Figure 4.1 Different sources of funding as per cent of total health expenditures

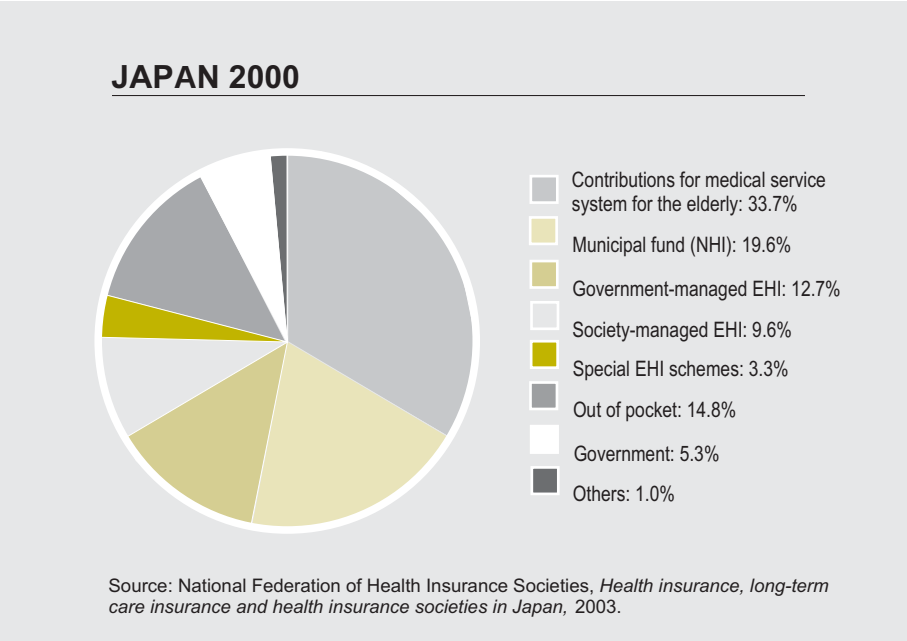


Source: ISSA country reports.

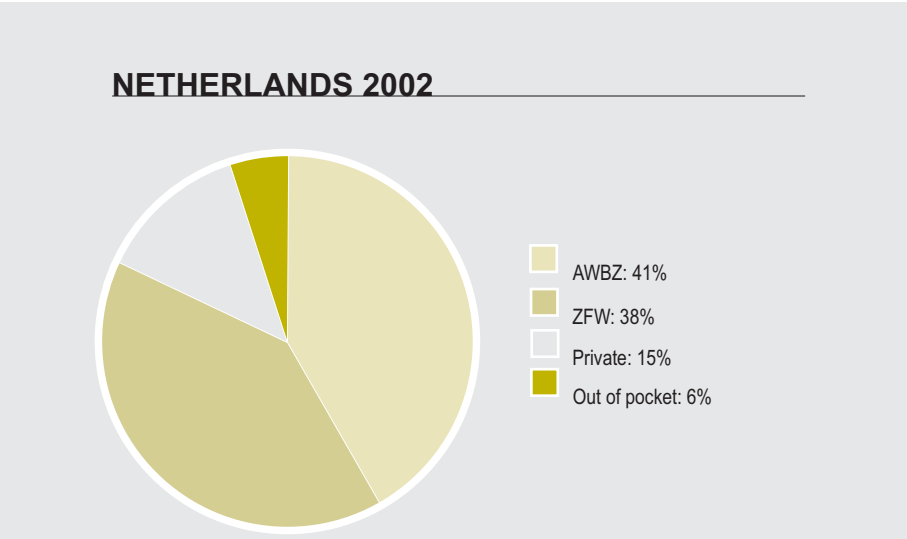


Source: Federal Statistical Office of Germany, 2003.

Figure 4.1 *(Contd.)* Different sources of funding as per cent of total health expenditures



Source: National Federation of Health Insurance Societies, *Health insurance, long-term care insurance and health insurance societies in Japan,* 2003.



Source: ISSA country reports.

Figure 4.2 Contributions at different income levels according to contribution rates in the four countries

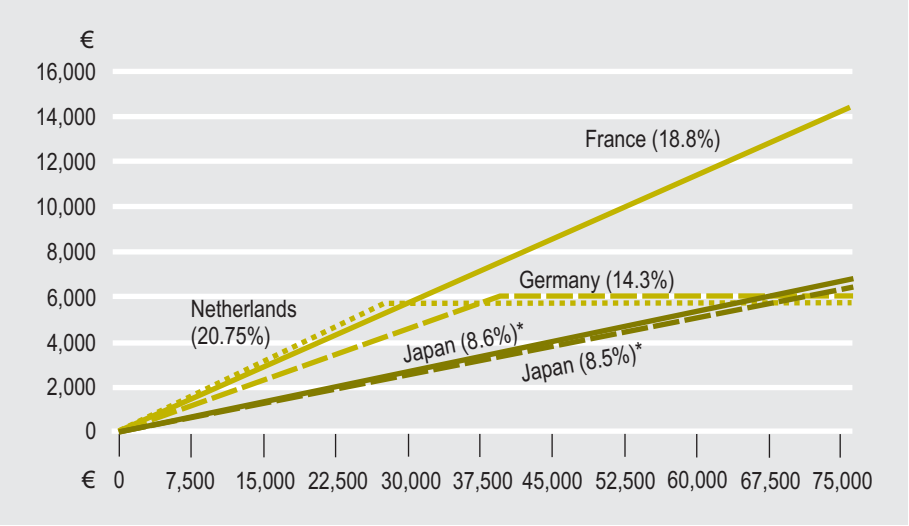
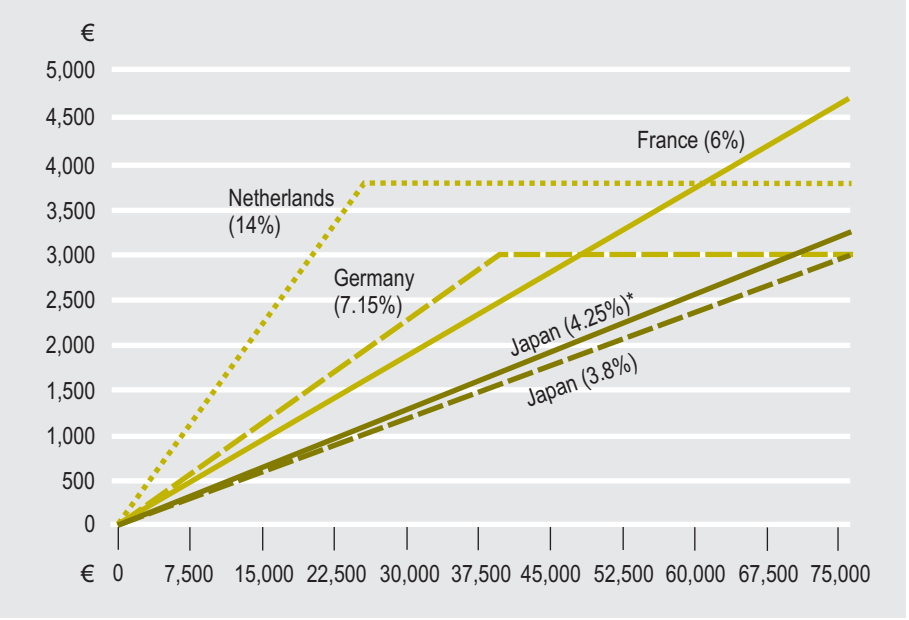


Figure 4.3 Contributions at different income levels according to contribution rates of employees in the four countries



* In Japan the Government-managed and the Society-managed sickness fund scheme have different contribution rates: Government-managed 8.5 per cent (4.25 per cent by employees) and Society-managed 8.6 per cent (3.8 per cent by employees); it should also be noted that the contribution assessment base for the CSG (5.25 percentage points) in France is larger than for any other scheme since it also includes unearned income (from capital gains and interest) e.g., from investments while for other schemes only earned income is considered. Therefore contributions are even higher than displayed. Additionally, it should be mentioned that flat-rate-premiums in the Netherlands are not considered in this illustration since they vary between the sickness funds.

Table 4.4 Change of funding sources as per cent of the total health expenditure

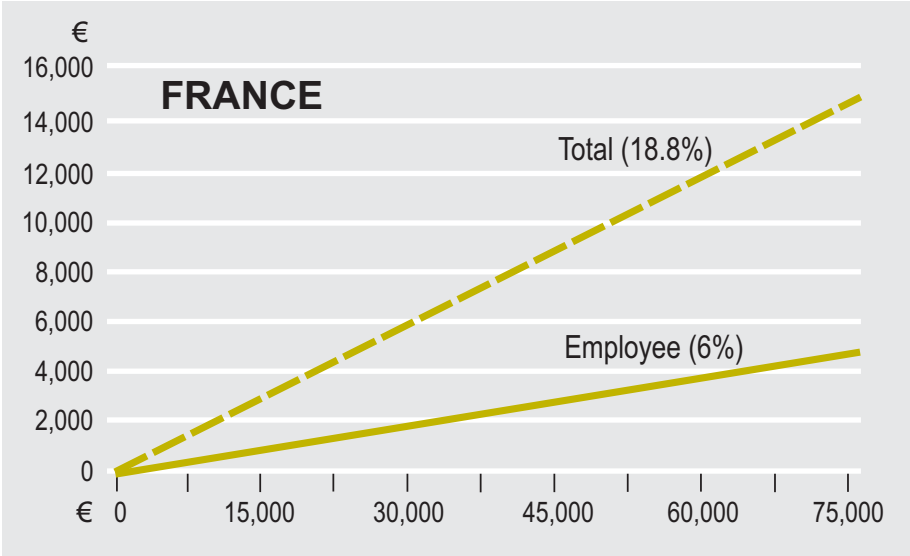
	1990	1995	1999	2000	2001	2002
Japan						
Contributions for medical system for the elderly	28.0	31.5	35.6	33.7	34.4	n.a.
Municipal fund (NHI)	20.8	19.6	18.7	19.6	19.4	n.a.
Government-managed EHI	15.8	15.6	12.4	12.7	12.3	n.a.
Society managed EHI	11.6	11.1	9.4	9.6	9.3	n.a.
Special EHI schemes	4.8	4.3	3.2	3.3	3.2	n.a.
Out of pocket	12.1	11.8	14.6	14.8	15.0	n.a.
Government	5.3	4.8	5.0	5.3	5.4	n.a.
Others	1.6	1.3	1.0	1.0	1.0	n.a.
Germany						
GKV	60.7*	58.2	56.8	56.9	57.0	n.a.
Out of pocket	10.7*	11.1	12.4	12.1	12.3	n.a.
PKV	7.3*	7.4	8.0	8.2	8.3	n.a.
Governmental	13.0*	12.1	8.0	7.9	7.8	n.a.
LTC insurances	0.0*	2.5	7.1	7.1	7.0	n.a.
Others	8.3*	8.7	7.7	7.7	7.6	n.a.
France						
Compulsory sickness funds	74.3	74.0	73.5	73.3	73.4	n.a.
Out of pocket	11.4	10.8	10.3	10.4	10.2	n.a.
Supplementary insurances	11.0	11.9	12.6	12.7	12.7	n.a.
Government	2.3	2.4	2.5	2.5	2.7	n.a.
Others	1.0	0.9	1.1	1.1	1.0	n.a.
Netherlands						
AWBZ		47.5	38.8	39.8	40.1	41.1
ZFW		30.6	38.2	38.8	38.2	37.7
Private		13.4	15.0	14.6	14.6	15.2
Out of pocket		8.5	8.0	7.0	7.0	6.0

*1992
Sources: National Federation of Heath Insurance Societies (Kemporen) (2003); Federal Statistical Office of Germany; ISSA country reports.

Governments' subsidies for sickness funds and out-of-pocket payment

In examining the share of social health insurance and other sources as a percentage of total health expenditure (see figure 4.1), it should also be noted that social health insurance in every country is partially subsidized by the state. Japan pays for the administrative costs of the Government-managed sickness fund scheme, partially subsidizes the administrative costs of the society-managed sickness fund scheme and supports the

Figure 4.4 Employee and total contribution at different income level for each country



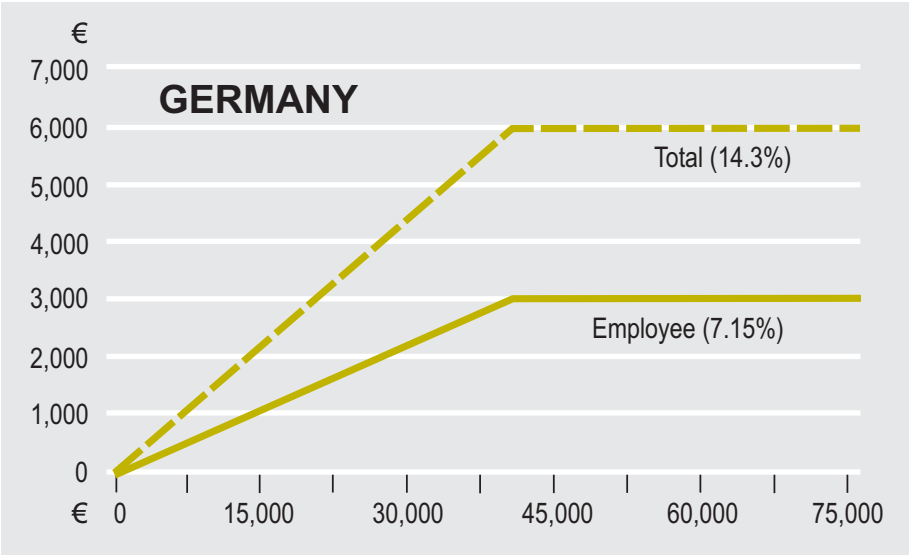
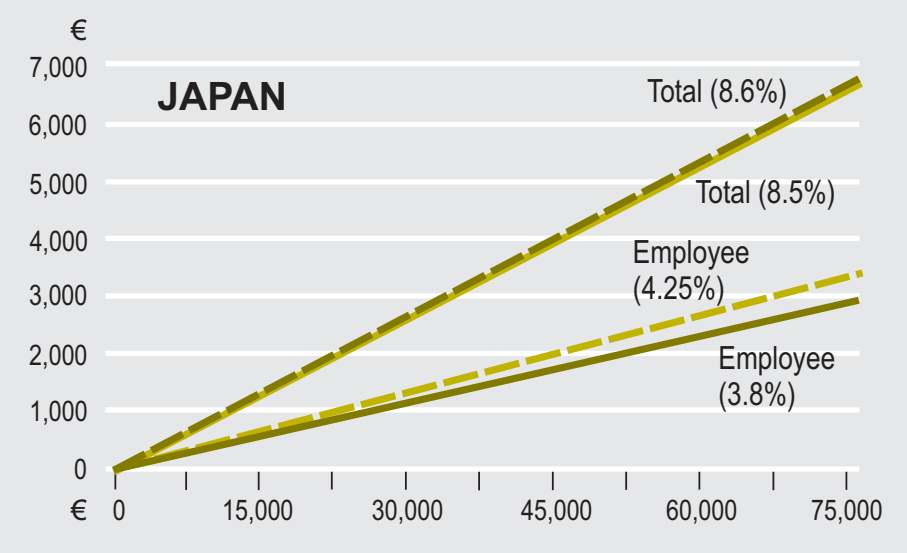


Figure 4.4 *(Contd.)* Employee and total contribution at different income level for each country



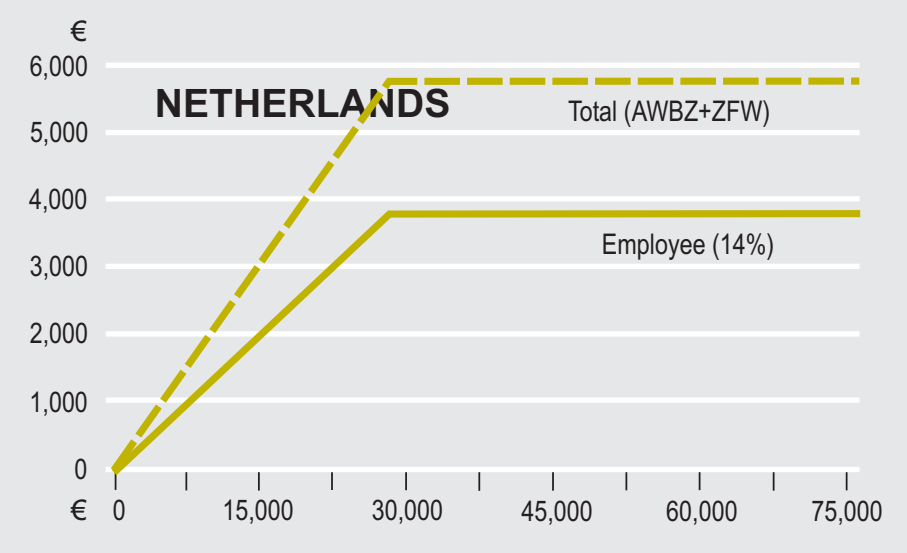


Table 4.5 Comparison of funding principles of social health insurance systems according to selected criteria

	Japan	Germany	France	Netherlands
(Average) contribution rate	Governent-managed funds: 8.5 per cent Society-managed funds: 8.6 per cent Municipal funds: very different	14.3 per cent	18.8 per cent (CNAMTS: 13.55 per cent + CSG: 5.25 per cent)	AWBZ 12.3 per cent ZFW 8.45 per cent + low flat-rate premium
Burden-sharing of contributions	Government- managed: employer: 4.25 per cent; employee: 4.25 per cent Society-managed: employers: 4.8 per cent; employee: 3.8 per cent Municipals funds: very different	Employer: 7.15 per cent; employee: 7.15 per cent	Employer: 12.8 per cent for CNAMTS; employee: 0.75 per cent for CNAMTS + 5.25 per cent for CSG	For AWBZ: only employee For ZFW: employer: 6.75 per cent; employee: 1.7 per cent + low flat-rate premium
Income ceiling (yearly)	No income ceiling including bonuses	Only income until €41,850	No income ceiling for employees	AWBZ €27,009 ZFW €28,188
Contributions of pensioners	Have to join municipal funds; pay same contributions as employees	7.15 per cent pensioner; 7.15 per cent pension scheme; same income ceiling	Reduced rate for CSG of 3.95 per cent on pensions	Lower income ceiling in ZFW at 19,550
Institutional separation of health and long-term care	Yes	Yes	No, but supplementary APA	Covered by AWBZ
Share of social health insurance as per cent of total health expenditures	45.2 per cent (2000)	57 per cent (2001)	76 per cent (2000)	79 per cent (2002)

Table 4.5 *(Contd.)* Comparison of funding principles of social health insurance systems according to selected criteria

	Japan	Germany	France	Netherlands
Deficits of sickness funds in billion €	Governent-managed: –2.8 (2001) Society-managed: –2.4 (2002) Municipal funds: –0.7 (1999)	–3.1 (2002)	No deficits	No deficits
Government subsidies for sickness funds	Government-managed: admin. exp. Society-managed: part of admin. exp. and in case of fin. difficulties Municipal funds: different	€1.26 billion (farmers´ scheme and for epidemics´ act) €2.8 billion (contributions for long-term unemployed) (1998)	€6.2 billion for total social health insurance (2000)	€6.9 million for AWBZ and ZFW (2002)
Out-of-pocket payments	14.8 per cent (2000)	12 per cent (2001)	11 per cent (2000)	6 per cent (2002)

Sources: ISSA country reports; Sandier, Polton, Paris and Thomson (2002); Busse (2002a); National Federation of Health InsuranceSocieties (Kemporen) (2003); Federal Statistical Office of Germany, 2003.

society-managed sickness fund scheme in case of financial difficulties. As displayed in table 4.5, the society-managed sickness funds had a deficit of 2.4 billion in 2002. Unlike Japan, Germany does not cover any financial deficits of sickness funds although they were also running deficits of €3.1 billion in 2002, but it subsidizes them for extraordinary expenditures. They receive €2.8 billion for contributions to insure the long-term unemployed under social health insurance and €1.26 billion for part of the farmers´ contribution and the epidemics act (e.g., covering payments to persons who suffer from consequences of mandatory vaccinations). France and the Netherlands also subsidize their sickness funds, with €6.2 billion and €6.9 billion Euro (2000; 2002). Sickness funds do not show any deficit in either of these countries.

As seen in table 4.4, the percentage of out-of-pocket expenditures varies significantly among the four countries, with the Netherlands showing the smallest and Japan the highest percentage. Again, it is difficult to compare these figures since the definition of out-of-pocket payments can vary a great deal. For example, it is questionable whether or not certain treatments at health resorts or other wellness services are regarded as health services. The longitudinal comparison of the share of out-of-pocket payments in each country is more definitive. Table 4.4 shows that out-of-pocket payments increased over the last years in Germany and Japan while they decreased in the Netherlands.

4.3 Provision and purchasing of health services

4.3.1 Health expenditures by type of services

The volume (see figure 4.1) and the breakout of health expenditures by type of services provide a first glimpse of what needs to be financed and what kinds of services must be purchased. It is obvious that expenditures for each type of service vary according to the design of the individual health care system. It is difficult to compare overall expenditures for outpatient and inpatient care as a percentage of total health expenditures and attribute them to certain features of a single health care system. Only some figures, especially those in the subcategories, can be explained. It is striking that services reimbursed in some countries by sickness funds or other carriers are in more demand and therefore represent a higher share of total health expenditures than in those countries which do not include them in their benefits catalogue.

In the case of dental care, table 4.6 reveals that the Netherlands is spending a significantly lower percentage (3.8 per cent in 2001) of its total health expenditures for these services than any of the three other countries. This is primarily due to fact that dental benefits regarding provided by ZFW are limited to children and preventive and surgical care for adults. Dental prosthesis and any other dental services are either covered by supplementary private health insurance or paid out-of-pocket. In contrast, dental care is widely reimbursed by all other countries and therefore more expensive.

Another important difference revealed by comparing expenditures by type of services is the share of long term care provided by each country. Although the Netherlands has the

Table 4.6 Health expenditures by type of services as per cent of total health expenditure

	1992*	1995	1998	1999	2000	2001
Japan						
Outpatient	43.5	29.5	33.4	34.0	34.1	31.4
dental care	*7.7*	*7.0*	*6.8*	*6.6*	*6.5*	*6.3*
nursing home care	*n. a.*	*0.1*	*0.2*	*0.3*	*0.4*	*0.3*
Inpatient	32.8	36.4	37.8	38.0	37.9	37.3
long-term care	*0.5*	*3.7*	*6.4*	*7.7*	*8.7*	*8.6*
Pharmaceuticals	22.0	21.6	17.0	16.4	15.9	18.7
Administrative costs	n.a.	2.1	1.9	1.9	2.2	2.1
Others	1.7	10.4	9.9	9.7	9.9	10.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Germany						
Outpatient	25.2	25.4	25.6	25.3	25.2	25.2
dental care	*10.4*	*8.8*	*8.0*	*7.7*	*7.8*	*7.9*
nursing home care	*1.1*	*3.6*	*4.5*	*4.5*	*4.5*	*4.4*
Inpatient	35.8	36.9	36.7	36.5	36.6	36.1
long-term care	*5.6*	*5.9*	*6.3*	*6.3*	*6.4*	*6.3*
Pharmaceuticals	14.7	12.7	13.4	13.5	13.6	14.3
Administrative costs	5.0	5.3	5.3	5.4	5.4	5.4
Others	20.3	19.7	19.0	19.3	19.2	19.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
France						
Outpatient	24.1	23.6	23.5	23.5	23.2	23.1
dental care	*5.6*	*5.2*	*5.2*	*5.0*	*5.0*	*5.1*
nursing home care	*0.3*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
Inpatient	44.7	45.1	44.3	43.2	42.3	41.6
long-term care	*2.5*	*2.9*	*3.2*	*3.3*	*3.3*	*3.3*
Pharmaceuticals	17.1	17.6	18.6	19.5	20.4	21.0
Administrative costs	1.6	1.7	1.8	1.8	1.8	1.9
Others	12.6	12.0	11.8	12.0	12.3	12.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Netherlands						
Outpatient	23.9	22.0	24.9	24.6	24.7	24.6
dental care	*4.6*	*3.9*	*3.9*	*3.8*	*3.8*	*3.8*
nursing home care	*6.9*	*6.8*	*6.6*	*6.6*	*7.0*	*7.3*
Inpatient	49.7	49.1	44.9	44.6	44.6	44.9
long-term care	*9.8*	*10.1*	*9.6*	*9.4*	*9.3*	*9.5*
Pharmaceuticals	10.5	11.0	9.7	10.0	10.1	10.1
Administrative costs	4.8	4.5	4.8	4.7	4.4	4.3
Others	11.1	13.4	15.7	16.1	16.2	16.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

*For Japan, obviously a change in accounting principles occurred in 1995.
Source: OECD Health Data 2003.

most experience with long-term care (35 years), the share of long-term care for outpatients (7.3 per cent in 2001) as well as inpatients (9.5 per cent in 2001) is by far the highest compared to other countries. It can also be seen that expenditures for long-term care grew significantly in Germany when long-term care insurance provided benefits for the first time in 1995 for home care nursing and in 1996 for institutional long-term care. A similar effect could be seen in Japan when public long-term care insurance was introduced in 2000. The share of institutional care jumped about 1 per cent from 1999 to 2000 although it had already grown 1.3 per cent the year before. Again, it is difficult to compare figures by relying on only one expenditure carrier; in Germany, for example, nursing home care of the elderly was formerly paid under social assistance by local governments.

4.3.2 Hospital care

Ownership

Similar to the Dutch institutional organisation of social health insurance, the Netherlands has a long tradition of privately supplying hospital care. Private or not-for-profit institutions manage more than 90 per cent of hospital beds in the Netherlands. It should also be noted that private-for-profit management is prohibited in the Netherlands. The Dutch had imposed increasing regulation on hospital infrastructure in the last decades of the 20th century, but they are now in the process of deregulation. The development of the number of beds shown in table 4.7 is somehow contradictory to trend toward deregulation because the share of public beds actually increased from 11.8 per cent in 1990 to 14 per cent in 2001.

Germany seems to follow a similar approach as the Netherlands since the share of beds run by private-for-profit and not-for-profit hospitals is steadily increasing. Between 1990 and 2001 the share of beds in public ownership decreased from 62.8 per cent to 53.3 per cent while at the same time the share of beds in private-for-profit and private-not-for-profit hospitals increased from 37.2 per cent (33,5 per cent + 3,7 per cent) to 46.8 per cent (38,7 per cent + 8,1 per cent). This increase is primarily due to acquisitions of previously publicly owned hospitals by private investors.

In Japan the share of beds owned by private-not-for-profit hospitals is lower than in the Netherlands but still high compared with France and Germany, which is due to the establishment of private “Medical Care Corporations”. As in the Netherlands profit management of health care institutions is generally prohibited in Japan, therefore these corporations are privately owned but must be managed as non-profit organisations. The scope of their related business is limited to the training of medical staff and some other activities. These corporations alone manage 48.8 per cent of all beds and 58.9 per cent of all hospitals in Japan.

Compared to the other countries, the share of beds in public hospitals is quite high in France, with 65.6 per cent of all beds. On the other hand, the share of beds managed by private hospitals (19.8 per cent) is higher than in Germany where private not-for-profit

Table 4.7 Development of ownership of general hospitals in each country

	Year	Public		Private non-profit		Private for profit		Total
		Beds	Per cent share	Beds	Per cent share	Beds	Per cent share	Beds
Japan	1990	514,142	26.4	1,435,117	73.9	0	0	1,929,259
	2001	504,243	27.2	1,352,098	72.8	0	0	1,856,259
	Change	**–1.9 %**		**–5.8 %**				**–3.8 %**
Germany	1990	387,207	62.8	206,936	33.5	22,779	3.7	616,922
	2001	273,046	53.3	198,205	38.7	41,283	8.1	512,534
	Change	**–29.5 %**		**–4.2 %**		**+81.2 %**		**–16.9 %**
France	1990	358,450	64.8					552,755
	2001	309,047	65.6	68,963	14.6	93,511	19.8	471,521
	Change	**–13.8 %**						**–14.7 %**
Netherlands	1990	7,800	11.8 %	58,248	88.2	0	0	66,248
	2001	7,933	14 %	48,511	86	0	0	56,444
	Change	**+1.7 %**		**–16.2 %**				**–14.8 %**

Sources: Federal Statistical Office, Germany; Ministry of Health, National Federation of Health Insurance Societies (Kemporen) (2003); OECD Health Data 2003.

hospitals are historically more dominant than private for-profit hospitals. Table 4.7 summarizes the ownership of general hospitals in each country.

Access to services

In spite of differing service structures across the four countries, patients insured under social health insurance generally have access to all types of hospitals. In France and in Germany access is slightly limited since some private hospitals not contracted by the SHI do not accept SHI-patients unless they are prepared to carry the costs privately.

Although all patients in all four countries have access to outpatient services in hospitals, some countries are regulating access by establishing referral systems. In the Netherlands mainly medical specialists in outpatient units in hospitals provide secondary and tertiary care. Apart from emergencies, patients only have access to these outpatient facilities provided by nearly every hospital in the Netherlands if a general practitioner refers them. Germany is also using a referral system but secondary, and sometimes even, tertiary care is provided by specialists outside of hospitals. Therefore, patients are usually only referred to hospitals by GP's or specialists if they need inpatient treatment. Japan and France have so far not established a referral system for outpatient services in hospitals, and are free to visit any type of service they wish.

Table 4.8 Access to inpatient services

	Japan	Germany	France	Netherlands
Access to all types of hospitals	Yes	Yes, but not to all private hospitals accept SHI insured patients	Yes, but some private hospitals charge higher co-payments	Yes
Referral system (to outpatient services in hospitals)	No	Yes (except cases of emergency)	No	Yes (except cases of emergency)
Waiting lists	No	No	No	Yes for different treatments

Sources: Based on ISSA country reports.

Waiting lists are limiting access to hospital care in many countries, but the Netherlands is the only country among the four under discussion which is reporting such lists. During the nineties, waiting lists for certain diagnostic procedures and treatments in hospitals needed to be created in the Netherlands. At the end of 2001, the number of patients waiting for treatment in general hospitals had increased to 185,000. The largest waiting lists were those in the specialities of orthopaedics, general surgery, ophthalmology and plastic surgery. A report issued by the Social and Economic council at the end of 2001 estimated the total social costs of waiting lists at 3.16 billion per year, including 1.86 billion due to loss of welfare, 0.59 due to loss of income and productivity, 0.68 due to long-term disability and 0.03 due to bureaucracy (SEO 2001, Busse 2002a).

Hospital planning and contracting

In Germany, the Laender governmentally plans capacities for hospital care on a regional level, while in Japan such planning is carried out by the prefectures. Capacities are planned by the central government in the Netherlands. For the purpose of hospital planning, France has established Regional Hospital Agencies as joint committees of health insurance schemes and public services, although its directors are appointed by the council of ministers. Those hospitals included in the regional or central hospital plans in the four countries are usually contracted by sickness funds for reimbursement, although there are some exceptions (e.g., in Germany there are additional contracts with hospitals not included in the hospital plan if additional capacities are needed).

Table 4.9 Hospital infrastructure and utilization

		1990	1995	1998	1999	2000	2001
Hospital beds per 1,000 persons	Japan	13.6	13.3	13.1	13.0	13.0	12.9
	Germany	7.5	6.9	6.5	6.4	6.4	6.3
	France	9.7	8.9	8.4	8.3	8.1	8.0
	Netherlands	4.3	3.8	3.7	3.6	3.5	3.3
Personnel per bed	Japan	0.79	0.91	0.97	0.98	1.00	1.01
	Germany	n.a.	1.47	1.51	1.51	1.51	1.51
	France	1.09	1.1	1.09	1.12	1.51	1.56
	Netherlands	2.13	2.34	2.63	2.67	2.76	
Average length of stay (in days)	Japan	50.5	44.2	40.8	39.8	39.1	38.7
	Germany	17.2	14.2	12.3	12.0	11.9	11.6
	France	15.1	14.1	13.4	13.1	13.1	13.5
	Netherlands	16.9	14.3	13.6	13.1	12.9	12.5
Occupancy rate	Japan	83.6	83.6	84.0	84.6	85.2	85.3
	Germany	86.4	81.3	81.6	81.4	81.1	80.1
	France	80.4	80.7	81.8	80.9	81.9	82.2
	Netherlands	73.3	73.3	70.1	66.7	65.7	66.0
Admission rate per 100 persons	Japan	8.2	9.2	9.8	10.1	10.3	n.a.
	Germany	20.0	21.9	22.7	23.1	23.5	n.a.
	France	23.2	22.9	23.1	23.0	22.4	21.8
	Netherlands	9.9	10.0	9.9	9.7	9.4	9.3

Sources: WHO, HFA Database (2003); OECD Health Data (2003); National Federation of Health Insurance Societies (Kemporen) (2003).

A special characteristic of the German and French hospital systems is the structure of dual financing, implying a separation of financing recurrent hospital expenditures and investment expenditures. According to this separation the state carries certain investment expenditures by subsidies while the sickness funds pay current hospital expenditures.

Hospital infrastructure und utilisation of hospital services varies dramatically among the four countries, but the heterogeneity of the data sources requires careful interpretation concerning across-country comparisons. In particular, Japan's method of calculating "hospital beds per 1000 persons" and "average length of stay" seems to vary from that used by the other countries. In spite of this methodological problem, certain trends can be recognized from the longitudinal changes in each country. While the number of hospital beds was reduced over time in all of the four countries, at the same time the "personnel per bed" increased in every country. Obviously, the number of personnel has not been declining while the number of beds has been reduced. All four countries show a trend towards a decrease in their "average length of stay (in days)".

Reimbursement and spending control

DRG's seem to have become the dominant method of reimbursement of hospital services in most of the four countries. Germany currently uses a reimbursement mix based on per diem, case and procedure fees. Additionally, there are negotiated target budgets which are set for each hospital containing all elements of the reimbursement mix. If these budgets are exceeded, hospitals must pay back certain elements to the sickness funds. While recurring expenditures are reimbursed by the sickness funds, investments are carried by the Laender (regions). DRG's are expected to be introduced in 2004 onwards for most hospitals, psychiatric care hospitals excepted.

In France, public and private non-profit hospitals are reimbursed per prospective budgets defined by regional hospital agencies based on historical budgets, relative costs per DRG's and strategic objectives. Private hospitals are currently reimbursed on a fee-for-service basis although the introduction of DRG's is also planned.

In the Netherlands, hospitals receive budgets negotiated by the Central Agency for Health Tariffs and sickness funds. The budget for each hospital is calculated on the basis of the number of persons using a service area, the number of licensed beds and specialists units, and negotiated utilization volumes in one hospital. The Netherlands also plans to introduce a system of DRG's, integrating ambulatory care provided by hospitals.

The Japanese system of reimbursing hospital care differs in many ways from the approach used in the three other countries. So far, hospitals are reimbursed on a fee-for-service basis by receiving defined points for each service with a fixed value for each point. Since the same method of reimbursement was also used for ambulatory care it aimed to achieve a better integration of hospital and ambulatory care but at the same time encouraged excessive treatments and prolonged hospitalisation. After

Table 4.10 Planning, contracting, reimbursement and user charges in hospital care

	Japan	Germany	France	Netherlands
Planning	Hospitals need the permission of the prefectural (regional) governments	Laender (provincial) governments are planning number of beds and hospitals	Regional hospital agencies are planning the number of beds and hospitals	Planned by central government
Contracting	Contracting with all hospitals accredited by the regional governments	Contracting with all hospitals accredited by regional hospital plans and with selected others	Contracting with all hospitals accredited by regional hospital agencies	Contracting with all hospitals accredited by the central government
Reimbursement method	Fee-for-service (hospitals received defined points for each service with fixed value of each point); in 2003 a capitation system based on Diagnosis Procedure Combination (DRG's based on a point system) was introduced for some hospitals	Current reimbursement mix: per diems, case and procedure fees; additionally negotiated target budgets (from 2002 onwards DRG's are step by step introduced for hospitals)	Public and private non profit: prospective global budgets defined by regional hospital agencies based on historical budgets, relative costs per DRG's strategic objectives Private for-profit: fee-for-service payments (DRG's planned)	Hospitals receive budgets being calculated on the following basis: number of persons in one service area, number of licensed beds and specialists units, negotiated utilization volumes (DRG's planned)
User charges	30 per cent co-payments for citizens below 70 and 20 per cent for citizens above 70 (10 per cent for those above 70 with low income); ceilings are set according to income	Fee of €10 per day, but limited to a maximum of 28 days per year	Co-payments of 20 per cent for the first 31 days up to a ceiling of €200/ Additionally €10.67 per day	None

Sources: ISSA country reports; Sandier, Polton, Paris and Thomson (2002); Busse (2002a); National Federation of Health Insurance Societies (Kemporen) (2003).

several trials were conducted with DRG's, a capitation system based on Diagnosis Procedure Combinations (DPC's) was introduced in 2003 for hospitals with specified functions providing advanced medical care and other services. According to this system, hospitals receive a certain number of points per day for each diagnosis-related group currently covering 475 diseases and 1,860 classifications.

In all four countries there is a trend towards the introduction of DRG-like systems. Japan seems to be most advanced in introducing this method, while the Netherlands plans the most comprehensive DRG-system including inpatient and outpatient care.

User charges

Japan charges the highest co-payment rate of all four countries for hospital care, with a 30 per cent share for citizens below age 70 and a 20 per cent share for those above age 70. Low-income citizens above age 70 are charged a 10 per cent co-payment. For those below age 70 as well as for those above age 70, different co-payment ceilings have been defined according to income. Once the ceilings are reached, benefits are granted without co-payments. France follows a different strategy, with co-payments of 20 per cent for the first 31 days of hospital care (with a ceiling of €200) and an additional €10.67 per day for accommodations. Germans have to pay the lowest user charges for hospital care, with a fee of €10 per day, but limited to a maximum of 28 days per year. Co-payment ceilings in Germany are set at 2 per cent of yearly income and at 1 per cent of yearly income for citizens with chronic diseases. For the calculation of co-payment ceilings, all kinds of co-payments (not only for hospital care) are considered. The Netherlands is the only country with no co-payments of any type for hospital care.

4.3.3 Ambulatory care

Employment status and organisation

Ownership and organisational structure of physician practices in ambulatory care in the four countries has reflected certain historic and economic factors. In Germany and France the majority of physicians are self-employed and still practicing in single practices. In France and Germany, 38 per cent and 30.1 per cent, respectively, of office-based sickness funds physicians work in group practices. In each country, there remain a few physicians employed by polyclinics or dispensaries (pharmacies with attached ambulatory care). Before German reunification, most of the ambulatory care in East Germany was provided by polyclinics which have gradually been reduced and replaced by single practices after reunification. In the Netherlands ownership and organisation of practices differ based on the medical service field. Half the general practitioners are self-employed in single practices and the other half work in either group practices or health centres. In contrast, specialists in the Netherlands usually practice in hospital outpatient clinics, of which 15 per cent are employed by hospitals while 85 per cent are self-employed. Unlike physicians in the other countries, in Japan they are either employed by hospitals, practicing in outpatient departments, or work as self-employed physicians in single practices or clinics which are similar to health centres in other countries.

Dispensation of pharmaceuticals

Japan is unique with respect to its organisational separation of prescription and dispensation of pharmaceuticals. While Germany, France and the Netherlands strictly limit dispensation to pharmacies, physicians in Japan are allowed to dispense pharmaceuticals by employing pharmacists. However, the share of drugs dispensed by pharmacies has been rising over the last few years and just exceeded 50 per cent at the end of 2002.

Manpower planning

The admission of medical students is limited by quota in all four countries. Furthermore, Germany has limited the number of physicians practicing in ambulatory care by medical specialty and region. If one region has more physicians than needed, physicians are prohibited from opening new practices in that region. In the Netherlands the number of practicing specialists is similarly controlled by the state but general practitioners are not restricted. So far, France and Japan have not limited the number of physicians, but France is in the early stages of introducing a quota system.

Table 4.11 Number of physicians

		1990	1995	1998	1999	2000	2001
Physicians per 1,000 inhabitants	Japan	1.7	1.9*	2.0	n.a.	2.0	2.1**
	Germany	3.0	3.4	3.5	3.5	3.6	3.6
	France	3.1	3.2	3.3	3.3	3.3	3.3
	Netherlands	2.5		2.9	3.1	3.2	3.3
General practitioners per 1,000 inhabitants	Japan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Germany	1.1	1.1	1.0	1.0	1.0	1.0
	France	1.6	1.6	1.6	1.6	1.6	1.6
	Netherlands	0.5	0.5	0.5	0.5	0.5	0.5
Specialists per 100 persons	Japan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Germany	1.3	1.8	2.1	2.1	2.2	2.2
	France	1.4	1.6	1.7	1.7	1.7	1.7
	Netherlands	0.8	0.9	0.9	0.9	0.8	0.8
Dentists per 100 persons	Japan	0.6	0.7*	0.7	n.a.	0.7	0.7**
	Germany	0.7	0.7	0.8	0.8	0.8	0.8
	France	0.7	0.7	0.7	0.7	0.7	0.7
	Netherlands	0.5	0.5	0.5	0.5	0.5	0.5

* = 1996 ** = 2002
Sources: WHO, HFA Database (2003), OECD Health Data (2003); National Federation of Health Insurance Societies of Japan (2003); Japan, Ministry of Health, Labour and Welfare.

Apart from Japan, all of the other countries legally define the field of medical services in which physicians are allowed to offer ambulatory care. In Japan, physicians can freely claim any field of medical services they wish to provide. There is thus no gatekeeper system in Japan and patients have free choice between general practitioners and any kind of specialist. France and Germany have no obligatory gatekeeper system either. In France only one percent of patients have registered for a voluntary gatekeeper system introduced in 1987. As an incentive for patients to register they are not required to pay their bills before consultation.

Table 4.12 Organisation, employment status, planning and access to ambulatory care

	Japan	Germany	France	Netherlands
Organisation of practice	Single practice, clinics (similar to health centres) or practising in out-patient departments of hospitals	Primarily single practices but also group practices	Primarily single practice, but 38 per cent work in group practices	GP's: 50 per cent in single practices, others in group practices and health centres Specialists: practicing in outpatient departments of hospitals:
Employment status of practitioners	Self-employed and employed in hospitals	Usually self-employed and few are employed in polyclinics	Usually self-employed and few are employed in polyclinics or dispensaries	GP's: self-employed Specialists: 85 per cent self-employed, 15 per cent employed by hospitals
Dispensation drugs	Only 50 per cent of prescriptions are dispensed by pharmacies	Drugs are only dispensed by pharmacies	Drugs are only dispensed by pharmacies	Drugs are only dispensed by pharmacies
Number of practicing physicians limited	No	Yes, by medical specialty and region	No	GP's: No Specialists: state controlled
Separation of GP's and specialists	No, doctors can freely claim a field of medical services	Yes	Yes	Yes
Access to GP's and specialists	Free choice between GP and specialist	Free choice between GP and specialist	Free choice between GP and specialist	Free choice but access to specialist only via referral of GP's (Gatekeeper system)
Admission of medical students limited by quota	Yes	Yes	Yes	Yes

Sources: ISSA country reports; Sandier, Polton, Paris and Thomson (2002); Busse (2002a).

Table 4.13 Purchasing and contracting of ambulatory care

	Japan	Germany	France	Netherlands
Contracting	Collective contracting	Collective contracting	Collective contracting	Selective contracting (since 1994 free choice of ZFW funds), but rarely used
Reimbursement	Benefits-in-kind	Benefits-in-kind	Cost-reimbursement, but increasingly more benefits-in-kind (already 40 per cent of payments)	Benefits-in-kind
Institution which physicians are claiming fees from	Physicians claim fees from Social Insurance Medical Fee Payment Fund or Federation of National Health Insurers	Physicians claim fees from the associations of sickness funds physicians who receive negotiated capitations from the sickness funds	Physicians claim fees from the patient, but there are some exemptions e.g. CMU beneficiaries	Directly from AWBZ, ZFW funds and voluntary health insurance
Reimbursement method	Fee-for-service (physicians receiving defined points for each service)	Fee-for-service (physicians receiving defined points for each service)	Usually fee-for-service for all physicians but referring GP's (10 per cent of GP's) receiving capitations; "sector 2"-physicians can charge more	GP's are reimbursed on a capitation basis by ZFW funds and on fee-for-services basis by voluntary insured patients Specialists: fee-for-service
Budgeting; spending control mechanism	Number of points per service and value of points is revised every two years	Monetary value of points for provided services is set ex-post according to the overall number of points claimed in each region	None	In 1995 negotiated spending caps have been introduced for specialists; if caps are exceeded, fees are cut for the following year
User charges	Same co-payments as for hospital care (30 per cent below 70 years; 20 per cent above 70 years)	€10 per quarter if ambulatory care is demanded (no matter how many physicians are visited)	Co-insurance rate of 30 per cent plus balance-billing for treatment in "sector 2"	None

Source: ISSA country reports.

The Netherlands is the only country with an institutionalised mandatory gatekeeper system. Patients have free choice of physicians and specialists but must gain access to specialists through a referral from a general practitioner. They are registered with the sickness funds for a certain GP but are able to change the GP upon approval of the sickness fund.

Contracting

In Japan, Germany and France sickness funds are obliged to collectively contract with all providers of ambulatory care. In contrast, the Netherlands established a system of selective contracting in 1994. Sickness funds now have a choice as to whether or not they want to contract with certain providers. Although this system was introduced to promote competition among providers and therefore increase quality and reduce expenditures, so far sickness funds in the Netherlands rarely make use of this choice.

Claiming fees

Physicians are reimbursed for their services in different ways in all four countries. In Japan and Germany physicians claim their payments from institutionalised bodies administrating the payments for physicians.

In Japan, physicians claim payments for patients insured under Government and Society-managed-funds from the Social Insurance Medical Fee Payment Fund. For patients insured under Municipal Funds they claim payments from the Federations of National Health Insurers on a regional basis. The single sickness funds in turn reimburse the administrative bodies according to each payment.

In Germany, the Associations of Sickness Funds Physicians have the function of processing claims and reimbursing physicians on a regional basis. Unlike Japan, sickness funds in Germany do not reimburse the Associations of Sickness Funds Physicians according to each claim but pay negotiated capitations, which differ significantly among sickness funds.

In the Netherlands there is no administrative body for processing claims but physicians are required to claim payments directly from the AWBZ, ZFW or voluntary health insurance. The only country that does not apply the benefit-in-kind principle is France. Although physicians in France claim their fees directly from the patients on a cost-reimbursement basis, there are increasingly more exemptions from this. For example, CMU (Couverture Medicale Universelle – health insurance coverage for the poor) beneficiaries do not need to pay in advance for ambulatory services and outpatient hospital care is also reimbursed on a benefit-in-kind basis.

Reimbursement method

Although it is widely accepted that fee-for-service reimbursement leads to an oversupply of services, all four countries still use this method of reimbursement, at least

partially. Japan and Germany combine fee-for-service payment with a point system. According to this system, physicians receive a certain number of points for each service delivered. In Japan, the monetary value of points is known ex-ante and is only revised every two years. In Germany the value is set ex-post, according to the overall number of points claimed in one region. The overall amount distributed among physicians is set by capitations paid by sickness funds, in effect creating de facto budgets. Therefore, the monetary value per point is calculated by dividing the total sum for each region by the overall amount of claimed points. Thus, physicians do not know the fee for medical services in advance.

In France, services are reimbursed on a fee-for-service basis, as in Japan. The 10 per cent of French general practitioners who have opted to be a "referring physician" (participating in a gatekeeper system on a project basis), are reimbursed on a capitation basis. It should also be noted that physicians in "Sector 2", representing 38 per cent of specialists and 15 per cent of general practitioners, are allowed to charge more than the official tariffs.

In the Netherlands, reimbursement methods differ between general practitioners and specialists. General practitioners are reimbursed on a capitation basis by ZFW funds and on a fee-for-services basis by voluntary-insured patients. Specialists in the Netherlands are generally paid on a fee-for-service basis, but some are also employed by hospitals in outpatient care units. In addition, negotiated spending caps were introduced for specialists in 1995. According to these spending caps, sickness funds enter into contracts with specialist groups, fixing a certain volume of care to be provided by specialists. Reduced fees compensate any overrun in subsequent years.

4.3.4 Long-term care

Planning

Planning long-term care capacities takes place on local, provincial and central levels in the four countries. In particular, resource planning is conducted with respect to institutional care. In Japan, municipalities (local communities) determine care plans under the

Table 4.14 Infrastructure characteristics of long-term care

	Nursing care: beds per 1,000 persons					
	1990	1995	1998	1999	2000	2001
Japan	0.2	0.8	1.5	1.7	1.8	1.9
Germany	3.5	3.7				
France	1.2	1.4	1.4	1.4	1.4	1.4
Netherlands	3.5	3.6	3.7	3.6	3.7	3.7

Source: OECD Health Data (2003).

Table 4.15 Long-term care: planning, coverage, access and user charges

	Japan	Germany	France	Netherlands
Planning	Municipalities determine care plans under supervision of prefectures (provinces)	Laender (provincial) governments are planning capacities but are not allowed to limit number of ambulatory care providers	Planned by local authorities (départements)	Planned by central Government
Benefits	All people above 40 are covered by the statutory long-term care insurance	Institutional care or ambulatory care is provided by statutory long-term care insurance for everyone if care is expected to be necessary for at least six months	Only institutional care is provided by sickness funds for disabled adults or dependent elderly people; for home care persons with low income receive benefits from retirement schemes; APA pays additional allowance; comprehensive long-term care insurance is shortly introduced	AWBZ fully covers institutional care and home care for everyone
Access	Application to municipal department for decision on status; care manager or applicant draws up care plan	Applicants are examined and grouped into three categories by the regional medical review boards	Depending on local authorities (départements)	Patients are examined and grouped at the Regional health care office (RIO)
User charges	10 per cent co-payments on all services	Difference between actual price and granted payments (indemnity tariff)	For home care depending on income	Low user charges depending on individual circumstances (e.g. marital status)

Sources: ISSA country reports; Sandier, Polton, Paris and Thomson (2002); Matsumoto (2003); Weber and Leienbach (2000); den Exter, Hermans, Dosljak and Busse (2004).

supervision of prefectures (provinces), which define the number of institutions and beds for long-term care. In France, planning for long-term care capacities is also a matter for local communities (departments) while in Germany the Laender (provincial) governments plan for capacities. The Laender are not allowed to limit the number of home-care providers in one region in order to enhance competition. Apart from planning hospital capacities, the central government in the Netherlands also plans institutional care.

Benefits

Statutory long-term care insurance in Germany and Japan pays for both institutional and home-care services, but benefits are granted in different ways. While German long-term care insurance provides services as an indemnity tariff (fixed amount of cash benefits or in kind), according to the care class each person is grouped into, Japanese long-term care insurance provides benefits-in-kind for all persons above age 40. In the Netherlands, institutional and home-care services are also fully covered by the AWBZ, but as mentioned in 4.1, the function of the ABWZ differs from German and Japanese long-term care insurance since it also covers high-cost treatments and hospitalisation costs if they continue for more than one year. In this way, long-term care in the Netherlands is more integrated into the general system of health care than it is in Germany and Japan. As opposed to the other countries, France has no separate long-term care insurance although it will be introduced shortly. So far, sickness funds pay for long-term care but only cover institutional care for disabled adults or the elderly. There are some other resources such as retirement schemes which pay benefits for home care to low-income persons and APA (tax-financed benefit scheme), a recently introduced scheme which pays additional allowances to the elderly, enabling them to finance home-care providers.

Access

In order to access long-term care in Germany, applicants are examined and grouped into one of three categories by the regional medical review boards which are jointly run by all statutory sickness funds. A precondition for entitlement to insurance benefits is the expectation that care would be necessary for at least six months. In Japan, persons must apply to municipal departments; a care manager then creates a care plan for the applicant, placing the person into one of seven defined categories. While in France a person applies to local authorities; patients in the Netherlands are examined and grouped at the regional health care offices (RIO).

User charges

There is a co-payment of 10 per cent on all services representing user charges which must be paid in Japan. Since benefits are often granted in Germany as fixed payments (indemnity tariffs), patients usually pay the difference between the actual price and the payments by statutory long-term care insurance. While in the Netherlands patients must pay only low user charges depending on individual circumstances, French residents cover home-care services mainly out-of-pocket, unless they are low-income and receive other sources of support.

5 Lessons to ensure sustainable social health insurance systems and future developments

On the basis of a "best practices" comparison among the four nations, there are certain solutions to ensure sustainable health care systems in the future. There is, of course, no panacea and no ideal system that France, Germany, Japan and the Netherlands or other countries should try to establish. But certain conclusions can be drawn concerning future development in financing, providing and purchasing health services. These are discussed in 5.1. In addition to lessons learned from comparing the four countries, there are further trends which can be anticipated regarding future developments in health care systems in the four countries. These are discussed in 5.2.

5.1 Lessons towards sustainable social health insurance

Competition vs. regulation of sickness funds

For several years, there has been a trend towards promoting competition among sickness funds, in certain countries. While France and Japan have not established any policies to promote competition, the Netherlands and Germany are increasingly moving in this direction. Sickness funds in both of these countries have opened up and their risk structure compensation schemes have been developed to ensure fair competition between sickness funds. It is difficult to empirically assess the effect of the introduction of competition in these countries. Both countries report that, thus far, sickness funds are not sufficiently able to influence the decisive parameters for competition such as contribution rates, provided services and quality of services. Although the framework for competition in both countries is not fully developed yet, they have certainly taken the initial step towards more competition. While the Netherlands and Germany regard competition as their means towards more efficiency in health care systems, France and Japan maintain a more regulated organisational framework for sickness funds. Citizens in these countries have no choice between sickness funds and therefore there is no competition between them. The four countries are obviously moving in two different directions and it is yet to be proved whether one will be more successful than the other.

Separation of long-term care and high-cost medical care

Given the overall aging of the population in the four countries, rising demand for long-term care and the resulting problems for social health insurance systems have

prompted increased efforts to develop strategies for financing long-term care. Apart from France, the three other countries have separated their social health insurance from long-term care by introducing mandatory long-term care insurances. And even France will soon introduce comprehensive long-term care insurance. While Germany and Japan both have long-term care insurance for the elderly, the Netherlands has chosen an even more comprehensive approach. The AWBZ in the Netherlands also covers hospital stays with durations of longer than one year. This comprehensive long-term care insurance not only supports a smooth transition from hospital care to long-term care, thereby reducing duration of hospital stays, it also marks a new trend towards separation of high-cost medical care/long term care and normal medical care. With rising health expenditures more countries are excluding services and are concentrating their social health insurance activities on those services which potentially expose citizens to financial risk. In this context, separation of the AWBZ and the ZFW schemes for normal medical care could be seen as one innovative example of the future organisation of social health insurance.

Private health insurance

Besides Japan, the remaining countries increasingly rely on the integration of private health insurance into social health insurance systems. Private health insurance is used either on a supplementary basis to cover certain services not included in social health insurance, or on a complementary basis, substituting for social health insurance. Substituting complementary private health insurance for sickness funds may be an option, thereby promoting competition and a more service-oriented approach by sickness funds. It should be noted, however, that administrative costs for complementary private health insurance are about three times as high as those of sickness funds (e.g., in Germany). There are important questions concerning the efficiency of complementary private health insurance, as well, but it could also contribute to more flexibility and the deregulation of sickness funds, e.g. if sickness funds offer schemes with deductibles (as in Germany) to prevent insurants from switching to private health insurance.

Supplementary health insurance could be even more important in fostering the modernisation of social health insurance, since services excluded from sickness funds can immediately be replaced by private health insurance. Therefore, it helps social health insurance to concentrate on its major task of providing risk pooling for citizens in order to prevent them from being exposed to financial risks. At the same time, it represents a fallback position for health administrations, while redesigning social health insurance (e.g., excluding services associated with the risk of moral hazard.) For these reasons, private health insurance is certainly an important element in making social health insurance systems more sustainable (see figure 2.3).

User charges

A comparison of user charges reveals that there are differences evident among the four countries. While Japan obviously relies more on user charges for hospital as well as ambulatory care, the Netherlands does not impose any of these charges. Comparing

overall out-of-pocket spending as a percentage of total health expenditures also reveals differences in these approaches. Japan had the highest percentage of out-of-pocket costs while the Netherlands had the lowest. In general, it can be said that the extent of user charges depends very much on each country's system design and the policy behind it. For example, low contributions for employees could be one reason behind high user charges in Japan, while contributions for employees in the Netherlands are relatively higher. Since the ceiling of user charges for each Japanese citizen differs based on income, this has a certain progressive effect similar to that of contributions. But one important difference lies in the fact that if incentive-based user charges are instituted (e.g., per patient contact), these can serve as an economic incentive and therefore prevent an overuse of services. For this reason user charges, such as those found in Japan are probably the best solution to generate revenue and institute economic incentives at the same time.

Reimbursing hospital care with DRG's

All four countries are working to introduce a DRG-like system for reimbursement of costs for hospital care. While Japan seems to be the most advanced country regarding the introduction of this type of system, the Netherlands is planning the most comprehensive DRG-system, including inpatient and outpatient care. In addition to the normal effects of DRG's, (e.g. a reduction in the duration of stay per case and better management), a comprehensive reimbursement system including inpatient and outpatient care would integrate these two segmented sectors not only institutionally but also from a financial point of view. Generally, the transition from inpatient to outpatient care would become easier with such a system which would certainly generate cost savings to a certain extent. It would therefore encourage the introduction of integrated care and especially of disease management programs which are gaining in importance in view of rapidly aging populations.

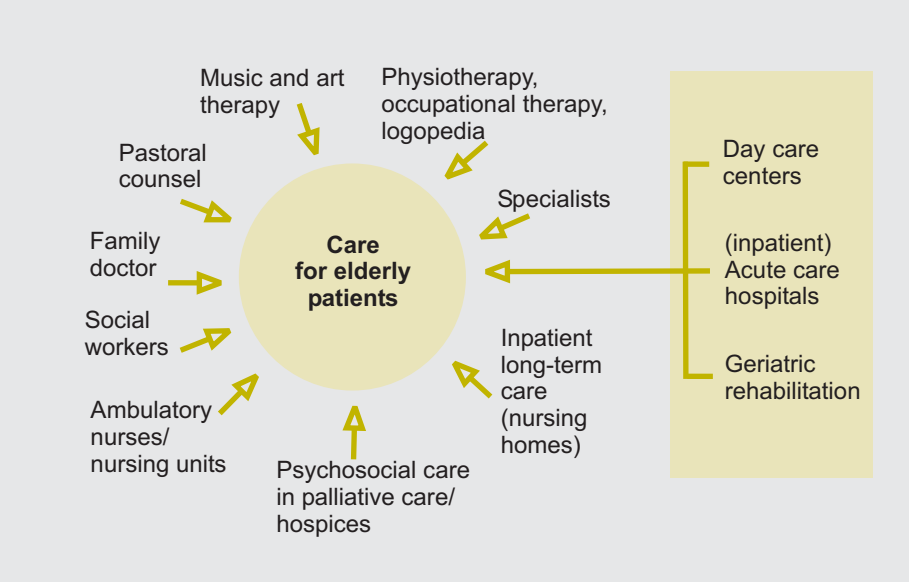
5.2 Further developments

Apart from lessons drawn from comparing the four countries there are certain developments which can be anticipated in the future for social health care systems. As mentioned in 5.1, most countries wish to introduce an integrated healthcare system (figure 5.1.). While setting priorities in health care is a permanent issue on the basis of which day-to-day-adjustments take place in all the four countries (figure 5.2). In line with these permanent corrections and the more comprehensive ideas of a health care network, health care services need to be financed differently in the future than they have been in the past, and for these new approaches some financing options are available. They could be developed by each of the four nations based on their individual peculiarities, customs and historical experiences (figure 5.3). Finally, the future of the European Welfare State within the Common Market needs to be considered on the basis of its growing importance for national and European economic and social policy (figures 5.4. and 5.5.). For Japan and even for Asia as a whole this development will be of interest.

Functional approach and comprehensive all-around care

In all four countries the overall goal is to overcome the segmentation in health care and to work on an integrated and quality assured medical care network. To achieve this goal a functional approach to the health care sector is indispensable for the necessary institutional reforms. For an integrated care delivery system new forms of selective contracting will be needed. The provision of medical treatment and nursing care, including rehabilitation, systematically belongs together, and should be covered through joint remuneration by way of network budgeting and new kinds of fee-per-case payments. Comprehensive "all-around-care" is the new subject of financing. In figure 5.1 health care for elderly patients is taken as an example of the desired integration of providers.

Figure 5.1 Integration of providers in health care for the elderly



To propose such a network is much easier than to accomplish it. Pricing, purchasing (e.g., through DRG´s, reference prices or on the basis of fee schedules), expenditures, and financing (taxes, contributions, premiums, co-payments, etc.) of health services represent a highly complex picture for all the participants. It raises more questions than answers and hopefully competition may help to further develop the institutional details in providing, funding and purchasing required health care for the elderly.

Setting priorities in health care

In all four countries governments and providers of health services will need to set priorities in health care as a day-to-day business in a world of scarce resources. Medical

guidelines, evidence-based medicine and all kinds of certifications are very high on the agenda of health policy. Priority setting in health care in real terms will take place on a macro, a regional and a micro level in all four nations. Quality assurance is a major goal everywhere and will take place even without more changes or reforms.

Figure 5.2 Setting priorities in health care

- In real terms on a macro, regional and micro level
  - by guidelines,
  - certification,
  - evidence-based medicine.
- In monetary terms through financial constraints
  - by global budgets,
  - regional budgets,
  - sectoral budgets,
  - individual budgets.
- By a new institutional framework
  - with solidarity,
  - competition at the same time.

In addition to medical guidelines, priority setting in health care will take place through financial constraints. Global, regional, sectoral, group-specific or individual budgets will be the vehicles to cut back on health care expenditures. Revenue-based expenditure policy could also be instituted in the form of an act in order to provide stability in contribution rates. This approach was taken in Germany back in 1977 when the act for contribution rate stability was first codified in the social security law. Since then, payroll tax rate stability itself developed as a major guideline and today might be considered as a type of political price for health care services.

New ways of funding health care

The separation of allocation (insurance functions) and distribution (income redistribution and family allowances) is one possible element in a new system where family policy is created through tax transfer systems and not within the health care system. Health policy and distribution policy are no longer commingled with each other. A second element would be a reimbursement system that is less revenue-oriented but more outcome-oriented and not reimbursed on a fee-for-service basis. Thirdly, due to risk selection a risk adjustment process is necessary to enable fair competition in health care. Fourth, partially capital funded systems based on the idea of saving money for old age would balance risk management with respect to the severe demographic challenges that are faced by all four nations.

Figure 5.3 Financing health care in the future

- By implementing outcome-oriented incentive and remuneration mechanisms
- By replacing the present payroll-based contribution mechanisms
- By an obligatory private insurance for the whole population with public support for low income people
- No risk selection, but risk adjustment
- Separation of allocation and distribution

Major decisions must be taken regarding a possible replacement of the present payroll-based contribution by a broader tax base with capital income and rent included in the contribution assessment base, as it already exists in France. Following this approach, taxable income could, in the long run, be the basis for employee contributions, which would add a type of proportional income tax to the already existing progressive tax. The "ability-to-pay" principle would be the core of financing health care.

The other option is obligatory health insurance operating on a not-for-profit basis with public support for lower-income people on the basis of community rated premiums. Based on the benefit or insurance principle this obligatory health insurance could be supplemented by private health insurance. Furthermore savings schemes could be added to provide a more demographic resistant health insurance system. This would be an appropriate solution for securing the risks of life in a sustainable way in a social market economy.

The future of the European welfare state and international comparisons

While Japan is completely free to choose the system that best suits its interests, the future of European health care systems is in the long run not completely in the hands of its individual nations.

All systems will learn from each other by comparing their structures, processes and outcomes as it has been done in this comparative study on France, Germany, Japan and the Netherlands. In each system different types of insurance (social, private, non-for-profit e.g.) will balance individual responsibility, competition and solidarity and the future will show just how nations will set priorities regarding basic principles of risk management in social welfare. Even if basic coverage is tax-financed Government must not directly provide health services. In the Common Market, competition, convergence, co-ordination and harmonization of health care systems take place at all times. It is to be

Figure 5.4 The future of the European welfare state I

- Learning by comparing systems: structures, process and outcome in different fields of social welfare
- Private and social insurance between individual responsibility, competition and solidarity
- Tax financed basic coverage/high risk insurance
- Where there is a risk there is a market
- More competition within Europe will strengthen the individual elements of insurance systems

expected that more competition within Europe will strengthen and enlarge individual elements of the insurance systems. Co-ordination has occurred for decades in social policy for people working abroad, for students and for tourists. Harmonization takes place through the Maastricht criteria in monetary policy and regarding fiscal consolidation with repercussions on social security.

Liberalization of health care markets will continue in Europe while solidarity is increasingly left to the tax-transfer-system of the public sector. A social union will not be seen within the European Union in the near future and with its enlargement in 2004 the likelihood is even less. What will grow, however is pressure for reform from Brussels through the European Court of Justice and European competition law.

Figure 5.5 The future of the European welfare state II

- Income redistribution and family allowances through tax transfer system
- No social union in the foreseeable future
- Reform pressure from Brussels will grow (ECJ and European competition law)
- Liberalisation of health care markets will continue

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Towards sustainable health care systems

Strategies in health insurance schemes in France, Germany, Japan and the Netherlands

The cost of health care is growing while the revenue base has remained constant, or in some cases, has even shrunk in recent years. Medical progress, ageing and many other factors have contributed to this growing gap. Neither the pay-as-you-go, nor the tax-financed systems have proven to be capable of being able to regulate themselves quasi automatically to address growing financing concerns. Major reforms are either too difficult in an increasingly complex system or are politically unmanageable in a highly sensitive area such as health care. Patchwork repair is the reality everywhere. This daunting situation describes why in Europe and in Japan the public is calling for more substantial and longer lasting reforms.

By adopting a best-practice approach, this study compares the social health insurance models found in France, Japan, Germany and the Netherlands, and compares the impacts of several common challenges faced by each country, notably:

- an ageing population;
- changes in disease structure;
- technological progress;
- socio-economic situation;
- and changes in preferences and structural weaknesses of each system.

The study further identifies certain lessons, and questions whether competition or regulation are appropriate vehicles to tackle the widespread problems faced by many health care systems.

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