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Open pension funds in Poland: the effects of the pension privatization process

Abstract

Since their establishment in 1999, the Open Pension Funds (OPFs) have comprised a mandatory capital pillar in the pension system of Poland. The paper's objective is to analyze the principles under which the OPFs function and assess their past and anticipated future impact on the state of the country's public finances, particularly on the public debt. The analysis also considers the past and potential effects of the OPFs existence from the point of view of future levels of old-age pension. The studies are targeted at determining the threats connected with further maintenance of the OPFs from the point of view of both public finance stability and pension system security.

Keywords: pension system, mandatory second pillar, open pension funds, pension reform

Introduction

The mandatory capital pillar, established in 1999 in the Polish pension system, has triggered a significant worsening of the situation with Poland's public finances. Since 1999, half of the growth in Polish public indebtedness is due to the Open Pension Funds (OPFs), while in the entire public debt of Poland, the debt due to introduction of the capital pillar constitutes over one-third. Following annual increases from 2013 to 2017 in pension contributions transferred to OPFs, this debt will grow at a fast pace, causing an increasingly higher threat of insolvency. From the point of view of a future pensioner, basing a significant part of a pension benefit on the effects of contributions invested in the financial market is seriously detrimental. The risk related to this market means the possibility of significant losses of assets gathered in pension funds. Moreover, the fees and commissions charged over the decades by private institutions managing OPFs will

cause a significant reduction in the resources intended for future pensions. Because of the huge damage to public finances and threats to future pensions, the mandatory capital pillar should be totally liquidated.

The reform of pension systems in the world

Pension systems in the world have been undergoing constant changes, although in the highly developed countries these changes have been relatively small over the last several years. They did not undermine the principles under which these systems were shaped during the post-war period. The situation was different in the case of some countries usually counted in the group of developing countries, including those of the Central and Eastern Europe region. The significant impact on the direction of reforms undertaken in these countries since the mid- '90s was presented in 1994 by the World Bank in the report Averting the Old Age Crisis [World Bank, 1994]. In this report, the Bank recommended construction of a pension system based on three pillars. The first, which was mandatory and was financed from the state budget from pension contributions and taxes deducted from the currently employed, was to ensure at least a minimal benefit for retirees. The second pillar, defined as the capital pillar, was to be created from a portion of contributions previously transferred to the first pillar. The Bank also postulated this capital pillar as mandatory, while a source of pensions paid from it would be financial assets managed by private institutions. Complementary to those two pillars was to be the third pillar, within the scope of which certain persons could voluntarily invest capital in the financial market.

The conception presented by the World Bank was based on increasingly obvious negative demographic tendencies that could cause incapacity of the traditional repartition pillar in the future. The multi-pillar character of the system proposed by the Bank was to be a way to reduce the risk for public finances caused by the ageing process in society. This led to the slogan propagated by this institution: security through diversity. Exposing demographic concerns was the factor that was to mobilize at least some countries to abandon the traditional, solidarity-based pillar on behalf of market solutions in creation of old-age pensions.

These arguments provided the World Bank with grounds to question the traditional pillar of the pension system, and to recognize economic liberalism as the base for development of this system through connecting pension benefits with functioning of the financial markets. Thus, the essential concept of social insurance - a method of reducing the risk to personal income of the elderly in view of their age and declining working capabilities - was undermined. The World Bank had created a specific ideology that advocated "propelling privatization" of a part of the pension system.

The experiences with pension reform in Chile, inspired by neo-liberal principles and implemented in 1981 under authoritarian rules [Antia, Lanzara, 2011], were of great sig-

nificance for the promotion of the World Bank's vision of the pension system. As a result, financial institutions were provided with extraordinary sources of profits for decades as enormous flows of financial resources were diverted to them due to the state obligation. Thus, huge groups of society were taxed on behalf of a few private companies. It encouraged financial institutions, particularly those operating on the international scale, to promote this solution and make efforts, with the support of international financial organizations, to introduce it in other countries.

The structure of pension systems in the world

In 2005, within the framework of the World Bank, a slightly modified classification of the pension system components [Holzmann, Hinz, 2005] was proposed including five pillars: 1) pillar "zero", assurance of a social old-age pension, not related to duration of insurance, 2) mandatory pillar One, of repartition character, 3) mandatory pillar Two, of capital character, 4) voluntary pillar Three, various forms of private savings, 5) voluntary pillar Four, including formal social welfare programs (in the area of health care and housing), non-financial assets (including properties), and the so-called reverse mortgage. In practice, in most countries the last two pillars are not regarded as parts of pension systems because of their optional character.

Pillar zero, most often assuming the form of a minimal state old-age pension, is sometimes regarded as the social welfare system. Its objective is providing minimum subsistence in old age, as well as preventing poverty and social exclusion. In practice, it may concern only the poorest elderly people, or it may have a general character. Then, all people who meet the obligatory criteria regarding age and length of citizenship are entitled to some minimal old-age pension.

The mandatory first pillar (pay-as-you-go – PAYG) of the pension system has a repartition character, which means that pension benefits are paid from the contributions transferred to the system by the currently employed (any deficit is covered from the budget). The right to this benefit is usually connected with minimal insurance duration and payment of contributions into the system during that period. Pillar One may be either a system with a defined benefit (DB) or with a defined contribution (DC). In the first case, the level of an old-age pension most often depends on the amount of received remuneration and work seniority. The level is usually measured by the so-called replacement rate, i.e. the relation of an old-age pension to the last remuneration, or the ratio of the average pension to average earnings in the economy (benefit ratio). In the second case, it is only known what contributions should be paid to the system, and the level of an old-age pension is not determined. At its best, in this system the state may only guarantee some minimal oldage pension or apply some other mechanism providing aid to the poorest. However, this mechanism is closer to the social welfare system than to the pension system. The mandatory second pillar of the pension system means that a portion of pension contributions deducted from the earnings of the currently employed, instead of going to pillar One, is transferred to pension funds to be invested in the financial market. Private financial institutions are usually entrusted with the management of these pension funds. The second pillar almost entirely comprises the defined contribution system; therefore, it contains no guarantees – neither public nor private – concerning the level of future old-age pensions that would come from this pillar.

Region	The number of countries	Pillars pension system		
		Pillar Zero	Pillar One	Pillar Two
East Asia and Pacific	28	11	17	1
East Europe and Central Asia	30	17	30	14
Latin America and the Caribbean	37	19	29	10
Middle East and North Africa	20	2	18	1
South Asia	8	4	4	1
Sub-Saharan Africa	46	8	33	2
High-income OECD countries	24	20	20	3
World	193	81	151	32

TABLE 1. Structure of pension systems by regions of the world in 2011

Source: own elaboration based on: [Pallares-Miralles, Romero, Whitehouse, 2011, p. 40].

Of the analyzed 193 countries (Table 1), 81 have some form of pillar zero, but the most common solution is the mandatory pillar One, which in 2011 was reported as operating in 151 countries. Particularly noteworthy is the fact that almost all high-income OECD countries, including all EU-15 countries with the exception of Sweden and Italy, are still applying the defined benefit principle in this pillar [OECD, 2011, p. 107]. It means that these countries respect the principle of ensuring a particular level of income for pensioners, in accordance with the countries' obligatory social standards. Among the Central and Eastern European countries that accessed the European Union in 2004 and 2007, the defined contribution principle was applied in Poland and Latvia [European Commission, 2012, p. 87].

Significantly, mandatory pillar Two of the pension system has been introduced in only 32 countries, including 14 in Eastern Europe and Central Asia, and 10 in Latin America and the Caribbean. It should be noted that mandatory pillar Two was established in only three OECD countries, all classified as high-income countries. Therefore, pillar Two has generally been established in the low-income countries within the group of developing countries. This means that highly developed countries have not adopted the obligation of transferring pension contributions to the management of private institutions. The three OECD countries that have adopted mandatory pillar Two – Australia, Norway and Sweden – are among the wealthiest countries in the world and they have had huge budgetary surpluses for a long time (although the budgetary situation in Sweden has deteriorated slightly in recent years, partly because of the necessity to maintain pillar Two). The situation of these countries contrasts with that of the other developed countries, the majority of which have had budgetary deficits for decades and increasing public debt. Transition of a part of pension contributions to pillar Two, resulting in a loss of public means for the payment of current pensions within the scope of pillar One, would cause a growth of additional debt. Moreover, there is no social acceptance in these countries for the idea of building pensions via the financial market because of the current high-risk situation.

Kotlikoff [1999], characterizing the World Bank approach toward reforming the pension system, described the "irrational" character of the mandatory capital pillar. He pointed out that in practice, pension contributions directed to this pillar are mostly invested in government bonds. In the new system, contributions are transferred to pension funds, to the state budget, and then the pension funds retransfer these contributions to the government in the form of loans. In 1999, warnings concerning the irrationality of the mandatory second pillar were presented by Miles [1999] indicating that the costs of the capital pillar are very high. The cost is a burden on both current and future generations in the form of tax increases and reduction in public expenditures. Miles also underlined the fact that, as they are propagated by partisans of this pillar, potential profits from investing pension contributions are burdened with high risk.

Holzmann [2012], in his extensive analysis of world pension systems, indicated that from the very beginning of the existence of mandatory capital pillars in various countries, the high fees charged by financial institutions managing pension funds have been subjected to severe criticism. He pointed out these charges may significantly decrease future old-age pensions. If the charges amount to 100 base points or more (i.e. by 1% or more), it reduces the final pension benefit by 20% or more.

The reform implemented in the Latin American countries, including establishment of the mandatory pillar Two, proved to be difficult to maintain; the crisis that began in 2007 was instrumental in this case. In some of these countries, it produced an incentive to reverse these reforms because of a snowballing public debt and a drastic drop in the funds' assets due to fees charged by financial institutions, as well as a drop in market prices of shares and other financial instruments. In 2008, Chile introduced serious changes in the pension system to reduce the negative effects of pension privatization within the framework of pillar Two. In Argentina, this pillar was entirely abandoned and the funds gathered within its scope were transferred to the public system [Mesa-Lago, 2012, p. 3]. A report published in 2010 by the Chilean National Research Center for Alternative Development Centrum – CENDA (Centro de Estudios Nacionales de Desarollo Alternativo), presenting the results of pension reform in Chile in 1981–2009, indicates that financial institutions managing mandatory pension funds benefited more from this reform than the fund members [CENDA, 2010]. The practice showed that these funds are not able to ensure the previously promised pensions and that the obligation of providing 60% of the fund members with at least minimal old-age pensions burdened the state. Moreover, it turned out that the system of private pension funds, resulting in a huge burden on public finances, became the source of enormous profits for the institutions managing the funds and made possible the seizure of significant public means by selected private companies.

Experience proved that the mandatory capital pillar of the pension system managed by private financial institutions does not solve – or even mitigate – the problems resulting from the ageing of society; instead it creates numerous new threats. Nicholas Barr (London School of Economics) indicated in 2001 that the capital pillar is just as prone to demographic tendencies as the repartition system [Barr, 2001]. It should be added that the irrational character of this pillar, leading to quick acceleration of a public debt in the countries that introduced this pillar, as well as the risk it generates for future pensioners, initiated a gradual process of abandoning this element of the pension system not only in Latin America, but also on other continents. Some countries have managed to fully liquidate this pillar, while others are successively reducing the transfer of pension contributions.

Union regulations concerning the pillar pension system

The regulations adopted at the level of the European Union in respect to social insurance¹ stipulate coordination of actions initiated by the member states within this area. Therefore, harmonization of the insurance systems is not anticipated. Each member state has freedom in shaping them, including the amount of benefits paid within their scope, persons entitled to these benefits and the level of contributions. Regulations No. 883/2004 and 987/2009² define mutual requirements that should be met by governments of the member states when executing domestic law. National legislation should ensure equal treatment and non-discrimination of persons exercising the right to free movement within the European Union. In respect to pensions, the above-mentioned so-called coordination regulations define the following principles of shaping the pension system, significant from the point of view of the uniform market:

- duration of insurance periods in accordance with regulations in one country are taken into account in assessing benefit entitlements,
- pension entitlement is not dependent on residency in the country guaranteeing an old-age pension,

- each member state in which a person was insured for at least a year is obliged to pay an old-age pension,
- there are no transfers of pension entitlements to the pension system of another member state.

As regards directives directly or indirectly connected with particular pillars of the pension systems, the following should be mentioned:

- 1. Directive 2003/41/EC of June 3, 2003 on the activities and supervision of institutions for occupational retirement provision (IORP Directive). The Directive enables institutions to exercise freedom of capital flow obligatory in the internal Community market as well as the freedom to provide services, and also management of company pension funds in the enterprises located in other member states.
- 2. Directive 2008/94/EC of October 22, 2008 on the protection of employees in the event of the insolvency of their employer (Insolvency Directive), obligating the member states to pass necessary regulations laying down the rules and scope of such protection. This is also in respect to the employees' rights respective to company pension systems.
- 3. Directive 98/49/EC of June 29, 1998 on safeguarding the supplementary pension rights of employed and self-employed persons moving within the Community, obliging member states to treat such persons no worse than persons moving within the country's territory.
- 4. Directives concerning life insurance, enabling insurance activity and freedom of insurance services within the entire Community. In 1979, the so-called First Life Directive was adopted on life insurance. In 2002 and 2009 the regulations were seriously amended and developed in order to provide additional protection to the insured.
- 5. Directive 2009/65/EC of July 13, 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS). It establishes the framework of investment funds and establishes rules for their operation in the unified Community market.
- 6. Directive 2004/39/EC of April 21, 2004 on markets in financial instruments (MFID), which objective is to protect investors, increase competition, and promote competition in the sector of financial services.

The Directive 2004/39/EC concerns a wide range of investment services and financial operations, including trade in monetary market instruments, securities, units of investments funds, and derivative instruments. The Directive introduced the obligation on financial institutions, including banks and broker's offices, to inspect the clients' knowledge regarding investment products and risk related to the investment in these products before concluding the contract for providing investment services. The regulation is intended to ensure that customers learn about the risk and consciously choose both the products as well as connected with them financial services.

It should be pointed out that inherent in the mandatory capital pillar dependency of part of the future pension on investment in the financial market contradicts the philosophy of investing in this market implied by the MFID directive. Investing in the financial market is connected with high risk, which may eventually result in a drastic pension reduction. According to this Directive, such risk may be only taken voluntarily and advisedly. It is a particularly significant question from the point of view of a future retiree, as a pension benefit objective is providing minimum subsistence after termination of economic activity. Therefore, from the societal point of view, it is unacceptable to expose these resources to the risk connected with financial market. This aspect is strongly accentuated by Riesco in his assessment of the mandatory private pension funds functioning in Chile since 1981. He points out that these funds should be completely liquidated, as the dependency of pensions of over 90% of Chilean pensioners on a roulette game is inadmissible, considering investment in financial instruments as such a game. The practice of the almost 30-year period of the Chilean OPFs showed that the majority of these fund members did not manage to obtain any pension. In order to provide minimum subsistence means after transition into retirement, the state pledged to pay benefits from the budget [Riesco, 2010].

The structure of pension systems in the EU countries

The most important element of the pension systems in all European Union countries is the repartition pillar, within the framework of which the pension amount depends on remuneration and duration of employment. In nine EU member states, besides this mandatory pillar, a second mandatory pillar of capital character was also established in which private financial institutions were entrusted with management of the funds derived from pension contributions. Pillar Two was established in eight countries of Eastern and Central Europe, but only in Sweden among the countries of the "old" EU. However, considering the numerous differences (which are mentioned below), the mandatory capital pillar in Sweden is a specific solution and is different from those functioning in the countries of Eastern and Central Europe.

In some member states there are also employee (company) pension funds, functioning either according to the principle of setting up holdings entered in the balance of the employer company, or transferring money into management of professional pension funds or insurance institutions. Participation of employees in company pension funds is usually voluntary, whereas in the countries that initially assumed obligatory participation, in most cases an option of leaving the fund (opt-out) has been introduced. In each country it is also possible to gather savings within the scope of various personal pension plans operated mainly by insurance companies.

The Community Social Security Committee in its report of 2008 on pension funds managed by private institutions stated that real return rates from investment contributions in the financial market have a strong impact on future old-age pension. Pursuing higher profitability unavoidably causes higher risk [European Commission, 2008, p. 23]. Thought-provoking is a Committee statement indicating that because of that risk, the real level of an old-age pension from the capital pillar may turn out to be so low that the state will have to shoulder the burden of providing a pension benefit that ensures the socially accepted minimal level.

A January 2010 analysis by the Special Committee on the Financial, Economic and Social Crisis, European Parliament claimed that both financial crises and demographic changes have a serious impact on the pension systems in the EU member states. The crisis has a short- and medium-term impact, whereas the impact of demographic changes is mostly a long-term one, lasting for decades. It should be noted that the current crisis is one of many that were observed during the last 20 years; history is full of financial crises that cause speculation bubbles in the market of financial assets. Unlike the repartition system, in the capital pillar pension system current generations pay pension contributions that are transferred into the financial market and stay there until these generations withdraw the gathered capital after transition into retirement and use it for financing their consumption. Therefore, the means gathered in this pillar are directly submitted to the influence of financial crisis; it depreciates the funds gathered in the period before the crisis, while the scope of losses depends on the structure of investment holdings. The Committee pointed out the fact that as a result of the 2008–2009 crisis the stock value in the Community member states dropped by almost 50%. Lower value losses occurred with company bonds, whereas the losses in particular countries depended on the sector in which the issuer company operated. The lowest risk concerned government bonds, although in some countries they were also very high (e.g. Greek bonds). Assessing the overall effects of the financial crisis on pension funds (voluntary and mandatory) the Committee stated that in the European Union during the period 2008–2009, the crisis reduced the value of the assets accumulated by the funds by 15.8 % [European Parliament, 2010, p. 2].

The public debt crisis in the euro zone since 2010 has been seriously destabilizing the situation in financial markets, including stock markets. There is no reason to expect any significant improvement in this situation in any predictable time perspective. Therefore, old-age pensions based on the instruments of the financial market will be still threatened with the huge risk of devaluation.

Mandatory capital pillar of the pension system in some EU countries

The obligation to gather means towards an old-age pension in the second capital pillar has been established in nine Community member states: in Sweden and in eight countries of Eastern and Central Europe (Bulgaria, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia, and Hungary). In respect to other EU countries, the principle has been maintained that participation in all elements of the pension system, besides the repartition system, is voluntary, with the exception of employees' pension funds in Denmark [European Commission, 2010]. According to the European Commission report published in May 2012, the mandatory capital pillar of the pension system functions in six of the 27 member states, i.e. in Bulgaria, Estonia, Lithuania, Poland, Romania, and Sweden [European Commission, 2012, p. 90]. It means that the obligation to participate in this pillar has been already abandoned in three Community member states (Latvia, Slovakia, and Hungary). It should be also added that in most EU countries where the mandatory second pillar is still functioning, the percentage of the pension contributions transferred to this pillar has been significantly reduced.

Sweden. Sweden often serves as the example of a highly developed country where a mandatory pillar of the pension system in the form of open pension funds was established. The different character of this pillar in Sweden as compared to OPFs in Poland is, *inter alia*, indicated by Szumlicz [2010].

When assessing the Swedish solution, it should be pointed out that Sweden is a unique case in this group of countries, and its pension reform is distinguished from Poland's reform in respect to the mandatory capital pillar in many ways.

First, Sweden based its mandatory system of pension funds on annual surpluses in the public finance sector constituting between 2% and 4% of GDP (following the last financial crisis, Sweden observed a worsening of the budgetary balance), whereas Poland has posted deficits in the state budget and the entire public finance sector for decades, which results in growing public debt. The Swedish system assumed that old-age pensions would be covered by the surpluses obtained by the state, while in Poland, it was assumed *de facto* that saving towards an old-age pension would be carried out through incurring the public debt.

Second, it was decided in Sweden that only a contribution comprising 2.5% of the monthly remuneration, i.e. a relatively small part of contributions amounting to 18.5% of the monthly remuneration, would be invested in the financial market, while 16% would be transferred to the repartition system, whereas in Poland it was as much as 37.4% of contributions (division of contribution comprising 19.52% of the monthly remuneration: 12.22% into the repartition pillar and 7.3% to OPFs).

Third, in Sweden participation in pension funds is obligatory for persons receiving annual income higher than 16,800 SEK a year, while in Poland no income threshold was established. Moreover, in Sweden financial institutions are not allowed to charge an initial fee from the contributions transferred to investment [European Commission, 2008], whereas in Poland there is a charge and it is high (see below).

Fourth, in Sweden, contributions transferred to the capital pillar may be managed by a few hundred various financial institutions, according to the fund members' choice, while in Poland the number of institutions managing the OPFs' assets is limited, and transferring to another fund may result in extra charges. Considering the above differences, the mandatory pension funds in Sweden are a solution that should not be used as an argument supporting a mandatory capital pillar in Poland.

New member states. The majority of the countries that accessed the European Union in 2004 and 2007 introduced a mandatory capital pillar in the pension system. Among the new member states of the Central European region, only the Czech Republic and Slovenia have not introduced the pillar.

Like some Latin American countries, privatization of a part of the pension system in the newer EU countries resulted from a strong involvement of the World Bank and the USAID (U.S. Agency for International Development) organization, and also some international organizations (including the OECD). The base of this involvement, mechanisms of implementing the mandatory capital pillar and methods of influencing particular countries were presented in detail by Mitchell A. Orenstein (John Hopkins University) in 2008. He indicated that the main motive for enforcing the idea of this pillar establishment was the aspiration of international banks and other financial institutions to obtain new sources of income as a result of managing the huge pool of savings coming partially from obligatory pension contributions deducted from earnings [Orenstein, 2008, p. 79]. According to Orenstein, dependence on financial aid from both the World Bank and the International Monetary Fund plays a significant role in enforcing introduction of the mandatory capital pillar.

In the case of Argentina, one of the conditions for obtaining a 40 billion USD loan from the IMF was establishment of mandatory pension funds managed by private financial institutions. Orenstein thoroughly described the actions undertaken in Poland by the World Bank and USAID; he showed various methods of influencing decision makers in order to persuade them to establish such funds, interference from these institutions in designing legal acts, financing a campaign focused on shaping public opinion, and financing numerous study visits of politicians, journalists, and scientists in Chile, Argentina and other countries. The author also noted that the World Bank placed its functionaries in some Polish central offices and entrusted them with the mission of shaping and implementing the pension reform. Also noteworthy are his comments concerning involvement of the financial organization USAID in shaping the state body that was to supervise pension funds in Poland [Orenstein, 2008, p. 112–128].

The analysis by Orenstein suggests that Poland and other countries of the Eastern and Central Europe region, as well as countries in Latin America, were unable to resist the strong pressure of international organizations and financial institutions regarding introduction of the mandatory capital pillar. The practice showed that existence of this pillar generated such enormous public indebtedness that in some countries its complete liquidation was necessary, while others implemented a drastic reduction in the level of transferred contributions.

In Poland the mandatory capital pillar has been functioning since 1999 in the form of open pension funds (OPFs). Establishing this pillar was part of a reform targeted, according to the declaration of its authors, at adjustment of the pension system to challenges posed by demographic tendencies and the state of public finances. Therefore, the declared goal was to increase the security of future pensions when, because of the continually lower number of people of working age per each retired person, the possibilities of financing pension benefits from the budget would be significantly reduced. Therefore, it was assumed that a portion of pension contributions currently deducted from the employed, instead of financing current pensions in the repartition pillar, would be directed to management of private financial institutions in order to invest them in the financial market. These institutions, after charging their fees, should manage received resources by taking into account the limits set by the state regarding investments in particular groups of equities (shares, bonds and other financial instruments). The period of this management, i.e. administration of the money from pension contributions, basically constitutes the entire period of the employee's economic activity until reaching retirement age - in practice 50 years or even more. After this period, the accumulated amount should be either transferred to the state institutions in order to pay an old-age pension due from this source, or to a special private institution, which would pay pension benefits while still actively managing the received resources and charging respective fees. In Poland, the role of such institutions was to be played by the so-called pension establishments, although hitherto no respective law was passed.

Solving the OPFs' problem in Hungary. Hungary is a country that suffered particularly severely in the world financial and economic crisis. In 2008–2010, the country had serious problems with repayment of the public debt. Actual insolvency was only avoided due to substantial financial aid provided by the International Monetary Fund and the European Union. On the basis of an agreement concluded in October 2008, the country was granted a loan of 20 billion USD by the IMF and the EU. The Hungarian government had to take drastic steps in order to improve the state of public finances. Both drastic cuts in expenditures and tax increases turned out to be necessary.

The mandatory capital pillar, consisting of transferring a part of pension contributions to private financial institutions for management, was established in Hungary in 1998. In 2010, over 3 million people were members of open funds in Hungary. Growing problems with public finance in Hungary became the main element that facilitated actual liquidation of the mandatory pillar. The Hungarian Parliament passed a law regarding this issue on 13 December 2010. The solution consisted of retransferring as of 31 January 2011 the assets gathered in the funds to the budget, providing that a fund member had not declared the will to remain in a private fund until that date. When deciding to remain in a private pension fund, the fund members had to resign from the entitlement to the state old-age pension. That move, meaning actual liquidation of the mandatory capital pillar, was mostly targeted at elimination of one of the main reasons for the budget deficit. The Hungarian government assumed that the reclaimed funds would go towards a reduction in the personal income tax, which would help create more than a million new jobs during the next decade and accelerate economic growth [Barley, 2010].

The assumptions concerning liquidation of open pension funds were implemented in practice. Only about 3.1% of these fund members (97,000 people) remained in them after 31 January 2011. About 96.9% moved into the state system [Hirose, 2011, p. 195]. Societies managing pension funds were obliged to prepare a plan for transferring the assets gathered in funds into the budget (about 3,000 billion HUF) by mid-April 2011³.

The assets that were transferred in 2011 from mandatory pension funds into public finances constituted 9.5% of the GDP. The assets were transferred to a special state fund (Pension Reform and Debt Reduction Fund), which became a significant factor enabling improvement of the public finances. After many years of large budgetary deficits, in 2011 Hungary for the first time observed a budgetary surplus comprising 4.3% of GDP [Government of the Republic of Hungary, 2012, p. 26].

The actions undertaken by Hungary in respect to pension funds were criticized by financial institutions in the country, including beneficiaries of the previous system. International financial markets projected doubts about whether due to this unfriendly step concerning financial institutions, Hungary would be able to obtain resources in financial markets in order to refinance debt in the foreign currency due for repayment in 2011. The evidence showed that eventually, the actions of the Hungarian government regarding pension funds did not have a negative impact on Hungary's international credibility. This is due to the fact that the country almost entirely freed itself from a huge burden to public finances posed by the maintenance of the mandatory second pillar of the pension system generating fast growing public debt. Moreover, the maintenance of Hungarian financial credibility was facilitated by the fact that before making a decision regarding actual liquidation of open pension funds, the crisis of public finances forces numerous other drastic steps, including inter alia cuts of one monthly remuneration in state offices and one monthly old-age pension, and increasing the basic VAT tax from 20% to 25%. The fact that liquidation of OPFs in Hungary did not ensure a permanent reduction in its budget deficit cannot serve as an argument against the actions undertaken in this country in case of the mandatory capital pillar. The pillar was not the only reason for the annual budgetary deficits. However, it is worth noting that if this pillar had not been liquidated, the problems might have turned out to be so massive that they would have created a huge burden the Hungarian economy and society would find difficult to shoulder.

OPFs in Poland – assumptions, effects and perspectives

In 1999, a radical reform of the pension system was implemented in Poland. According to the declarations of its authors, its main objective was ensuring security of the pension system and adjusting this system to the challenges posed by demographic tendencies, consisting in the fact that a decreasing number of people at working age would have to finance old-age pensions of the growing number of retirees. The main change was the above-mentioned transition from the defined benefit system into the defined contributions system. The change results in a significant reduction in the future pensions compared with those received by current retirees from the old system. Additionally, the mandatory capital pillar was established, which apparently was to ensure the independence of at least a portion of the future pension benefits from demographic tendencies.

As the result of the 1999 reform, the ratio of average old-age pension to average remuneration (benefit ratio) in 2007 was 56%, while according to European Commission estimates, in 2060 it will be 26%. Including pillar Two will raise it to about 31%, i.e. in practice it will drop by half [European Commission, 2010, p. 31]. When assessing such a drastic change in the case of Poland, it is remarkable that this change was successfully carried out not as a result of the occurrence of an extraordinary situation (war or crisis). It was implemented during a booming economy during a dynamic development period, as was repeatedly stressed by the government. Of key importance was the fact that this significant change in Poland had not been preceded by a wider public debate concerning possible threats of this reform, in particular the establishment of mandatory capital pillar. Instead, the reform was preceded by a widespread government propaganda campaign, promising citizens high old-age pensions, as well as the possibility of spending holidays in exotic places after retirement. Thus "retirement under the palms" became the symbol of the pension reform in 1999. The information that as a result of this reform, old-age pensions were reduced by half started spreading only a few years ago. Previously, most Poles were convinced that in 1999 Poland reformed its pension system in a way to be the envied and acknowledged by the whole world and that old-age pensions within the framework of the new system would be very attractive. Many politicians, scientists and journalists and financial institutions managing the mandatory capital pillar had a huge influence on the public climate concerning the reform, as well as strong financial ties among the groups that still exist. Also of great significance is the relationship of these institutions, whether through ownership relations or revenues from advertising, to many significant private media. The approach of most of the public media to presenting the 1999 reform was generally limited to supporting the reform's authors and people associated with financial institutions. Such an atmosphere significantly limits the public debate concerning the real problems of the pension system and stifles the airing of varied opinions concerning this issue.

Following implementation of the reform in 1999, a rule was adopted specifying that the employee's pension contribution charged by the Social Insurance Institution (SII), comprising 19.52% of the monthly remuneration, would be divided the following way:

- 12.22% stays in the Social Insurance Fund and is destined to payment of current pensions within the framework of pillar One,
- 7.3% is transferred to open pension funds (OPFs) constituting the mandatory capital pillar of the pension system.

Such a division means that as much as 37.4% of the overall pension contributions were transferred to OPFs. Therefore, the necessity arose to cover this loss of contributions from other sources.

Under a law that took effect 25 March 2011^4 , since May 2011, pension contributions transferred by the SII to OPFs were reduced to 2.3% of the employee's monthly remuneration. Contribution comprising 17.22% of the remuneration is transferred to the Social Insurance Fund. However, it should be underlined that according to this law, the contribution transferred by the SII to OPFs will be increased: in 2013 it is to constitute 2.8%, in 2014 – 3.1%, in 2015 and 2016 – 3.3%, and from 2017 – 3.5%. As the result of these changes, as of 2017 a large portion of these contributions will be again transferred into the financial market, i.e. 18%. This rise in contributions will increase the shortage of resources for current pensions.

According to a February 2012 report by the Ministry of Finance, the public debt of Poland at the end of 2011 comprised 56.6% of GDP, whereas the same debt, but without OPFs, comprised 39.4 % of GDP [Ministry of Finance, 2012, p. 39]. It means that the difference between these two indicators comprises 17.2 % of GDP constitutes our country's public debt, which is the effect of the OPFs existence. Therefore, the Ministry clearly stated that establishment of OPFs in 1999 led to additional public debt amounting to over 17% of GDP during the 1999–2011 period. The report states that "about 30% of the public debt of Poland is due to the costs of the pension reform, which has not been introduced in the majority of EU countries". Obviously, it refers to the pension system reform carried out in 1999, in the form of establishment of the mandatory capital pillar and the OPFs. As a result, a huge, previously non-existent expense from the state budget was created, increasing overall expenditures.

In this context, it is worth bringing up one of the main arguments of the OPFs' authors: that establishment of the capital pillar reduces the so-called "hidden debt" of the state owed to the baby boom generation, which in turn will help to maintain equilibrium in the repartition pillar in the future [Góra, Chłoń, Rutkowski, 1999]. This argument, presented earlier by the World Bank in the 1994 report *Averting the Old Age Crisis*, is still viewed as a significant justification for the further maintenance of OPFs. Hidden debt is the hypothetical liabilities of the state to future pensioners, due to contributions recorded on the pension accounts (including valorization of these contributions and so-called initial capital). These liabilities will became payable at the moment of transition into retirement of particular persons. Since the OPFs were established, these hypothetical liabilities concerning successive years and decades have been ceaselessly converted into the open, increasing public debt. The state must constantly obtain loans in order to cover the loss in contributions transferred to OPFs; otherwise it would not be able to fulfill its obligations to current pensioners. Thus, the OPFs defenders force a difficult-to-accept thesis that it is worth incurring debt today in order to enjoy a better future situation in public finances and be able, thanks to the assets gathered in OPFs, to pay pensions in several years or a few decades when the demographic situation is difficult. Their reasoning entirely misses the fact that in exchange for gathering these assets in portfolios of the OPFs members, the entire society, including OPFs, face repayment of growing open public debt. Its quick growth increases the risk of the country's insolvency.

According to the state, at the end of May 2012, there were 14 OPFs managed by private institutions, which are General Pension Societies (GPS) functioning in Poland. The stockholders of the GPS are insurance companies and banks, mainly with foreign equity. They usually are huge financial concerns, operating in most countries in the world, with enormous expansion power and the means to effectively influence governments in the struggle to protect their own interests. From the pension contributions, which each month are transferred by the Social Insurance Institution to OPFs, there is immediately deducted a 3.5% charge on behalf of the GPSs (the so-called contribution fee). For more than five years after 1999, the fees charged by all funds were much higher, at 9% to 11 %. From April 2004 to the end of 2009, the law held that the charge from contributions could not be higher than 7%. In addition to contribution charges, GPSs also charge monthly fees for managing the assets [GUS, 2010, p. 100–101]. All these charges, which reduced the resources intended for old-age pensions of the OPF members, are not dependent on the results achieved by the societies managing the funds. Even if such results were acquired, in practice it would not reduce the risk for future retirees seeking to transfer a portion of pension contributions to the financial market. Profits accumulated by the GPS from investment of the funds in OPFs are reversible; they may be easily lost as a result of negative tendencies in the financial market, particularly due to financial crises. Another significant factor of the risk related to investment in the financial market is inflation, which may significantly reduce the value of financial assets gathered in future pensioners' holdings.

The fees mentioned above that are charged by GPSs are irreversible, i.e. not refundable. OPF members are also aware once a contribution is paid in, so-called management fees may be charged every month until the day of transition into retirement, i.e. in the extreme case even for 50 years. There is no guarantee that this ceaseless reduction in the amount of contributions accumulated in the OPFs will be compensated by the profits derived from the investment of these contributions in the financial market. The assessment of this risk should not omit the above-indicated possible impermanency over time of the profits obtained from these investments.

According to the state, at the end of May 2012, the amount of contributions transferred by the SII to OPFs since 1999 amounted to 180.3 billion PLN, while the market value of the assets accumulated in OPFs stood at 232.9 billion PLN. In order to gather these assets, Poland had to incur debt, which at the end of 2011 was estimated (with interest) at over 262 billion PLN (17.2 % of GDP), while at the end of May 2012 at over 270 billion PLN. The annual interest on the debt relating to the OPFs may be estimated at no less than 14 billion PLN, assuming average interest rates of Polish government bonds of 5%. In May 2012, yields of the Polish 10-year government bonds amounted to 5.41% and was among the highest in the European Union, which indicates Poland's weak financial position [Eurostat, 2012a]. Comparing the value of OPF assets with the level of the public debt that the government had to incur in order to refund to the SII the loss of contributions transferred to OPFs, it should be stressed that this debt is nearly 40 billion PLN higher than these assets. Therefore, all of society will have to repay a gigantic debt created as a result of establishing this provision towards future pensions that comprise OPFs. Considering the worsening of the situation in international financial markets following the crisis of public indebtedness in the euro zone, growth may be expected in interest rates of government bonds issued by various countries, including Poland. The credit needs of Poland related to the necessity of the debt refinancing, comprising 859 billion PLN at the end of 2011 [Eurostat, 2012b], are very high. In 2012 they were estimated at over 176 billion PLN [Ministry of Finance 2012b, p. 3]. The further maintenance of OPFs, and the increase from 2013 contributions transferred to OPFs by the SII, will accelerate the growth of public debt, deepening the threat to the country's solvency.

At the end of May 2012, the majority of the OPFs' assets (53.6%) constituted government bonds issued by the Polish government. The second most important assets were company shares (31.5%). The OPF holdings also contained non-fiscal debt instruments (9.9%), bank deposits and equity securities (4.4%) and other assets [KNF, 2012]. When analyzing all data regarding rates of return achieved by OPFs, published by the Polish Financial Supervision Authority, it is worth taking into account the general regularity of the financial market, i.e., that in a given time the interest on credit (also the debt incurred by the state) is generally higher than the interest rates of investments available in the market. In practice, a reverse situation may be only achieved via skillful speculation that allows profits higher than costs of the credit obtained to finance a particular investment. However, such speculation is always burdened with significant risk and it may lead to serious losses. The fact of financing OPFs from the public debt leads only to increasingly higher indebtedness of Poland and increases the risk of falling into the crisis of public debt.

Because the majority of the OPFs assets are Polish government bonds, the interest of these bonds constitutes the main source of increasing the market value of the fund assets. The absurdity of this situation lies in the fact that these assets will grow proportionally to the increase in interest rates that Poland will have to pay on its bonds. It means that the worse the financial situation of Poland will be, the more money OPFs will "earn" for their members, as only then the interest rates of the bonds will grow. Pension societies may then boast greater efficiency in "multiplication" of the money for the future pensioners and charge higher commission for managing these assets. It should be underlined that the interest transferred by the state to OPFs constitutes one of the main items in state budget expenditures included in the Budget Control Act. For 2012, the act assumed interest in the amount of 43 billion PLN for public debt service. They constitute a liability to all of society. Such construction of a mandatory capital pillar that is based on the country's increasingly growing indebtedness – in addition to paying financial institutions through commission for managing the assets – should be deemed senseless. The shocking irrationality of the second pillar of the pension system was one of the key factors leading to rejection of this solution by highly developed countries.

It should be stressed that the increase in OPF assets, due to accumulated interest from government bonds, has provided the source – though sometimes insufficient - of compensating the OPF losses incurred by investing in shares the last few years. The shrinkage of the funds' assets (due to these losses and commissions charged by GPSs) may be quite significant. In the period between November 2007 and February 2009, the net decline in the assets amounted to 32 billion PLN and was higher than the overall amount of contributions transferred in this period to OPFs by the SII, which was 24.4 billion PLN. That means during this period, OPFs not only earned nothing for their members, but they lost much more than they received from the SII. A similar situation occurred in 2011, when the Social Insurance Institution transferred to OPFs 15.1 billion PLN, of which 11.7 billion PLN were lost (stock market declines and charged fees). Some of these losses were compensated at the beginning of 2012, but on the other hand, in the month of May 2012 only, OPFs assets dropped by 4.8 billion PLN [KNF, 2012]. It illustrates the gigantic scale of possible losses that pension funds may incur even in a short period. There is huge harm to public finances because of this wastage, but the gigantic losses are even more appalling in view of the persistent shortages of public resources for basic necessities such as providing medicines in hospitals.

The irrational character of the second pillar is confirmed by the fact that a significant part of the OPF assets is invested in government bonds. It means that in the future, when pensions have to be paid from the funds, these bonds should be redeemed by the state. Therefore, all taxpayers will have to contribute (paying taxes and pension contributions) in order to secure necessary resources for this purchase. If the demographic situation is unfavorable, it is also possible that the situation of public finances would be so bad that the state would not be able to meet its bond-related obligations. Therefore, OPFs do not protect pensions against the risk related to demographic tendencies. Such protection is also not ensured by investment of some funds' assets in the stock market. The ongoing financial crisis showed that the risk of investment in equity market may be significant. It is difficult to rule out the possibility of serious financial crises in the future, which is of great significance considering that the period for which resources from pension contributions are entrusted to OPFs may last half a century.

According to the International Monetary Fund, the relationship of public debt to GDP in the case of developed countries will comprise 108.2% of GDP in 2015, up to 34 percentage points higher than in 2006, while the level of the public debt in 2015 will be 48,000 billion USD—over twice as high as in 2007, when it was 23,000 billion USD [Talley, 2010]. This huge debt generates huge loan problems for the countries and creates a risk of a significant growth in interest rates in the bond market. It increases the risk connected with these securities. The entities investing in these instruments, including pension funds, should take this risk into consideration. They also must take into account the possibility of public debt restructuring in some countries, which may result either in reductions in interest rates or capital (as happened in the case of Greek government bonds, the value of which was reduced by about 70%). For investors, including future pensioners, it may mean serious losses.

Recapitulation

Practice has shown that the mandatory capital pillar of the pension system, introduced in some new member states, did not prove itself. It turned out that the pension that was be derived from this pillar is burdened with huge risk caused by the financial market instability. High fees charged by financial institutions managing the assets coming from pension contributions negatively influence the level of this pension. The weakness disqualifying the mandatory pillar pension system is that it increases the public debt at a fast pace, affecting in this way the growing risk of a public finances collapse in certain countries. In Poland as well, open pension funds turned out to be a source generating a huge public debt and significantly increasing the risk of the country's insolvency. A solution in the form of an OPE is also unfavorable for future pensioners, as it does not ensure a secure old-age pension. Therefore, there is no justification for the further existence of these funds. The sooner a decision is made on their total liquidation, the lower the losses in public finances. In practice, the variant applied by Hungary may be considered according to which the fund members can choose (in accordance with the MFID directive) whether to remain in the capital pillar, or return to the repartition pillar. When making this decision they should consider the fees charged by financial institutions and the risk connected with investment in financial instruments.

Notes

¹ Social insurance covers several. areas: a) old-age pension insurance - providing monthly payment of pension benefit to persons who reached retirement age. b) disability pension insurance - providing monthly payment of a particular sum during a defined period, i.e. due to incapability to work (disability pension), c) sick insurance providing financial allowance in case of sickness, d) insurance due to accident at work – provide payment of compensation and benefits due to occupational diseases and accidents at work.

² Regulation (EC) No 883/2004 of the European Parliament and of the Council of 29 April 2004 on the coordination of social security systems, OJ L 166, 30.4.2004. Regulation (EC) No 987/2009 of the European Parliament and of the Council of 16 September 2009 laying down the procedure for implementing Regulation (EC) No 883/2004 on the coordination of social security systems.

³ See: Over 100,000 members remain in second pillar, *Budapest Business Journal*, February 1st, 2011, http://bbj.hu/?id=55788 (1.07.2012).

⁴ Law of March 25, 2011 on amendment of some acts regarding functioning of the social insurance system, *Journal of Laws* No. 75, item 398, 2011.

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