International Social Security Association

Towards sustainable health care systems

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

A comparative study

Second edition

Klaus-Dirk Henke
and Jonas Schreyögg

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Acknowledgements

This is the second edition of the comparative report published under the same title in 2004. Since certain developments and data could not be integrated in the previous version, this version is an extended and updated version which aims to provide an in-depth analysis of the four social health insurance systems.

The content of this book is the result of a comparative study on social health insurance systems in France, Germany, Japan and the Netherlands, which has been worked out on behalf of the International Social Security Association (ISSA) based in Geneva. The International Social Security Association was founded in 1927 at the initiative of the International Labour Organization (ILO) to develop and improve sickness insurance. Its membership comprises over 350 social security institutions in over 142 countries.

This comparative study is first of all based on comprehensive country reports from France, Germany, Japan and the Netherlands which have been conducted especially for this study. Michel Grignon, Marie-Eve Joel and Pierre Levy worked out the country report for France, Prof. Dr. Reinhard Busse, Dr. Susanne Weinbrenner, Annette Riesberg and Dr. Stephan Burger for Germany, Prof. Dr. Hiroya Ogata and Prof. Dr. Kotaro Tanaka for Japan and Geert Jan Hamilton for the Netherlands. We are also grateful to the mentioned persons for the valuable review of our comparative study. Furthermore we would like to thank several institutions and governmental organisations in all four countries for their data support.

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Klaus-Dirk Henke
Jonas Schreyögg

Berlin, May 2005

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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Abbreviations

AWBZ	Algemene Wet Bijzondere Ziektekosten
CMU	Couverture médicale universelle
DRG	Diagnosis related groups
EHI	Employer health insurance
GKV	Gesetzliche Krankenversicherung
GP	General practitioner
HALE	Healthy life expectancy
ISSA	International Social Security Association
LTC	Long-term care
NHI	National Health Insurance
OECD	Organisation for Economic Co-operation and Development
PKV	Private Krankenversicherung
SHI	Social Health Insurance
WHO	World Health Organisation
ZFW	Ziekenfondswet

Summary

1 Introduction

In all four countries 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 pay-as-you-go approach is encountering limits, either with rising employer and employee contribution rates, as is the case in the so-called Bismarck-Systems, or with higher taxes in the so-called Beveridge-systems. Neither of the two systems is able to regulate themselves quasi automatically. The number of political interventions increases, and patchwork repair is the reality everywhere. Major reforms are either too difficult in an increasingly overcomplex area or are politically unmanageable in a highly sensitive area such as health care. This describes in brief why the public is calling for more substantial and longer-lasting reforms in Europe and Japan.

The overall answer to resolve 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 revenue by either higher contribution rates, by using a broader base for financing and/or through higher co-payments and out-of-pocket-expenditures. Thirdly, major structural reforms could be the answer to close the financial gap. These reforms can be accomplished on the basis of the ability-to-pay-principle or with the help of the benefit or insurance principle. These theoretical approaches may be employed by all nations at any time. They offer not much more than a simple restructuring of the problem that virtually all nations face. But there are differences regarding the solutions used by each country to respond to this challenge, and they might be able to learn from each other if they are compared.

2 Impacts on health care systems

2.1 Trends in expenditures for health care

Health care expenditures have risen considerably in the past ten years in all four countries compared. While Japan, Germany and France experienced an average yearly increase in total health expenditures between 1995 and 2001 of 2.9 per cent, 2.4 per cent and 3.2 per cent, health care expenditures in the Netherlands rose an average of 6.4 per cent per year in the same period. The percentage of GDP spent on health care services also increased over the last decade in all four countries – Japan experienced the highest rise, from 6.8 per cent in 1995 to 8.0 per cent in 2001.

2.2 Causes for expenditure trends

Demographic characteristics

One major reason for the recent growth in expenditures in all four countries is attributable to 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 age 65 has risen from 5.7 per cent as a percentage of the total population in 1960 to 17.4 per cent in 2000. Changes in the three European countries have not been that drastic, but nevertheless the number of people above age 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 in the same period.

Changes in disease structure

Changes in disease structure are partially linked to demographic developments, having a direct impact on the provision of health care and therefore on health expenditures. First of all, a shift to chronic diseases can be observed. Allergies, asthma and diabetes are becoming widespread. Furthermore, due to increased affluence, excess weight is becoming an increasingly widespread health problem. Measured as body mass index, the number of people considered to be overweight in France has risen from 5.8 per cent in 1990 to 9 per cent in 2000. The Netherlands and Japan have similar problems. This development is alarming since muscular, skeletal and circulatory diseases are expected to increase. In spite of this development, life expectancy and healthy life expectancy have increased in all four countries over the last forty years. Japan has the highest life expectancy at birth, at 81.3 (2000) years followed by France at 79.0 (2000) years and the Netherlands at 78.0 (2000) years. Germany has 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. Therefore, the duration of treatments has been reduced, outcomes have been improved and incurable illnesses can now be cured. 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. Additionally, technological progress has had an impact on the number of life years lost. 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 which can also be attributed to new technologies and new opportunities for medical treatment

Economic situation

The increase of health care expenditures as percentage of GDP in the four countries is also due in part to the deceleration of economic growth. Japan experienced a decline in

growth rates from an annual average GDP growth of 4.5 per cent between 1970 and 1990 to 2.2 per cent in 2000 and –0.8 per cent in 2001. 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. Since health care systems following the Bismarckian approach are mostly linked to wages and salaries as the base for contributions, high unemployment rates contributed to the financial constraints of the sickness funds. While Japan (4.7 per cent in 2000 to 5.4 per cent in 2002) and Germany (from 7.8 per cent in 2000 to 8.6 per cent in 2002) also experienced sharp increases the French unemployment rate dropped slightly from 9.3 per cent in 2000 to 8.8 per cent in 2002 and the Netherlands managed to keep unemployment at a low level.

Changes in preferences

Changing needs and the rise of new demands in health care can generally be regarded as a positive development since these changes create new demand 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 expenditures and subsequently higher contribution rates for social health insurance systems.

Structural weaknesses of the system

The fundamental weaknesses and disincentives in social health insurance systems are the loss of welfare leading to rising insurance contributions and consequently to an immanent increase in the redistribution of insurance funds from users to non-users of insurance benefits. Next to the misconduct of different actors, activated by certain disincentives such as moral hazard, every system also contains structural weaknesses, e.g. the separation of the inpatient and outpatient sectors in Germany, which are due to a simple misconception of the individual system design.

3 Comparison between social health insurance systems of Japan, Germany, France and the Netherlands

3.1 Institutional and organisational framework

The institutional framework of social health insurance and its organization in the four countries has evolved over time according to national and cultural needs and has sometimes moved away from the original ideas at the inception of social security systems under Bismarck. Due to the complexity of different institutional settings, it seems necessary to select certain criteria in order to make comparisons possible.

Membership and enrolment

All countries compared have a social health insurance system based on several sickness fund schemes covering the majority of the population with health insurance protection. Membership in sickness funds schemes is compulsory for the entire population in all four countries. Only in Germany and the Netherlands are segments of the population exempted from this obligatory membership.

Benefits and coverage

The extent of covered services differs among the countries. Although in both Japan and France nearly the whole population is 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 while in Japan the population has no need to be privately insured. This has limited the market share of private health insurance in Japan. Social Health Insurance in Germany, like Japan, is comprehensive, but only covers 89 per cent of the population. The Netherlands completely differs from the other countries regarding covered benefits since they have one scheme for long-term care and high cost treatments (AWBZ) which covers the entire population. Another scheme for normal medical care (ZFW) covers 63 per cent of the population. The sickness funds scheme (ZFW) is substituted by 30.2 per cent of the population with comprehensive private health insurance.

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 the sickness funds is solely carried by the state, Japan only carries the deficits of certain schemes and offers this option to privately founded sickness funds. In the Netherlands sickness funds of the ZFW (normal medical care) are carrying more financial risks of their own. They can also apply for the management of the AWBZ in one region. In France, choice of membership in one of the three large sickness funds is strictly determined by the type of employment. This kind of institutional organization is quite similar to Japan, where citizens except employees are compulsorily insured by the municipal insurance scheme of their local community (also classified as NHI “National Health Insurance”). Insurers of employees are determined by their occupation and companies. Employees of large companies above a certain size are insured by company-based society-managed sickness funds, whereas employees of small-to-medium-sized companies join Government-managed scheme. Public employees and others are covered by medical insurance systems established on the basis of occupation categories. Altogether there are 5,192 (2000) sickness funds in Japan. In Germany all citizens are able to choose among a variety of sickness funds which are organised on a regional or on a nationwide basis. There were 319 sickness funds in Germany in 2003. Sickness funds compete with each other on the basis of different contribution rates. Since in the Netherlands the AWBZ scheme for long-term care and high cost treatments consists only of one sickness fund in each region there is no choice for Dutch citizens in this segment. In the ZFW scheme for normal medical care they are able to choose between 25 different funds competing with each other.

Competition and risk structure compensation

To spread financial risks among the different funds and provide fair competition among sickness funds, three countries have created a risk structure compensation scheme. Japan has a risk structure compensation scheme considering the criteria of age and in addition the government highly subsidizes municipal sickness funds, since they have more retired persons and therefore a more negative risk structure. In Germany after each calendar year standardized expenditures are calculated on the basis of the criteria of income, age, sex and invalidity. On this basis certain sickness funds pay into this scheme and other funds receive out of the pool. It plans to introduce a morbidity-oriented risk structure compensation scheme until the year 2007. In the Netherlands the risk structure compensation scheme compensates funds of the Ziekenfondswet (ZFW). It comprises 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 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 to a certain percentage, called the equalisation percentage. 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 which cannot be influenced by 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 considering the criteria of age. Although the introduction of competition in Germany and the Netherlands was o targeted at reducing the costs for administering the sickness funds, costs are even higher than in France and Japan which have no competition among sickness funds.

3.2 Funding

When social insurance schemes were first introduced by Bismarck, they were meant to provide sickness benefits and primary care for the needy. Over the years the provision of primary care was extended while covering most segments of the population. Although increasingly under pressure, the pay-as-you-go-principle as a main feature has so far remained untouched in all four countries. Instead, the countries have extended their provided 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 rate in the Netherlands for the AWBZ is set at 12.3 per cent and is paid entirely by 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 is currently set at € 28,188 in

the same year. 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. While the average contribution rates in Japan are nearly the same for the Society-managed sickness funds (7.6 per cent in 2003) and the Government-managed sickness funds (8.2 per cent in 2003) there is a high degree of variability in rates for the Municipal funds. As in Germany the contribution for the Japanese Government-managed sickness funds is shared in equal parts by employers and employees, while for the society managed sickness funds employers pay 4.2 per cent while employees only pay 3.4 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 while 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 finally 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 the majority of pensioners must join the municipal funds which receive compensation for increased expenditures resulting from the old age structure. In the other countries pensioners stay in their former sickness funds schemes but sometimes under changed conditions. In France, they 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 of the average contribution rate for 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 institutionally separated funding for health care and long-term care. Risks for long-term care in both countries are insured under long-term care insurance with payroll-deducted contributions and in Japan at 50 per cent by taxes. In the Netherlands long-term care is covered by the AWBZ while in France it is insured under the normal social health insurance although long-term care insurance will soon be introduced.

Burden of contributions at different income levels

With contribution rates of 18.8 per cent and without an income ceiling French residents pay the highest contributions, although it should be kept in mind that French social health insurance contributes a higher share to total health expenditures. While in France social health insurance contributes 76 per cent to total health expenditures, it only contributes 57 per cent in Germany and 53 per cent in Japan. In the Netherlands it contributes a similar share (79 per cent) to total health expenditures while the contribution rate is even higher at 20.75 per cent and unlike France the Netherlands does have

income ceilings. The Dutch design of raising contributions has the effect such that persons with incomes up to € 30,000 pay even higher contributions than in France while higher incomes pay less. Japan obviously has the lowest contributions, at least with incomes up to about € 70,000. At the same time, Japanese social health insurance contributes less than all of the three other countries to total health expenditures. In Germany the contribution burden regarding low incomes until the income ceiling of € 41,850 and high incomes from € 78,740 upwards is the second lowest of all four countries.

Burden sharing between employers and employees

Employees in the Netherlands pay the highest contributions up to about € 65,000 (2003). The French system is more progressive for those with higher incomes. Lower-income Japanese employees pay the lowest contributions, while German employees pay the lowest contributions for incomes higher than about € 88,000.

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

In every country, social health insurance is partially subsidized by the state. Japan subsidizes provided benefits and health plans for elderly of Government-managed sickness fund schemes and Municipal funds. It also subsidizes Society-managed sickness fund schemes in case of financial difficulties. The Society-managed sickness funds had a financial 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 (e.g. long-term unemployed) by € 4.06 billion. France and the Netherlands also subsidize their sickness funds with € 6.2 billion and € 6.9 billion Euro (2000; 2002). The percentage of out-of-pocket expenditures varies significantly among the four countries with the Netherlands showing the smallest and Japan the highest percentage of these expenditures.

3.3 Provision and purchasing of health services

Health expenditures by type of services

Expenditures for each type of service vary according to the individual design of the health care system. It is difficult to compare overall expenditures for outpatient and inpatient care but some figures, especially those in subcategories, can be explained. It is striking that services reimbursed in one country by sickness funds or other carriers are in higher demanded and therefore represent a higher share of total health expenditures than in those countries which do not include them in their benefits catalogue. Taking the example of dental care, the Netherlands spends a significantly lower percentage (3.8 per cent in 2001) of their total health expenditures for these services than any other of the three countries since its provision is limited to children and to preventive and surgical care for adults. Another outstanding difference is the share of long-term care: The proportion of outpatient (7.3 per cent in 2001) as well as inpatient care (9.5 per cent in 2001) of the Netherlands is by far the highest compared to other countries.

Hospital care

The Netherlands takes a leading role in privatizing hospital infrastructure, similar to its institutional organization of social health insurance. More than 90 per cent of the hospital beds in the Netherlands are run by private or non-for-profit institutions. It also has to be considered that private-for-profit management is prohibited in the Netherlands. Germany follows a similar approach since the share of beds run by private-for-profit and not-for-profit hospitals is steadily increasing (from 37.2 per cent to 46.8 per cent). 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, due to the establishment of private "Medical Care Corporations" which are managed as non-profit organizations, carrying alone 48.8 per cent of all hospital beds. Compared to the other countries the share of beds in public hospitals is quite high in France with 64.8 per cent of all beds. On the other hand, the share of beds carried by private hospitals (21.8 per cent) is higher than in Germany where private non-for-profit hospitals are historically more dominant than private for-profit hospitals.

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

While in Germany capacities for hospital care are planned on a governmental level by region through the Laender, capacities are planned by the central government in the Netherlands. In Japan, the government designates "insurance medical care institutions" instead of direct contracts between insures and medical care institutions. In France Regional Hospital Agencies plan for hospital capacities. Those hospitals included in the regional or central hospital plans in the four countries are usually contracted by sickness funds or by the state in case of Japan for reimbursement. The number of personnel per bed has increased while the average length of stay in number of days has been reduced in all four countries.

DRGs have become the dominant reimbursement method for reimbursing hospital services in most of the four countries. A system of DRG's has already been introduced in Germany in 2004; it is planned for the Netherlands and France. In Japan, a system based on Diagnosis Procedure Combinations (DPC's) was introduced in 2003 for hospitals with specified functions providing advanced medical care and other services.

Japan charges the highest co-payment rate of all four countries as user charges for hospital care, with a share of 20 per cent for citizens under the age of 3, 30 per cent for

citizens 3 to 69, and a share of 10 per cent for those 70 and above while citizens age 70 and above with incomes exceeding a certain level have to pay 20 per cent 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 additionally € 10.67 per day for accommodation. Germans must pay the lowest user charges for hospital care with a fee of € 10 per day, but this is limited to a maximum of 28 days per year. The Netherlands is the only country with no co-payments for hospital care.

Ambulatory care

The majority of ambulatory care physicians in Germany and France are self-employed and working in single practices. In the Netherlands ownership and organisation of practice differs according to the field of medical services. Half of the general practitioners are self-employed in single practices and the other half is either working in group practices or in health centres. In contrast, specialists in the Netherlands usually practice in outpatient departments of hospitals. Unlike the other countries, physicians in Japan practice in all forms of organisations. They are either employed by hospitals or working as self-employed physicians in single practices or clinics.

The admission of medical students is limited by quota in all four countries. In contrast to 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 in which physicians are allowed to offer ambulatory care. In Japan physicians can freely claim any field of medical services they would like to provide. Subsequently, as in France in Germany, there is no gatekeeper system in Japan and patients have free choice between general practitioners and any kind of specialists while the Netherlands is the only country with an institutionalised mandatory gatekeeper system.

In Germany and France sickness funds are obliged to collectively contract with all providers of ambulatory care while in Japan even the Government designates the contracts. In contrast, the Netherlands has established in 1994 a system of selective contracting. Sickness funds have now free choice as to whether or not they wish to contract with certain providers.

Physicians or their medical institutions are reimbursed for their services in different ways in all four countries. In Japan and Germany physicians or their medical institutions claim their payments from institutionalised bodies administrating the payments for physicians. In Germany, the Associations of Sickness Funds Physicians has the function of processing claims and reimbursing physicians on a regional basis. Unlike Japan, sickness funds in Germany do not reimburse the Associations of Physicians' according to each claim but pay negotiated capitations differing significantly between sickness funds. In the Netherlands there is no administrative body for processing claims but physicians are requested to claim payments directly from the AWBZ, ZFW or voluntary health insurance. French physicians mainly claim their fees directly from the patients on a cost-reimbursement basis.

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 under which physicians or their medical institutions 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 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 long-term care capacities takes place on local, provincial and central levels in the four countries. In particular, resource planning is conducted for institutional care. In Japan, the long-term care insurance business plans are prepared by the municipalities with the support of the prefectures. In France the planning of long-term care capacities is a matter for local communities while in Germany the Laender (provincial) governments plan capacities. In the Netherlands the central government has the function of planning for institutional care.

Statutory long-term care insurance in Germany and Japan pays for institutional as well as home care long-term services. In the Netherlands institutional as well as home care services are also fully covered by the AWBZ. Unlike the three other countries, France has no separate long-term care insurance – although it will be introduced soon – therefore sickness funds pay for long-term care at the present time.

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

4.1 Lessons towards sustainable social health insurance

Competition vs. regulation of sickness funds

For several years a trend towards encouraging competition between sickness funds can be seen in certain countries. While France and Japan have so far not instituted any elements to foster competition, the Netherlands and Germany are moving towards more competition. Sickness funds in both these countries have opened up and their risk structure compensation schemes have been further developed ensure fair competition among sickness funds. It is difficult to empirically assess the effect of the introduction of competition in these countries. So far, it appears in both countries sickness funds are not sufficiently able to influence the decisive parameters for competition such as contribution rates, services provided and quality of services. Therefore it is yet to be proven that competition among sickness funds is more successful.

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

In view of aging societies, the rising demand for long-term care and the resulting problems for social health insurance systems all counties are increasingly focused on developing strategies for financing long-term care. Apart from France all three other countries have separated their social health insurance from long-term care by introducing mandatory long-term care insurance. While Germany and Japan both have long-term care insurance solely reimbursing long-term care services primarily for elderly citizens, the Netherlands have chosen an even more comprehensive approach. This long-term care insurance (AWBZ) not only supports a smooth transition from hospital care to long-term care and therefore reduces durations of hospital stays, it also marks a trend towards a separation of high-cost medical care/long-term care and normal medical care and could therefore serve as an example for future organization of social health insurance.

Private health insurance

Besides Japan, the countries compared increasingly rely on the integration of private health insurance into social health insurance systems. Private health insurance is either used on a supplementary basis to cover certain services not included in social health insurance or on a complementary basis, substituting for social health insurance. Complementary private health insurance might be an option to produce a more service-oriented approach and more competition among sickness funds although administrative costs are so far higher for private health insurance (e.g., in Germany). Supplementary health insurance could be an important element to make social health insurance systems more sustainable since it could immediately replace excluded services from sickness funds. 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.

User charges

Comparison among the four countries reveals important differences in the area of user charges. While Japan obviously relies more on user charges for hospital as well as for ambulatory care, the Netherlands does not impose any user charges. Since in Japan the ceiling of user charges for each citizen differs according to income, it has a certain progressive effect similar to that of contributions. On the other hand, it should be noted that, if instituted, incentive-based user charges (e.g. per patient contact) can serve as an economic incentive and therefore prevent an overuse of services. For this reason, user charges as used 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 DRG-type of system for reimbursement of costs for hospital care. While Japan seems to be the most advanced country regarding its introduction, the Netherlands plans the most comprehensive DRG-system, including

inpatient and outpatient care. Such a comprehensive reimbursement system would integrate these two segmented sectors not only institutionally but also from a financial standpoint. 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 more and more importance in view of rapidly aging populations.

4.2 Further developments

Apart from lessons learned by comparing the four countries there are certain developments which can be anticipated in thee future for social health insurance systems. First, most countries wish to introduce an integrated health care system while setting priorities in health care is a permanent topic on the basis of which day-to-day-adjustments take place in all the four countries. In line with these permanent corrections and the idea of a comprehensive health care network, health care needs to be financed differently in the future than in the past and some new financing options are available to handle these new approaches. They could be developed in each of the four nations based on their peculiarities, customs and historical experiences. Finally, the future of the European Welfare State within the Common Market should be considered with its growing importance for national and European economic and social policy. For Japan and even for Asia as a whole this development will be of interest.

1 Introduction

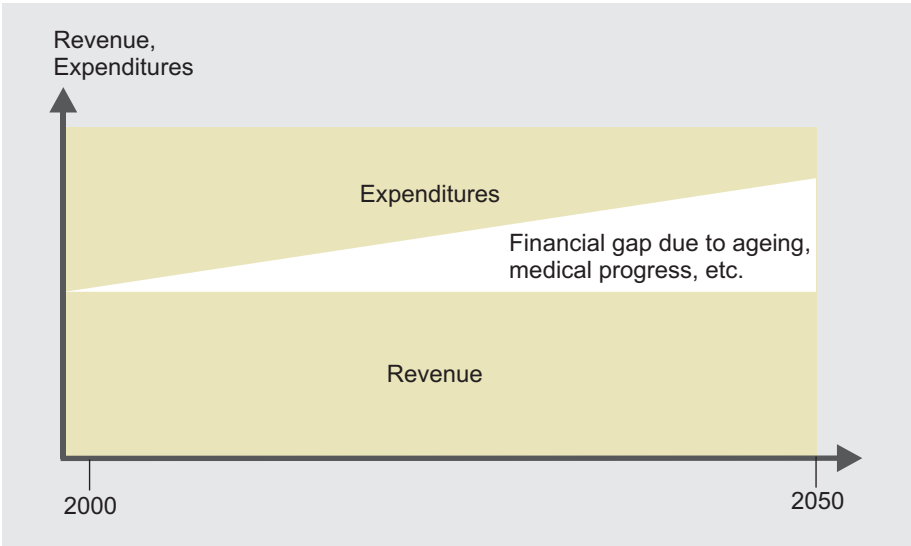
Notwithstanding the differences in the health care systems of France, Germany, Japan and the Netherlands, starting points for discussing health care reform are similar in each country. They include:

- The financial gaps in health insurance systems and other current problems in the four countries (figures 1.1 and 1.2).
- The bases for financing and providing health care are: theoretical approaches to risk management and social security. Their basic forms and arrangements are basically the same for all countries (figure 1.3).
- 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 1.4 and 1.5).
- The elements of health care reform which need to be analyzed (figure 1.6).

Financial and other current problems

In figure 1.1 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 1.1 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. 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 overall 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 perhaps 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 by 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 ideal 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.

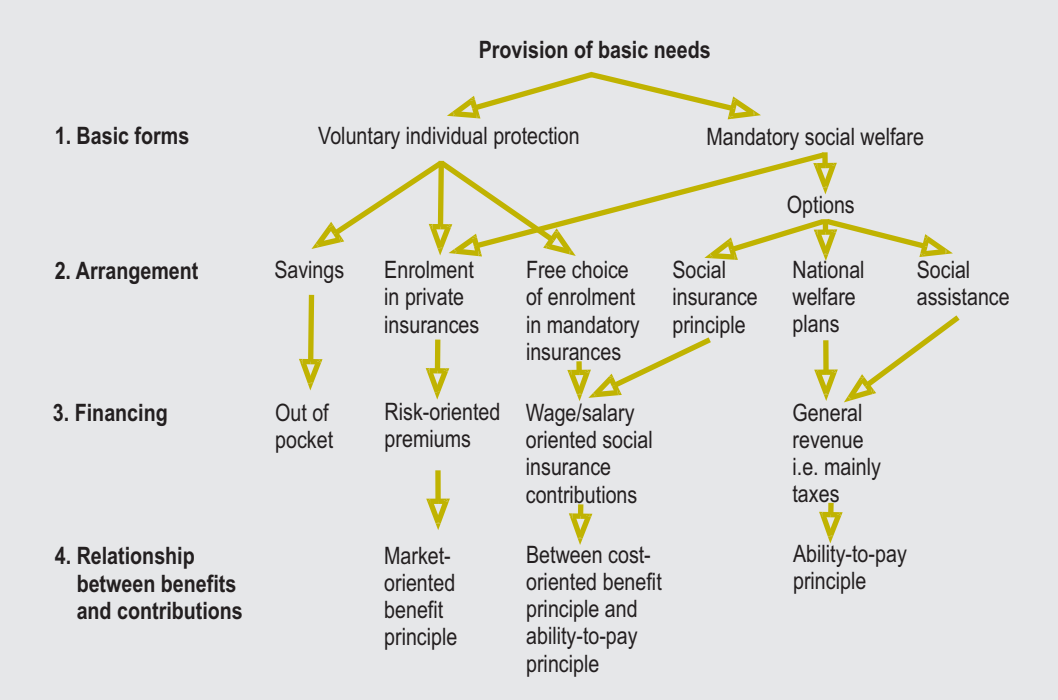
Figure 1.2 The current situation of the four health care systems

- 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 1.3 Risk management and social security



Source: Zimmermann and Henke, 2001; p. 154.

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 payroll-tax rates are perceived by the public 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 security 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 are, 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 security.

Health policy: goals and entitlements

The goals of Social Security are viewed in close relation with more theoretical background in figure 1.4. These goals are probably the most basic elements underlying all systems. They are relatively general and thus are supported by all four nations (figure 1.4). 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 1.4 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 1.5 for health care in the German setting. Again, everyone will probably respond positively to these postulates in figure 1.5 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 1.5 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

A final set of starting points focuses on health care reform from the onset. In all countries the health care sector 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.[1]

Another point of departure for health care reform is the fact that there is no overall rationality in a given system. Health care reforms are driven by the interests of all the participants and other driving forces, e.g., the media. 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. It is also

[1] See in more detail Henke/Mackenthun/Schreyoegg, 2004, and Henke, 2003.

critically influenced by the driving forces 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.

Figure 1.6 Elements of health care reform[2]

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

Finally, 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.

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 basket for all is necessary and obligatory, including medical necessary services, so that all sickness funds must accept applicants without individual risk review.

In chapter 2, 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,

[2]"Interest-driven system" means that a system is highly determined by different interest groups.

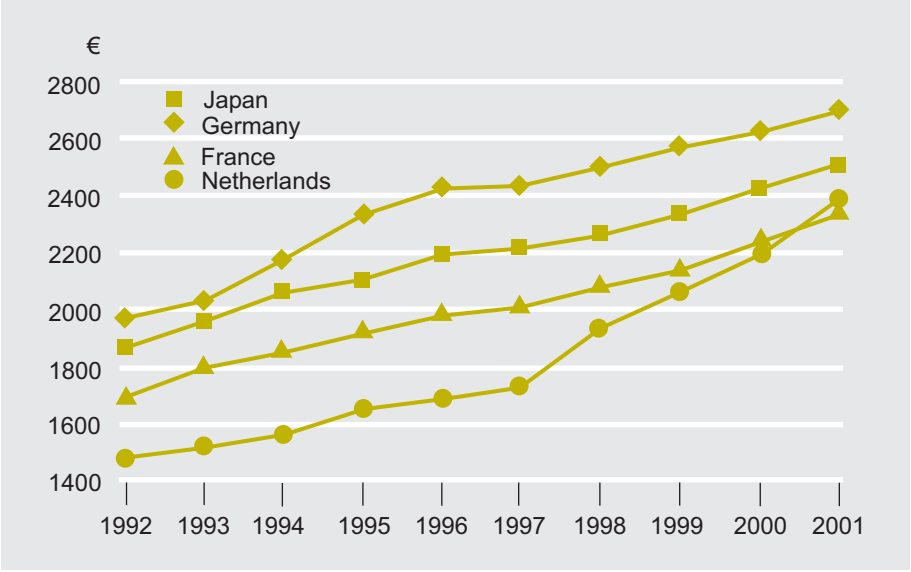
provision and purchasing health services in different sectors with the help of selected criteria (chapter 3). The conclusion in the final chapter provides suggestions for the future development of the four systems compared and of course for other systems as well (chapter 4).

2 Challenges for health care systems

2.1 Trends in expenditures for health care

Basically, 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 1995 and 2001 of 2.9 per cent, 2.4 per cent and 3.2 per cent, health care expenditures in the Netherlands rose an average of 6.4 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 2.1.

Figure 2.1 Total health expenditures per capita



Source: OECD Health Data 2004.

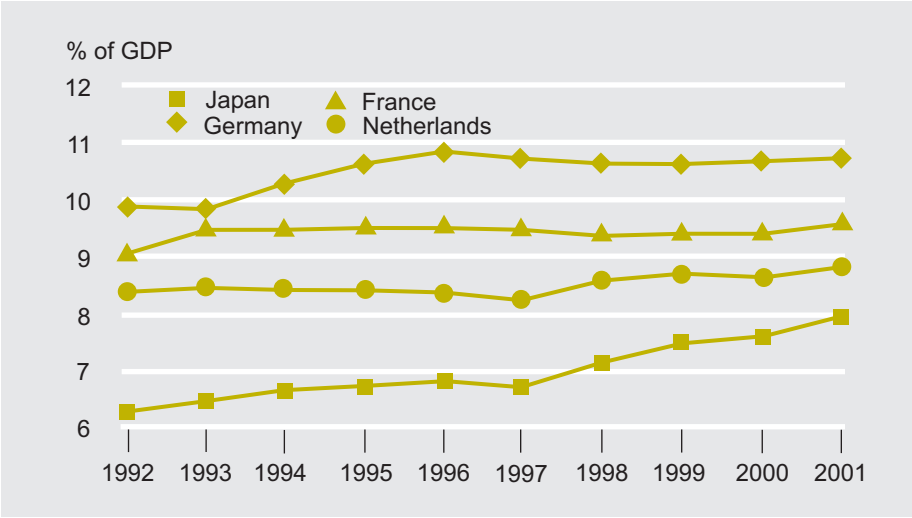
It should be pointed out that the increase in health care expenditures in each of the four systems is due to different reasons. Between 1995 and 2000 total spending for out-patient care increased dramatically in all four countries: Japan (+33 per cent),

[1] Based on OECD Health Data 2004 and own calculations. Valid comparison can only be made between 1995 and 2001 since in Japan different calculation standards were applied in 1992-1994.

Germany (+7 per cent), France (+15 per cent) and the Netherlands (+59 per cent). During the same period pharmaceutical expenditures, for instance, even decreased in Japan (-14 per cent), but increased considerably in the three European states (Germany: +21 per cent, France +36 per cent, Netherlands +26 per cent). All four countries experienced increased expenditures for in-patient care between 1995 and 2000. In the Netherlands it increased by 24 per cent, followed by Japan (+21 per cent), Germany (+12 per cent) and France (10 per cent)[2] (see also figure 2.1 above).

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 2.2 Total health expenditures in per cent of GDP



Source: OECD Health Data 2004.

As revealed in figure 2.2, the percentage of GDP spent on health care services is increasing in all four countries while Japan experienced the highest rise – from 6.8 per cent in 1995 to 8.0 per cent in 2001. Therefore, health care is obviously gaining in importance. Nevertheless, a slight tendency towards reduction of the public share[3] of total health care expenditures is observable. Public health expenditures in the Netherlands, including 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 2001.

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

[3] The term "public share" refers to the share of total health expenditures being from public sources (taxes, social health insurance, etc.).

The German government reduced its public share by 2 per cent while the Japanese and the French public share remained at about the same levels.

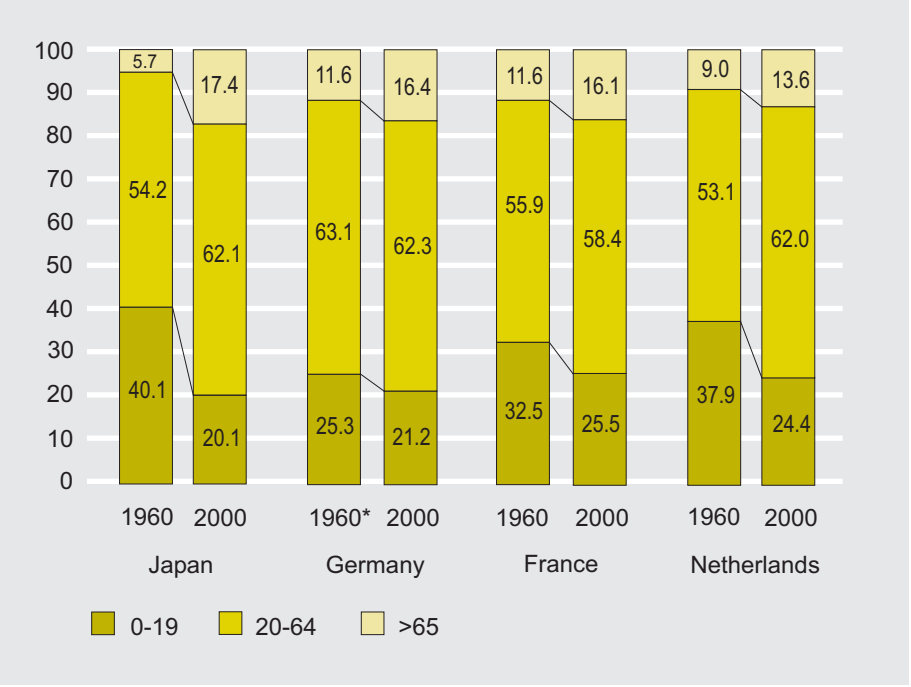
2.2 Causes for expenditure trends

There are many factors which definitely 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.

2.2.1 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

Figure 2.3 Aging of the population in the four countries



* Germany 1960: 0-19; 19-65; >65
Source: OECD Health Data 2004; Federal Statistical Office of Germany, *Statistical Yearbook 2002.*

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 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 2.3.[4]

Until today, 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 the 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)[5]. 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 2.1 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

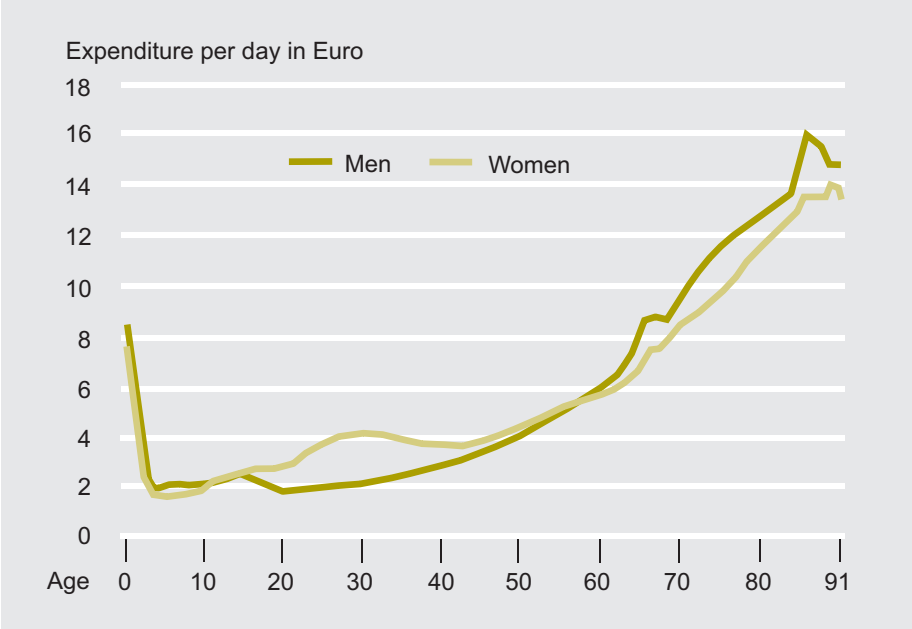
Sources: OECD Health Data (2003); Federal Statistical Office of Germany (2000); National Institute of Population and Social Security Research; Institut National de la Statistique et des Etudes Economiques (France).

[4] OECD Health Data 2004.

[5] OECD Health Data 2003.

A third factor combined with the demographic challenge is population development. As presented in table 2.1 the population for Germany and Japan is predicted to shrink until 2050 while French and Dutch populations are estimated to rise slightly. A shrinking population has implications for providing the 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.

Figure 2.4 Standardized expenditures for the German Statutory Health Insurance according to age and gender



Source: Bundesversicherungsamt 2004.

It is difficult to anticipate the impact on the health care system, as cost developments, especially for the elderly, is 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 2.4[6]. It can be seen that in Germany expenditures for people over 60 are almost 3 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.

[6] 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/Felder 1999.

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.

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.

2.2.2 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, hypertension, cancer 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.

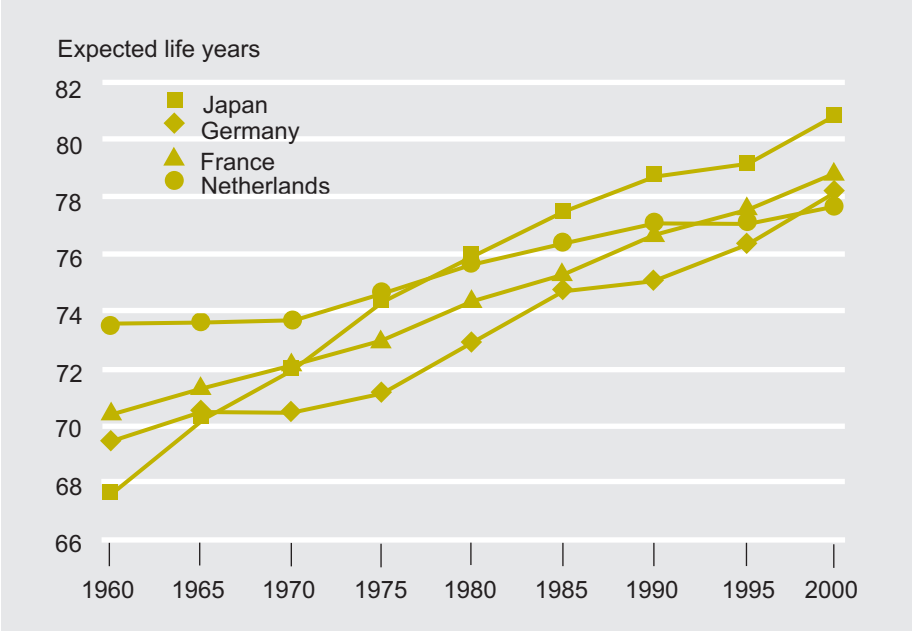
Due to increasing affluence, obesity is becoming a widespread condition with several potentially harmful consequences. Measured as body mass indices, the number of people considered to be overweight in France, for example, has risen from 5.8 per cent in 1990 to 9 per cent in 2000. The Netherlands and Japan have similar problems as displayed in table 2.2. This development is alarming since cardiovascular, skeletal and circulatory diseases are expected to increase as a result.

Table 2.2 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 2004; Bundesgesundheitssurvey 1998; Deutsche-Herz-Kreislauf-Präventionsstudie 1990

Figure 2.5 Average life expectancy at birth in the four countries



Source: OECD Health Data 2004.

In spite of this development, life expectancy and healthy life expectancy have increased in all four countries over the last forty years (figure 2.5; table 2.3). As revealed in figure 2.5 below, Japan has the highest average life expectancy at birth, 81.3 years (2000) followed by France, 79.0 years (2000) and the Netherlands, 78.0 years (2000). For more than the past 30 years, Germany has had 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 2.3. 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.

2.2.3 Technological progress

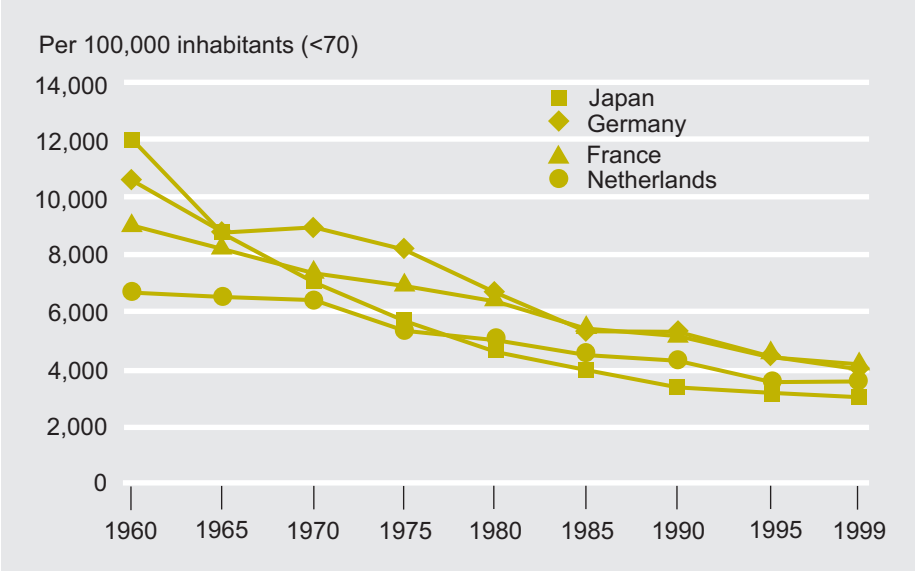
According to several macroeconomic studies, a major force behind rising health expenditures is the diffusion of new technologies and medical progress. Some authors even attribute about 50 per cent of total expenditures to new technologies. Patterns of diffu-

Table 2.3 Healthy life expectancy (HALE) from WHO at birth and at age 60, estimates for 2000 and 2001

Country	Total population (1)		Males 2001 (2)		Females 2001 (3)		Expectation of lost healthy life years at birth in 2001 (years) (4)		Healthy life years lost as per cent of the total life expectancy (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 2.6 Potential years of life lost due to diseases in the four countries



Source: OECD Health Data 2004.

sion 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 improvements in the provision of medical care.[7] 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.[8] 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.[9] Hence, some technologies, especially process innovations such as keyhole surgery, have also contributed to reduced costs.

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[7] Weisbrod 1991.

[8] Phelps 1997; Jacobzone 2003; McClellan 1996, OECD 2003.

[9] OECD Health Data (2003).

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 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.[10] 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 is displayed in figure 2.6.

2.2.4 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[11] to 2.2 per cent in 2000 and –0.8 per cent in 2001[12]. 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 2.7. 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.

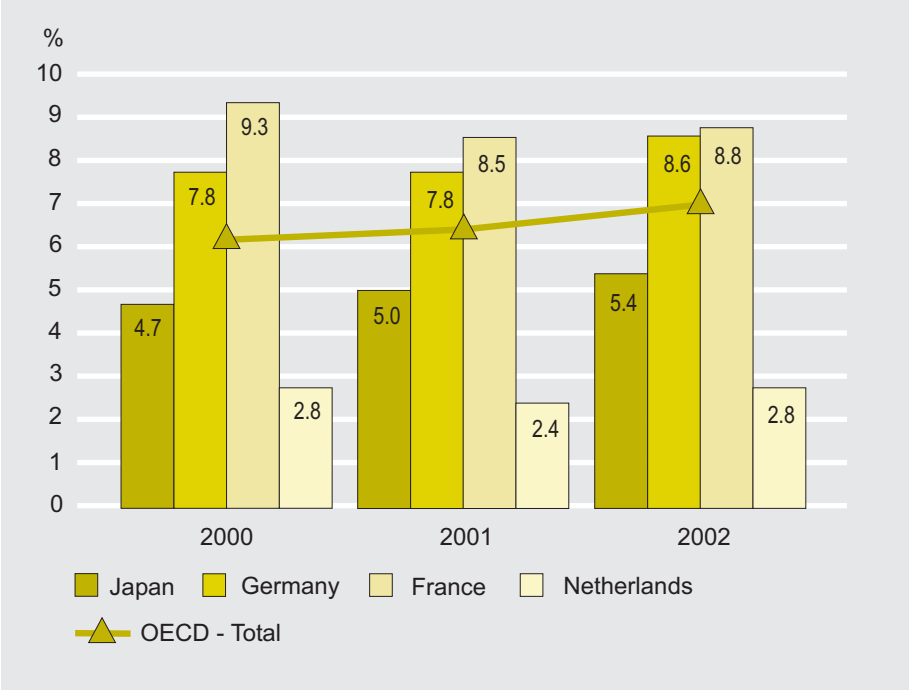
While low economic growth rates and the labour market situation results in eroding revenues for sickness funds, balancing state budgets represents another difficulty. Therefore, it is nearly impossible to subsidise health care from the ordinary state budget without raising taxes or increasing public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

[10] Nolte et al. 2002.

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

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

Figure 2.7 Standardised unemployment rates in the four countries



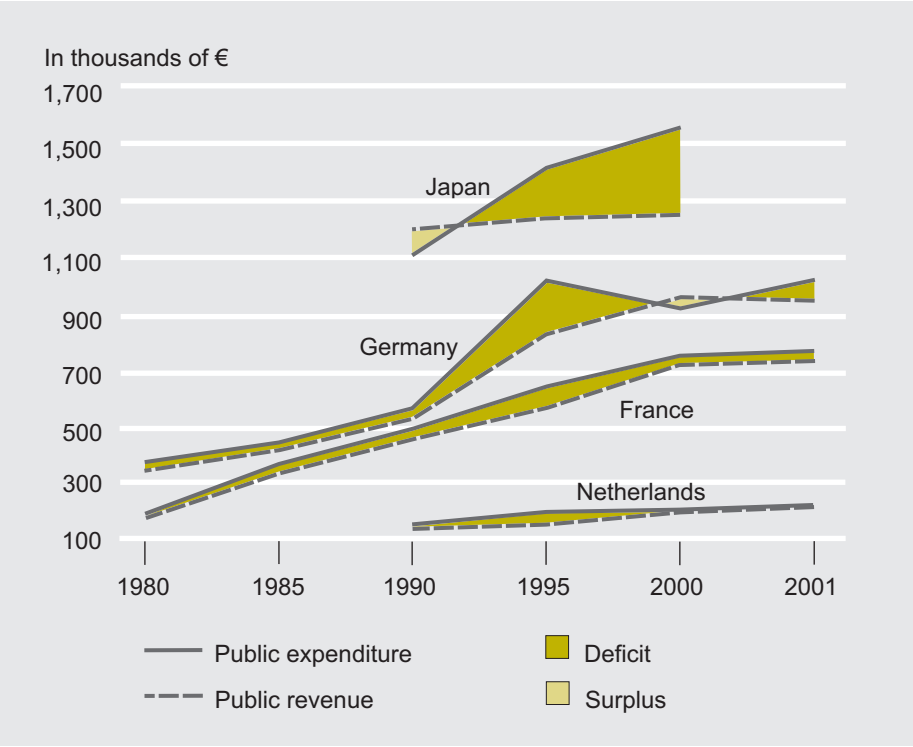
Source: OECD, *Main Economic Indicators*, Oct. 2003.

tries are required to comply with the European growth and stability pact suggesting a 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 2.8.[13]

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.

[13] OECD Health Data 2003.

Figure 2.8 Development of state budgets in the four countries



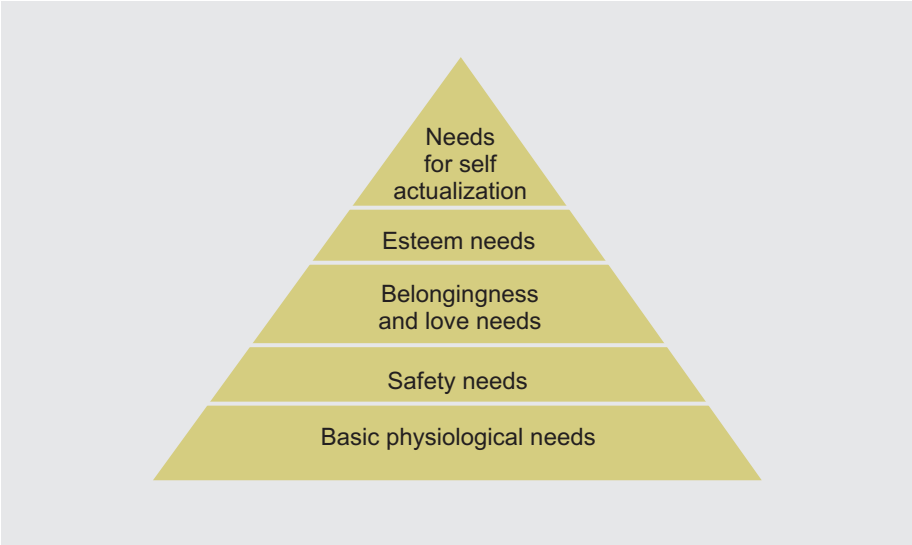
Source: OECD Health Data 2004.

2.2.5 Changes in preferences

Rarely mentioned but also important are changes in consumer behaviour and preferences over the last years as part of the post-materialistic change in values. Maslow's hierarchy of needs pyramid, shown in figure 2.9, 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 2.9 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).

2.2.6 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 2.2.3). There are numerous other examples for disincentives in health care systems such as adverse selection and external effects leading to rising health expenditures.[14]

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.

[14] Weisbrod 1991.

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

3.1 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 3.3 below 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 and enrolment

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 the self-employed. In contrast to Germany, social health insurance in the Netherlands is

[1] Dunlop/Martins 1995; Staines 1999; Leidl 1998; Sinn 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.

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 and coverage

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. However, this excludes highly advanced health care and other services that have not generally proliferated. In addition, a public long-term care insurance system for elderly, which furnishes comprehensive health, medical care and welfare services, exists independently from the medical care insurance systems. 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,

Table 3.1 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.

Japan only subsidizes certain schemes, such as government-managed health insurance, the municipal funds in order to maintain a fair balance between the different schemes. But Japan provides the opportunity to establish a sickness fund, the so-called society-managed sickness fund, if an entrepreneur can provide at least 700 insured persons as an initial risk pool. To a certain degree set amount budget subsidies are available as assistance to society-managed sickness funds that fall into fiscal difficulties. 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

Table 3.2 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	11
Netherlands						
Sickness funds (ZFW)	30	34	29	30	27	25

Source: Based on ISSA country reports.

the Ministry of Health and its supervisory board do not intervene. In the Netherlands, the 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 of their own. 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 3.1 and 3.2.

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 citizens except employees are compulsory insured by the municipal insurance scheme of their local community (also classified as NHI "National Health Insurance"). Sickness funds of employees are determined by occupational status and the company size. Employees of bigger companies of a certain size are usually insured by company-based society-managed sickness funds, whereas employees of small-to-medium-sized companies without attached sickness funds are usually insured by Government-managed schemes. Public employees and others are covered by sickness funds established on the basis of occupation categories. 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 Jan. 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 installed different kinds of risk structure compensation schemes. These schemes have gained importance, especially in view of the rapidly aging European populations. Japan only has a "small" risk structure compensation scheme considering the criteria of age and in addition as explained below in 3.2 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 more comprehensive risk compensation 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 which cannot be influenced by sickness funds. This compensation is termed the recalculation percentage.[4]

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

[4] Lamers/Vliet/Ven 2003, pp. 49-62.

Table 3.3 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 (except households receiving public assistance)	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 3.3 *(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)	Yes (age)	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 2004.

The French risk structure compensation mechanism is completely different, since it consists of two different risk structure compensation schemes. One scheme compensates 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.[5]

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 3.3 summarises the institutional settings in the four countries according to the selected criteria.

[5] OECD Health Data 2004.

3.2 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 social insurance schemes were first introduced by Bismarck, 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. Just recently a trend can be recognized that benefits are again removed from the benefit basket.

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 paid by the employer with a share of 6.75 per cent and by the employees with a share of 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, all contributions for ZFW are first received by the central fund and then allocated to different sickness funds. Another 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.[6]

Japan also has an income ceiling which is set at € 92,076 of income for the Government and the Society-managed sickness funds and therefore higher than in all other countries. The ceiling for the municipal funds is set lower at € 49,800. In Japan even bonus payments, which play an important role for the remuneration of Japanese employees, are included into the contribution assessment base and the ceiling for bonuses is set at € 15.660 for each salary bonus and € 46.980 in total per year. While the contribution rates in Japan are nearly the same for the society-managed sickness funds (at an average rate of 7.6 per cent) and the Government-managed sickness funds (at a rate of

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

8.2 per cent) (2003), the variability in rates for the municipal funds is so high that it does not make sense to calculate an average.[7] Contributions to municipal sickness funds consist of two components: one of them is related to the income and assets of the insured and the other is paid as flat rate contribution. As in Germany, the contribution for the Japanese Government-managed sickness funds is shared in equal parts by employers and employees at a rate of 4.1 per cent each. For the society-managed sickness funds employers contribute at a rate of 4.2 per cent while employees only pay 3.4 per cent of their income.

Unlike Germany, the Netherlands and Japan, France has no income ceiling. 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 which is finally 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.[8]

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 the majority of 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 2 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 2.4).[9]

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[7] Based on ISSA country reports; National Federation of Health Insurance Societies, Kemporen 2003.

[8] Based on ISSA country reports; European Observatory on Health Care Systems 2002.

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

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 although in Japan 50 per cent is financed by general tax revenue. 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.

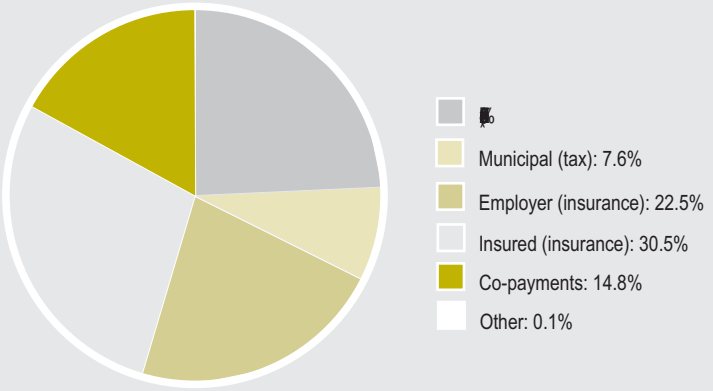
Burden of contributions at different income levels

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 3.1. 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 53 per cent (including medical services provided by the long-term care insurance), 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 3.1. 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 3.2, 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 € 70,000 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, it can be seen in figure 3.2 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 € 78,740 upwards.

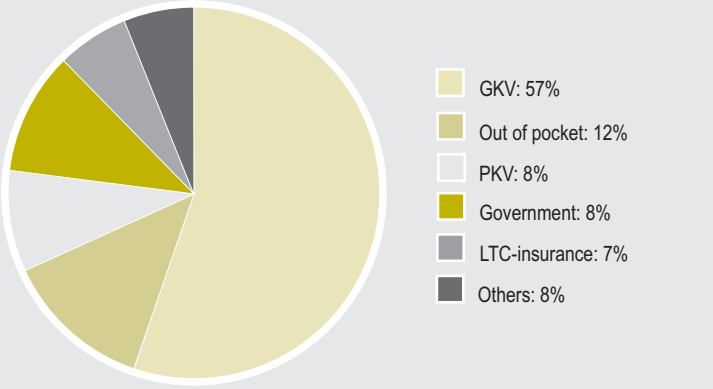
Figure 3.1 Different sources of funding as per cent of total health expenditures

JAPAN 2000



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

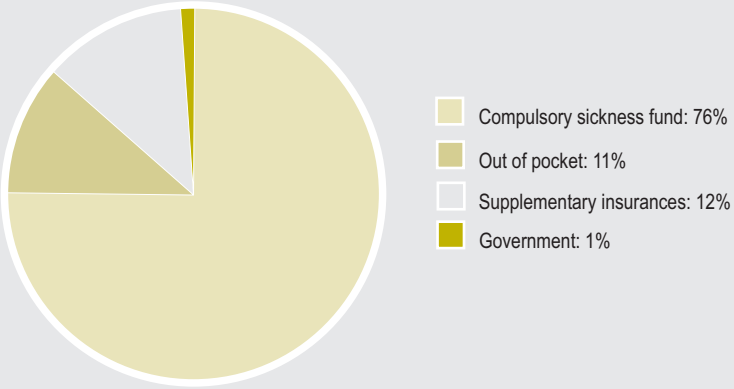
GERMANY 2001



Source: Federal Statistical Office of Germany, 2003.

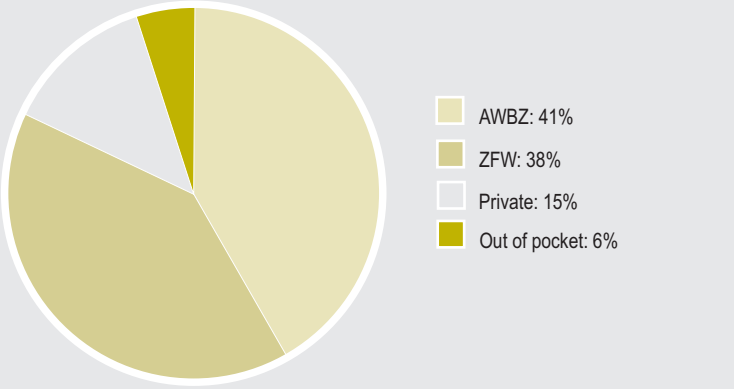
Figure 3.1 *(Contd.)* Different sources of funding as per cent of total health expenditures

FRANCE 2000



Source: ISSA country reports.

NETHERLANDS 2002



Source: ISSA country reports.

Figure 3.2 Contributions at different income levels according to contribution rates in the four countries

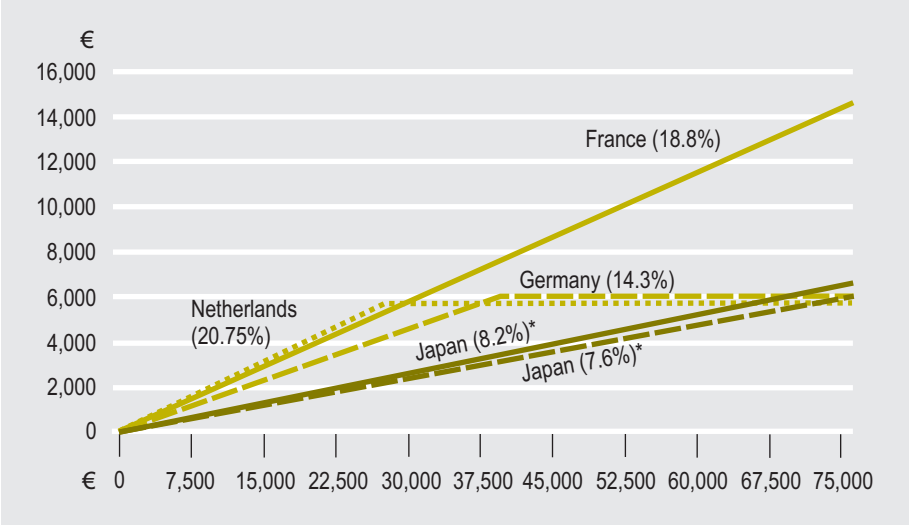
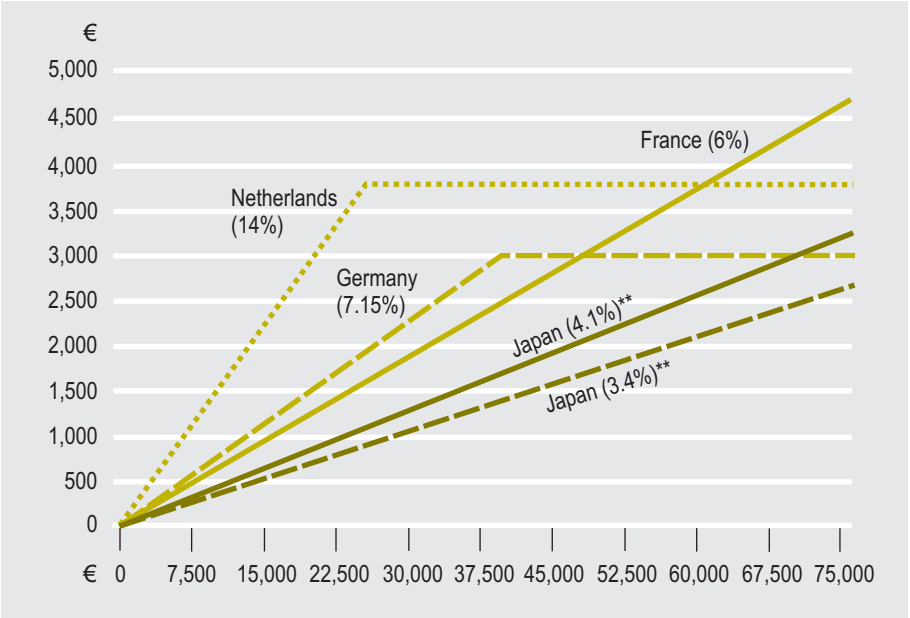


Figure 3.3 Contributions at different income levels according to contribution rates of employees in the four countries



* In Japan the Government-managed and the Society-managed sickness fund schemes have different contribution rates: Government-managed 8.2 per cent and Society-managed 7.6 per cent.
** In Japan the Government-managed and the Society-managed sickness fund scheme have different contribution rates: Government-managed 8.2 per cent (4.1 per cent by employees) and Society-managed 7.6 per cent (3.4 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 3.4 Change of funding sources as per cent of the total health expenditure

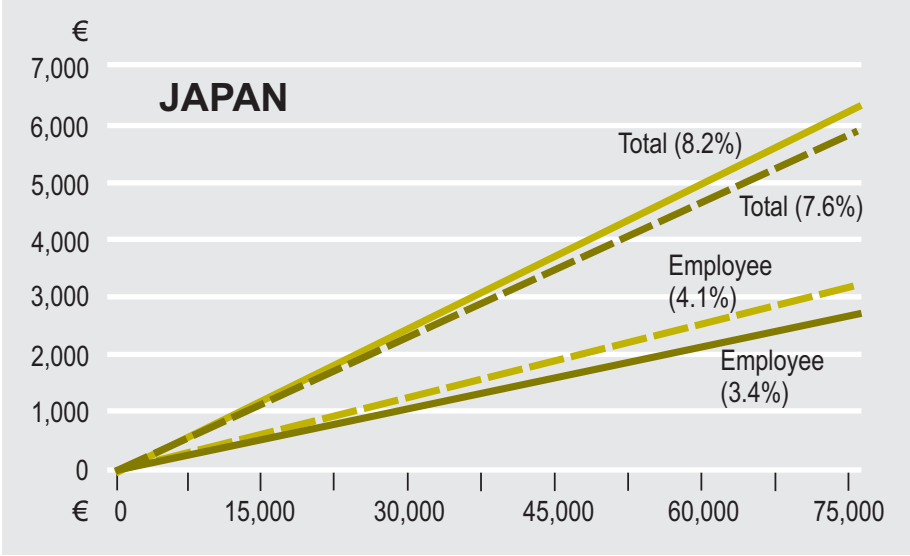
	1990	1995	1999	2000	2001	2002
Japan						
Federal (tax)	23.8*	24.2	24.9	24.5	24.7	n.a.
Municipal (tax)	6.6*	7.5	8.0	7.6	7.7	n.a.
Employer (insurance)	25.1*	24.5	22.5	22.5	22.3	n.a.
Insured (insurance)	32.5*	31.9	30.0	30.5	30.3	n.a.
Out of pocket	12.0*	11.9	14.7	14.8	15.0	n.a.
Others	0*	0	0	0.1	0	n.a.
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.

Burden sharing between employers and employees

Since contribution rates are shared by employer and employee in all four countries, it is worth looking at the different contributions employees must pay in each country. As displayed in figure 3.3, 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 € 88,000. It should also be kept in mind that economists often em-

Figure 3.4 Employee and total contribution at different income level for each country



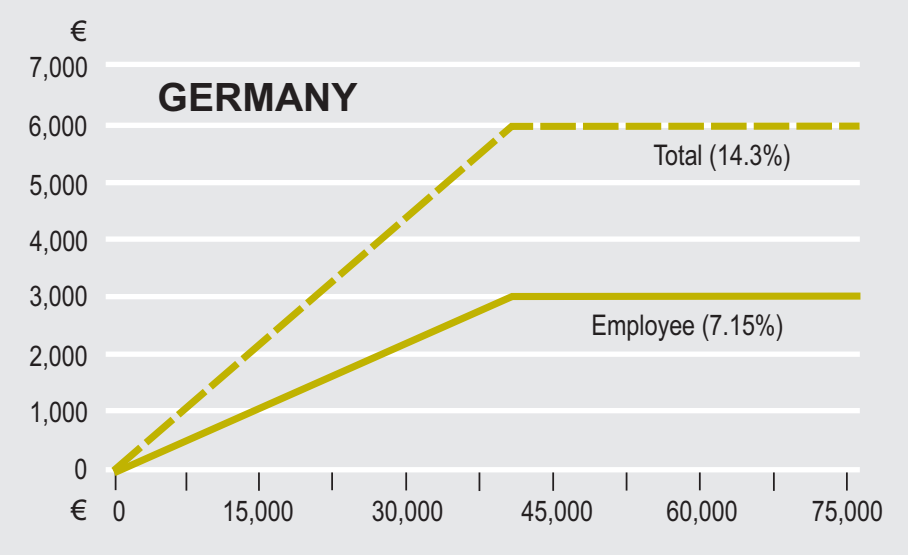
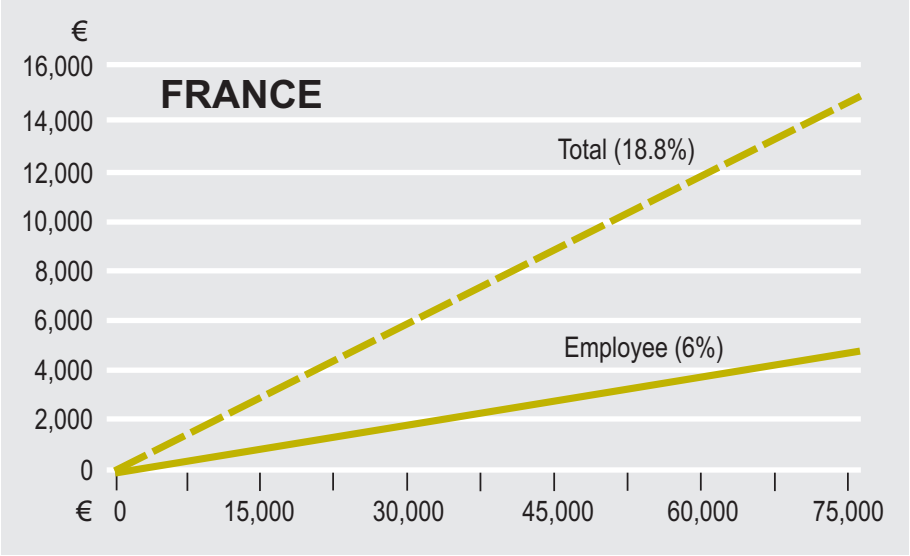


Figure 3.4 *(Contd.)* Employee and total contribution at different income level for each country



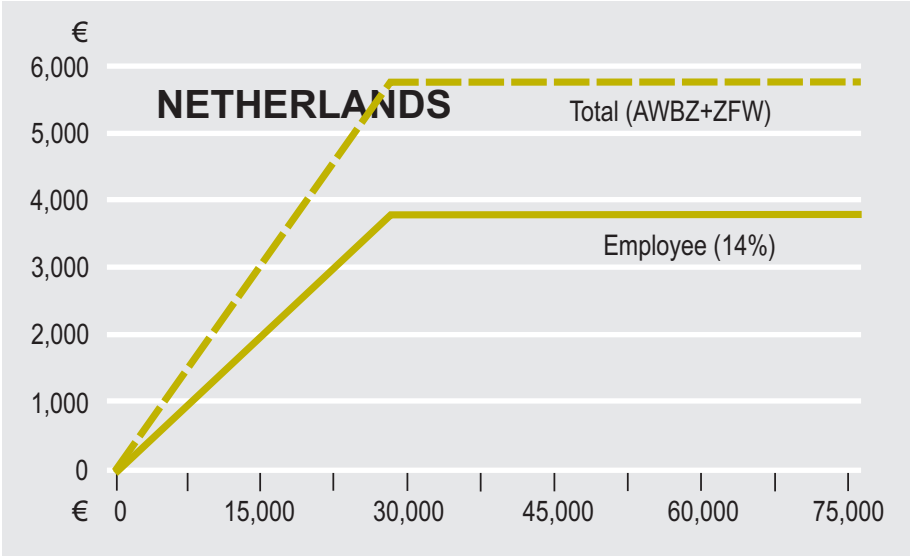


Table 3.5 Comparison of funding principles of social health insurance systems according to selected criteria

	Japan	Germany	France	Netherlands
(Average) contribution rate	Governent-managed funds: 8.2 per cent Society-managed funds: 7.6 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: 4.1 per cent; employee: 4.1 per cent Society-managed: employers: 4.2 per cent; employee: 3.4 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)	Society + Government-managed: € 92,076 + for bonus payments: € 46,980. Municipal funds: € 49,800	Only income until €41,850	No income ceiling for employees	AWBZ €27,009 ZFW €28,188
Contributions of pensioners	Majority has 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	53 per cent (2000)	57 per cent (2001)	76 per cent (2000)	79 per cent (2002)

Table 3.5 *(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)	–3.1 (2002)	No deficits	No deficits
	Society-managed: –2.4 (2002)			
	Municipal funds: –0.7 (1999)			
Government subsidies for sickness funds	Government-managed: for benefits and for health programs for the elderly	€1.26 billion (farmers´ scheme and for epidemics´ act)	€6.2 billion for total social health insurance (2000)	€6.9 million for AWBZ and ZFW (2002)
	Society-managed: in case of fin. difficulties	€2.8 billion (contributions for long-term unemployed) (1998)		
	Municipal funds: for health programs for the elderly			
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.

phasise 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 3.4 displays the burden sharing between employee and employer in each of the four countries.

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 above figure 3.1), it should also be noted that social health insurance in every country is partially subsidized by the state. Japan pays for the provided benefits (13 per cent of expenditure for benefits) of the Government-managed sickness fund scheme and partially subsidizes programs for the elderly (16.4 per cent of budgets for these programs) installed by these sickness funds. Municipal funds receive subsidies of 50 per cent for provided benefits and for health programs for the elderly. Apart from this society-managed sickness funds, whose operation is left entirely in the hands of the respective societies, receive fixed subsidies in case of financial difficulties. As displayed in table 3.5, 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 3.4 (above), 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. As seen in table 3.4 out-of-pocket payments have increased over the last years in Germany and Japan while they decreased in the Netherlands.

Table 3.6 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 2004.

3.3 Provision and purchasing of health services

3.3.1 Health expenditures by type of services

The volume (see figure 3.1, above) 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 3.6 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 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 German 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 points from 1999 to 2000 although it had already grown 1.3 per cent points 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.

3.3.2 Hospital care

Ownership

Similar to the Dutch institutional organisation of social health insurance, the Netherlands has a long tradition of privately supplying hospital care. More than 90 per cent of hospital beds in the Netherlands are managed by private or not-for-profit institutions. 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

Table 3.7 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	1,856,341
	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 2004.

decades of the 20th century, but they are now in the process of deregulation. The development of the number of beds shown in table 3.7 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. Hospitals with 19 beds or less are called "general clinics" in Japan. They provide 216,755 beds and are also included in the data presented in table 3.7.

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 hospitals are historically more dominant than private for-profit hospitals. Table 3.7 summarizes the ownership of general hospitals in each country.

Access to services

In spite of differing ownership 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 secondary and tertiary care is provided mainly by medical specialists in outpatient units in hospitals. Apart from emergencies, patients only have access to these outpatient facilities provided by nearly every hospital in the Netherlands if they are referred by a general practitioner. 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 inpa-

tient treatment. Japan and France have so far not established a referral system for outpatient services in hospitals. In both countries patients are free to visit any outpatient unit in hospitals. Nevertheless, Japan installed certain incentives to promote referrals, such as additional payment for doctors.

Table 3.8 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

Source: 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, capacities for hospital care are governmentally planned on a regional level by the Laender, while in Japan such planning is carried out by the prefectures on the basis of applications from different medical institutions. 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 exemptions (e.g., in Germany there are additional contracts with hospitals not included in the hospital plan if additional capacities are needed). In Japan, the government designates “insurance medical care institutions” on the basis of the applications from medical care institutions desiring that designation, in stead of direct contracts between insures and medical care institutions. 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.

Table 3.9 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	n.a.
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 (2004); National Federation of Health Insurance Societies (Kemporen) (2003).

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

Table 3.10 Planning, contracting, reimbursement and user charges in hospital care

	Japan	Germany	France	Netherlands
Planning	Prefectural governments are planning and give the permission to hospitals	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	Designation of "insurance medical care institutions" by the state is conducted	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)/ since 2003 system based on Diagnosis Procedure Combination (based on comprehensive points for each patient by diagnosis procedure)	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	20 per cent co-payment for citizens under the age of 3, 30 per cent for citizens 3 to 69, and 10 per cent for 70 and above (20 per cent for those 70 and above with incomes exceeding a certain level); higher ceilings are set for persons with incomes above a certain level than is set for the general public	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).

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 recurrent expenditures are reimbursed by the sickness funds, investments are carried by the Laender (regions). DRG's are planned to be introduced from 2004 onwards for all hospitals with except for psychiatric care hospitals.

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 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 plan to introduce a system of DRG's, additionally 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. The same method of reimbursement was also used for ambulatory care. After 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 procedure currently covering 475 diseases and 1,860 classifications.

In all four countries a trend towards the introduction of DRG-like systems can be recognised although the Netherlands obviously plan the most comprehensive DRG-system including inpatient and outpatient care.

User charges

Japan charges the highest co-payment rate of all four countries for user charges for hospital care, with a share of 20 per cent citizens under the age of 3, 30 per cent for citi-

zens 3 to 69, and a share of 10 per cent for those 70 and above while citizens age 70 and above with incomes exceeding a certain level have to pay 20 per cent co-payments. The co-payment ceiling for persons under age 70, as well as co-payment rate and co-payment ceiling for persons age 70 and above, are set at higher amounts than for the general income brackets for persons with incomes above a certain level. These co-payments and ceilings refer to also all other health benefits granted by social health insurance in Japan. 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.

Table 3.11 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	n.a.	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 1,000 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 1,000 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 (in Japan this statistics is only conducted every two years, therefore no data is available for odd-numbered years).
Sources: WHO, HFA Database (2003), OECD Health Data (2004); National Federation of Health Insurance Societies of Japan (2003); Japan, Ministry of Health, Labour and Welfare.

3.3.3 Ambulatory care

Employment status and organisation

Ownership and organizational 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 is 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 both countries, a few are

Table 3.12 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 46 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 3.13 Purchasing and contracting of ambulatory care

	Japan	Germany	France	Netherlands
Contracting	Designation is conducted by the state	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	Med. Institutions claim fees from Social Insurance Medical Fee Payment Fund or Fed. 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 (med. Institutions 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 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 allocated number of points is revised every two years	Monetary value of 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 (20 per cent co-payment under age 3, 30 per cent for age 3 to 69, and 10 per cent for 70 and above (20 per cent for those 70 and above with incomes exceeding a certain level	€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.

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 departments. Currently, 15 per cent of them are employed by hospitals while 85 per cent are self-employed. Recently, more physicians tend to be employed by hospitals. Unlike physicians in the other countries, physicians in Japan practice all forms of organisations. They are either employed by hospitals, practicing at hospitals, or work as self-employed physicians in single practices or clinics.s.

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 years and matches 46 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 planning to introduce a kind of quota.

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.

The Netherlands is the only country with an institutionalised mandatory gatekeeper system. Patients have free choice of physicians and specialists but they only have 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 Germany and France sickness funds are obliged to collectively contract with all providers of ambulatory care while in Japan, as with hospitals, the government designates “insurance medical care institutions” for outpatient treatment instead of direct contracts between sickness funds and medical care institutions. 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 provided in different ways in all four countries. In Japan and Germany physicians or their respective medical institutions claim their payments from institutionalised bodies administrating the payments for physicians.

In Japan, medical institutions claim payments for their physicians 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 requested to claim payments directly from the AWBZ, ZFW or voluntary health insurances. The only country which 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 the number of

points per service is 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. Any overrun is compensated by reduced fees in subsequent years.

3.3.4 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 the long-term care insurance business plans are prepared by the municipalities with the support of the prefectures. For the supply of facility services, the necessary limits on the total number of occupants are determined in the long-term care insurance business support plans formulated by the prefectures. Furthermore, with

Table 3.14 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	n.a.	n.a.	n.a.	n.a.
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 (2004).

Table 3.15 Long-term care: planning, coverage, access and user charges

	Japan	Germany	France	Netherlands
Planning	The long-term care insurance business plans are prepared by the municipalities with the support of the prefectures	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	Provided to all such individuals aged 40 and above, and benefits in kind supplied to persons age 65 and above who require long-term care, and to persons age 40 to 64 who require long-term care due to illnesses accompanying aging	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).

regard to medical care not included in the target for long-term care insurance, the prefectures draw up the medical care plans. 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. The 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. In the Japanese long-term care insurance, the term “insured persons” refers to all such individuals aged 40 and above, and benefits-in-kind are supplied to persons age 65 and above who require long-term care, and to persons age 40 to 64 who require long-term care due to illnesses accompanying aging. In the Netherlands, institutional and home-care services are also fully covered by the AWBZ, but as mentioned in 3.1, 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 six 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

In Japan there are the same co-payments as for hospital care, 20 per cent co-payment for citizens under the age of 3, 30 per cent for citizens 3 to 69, and 10 per cent for 70 and above and 20 per cent for those 70 and above with incomes exceeding a certain level. 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.

4 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 4.1. 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 4.2.

4.1 Lessons towards sustainable social health insurance

Competition vs. regulation of sickness funds

For several years, a trend towards promoting competition among sickness funds has been identified in certain countries. While France and Japan have not established any policies to promote competition, the Netherlands and Germany are increasingly moving towards competition. Sickness funds in these both 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, so 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 that 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 solely reimbursing long-term care services mainly 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 way, 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

Other than 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 open questions concerning the efficiency of complementary private health insurance, as well, but it could contribute to more flexibility and 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 1.3).

User charges

A comparison of user charges reveals that there are sharp 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. Differ-

ences in these approaches are also revealed by comparing overall out-of-pocket spending as a percentage of total health expenditures. 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. In Japan higher ceilings of user charges are set for persons with incomes above a certain level than for the general public. 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 as structured 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 a professionalization of 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.

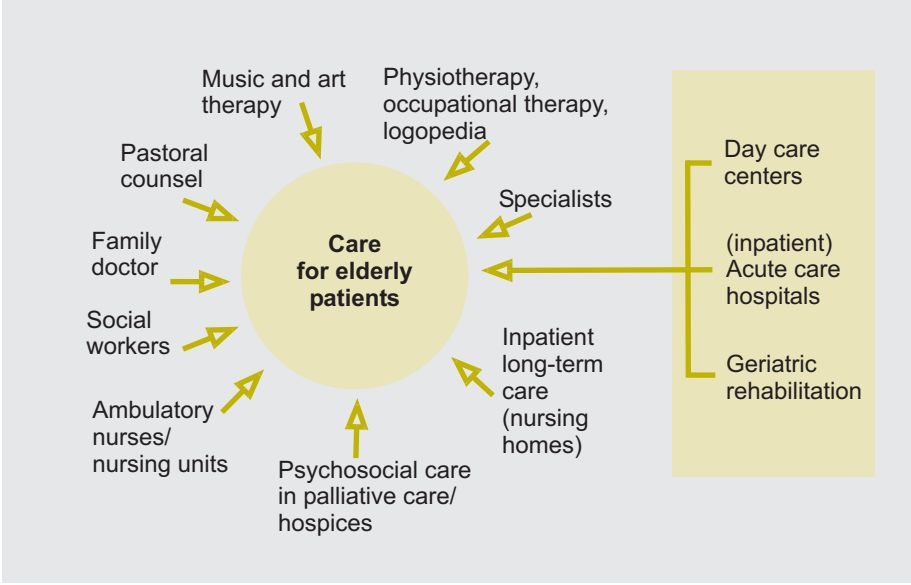
4.2 Further developments

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 4.1, most countries wish to prospectively introduce an integrated health-care system (figure 4.1). While setting priorities in health care is permanent topic on the basis of which day-to-day-adjustments take place in all the four countries (figure 4.2). 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 4.3). 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 (figure 4.4 and 4.5). 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 4.1 health care for elderly patients is taken as an example of the desired integration of providers.

Figure 4.1 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 scare 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 4.2 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 e 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.[1]

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

[1]See in more detail Henke 1997.

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.[2]

Figure 4.3 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 demography resistant health insurance system.[3] 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.

[2]Henke and Borchardt 2003; Schreyögg 2004.

[3]Henke and Borchardt 2003; Schreyögg 2003 and 2004.

Figure 4.4 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

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 all systems different types of insurance (social, private, non-for-profit e.g.) will balance individual responsibility, competition and solidarity e and the future will show how nations will set priorities regarding basic principles of risk management in social security. Even if basic coverage is tax-financed health services must not be directly provided by Government. In the Common Market, competition, convergence, co-ordination and harmonization of health care systems take place at all times. It is to be 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.

Figure 4.5 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

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.[4]

[4]See in more detail Henke 2002, Marinker 2002.

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Towards sustainable health care systems

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

Second edition

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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