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Medical savings accounts – in search of an alternative method of health care financing in European countries

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In times of increasing health care expenditure and insufficient cover provided by publicly financed health systems additional, alternative methods of health care financing become more and more considerable. The purpose of the paper is to present the concept of Medical Savings Accounts (MSAs) and possibilities of their application in the health care systems of European countries. First, the author describes the idea of MSAs and reviews positive and negative findings about the effects of implementing this method into the health systems. Next, two main approaches to the application of MSAs in health care financing are considered. In the last part of the paper, the possibilities of introducing MSAs into health care systems in European countries are discussed. The author takes into consideration the existing health care financing conditions and other specific institutional, socio-economic and cultural factors as the main determinants for successful designing and implementation of the MSA scheme in a given country.

JEL Classifications: G22, I11, I18

Keywords: Medical Savings Accounts, health care financing, health expenditure, health insurance, European countries.

Introduction

In most countries in the world the health care is financed from a combination of public and private sources, including social health insurance contributions, taxes, private health insurance premiums and out-of-pocket payments. Because the demand for health care services is expected to increase at a faster pace than economic growth, health care funding becomes a significant challenge for both policymakers and households. Depending on the health policy conducted in a given country, various solutions can be implemented in order to intensify the cost effectiveness of health care providers or to reduce the demand for medical services by increasing the participation of private sources of financing (e.g. co-payments). Medical Savings Account (MSA) represents an innovative and relatively seldom used mechanism of health care financing, in which individual savings for covering health care expenses are accumulated. MSAs are similar to bank accounts, however their purpose is to pay for health expenses of an individual (or a family) (Dixon, 2002). From a theoretical point of view the MSA concept helps to reduce moral hazard occurring in the health insurance systems, at the same time coping with the future challenges posed by demographic trends (ageing societies).

Although the Medical Savings Accounts have been discussed in the international literature (e.g. Ham, 1996; Scheffler and Yu, 1998; Hsiao, 2001; Gratzer, 2002; Shortt, 2002; Schreyögg, 2004; Robinson, 2005), in practice they are applied only in a few countries in the world, where they complement publicly financed health care systems (Singapore and China) or supplement private health insurance markets (the United States and South Africa). Because of the necessity of health sector reforms, many countries show interest in

implementation of MSAs into their health care financing systems. In Europe the MSA concept has also been considered from a scientific approach (Henke and Borchardt, 2003), as well as from a practical perspective (Dixon, 2002; Johannssen, 2003; Kiszka and Sowada, 2007). Consequently, there are positive and negative findings about possible effects of implementing this form of financing into the contemporary health care systems (Saltman, 1998; Hurley at al., 2008; Kiszka and Sowada, 2007; Borda, 2009).

The purpose of the paper is to present the idea of Medical Savings Accounts and to examine the possibilities of MSAs incorporation into health care systems in European countries. The author reviews the most important arguments put in favour and against the use of MSAs in the health care financing and then considers two main approaches to MSAs application in the contemporary health care systems. These two models are represented by Medisave scheme adopted in Singapore and the system of Health Savings Accounts implemented in the United States. The last part of the paper presents a discussion about the possibilities of MSAs introduction in European countries. The author takes into consideration the existing health care financing conditions and other specific institutional, socio-economic and cultural factors as the main determinants for successful designing and implementation of the MSA scheme in a given country.

Concept of medical savings accounts

Medical Savings Account can be defined as a personalized savings account, on which compulsory or voluntary contributions are accumulated strictly to cover health care expenses. In other words, it is an instrument designed to cover health care expenses, that enables to spread the financial risk of illness over time (Dixon, 2002). The detailed principles of the MSA system including specific criteria for payments, interest earned and withdrawals can vary considerably depending on the MSAs` role in a health care system. As Schreyögg (2004) notes, in contrast to collective forms of financial security against the risk of illness, such as social health insurance, the system of MSAs provides for the risk to be covered by each individual. In the case of MSAs redistribution of income does not exist, however taking into account the formation of capital reserves for emergencies characteristic for the insurance method, MSAs can be referred to as self-insurance.

It is important to emphasize, that the value of savings collected by the use of Medical Savings Accounts is influenced by various macroeconomic factors (e.g. employment rate, inflation rate and wage growth) as well as - due to the investment component - the financial markets performance. The MSAs` sensitivity to financial markets and overall economic situation is associated with the risk of decline of the value of invested capital, which may, especially in the case of economic crisis, significantly reduce the possibilities of financing health care services with accumulated savings.

MSAs can be used to supplement the existing health care funding systems. They have generally been introduced for one of the following reasons (Hanvoravongchai, 2002; Thomson and Mossialos, 2008):

- To address the problem of moral hazard occurring in the health care sector;
- To encourage savings for the expected high costs of medical care in the future;
- To increase cost effectiveness of provided health care services;
- To mobilize additional funds for health care systems.

The concept of Medical Savings Accounts was originally developed in the United States in the 1970s in response to problems associated with the private health insurance market, such as moral hazard, adverse selection and rising administrative costs. Moral hazard is a phenomenon appearing in the private health insurance as well as publicly financed health insurance systems. Economic theory suggests that when individuals are covered by health insurance, they may take less care of their health because they know they will have access

to health care if they need it. They may also use more health care than they really need because this care is essentially free at the point of use. At the same time, because the health costs are borne by an insurer, the providers may supply more health care than is strictly necessary. Consequently, moral hazard can lower efficiency in the allocation of scarce recourses and increase health care costs (Thomson and Mossialos, 2008). Obviously, the simplest way to reduce moral hazard is the introduction of patient participation in the costs of provided medical services. MSA is built on the logic of cost sharing (Pauly and Goodman, 1995). MSAs` holders are not as likely to use health services and spend their own savings on them, as in the case of health insurance. Instead of "using or losing" the money they pay in health insurance premiums, the choice they now have is to "spend it or save it" (Robinson, 2005).

The MSA concept, contrary to private health insurance and publicly financed health systems, is based on individual, not collective, responsibility in the area of health care spending. The principle of solidarity is replaced here by the principle of individual accountability. MSAs do not involve risk pooling. Consequently, they do not involve any form of cross subsidy from rich to poor, healthy to unhealthy, young to old or working to non-working. Since the reimbursement of health care costs is limited to the value of savings accumulated on the account, MSAs do not protect against the risk of unexpectedly high medical expenses. The high-risk protection should be provided separately by tax or contribution-based public system or by private health insurance. In practice, MSAs are usually offered in combination with private high-deductible catastrophic health insurance plans.

Another potential advantage of MSAs is that they enable accumulating individual savings for the expected high costs of health care in the future. In a person's life cycle of saving capacity and health spending pattern can be noted that the average income and saving capacity are usually higher during economically active years than during retirement period. In contrast, the average level of health care expenditure is usually low at younger ages and increases during later years of life. Along this line of reasoning, the MSA system creates additional savings for covering future health care costs without the intergenerational burden that exists in pay-as-you-go systems, what seems to be more and more considerable due to demographic trends (ageing societies). In the shorter term, such individual savings also allow a person to accumulate resources during good times that can be drawn upon during subsequent bad times (Hanvoravongchai, 2002).

It should be noticed that the application of MSAs may increase consumer choice and reduce health care expenditures. MSAs may result in raising society's awareness about the current costs of purchased medical services, because in this case a patient decides to cover the cost of specified health care services from his / her own savings. Therefore, MSAs may stimulate the competition between medical providers, affecting the growth of discipline in the area of costs, as well as improving the quality of provided health care services.

The opponents put the stress on the imperfections of MSAs as a method of health care financing. First, it is argued that the main problem of moral hazard comes from health care providers rather than patients, and therefore, MSAs may not contain costs. The conducted studies have shown that provider behaviour has a larger impact on rising health expenses than consumers. The problem of supplier-induced demand results from the information asymmetry between providers and patients. Second, the MSA model is considered to be less equitable than comprehensive benefit systems (insurance or tax-based). Because there is no risk pooling, in the case of MSAs, the unemployed or chronically ill are very unlikely to accumulate enough savings.

The main arguments put in favour and against the application of MSAs in the health care systems are presented in Table 1. It should be added that the advantages and disadvantages of MSAs may refer to various health care financing systems. Consequently,

the effects of introducing the MSA model may be varied in countries with universal health care coverage and those with a large percentage of population uncovered.

TABLE 1. MAIN CLAIMS REGARDING THE APPLICATION OF MEDICAL SAVINGS ACCOUNTS IN THE HEALTH CARE SYSTEMS

Advantages	Disadvantages
MSAs prevent moral hazard and create incentives for wise health care purchasing decisions.	MSAs provide no risk pooling between individuals. Those with chronic diseases or those persistently unemployed may not accumulate enough savings for necessary health care.
Long term savings provide resources for individual health spending in later years of life. It lowers the burden on the young & employed, especially in a rapidly aging society.	If implemented voluntarily with comprehensive insurance schemes in a non-universal setting, MSAs will selectively attract those who are healthy (the cream skimming problem).
Introducing MSAs into the health financing system can free public funding to focus more on the poor or the underprivileged.	If cream skimming occurs, those who do not have MSAs are likely to face higher premiums because the remaining risk pool is smaller and has higher health risks.
Consumers` freedom to choose where they want to spend their money can make providers more responsive to their demands and promote price competition.	MSAs with a high deductible system can deter necessary health care especially for those with limited or no savings.
MSAs provide intertemporal risk pooling which limits the impact of economic cycles on health spending.	Patients may be weak bargainers relative to providers who may see MSAs as "freely" available funds. With the money in his/her account, MSAs can encourage immediate consumer spending on unnecessary services.

Source: Hanvoravongchai (2002).

Role of medical savings accounts in health care financing: two different approaches

Taking into consideration the reasons for application of MSAs in health care financing, there are various ways in which the MSA concept can be implemented in practice. However, on the basis of previous experience of countries which decided to introduce MSAs (Singapore, the United States, China, South Africa), it is evident that the idea of MSAs has been developing in two different directions. These two main approaches are represented by Medisave scheme adopted in Singapore and the system of Health Savings Accounts implemented in the United States.

Medisave scheme in Singapore

MSAs were first introduced in Singapore in 1984 as a part of a comprehensive government reform strategy in order to reduce public health expenditure. The high levels of cost sharing for households, particularly for hospital services, and limiting public financing to protect the lowest income people were established. As a result, by increasing the share of private financing a reduction in demand for unreasonable health services and an increase of competition among health care providers were expected. When the case of Singapore is considered, it is important to pay attention to the specific socio-economic conditions of this small country, including a rapid economic growth over the past few decades and extraordinarily high savings rate (over 40% of income goes into savings)

(Maynard and Dixon, 2002), which makes that the experience of Singapore should be evaluated with caution in the context of introducing MSAs in other countries.

Medisave - a program of compulsory, individual Medical Savings Accounts was separated organizationally as a part of the Central Provident Fund (CPF) - a system of compulsory savings for pensions and other purposes. All employed Singapore residents are required to contribute to Medisave, which gives about 80% of the population, but a large group of foreign immigrants (about 1 million people) and a part of the self-employed still remain outside the program. Contributions to Medisave, like all the CPF are paid regularly and financed partially by an employer and an employee and the amount of contribution transferred directly to Medisave varies depending on an employee's age and the level of income. There is a minimum total amount that each participant should accumulate by the age of 55, known as Medisave Minimum Sum (from 1 July 2011 this amount is SGD 36,000). The members are able to withdraw their Medisave savings in excess of this amount at or after age 55. There is also the Medisave Contribution Ceiling, which represents the maximum balance a member may have in his/ her account (SGD 41,000 from 1 July 2011) (Central Provident Fund Board, 2011). All Medisave contributions, investment earnings and withdrawals enjoy tax free status (Asher et al., 2008). The money accumulated in the MSAs may only be used to cover various costs associated with treatment in a hospital approved by the Ministry of Health (such as: daily ward charges, doctors` fees, surgical operations, tests, medicines, rehabilitation services), as well as some outpatient expenditures[1]. In the case of a participant's death the accumulated fund is inherited.

Because individual savings accounts would be insufficient to cover large hospital costs, Medisave is supplemented by two voluntary insurance programs. MSAs` holders can purchase additional health insurance providing protection against catastrophic illness and hospital expenses (Medishield). This insurance is relatively cheap, however it does not cover pre-existing illnesses or certain categories of treatments such as maternity-related costs and treatment for mental illnesses. By 2005, 54% of Medisave members also held this additional voluntary insurance (Asher et al., 2008). Moreover, Medisave participants may join Eldershield, which is a form of voluntary insurance providing long-term care to old people requiring intensive levels of care. In 2006, approximately 86% of Medisave members also participated in Eldershield.

The introduced reform of the health care system in Singapore has significantly changed the structure of health care financing sources. The share of public spending in total health expenditure fell from 75% in 1980 to about 36% in 2003. Despite the introduction of mandatory MSAs and voluntary private health insurance schemes, over 60% of total health care expenditure is still borne out of current incomes of households. Evidence indicates that hospitals have become more productive and efficient and that patients are satisfied with the quality of care. The record of MSAs on cost containment is still unclear (Folland et al., 2007).

Health savings accounts in the United States

The different approach to implementation the MSA concept in practice is represented by the system of Health Savings Accounts in the United States. Health care in the U.S. is funded from a mix of private and public sources, with a predominance of the former, especially in the form of private health insurance. In 2003, under the Medicare Prescription Drug, Improvement and Modernization Act substantial tax relief has been introduced for people who established Health Savings Accounts (HSAs) linked to qualified high-deductible health insurance plans. A person (or an employer on behalf of an employee) may make contributions to an HSA as long as the account holder is covered by

[1] There are maximum limits of the amount covered per day and per medical intervention.

a qualified high-deductible health plan[1] with an annual deductible not less than USD 1,200 for individuals and USD 2,400 for family coverage. Maximum out-of-pocket costs should not exceed a legislated level that is USD 5,950 for individuals and USD 11,900 for families. A maximum annual contribution is also fixed in law and stood at USD 3,050 for individuals and USD 6,150 for family plans (U.S. Department of the Treasury, 2011). Regardless of the source of contributions, the account is owned by an employee and it is portable from job to job. The important advantages of HSAs are the above mentioned tax exemptions concerning: payments made to an account, interests earned and expenditure on qualified medical services. Withdrawals from the account for purposes other than medical expenses are possible, but taxable. Health insurance with accompanying HSAs may be purchased as group or individual policies, however the individuals represent only about 25% of all HSAs` holders. HSAs can be managed by an insurer or by a financial institution cooperating with the insurance company. The insurer usually offers a network of preferred health care providers who provide health services at negotiated lower rates.

The proponents of HSAs predicted that nearly 75% of employers would decide to purchase these health plans by 2006. In fact, less than 15% of employers offer this type of health care coverage for employees. In January 2008, about 6.1 million Americans had HSAs coupled with appropriate health insurance, representing about 3.3% of the privately insured population under 65 (Glied, 2008).

TABLE 2. COMPARISON BETWEEN MEDISAVE SCHEME IN SINGAPORE AND HSA SYSTEM IN THE U.S.

Criterion	Singapore (Medisave)	United States (Health Savings Accounts)
Objective	Private resource mobilization; reduction of demand for health care services	Cost containment (preventing moral hazard); expansion of private health insurance
Enrolment	Compulsory	Voluntary
Administration	Public (Central Provident Fund)	Private (insurance companies)
Contributor(s)	Employer and employee	Either employer or employee
Financing form of high-risk protection	Voluntary - social health insurance (Medishield) or privately provided	Compulsory - private high-deductible health insurance
Premiums or contributions calculation	Income-dependent contributions with minimum and maximum limits	Risk-based calculation; maximum limits
Tax exemptions	For contributions to and interest from MSA	For contributions to and interest from HSA (up to a limit)
MSAs/ HSAs spending	Eligible for enrolee and family members; restricted to qualified inpatient services and selected outpatient treatments	Only for enrolee's health care; limited to qualified health care services
Withdrawals other than health expenses	Not allowed	Allowed, but subjected to taxation
Annual interest payment	Variable; depending on the market rate	Variable

Source: Author's own study based on Hanvoravongchai (2002) and Schreyögg (2004).

The main reasons for the introduction of HSAs in the United States were expected reduction of health care expenditure and improving the efficiency of health care services by exposing patients to greater cost sharing. In addition, it was predicted that the health plans related to HSAs would influence the cost of insurance coverage (catastrophic insurance with a high deductible is cheaper than traditional one) and would increase the demand for health insurance. On the other hand, the functioning of HSAs simultaneously with traditional health insurance products may lead to the situation in which young people in good health are more likely to terminate the traditional policies and to purchase cheaper

[1] Alternatively, participation in the health program, for example HMO, that meets the statutory requirements.

insurance with an accompanying HSA. Consequently, it may cause an increase in premiums for traditional health insurance and a growing percentage of uninsured. Due to the relatively short period of functioning of Health Savings Accounts in the United States, there are no comprehensive studies confirming unequivocally the impact of HSAs on the health care system, particularly on the level of costs. Some studies find that the holders of health plans associated with HSAs are often less satisfied with the range of coverage, in comparison with the insured under traditional health insurance, and more likely to avoid or delay the decision to make use of health care (Glied, 2008).

Table 2 presents the comparison between two considered MSA/HSA systems according to the selected criteria. Summarizing, Singapore has chosen a compulsory, publicly financed MSA system with income-dependent contributions and voluntary high-risk health insurance. On the other hand, HSA system introduced in the U.S. voluntarily supplements the existing private health insurance market through a combination with high-deductible health insurance calculated on a risk basis.

Possibilities of application of medical savings accounts in European countries

Based on the limited international experience of MSAs/ HSAs, it is difficult to conclude whether the introduction of this form of financing could be beneficial for the health care systems in European countries. The limited empirical evidence does not allow to confirm unequivocally, that the MSAs reduce moral hazard, improve the efficiency of health insurance and result in lower costs in health care. In the case of European countries, it should be stressed that the health financing policy generally demonstrates a commitment to collective responsibility and any new solutions in this area must be consistent with this principle. The MSA systems that increase the inequities in access to health care services and do not protect the poor and the chronically ill are not likely to be implemented. Recently, in the face of problems occurring in the publicly financed health care systems, some European countries have been considering the introduction of MSAs as an additional method of health care funding. For example, in the Czech Republic a group of reformers has proposed the integration of the social health insurance system with Personal Health Accounts, through which patients would be enabled to become respected partners to health insurers and healthcare providers (Chawla, 2007). This proposal is designed to allow more independence and responsibility for health care costs on the part of the citizens. Personal Health Accounts could be used to buy supplementary insurance or to pay for medical care directly (Tchaidze and Westin, 2010). Presently, the only existing example of MSAs in Europe context is in Hungary, where savings accounts that benefit from tax subsidies are used to cover statutory cost sharing or out-of-pocket payments for health care services obtained in the private sector (Thomson et al., 2009).

When new possibilities for health care financing are discussed, first of all, the specific conditions and the existing health care financing systems should be analyzed. In European region significant differences in levels of health expenditure incurred by particular countries can be noticed (Table 3). It reflects the differences in levels of economic development and the area of conducted health policy. The substantial differentiation is especially evident, when we compare the total health care expenditure per capita, expressed in USD purchasing power parity (PPP), incurred by central and eastern European countries with the respective values noted in the case of the "old" European Union members. The systematic increase of total expenditure on health care has been noticeable generally for all European countries. This tendency has become a significant worldwide problem and it is expected to continue. Among the factors that contribute to this situation the most important seem to be the following: increasing costs of health care services, demographic processes (ageing populations), advances in medical technology and

infrastructure and increasing demand for high quality medical services (Steinmann and Yeung, 2007; Borda, 2008). As Table 3 shows, in 2008 total health expenditure measured as a percentage of GDP ranged from approximately 5–6% for Estonia, Lithuania, Romania and Turkey to over 10% in France, Austria, Belgium, Germany, Republic of Moldova and Switzerland. In most cases the considered ratio has been increasing gradually, which indicates that for most analyzed countries the total expenditure on health increases faster than the growth rate of GDP. The average value of the ratio calculated for all European Union members increased from 7.94% in 1998 to 9.01% in 2008 (WHO, 2011).

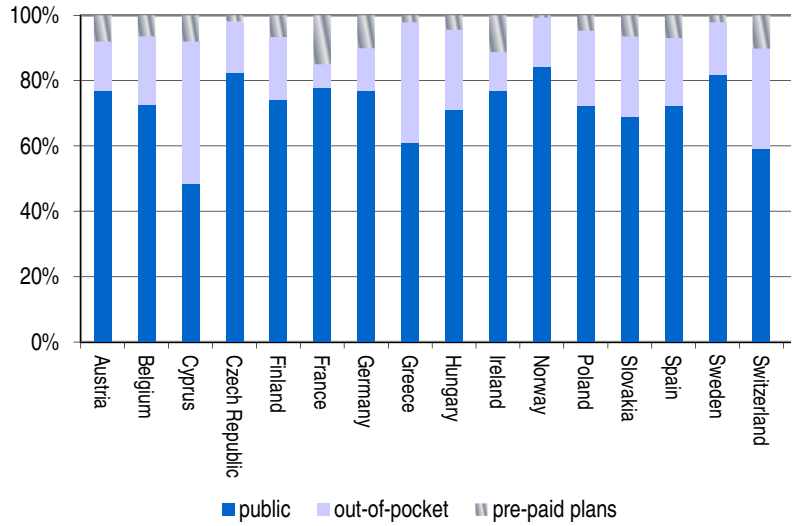
TABLE 3. TOTAL HEALTH EXPENDITURE INDICATORS IN THE SELECTED EUROPEAN COUNTRIES (1998-2008)

Country	Total health expenditure PPP$ per capita			Total health expenditure as % of GDP		
	1998	2003	2008	1998	2003	2008
Austria	2 572	3 200	3 836	10.0	10.3	10.1
Belgium	2 111	2 781	3 392	8.7	9.2	9.7
Cyprus	1 625	2 325	3 312	5.5	6.2	6.7
Czech Republic	926	1 339	1 684	6.6	7.4	6.8
Denmark	2 176	2 832	3 630	8.3	9.3	9.9
Estonia	468	668	1 226	5.6	5.0	5.9
Finland	1 666	2 254	2 979	7.4	8.1	8.4
France	2 374	3 074	3 778	10.1	10.9	11.1
Germany	2 483	3 088	3 692	10.2	10.8	10.4
Greece	1 382	2 028	2 852	8.4	9.0	9.7
Hungary	763	1 284	1 419	7.1	8.3	7.4
Italy	1 830	2 271	2 825	7.7	8.3	9.0
Lithuania	487	784	1 178	6.1	6.5	6.2
Netherlands	2 054	2 833	3 749	8.1	8.9	9.1
Norway	2 538	3 837	4 989	9.3	10.0	8.6
Poland	559	748	1 162	5.9	6.2	6.6
Republic of Moldova	91	131	318	7.1	6.8	10.7
Romania	244	414	665	4.5	5.4	4.7
Slovakia	584	1 024	1 717	5.7	7.5	7.8
Sweden	1 982	2 829	3 423	8.2	9.4	9.1
Switzerland	2 982	3 779	4 620	10.1	11.3	10.5
Turkey	295	502	695	3.6	6.0	5.0
United Kingdom	1 558	2 324	3 230	6.7	7.8	9.0
EU Members	1 661.12	2 237.3	2 877.46	7.94	8.74	9.01

Source: (WHO, 2011)

Taking into consideration the mechanisms used to finance health care, public funds (compulsory social health insurance contributions and/ or tax revenue) traditionally play the dominant role in most European countries. Approximately 69-84% of total health expenses are public funded (Figure 1). The predominant role of public sector expenditure is especially evident in the case of Norway (84.2% of total health expenditure in 2008), the UK (82.6%), the Czech Republic (82.5%) and Sweden (81.9%). Only a few of the analyzed countries (Cyprus, Switzerland and Greece) are characterized by a relatively small share of public funds in the health care financing (below 61%). It is accompanied by a relatively higher, than in the case of other states, level of private health expenditure, mainly in the form of direct households` spending on health care services (out-of-pocket payments).

FIGURE 1. TOTAL HEALTH EXPENDITURE ACCORDING TO THE MAIN SOURCES OF FINANCING IN THE SELECTED EUROPEAN COUNTRIES IN 2008



Source: Author's own calculations based on data from (WHO, 2011)

Generally, in European countries an increase of using private funds to cover health care expenses can be observed. This phenomenon results directly from conducted health policy, in particular the tendency to shift partially the burden of health care financing towards the patients (in the form of partial or total payments for some medicines and health care services not reimbursed by the public system), as well as it is related to problems in getting the quick access to the medical services financed from public sources. Out-of-pocket payments have the dominant share in the structure of private expenditure on health care incurred by European countries. Out-of-pocket payments include all costs paid directly by the consumer, such as direct payments, formal cost sharing and informal payments. Pre-paid plans (including spending on private health insurance and medical subscriptions) usually represent less than 10% of total health expenditure. Exceptions are countries with relatively well-developed voluntary health insurance markets (France (14.99%), Ireland (11.27%), Switzerland (10.23%) and Germany (10.07%)).

The possibilities of introducing MSAs in the case of European countries were criticized in the international literature (Ham, 1996; Saltman, 1998), however nowadays more empirical evidence is needed to evaluate their impact on the health care financing systems. The institutional, socio-economic and cultural conditions, specific for a given country, determine the possible people's interest in MSAs and potentials for their development. Besides the above mentioned compatibility of the MSA system with the goals of conducted health policy, the following conditions seem to be crucial for its implementation:

- Appropriate statutory regulations including tax incentives for the MSA holders - what may be questionable in times of economic crisis;
- Level of inhabitants` incomes and the tendency to accumulate savings (savings rate);
- Level of development of health insurance market that can provide the supplemental cover for catastrophic health expenses;

- Availability and transparency of information about the cost of provided health care services;
- People`s awareness in the area of taking the responsibility for their own health.

The introduction of MSAs as an additional, voluntary form of health care financing in European countries would result in an increase of the share of private funds and "shifting" a part of the existing out-of-pocket expenses towards pre-paid plans. Therefore, voluntary and privately financed MSAs can be used to cover the mandatory co-payments in the public system as well as to finance additional services enhancing the standard of health care (e.g. better accommodation in hospitals). In the case of publicly financed MSA system, this solution can be applied as a method of long-term care financing for older people.

Summarizing, more attempts should be made to better recognize the possibilities of MSA system implementation in a given country, taking into account its specific institutional, socio-economic and cultural conditions. In European countries a wide range of options for designing MSAs is possible, because each country has its own set of objectives and pre-existing financing systems (Hanvoravongchai, 2002). The most important aspects that should be considered at the stage of designing the MSA system include the following:

- Coverage - voluntary or mandatory and restricted to employees and their dependents or universally applicable;
- Entities managing MSAs and regulations to ensure their long-term financial security and transparency of management (investment criteria);
- Amount and character of contributions - mandatory or voluntary, with maximum or/ and minimum limits, the manner of funding (with or without employer's participation);
- Conditions on withdrawals - just to cover the costs of certain health care services (including family members), or it is also possible to withdraw money for "non-medical" purposes;
- Accompanying catastrophic health insurance - voluntary or mandatory, the range of coverage, the level of deductibles, policy exclusions, etc.

Conclusion

The economic theory suggests that Medical Savings Accounts may allow to overcome the problems characteristic for private health insurance, however limited use of the MSAs in practice makes it difficult to draw conclusions regarding their impact on the health insurance market, or in a broader perspective on the health care systems. Certainly, due to the lack of risk pooling, MSAs should be considered as a component of the comprehensive health care financing system in a given country linked to an appropriate insurance providing cover for catastrophic health expenses. In practice, this insurance may be an obligatory condition for the establishment of MSA (the United States) or a voluntary supplement to an existing account (Singapore).

In Europe, because of systematically rising health expenditure and difficulties in functioning of the obligatory health systems additional methods of funding health care, such as MSAs, seem to be more and more needed. MSA concept can be implemented in various ways in practice, and for European countries, with significantly differentiated health care systems and their development conditions, it is impossible to design one universal model of MSAs. When the chances for introduction of MSAs in Europe are discussed, relatively more attention is paid to the adverse consequences of this solution, in particular the increased inequality in access to health care services than to the possibility of raising additional funds for the health sector and reducing moral hazard. However, successive attempts should be made in order to better recognize the possibilities of MSAs implementation in particular countries and to predict the positive and negative effects of

this solution in the context of the specific circumstances of the existing health care systems.

References

Asher, M., Ramesh, M., Maresso, A., 2008. "Medical savings accounts in Singapore," Euro Observer, Vol.10, No.4, pp.9-11

Borda, M., 2008. "The role of private health care financing in the Central and Eastern European countries," Economics, Vol.83, pp.100-109

Borda, M., 2009. "Medical savings accounts as an alternative or supplement to private health insurance," in: Sulkowska, W., (Ed.), Opportunities and Threats for Insurance Markets in Central and Eastern European Countries, Research Papers of Cracow University of Economics, No.7, pp.217-23

Chawla, M., 2007. "Health Care Spending in the New EU Member States: Controlling costs and improving quality", World Bank Working Papers No.113, June

Dixon, A., 2002. "Are medical savings accounts a viable option for funding health care?", Croatian Medical Journal, Vol. 43, No.4, pp.408-16

Folland, S., Goodman, A. C., Stano, M., 2007. The economics of health and health care, Pearson Education, Upper Saddle River, New Jersey

Gratzer, D., 2002. "It's time to consider medical savings accounts," Canadian Medical Association Journal, Vol. 167, No.2, pp.151-52

Glied, S., 2008. "Health savings accounts in the United States," Euro Observer, Vol.10, No.4, pp.5-6

Ham, C., 1996. "Learning from the tigers: Stakeholder health care," Lancet, No.347, pp.951-53

Hanvoravongchai, P., 2002. "Medical savings accounts: lessons learned from limited international experience", WHO Discussion Paper No.3, Geneva

Henke, K.-D., Borchardt, K., 2003. "Capital funding versus pay-as-you-go in health care financing reconsidered," CESifo DICE Report - Journal for Institutional Comparisons, Vol.1, No.3, pp.3-8

Hsiao, W. C., 2001. "Commentary. Behind the ideology and theory: What is the empirical evidence for medical savings accounts?", Journal of Health Politics, Policy and Law, Vol.26, No.4, pp.733-37

Hurley J., Guindon, G. E., Rynard, V., Morgan, S., 2008. "Publicly funded medical savings accounts: Expenditure and distributional impacts in Ontario, Canada," Health Economics, Vol.17, No.10, pp.1129-151

Johannssen, W., 2003. "Demographic developments, full funding and self-regulation: The foundations of the social health insurance of the future," The Geneva Papers on Risk and Insurance - Issues and Practice, Vol. 28, No. 2, pp. 351-67

Kiszka, K., Sowada, Ch., 2007. "The Singapore model of medical savings accounts. Estimate the opportunities of implementation into the Polish health care system," Health Care Research Papers - Public Health and Management, No.1-2, pp.95-105

Maynard, A., Dixon, A., 2002. "Private health insurance and medical savings accounts: theory and experience," in: Mossialos, E. et al., (Eds.), Funding health care: Options for Europe, Open University Press, Buckingham, pp.109-27

Pauly, M. V., Goodman, J. C., 1995. "Tax credits for health insurance and medical savings accounts," Health Affairs, Vol.14, No.1, pp.125-39

Robinson, J. C., 2005. "Health savings accounts - the ownership society in health care," New England Journal of Medicine, Vol.353, No.12, pp.1199-202

Saltman, R. B., 1998. "Medical savings accounts: a notably uninteresting policy idea," European Journal of Public Health, Vol.8, No.4, pp.276-78

Scheffler, R., Yu, W., 1998. "Medical savings accounts: A worthy experiment," European Journal of Public Health, Vol.8, No.4, pp.274-76

Schreyögg, J., 2004. "Demographic development and moral hazard: Health Insurance with medical savings accounts," The Geneva Papers on Risk and Insurance, Vol.29, No.4, pp.689-704

Shortt, S., 2002. "Medical savings accounts in publicly funded health care systems: Enthusiasm versus evidence," Canadian Medical Association Journal, Vol.167, No.2, pp.159-62

Steinmann, L., Yeung, R., 2007. "To your health: Diagnosing the state of healthcare and the global private medical insurance industry", Sigma, No.6, Swiss Reinsurance Company

Thomson, S., Foubister, T., Mossialos, E., 2009. "Financing health care in the European Union. Challenges and policy responses," European Observatory on Health Systems and Policies, WHO

Thomson, S., Mossialos, E., 2008. "Medical savings accounts; can they improve health system performance in Europe?", Euro Observer, Vol.10, No.4, pp.1-4

Central Provident Fund Board, 2011. CPF Contribution 2011, http://www.cpf.gov.sg

U.S. Department of the Treasury, 2011. 2010 HSA Indexed Amounts, http://www.ustreas.gov

WHO, 2011. WHO European Health for All Database (HFA-DB), http://data.euro.who.int/hfadb, 1998-2008