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Towards sustainable health care systems: Strategies in health insurance schemes in France, Germany, Japan and the Netherlands ; a comparative study

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Towards sustainable health care systems

Strategies in health insurance schemes in France, Germany, Japan and the Netherlands
– A comparative study –

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Abstract

In all four countries health care expenditures grow while the revenue remains at the same level or even shrinks in many cases. Due to medical progress, ageing and many other factors the gap is widening over time. The pay-as-you-go approach is running against 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. There are differences regarding the solutions of each country to tackle the described challenge and they might be able to learn from each other if they are compared. Therefore the study compares the health care systems of France, Germany, Japan and the Netherlands. Due to the complexity of the different institutional settings it seems necessary to select certain criteria in order to make a comparison at all possible. The comparison is divided into three different sections. The institutional and organizational framework as first section compares the general organization of social health insurance in all four countries. It comprises the benefit structure, the enrolment, ownership issues and other criteria. The second section focuses on the funding of social health insurance comparing the different approaches according to criteria like contribution rates, contribution assessment bases, burden of contributions and others. The final section analyses different strategies in the provision and purchasing of health services in the four countries. Next to other hospital ownership infrastructure characteristics play an important role in this section. In the last part of the study certain lessons are drawn from the comparison of the four countries. Furthermore certain developments are described which can be anticipated for the future of social health insurance systems.

Abstract (deutsch)

Sowohl die demographische Entwicklung als auch vielfältige medizinische und medizinisch-technische Fortschritte führten in den letzten Jahren zu starken Ausgabensteigerungen in den sozialen Krankenversicherungssystemen. Neben Deutschland sind von dieser Entwicklung auch andere Länder mit sozialen Krankenversicherungssystemen betroffen. Die vorliegende Studie nimmt einen systematischen Vergleich zwischen verschiedenen Ländern vor, deren Gesundheitssystem auf einer sozialen Krankenversicherung aufbaut: Deutschland, Frankreich,

Japan und die Niederlande. Anhand definierter Kriterien werden die unterschiedlichen Ausprägungsformen im Hinblick auf den organisatorischen und institutionellen Rahmen, die Mittelaufbringung sowie die Leistungserbringung bzw. die Mittelverwendung der einzelnen Länder verglichen. Anschließend werden mögliche Handlungsstrategien aus dem Vergleich abgeleitet, um den zukünftigen Herausforderungen zu begegnen und eine nachhaltige Entwicklung der sozialen Krankenversicherungssysteme sicherzustellen. Abschließend werden bestimmte Entwicklungen beschrieben, die für die sozialen Krankenversicherungssysteme antizipiert werden können.

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1. Introduction

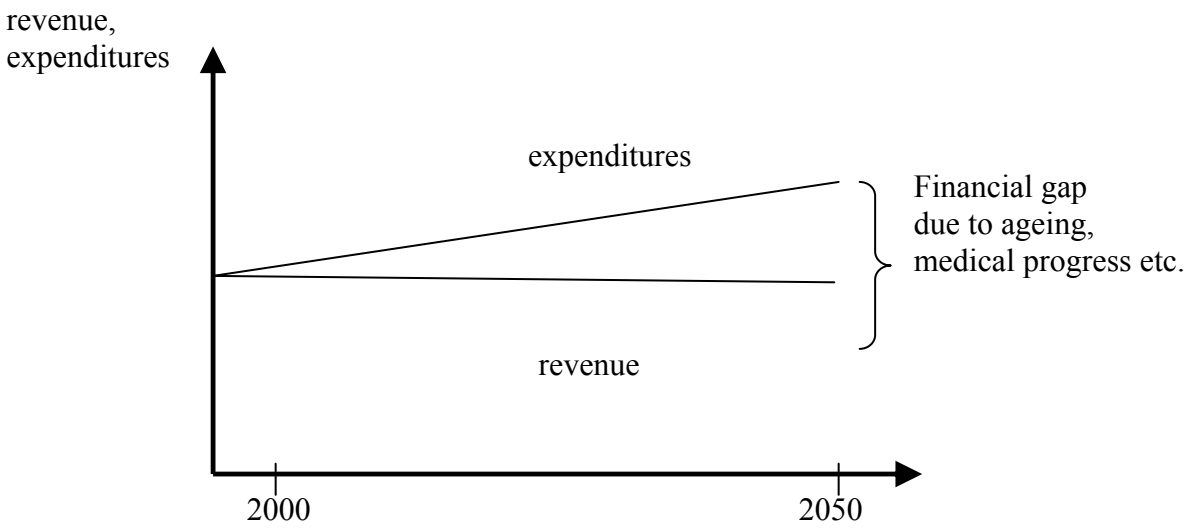
Apart from differences in health care systems of France, Germany, Japan and the Netherlands the starting points for health care reforms are similar in each country. They refer to

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

Financial and other current problems

In figure 1.1 the financial gaps are easily to be seen: health care expenditures grow while the revenue remains at the same level or even shrinks in many cases. Due to medical progress, ageing and many other factors the gap is widening over time. The overall answer to solve this situation is relatively easy and consists of three approaches**.** The nations facing financial gaps may firstly 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 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 occur in all nations at a time. They offer not much more than a simple structuring of the overall problem that more or less all nations face. But there might be differences depending on how nations are financing health services. Tax-financed systems may perhaps run into heavier financial problems than social health insurance systems in France, Germany, Japan and the Netherlands

Figure 1.1: Financing gaps in social health insurance systems



More specific are other current problems that the four health care systems face in the short and in the long run. The technological change, the medical progress and the demographic development were already mentioned and without going into details one faces with the given demographic challenge an intergenerational equity problem which has to be solved. And in addition, as just mentioned, the pay-as-you-go-method is running against 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. None of the two ideal systems are able to regulate themselves quasi automatically. The number of political interventions increases more and more and patchwork repair is the reality everywhere. Major reforms are either too difficult in a more and more overcomplex area or are politically not manageable in a highly sensible area as health care is.

This situation describes very shortly why in Europe and in Japan the public is calling for more substantial and longer lasting reforms. 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

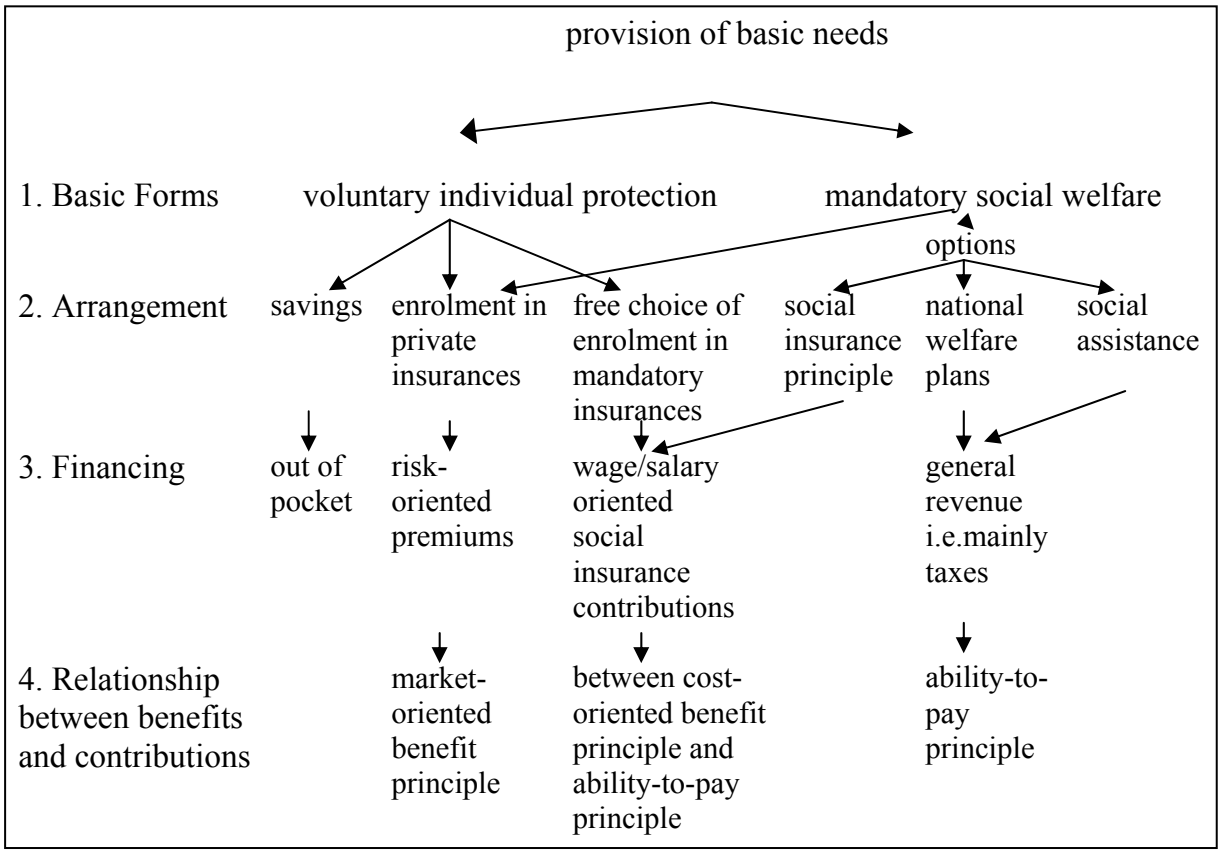
- Demographic development, technological change, medical progress
- Pay-as-you-method running up against limits with rising employer and employee contribution rates
- Systems are no longer able to regulate themselves
- Spiral of political interventions and patchwork solutions has not solved basic problems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

Risk management in theory

The analytical background for the overall risk management in social welfare is the same for all countries. To provide the basic needs you may divide two general forms: a more private or a more public approach, each of which has different arrangements and ways of financing.

In all systems the existence of social assistance for the unemployed and those who need support for other reasons is essential. These expenditures stem 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 the budgetary decisions taken year by year by their parliaments. Although nations with social insurance systems are mandatory social welfare systems as well 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.

Figure 1.3: Risk management and social welfare



Source: Zimmermann and Henke (2001).

Apart from the different options within mandatory social welfare many nations offer substitutional or in complementary individual protection against the risks of life. Thus the enrolment in private insurances may be mandatory for the total or part of the population. It could also be a free choice to enrol in mandatory insurances or in private ones which are in general more risk- and less income-related in regard to their financing mechanisms.

Whilst the risk management on the basis of private insurances relates merely to the tasks of an insurance, the risk management in payroll- or tax-financed systems generally includes elements of income and family redistribution as well. Allocation and distribution is thus not separated from each other. This relationship between benefits and contributions may be described through the market-oriented benefit principle on the one hand and the ability-to-

pay-principle on the other hand. And many systems are between these two possible principles of risk management in social welfare.

Health policy: goals and entitlements

The goals of Social Security are to be seen in close relation with the more theoretical background in figure 1.3. These goals are probably the most basic elements underlying all systems. They are comparatively general and thus being supported by all the four nations (figure 1.4.). But problems will definitely arise, when people or politicians have to decide how „equitable distribution", „optimal prevention and rehabilitation" or the scope and content of the „most important risks of life" is interpreted. And even if this will work out the parliament or other bodies have to decide about the weight of the different goals respective criteria. Thus value judgements play a significant role in health care issues and in setting the 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 the German Social Security Law the legislator wanted to be more precise and codified the six prerequisites in figure 1.5 for health care in a German setting. Again everybody will probably like these postulates in figure 1.5 and agree to them. But the problems arise when one tries to operationalize them. What is the „current state of medical science" in a nation and what is it in a growing common market in Europe? Are patient`s needs everywhere the same? And are adequate services the same in France, Germany, Japan and the Netherlands? In which

moment do health services exceed what is necessary? More questions than answers. But nevertheless these goals are codified and the legal basis for claims of the insured population in general and the 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 reforms

A last set of starting points refers to a health care reform from the onset. In all countries the health care sector is a labour intensive growth sector. About 10 % of the working population is employed in this part of the economy, where many new professions developed over the years. Good health, fitness, wellness and aging healthily are key concepts in an ageing society. The numbers also impressively demonstrate a desirable trend: the paradigm for 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 undesired oversupply of services.

Figure 1.6: Elements of a health care reform

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

Another point of departure for health care reforms is the fact that there is no overall rationality in a given or planned system. Health care reforms are driven by the interests of all the participants and other driving forces, e.g. the media. The ability to achieve acceptance for proposed reforms does not by any means depend solely on the diverse professional and personal interest of doctors, economists, lawyers and commission members. It is also critically influenced by the driving forces in the health care system – the health insurance associations and the bureaucracy of the ministries. In addition to the political atmosphere the pending elections have to be considered. Ultimately the „chemistry“ must be right among the few persons who ultimately must pull together under strong, statesmanlike leadership and achieve a politically acceptable, viable, sustainable solution.

Finally there are three economic prerequisites for health care reforms. One of them is valid everywhere and at all times. And that is 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 financing problems in health care.

Furthermore there is agreement that everywhere and within all reforms moral hazard and adverse selection as two forms of misbehaviour should be avoided. Moral hazard ax ante takes place through an unhealthy lifestyle or a behaviour which provokes the event insured against. Ex-post moral hazard happens when a doctor does more out of income interest than is necessary. And the patient requires unnecessary services because he has paid his contributions and wants to make the best out of it.

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

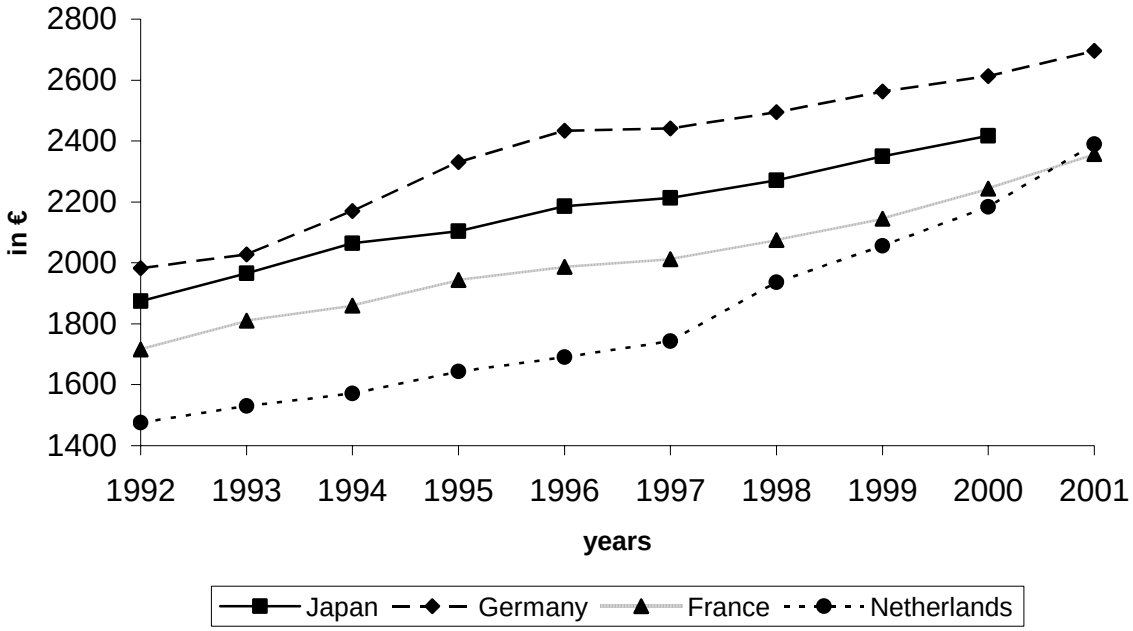
In chapter 2 impacts on health care systems are analyzed on the basis of expenditure trends in the different countries. This will be followed by a classical comparison of France, Germany, Japan and the Netherlands on the basis of financing health care, provision and purchasing health services in the different sectors with the help of selected criteria (chapter 3). The conclusion in the final chapter gives hints 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 compared countries. However, there are significant differences regarding the scope and the structure of changes. While Japan, Germany and France experienced an average yearly increase in total health expenditures between 1992 and 2001 of 3.48%, 3.75% and 3.98%, health care expenditures in the Netherlands have risen with an average of 6.18% 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 (2003).

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

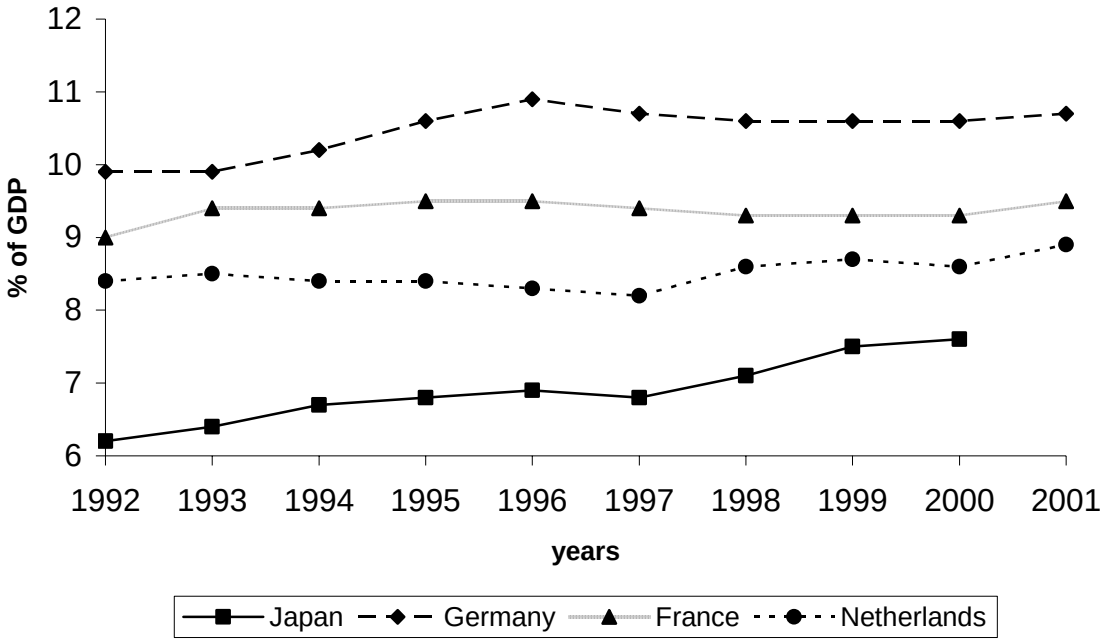
It has to be pointed out that the increase in health care expenditures in each of the four systems is due to different reasons. Between 1992 and 2000 total spending for out-patient care remained nearly the same in Japan (+2%) while at the same time it drastically increased in Germany (+37%), France (+27%) and the Netherlands (+62%). During the same period pharmaceutical expenditures, for instance, even decreased in Japan (-5%), but increased considerably in the three European states (Germany: +25%, France + 60%, Netherlands +50%). All four countries experienced increased expenditure for in-patient care between 1992 and 2000. In Japan it increased by 52%, followed by the Netherlands (+39%), Germany (+37%) and France (27%)[2] (see also figure 2.1. above).

Although the differences might be due to a different design of institutional provision or due to different priority setting in health care policy they might also give evidence whether certain actions taken by the governments or the sickness funds have been successful in containing health care expenditures.

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 6.2% in 1992 to 7.6% in 2000. Therefore health care is obviously gaining in more importance. Nevertheless a slight tendency in reducing the public share of total health care expenditures is observable. The public health expenditures of the Netherlands, which include sickness funds expenditures as a percentage of total health expenditures, dropped by 9.5% from 72.8% to 63.3% between the years 1992 and 2000. The German government reduced its public share by 2% while the Japanese and the French public share remained at the same level.

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

Figure 2.2: Total Health Expenditures in % of GDP



Source: OECD Health Data (2003).

2.2 Causes for expenditure trends

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

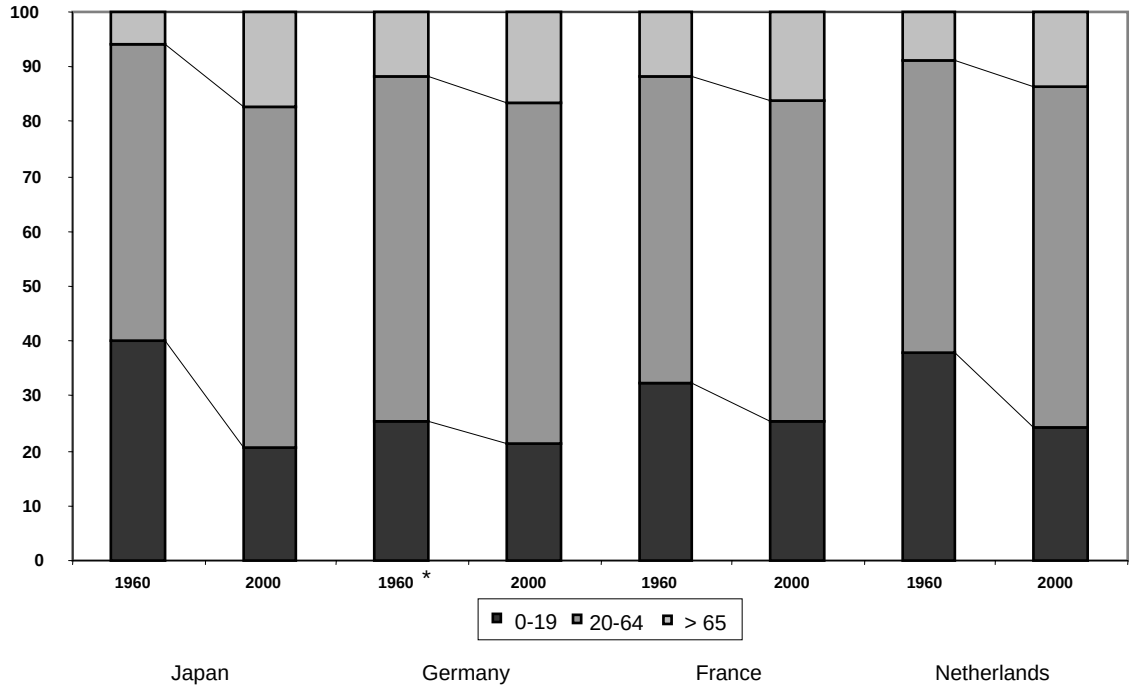
2.2.1 Demographic characteristics

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

16.1% in France and from 9.0 % to 13.6% in the Netherlands as percentage of the total population in 2000 while the number of young people between 0 and 19 years has decreased from 25.3% to 21.2% in Germany, from 32.5% to 25.5% in France and from 37.9 to 24.4% in the Netherlands as displayed in figure 2.3.[3]

Until today, the demographic development had only minor effects on the labour markets, since the number of people in working age in the four countries stayed about the same. As further factors an increasing number of women in the work force and an increasing immigration are counter-balancing the shortfalls but are not able to fully compensate the development mentioned.

Figure 2.3: Ageing of population in the four countries



	Japan			Germany			France			Netherlands		
	0–19	**20–64**	**> 65**	**0–19**	**20–64**	**> 65**	**0–19**	**20–64**	**> 65**	**0–19**	**20–64**	**> 65**
1960	40,1	54,2	5,7	25,3	63,1	11,6	32,5	55,9	11,6	37,9	53,1	9,0
2000	20,5	62,1	17,4	21,2	62,3	16,4	25,5	58,4	16,1	24,4	62,0	13,6

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

[3] OECD Health Data 2003.

In the near future however, it can be predicted that the four pay-as-you-go based systems will face severe problems. Age groups of low birth rates are soon entering the labour market while age groups of high birth rates are going to retire from work. This development is going to continue over the next decades because births per women in all four countries are below 2.00 (Germany 2001: 1.29; Japan 2000: 1.41; Netherlands 2001: 1.69 and France 2001: 1.90)[4]. As a consequence the proportion of the total population over 60 years of age is constantly growing and this population group is to a significant extent no longer part of the labour force. Since, however, the pay-as-you go approach is working on the theoretical 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 is to be funded in these systems by a decreasing number of employed people.

A third factor combined with the demographic challenge is the development of the population. As presented in table 2.1 the population for Germany and Japan is predicted to shrink until 2050 while the French and the Dutch populations are estimated to rise slightly. A shrinking population especially has implications on the provision of health care infrastructure. It means for instance for Japan, that much less hospitals will be needed if this development is not offset by a much higher demand for health care of the elderly. At the same time a shrinking population also leads to lower population density which could in the case Japan lower the risk of epidemics.

[4] OECD Health Data (2003).

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

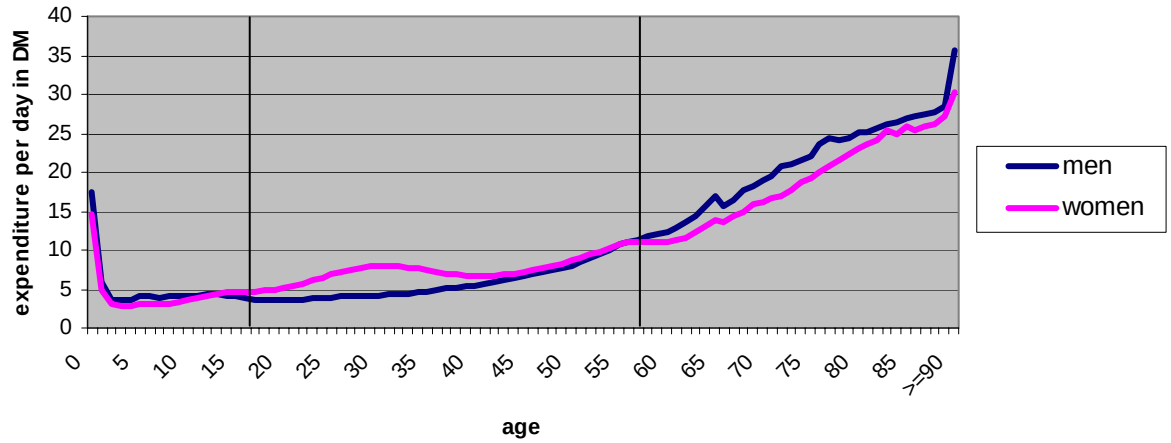
Sources: OECD Health Data (2003), Federal Statistic Office of Germany (2000), National Institute of Population and Social Security research, Institut National de la Statistique et des Etudes Economiques (France).

It is difficult to anticipate the impact for the health care system, as cost development especially for the elderly population is not reliably predictable. On the one side, cross-sectional data show a clear correlation of health care costs with age as shown in figure 2.4 in the case of Germany. [5] It can be seen that for instance in Germany the expenditures for people above 60 are almost 3 times as high as for those between 20 and 60. On the other much of this increase with age can be attributed to the larger percentages of persons in their final year(s) of life for whom health care is especially costly. If life expectancy is increasing, this portion of the costs will be shifted upwards. However, currently implicitly applied age limits for using certain diagnostic or therapeutic procedures will also be shifted upwards with 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 the demographic development leads to the problem that the number of net-benefit-receivers is increasing while at the same time the number of net-payers is decreasing.

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

Figure 2.4: Standardized Expenditures in Germany according to age and gender



Source: Bundesversicherungsamt (2002).

2.2.2 Changes in disease structure

Changes in disease structure are partially linked to the demographic development having direct impact on the provision of health care and therefore on the health expenditures. First of all a shift to chronic diseases can be observed. Allergies, asthma and diabetes are becoming widespread. This is only partly due to ageing, but also due to changes in the environment. Environmental pollution in the past decades has decreased in general, 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 1960ies and 1970ies are affecting the health care systems today, while the effects of stronger ultraviolet radiation in 1980ies and 1990ies will be experienced in the future.

Due to increased economic welfare excess of weight is becoming more and more a mass disease. Measured as body mass indexes the number of people considered to be overweight e.g. in France has risen from 5.8% in 1990 to 9% in 2000. The Netherlands and Japan have similar problems as displayed in table 2.2. This development is alarming since diseases in coherence with skeleton, muscles and circulatory diseases are expected to increase.

Table 2.2: Body Mass Index in the four countries

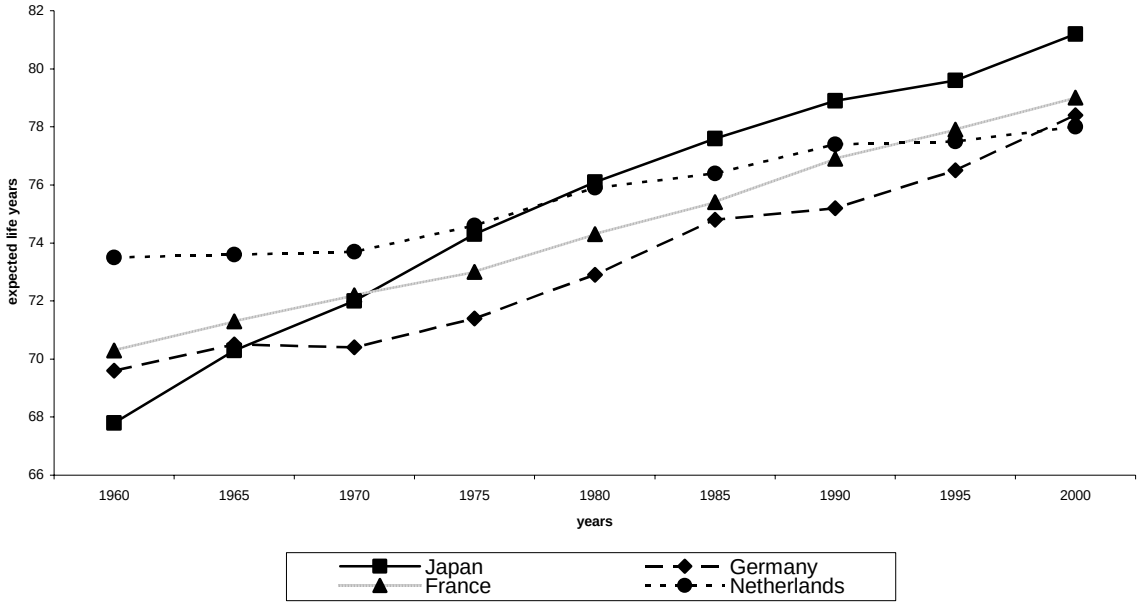
	Japan		**Germany**		**France**		**Netherlands**	
	25< BMI <30	*BMI >30*	*25< BMI >30*	*BMI >30*	*25< BMI >30*	*BMI >30*	*25< BMI >30*	*BMI >30*
1980	17.5	2.0						
1985	18.0	1.9					28.0	5.0
1990	19.7	2.3	33.0	18.0	23.9	5.8	28.8	6.1
1995	19.6	2.6			26.4	7.0	31.0	6.9
2000	21.0	2.9	39.4	29.2	27.2	9.0	34.7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

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

In spite of this development life expectancy and healthy life expectancy have increased in all four countries over the last forty years (figure 2.5; table 2.3). As revealed above in figure 2.5 Japan has the highest average life expectancy at birth with 81.3 (2000) years followed by France with 79.0 (2000) years and the Netherlands with 78.0 (2000) years. Germany had the lowest average life expectancy at birth of all four countries since more than 30 years, but has since 2000 a higher average life expectancy than the Netherlands with 78.4 years.

As far as healthy life expectancy (HALE) is concerned the situation changes as one may see from table 2.3. The healthy life expectancy in citizens in Japan is even 2.3 years higher than in France which has the second highest healthy life expectancy. This hypothesis is further supported by column 4 and 5 as Japan. Column 4 documents that Japan has the lowest expectation of lost healthy years at birth in 2001 while column 5 shows that is also has the lowest healthy life years lost as % of the total life expectancy.

Figure 2.5: Average Life expectancy at birth in the four countries



Source: OECD Health Data (2003).

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

Healthy life expectancy (HALE)										
	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 % of the total life expectancy (5)	
Country	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).

2.2.3 Technological Progress

According to several macroeconomic studies a major driver for rising health expenditures is the diffusion of new technologies and medical progress. Some authors even attribute about 50% of total expenditures to new technologies. The patterns of diffusion of new technology within health care systems are in many cases subject to supply side economic incentives. In view of the proposed possibilities health care providers often adopt technologies that de facto only contribute a minimal improvement in the provision of medical care.[6] In addition this technology-push effect is encouraged by the relative propensity of government and sickness funds to pay for those "innovations". Even if technologies are assessed in medical trials their subsequent use might be well beyond the range of initial efficacy since they are often used for groups of patients beyond the initial indications.[7] Therefore they often produce marginal benefits in terms of quality but significantly increase health care costs and expenditures.

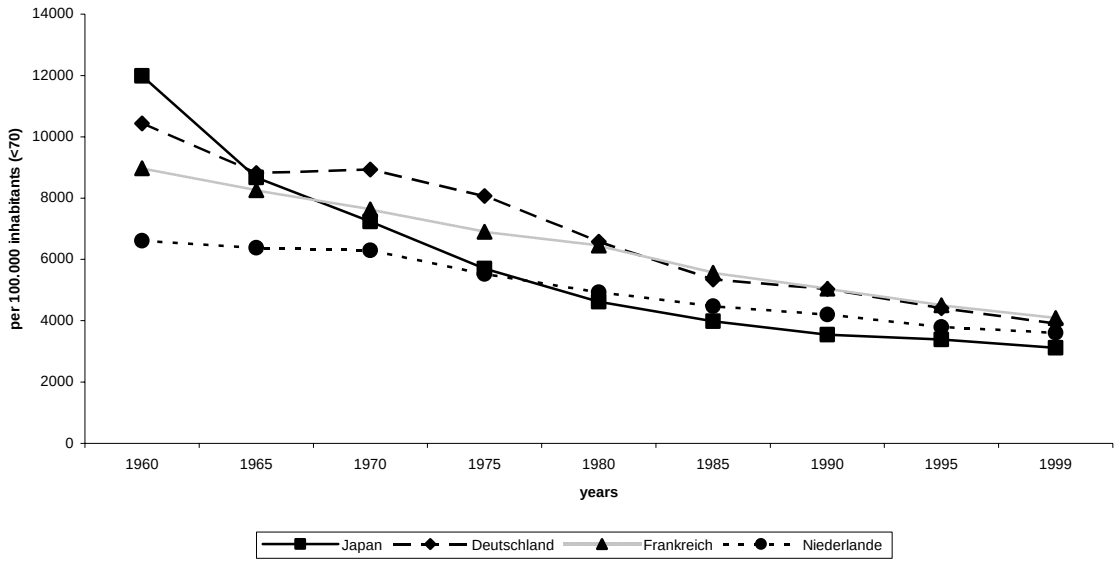
At the same time invention, innovation and imitation of technologies have significantly increased the effectiveness of provided health care services. Therefore the duration of treatments has been reduced, outcomes have been improved and incurable illnesses can now be cured. Former inpatient care has been substituted or at least 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% from 2.4 to 1.9 days in both countries.[8] Hence some technologies, especially process innovations as keyhole surgery, have also contributed to reduced costs.

Additionally technological progress also has an impact on life expectancy and working capabilities of the population. Better health care leads to a healthier workforce and therefore increases productivity, which again has influence on the growth rates of the economy of the country. The number of lost life years due to diseases for persons below the age of 70 years has decreased very much which can also be attributed to new technologies and new opportunities for medical treatment.[9] Between 1975 and 1995 the number of life years lost

[6] Weisbrod (1991).
[7] Phelps (1997); Jacobzone (2003); McClellan (1996), OECD 2003.
[8] OECD Health Data (2003).
[9] Nolte et al. (2002).

due to diseases was reduced by 40.5% in Japan, 45.3% in Germany, 34.8% in France and 31.3% in the Netherlands. The development of lost life years due to diseases is displayed in figure 2.6.

Figure 2.6: Potential years of life lost due to diseases in the four countries



Source: OECD Health Data 2003.

2.2.4 Economic situation

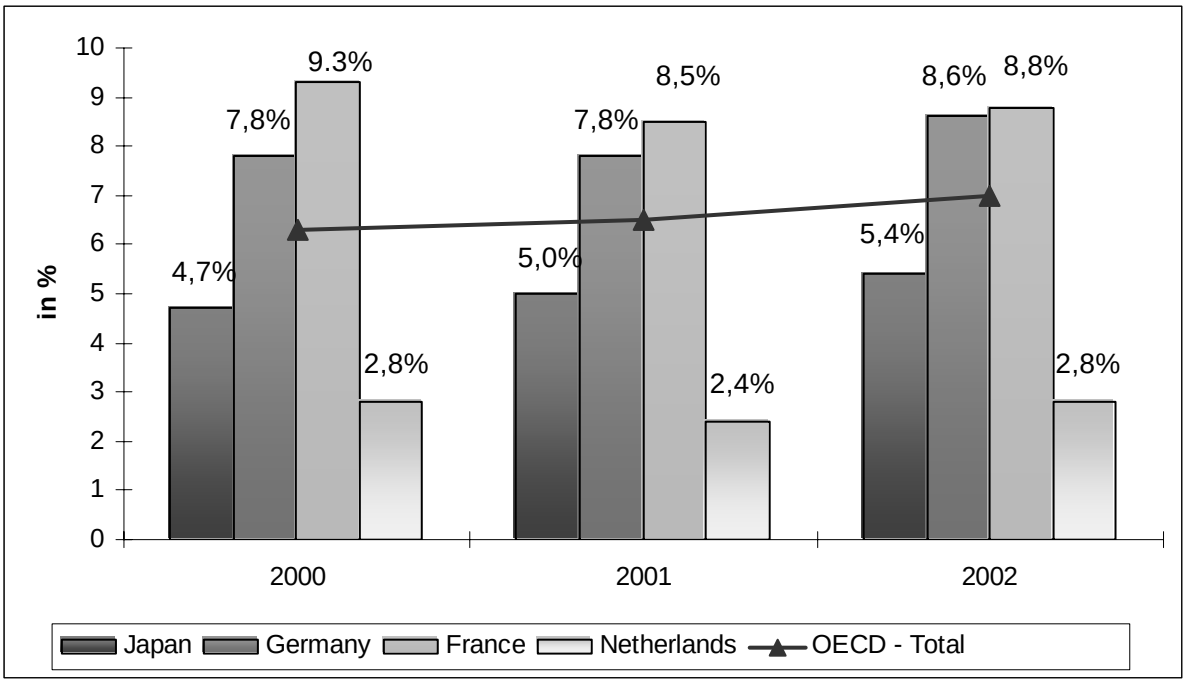
The increase of health care expenditures as percentage of GDP in the four countries is not to the whole extent due to an increase in total health expenditures, but also due to the deceleration of economic growth. Japan has experienced a cut down in growth rates from an annual average GDP growth of 4.5%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

[10] Calculation based on World Bank, World Development Indicators 1997.
[11] World Bank, Economic Policy and Prospect Group.

For historical reasons financing health care in systems following the Bismarckian approach is mostly linked to wages and salaries as the base 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 the financial constraints of the sickness funds. While the average unemployment rate for all OECD countries rose from 6.3% in 2000 to 7.0% in 2002 Japan and Germany – though having started at different levels – also experienced sharp increases as revealed in figure 2.7. The German unemployment rate rose from 7.8% (2000) to 8.6% (2002) and the Japanese unemployment rate from 4.7% (2000) to 5.4% (2002). The French unemployment rate dropped slightly from 9.3% in 2000 to 8.8% 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, which are not able to contribute to social security systems as much as full time workers.

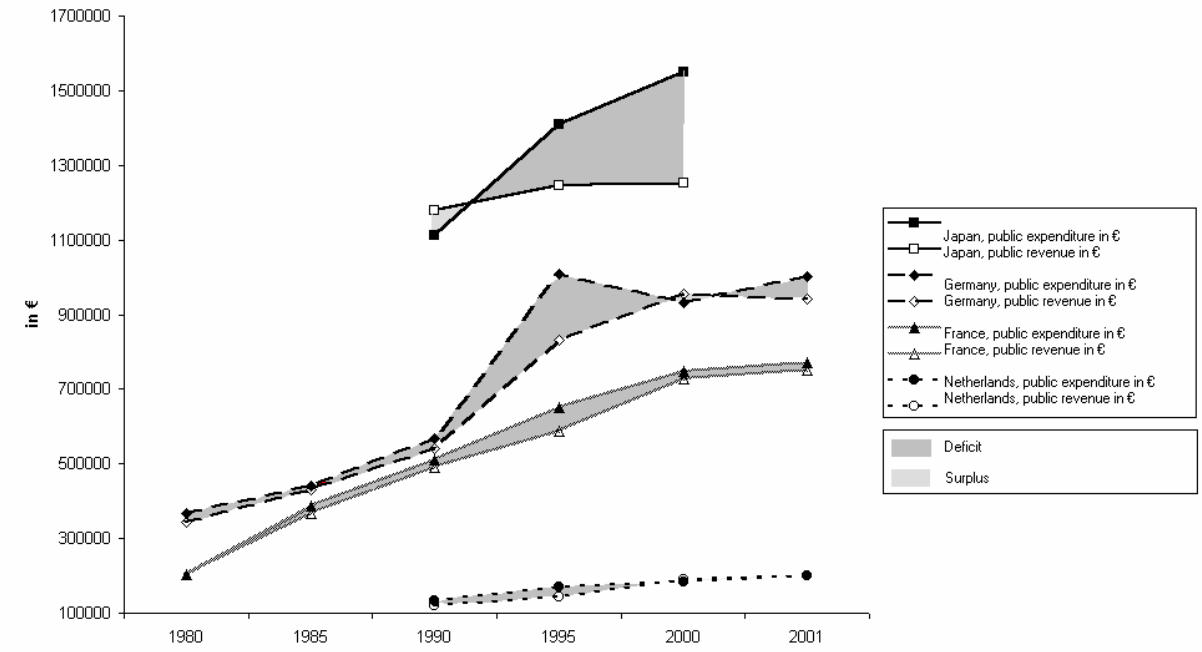
Figure 2.7: Standardised unemployment rates in the four countries



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

While in regard to the sickness funds low economic growth rates and the situation on the labour market meant an erosion of the revenue it was at the same time difficult to balance state budgets. Therefore it is nearly impossible to subsidise health care from the ordinary state budget without raising taxes or increase public debt. Additionally the three European countries have to comply with the European growth and stability pact that suggests a balanced budget and limits yearly deficits to 3% of the GDP. The Netherlands' budget was balanced in 2002, but Germany and France reported a deficit of 3.5% and 3.1% of their GDP to the European Commission. Forecasts for 2003 have been again above the limit for both countries putting them in a difficult situation as they might be imposed sanctions 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% of GDP in 2000. The budget deficits or surpluses of the four countries over the last years are displayed in figure 2.8.[12]

Figure 2.8: Development of state budgets in the four countries



Source: OECD Health Data 2003.

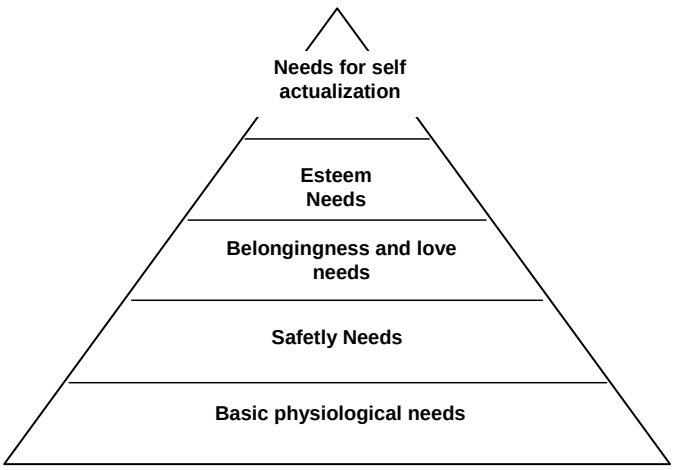
[12] OECD Health Data (2003).

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

2.2.5 Changes in Preferences

Rarely mentioned but also important are the changes in consumer behaviour and preferences over the last years in the course of the post-materialistic change in values. Maslow's hierarchy of needs pyramid, which is shown in Figure 2.9, illuminates changing preferences at individual and societal level. The basic physiological needs at the first level such as food, housing or basic 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, lifestyle drugs and new sophisticated treatment methods widening the scope and objectives of health care provision.

Figure 2.9: Maslow's hierarchy of needs pyramid



Source: Maslow 1970.

The change of needs and the occurrence 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 the sickness funds in the four countries this increased demand also means higher health expenditures and subsequently higher contribution rates for the social health insurance systems. As long as the population is aware of the fact that in social health insurance systems growing demand is automatically related to higher contributions there is no problem but if in turn increased contribution rates induce a rise in expectations towards the system this creates a vicious circle. New forms of financing health care have to be developed.

With regard to changing preferences it also has to be mentioned that patients tend to be better informed and demand more information on treatments and diseases. At the same time patient empowerment is more and more gaining 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 performed treatment or are able to prevent certain risks in order to avoid diseases. Although higher patient empowerment contains the potential for a reduction of health expenditures to encourage this development is still neglected in all four countries although the Netherlands and (just recently) Germany made some progress regarding the 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 of all these weaknesses and disincentives is a reduction of welfare owing to the breach of a pareto-optimal allocation. This loss of welfare leads to rising insurance contributions and consequently to an immanent increase in the redistribution of insurance 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 can be due to a variety of reasons. First of all, misconduct of different actors of the health care system, activated by certain disincentives as in the case of moral

hazard, can lead to an overuse of services or resources. E.g. Weisbrod (1991) argues that health insurance systems with a high coverage of health benefits and the problems of moral hazard resulting therefrom have caused the development of progress in medicine and medical technology to set off in the wrong direction. In view of the supposed 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.[13]

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

[13] Weisbrod (1991)

3. Comparison between the 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 differ very much thus making it difficult to compare them. Over the time they have developed according to national and cultural needs and are sometimes quite away from the original ideas at the beginning of social security systems under Bismarck. Even inside of each country various mixtures of regional and occupational insurance schemes coexist next to each other. Some insurance companies are public corporations others are privately owned. Furthermore some countries trust in competition between the funds and in the provision of health care while others do not; office - based physicians are self-employed in some countries, while in others they are employed.

Due to the complexity of the different institutional settings it seems necessary to select certain criteria in order to make a comparison at all possible. Different institutions (e.g. OECD, World Bank, WHO) choose different approaches and indicators for describing and analysing the functions and the performance of health care systems.[14]

Table 3.3 below displays certain criteria which have been chosen in this comparative study in order to underline differences and similarities between the institutional settings of social health insurance systems of the four countries.

Membership, Enrolment, Coverage

All compared countries 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 not every country compulsory for the whole

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

population. Especially in Germany and the Netherlands parts of the population – if they are above a certain income level – are allowed to join private health insurance instead. In Germany employed persons are exempted if they exceed an income of € 41,850 per person (2003) and furthermore social health insurance is not compulsory for public servants or self-employed. In contrast to the situation in Germany social health insurance in the Netherlands is also compulsory for self employed if their income does not exceed an amount of € 20,250 and for employees if it does not exceed an amount of € 31,750 (2003). In Japan and France the whole population is compulsory member in one of the sickness fund schemes. Due to these differences population coverage of sickness funds schemes in Germany and the Netherlands is lower than in Japan and France.

Benefits

Regarding population coverage of sickness funds schemes in the four countries it also has to be considered that the extent of granted services differs between the countries. Although in both Japan and France nearly the whole population is covered by the sickness funds schemes the granted services are more comprehensive in Japan. For this reason nearly 90% of the French population is insured by supplementary private insurance which is not compulsory and varies by price and granted services. For the poorest 10% of the population private health insurance with a fixed minimum basket of services is granted free of charge financed by the federal government. In contrast to this the Japanese population has no need to be private insured holding down the market share of private health insurance in Japan.

The Social Health Insurance in Germany is similar comprehensive as in Japan but it only covers 89% of the population while it has full coverage in Japan. As mentioned above in Germany certain groups are not compulsory insured by Social Health Insurance and therefore 9% is insured by comprehensive private health insurance. The Netherlands completely differ from the other countries regarding granted benefits by sickness funds since they have one scheme for long term care and high cost treatments (AWBZ). The domain of the AWBZ is called the first compartment. It covers long term nursing care and home care for elderly and handicapped people (as from day of indication), and hospitals costs after one year of hospitalisation. It is covering the whole population and its contributions are obligatory for

every Dutch citizen. Another scheme for normal medical care (ZFW) is covering 63% of the population. The sickness funds scheme (ZFW) is substituted by 30.2% of the population by comprehensive private health insurance. ZFW and substitutive private health insurance together are called the second compartment. In addition most people have supplementary private insurance dental care, physiotherapy and other sorts of care not covered by the packages of ABWZ and ZFW. This is called 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

The ownership of the 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, the Japanese state only carries the deficits of certain schemes as the government-managed health insurance and the municipal funds. But Japan offers the possibility to privately found a sickness funds as so called society-managed sickness funds if some entrepreneur can at least prove 700 insured persons as an initial risk pool. Although the state covers part of the administrative costs and provides financial support in case of problems of liquidity the risk is carried privately. Thus society-managed sickness funds can also set contribution rates independently (within a range of 3.0-9.5%) and can also become insolvent.

In Germany all sickness funds are operated on a not-for-profit basis by a management and a supervisory board. They can autonomously set their contribution rates as long as the Ministry of Health and its supervisory board do not intervene. In the Netherlands the AWBZ is managed by one sickness fund (ZFW funds) in each of 31 regions. The 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. The sickness funds receive full financial compensation for the management of the AWBZ. Unlike in Germany the sickness funds of the ZFW (normal medical care) are more and more carrying financial risks on their own. Until 1995 the sickness funds only had to carry 2.5% of the difference between planned and real costs but in 1997 this share was increased to 27% and is

planned to be 65% in future. At the same time the 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 possibility to choose between different funds and finally the kind of competition among different funds in the four countries. The number of sickness funds as well as the membership of citizens in each country as % 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, the scheme for self-employed or in several small schemes for special occupations (e. g. seaman, civil servants) is strictly determined by the 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 Japan, where membership in certain sickness funds is at first also determined by occupational status. Citizen who are employed in bigger companies with a certain size are usually insured by society-managed sickness funds which often belongs to the company itself. Citizens of smaller companies without attached sickness fund are either insured in one of the sickness fund schemes for special occupations or if not, they covered by the Government-managed scheme. All other citizens which are not insured by occupation as self-employed, retired and others are compulsorily insured by the municipal insurance scheme of their local community (also classified as NHI "National Health Insurance"). Altogether there are a number of 5,192 (2000) different sickness funds in Japan which unlike in other countries (e.g. Germany) has increased over the last decades while it decreased 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 structure of assignment of different occupational groups to certain sickness funds has been very similar to the current system in Japan but since 1997 sickness funds have been opened to all citizens being able to choose between a variety of sickness funds. They are organised on a regional or on a nationwide basis and can be divided in 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 everybody. The sickness funds are standing in competition to each other basically on the basis of different contribution rates since the mandatory range of offered services only allows few and little variations. As a result of competition the number of sickness funds has sharply reduced from more than 1,200 in the nineties to 319 (2003) and a further reduction in number is expected. The number of private insurances has increased by 20 over the last 20 years and is currently stable at around 50.[15]

Competition in the Netherlands is working somehow different from Germany. Since the AWBZ scheme for long term care and high cost treatments is only managed by one sickness fund in each region there is no choice for Dutch citizens in this segment. Among the ZFW scheme for normal medical care they are currently able to choose between 25 different funds. In the early nineties the number 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 is not working on the basis of contribution rates which are fixed but on the basis of service and flat-rat-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 capital expenditure of hospitals are therefore excluded.

[15] Information according to the German Association of Private Health Insurance Companies in Jan. 2004.

Table 3.1: Membership in different sickness funds in % 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
	Σ	**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 (including uninsured)	3,9	4,3	4,2	4,3	4,5	
	Σ	**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		
	Σ	**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 (including uninsured)	1,0		1,6		1,9	2,0
	Σ	**100,0**		**100,0**		**100,0**	**100,0**

Sources: Based on ISSA country reports.

Table 3.2: Number of sickness funds according to different schemes

	Japan				Germany						France		Netherlands
	∑	EHI (govern-ment managed)	EHI (society ma-naged)	NHI (muni-cipal-managed)	∑	AOK (re-gional)	BKK (com-pany based)	IKK (guild funds)	substitute funds	other funds	sickness funds		Sickness Funds (ZFW)
											main	special	
1992	5244	1	1823	3420	1209	271	741	173	15	21	3	11	30
1994	5236	1	1817	3418	1152	235	719	160	15	21	3	11	34
1996	5235	1	1819	3415	642	20	532	53	15	20	3	11	29
1998	5229	1	1813	3415	482	18	386	43	13	20	3	11	30
2000	5192	1	1780	3411	420	17	337	32	12	20	3	11	27
2002	5124	1	1722	3401	355	17	287	24	12	13	3	11	25

Source: Based on ISSA country report.

Competition and risk structure compensation

To spread the financial risks among the different funds and provide a fair competition between sickness funds three of the four countries have installed different kinds of risk structure compensation schemes. These schemes especially gain importance in view of the rapidly aging populations in Europe. Japan has no risk structure compensation scheme but as explained below in 3.1.2 the government subsidises municipal sickness funds since they have a more negative risks structure due to the fact that retired persons have to join these funds. The other three countries have certain schemes varying according to the risk adjusting criteria reflected in the schemes.

In Germany a risk structure compensation scheme was introduced in 1994/1995. After each calendar year standardized expenditures are calculated on the basis of the criteria 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 has passed an act in the year 2001 to additionally include the criteria of morbidity into the risk structure compensation scheme until the year 2007. Until then the existing scheme should be supplemented by a high risk pool which compensates sickness funds for 40% of all expenses for a particular person beyond a certain limit and so called Disease Management Programmes[1].

The risk structure compensation scheme of the Netherlands is only used for compensating funds of the Ziekenfondswet (ZFW). It is somewhat different to the German scheme since all contributions first flow into a central fund on the basis of which the resources are allocated to the different sickness funds according to certain criteria. The risk structure mechanism comprises of 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,

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

employment/social security status and region. The retrospective risk adjustment component consists of two different mechanisms. Firstly 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. Therefore resources are shifted from sickness funds with low expenditure to sickness funds with high expenditure. Secondly sickness funds are compensated for a certain percentage of the difference between the overall allocated budget to all sickness funds and the actual expenditure arising from cost drivers which cannot be influenced by the sickness funds. This compensation is called the recalculation percentage.[2]

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 would be the same as for the general scheme. Transfers from the general scheme to the small schemes and vice versa are compensating for certain losses. Another risk structure compensation scheme is adjusting the differences between the three main schemes considering the criteria of age. It turns out that the general scheme pays to the self-employed and to the agriculture scheme whose populations are much older.

Although the introduction of competition in Germany and the Netherlands was also targeted at bringing down the costs for administration of sickness funds the 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 at 1.9% as percentage of sickness funds expenditure Japan has the second lowest cost at 2.2%. The Netherlands have administrative costs of 4.3% and in Germany institutional organisation is the most expensive administration with 5.4% of sickness funds expenditures.

By interpreting these differences it also has to be considered that in some countries e.g. in France there is more activity on the state level regarding the administration of sickness funds than e.g. in Germany where most of the administration is in the hands of the self-

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

administration. Thus it depends a lot on how administration costs are defined. In Germany e.g. the collection of the contribution is done free of charge by the employer and in case of partially tax-financed systems collection cost is to be dealt with completely differently. Table 3.3 summarises the institutional setting in the four countries according to the criteria selected.

Table 3.3: Comparison of the institutional and organizational framework of social health insurance on the basis of selected criteria

	Japan	**Germany**	**France**	**Netherlands**
Compulsory **membership**	Yes	Below €41,850 income per year/not compulsory for self-employed and public servants	Yes	AWBZ: Yes ZFW: Below income of € 31,750 for employees (€ 20,250 self-employed)
Enrolment in sickness funds schemes	Full	89%	99%	AWBZ (Full) ZFW (63%)
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 osteopathy, inclusion of long-term	AWBZ: long-term care and high-cost treatments (hospitalisation costs after 1 year)/ ZFW: Full coverage of medical care (hospitalisation costs until 1 year)
Supplementary or comprehensive private health insurance (**population coverage**)	Supplementary (very low)	Comprehensive (9%)	Supplementary especially. for high co-payments (90%; free of charge for poorest 10% called CMU)	Comprehensive substituting ZFW (30.2%) and supplementary (low coverage)
Ownership (risk)	Semi-private/governmental	Semi-private	Governmental	Governmental/semi-private

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

Table 3.3 (contd.): Comparison of the institutional and organizational framework of social health insurance on the basis of selected criteria

	Japan	**Germany**	**France**	**Netherlands**
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%, 2000)	AOK-Regional sickness funds (31,9%, 2001)	CNAMTS-General scheme (80%, 2000)	AWBZ (100%, 2002)
	Society-managed Funds (25.1%, 2000)	Ersatzkassen-White collar funds (30,9%, 2001)	Agricultural scheme (9%, 2000)	ZFW (63.0, 2002)
	Municipal Funds (National Health Insurance (37.7%, 2000)	BKK-Company-based funds (15,2%, 2001)	Self-employed scheme (6%, 2000)	Private Insurance (30.2%, 2002)
Competition among Sickness Funds	No	Yes	No	Yes for ZFW
Risk structure compensation scheme (included characteristics)	No	Yes (income, age, gender, invalidity/ morbidity planned for 2007)	Between large and small funds (age and income)/ between large funds (age)	Yes (age, gender, employment/ social security status and region)
Administrative costs as percentage of SHI exp.	2.2% (2000)	5.4% (2001)	1.9% (2001)	4.3% (2001)

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

3.2 Funding

Compared to the changes in scope and objectives of institutional organisation, funding of social insurance systems has undergone only minor changes 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 on their own. Over the years the provision of primary care was more and more extended while covering most parts of the population. Although the systems are increasingly under pressure the pay-as-you-go-principle as main feature of social health insurance has still 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 years.

Contribution rates, income ceiling and contribution assessment bases

The contribution assessment base has to be seen in the context with the income ceiling and the contribution rates set in the four countries. The contribution rates vary between 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% and is completely paid by the employees being deducted from their wages and salaries with a yearly income ceiling of € 27,009 (2003). The contribution rate of 8.45% for the ZFW is paid by the employer with a share of 6.75% and by the employees with a share of 1.7%. The income ceiling for the ZFW is currently set at € 28,188 in the same year. As mentioned above under 3.1.1 all contributions for ZFW are first received by the central fund and then allocated to the different sickness funds. The only other country with an income ceiling is Germany but at € 41,850 (2003) set much higher than in the Netherlands. On the other hand the average contribution rate of 14.3% (2003) is lower in Germany than in the Netherlands although it has to be considered that the contribution rate in Germany varies between different sickness funds between 11.8% and 15.5% The contribution rate in Germany is shared equally between

employers and employees who both pay on average 7.15% (2003) of the employees' income.[19]

Unlike Germany and the Netherlands, France and Japan have no income ceiling and in Japan even bonus payments, which play an important role for the remuneration of Japanese employees, are included into the contribution assessment base. While the contribution rates in Japan are nearly the same for the Society-managed sickness funds at an average rate of 8.6% and the Government-managed sickness funds at a rate of 8.5% (2003) the variance of rates for the Municipal funds is so high that it does not make sense to calculate an average.[20] As in Germany the contribution for the Japanese Government-managed sickness funds is shared at equal parts by employers and employees at a rate of 4.25% each. For the society managed sickness funds employers are paying a contribution rate of 4.8% while employees only pay 3.8% of their income.

In France the contribution rate for the general employee scheme (CNAMTS), covering about 80% of the population, is currently 13.55% of wages and salaries and therefore higher than in Japan. The employer carries 12.8% while employees pay only 0.75%. In addition it has to be considered that since 1998 every employee also pays a tax of 5.25% 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 is different from the sickness funds schemes since it also includes unearned incomes (from capital gains and interest) e.g. from investments while for other schemes only the earned income (wages and salaries) is considered. Altogether including the CSG the employee contribution rate does finally sum up to 6.0% (at different contribution assessment bases) without any income ceiling.[21]

[19] Based on ISSA country reports; Federal Statistical Office of Germany (2003); European Observatory on Health Care Systems (2002).
[20] Based on ISSA country reports; National Federation of Health Insurance Societies (Kemporen) (2003).
[21] Based on ISSA country reports; European Observatory on Health Care Systems (2002).

Contribution of pensioners

Every country has its own strategy to handle the growing number of pensioners and the increasing demand for long-term care. In Japan pensioners have to join the municipal funds which receive certain subsidies by the state as compensation for increased expenditures resulting from the old age structure. Being insured by the municipal funds pensioners are paying the same contribution rates as other insurants. In the other countries pensioners are staying in their former sickness funds schemes but sometimes under changed conditions. In France pensioners are paying a reduced rate for the CSG of 3.95% while in the Netherlands a lower income ceiling of € 19,550 for sickness funds in the ZFW has been installed for pensioners. In Germany pensioners are paying half of the average contribution rate of all sickness funds; the other half is paid from the pension scheme. In most countries health expenditures for the people above 60 are on average more than 2 times that of the expenditures for the insured population between 20 and 60. Additionally the older part of the 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.).[22]

Separation of health and long term care

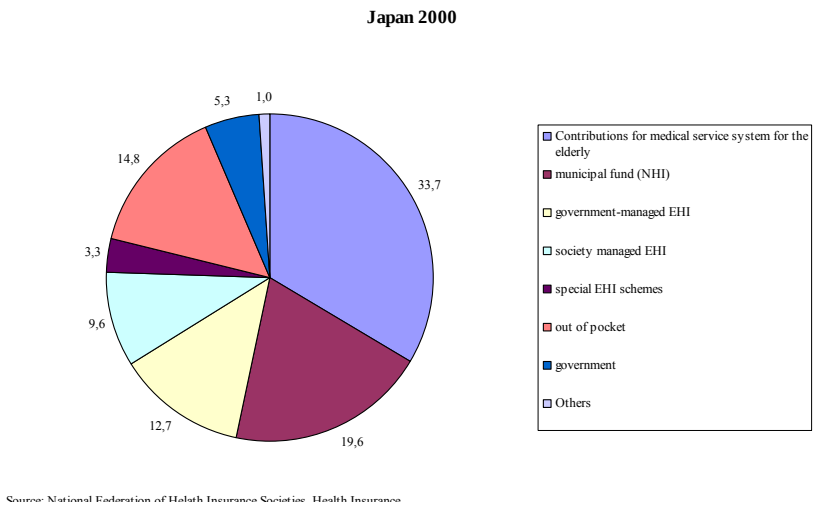
As a strategy to cope with rising demand for long-term care, Germany and Japan have separated funding for health care and long- term care institutionally. Risks for long-term care are in both countries insured under a long-term care insurance which is also financed by payroll deducted contributions.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

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

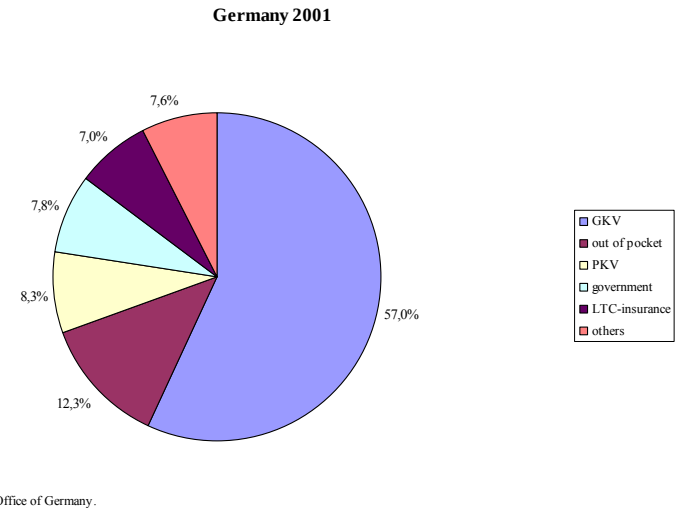
Burden of contributions at different income levels

With contribution rates of 18.8% and without income ceiling French residents pay the highest contributions of the four countries especially for higher incomes as revealed in Figure 3.1. Furthermore it has to be taken into account that 90% of the French population is additionally paying for supplementary private insurance. But at the same time it has to be considered that in France social health insurance also contributes a higher share to the total health expenditure than in countries with lower contributions as Germany and Japan. While in France social health insurance contributes 76% to the total health expenditures it only has a share of 57% and 45.2% in Germany and in Japan. Therefore in these countries a significant proportion of the total health expenditure is financed by other sources as separated long term care insurance. The sources of funding as % of the total health expenditures for each country are displayed in figure 3.1. In the Netherlands the arrangement of funding has some similarity to France. Social health insurance contributes a similar share (79%) to the total health expenditure while the contribution rate is even higher at 20.75% although in contrast to France the Netherlands have income ceilings for both the AWBZ and the ZFW.

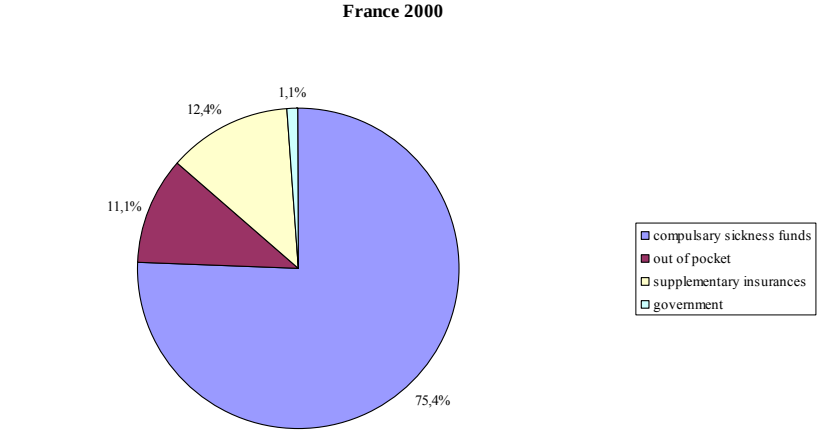
Figure 3.1: Different Sources of funding as % of the total health expenditure



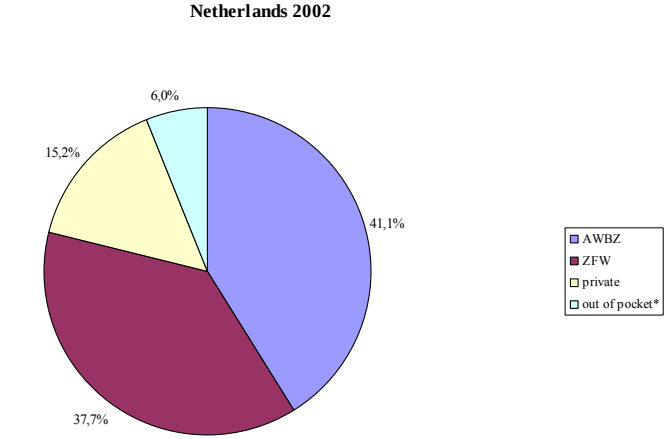
Source: National Federation of Health Insurance Societies, Health Insurance



Source: Federal Statistic Office of Germany.



ce: ISSA Country Report.



Source: ISSA Country Report

Table 3.4: Change of funding sources as % of the total health expenditure

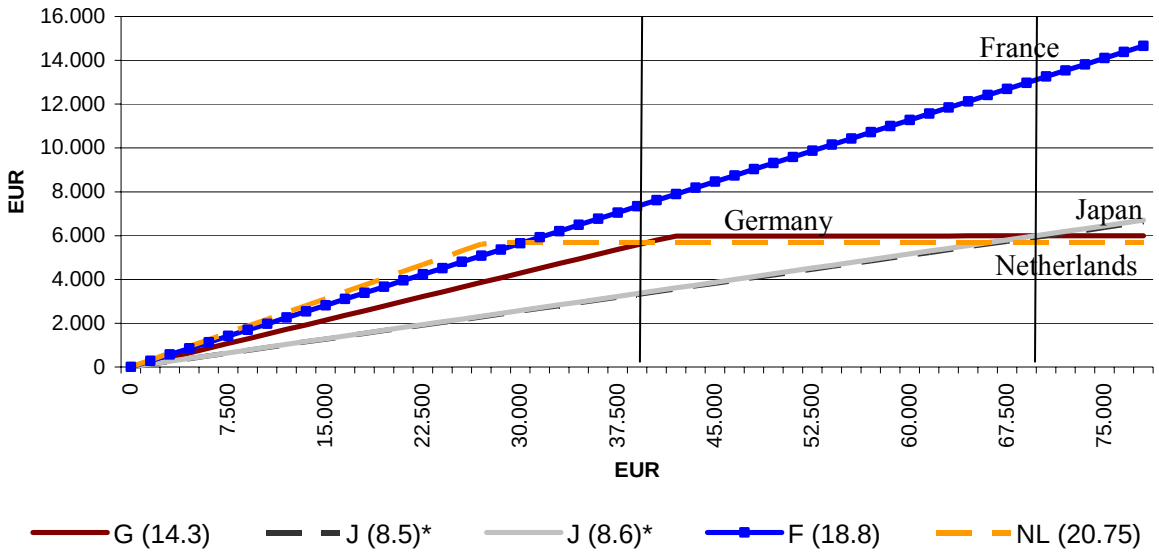
		1990	1995	1999	2000	2001	2002
Japan	Contributions for medical system for the elderly	28,0	31,5	35,6	33,7	34,4	n.a.
	municipal fund (NHI)	20,8	19,6	18,7	19,6	19,4	n.a.
	Government-managed EHI	15,8	15,6	12,4	12,7	12,3	n.a.
	society managed EHI	11,6	11,1	9,4	9,6	9,3	n.a.
	special EHI schemes	4,8	4,3	3,2	3,3	3,2	n.a.
	out of pocket	12,1	11,8	14,6	14,8	15,0	n.a.
	Government	5,3	4,8	5,0	5,3	5,4	n.a.
	Others	1,6	1,3	1,0	1,0	1,0	n.a.
Germany	GKV	60,7*	58,2	56,8	56,9	57,0	n.a.
	out of pocket	10,7*	11,1	12,4	12,1	12,3	n.a.
	PKV	7,3*	7,4	8,0	8,2	8,3	n.a.
	Governmental	13,0*	12,1	8,0	7,9	7,8	n.a.
	LTC insurances	0,0*	2,5	7,1	7,1	7,0	n.a.
	Others	8,3*	8,7	7,7	7,7	7,6	n.a.
France	Compulsory sickness funds	74.3	74.0	73.5	73.3	73.4	n.a.
	out of pocket	11.4	10.8	10.3	10.4	10.2	n.a.
	supplementary insurances	11.0	11.9	12.6	12.7	12.7	n.a.
	Government	2.3	2.4	2.5	2.5	2.7	n.a.
	Others	1.0	0.9	1.1	1.1	1.0	n.a.
Netherlands	AWBZ		47,5	38,8	39,8	40,1	41,1
	ZFW		30,6	38,2	38,8	38,2	37,7
	Private		13,4	15,0	14,6	14,6	15,2
	out of pocket		8,5	8,0	7,0	7,0	6,0

*1992

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

As shown in figure 3.2 the Dutch design of raising contributions has the effect that persons with incomes until € 30,000 are paying even more contributions than in France while higher incomes pay less. In addition it has to be considered that ZFW funds in the Netherlands charge low flat-rate-premiums varying between the sickness funds which are not considered. Japan obviously has the lowest contributions at least up to an income of € 67,500 although it should be considered that per capita income in Japan is generally higher than in the other four countries. At the same time the Japanese social health insurance contributes less than all other three countries to the total health expenditure. For Germany it can be recognized from figure 3.2 that contributions are not particularly high. Especially regarding low incomes until the income ceiling of € 41,850 and high incomes from € 70,000 onwards the burden of contribution is the second lowest of all four countries.

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

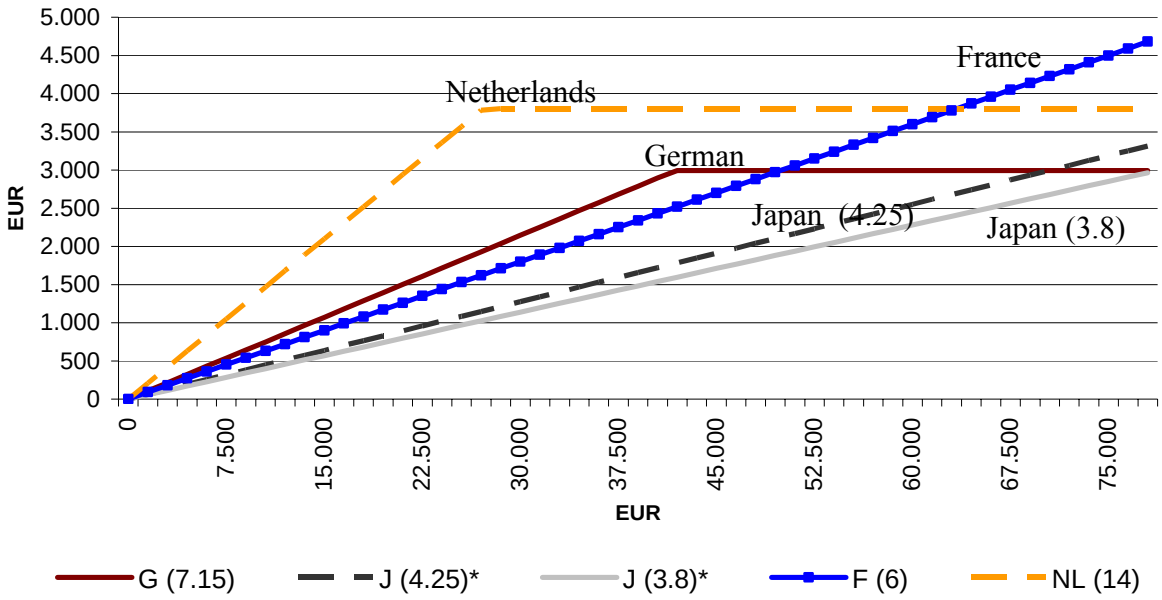


Burden sharing between employers and employees

Since in all four countries the contribution rate is shared by the employer and the employee it is worth looking at the different contributions employees have to pay in each country. As displayed in figure 3.3 employees in the Netherlands are paying the highest contributions until an amount of about € 65,000 (2003). For higher amounts the French contributions show more

progressiveness. It also turns out that the Japanese employees are paying the lowest contributions for the lower incomes while the German employees pay the lowest contributions for incomes higher than about € 80,000. At the same time it should also be considered that economists often emphasise that the employer's contribution is in most cases subtracted from the wage of employee anyway and could therefore also be regarded as an employee's contribution. Therefore it might be more accurate to look at the total contributions rather than at the employee's share.

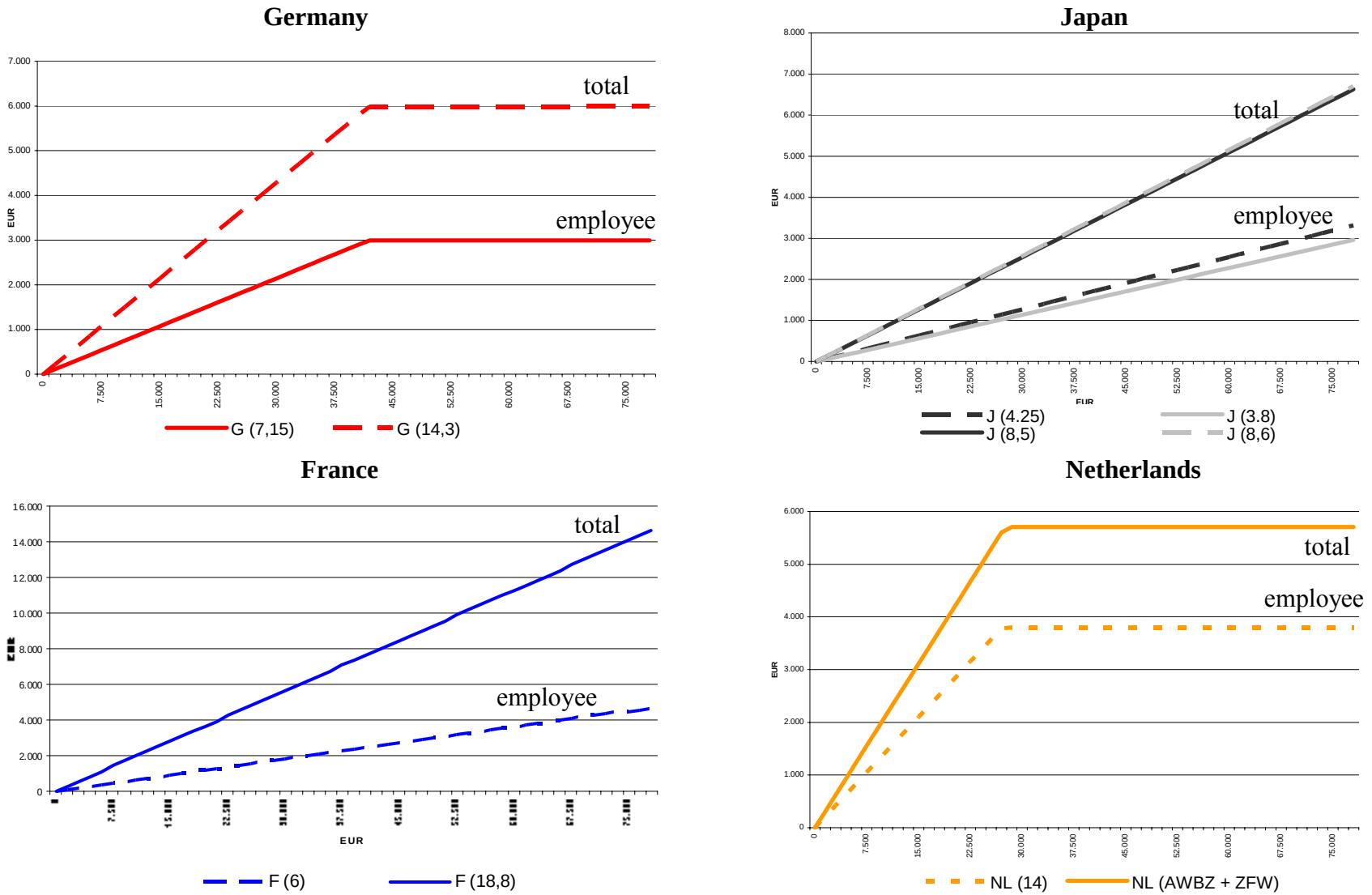
Figure 3.3: Contributions at different income levels according to contribution rates of employees in the four countries



[23] In Japan the Government-managed and the Society-managed sickness fund scheme have different contribution rates: Government-managed 8.5% (4.25% by employees) and Society-managed 8.6% (3.8% by employees)/ it also has to be considered that the contribution assessment base for the CSG (5.25 percentage points) in France is larger than for any other schemes since it also includes unearned income (from capital gains and interest) e.g. from investments while for other schemes only the 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 very between the sickness funds.

As an overview figure 3.4 displays the burden sharing between employee and employer in each of the four countries.

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



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

If looking at the share of social health insurance and other sources as % of the total health expenditure (see above figure 3.1) it also has to be considered, that social health insurance in every country is partially subsidized by the state. The Japanese state pays for the administrative costs of the Government-managed sickness fund scheme, partially subsidizes the administrative costs of the Society-managed sickness fund scheme and supports the Society-managed sickness fund scheme in case of financial difficulties. As displayed in table 3.5 the society-managed sickness funds had a financial deficit of 2.4 billion in 2002. Unlike Japan the German state does not cover any financial deficits of sickness funds although they were also running deficits of € 3.1 billion in 2002, but it subsidizes them for extraordinary expenditures. They receive € 2.8 billion for contributions of long term unemployed being insured under social health insurance and € 1.26 billion for part of the farmers´ contributions and the epidemics´ act (e.g. covering payments to persons who suffer from consequences of mandatory vaccinations). France and the Netherlands are also subsidizing their sickness funds with € 6.2 billion and € 6.9 billion Euro (2000; 2002). In both countries sickness funds do not have any deficits.

As one may see from table 3.4 (see above) the percentage of out-of-pocket expenditures vary significantly between 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 quite a lot. For example it is questionable whether certain treatments at health resorts or other wellness services are regarded as health services or not. More expressive is the longitudinal comparison of the share of out-of-pocket payments in each country. As displayed in table 3.4 out-of-pocket payments have increased over the last years in Germany and Japan while they decreased in Netherlands.

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

	Japan	**Germany**	**France**	**Netherlands**
(Average) **contribution rate**	Government-managed funds 8.5%	14.3%	18.8% (CNAMTS: 13.55% + CSG: 5.25%)	AWBZ 12.3%
	Society-managed funds: 8.6%			ZFW 8.45% + low Flat-rate premium
	Municipal funds: very different			
Burden-sharing of contributions	Government.-m.: employer: 4.25%/ employee: 4.25%	Employer: 7.15% / employee: 7.15%	Employer: 12.8% for CNAMTS/ employee: 0.75% for CNAMTS + 5.25% for CSG	For AWBZ: only employee
	Society-m.: employers: 4.8% / employee: 3.8%			For ZFW: employer: 6.75%/employee: 1.7% + low flat-rate premium
	Municipals funds: very different			
Income ceiling (yearly)	No income ceiling including bonuses	Only income until € 41,850	No income ceiling for employees	AWBZ € 27,009
				ZFW € 28,188
Contributions of pensioners	Have to join municipal funds/ pay same contributions as employees	7.15% pensioner/ 7.15% Pension scheme/ same income ceiling	Reduced rate for CSG of 3.95% on pensions	Lower income ceiling in ZFW at 19,550

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

Table 3.5 (contd.): Comparison of funding principles of social health insurance systems according to selected criteria

Institutional **separation of health and long term care**	Yes	Yes	No, but supplementary APA	Covered by AWBZ
Share of social health insurance as % of total health expenditures	45.2% (2000)	57% (2001)	76% (2000)	79% (2002)
Deficits of sickness funds in billion €	Government-m.: -2.8 (2001)	-3.1 (2002)	No deficits	No deficits
	Society-m.: -2.4 (2002)			
	Municipal Funds: -0.7 (1999)			
Government subsidies for sickness funds	Government-m.: admin. exp.	€ 1.26 billion (farmers´ scheme and for epidemics´ act) € 2.8 billion (contributions for long term unemployed) (1998)	€ 6.2 billion for total social health insurance (2000)	€ 6.9 million for AWBZ and ZFW (2002)
	Society-m.: part of admin. exp. and in case of fin. difficulties			
	Municipal Funds: different			
Out-of-pocket payments	14.8% (2000)	12% (2001)	11% (2000)	6% (2002)

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

3.3 Provision and Purchasing of health services

3.3.1 Health expenditures by type of services

The volume (see above figure 2.1) and the structure of health expenditures by type of services give a first impression of what has to be financed and what kind of services have to be purchased. It is obvious that expenditures of each type of services vary according to the individual design of the health care system. It is difficult to compare overall expenditures of outpatient and inpatient care as % of total health expenditures and attribute them to certain features of single health care systems. Only some figures, especially those in subcategories, can be explained. It is striking that services reimbursed in some country by sickness funds or other carriers are more demanded and therefore represent a higher share of total health expenditure as in those countries which do not include them in their benefit catalogue.

Taking the example of dental care table 3.6 reveals that the Netherlands are spending a significant lower percentage (3.8% in 2001) of their total health expenditure for these services than any other of the three countries. This is primarily due to fact that benefits regarding dental care provided by ZFW are limited to children and preventive and surgical care for adults. Dental prosthesis and any other dental services are either to be covered by supplementary private health insurance or to be paid out-of-pocket. In contrast to this dental care is widely reimbursed by all other countries and therefore more expensive.

Another outstanding difference revealed by comparing expenditures by type of services is the share of long term care. Although the Netherlands have the longest experience with long term care since 35 years the share of long term care in outpatient (7.3% in 2001) as well as in inpatient care (9.5% in 2001) is by far the highest compared to other countries. It can also be recognized that expenditures for long term care grew significantly in Germany when the 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 the public long term care insurance was introduced in 2000 and the share of institutional care jumped about 1% from 1999 to 2000 although it already grew 1.3% the year before. Again it is difficult to compare the figures by using one expenditure carrier only; in Germany e.g. nursing home care of the elderly was formerly paid under social assistance by local Governments.

Table: 3.6: Health expenditures by type of services as % of total health expenditure

Japan		1992*	1995	1998	1999	2000	2001
	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
		100	**100**	**100**	**100**	**100**	**100**
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
		100	**100**	**100**	**100**	**100**	**100**
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
		100	**100**	**100**	**100**	**100**	**100**
Nether-lands	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
		100	**100**	**100**	**100**	**100**	**100**

For Japan, obviously a change in accounting principles occurred in 1995.

Source: OECD Health Data 2003.

3.3.2 Hospital Care

Ownership

Just like in the Dutch institutional organisation of the social health insurance the Netherlands have a long tradition of private supply of hospital care. More than 90% 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. The Dutch more and more regulated the hospital infrastructure in the last decades of the 20th century, but they are now in the process of deregulation. The development of beds shown in table 3.7 is somehow contradictory to this deregulation because the share of public beds even increased from 11.8% in 1990 to 14% 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 the years 1990 and 2001 the share of beds in public ownership decreased from 62.8% to 53.3% while at the same time the share of beds in private-for-profit and private-not-for-profit hospitals increased from 37.2% (33,5% + 3,7%) to 46.8% (38,7% + 8,1%). This increase is primarily due to acquisitions of previously public 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 have to 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 carry alone 48.8% of all beds and 58.9% of all hospitals in Japan.

Compared to the other countries the share of beds in public hospitals is quite high in France with 65.6% of all beds. On the other hand the share of beds carried by private hospitals with 19.8% is at least higher than in Germany where private non-for-profit hospitals are historically more dominant than private hospitals. Table 3.7 summarizes the ownership in general hospitals of each country.

Table 3.7: Development of ownership in general hospitals in each country

Japan								
	Year	**Public**		**Private non-profit**		**Private for profit**		**Total**
		Beds	% share	Beds	% share	beds	% share	beds
	1990	514,142	26.4	1,435,117	73.9	0	0,0	1,929,259
	2001	504,243	27.2	1,352,098	72,8	0	0,0	1,856,341
	Change	**-1.9%**		**-5.8%**				**-3.8%**
Germany								
	Year	**Public**		**Private non-profit**		**Private for profit**		**Total**
		Beds	% share	Beds	% share	beds	% share	beds
	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								
	Year	**Public**		**Private non-profit**		**Private for profit**		**Total**
		Beds	% share	Beds	% share	beds	% share	beds
	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								
	Year	**Public**		**Private non-profit**		**Private for profit**		**Total**

		Beds	% share	Beds	% share	beds	% share	beds
	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 Office of Statistics, Germany; Ministry of Health, National Federation of Health Insurance Societies (Kemporen) (2003), France Health Data 2003.

Access to services

In spite of different ownership structures in the four countries in general patients insured under Social health insurance 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 of all four countries have access to outpatient services in hospitals some countries are regulating the access by establishing referral systems. In the Netherlands secondary and tertiary care is predominantly provided by medical specialists in outpatient units in hospitals. Apart from cases of emergency, patients do only have access to these outpatient facilities which are 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 also provided by specialists outside of hospitals. Therefore patients are usually only referred to hospitals by GP's or specialists if they need inpatient treatment. Japan and France have so far not established a referral system for outpatient services in hospitals. In both countries patients are free to visit any outpatient unit in hospitals.

Waiting lists are limiting the access to hospital care in many countries but regarding the selected four countries only the Netherlands are reporting such lists. During the nineties waiting lists for certain diagnostic procedures and treatments in hospitals had to be created in the Netherlands. At the end of the year 2001 the number of patients waiting for treatment in general hospitals had increased to 185,000 persons. The largest waiting

lists emerged 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 of 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).

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

Sources: Based on ISSA country reports.

Hospital planning and contracting

While in Japan and Germany capacities for hospital care are governmentally planned on a regional level by the Laender in Germany and the prefectures in Japan, capacities are being 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 the 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. A special

characteristic of the German and the French hospital system 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 the current hospital expenditures.

Hospital infrastructure und utilisation of hospital services varies drastically between the four countries, but the heterogeneity of the data sources requires a careful interpretation concerning cost country comparison. Especially regarding the categories hospital beds per 1000 persons and average length of stay Japan's method of calculation seems to vary from the others. In spite of this methodological problem certain trends can be recognized from the longitudinal development of each country. While the number of hospital beds was reduced over time in all of the four countries the personal per bed at the same time increased in every country. Obviously the number of personnel has not been as much reduced as the beds. Regarding the average length of stay again a trend can be recognized that all four countries have reduced their number of days.

Table 3.9: Hospital infrastructure and utilization

		1990	1995	1998	1999	2000	2001
hospital beds per 1000 persons	Japan	13,6	13,3	13,1	13,0	13,0	12,9
	Germany	7,5	6,9	6,5	6,4	6,4	6,3
	France	9,7	8,9	8,4	8,3	8,1	8,0
	Netherlands	4,3	3,8	3,7	3,6	3,5	3,3
personnel per bed	Japan	0,79	0,91	0,97	0,98	1,00	1,01
	Germany	n.a.	1,47	1,51	1,51	1,51	1,51
	France	1,09	1,1	1,09	1,12	1,51	1,56
	Netherlands	2,13	2,34	2,63	2,67	2,76	
Average length of stay (in days)	Japan	50,5	44,2	40,8	39,8	39,1	38,7
	Germany	17,2	14,2	12,3	12,0	11,9	11,6
	France	15,1	14,1	13,4	13,1	13,1	13,5
	Netherlands	16,9	14,3	13,6	13,1	12,9	12,5
occupancy rate	Japan	83,6	83,6	84,0	84,6	85,2	85,3

	Germany	86,4	81,3	81,6	81,4	81,1	80,1
	France	80,4	80,7	81,8	80,9	81,9	82,2
	Netherlands	73,3	73,3	70,1	66,7	65,7	66,0
admission rate per 100 persons	Japan	8,2	9,2	9,8	10,1	10,3	n.a.
	Germany	20,0	21,9	22,7	23,1	23,5	n.a.
	France	23,2	22,9	23,1	23,0	22,4	21,8
	Netherlands	9,9	10,0	9,9	9,7	9,4	9,3

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

Reimbursement and spending control

Regarding reimbursement of hospital services DRG's seem to become the dominant reimbursement method of the future in most of the four countries. Germany currently uses a reimbursement mix which is based on per diems, 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 have to pay back certain parts to the sickness funds. While the recurrent expenditures are reimbursed by the sickness funds investment are carried by the Laender (regions). DRG's are planned to be introduces from 2004 onwards for all hospitals with exception of 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 are calculated on the basis of the number of persons living one the 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 does in many ways differ from the approach of the other three countries. So far hospitals were reimbursed on a fee-for-service basis by receiving defined points for each service with a fixed value of each point. Since the same method of reimbursement was also used for ambulatory care it aimed to achieve a better integration of hospital and ambulatory care but at the same time encouraged excessive treatments and prolonged hospitalisation. After several trails have been conducted with DRG's a capitation system based on Diagnosis Procedure Combinations (DPC's) was introduced in 2003 for hospitals with specified functions providing advanced medical care and other services. According to this system hospitals receive a certain number of points per day for each diagnosis related group currently covering 475 diseases and 1,860 classifications.

In all four countries a trend towards the introduction of DRG-like systems can be recognised. Japan seem to be the most advanced country regarding an introduction while the Netherlands plan the most comprehensive DRG-system including inpatient and outpatient care.

User charges

Concerning user charges for hospital care Japan is charging the highest co-payment rate of all four countries with a share of 30% for citizens below 70 and a share of 20% for those above 70 while citizens with low income above 70 only have to pay 10% co-payments. For the age group below 70 as well as for the age group above 70 different co-payments ceilings have been defined according to income. The mentioned co-payments and ceilings also refer to all other health benefits granted by social health insurance in Japan apart from pharmaceuticals. Once the ceilings are reached benefits are granted without co-payments. France is following a different strategy with co-payments of 20% for the first 31 days of hospital care with a ceiling of € 200 and

additionally € 10.67 per day for accommodation. 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% of yearly income and at 1% 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 are the only country with no co-payments at all for hospital care.

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

	Japan	Germany	France	Netherlands
Planning	Hospitals need the permission of the prefectural (regional) governments	Laender (provincial) governments are planning number of beds and hospitals	Regional Hospital agencies are planning the number of beds and hospitals	Planned by central government
Contracting	Contracting with all hospitals accredited by the regional governments	Contracting with all hospitals accredited by regional hospital plans and with selected others	Contracting with all hospitals accredited by regional hospital agencies	Contracting with all hospitals accredited by the central government
Reimbursement method	Fee-for-service (hospitals received defined points for each service with fixed value of each point)/ in 2003 a capitation system based on Diagnosis Procedure Combination (DRG's based on a point system) was introduced for some hospitals	Current Reimbursement mix: per diems, case and procedure fees/ additionally negotiated target budgets (From 2002 onwards DRG's are step by step introduced for hospitals)	Public and private non profit: prospective global budgets defined by regional hospital agencies based on historical budgets, relative costs per DRG's strategic objectives Private for-profit: fee-for-service payments (DRG's planned)	Hospitals receive budgets being calculated on the following basis: number of persons in one service area, number of licensed beds and specialists units, negotiated utilization volumes (DRG's planned)
User charges	30% co-payments for citizens below 70 and 20% for citizens above 70 (10% for those above 70 with low income); ceilings are set according to income	Fee of € 10 per day, but limited to a maximum of 28 days per year	Co-payments of 20% 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).

3.3.3 Ambulatory Care

Employment status and organisation

Regarding ownership and organisation of physician practice in ambulatory care the structures of the four countries have been historically grown. In Germany and France the majority of physicians is self-employed and still practicing in single practices. In France 38% and in Germany 30.1% (only including sickness funds physicians) of office-based physicians are working in group practices. In both countries there are few who are employed by polyclinics or dispensaries (pharmacies with attached ambulatory care). Before the German reunification in the Eastern part of Germany most of the ambulatory care was provided by polyclinics which have gradually been reduced and substituted by single practices after the reunification. In the Netherlands ownership and organisation of practice differ according to the field of medical services. Half of the General Practitioners are working self-employed in single practices and the other half is either working in group practices or in health centres. In contrast to this specialists in the Netherlands usually practice in outpatient departments of hospitals. Currently 15% of them are employed by the hospitals while 85% are self-employed. But recently more and more physicians tend to be employed by hospitals. Unlike in other countries physicians in Japan are practicing in all forms of organisations. They are either employed by hospitals practicing in outpatient departments or working as self-employed physicians in single practices or clinics which are similar to health centres in other countries.

Dispensation of pharmaceuticals

Japan also has an exceptional position regarding the organisational separation of prescription and dispensation of pharmaceuticals. While in Germany, France and the Netherlands dispensation is strictly limited 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 just exceeded 50% at the end of 2002.

Manpower planning

Regarding medical 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 some region has more physicians than needed physicians are prohibited to open up new practices. In the Netherlands the number of practicing specialists is similarly controlled by state but general practitioners are not restricted. France and Japan do not limit the number of physicians so far.

Apart from Japan all other countries legally define the field of medical services physicians are allowed to offer ambulatory care. In Japan physicians can freely claim any field of medical services they would like to provide. Subsequently there is no gatekeeper system in Japan and patients have free choice between general practitioners and any kind of specialists. France and Germany have no obligatory gatekeeper system either. In France only one percent of patients have registered for a voluntary gate-keeper system being introduced in 1987. As incentive for patients to register they do not have to pay their bills before consultation.

The Netherlands are the only country with an institutionalised mandatory gatekeeper system. Patients have free choice of physicians and specialists but they only have access to specialists via referral of general practitioners. They are registered at the sickness funds for a certain GP but are able to change the GP upon approval by the sickness funds.

Table 3.11: Number of physicians

		1990	1995	1998	1999	2000	2001
physicians per 1000 inhabitants	Japan	1,7	1,9*	2,0	n.a.	2,0	2,1**
	Germany	3,0	3,4	3,5	3,5	3,6	3,6
	France	3,1	3,2	3,3	3,3	3,3	3,3
	Netherlands	2,5		2,9	3,1	3,2	3,3
general practitioners per 1000 inhabitants	Japan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Germany	1,1	1,1	1,0	1,0	1,0	1,0
	France	1,6	1,6	1,6	1,6	1,6	1,6
	Netherlands	0,5	0,5	0,5	0,5	0,5	0,5
specialists per 100 persons	Japan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Germany	1,3	1,8	2,1	2,1	2,2	2,2
	France	1,4	1,6	1,7	1,7	1,7	1,7
	Netherlands	0,8	0,9	0,9	0,9	0,8	0,8
dentists per 100 persons	Japan	0,6	0,7*	0,7	n.a.	0,7	0,7**
	Germany	0,7	0,7	0,8	0,8	0,8	0,8
	France	0,7	0,7	0,7	0,7	0,7	0,7
	Netherlands	0,5	0,5	0,5	0,5	0,5	0,5

*=1996, **=2002

Source: WHO, HFA Database (2003), OECD Health Data (2003), National Federation of Health Insurance Societies of Japan (2003), Japan, Ministry of Health, Labour and Welfare.

Table 3.12: Organisation, Employment status, planning and access of ambulatory care

	Japan	Germany	France	Netherlands
Organisation of practice	Single practice, clinics (similar to health centres) or practising in outpatient departments of hospitals	Primarily single practices but also group practices	Primarily single practice, but 38% work in group practices	GP's: 50% 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% self-employed, 15% employed by hospitals
Dispensation drugs	Only 50% 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).

Contracting

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

Claiming fees

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

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

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

In the Netherlands there is no administrative body for processing claims but the 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 have 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 the fee-for-service payment with a point system. According to this system physicians receive a certain number of points for each service delivered. In Japan the monetary value of points is known ex-ante and is only revised every two years. In Germany the value is set ex-post according to the overall number of points claimed in one region. The overall sum being distributed among the physicians is set by the mentioned capitations paid by sickness funds having the effect of 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 the physician does not know the fee for medical services in advance.

In France services are reimbursed on a fee-for-service basis as in Japan. Those 10% of general practitioners in France, which have opted being "referring physician" participating in a gatekeeper system on a project basis, are reimbursed on a capitation basis. It should also be mentioned that physicians in "Sector 2", representing 38% of specialists and 15% 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 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 have been introduced for specialists in 1995. According to these spending caps sickness funds sign contracts with specialists groups fixing a certain volume of care being provided by specialists. Any overrun is compensated by reduced fees in the following years.

Table 3.13: Purchasing and contracting of ambulatory care

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

Sources: ISSA Country Reports.

3.3.4. Long Term Care

Planning

Planning long term care capacities takes place on local, provincial as well as on central level in the four countries. In general the planning of resources is especially conducted for institutional care. In Japan municipalities (local communities) determine care plans under supervision of prefectures (provinces) defining the number of institutions and beds for long term care. In France the planning of long term care capacities is also a matter of local communities called departments while in Germany the Laender (provincial) governments are planning the capacities not being 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 has the function to plan institutional care.

Table 3.14: Infrastructure characteristics of long-term care

		1990	1995	1998	1999	2000	2001
nursing care: beds per 1000 persons	Japan	0,2	0,8	1,5	1,7	1,8	1,9
	Germany	3,5	3,7				
	France	1,2	1,4	1,4	1,4	1,4	1,4
	Netherlands	3,5	3,6	3,7	3,6	3,7	3,7

Source: OECD Health Data (2003).

Benefits

Regarding coverage of long term service the statutory long term care insurances in Germany and Japan are paying for institutional as well as home care services, but the benefits are granted in different ways. While the German long term care insurance provides the services as indemnity tariff (fixed amount of cash benefits or in kind) according to the care class each person is grouped into the Japanese long term care insurance provides benefits-in-kind for all persons above the age of 40. In the Netherlands institutional as well as home care services are also fully covered by the AWBZ but as mentioned in 3.1 the function of the ABWZ is

different from the German and Japanese long term care insurance since it also covers high cost treatments and costs of hospitalizations if they last longer than one year. In this way long term care in the Netherlands is more integrated in the general system of health care than in Germany and in Japan. As opposed to the mentioned three countries France has no separated long term care insurance although it is shortly being introduced. So far sickness funds are paying for long term care but are only covering institutional care for disabled adults or elderly people. There are some other sources as retirement schemes which pay benefits for home care to persons with low incomes and as APA (tax-financed benefit scheme), a recently introduced scheme which pays additional allowances to elderly people enabling them to finance home care providers.

Access

In order to have access to 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. Precondition for entitlement to insurance benefits is the expectation that care would be necessary for at least six months. In Japan persons have to apply to municipal departments and a care manager draws up a care plan for the applicant grouping the person in one of seven defined categories. While in France a person applies to local authorities patients in the Netherlands are examined and grouped at the Regional health care offices (RIO).

User charges

User charges for care services have to be paid in Japan at a co-payment rate of 10% on all services. Since in Germany benefits are granted as fixed cash payments (indemnity tariffs) the patients usually carry the difference between the actual price and the payments by the statutory long term care insurance. While in the Netherlands patients only have to pay low user charges depending on individual circumstances French residents are covering home care services mainly out-of-pocket unless they have low incomes and receive any other support.

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

	Japan	Germany	France	Netherlands
Planning	Municipalities determine care plans under supervision of prefectures (provinces)	Laender (provincial) Governments are planning capacities but are not allowed to limit number of ambulatory care providers	Planned by local authorities (Départements).	Planned by central Government
Benefits	All people above 40 are covered by the statutory long term care insurance	Institutional care or ambulatory care is provided by statutory long term care insurance for everyone if care is expected to be necessary for at least six months	Only institutional care is provided by sickness funds for disabled adults or dependent elderly people/ for home care persons with low income receive benefits from retirement schemes/ APA pays additional allowance/ Comprehensive long term care insurance is shortly introduced	AWBZ fully covers institutional care and home care for everyone
Access	Application to municipal department for decision on status/ Care manager or applicant draws up care plan.	Applicants are examined and grouped into 3 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% 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).

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

On the basis of the comparison between the four nations in a sense of best practice there are certain solutions towards 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 accomplish. But certain results can be drawn concerning the future development of financing, providing and purchasing of health services which are described in 4.1. Apart from lessons drawn from the comparison of the four countries there are further trends which can be anticipated for the future developments of health care systems in the four countries being finally elaborated in 4.2.

4.1 Lessons towards sustainable social health insurance

Competition vs. regulation of sickness funds

Since several years a trend towards enforcing competition between sickness funds can be identified among certain countries. While France and Japan have so far not installed any elements, the Netherlands and Germany are more and more moving towards competition. Sickness funds in these both countries have opened up and their risk structure compensation schemes are further developed step by step in order 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 sickness funds are so far 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 preceded one initial step towards more competition. As the Netherlands and Germany regard competition as their way 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 towards two different directions and it is yet to be proved that one turns out to be more successful than the other.

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 concerned with different 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 insurances. And even France is soon going to introduce a comprehensive long term care insurance. While Germany and Japan both have long term care insurances solely reimbursing long term care services primarily for elderly citizens the Netherlands have 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 and therefore reduces durations of hospital stays. It also indicates a new trend towards a separation of high cost medical care/long term care and normal medical care. With rising health expenditures more and 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 the separation of the state operated AWBZ and the more privately operated ZFW schemes for normal medical care could be taken as an example for the future organisation of social health insurance.

Private Health Insurance

Besides from Japan the compared countries increasingly rely on private health insurance being integrated into the social health insurance systems. Private health insurance is either used on a supplementary basis to cover certain services not included into social health insurance or on a complementary basis substituting social health insurance. Complementary private health insurance may be an option to substitute sickness funds and therefore enforce competition and lead to more service orientation of sickness funds. Although it should to mentioned that administrative costs e.g. in the case of Germany are about three times as high as of sickness funds. Therefore in terms of efficiency complementary private health insurance seems to be questionable but could in a certain way 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 order to foster the modernisation of social health insurance since excluded services from sickness funds can immediately be replaces by private health insurance. Therefore it helps social health insurance to concentrate on its major task to provide risk pooling for citizens in order to prevent them from being exposed to financial risks. At the time it provides a fallback position for health administrations while redesigning social health insurance e.g. excluding services being associated with the risk of moral hazard. For those reasons private health insurance is certainly an important element to design social health insurance systems more sustainable (see figure 1.3).

User charges

Concerning user charges the comparison between the four countries reveals sharp differences. While Japan obviously relies more on user charges for hospital as well as for ambulatory care the Netherlands does not charge any. These different approaches are also revealed in the overall out-of-pocket spending as % of the total health expenditure showing the highest percentage for Japan and the lowest for the Netherlands. In general it can be said that the extent of user charges depends very much on the system design of each country and the policy behind it. For example low contributions for employees could be one reason for high user charges in Japan while at the same time contributions for employees in the Netherlands are relatively higher. Since in Japan the ceiling of user charges for each citizen differs according to each income they have in a certain way a similar progressive effect as contributions. But as an important difference it has to be seen that user charges if installed incentive based 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 install economic incentives at the same time.

Reimbursing hospital care with DRG's

Regarding reimbursement of hospital care all four countries are working to introduce a DRG-like system. While Japan seems to be the most advanced country regarding the introduction the Netherlands plan the most comprehensive DRG-system including inpatient and outpatient care. In addition to the normal effects of DRG's, e.g. a reduction of the duration of stay per case and a professionalisation 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 more and more importance in view of rapidly aging populations.

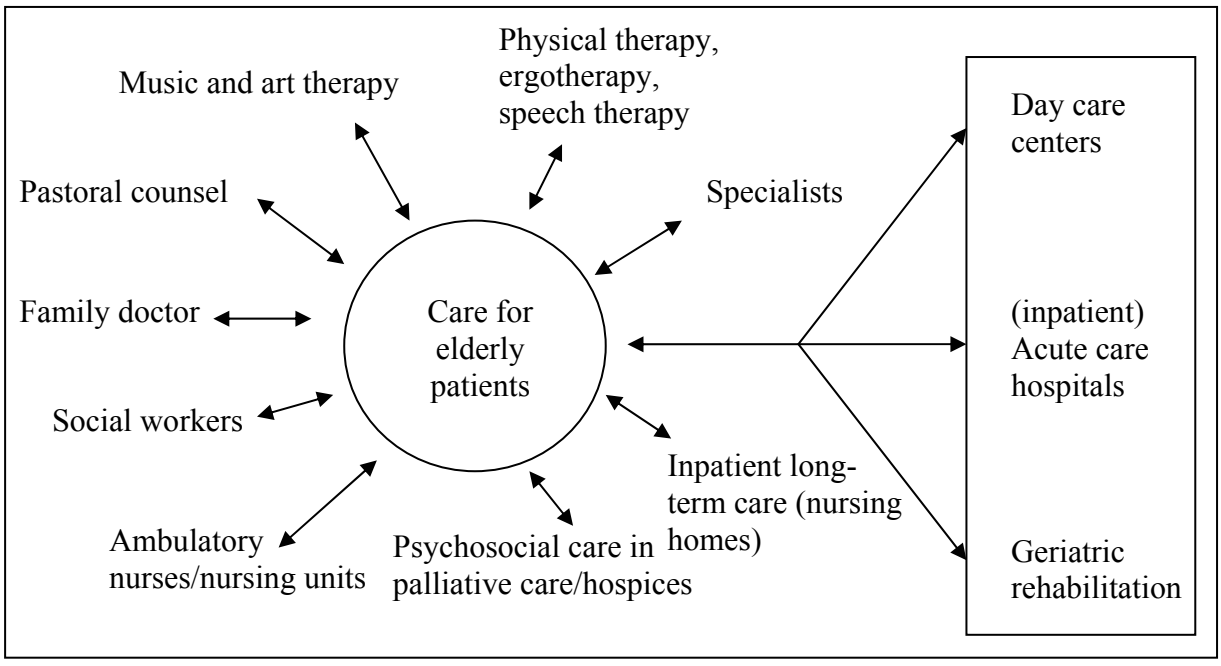
4.2 Further Developments

Apart from lessons drawn from the comparison of the four countries there are certain developments which can be anticipated for the future of social health care systems. As mentioned under 4.1 most countries perspectively wish to introduce an integrated health care system (figure 4.1.) 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 (figure 4.2.). In line with these permanent corrections and the more comprehensive ideas of a health care network we need to finance health services in the future perhaps differently than in the past and for these new approaches some financing options are available. They could be developed on the basis of the four nations with their peculiarities, customs and historical experiences (figure 4.3.). Finally the future of the European Welfare State within the Common Market has to be taken into account with its growing importance for the 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 on interest.

Functional approach and comprehensive all-round care

In all four countries the overall idea is to overcome the segmentation in health care and to work on an integrated and quality assured medical care network. To achieve this wish 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-round-care" is the new subject of financing. In figure 4.1 the care for elderly patients is taken as an example for the desired integration of providers.

Figure 4.1: Integration of providers in the care for elderly



To postulate such a network is much easier than to accomplish it. Costs, prices, purchasing (through DRG´s, reference prices or on the basis of fee schedules e.g.), expenditures, and financing (taxes, contributions, premiums, co-payments e.g.) of health services represent a highly complex picture for all the participants. It raises more questions than answers and

hopefully a socially bounded competition may help to further develop the institutional details in providing, funding and purchasing the required health care for the elderly.

Setting priorities in health care

In all four countries governments and providers of health services will have to set priorities in health care as a sort of 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 in the centre everywhere and will take place even without greater changes or reforms.

Figure 4.2: Setting priorities in health care

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

In addition to medical guidelines there will take place priority setting in health care in monetary terms through financial constraints. Global, regional, sectoral, group-specific or individual budgets will be the vehicles to cut back health care expenditures. Revenue-based expenditure policy could also take place in form of acts in order to provide stability of 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 the payroll

tax rate stability developed itself as a major guideline and today it could be considered as a sort of a political price for health care services.

New ways of funding health care

The separation of allocation (insurance functions) and distribution (income redistribution and family allowances) is one of the possible elements in a new world where family policy is done through the tax transfer systems and not within the health care system. Health policy and distribution policy are not mixed with each other any more. A second element would be a reimbursement system that is less revenue but outcome oriented and not reimbursed on a fee-for-service basis. Thirdly, instead of risk selection respective adverse selection a risk adjustment process is necessary to enable fair competition in health care. Fourthly partially capital funded systems based on the idea of saving money for times of old age would balance the risk management in respect to the severe demographic challenges that are faced by all four nations..

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

The major decision has to be made between replacing the present payroll-based contributions mechanisms by a broader tax base with capital income and rent included in the contribution assessment base. Following this approach taxable income could be in the long run the basis for the employee contributions, which would add a sort of proportional income tax to the already existing progressive one. The ability to pay principle would be in the centre of financing health care.

The other option is an obligatory health insurance operating on a not-for-profit basis with public support for people with lower incomes on the basis of community rating respective premiums. Being based on the benefit or insurance principle the obligatory private insurance could be the correct answer 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

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

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 its structures, processes and outcomes as was done in this comparative study for France, Germany, Japan and the Netherlands. In all systems the different types of insurances (social, private, non-for-profit e.g.) will act between individual responsibility, competition and solidarity at the same time and the future will show how the nations will set priorities in regard to basic principles of risk management in social welfare. Even if the basic coverage is tax-financed the health services must not be directly provided by Government.

In the Common Market competition, convergence, co-ordination and harmonization of the health care systems happen all at a time. It is to be expected that more competition within Europe will strengthen and enlarge individual elements of the insurance systems. Co-

ordination happens 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 in regard to fiscal consolidation with its repercussions on social security.

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

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

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