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Health Care in the Czech Republic, Hungary and Poland – the Medium-term Fiscal Aspects

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Responsibility for the information and views set out in the paper lies entirely with the editor.

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1. Introduction [1]

The paper provides perspective of recent developments in health care reforms in three fast-reforming transition economies: the Czech Republic, Hungary and Poland. The two former countries have been implementing reforms since early 1990s, while Poland started its reform on January 1, 1999 only. But the reforms are not over: in all three countries further changes are envisaged. The objective of this paper is to assess the current situation from a fiscal perspective. This, of course, is not the only criterion, but still vital enough to deserve careful analysis.

By now, all three countries have opted for a mandatory social insurance system – the so-called Bismarckian model. In Hungary, the monopolistic health insurance fund is now under full government control, but a competitive multi-player insurance system is envisaged after 2001. In the Czech Republic, initially there were as many as 20 funds, but the state-controlled General Health Insurance Company now receives about 80% of total contribution. In Poland, there are 17 newly created funds, 16 of them regional – controlled by representatives of local parliaments and one Branch Insurance Fund. Private funds will be allowed to compete in Poland only from 2002 on.

The health care systems in all three countries are contractual systems with a clear separation between financing and provision. Financing is made through the health insurance companies. On the provision side, primary health care is organised at municipal level. Hospitals, out-patient health care centres and physicians sign contracts with health insurance companies for the provision of services. Hospitals are generally owned by municipalities, only a few hospitals are private.

The payment scheme in the Czech Republic is based on fee-for-service principle. The fee-for-service system stimulated a considerable growth in services provided by hospitals and outpatient health care centres. Hungary applies three different payment systems at different levels of health care. In Poland in general there are two types of payment scheme: at outpatient level – capitation fee, at inpatient level – per admission fee.

The reforms so far has led to different financial consequences. In the Czech Republic, the share of health expenditures in the GDP rose quite sharply, while the direction of change in Hungary was just the opposite. It is too early to guess what will happen in Poland. But the issue is very important, since 3–5 per cent of GDP is on stake!

[1] Special thanks to Maciej Kołodziejczyk and Paweł Sztwiertnia for their help and comments.

2. Health Care as an Economic Problem

One of the most striking features of modern medicine is its diminishing rate of return. If the output of health care is measured in increased life expectancy – as it is often the case in international comparisons – this rule seems to hold in virtually all developed economies. This means that – ceteris paribus – more money that can buy more doctors, more machines and more medicaments will not yield a proportional rise in life expectancy. Quite interestingly, this fact was first noticed by demographers in the late 70s. They were surprised to notice that life expectancy in the Soviet Union was shorter only by 5–7 years, if compared to the United States, although per capita dollar expenditures were 20 times higher in the United States than in the Soviet Union.

At a high level of abstraction, the diminishing rate of return in health care can be explained by the following factors:

– The rise in the number of doctors tends to increase the number of doctor-patient encounters. At an earlier stage of development, where doctors are of short supply, both doctors and patients are more selective. Patients with smaller complaints do not go to doctors. Doctors concentrate on those patients, who need care most.

– At a lower development level, the extensive growth of the hospital network leads to significant health gains. Hospitals are very efficient in fighting communicable diseases and to reduce infant mortality. The upgrading of an existing hospital network cannot yield really significant health gains in terms of life years gained.

– The most efficient tools of modern medicine, such as vaccination, anti-biotics are relatively inexpensive. Once a country is well supplied with them, more money cannot buy equally powerful weapons to fight diseases.

– Modern medicine is based on high level specialisation. If this is not combined with an effective system of the division of labour in order to eliminate overlaps, the cost of health care can grow infinitely.

– With the expansion of the health care system, some positive features can turn into negative (self-medication, polipragmasia, iatrogen diseases).

From an economic perspective, it is also important to see that the definition of "illness" is not a matter of ”hard” scientific. The meaning of illness has a very strong historical, sociological and economic component. With the progress of economic well-being health care needs are continuously rising. Ageing is an additional demand creating factor. Life style problems (e.g. allergy), smaller pains, psychological disorders which remained largely unnoticed at an earlier stage of development or were treated in the family circle, are now medicalised. Large segments of health care have become businesses, where strong marketing skills are used to boost consumption.

Needless to say that the Czech Republic, Hungary and Poland are not capable to escape the consequences of the above mentioned changes. The problem is, that health policy experts of these countries are not fully aware of these dangers. It is widely believed in medical circles that health care needs can be and should defined through a scientific procedure. And once this is done, it is their respective government's duty to guarantee the "necessary" financial resources. It is simply bad economics to assume that the demand for health care is finite, and that some given sum of money therefore is "enough".

3. Main Types of Health Care Systems

There are four major ways of financing and providing health care.

1. Tax financed, government controlled system.
2. Mandatory social insurance.
3. Voluntary health insurance.
4. Case-by-case financing.

1. The first type can be subdivided into two, depending whether there is a separation between the payer and provider of medical services. In the United Kingdom, the National Health System (NHS) is based on the principle that providing and financing of services should be separated. All citizens are covered, the system is financed from taxes, but NHS contracts services on behalf of citizens by negotiating the cost of services with hospitals and physicians. To a large extent contracting takes place at the level of regions to ensure that local differences in needs are taken into account. It is generally believed, that this system is providing satisfactory services at low-cost, though access to state-of-the art specialised care can be difficult. A similar system is used in the Nordic countries. Both in the UK and in the Nordic countries quantitative rationing is used to contain demand.

The other type of budget-financed system was common in Central & Eastern Europe before the reforms, and was, till the end of 1998 in place in Poland. Both financing and health care facilities were managed by the state. In other words, supply and demand were simultaneously controlled by the same administrative apparatus. The main problem with this system was that financial resources were often allocated regardless of local needs and spent in an extravagant manner.

2. The social insurance system, also known as the 19th century Bismarckian model, is based on a strong link between the world of labour and social services of

different kinds. As it is well known, the then recently formed German state used health care and old-age pension insurance as ways to build solidarity among workers nationwide. The idea was to force low income workers in industry to pool a fraction of their wage in a common financial fund to finance health care, sickness pay and old-age retirement. In the course of the 20th century, this German model was emulated by some West European countries (e.g Belgium, Switzerland, France), but not in its original form. The most important change was that health care provision was extended to the family members as well.

The logic of the Bismarckian model tends to support the rise of several insurance companies – typically industry specific companies. Due to the increased costs of administration (and more recently: the increased costs of competition), the Bismarckian system provides high level of services at relatively high cost. Under the recent health insurance reforms, this modified Bismarckian system was introduced in the Czech Republic, Hungary and is being introduced in Poland. In all three countries, the original reform blueprints made a strong commitment to introduce competition in health care insurance, although the scope, the modalities and the deadlines for introducing competition varied from country to country.

In retrospect, the choice of the countries can be explained by several factors:

– In some ways, all three countries knew the Bismarckian model prior to Word War II. Workers of certain industries, as well as civil servants were privileged to have Bismarckian-type health care, accident and pension insurance. Therefore it was a logical political reflex to restore the "old" system and gradually expand it to the entire population.

– Policy makers of the three countries are closely watching each other. This explains that Poland has just recently re-introduced the Bismarkcian model. It seems that after 10 years of preparation it has become increasingly cumbersome to postpone further the decision on health care financing.

– It is equally important to note that the multilateral agencies, such as the WHO and the World Bank, didn't push the three East European countries towards the acceptance of the Bismarckian model. In particularly, the advisors of the above mentioned organisations warned against the dismantling of the unified health care financing system. On the other hand, German policy advisers were quite active in promoting the Bismarckian system – at least in two countries (Hungary, Poland).

3. Voluntary health insurance system is characteristic for the USA. The majority of the population, about 74 per cent, is covered by private health insurance provided by more than 1000 companies. Those under 65 years of age (and their dependants) obtain private health insurance either through their employers (61%) or by direct

purchase of non-group health insurance (13%). Approximately 12–14% have no insurance at all. Although this sounds strikingly high, the majority of the uninsured is only temporarily uncovered for the period between two jobs.

4. In virtually every country, health care is partially financed through non-insurance based techniques.

– User fees. In this scheme the patient pays a certain fee to the provider for the service rendered. Historically, such fees were always present in the private health care sector. In the public form it is very rare that significant user fees are employed. Usually, they exist in the form of co-payment. The standard criticism against co-payment is that it unproportionally hampers access to medical care of low-income people.

– In some countries, including Hungary, governments "earmark" a certain tax specifically for health expenditures. The examples are taxes on alcohol and tobacco. The major disadvantage is that these taxes are regressive and mostly hit low-income people.

– Under-the-table payments. In all three countries, health care workers – and medical doctors in particular – routinely receive gratuity payments from their patients. More recently pharmaceutical companies have started to "sponsor" medical doctors in order to direct prescription habits into a "desired" direction. Both type of payments are untaxed, illegal and – consequently – statistically unrecorded.

There are very few countries in the world, where the above described financing schemes exist in their pure forms. In the UK, NHS is complemented by a well developed private insurance sector. The home country of the Bismarckian system – notably Germany – has also developed her own private insurance system that serves high income groups over certain statutory income. In the US health care for the elderly (over 65 years of age), the disabled and certain groups of very poor people is directly financed from the budget (MEDICARE, MEDICAID).

To complete the picture, it is noteworthy to briefly describe two schemes of financing that elude the classifications used above. In Canada, there is the National Health Insurance system, which covers the whole population. The revenues come from general taxes and payroll taxes. Both federal and provincial governments finance the National Health Insurance. Patients may choose freely the providers (both in outpatient and inpatient care). In Singapore the system of financing is based on so-called Medisave. Every citizen has his or her personal medical savings account (MSA), where money is regularly deposited. The saving is compulsory and covers the costs of hospital care. The savings may be used for medical expenses only. Inheritance law also applies to Medisave. In order to cope with payment for highly specialised (and thus very expensive) services, a public catastrophic insurance has been established. If the

patient decides to use the private outpatient service – he or she has to pay the full amount. In the case of the private inpatient care (or higher standard in public hospitals) – the patient pays deductible amount.

In a similar vein, the Czech, the Hungarian and the Polish systems cannot be regarded as pure Bismarckian regimes, either. In all three countries, important segments of health care are financed from tax revenues of the central government (e.g. preventive programmes, certain high cost interventions, certain medicaments, etc.); local governments have their shares too. In addition patients pay directly to doctors, as well.

4. Health Status and Health Care Resources

Over the past two decades, a number of scholarly studies have made attempts to establish quantifiable link between economic development indicators on the hand and health outcome on the other. In a world-wide sample, the correlation between health outcome indicators and GDP levels is strong. However, if countries with similar GDP levels are sampled, the correlation is weak or nil. The correlation is similarly weak between health expenditure – measured as % of GDP – and health status. Different countries with different health care regimes could produce identical health outcomes, irrespective to the percentage share of health expenditures in GDP. The direction of causation appears to work more strongly in the opposite direction. Countries with higher GDP per capita levels tend to spend a relatively higher fraction of their GDP on health – but this is not necessarily reflected in better health outcomes. There is no clear correlation between the changes of GDP and health outcome indicators, either. In some countries, the post-communist transition shock – i.e. the sharp decline of GDP – was associated with a drop of life expectancy (e.g. Hungary, the Czech Republic), but in other countries this drop didn't occur, although the output fall was deeper than in Hungary or the Czech Republic (e.g. Romania, Slovakia, Poland).

While it remains true that higher GDP levels does tend to be associated with lower infant mortality (Table 1), there is virtually no correlation between GDP levels, life expectancy or overall health status of the population (Tables 2 and 3). In fact, there are quite striking counter examples. Life expectancy in Albania is higher in than in Hungary (The "advantage" of Albania is 4 years for men and 2 years for women).

Table 1. Infant mortality under 1 year per 1000 live born

	1990	1991	1992	1993	1994
Hungary	14.8	15.6	14.1	12.5	11.5
Czech Republic	7.7	7.0	6.2	5.7	4.7
Poland	19.3	18.1	17.5	16.2	15.1
	1995	**1996**	**1997**	**1998**	
Hungary	10.7	10.9	9.9	9.9	
Czech Republic	4.9	3.8	…	…	
Poland	13.6	12.2	10.2	…	

Source: Mały Rocznik Statystyczny 1998, GUS, Warsaw 1998; Health policy reforms in the Czech and Slovak Republics as a political process, Potucek M., Vienna 1998, Hungarian Statistical Office

Table 2. Life expectancy at birth (1997 estimates)

Country	Years
Slovenia	74.93
CZECH REPUBLIC	73.86
Croatia	73.45
Slovakia	72.91
POLAND	72.47
Bulgaria	71.65
HUNGARY	70.48
Romania	70.11
Lithuania	68.70
Belarus	68.40
Estonia	68.38
Latvia	66.91
Ukraine	65.77
Moldova	64.25

Source: N/E/R/A (1998)

The difficulty of establishing causal links between economic and health outcomes is partially explained by the fact that better health outcomes are associated with better education and higher incomes. This is true both at aggregate and individual levels. Life chances within one country improve with income (and education), as exemplified by several US and UK studies. Both longer life and higher education means higher health expenditures during one's lifetime. International experience also shows that 50 per cent of the differences

Table 3. Overall health ranking of European countries*

1	Sweeden	18	Belgium
2	Finland	19	Ireland
3	Norway	20	Portugal
4	Italy	21	Albania
5	Switzerland	22	**Poland**
6	Slovenia	23	Croatia
7	Austria	24	Macedonia
8	Greece	25	Yugoslavia
9	France	26	**Hungary**
10	Netherlands	27	Lithuania
11	Slovak Republic	28	Bulgaria
12	Spain	29	Romania
13	**Czech Republic**	30	Turkey
14	UK	31	Estonia
15	Germany	32	Belarus
16	Iceland	33	Latvia
17	Denmark	34	Ukraine

* Ranking takes into account 14 different health indicators, including life expectancy, infant mortality and death rates from a number of diseases

Source: Economist Intelligence Unit

in health outcomes are explained by life-style factors, while wealth and associated socio-economic factors account for 30 per cent only. The remaining 10–10 per cent is accounted for the volume of preventive and curative health and environmental risks, respectively. Unfortunately, there is no comparable study to test these letter findings for the three Central European countries. But there is no question, that people of these three countries failed to adopt responsible health behaviour. The incidence of high cholesterol, high blood pressure and obesity are prevalent. The population has a traditionally permissive attitude with respect to the consumption of alcohol and tobacco products.

Under the system of central planning, policy makers evaluated health care by the number of medical staff and hospital beds (Tables 4 and 5). In such comparisons, the former socialist countries generally fared very well. In fact, the Czech Republic and Hungary have too many hospital beds and too many specialists. The Polish situation is more in line with that country's relative development level. In all three countries that little attention was paid to increase financing per medical staff or per hospital beds, although technical progress would have required exactly this. As a result, the condition of the infrastructure deteriorated, with much needed reconstruction postponed and the

standard of technology lagging behind the West. Wages of doctors were also kept low by international standards, although the discrepancy was not so striking within the wage structure of the socialist countries themselves. The insufficient number of nurses – particularly in Hungary and Poland – is also a question of wages.

Table 4. Health sector employment in Hungary, Czech Republic and Poland (1997)

	Hungary/ Czech R./ Poland	OECD average
	Per 1000 Population	
All health-care workers	16.0 21.9 n.a.	23.9
Physicians	4.2 2.9 2.4	2.7
Specialist	2.7 2.2 n.a.	1.3
General practitioners	0.7 0.7 1.8	0.8
Nurses	4.9 8.1 5.6	7.7

Source: OECD

Table 5. Hospital beds in Hungary, Czech Republic and Poland (1997)

	Hungary Czech R./ Poland	OECD average
	Per 1000 population	
In-patients care beds	9.3 9.0 5.5	7.8
Acute care beds	6.4 6.9 n.a.	4.4
Nursing home beds	1.0 0.6 0.0	2.7

Source: OECD

During the 1950s and 1960s, the rapid increase of hospital beds was justified by public health concerns. Hospitals were very effective in the battle against communicative diseases and to reduce infant mortality. As morbidity patterns changed, hospitals have lost their comparative cost-effectiveness. Furthermore, as medical technology developed and hospitals were forced to accumulate a large pool of different machines. In Hungary – for example – hospitals with their barrack buildings dispersed in a large campus like territory, became hopelessly cost-ineffective. This is one of the most difficult policy tasks that Hungarian health planners face today. Everybody agrees that the country has far more hospitals and hospital beds than needed, but at the same time many hospitals are unsuitable to provide cost-effective treatments, thus they need to be replaced by newly built hospitals.

Strangely enough, patients in the Czech Republic and Hungary are not aware that their countries' vast health care network allows for a luxury that few other countries can afford. If compared to virtually any West European countries, Czech or Hungarian patients have a better chance to be seen by a doctor (Table 6) and operated instantaneously, rather than waiting for the evasive medical intervention for weeks or even months (in the UK, for example, the number of people waiting for hospital admittance is around 1.5 million and growing!). As noted, the situation in Poland is much less favourable, since the number of impatient beds remain well below the OECD average. Poland has less doctors, as well.

Table 6. Doctors' consultations (Number/head) in 1996*

United Kingdom	5.9
Sweden	2.9
Germany	6.4
USA	6.0
Poland	5.4
Hungary	14.8
Czech Republic	14.7

* or latest available

Source: OECD and Health Care Systems in Transition – Czech Republic, WHO 1996

5. Health Care Reforms – Legal Framework

The first post-communist country that started to dismantle Soviet-type, state-run health care was Hungary. As early as 1989, a government decree on private social and

health enterprises authorised private health practices (note, however, that some doctors were privileged to run private practice throughout the communist period). In the next year, the system of consensus management was introduced through a decree on election of hospital directors. The 1990 Local Government Act transferred ownership of health care facilities and responsibility for health care provision to local governments. These two latter developments were – of course – in contradiction to each other. Very soon, the right of nomination (i.e. hiring and firing hospital directors) was delegated to the local authorities.

In 1991 further changes were introduced, when the Act on Self-governance of the Social Insurance Funds divided the former social insurance fund into a Pension Fund and a Health Fund. The act regulated their tasks, organisation and financing. A Parliamentary resolution set the main directions of development of health insurance. The year 1992 brought further fine tuning in the system. Groups entitled for compulsory health insurance were specified, and services covered by the health insurance scheme were defined. These included curative and preventive care, maternity care, subsidies for medication, sick leave, invalidity pensions and maternity support. Privatisation of primary health care practices started in the same year, as well.

In reality, however, these changes were somewhat cosmetic. There was no intention – let alone possibility – to curtail substantially eligibility or the scope of health care services. From the patients' point of view, the situation was the same as before 1989 – every Hungarian citizen was entitled to receive any treatment free of charge. In theory, health care is provided on an insurance basis. In reality, care is extended to all citizens irrespective of payments and the benefit package remains contractually (or legislatively) undefined.

Reforms in the Czech health care system were introduced piecemeal. 1990 saw the privatisation of primary doctors' practices and the decentralisation of the ownership of hospitals. The main set of regulations shaping the financing system was passed by Parliament in 1991–92. They included Laws on General Health Insurance and General Health Insurance Company, Medical, Dental and Pharmaceutical Chambers, Branch, Local and other Health Insurance Companies and on Non-State Health Care Facilities. As from 1993, the separation of providers of care from funders of care is complete. Funding is now mainly the responsibility of various health insurance funds which make contracts with providers of services.

Poland was the latest in introducing reforms. However it is important to stress, that before 1989 the Polish government also allowed for some degree of private sector participation in the health care provision (individual practices and co-operatives – mostly in the dental care). Starting form 1989, the most visible impact of

liberalisation was the "spontaneous self-privatisation" of dentists and pharmacists (today nearly 100% of dentists and pharmacists run private practices). Boom in opening private medical practices followed as well. The first major breakthrough in organisational framework was Law on local governments of 1990 (amended in 1996) that gave the communities ("gmina") competencies in health care provision and funding. Decentralisation that started in 1990 was a success. In 1995 the Parliament passed a Law on large cities (urban gminas), which received competencies to run and finance health care institutions (they virtually took over the primary health care). A Law on Health Care Institutions (HCI) was passed in 1991. It allowed for HCI-s to become an independent unit with legal personality. It is the strategic goal of the reform that all HCI become autonomous in terms of financial management, staffing, and salary policy. The ownership is passed form the State to the local authorities. That process was completed in 1998. The debate on the financing the health care started in late 80's, but the Health Insurance Act was passed in February 1997 only (amended in 1998). Some changes reforming health care system regarding private practices have been introduced before 1999, but the main part of the reform started on January 1, 1999 only. The Common Health Insurance bill of 1997 (with amendments in 1998) introduced 16 Regional Health Insurance Funds, National Union of Insurance Funds and Office of Health Insurance Supervision. Patients have a possibility to choose between physician, specialists, nurses and other medical personnel. The same principles of free choice apply to hospitals and clinics.

6. Current State of Health Care System

The health care system in the Czech Republic and Hungary is a contractual system with a clear separation between financing and provision. Financing is made through health insurance companies, which are under the supervision of government bodies. Hospitals are generally owned by municipalities, only a few hospitals are private. The health insurance companies (or funds) are independent bodies responsible for contracting health care facilities. In the Czech Republic contracts are short-term (1–2 years), in Hungary the contracts are – for all practical purposes – open-ended. Although in theory, the National Health Insurance Fund has the right to select among providers, in reality the existing contracts are automatically renewed year by year. The problem with this practice is that it is extremely difficult for a newly established private venture to be accepted by the Fund. In Poland, health care system was

financed from state budget and the hospitals were mainly owned by the state. The whole system has changed as of January 1, 1999.

6.1. Insurance Funds

Today, Health Insurance Funds (HIFs) are the cornerstone of the system in all three countries. They collect payroll contributions from their members and contract medical services with appropriate medical suppliers. HIFs are non-profit organisations. The number of HIFs in a country ranges from 1 in Hungary to 23 in the Czech Republic. The Hungarian HIF operates in the whole country. Poland has just created 16 regional HIFs – one in each of new regions. There is also a so-called Branch Insurance Fund for the staff of the Ministry of National Defense and the paramilitary and police-type formations of the Ministry of Administration and Interior.

In the Czech Republic the number of HIFs was not arbitrarily set by the authorities – they could be set up with a permission of Ministry of Health and Ministry of Finance. Several years ago there were as many as 27 HIFs, but some of them went bankrupt as a result of competition. In 1996 there were 23 HIFs, but two of them were nearly bankrupt, and it is expected that the number of HIFs will decrease further, until it settles at the level of 15. It is possible to switch between HIFs every three months. By far the biggest fund is the General Health Insurance Company (GHIC), which covers 80% of population and its solvency is guaranteed by the state. The relative strength of the company comes from the fact, that it insures all non-wage earners. Those insured in bankrupt HIFs are automatically moved to GHIC, unless they decide otherwise. HIFs are permitted to set their own range of services available to their clients, but recent bankruptcies of companies, that tried to do so, discourage others from following them. In the case of financial difficulty, only limited assistance is available from the state but insured are protected from loss of insurance by the existence of the GHIC safety net. Children and pensioners can register with any health insurance company, but most of them are registered with GHIC. At the same time, other HIFs were organised by other Ministries. Ministry of Internal Affairs and the Ministry of Defence, set up their own health insurance companies for their staff, owning a number of health care facilities – these facilities have contracts with all the health insurance companies and are available to the whole population. The remaining insurers are generally organised around certain categories of employees (such as miners or bank employees) or large companies.

These insurance companies are jointly monitored by Ministry of Finance and Ministry of Health, but in practice this control is fairly weak. In case of financial difficulty only limited assistance is available from the state budget. Managing directors

of each of the GHIC's 76 branches are accountable to supervisory boards. They consist of 3 employer representatives, 3 representatives from municipal councils or representatives from national parliament, and representatives from the Ministry of Finance, Ministry of Health and Social Affairs (appointed by Parliament).

As was said before, the new health insurance system in Poland is based on 16 Regional Health Funds that are operating in 16 regions due to the new administrative division of the country (geographic overlap of a region and a health fund). According to the Act, it is possible that a health fund operates on the territory consisting of more than one region, but in practice it is unlikely to happen. The Branch Insurance Fund which operates nation-wide has come into being as a result of political bargaining between forces representing general health policy interests and those of defending existing privileges of certain social groups. On the other hand, it is worth noting that the Branch Insurance Fund has the potentials to become a competitive institution vis-a-vis the regional funds.

During the first 9 months of 1999, the Plenipotentiary of the Government for implementation of the health insurance reform is responsible for setting up and monitoring the system. In September 1999 regional councils (*Sejmik Samorządowy* – legislative branch of the regional self-government) will designate members of the health fund councils. This body will consist of the *Sejmik* members and people from outside the Sejmik. The term of the council is 4 years. The council will appoint the management board that will act similarly to the board of a partnership or joint stock company (as in the Commercial Code) with the difference, that a health fund is the not-for-profit institution. So there is a clear and close link of the local government (on the regional level) with governance of the fund.

The Polish health care reform has also created the Office of Health Insurance Supervision. This is a central government body, and its president is nominated by the Prime Minister. It controls funds' financial situation and has authority to impose temporary administration. It also oversees legality of HIFs' and National Union of Insurance Funds' activities and can impose financial punishment, if law is infringed.

In Hungary, the relative independence of the National Health Insurance Fund – together with the political independence of its ruling body, the so-called Health Insurance Self Government – has been heavily criticised from 1993 onwards. Between 1992–98, the Health Insurance Fund had an elected board of 48 non-paid officials. They were representatives of three groups: associations of employers, associations of employees and the associations of local governments. It turned out, that political independence induced moral hazard. Since neither the Fund, nor the Self Government was not constrained financially, the annual health budgets were repeatedly violated. In this situation, it was the task of the Government to cover the extra-budgetary

expenditures at the expense of the regular budget. When the 1998 elections brought a new government in Hungary, the independence of the health insurance system was abolished by a Parliamentary fiat. First, the Prime Minister's Office was in charge of the system, later this responsibility was transferred to the Ministry of Finance.

6.2. Health Care Facilities

The delivery system is organised in similar way in the three countries. The gatekeeper of the system is a "family doctor" (the general practitioner, GP) whom patients are free to choose. He provides primary care close to patients place of living, refers them to specialists and hospitals, certifies absence from work. Hospitals sign contracts with HIFs for the provision of medical services, and schemes of payment differ considerably between the three countries.

In all three countries, the various forms of ownership in the health care system are considered to be legally equal. The majority of institutions are now owned by the municipalities. It is important to emphasise that this change of ownership took place in the Czech Republic and Hungary early on, while this ownership change became a reality in Poland on the 1 January 1999, only. As the former two countries have already experienced this often creates a "free rider problem". The municipality in which a hospital is located is obliged by law to finance repairs and investment, although the hospital provides services for neighbouring areas as well. Quite often, the municipality doesn't want to support these costs due to its other financing obligations.

By contrast, university teaching hospitals and Specialised Health Institutes ("centres of excellence") are owned by the central government in all three countries. Some hospitals – usually smaller ones – are operated by churches that deliver services primarily in the field of long-term nursing care of the chronically ill, as well as hospice care. In the Czech Republic, spas and sanatoriums went into private hands and function as for-profit companies.

In Poland, health care institutions have to be registered in the court as autonomous entity in order to be eligible to contract medical services with health funds. This obligation gave a strong stimulus to the managers of the health care institution to register them as autonomous. The problem with this "quick independence" is that in fact those changes are on paper mostly. The legal change is not followed by an effective change in management, hospital beds' restructuring, staff reduction and quality improvement. It is important to add that in addition to the new

institutional system there were private practices (mostly dentists, but also other); private drugstores – after privatisation completed in the beginning of 90's and co-operatives which number is declining.

In Hungary, payments to physicians in family practice depends on the number and age of patients served by them as well as on the number of patients with chronic conditions under continuous care. Prior to 1990 all the family doctors had been in public employment with an obligation to provide in-area care to the inhabitants of a geographical area that had been assigned to them. Currently the entire population is covered by family practices that have an obligation to provide in-area health care. People can freely choose from the pool of family practitioners. Between 1993 and 1996 practically all citizens took advantage of this opportunity. The prime objective of establishing a family practitioner's system was to deliver continuous, personal and possibly definitive health care of a preventive approach close to a place where people live. Through the financing system and the free choice by patients it would create incentives for providers to deliver high quality care that is fully tailored to the real expectations and needs of patients and clients served. Efforts are aimed at improving the quality of care through increasing a number of practices and decreasing a number of people on the list of individual practices. Although the local municipalities are responsible for the provision of primary health care, they can meet this obligation not only with a family physician employed as a doctor in public service, but they can also contract out service to an entrepreneurial doctor. As the financing arrangements do provide incentives to family practitioners to work as private entrepreneurs, the proportion of privatised practices has increased to about 80% by 1996.

Outpatient specialists are financed on the basis of system points. The value of points is calculated to reflect the complexity, professional and technical difficulties involved in a given treatment. Inpatient care is financed by a system of DRGs [2], whereas chronic care is paid for by inpatient day. Spending caps were built into payment for family physician services, outpatient care and hospital care.

There is general agreement, that outpatient specialist services will play ever-greater role in modernisation of the health services. They relieve some of the burden on hospitals by taking over pre-admission work and follow-up care. Other important and developing areas include ambulatory services, 1-day surgery, non-invasive and micro-invasive diagnostic and therapeutic procedures that are able to replace inpatient care. During the past decades, the hospital system grew into the most developed sector within the health services in Hungary. It enabled high standard

[2] Diagnosis-related group. A US-born statistical system of classifying any inpatient stay into groups for the purpose of payment.

medical care, however, with its size and costliness, it endangered the operation of the entire health care delivery system in the past years. The very high bed/population ratio decreased by 25% between 1990–1998. Rather than aiming to merely shrink the total bed volume, this measure was implemented to decrease unjustified geographical differences and for the distribution of medical specialities to better fit the morbidity patterns of the specific region.

In the 1990's medical facilities were supplied by variety of new state-of-the-art equipment. Number of specialised equipment (such as CT scanners, MRI) increased two-threefold in 1990–96. However, no resources were left to replace and upgrade conventional X-ray machines, though radiography is required in the treatment of a number of conditions. A new program to overcome this shortage was launched in 1998 only.

In the Czech Republic, the District Health Department is responsible for accessible primary health services in its area. Citizens register themselves with primary health care physician and can re-register with another doctor every 6 months. By 1998 more than 95% of Czech physicians were in private practice. Almost all primary health care physicians work in health centres. Centres are owned by the local communities (municipalities) and run by directors. Private health care physicians who are in private practice pay rents for using the facilities of the centres. Primary care physicians are rather underused – large part of their work involves certification of absence from work, and referral rates to specialists are high. In addition, they are largely orientated towards curative rather than preventive services.

Both physicians and hospitals are paid on fee-for-service principle, but the system is capped. Certain fixed points value is attributed to each activity from a list of about 4500 services. As there is a ceiling on the total amount of point payments, the value of points decreased in previous years with increased activity levels. A value of point differs between companies, as those with higher income can offer higher payment per point. In 1994 value of a point was 0.52 CZK in GHIC and 0.70 CZK in both Zeleznicni and Bankovni Health Insurance Companies – a difference of over 30%. As patients can change insurance company every three months, there are incentives for the doctors to encourage patients to move from one company to another. The point-based payments are supposed to cover all operation costs and include allowance for capital expenditures. In practice, it is believed that it overestimates costs of several specialities in relation to others. It also does not take into account the fact that labour costs differ significantly between regions and are higher in big cities.

Hospitals also paid with point value for each day spent by a patient in their facilities. Since the end of 1994 the payments have been made on a decreasing scale to reduce the length of stay. Recently the point system has been modified and some

aspects of lump-sum payments were introduced (hospitals get money straight from the GHI, without asking for the amount of points earned and they have to cope with it during the year). The point system continues for GPs and ambulances.

There is a difference in earnings between physicians in their own practices and state physicians. The state physician gets permanent salary, which is the country average. Those in private practices are paid on fee-for-service basis and earn at least twice the incomes of salaried doctors. Wage increases for physicians in recent years were 30% higher than increase in average wage. It is common for physicians to bill for more than one hundred hours per week, which is hardly a reasonable work schedule. Surgeons working in private practices bill for 25% more points than those working in government hospitals. A similar pattern existed in charging for supplies. The fee-for-service system stimulated a considerable growth in services provided by hospitals and ambulatories. In the next phase of the reforms a combination of capitation fee and fee-for-service reimbursement is considered to contain the costs.

In Poland the core of the system is the family doctor (GP), whom an insured are entitle to select. A maximum number of patient a GP may enrol is 2500. A family doctor authorises referrals to specialists, diagnostic tests and hospitals. In some cases, however, direct access is allowed (e.g. dentist, dermatologist, oncologist, psychiatrist). In addition, an insured may directly turn for substance abuse services (e.g. tobacco, alcohol, psychotropic drugs addiction). The health insurance act gives certain groups of people direct access to specialised care, e.g. HIV-infected, TB patients and veterans. In case of emergency the insured is allowed to access necessary treatment without prior authorisation.

The health insurance act gives the health funds and providers freedom of choice the provider-payment scheme for the medical services (e.g. GPs are paid on capitation basis and some hospitals on per admission basis – different way that was adopted in Czech Republic). The payment scheme determines to the large extend the behaviour of the provider (e.g. under-service in capitation and over-service in fee-for-service mechanism). Certainly it gives more flexibility to negotiate contracts, but on the other hand poses some risk that the payment selected may lead to a sharp increase on the demand side.

The year of 1999 will be an interim period. In that year health funds will contracts medical services with all providers (that meet certain criteria). Starting January 2000, selective contracting will be permitted and hopefully will lead to competition and quality improvement on the provider side.

Unfortunately, the system of universal co-payment that was proposed by the Ministry of Finance has not been adopted by the Parliament. Therefore only some services will require co-payment from the patient (e.g. drugs, "hotel fees" in long-term

care facilities, transportation if not in emergency). The patient will pay in full for certain services, e.g. plastic surgery other than due to congenital failure, trauma, disease or treatment of it, acupuncture, some stomatological services not included in the basket of services guaranteed by the health fund, emergency care other than due to accidents, traumas or life threatening situations. As stated before, certain high-cost procedures and drugs will be financed through general taxes (from the central budget). Theses include – inter alia – tertiary care and oncology drugs.

7. Financing at Macro-level

Health insurance funds are financed from payroll contributions collected from insured. Their level varies significantly among the three countries. To make comparisons even more complicated, note should be taken of the fact that the rate of contribution changed in Hungary virtually every year. Contributions are levied on predominantly on gross salaries, paid by employers and employees. In some cases, pensions and unemployment benefits and other type of personal incomes are also "taxed".

The second source of health care financing comes from the state budget. State budget contributes on behalf of certain social groups – mostly without incomes (children, student in the Czech Republic, unemployed not receiving benefits in Poland). It also finances health care directly. It co-finances part of investments in facilities in Hungary, and is supposed to take care of financing most expensive services in the Polish system. Co-payments are required in all three countries, primarily as cost-sharing in payments for drugs and in ambulatory care.

Table 7. Health care premium in % levied on gross salary

	1992	1993	1994	1995	1996	1997	1998	1999
Poland	–	–	–	–	–	–	–	7.5
Hungary	21.5	23.5	22.0	22.0	20.0	19.0	18.0	14.0
Czech Republic	13.5	13.5	13.5	13.5	13.5	13.5	13.5	N/A

When splitting the social insurance fund into a pension fund and a health insurance fund, the Hungarian authorities decided to divide the 54% payroll tax levied on gross salary into two parts: 23.5% went to health and 30.5% to pension fund. The employees contributed 4% and 6%, and employers 19.5% and 24.5%, respectively. In the subsequent years employer's contribution to health insurance fund rate was reduced to 11%, employees'

rate fell to 3%. For those people who are in working age, but self-employed the compulsory health contribution is 11.0 % (11.5 % in 1998) calculated on the basis of the statutory minimum wage. Beyond the above said, since 1997 there is also a fixed health contribution paid by the employer. First, this was defined as 2100 HUF /month/employee (10 USD). As from 1999, the rate is raised to 3600 HUF/month/employee (16 USD). From the year 2000, further changes are expected, including the abolition of the flat rate. Pensioners and children do not pay contributions at all.

The high rate of contribution caused increased incentives for evasion of payments. Economic downturn in the 1990s resulted in growing unemployment, extensive black economy and worsening of financial standing of many state and private companies. Evading health insurance contribution payments enabled those companies to defer insolvency or bankruptcy. Amount of arrears resulting from unpaid contribution in 1994 exceeded 20% of total annual revenues of the National Health Insurance Fund (NHIF). As contributions care insufficient to cover expenditures, the central budget has to come with transfers every year. What is even worse, contributions do not increase with GDP, thus the professedly self-financing system is in chronic imbalance. As can be surmised from the above said, the Hungarian health care system operates on the basis of dual financing. Major investments like equipment purchases and construction or maintenance are financed by local governments or co-financed from the central budget. Only recurring expenditures of the daily operations are financed by the NHIF.

With an ongoing systemic deficit, the NHIF is facing a tricky task. Since the actual funding of the NHIF deficit is part of the general government deficit (*ex post*), the incentive to contain costs is weak. Furthermore, the NHIF has been under constant reform since its interception and there is still no political/professional consensus about its role. Several experts argue for a shift toward the UK-type state-financed, state-controlled organisation, while others would like to push the system towards a more competitive structure with 4–6 participants. Decisions on these questions are now promised within a year. Another aspect of the public debate concerns the question of revenue collection. Until 1998, NHIF collected the contribution revenue with half of its staff being tied in this work. The new Hungarian government, elected in May 1998, followed the suggestion of its predecessor and took away this task from NHIF. Thus, from January 1999, the Tax Authority collects the contributions on behalf of NHIF. This is an important step towards a more focused health-care financing activity within the NHIF itself.

Co-payments in the Hungarian system might be requested in exceptional cases for specific health services, for example, if the insured wants higher standard of accommodation or referral to a provider other than required by the order of referrals. The levels of subsidies for prescribed medicines are 100%, 95%, 80%, 50% and 0%. For certain drugs, a fixed amount of subsidy was applied for all drugs with identical

ingredients, regardless of their price. This move was intended to encourage the use of low cost generic drugs. In 1993 about 78% of expenditures on pharmaceuticals was covered by the insurance, the rest was co-paid by the population in out-of-pocket payments. The charges for therapeutical aids and therapeutical services (such as spas) are also subsidised by the NHIF.

The problem of health insurance contribution arrears also faces the health care system in the Czech Republic. It stems mainly from unpaid contributions of self-employed, due to weak control of the system. The contributions are defined as a percentage of income before tax – employees pay 4.5% and employers 9%. Self employed pay the same proportion (13.5%), but it is levied on only 35% of their profits [3]. The Ministry of Finance (state budget) contributes 13.5% of 80% of the minimum wage on behalf of the unemployed, pensioners, students and children.

About 60% of contributions fees collected by health insurance are redistributed by the GHIC according to the capitation formula. For insured over the age of 60 three times the standard capitation rate for those being under 60 is allocated. This weighting probably exceeds the true average costs of health care for those over 60, so the redistribution tends to favour the GHIC, which insures most of the elderly population.

It was proposed at the beginning of the transformation process, that there should be a multisource system of financing. As yet it is still fully financed from the public funds. Co-insurance is in its infancy and covers mainly travel abroad, cosmetic surgery or special kinds of dental care.

Cost sharing is used mainly for selected drugs, dental services, and some medical aids. There are small co-payments for ambulatory care. Co-payments represented some 5% of total health care expenditure in 1995 and about 10% in 1997. Under-the-table payments (gratitude money) seem not to be important anymore.

In Poland health contribution premium amounts to 7.5% of gross incomes. It is deducted from income tax paid by all employees, pensioners and unemployed receiving unemployment benefits. Contribution for health insurance of unemployed not receiving benefits, farmers and veterans is paid by the state budget. Self-employed pay the same contribution – 7.5%, but it is levied on average salary in the country. In order to change the level of the contribution, the Parliament has to amend the Act on Health Insurance. There is no financial limit up to which the health insurance fund may spend its revenues for administrative costs.

The Health Insurance System will provide vast majority of resources to finance health care. In general financing of the provision of primary and secondary care is the responsibility of the health funds (that also include drug reimbursement, dental care, rehab and nursing –

[3] "Profit" not "income" – Health Care System in Transition; WHO.

Table 8. Main groups of insured and their contributors

	Farmers	Unemployed	Self employed	Employees	Children	Students	Pensioners
Hungary	Farmers	Labour Market Fund from contributions of employers and employees	Self employed	Employees and employers	Automatically insured by their parents at no extra charge	Automatically insured by their parents at no extra charge	State budget until 1997
Czech Republic	N/A	Central budget	Self employed	Employees and employers	Central budget	Central budget	Central budget
Poland	Central budget	Central Budget or Labour Fund (for those receiving cash benefits)	Self employed	Employees and Employers	Automatically insured by their parents at no extra charge	Automatically insured by their parents at no extra charge	SIF*

*SIF – Social Insurance Fund (ZUS)

Source: Reforma służby zdrowia, Centrum Informacyjne Rządu, Warsaw 1998; Health Care Systems in Transition – Czech Republic, WHO 1996

care – but excluding "hotel costs"). Certain specialised procedures, so called tertiary care (e.g. Bone marrow transplants, open heart surgeries, but also certain drugs, inpatient only e.g. cytostatics) are financed from the central budget. The central budget is responsible to finance among others, the following:

a) investments,
b) emergency service,
c) blood service,
d) health policy programs,
e) sanitary inspection,
f) occupational medicine,
g) prevention of communicable diseases as AIDS, drug addiction, alcoholism.

In addition health funds will receive money from the central budget as contributions for certain groups of people (e.g. farmers, unemployed). The health funds (including the Branch Fund) participate in the equalisation process (according to the equalisation formula, that include two risk factors: age and revenue per capita) in order to flatten the revenue differences between the funds. In the future it is possible, that the formula will include other risk factors.

Insured are also subjected to co-payments. Drugs are subsidised by the HIFs in 50, 70% and 100% (drugs against chronic diseases). Choosing better standard of services than accepted by the HIF requires out-of-pocket payment. To illustrate, choosing a hospital for treatment from the list provided by HIF results in full reimbursement by HIF, but choosing a facility with a higher "reference level" will result in co-payment.

The article 4a of the Act gives the insured a possibility of opting-out starting 1 January 2002. The premium collected by other institution than health fund (most likely the private insurers) will be still tax offset up to the level of 7.5%.

8. Health Expenditure at Macro-level

The level of expenditures in the three countries as a proportion of GDP is still below standards of Western Europe, despite considerable growth in the Czech Republic and Hungary. However, if theses countries' absolute development levels are taken into account, the opposite can be said: all three countries spend more on health than the OECD countries used to spend when their per capita GDP was at similar levels. In absolute terms, of course, the three East European countries cannot spend than a fraction of the sums available in more advanced OECD countries (Tables 9 and 10).

Table 9. Developments in health care expenditures as a % of GDP

	1990	1991	1992	1993	1994	1995	1996
Poland	5.4	4.8	4.9	4.6	4.5	4.5	4.6
Hungary	10.6	10.6	10.9	9.9	9.7	8.6	8.3
Czech Republic	5.3	5.3	5.5	7.6	8.1	8.2	8.2

Source: Authors' estimates based on official national statistics and other information

Comparing health care expenditures it is important to add to official polish statistics debt in health care system.

Debt of health care sector in Poland as a % GDP

	1990	1991	1992	1993	1994	1995	1996
Poland	N/A	N/A	N/A	0.35	0.28	0.61	0.63

Table 10. Per capita health-care expenditures in US dollars at purchasing power parity (1997 or latest available data)

Turkey	232	Belgium	1747
POLAND	**371**	Austria	1793
Mexico	391	Australia	1805
Korea	587	Norway	1814
HUNGARY	**602**	Netherlands	1825
CZECH REPUBLIC	**904**	Denmark	1848
Greece	974	Iceland	2005
Portugal	1125	France	2051
Spain	1168	Canada	2095
Ireland	1324	Germany	2339
United Kingdom	1347	Luxembourg	2340
New Zealand	1352	Switzerland	2547
Finland	1447	USA	4090
Italy	1589		
Sweden	1728		
Japan	1741	**OECD-average**	**1558**

Source: OECD

In Hungary, the National Health Insurance Fund contributes about 70% of money spent on health care, local and central governments – 20–25%, the rest is provided directly by the population. Czech taxpayers (employers, employees and self-employed) contribute about 75–80% of total health care funding via the compulsory health insurance system. State and local government budgets contributions accounted for some 10–15%. The remaining 10% were provided by the households (as co-payments).

Table 11. Total health care expenditures by the source of financing

	Contribution	Budgets	Co-payments
Czech Republic	75%	15%	10%
Hungary	70%	15%	15%
Poland (before 1999)	–	App. 76%	App. 24%
Poland (after 1999)	55%	25%	20%

Source: Recent reforms in organisation, financing and delivery of health care in Central and Eastern Europe in light of the accession to the European Union. Materials from Conference in Brussels, May 1998

Total expenditures for medicaments increased substantially in the Czech Republic and Hungary in the first half of 1990s chiefly because of the substantial increase in cost of drugs resulting from increased imports.

Table 12. Expenditures on drugs as % of GDP

	1990	1991	1992	1993	1994	1995	1996
Hungary	1.28	1.78	1.94	2.09	2.2	2.3	2.4
Czech Republic	N/A	1.05	1.45	1.42	1.86	1.95	1.90

Source: Health policy reforms in the Czech and Slovak Republics as a political process. Potucek M., Vienna 1998; Health Reform in Hungary: Taking Stock., Orosz E., Ho T.J., national estimates

9. Conclusions

From a financial perspective, the reforms of health care brought mixed results. In Hungary, health care expenditures appear to have risen only moderately. In current price terms, the share of health expenditures actually fell relative to GDP. This is explained predominantly by the large scale evasion of contribution payments. Although the central government, local governments and the patients themselves are forced to put money in

the system – this is not enough to compensate for the insufficient (nominal) rise in contributions. In the Czech Republic, the insurance reform and the privatisation of a large part of the provision was not accompanied by determined cost-containment measures. A fee-for-service system with privatisation tends to increase services and costs. Little wonder that health care expenditures grew by two percentage points of GDP! Higher expenditures can be to some extent justified by the fact that medical staff's incomes were previously relatively low compared to national averages, and status of the staff. Capital expenditures on repairs of buildings and purchase of state-of-the-art equipment were also necessary. But a certain part of increases in costs was unnecessary and detrimental. Equipment and beds are often underused – compared to virtually any West European country,

The volume of health care may be overstated – physicians in the Czech Republic and Hungary regularly issue fraudulent bills. The role of incentive system must be carefully considered. Therefore, any reform needs to include a mechanism for controlling costs and improving the quality of care. In addition, there are also administrative costs related to the new organisations (Insurance Funds) and bodies supervising them.

On the positive side, the reform made health care personnel much more sensitive to patient's needs. In the previous system patient's requirements were almost completely ignored. A major accomplishment of the reform is the fact, that consumers can now choose their own physician, treatments and facilities they are to be treated.

In Hungary a major accomplishment was the decrease of 25% in the volume of expensive hospital beds without affecting the safety of patient care. Regional differences in care decreased. The number of family practices increased and their equipment improved with the majority of family physicians working in the privatised system offering better incentives. The system of home care and home nursing was also established. The supply side has also decreased in the Czech Republic – since the implementation of the reform number of hospital beds has decreased by 10%.

WILL POLAND FOLLOW THE HUNGARIAN AND CZECH EXPERIENCE?

It is possible that Poland will follow the Hungarian or Czech experience, since it is adopting a system, where there is small interest in containing costs. One thing is certain: it is impossible that the public system will go bankrupt. Even though there are some safety mechanism, there is still risk, that the ultimate bail-out will come from the central budget, i.e. from the taxpayers' pockets. International experience shows that in order to

thoroughly prepare the system to be financed via social insurance, it requires between three and five years to implement proper infrastructure, IT (Information Technology), human resources, legal framework with tools enabling enforcing it, effective judicial system etc. Currently Poland has none of these elements.

It is fair to say, that there is no proof (considering international experience), that financing of health care based on general tax revenues is better than the one based on social insurance (and vice versa). To a large extent, it depends on implementation of the system. In general, the social insurance is perceived as more expensive than financing from general tax revenues because of higher administrative costs, moral hazard and supply-induced demand. In terms of technical efficiency, one should answer the question about equity, since there are trade-offs here. There is negative correlation between these two variables. The health status of the population depends more on the wealth of the country and its citizens than on the total expenditure on health. Healthy life-style, food, sports, everyday life comfort usually contribute more than increased health expenditure. However the truth is also that, as GDP grows, total health expenditure growth ratio is higher than that of GDP (GDP increases, but health expenditure as percentage of GDP increases as well). This is because the income elasticity of demand that is greater than one (it means that elasticity here tracks luxurious goods). But this general rule may not always hold – as the example of Hungary already showed.

The other problem is over-capacity on the supply side. In budgetary system the costs were pretty much under control. In the social insurance, the market failures – such as information asymmetry – and physician-induced demand – will lead to increased spending. On the other hand there is no proof that the quality of care will be higher. The system remains public and heavily politicised so it is difficult to point out a player, except for a private insurer or provider, that will be interested in reliable and effective system of claims processing or competing on quality and price, willingness to sack excessive staff etc. As the system of providing health is posing problems and arguments in developed countries, there's no easy path to follow for the three reforming economies.

There are several cost-containment measures incorporated in the Polish Health Insurance Act. The important ones are:

1. Health fund prepares a financial plan, that is revenue-spending balanced. The plan is submitted to the Supervisory Office by September 30 of the preceding year.

2. Health fund creates a reserve fund, that can be used only in the cases when spending exceeds revenue; the Supervisory Office has to be notified.

3. There is limited co-payment (mostly stomatological services), thus its efficiency will probably be limited.

4. The family doctor acts as a "gatekeeper", thus is believed to limit the access to specialised care, diagnostic tests, inpatient treatment.

5. The premium may be raised only by the amendment of the Act by the Parliament.

6. Wide competencies of the Supervisory Office to supervise and control the financial activities of the health funds.

Despite the measures mentioned above, it is questionable, whether they will be effective. According to international experience, the effective way to constrain inflation in the social insurance model is by demand-side approach, which is negligible in the Act. The level and scope of co-payment is insufficient. Therefore, due to the increased volume of services the expenditure will probably rise. For example hospital payment based on per admission basis will likely increase the total number of admissions (hospitals will be vitally interested in it) and subsequently the expenditure of the health funds on inpatient care.

In Hungary, the proportion the share of wage earners' contributions fell between 1992 and 1999 from 60 to 51% in total health expenditures. This gap was filled by direct payments of the patients. From an economic point of view, this rising share of "self-financing" is not problematic. The problem is that Hungary was unable to develop alternative insurance mechanisms that would allow its citizens to handle health costs in a fair and efficient manner. This is not a desirable tendency and Poland should make attempts to follow such a pattern.

In the Czech Republic we observe the trend of increased spending, but, as the system of contribution collection was more leak-proof than in Hungary, no additional funds from the budget or from households were necessary. But the situation is not without danger in the Czech Republic, either. Contribution losses are generated not only by leaking. In the case of Hungary, part of the problem was the growing unemployment. As the job market took a disadvantageous turn in 1992, the social security system felt the immediately through the loss of contribution revenue. In the Czech Republic unemployment is on the rise.

In Poland the contribution rate was set at 7.5%. During the legislative process opposition proposed a 10% rate, which was declined. Although the 7.5% rate seems low compared to Hungary and the Czech Republic, it nevertheless ensures, that in the first year of reform (1999) health care spendings will increase by about 7% in real terms. Whether this is enough or not – to early to tell. The medical staff is underpaid and many facilities are in need for renovation. The "solution" may come in two ways – either the rate of contribution will have to increase, or the budget will have to subsidise HIFs with additional transfers. In either way it will put pressure on population, as this is very unlikely that increased financing will be solely made via increased budget deficits. In case when HIFs face funds shortages, we should expect an increase in rate of contribution, rather than transfer from the budget. It would also cause an increase in personal income taxes, as health care contribution is a part of them.

It is also important to remember that in the case of financial deficiency of the regional health fund, it is possible that a local government, where the health fund operates, may give the health fund a loan (there are no limits for the loan). It is very likely that some NHFs will borrow in order to finance their expenditure increase and probably they will not be able to pay it back. So they will argue for contribution increase what will lead to higher public expenditures on the health care.

One can ask whether it is possible or feasible to return to the "old system"? The "old system" defined as the financial flows in the health care based on general tax revenue financing (budgetary system). The change of the legal status of the health care institutions i.e. the retreat from autonomous entities back to budgetary units is beyond the definition of the "old system", besides it would not be justified. In order to return to the "old system" an amendment of the General Health Insurance Act would be necessary. It is unlikely that the current coalition will decide to do so. However, it might be prudent to prepare a critical path analysis, since financial insolvency of the system cannot be ruled out. The critical path may be based on transitional budgetary financing with subsequent taking-over of the contracting and financing capabilities of the Health Funds (or initially one National Health Fund). Perhaps, more feasible would be assigning the local governments tasks currently held by the Health Funds (known as Local Government Health Care Bill). But it is unlikely, that total health expenditure will decrease.

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