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WORKING PAPER

Financial Stability of the Health Insurance Scheme

Models to Finance Health Care for a Just and Effective Provision Health Services

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Contents

1. Introduction

In all developed countries and societies of the world health care is considered as a special good, the allocation and distribution of which must meet specific regulations. Those regulations should guarantee that everybody has access to appropriate health care. The patients' willingness and ability to pay should not dictate how much and which services they receive in the case of illness. The following objectives are common for health care systems around the world:

- Equal access to health care for everyone;
- Cost-efficient production of health services;
- Effective medical care and patient management;
- Cost-control of public expenditures for medical services.

However, the way to achieve these goals varies. Korea and Germany have established social health insurance schemes. Other countries have relied on tax-financed national health care systems or free market allocation, but have social aid programs for special groups in society. All countries around the world have problems to achieve the general goals mentioned above. In particular, cost control seems to be a problem in all health care systems due to a rapidly aging population and advancement of new technology in

medical care. In addition, the health care sector is characterized by a high degree of asymmetric information which makes an efficient planning, controlling and steering nearly impossible. This is certainly one reason why we observe a tendency for growing administration in the health care sector.

In this paper, I will discuss strategies of achieving financial stability of social health insurance schemes. Because social health insurance is only one way of achieving equal access to medical care for everyone, the second section provides an overview of different ways of organizing health service financing. Each way has ist own specific advantages and disadvantages with regard to financial stability. That is why most systems including that of Korea and Germany are mixed systems. The third section of this paper shows some common organizational features and discusses them in the light of financial stability. As it is the aim of our discussion to learn by comparing the different approaches in the different countries, this section also compares the characteristic features of the Korean and German health insurance system. Although Korea and Germany are in two different parts of the world, these countries have a lot in common.

Table 1: Korea and Germany: an overview

	Korea	Germany
Size	99,143 km²	357,022 km²
Population	South: 47m. (North: 24 m.)	West: 67m. East: 15m.
Density	472 persons/km²	230 persons/km²
Foundation of state	1948	1949
Per capita GNI (1999)	8,581 US $	12,905 US $
Economic growth rate (1999)	10.7 %	1.6 %
Number of doctors per 1000 population	1.46	3.55
Life expectancy (1997)	70.6 / 78.1	74.4 / 80.6
Health care expenditures as % of GDP (1999)	5.4 %	10.6 %

Both Korea and Germany suffered as a result of the Second World War and the division of their state. However, while Korea is still waiting for its unification, Germany was united on October 3, 1990. 40 years ago, on August 13, 1961 the Berlin Wall was built and it came down in 1989.

Both countries have enjoyed a rapid economic growth, and have export-oriented economies, but have also been hit by an economic crises, slowing down this growth. Both countries have achieved considerable success in social welfare and economic income levels through continued growth, but Germany seems to be about 10 years ahead of the Korean economy and social development. This would also mean that Germany is a decade ahead in its problems, which have to be solved in society in general and in medical care financing in particular. Many problems, which are caused by the fast industrialization and urbanization such as environmental pollution and over-concentration of the population have been solved. However, the poor economic growth makes it more difficult to solve the growing demand for welfare services and medical care. While

Korea tries to solve these problems by more central and organized planning and management, as with the foundation of the National Health Insurance Corporation (NHIC), Germany and the European Union see solutions in implementing more competition, and a decentralization of decision-making processes. For instance, in Germany competition between social health insurers was introduced in 1997 and private saving programs were introduced in 2001 to reduce the public pension system. To sum up, it seems to be worth observing each other and learning from this experience.

In the last chapter of this paper, I will discuss several strategies to achieve financial stability in social health insurance.

2. Countries Have Chosen Different Ways to Finance Medical Care

The different nations have found various solutions for organizing the financing of medical care. Some nations employ a national health service financed by taxes, others base their health care system on social health insurance. The latter is financed by contributions from the insured and their employers. Most typical for a national health service is the British system, although social health insurance schemes, sometimes called Bismarckian type systems, are employed in many countries, including Korea and Germany. In those countries, most of the population are covered by one of the social health insurers. For instance, about 90 % of the population in Germany and about 97 % in Korea are covered by social health insurance.

The US system is often unfairly labeled as a muddle through or (non) system. But even the US health care system can be called a system although it is based on a different concept, with a different set of values. In Europe and in many other countries around the world, we believe that everybody should have the same access to health services if they are needed. In the US, health care policy is characterized by the assumption that in principle everybody should care for himself or herself. The task of national policy is only to identify those groups in society

which are believed to be under compensated or under served, those not being able to behave as normal consumers on health care and health insurance markets. For those groups, special isolated programs are then created and financed by tax money. In the US for instance, the Medicare program is concerned with health care for the elderly and the Medicaid program with health care for the poor, disabled and blind. Additional programs are enacted for unmarried mothers with dependent children and for children. The risk of such a policy is the overlap of those programs and the under compensated health care for parts of the population.

One of the great challenges of the European Union is to create an harmonized social security scheme. The European Union is one economic market, one financial market and one labor market (12 of the 15 countries of the European Union have the same currency, the EURO). The financing of health care will be one of the key issues in this transition process. There is a uniform opinion among economists that a basic decision has to be made if health care should be financed by contributions from the insured and their employers or by general taxes.

Table 2: Types of health care systems

	National Health Service (NHS)	Social Health Insurance (Bismarckian System)	Social Aid System
Countries (as on European car plates)	DK, E, GB, I, IRL, P, S, D (for civil servants) & most DCs	B, D, F, L, NL, CH & Japan, Israel, Korea	USA & South Africa
Financing	Taxes	Contributions	Out-of-pocket payments, taxes and other sources
Decision-maker	Government	Decentralized, but strong governmental impact	Markets, government and NGOs
Cost reimbursement	D (for civil servants)	B, F, L, NL, Korea	USA (most programs)
Benefits in kind	DK, E, GB, I, IRL, P, S & most DCs	CH, D, Japan, Korea	USA (managed care organizations)
Out-of-pocket payments	Low	Moderate, in some countries high (CH and Korea)	High
Cost control	Strong	Complicated	Difficult

As mentioned above, the problems of equity, efficacy and efficiency are discussed around the world. They are not singular for a certain type of system. Identical problems exist in many developing and developed countries. The financing system of health care has to take these goals into account. However, rationing medical care by budgets, price control, utilization control and market forces is necessary, too. Otherwise health care cost will explode. This is also not unique for a certain system.

The reasons for the cost driving forces are well known and can be summarized as follows:

1. Increase of demand for health services due to third-party coverage of expenses
2. Supplier induced demand
3. Increase of the number of elderly in society
4. Medical technological progress
5. Sysiphus syndrome in medical care

Some of these effects are actually intended by public health policy. The population should enjoy a comprehensive health service coverage, and should consume medical care if it is needed. In addition, it is intended that health care suppliers invest in their companies, i.e. physician offices and hospitals, so that they are able to offer more and high quality services to the patients. We do want to live longer, although we know that the elderly have a greater need and demand for health services than the young. Modern medical technologies and therapeutical concepts should be developed and used by our health care industry. The so-called Sysiphus syndrome describes the phenomenon that an increase in health services provided to the population leads to a increase in the sickness of the population, on average. This is because many diseases are chronic illnesses. Health services help the patient but do not cure him. In addition, health services prolong life and increase the chance that people will suffer from other diseases. That is why the more health services there are, the more the population requires them.

It is therefore no surprise that the introduction of a program which provides comprehensive coverage will induce an increase in national health care expenditures as we have seen in Korea. Since the initialization of a universal health insurance coverage 13 years ago and the idea to introduce it step by step health care expenditures have increased sharply in Korea. And health care cost will also increase in future. In addition, out-of-pocket payments are still high in Korea (55% of total expenditure, 66% in outpatient and 44 % in inpatient care). But these out-of-pocket payments will decrease. As a consequence, public health care expenditures will increase: a 10% fall of out-of-pocket payment leads to a direct increase of third-party payment by 10%. In addition it induces as German research shows additional demand between 10.7 and 34.6% depending on the level of

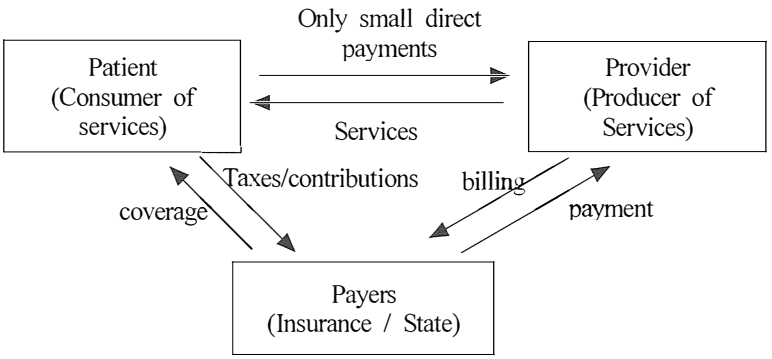
co-payments and the type of services.

So, even if some of the effects described above are in line with the goal of health policy, there is a need for a cost-containment policy irrespective of the type of financing system (i.e. tax-financed or insurance-based). The success or non-success of these measures to increase efficiency and contain cost work will be discussed in the last section.

3. Basic Models of Health Care Financing

As mentioned above, all third-party payment systems have a built in cost driving power. The reason is that, as shown in Figure 1, patients consume services, while they do not pay the full cost of their consumption out-of-pocket. Under full third-party coverage they pay only with their consumption time. This is why waiting lists and long waiting times are very effective cost-containment measures in modern health care systems. Doctors and hospitals are either paid by the patient who is reimbursed by his or her health insurer (cash benefits) or they are paid directly by the third party (benefit in kind). In a cash benefit system there is a risk that health care providers and patients collaborate to the disadvantage of the third-party payer. This behavior has already been described by Adam Smith and is called second degree moral hazard in modern economic literature. In the case of benefit in kind there is the problem of the third-party payer having to verify if the services billed were really provided according to the standards. As Korea and Germany have benefit in kind as well as cash benefit, both risks apply for these systems.

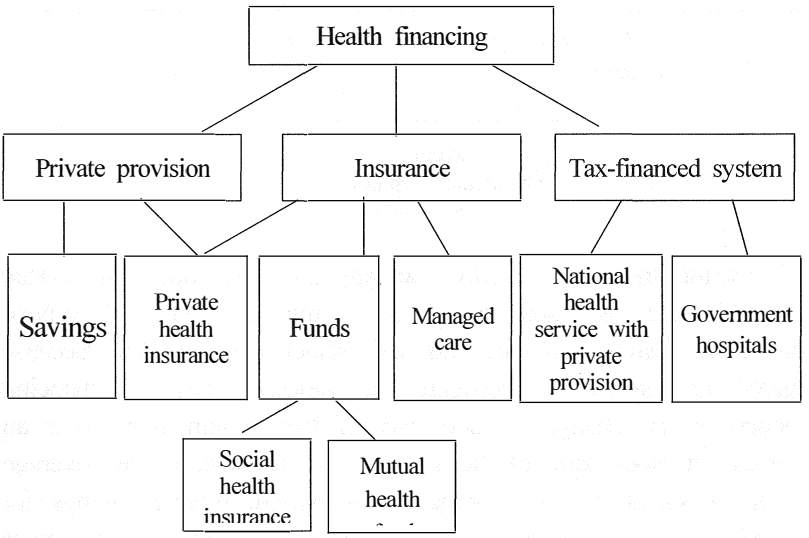
Figure 1: Third-party financing



Health insurance is only one way and one source to finance medical care. In most countries, a mixed system of private provision, health insurance and tax financing is adopted. Because there are interactions between the various types of financing modes, every change of one part of the system may have an impact on other parts of the system. For instance, if the coverage level of social health insurance is increased, private savings for health care expenditures may decrease and social aid programs may have lower expenditures. On the other hand, the number of health care suppliers might increase, which will lead to additional costs. Korea and Germany have mixed financing schemes, which makes every analysis on financial stability quite complicated. For instance, in the year 2000 the health insurance budget of the MOHW was 1,754 billion Won. In the same year the MOHW spent 1,032 billion Won on medical aid, and 236 billion on other health care issues. In Germany only 51 % of all health care expenditures (about 270 billion Euro) are paid by the social sickness funds. The other half is financed by public sources (12 %), social pension funds and social accident insurance (10 %) private health insurance (5 %), employers (14 %) and out-of-pocket (8 %).

Figure 2 provides an overview of the various basic models of health care financing.

Figure 2: Basic models of health financing systems



Some explanations might be helpful to understand the different models listed in Figure 2.

Private provision

Health services can be seen as goods which are traded on more or less free markets. In this case consumers pay the provider for the full cost of the service. No special market regulations are needed for health services. However, health services have various special characteristics:

- Health services are consumed relatively seldom and therefore consumers are not very well-informed about the available alternatives or adequacy of a service for a particular problem. Their consumer sovereignty is therefore limited. They depend on the opinion of specialists such as physicians and other health care providers.
- The cost of illness is often quite high, and it is uncertain as to when health services will need to be consumed. This means that it is in the interest of most people to take out an insurance to cover this uncertainty.
- Health care services are not consumed at an equal rate over a lifetime or among different population groups. For this reason it might be desirable to redistribute resources across generations and social groups.

For these and other reasons (e.g. ethical reasons of equal access to essential goods such as health care) the market model, where consumers pay fees to the providers, which amount to the full cost of the services, is very rare and appears only on partial markets (e.g. for luxury services such as cosmetic surgery) or on informal markets (i.e. under corruptive circumstances).

Uncertainty and ignorance about the need for health care, combined with the high cost of particular health care services often result in so-called market failure. This expression is used by economists to describe circumstances in which there are constraints on the regular order of a market. Under these conditions, private provision does not work fully and some elements of government regulation are needed.

However, the introduction of out-of-pocket payments is helpful to improve the referral system by the creation of price signals, and to increase incentives for providers. This price mechanism also limits the tendency of health insurance systems to

extend the number of health services provided. Some demand is also created by suppliers of care, drugs and other medical technology. Such expenditure does not necessarily ensure that the wishes of the population for better health services are met or that political goals such as longer life expectancy or better overall health status of the population are reached.

Table 3 provides a comparison of co-payments in Korea and Germany.

Table 3: Out-of-pocket payments in Korea and Germany (simplified)

	Korea	Germany
Hospital	20 %	$ 8 per day for 14 days
Outpatient in a clinic	3,200 Won or 30 %	0
Outpatient in hospital	40 or 55 %	0
Pharmacy	1,000 Won or 30 %	$ 4 to $ 5 and the amount above the reference price
Treatment for simple fatigue	100 %	100 %
Average out-of-pocket payment	55 %[1)]	7.8 %

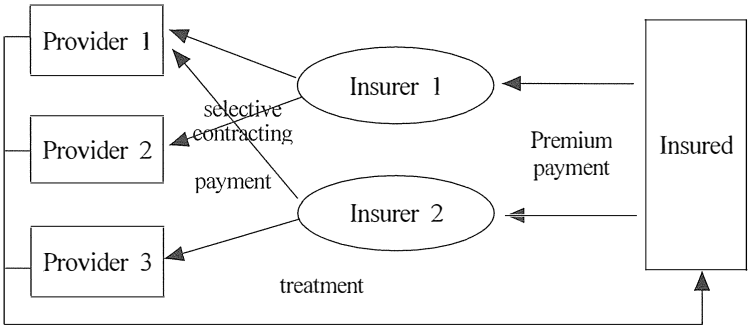
Note: 1) This number contains the service costs which are not covered by social insurance

We can expect a decrease in the out-of-pocket payments in Korea and an increase in Germany. In Germany it is openly discussed that co-payments and deductibles will be increased after the next federal election in 2002. This will make it even more difficult for the Korean government to stabilize expenditure of the national health insurance program.

Another type of private provision of health financing is the purchase of private health insurance with actuarial premiums. Usually this option is voluntary, but it is also possible for coverage with a private insurance company to be compulsory, the

choice of insurer being left to the consumer (such as the regulation for automobile liability insurance in many countries). Private health insurers often have only limited opportunities to contain costs and are characterized by high administrative costs (due to promotion and control costs). On the other hand, these suppliers of health coverage can usually offer high-quality health care providers and a benefits package tailored to the individual needs of the citizen. These advantages are often bought with comparatively high premiums which exclude low income classes from joining the scheme. In Germany about 8 % of the population have full private health insurance and another 15 % of the population have supplementary private health insurance for those services which are not covered by the social health insurance.

Figure 3: Private health insurance schemes

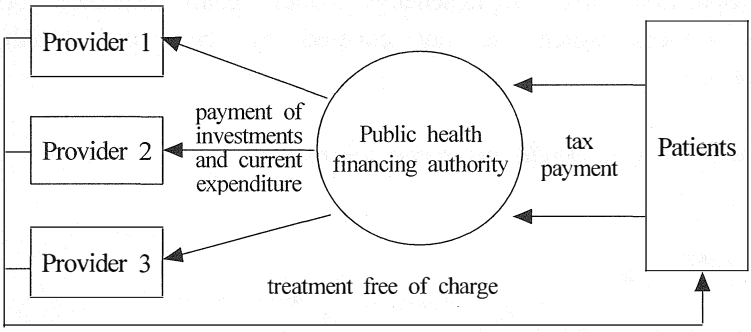


Tax-financed national health service

In purely tax-financed national health services, all revenue for financing the health system is provided by the state as part of the public budget (see figure 4). Although it is not essential for

this type of health financing system, all services are usually provided by public institutions such as state hospitals and health centers with employed physicians, nurses and technical staff. Private clinics or office-based physicians with their own practice are relatively rare in countries with a purely tax-financed national health service. However, the British and Swedish national health services have stimulated private provision of outpatient services and have adopted a more decentralized structure of financing and management.

Figure 4: Tax-financed health financing schemes



In a state-financed health system, the government or parliament can determine the balance between the amount of money allocated to the health care sector and that allocated to other essential public areas such as military defense, education and science. This leads to discussion about alternatives to health care services such as traffic safety or additional pollution control, which may also have a medical impact.

In practice it is often found that tax-financed systems are comparatively successful in controlling expenditure by powerful public control and cost-containment. On the other hand, competition in a state-financed system with public provision of

services is obviously quite small. Therefore, the efficiency of the system in terms of quality of care is relatively low, and efforts to assess the needs of consumers are not rewarded. On the contrary, providers who attempt to make procedures more effective risk being punished by having their budgets for the next period cut by the amount saved.

Such systems always run the risk of under funding, as the health sector is subject to political debate on its budget each year. It is highly possible that other political goals might crowd out the allocation of an adequate share for health care. As the optimal proportion of the public budget to be allocated to the health sector is not known and cannot be calculated, it has to be set as a democratic decision following public debate. But this procedure may lead to under funding and unreasonably low resources for the health system. Thus waiting lists, e.g. for elective surgery, and frustrated staff (due to low income) are quite common in such systems.

It seems that Korea has intelligently combined the advantages of central planning and budgeting by the MOHW, the NHIC and the HIRA, and the advantages of a social comprehensive social health insurance financed by contributions. Although the German system is praised for its decentralized planning and the self-government of sickness funds and health care suppliers organizations (such as the powerful Insurance Doctors' Association), the German government is almost unable to guarantee financial stability of the system.

Statutory social health insurance fund

Table 4: Social health insurance in Korea and Germany

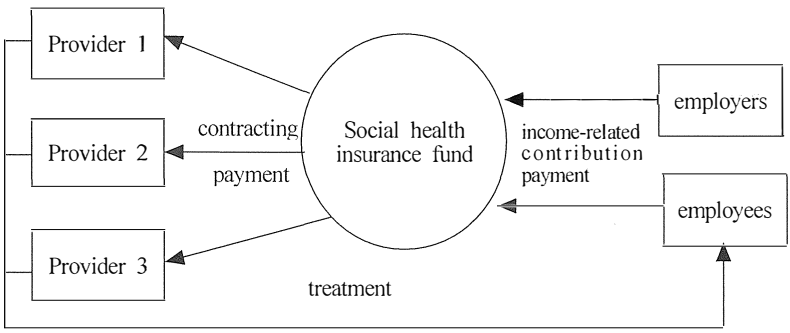
	Korea	Germany
Year of foundation	1977	1883
Compulsory insured	All employees	With income under 3,732 Euro
Population covered	97 %	90 %
Number of insured	45.9 million	71.3 million
Number of insurers	1 NHIC	420 (1.316 in 1980) competition
Contribution system	Percentage of income No ceiling 50 : 50 employer/employee	Percentage of income Ceiling income 3,732 Euro 50 : 50 employer/employee
Contribution rate	3.4 % for employees 3.4 % for employers	5.5 % to 7.2 % for employees 5.5 % to 7.2 % for employers
Family dependents	Covered	Covered
Service provision	Mainly private Freedom of choice Inpatient care: statutory referral, but actually non-referral	Mainly private Freedom of choice Inpatient care: referral
Payment of doctors	RVS MOHW sets point value on recommendation of National Insurance Coordination Committee	RVS Negotiated flat payment per Insured to Insurance Doctors Association
Payment of hospitals	Fee for service, DRGs	Per diems, DRGs, PMCs
Major reform projects	Expansion of benefits Reform of RVS Expansion of DRGs Increase of contributions Cost-containment	Risk adjustment compensation between sickness funds New DRG-system for hospitals Cost-containment

The health insurance fund pools the financial contributions of its members in order to protect the welfare of its members should

they fall ill. Without access to insurance, many people are unable to obtain treatment, or must take up loans to pay for the required medical services. Health insurance also has the potential to increase the revenue available for health care and to redistribute the burden of illness among age groups, among healthy and ill people, and among groups of different income levels.

As shown in figure 5, statutory social health insurance is typically financed by income-related contributions from employer and employee. Thus the contributions are not based on risk (as the premiums of private insurance companies are), but on the ability to pay. Social health insurance systems are generally tightly regulated, but are normally not a governmental institution, although it should at least have an independent position. Regulation includes a description of the beneficiaries, the benefit scheme, the internal organization of the fund (including responsibilities and decision-making authority), terms of financing by the contributors and payment to the providers. The benefits are usually set on a national level and the contributions are calculated to finance the total cost of these benefits.

Figure 5: Social health insurance fund



The payroll deductions are split between employer and employee in a certain percentage (for example 50 % from both as in Korea and Germany). This is intended to encourage the employers to take some responsibility for cost-containment.

One problem with this type of payroll tax is that deductions may discourage employers from hiring more employees (which would increase unemployment) and that they may decrease the available income of the employee (which would reduce the demand for other goods in the economy). On the other hand, it is often more acceptable for people to pay for health services when they discern a direct relationship between their pre-payment and the insurance benefits, rather than paying higher taxes for a national health service or a welfare program.

Most characteristic for the Korean and the German system is the financing of medical services via social health insurance. Table 4 compares the two systems. As the survey shows, both health insurance schemes have much in common. The major differences are:

- Monopoly of NHIC in Korea, competition between sickness funds in Germany
- Low contribution rates in Korea, high contributions in Germany
- Central setting of fees for health care providers in Korea, negotiated fees in Germany
- High out-of-pocket payments in Korea, comprehensive first Euro-coverage in Germany

The division of contributions between employees and employers is a political question. It is possible for both groups to pay proportional, income-related contributions, or flat contributions which need to be adjusted periodically, or a mixed system of proportional and flat contributions as shown in table 5:

Table 5: Proportional versus flat contributions

	Proportional contribution	Flat contribution
Employer	A	C
Employee	B	D

Proportional contributions are not necessarily superior to flat contributions and vice versa. Some pros and cons are listed in Table 6.

Table 6: Pros and Cons of different types of contributions

	Proportional contribution	Flat contribution
Pros	Redistribution according to solidarity principle	Equal distribution of burden to finance health care costs
	More acceptable for lower income classes	Less excess burden on wages for higher income classes
Cons	Revenues of health care plan increases automatically with development of wages	Strong incentive for cost-containment as rates have to be adjusted to cover inflation
	Less acceptable for higher income classes	Increases cost of low wage labor at a higher rate than high wage labor
	The higher the dispersion of labor the less it will be acceptable	Causes problems for part-time workers

Another disadvantage of a nationwide social security fund is the lack of competition between various funds, which would lead to efficiency and more flexibility of administration of the social insurance. Therefore, higher financial stability may be achieved by

introducing competition between different health plans or health insurers. This was done with some success in the Netherlands, Israel, Switzerland and Germany. If contributions are a proportion of income a risk adjustment compensation has to be introduced, otherwise health insurers try to select high income customers and avoid those with a low income.

It is also unlikely that a monopoly will be able to make selective provider contracts. Instead, all providers of health care have to be offered financing from the national fund, as there is no alternative scheme. Furthermore, it is likely that the fund will be subjected to political pressure.

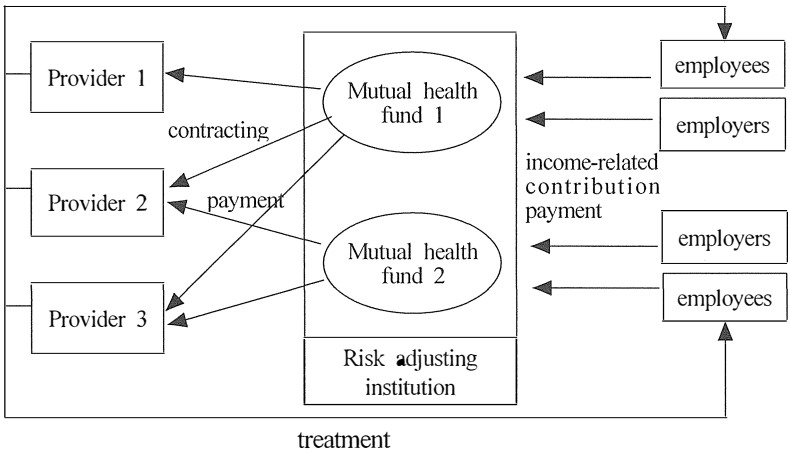
Mutual health funds

In comparison to a social health insurance fund a mutual health fund is not a monopoly, but rather the citizens can choose between various public or privately administrated funds. These may be established by large industrial companies, branches of industries, trade unions or local government. As with the social health insurance fund, mutual health funds are financed by income-related contributions which redistribute monetary resources between the fund members according to their health service needs and ability to support the fund. If necessary or desired the government may subsidize the contribution payments of low-income citizens.

The mutual health fund is a non-profit organization which can be joined by every citizen who meets the admission conditions (e.g. a certain occupation or membership of a trade union). Thus, risk selection by the fund is prohibited. To avoid adverse selection in one fund it might be necessary to establish a risk-sharing institution (working like reinsurer) which compensates

funds with a relatively bad risk structure (e.g. in terms of age, disease structure or gender) and provides services for the funds such as health fund staff-training. This organization can teach mutual health funds managers basic skills such as accounting, statistics and marketing, and can also work as a supervising agency. In order to avoid risk selection the government can also set regulations which force employees to join the employers' health fund.

Figure 6: Mutual health fund



As shown in figure 6, mutual sickness funds are self-governed with a board of employers' and employees' representatives who are regularly elected by the health fund members. The board is concerned with cost-containment and the provision of a high quality of services. It also decides on the scheme of benefits according to the needs of its insured, and on the contributions required by the fund to finance these benefits. The health funds make contracts with selected providers who treat the members free-of-charge (except for some co-payments to

avoid an over-demand) and send the bill directly to the fund. For this, it is necessary to arrange fee-for-service schedules or other terms of payment between the health fund and the providers. These are regularly reviewed and negotiated, but have to be maintained for the term of the contract.

In some health care systems based on mutual health funds (such as Germany, Switzerland and the Netherlands) it is possible for the members to opt out of the funds and to apply for private health insurance coverage. This may be feasible for people above a certain income level or for all citizens who do not wish to be insured by a sickness fund (e.g. in Switzerland). On the other hand, the political goal of risk-sharing and solidarity within the society is violated when only those with a high income opt out of the system.

The mutual structure of health funds makes it easier to meet the needs of different groups within the population. They are less bureaucratic than social security health insurance as they are more clearly arranged and better controlled by the members and their employers. Therefore, their administrative costs are usually lower than the overhead costs of social security health insurance or private health insurers. Moreover, it is possible to create competition between the different funds, so the citizens can choose which fund best suits their individual needs and financial condition.

Nevertheless, health funds fail to insure people without formal employment. Although it is also possible to insure self-employed people and workers without formal employment, it is only feasible with a risk examination of the applicant and risk-related premiums, as otherwise the danger of adverse selection would be too large.

Managed Care Systems

Managed Care Systems are known from the US. In the US, Managed Care Systems are privately operated insurance programs run by business firms or by so-called Health Maintenance Organizations (HMOs). These schemes are pre-paid on the basis of annual capitation and provide comprehensive health care benefits for their members. In the US, nearly 50 million citizens are insured in almost 700 HMOs with a rising trend.

A basic element of managed care is selective contracting, which means that a greater number of patients are treated by specific providers who agree to provide services under contract with a purchaser of these services (health plan or employer). The providers agree under these contracts to undergo utilization controls (e.g. a specific length of stay in hospital is allowed by the insurer, and any extension needs a special approval) and to accept a discounted price or fee schedule. This system, of course, means limited choice for the enrolled persons, possibly adversely affecting patient satisfaction. Apart from the number of patients, which might encourage a provider to enter into contract with the HMO, other incentives are possible. For example, providers may receive a share of surpluses from the health insurance.

In managed care, purchasers of services (employers or insurers) directly manage the delivery of health services to a defined group of enrolled persons (e.g. diabetics, AIDS patients, hypertension patients). The system is characterized by competition on different levels: providers compete to offer services, and consumers choose health plans based on who can offer a given quality of care for the lowest price. In this way, managed care systems can allocate resources in desirable directions compared to unmanaged fee-for-service systems. Unnecessary hospitalization in particular can be decreased, and costly treatment alternatives such

as inappropriate specialist care can be replaced by increased use of primary care.

In many countries, the basic idea of Managed Care Systems has been adopted. In Switzerland and Spain, Health Maintenance Organizations have been founded. In Germany we have about 250 so-called model projects or integrated service projects to find out how patients can be treated more effectively. Managed care, disease management, case management and evidence based medicine are currently the hot topics of the health care debate in Europe.

The different options for health care financing presented above have advantages and disadvantages. An optimal solution always depends on the particular circumstances of the country, its economic, social and historical background and the political goals and will. Apart from these structural considerations for the choice of a particular financing system (or a mixture of various types), it is also important to discuss the priorities which should be met by the health care systems. If, for example, cost-containment has top priority, a tax-financed scheme or a national health insurance which offers a wide range of instruments for government intervention appears to be the best. However, such a system will have more administrative problems and normally a poor quality of care. Moreover, an operational, relatively efficient civil service is required, as otherwise resource allocation will be far from optimal.

If freedom of choice for patients / insured and providers is a major goal of the system, mutual sickness funds and private health insurance should be considered, where the citizens can choose their health insurance and physicians on their own. Unfortunately, these systems are not very adept at avoiding cost escalation and tend to offer many incentives to increase utilization.

Statutory social health insurance does more to promote the idea of insurance than a tax-financed system which can lead to greater self-determination. On the other hand, as this financing type is a monopoly, the anticipated administration costs can be relatively high and the anticipated quality of the health providing system may be low. Another disadvantage of funds (public or private) as opposed to fiscal financing is the risk of under funding for preventative services, as the Ministry of Health has less direct influence on the health service budget allocation. "This has been the experience of the Medicare program in the United States."

Competitive mutual health funds have a greater incentive than social security health insurance to contain costs (as they have no monopoly on the health financing market) and to provide appropriate care. Their performance depends to a large extent on the internal process of managing the system.

Managed Care Systems define themselves in a world of competition. If a market solution is not accepted as an appropriate allocation mechanism for the health care sector, this financing system should not be applied. On the other hand, market instruments are most common in systems where people do not expect the government to be liable for every public concern. If, for example, the patients are used to paying user fees for health services, they are more likely to accept a pre-payment to the provider (or a provider-based institution such as a staff-based HMO) than people who already enjoy free health care.

Another important question is the respective level of centralization or decentralization in a health care system. This issue examines how the power to make decisions and delegate responsibility is distributed among various levels, i.e. national level, regional level (districts) and local level (community). In many countries centralized planning systems have been replaced

by competition between health care plans. To enable competition, risk adjustment and transfer mechanisms were introduced to subsidize those health insurers which insure mostly sick and low-income people. However, many countries have realized that competition works quite well in unregulated markets and in economic theory but does not work in health care and in practice. This topic is certainly on the health economic agenda in many countries.

There is no optimal system which meets the three goals equity, efficiency end effectiveness at the same time and in every segment of the health care system. Experience shows that particularly in less industrialized countries, the inefficiency of the government and other public bodies tends to increase, and public funds are often not administered appropriately. Tax-financed and government-managed health services will not be a good solution to cover the population in developing countries and even industrialized countries. Highly industrialized countries such as many EU-countries have had good experience with mandatory social health insurance and managed competition of health care plans. There is some doubt if these models would work in other countries. Every country has to make its own experience and has to make its own choice.

4. Strategies to Increase Financial Stability of the Health Insurance Scheme

Germany has 120 years of experience with social health insurance. The experience of Korea is much shorter. But Korea has achieved a lot in the past two decades. General life expectancy has increased drastically and mortality rates including infant mortality have decreased. Smoking cessation programs and lifestyle changing programs have been introduced by the government and will have an effect on the wellbeing of the population. Health care resources have increased remarkably during the past five years and public health programs have been implemented successfully. All these initiatives have their price. There is no free lunch and never will be.

Cost-containment efforts are necessary to control cost and maintain the efficiency of the system. Two key questions as to what the right strategy will be to achieve these goals must be answered:

1. What are the causes of inefficiency in our health care system?
2. What can be done to solve the problem?

There are three general factors for inefficiency and instability in health care financing as a general answer to the first question:

1. Third-party financing leads to moral hazard behavior of patients. Therefore, cost-containment or other methods of limiting the consumption of health services are particularly necessary in health systems which are based on third-party financing. This is regardless of whether the third-party payer is a public institution or a private body. As a result, we have a triangle consisting of patient (consumer), provider (producer) and payer (either insurance or a state institution). To limit "moral hazard" out-of-pocket payments are introduced; this means the patient has to cover a small part of the cost of treatment (for example with co-payments).
2. The reimbursement system (the system by which payments from the payer to the provider are organized and calculated) determines the behavior of health care providers. Various remuneration schemes lead to a number of different incentives: budgets and flat payments lead to a decrease in quality and quantity of services provided to the patient. Per diems in hospital care lead to an increase in mean length of stay. Fee for service and DRG payments provide incentives for supplier induced demand.
3. The third cause of inefficiency is the lack of patient management concepts for chronically ill patients. Patient management requires the following tools: disease management, cost management, case management and demand management. It also requires a close collaboration of all health care providers.

The answer to the second question can be structured by looking at the following simple equations:

(1) Expenditures = Income

(2) Demand = Supply

(3) Health Care Budgets = Prices x Utilization

The first equation simply explains that cost explosion in medical care is equal to income explosion of health care employees, and cost-containment means income containment for health care providers. Health care providers have never had an interest in cost-containment. To keep the financing of health insurance in balance, countervailing power has to be introduced. However, it is not wise for the government to become one of the parties. It is better if the government only sets the frame and takes the role of the moderator.

The second equation suggests that financial stability can be achieved by either stabilizing demand or stabilizing supply. Measures to stabilize demand are

- Out-of-pocket payment,
- Co-payments,
- Waiting lists,
- Demand management.

Measures to stabilize supply are

- License for physicians,
- Requirement planning for hospitals,
- Positive and negative lists for services.

The third equation expresses the problems in monetary terms. It suggests that budgets are needed to control cost. Alternatively, one can try to control cost with price regulation and utilization control. All those measures have a long tradition in health policy in Korea and Germany. I would just like to mention

- Budgets for outpatient and inpatient care
- Reference prices
- Positive or negative lists
- Positive lists, negative lists
- Waiting time