LIBERALIZATION OF PENSION SYSTEMS IN CENTRAL AND EASTERN EUROPE[1]

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Abstract

The principal aim of this paper is to describe the process of liberalization of the pension systems in Central and Eastern Europe, in terms of both the basic system structure and the regulations applied in relation to pension funds. The following issues are addressed: the universality of participation in the various pillars of the pensions system, the amounts of pension contributions, public engagement in the area of pensions provision, investment limits for pension funds, systems of remuneration for pension fund management companies, and guaranteed rates of return for pension funds. The final section of the paper contains overall conclusions relating to both positive and negative consequences of the liberalization of pension provision, and an attempt is made to outline the changes which ought to occur in further reform of the pensions systems of the post-communist countries.

1. Introduction

An omnipresent social and economic problem for the contemporary economies of many countries in Europe and worldwide is that of the ageing society. Current and projected demographic trends will lead, in the longer term, to very unfavourable ratios between the numbers of people of working age and over retirement age. The growing population above retirement age forces an increase in the total sum of pension benefits paid. The main reason for this is the projected more than twofold growth in the ratio of the number of people aged 65 and over to the number aged 20–64 (from 23.8% in the year 2000 to 49.9% in 2050). The distributive PAYG (Pay As You Go) pensions system which has been popular hitherto, based on the principle of solidarity between generations, is not resistant to the current unfavourable demographic changes. A capital-based system, on the other hand, would to a large extent be resistant to these changes. This makes it necessary to reform pensions systems which are based too much on inter-generation solidarity. The reforms carried out are moving in the direction of a capital-based system, though nonetheless also based to a greater or lesser extent

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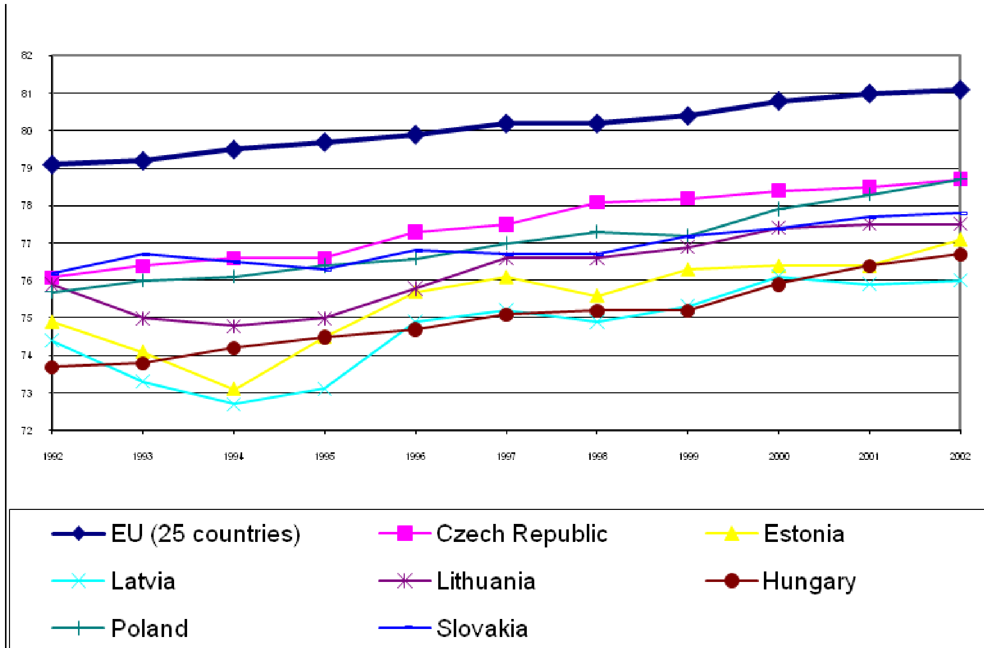
on distributive principles. The usual compromise solution is a three-pillar system. Such systems have been functioning since the end of the 20th century or start of the 21st in many countries of Central and Eastern Europe which have recently become members of the European Union or are seeking membership. Reforms to the system of pensions provision are still continuing in those countries, often making it necessary to answer the question of how much the regulations in this area should be liberalized, particularly at a time of financial crisis, which although it is the first serious period of downturn on the financial markets since the pension funds began operating in the post-communist countries, will certainly not be the last.

The objective of the present paper is to analyse the process of liberalization of the pensions systems of the countries of Central and Eastern Europe and the negative and positive aspects of that liberalization, as well as the opportunities and threats associated with it. The various areas of liberalization are described, as well as their impact on the effective functioning of the pensions system, in particular pension funds.

2. Reasons for pensions reform

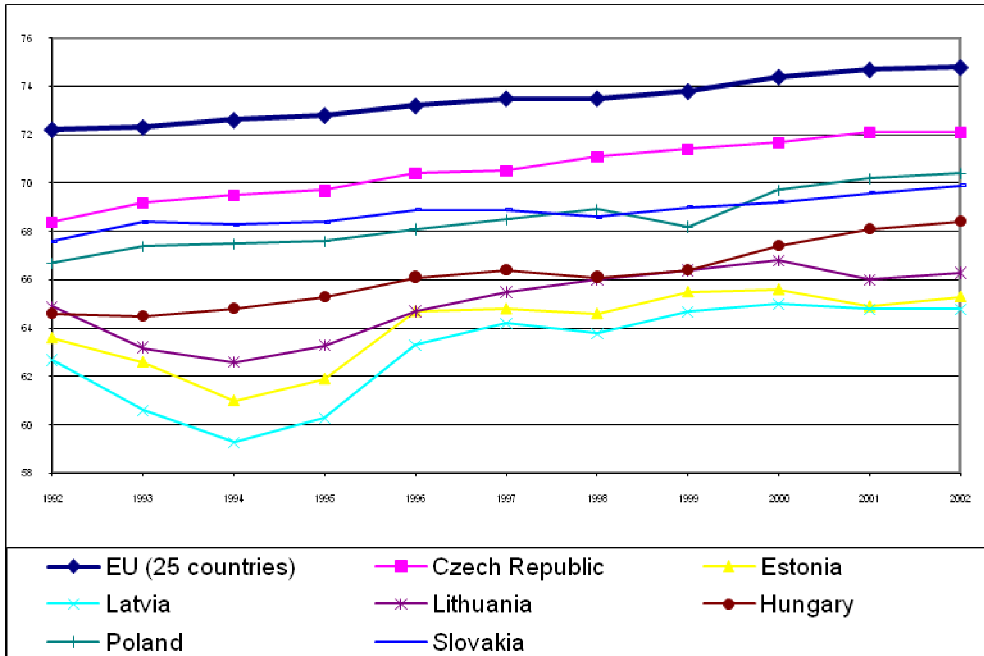
The dynamic socioeconomic development seen in the countries of Central and Eastern Europe since the start of the period of transformations brings with it an increase in the well-being of society. The most common measure of that well-being is per capita GDP, but it should be noted that improvement in the standard and quality of life is reflected also in life expectancy. Figures 1 and 2 show life expectancy at birth for women and men in selected countries of Central and Eastern Europe.

Figure 1. Life expectancy at birth for women (in years)



Source: Eurostat

Figure 2. Life expectancy at birth for men (in years)



Source: Eurostat

Visual examination of the above graphs shows an unambiguous upward trend in the life expectancy of people living in the countries of Central and Eastern Europe.

The fact that people are living ever longer, and the accompanying phenomenon of decreasing natural population growth, are the most significant reasons why society is ageing. The percentage of people in older age ranges is becoming ever greater, and the population in younger ranges is decreasing. The process of the ageing of society in Central and Eastern Europe is relatively dynamic in nature, as can be seen from the demographic dependency rates[2] in the last fifteen years and projected values up to the year 2050 (Table 1).

Table 1. Demographic dependency rates in selected countries of Central and Eastern Europe

country/year	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Czech Republic	19.3	19.8	19.8	21.9	26.8	31.8	35	37.1	39	43.8	51.2	54.8
Estonia	20.2	22.4	24.1	24.7	26.3	28.7	31.3	33.4	34.5	36.6	39.1	43.1
Latvia	20.5	22.1	24.1	25.2	26.3	28.0	30.7	33.4	34.9	37.4	39.9	44.1
Lithuania	18.5	20.8	22.5	23.4	24.2	26.0	29.2	33.4	36.5	39.3	41.2	44.9
Hungary	20.9	22	22.8	24.3	26.7	31.2	34.5	35.1	36.9	40.3	45.9	48.3
Poland	16.6	17.6	18.7	18.8	21.7	27.1	32.8	35.7	37.1	39.7	44.3	51.0
Slovakia	16.3	16.6	16.3	16.9	19.1	23.5	28.1	31.7	34.2	38.1	44.5	50.6

Source: OECD

If the values of the demographic dependency rate in 2005 are compared directly with the values projected for 2050, we notice that the most unfavourable trend in this indicator will occur in the Czech Republic (an increase of 35.0 percentage points) and in Slovakia (increase of 34.3 percentage points). The smallest growth in the indicator will probably be in Estonia (increase of 19.0 percentage points) and Latvia (increase of 20.0 percentage points). In each of the analysed countries there will be a very unfavourable change in the age structure of the population, which will have a direct impact on the financing of pensions provision, particularly in the distributive Pay As You Go pillar, where the pensions currently drawn are financed from the pensions contributions of those currently working. The ever higher ratio between the number of inhabitants of a country aged 65 and over and the number of working age (15–64) means that there are fewer and fewer people of productive age working for the pension of one old-age pensioner. It should be noted that the unfavourable demographic trends described above are characteristic of the whole of the European Union, and the

[2] The demographic dependency rate is the ratio of the number of inhabitants of a country aged 65 and over to the number aged 15–64 (considered to be working age).

demographic dependency rate for the whole EU will increase by around 27–28 percentage points in the period from 2005 to 2050.

There are also other factors which have compelled the governments of the post-communist countries to carry through difficult and costly – both economically and socially – pension reforms. These factors, like the demographic trends, have a highly unfavourable impact on the financing of pensions provision under the distributive pillar. These are primarily high unemployment, typical in the Central and Eastern European countries in the early phase of transformation, and political pressures causing the funds accumulated for pensions provision to be used for completely different purposes. Macroeconomic factors which stimulated reform of pensions systems also included the possibility of generating demand for domestic securities, representing both debt (primarily issued by the state) and equity, which assisted the privatization of state enterprises; and also increased levels of savings. For this purpose capital-based pillars were created, including in particular the "second pillar" based on obligatory membership of pension funds.

3. Structure of the reformed pensions systems and their degree of liberalization

The aforementioned reasons for the reforms of the pensions systems of the countries of Central and Eastern Europe determined the direction those reforms would take – from a fully distributive system to a mixed distributive and capital system. To a significant extent those countries, especially the pioneers of pension reform in post-communist Europe – Hungary and Poland – based their actions on the reforms which had been carried out previously in South America, and particularly on the Chilean and Argentine models. The first of these is often cited as a model for the construction of a pillar based on pension funds, and has been much discussed in the literature (see Mueller, 1999; Williamson, 2001; Queisser, 1999; Cerda, 2008). However in terms of the general structure of the pensions system the countries of Central and Eastern Europe did not exactly copy Chile, where the distributive pillar based on inter-generation solidarity was abolished completely, but partially followed the Argentine system, where participation in the distributive first pillar remained obligatory, though with the introduction of voluntary participation in a second pillar based on pension funds.

All of the analysed post-communist countries have retained a distributive pillar, obligatory in nature, involving more often a system of defined benefits, or less often one of defined contributions. Most of these countries have also introduced obligatory participation in a second, capital-based, pensions pillar, created by pension funds. The structures of the reformed pensions systems in the analysed post-communist countries are presented in Table 2.

Table 2. Structures of pensions systems in selected CEE countries

Country	First pillar (distributive)	Second pillar (capital-based)	Third pillar (capital-based)
Bulgaria	Defined benefits system	Obligatory pension funds	Voluntary pension funds, employee pension schemes managed by pension fund companies (also classified as fourth pillar)
Croatia	Defined benefits system	Obligatory pension funds	Voluntary pension plans, offered by pension funds, trade unions or employers
Czech Republic	Defined benefits system (defined contributions as from 2010)	None	Voluntary pension plans managed by pension fund companies
Estonia	Defined benefits system	Obligatory pension funds	Voluntary pension funds or pension policies offered by life insurance companies
Hungary	Defined benefits system	Obligatory pension funds	Voluntary pension funds or pension accounts, managed by banks or investment advisers (also classified as fourth pillar)
Latvia	Defined contributions system	Obligatory pension funds	Voluntary pension plans managed by credit institutions, life insurance companies
Lithuania	Defined benefits system	Voluntary pension funds, to which part of the contribution from the first pillar is paid	Voluntary pension funds
Poland	Defined	Obligatory pension funds	Voluntary employee

	contributions system		pension schemes or individual pension accounts (also classified as fourth pillar)
Romania	Defined benefits system	Obligatory pension funds from 1 January 2008	Functioning since 2007 in the form of employee pension schemes
Slovakia	Defined benefits system	Obligatory pension funds	Voluntary pension plans managed by pension fund companies, banks and life insurance companies
Slovenia	Defined benefits system	Pension plans (obligatory for some professions, voluntary otherwise) managed by insurance or pension fund companies	Voluntary pension plans managed by insurance or pension fund companies

Source: based on Allianz Global Investors, *Central and Eastern European Pensions 2007*; Dupont G., *Pension reform in acceding countries*, Special Issues, April 2004, Centre de recherche en economie de Sciences Po, p. 64

The information contained in the above table leads to the conclusion that on one hand the general structures of pensions systems in the post-communist countries show a large degree of uniformity, although within the individual pillars we can perceive significant differences, these being a measure of the liberalization of pensions systems both in terms of freedom to participate in the system (applicable to the second pillar) and the possibility of choosing forms of accumulation of pension capital in the third pillar.

In the distributive first pillar, most countries have retained a defined benefits (DB) system, as was typical of the old pensions systems. This has not been done in Poland or Latvia, where a defined contributions (DC) system was chosen. Such a system will also be in force in the Czech Republic as from 2010. The defined contributions system, in contrast to the defined benefits system, makes the size of the future pension dependent exclusively on the amount of contributions accumulated on an individual account and on further life expectancy. This means that the more a person contributes to the first pillar and the later he or she retires, the higher will be his or her first-pillar pension. The first pillar, managed by a state institution,

being of a distributive character, is the only one of the three pillars of the pensions provision system where there exists practically no possibility of choice.

The second pillar is created by pension funds, which compete with each other in the marketplace at various levels of their activity, the most desired being competition in terms of investment activity, or more precisely the effectiveness of that activity. The great majority of Central and Eastern European countries base the second pillar of their pensions system on the principle of universal membership of pension funds. In this way, in addition to the compulsory first pillar, every working citizen must also pay contributions under the new system to a pension fund. It is not possible to make a choice, therefore, between membership of a pension fund and non-participation in such a fund. However, it is possible to make a choice of pension fund from among those operating in the marketplace, which in comparison with the old pensions system is a mark of liberalization. However, two of the analysed countries – Lithuania and Slovenia – are an exception to the above rule, as they have abolished wholly or partially the obligation to belong to a second-pillar pension fund (the obligation does not exist in the Czech Republic either, but there the second pillar does not exist at all, only the first and third). In Lithuania people are allowed to choose freely whether to join a pension fund; if they do so, then a part of the contributions paid to the first pillar is transferred to the second pillar. In Slovenia the obligation applies only in relation to selected professions: the public sector, banking and high-risk professions.

The greatest differences are seen in the solutions applied under the third pillar. Here there are several possible forms of accumulation of pension capital, always voluntary in nature. The primary ones are pension funds, employee pension schemes, life and maturity insurance (with or without investment fund), and individual pension accounts.

Moreover in each country there exist other forms in which pension capital can be accumulated voluntarily, not being formalized as pension products, and thus being designed for the purpose of additional saving for pensions, but also characterized by a freedom to change the designated use of the accumulated savings. These forms of capital accumulation are often classified as a fourth pillar of the pensions system, being of a voluntary and unformalized nature. They include investments in property and works of art, bank deposits, deposits with investment funds, etc. Table 3 contains summary information on the pillars of the pensions systems of the countries of Central and Eastern Europe, indicating the degree of their liberalization in terms of participation and freedom to withdraw the accumulated funds before reaching retirement age.

Table 3. Degree of liberalization of individual pillars of the pensions system in the majority of Central and Eastern European countries

<table>
<tr><td rowspan="2">First pillar</td><td>Participation</td><td>Obligatory</td></tr>
<tr><td>Early withdrawal of accumulated funds</td><td>Impossible</td></tr>
<tr><td rowspan="2">Second pillar</td><td>Participation</td><td>Obligatory (fully or partially voluntary in Slovenia and Lithuania only)</td></tr>
<tr><td>Early withdrawal of accumulated funds</td><td>Impossible</td></tr>
<tr><td rowspan="2">Third pillar</td><td>Participation</td><td>Voluntary</td></tr>
<tr><td>Early withdrawal of accumulated funds</td><td>Limited possibilities</td></tr>
<tr><td rowspan="2">Fourth pillar</td><td>Participation</td><td>Voluntary</td></tr>
<tr><td>Early withdrawal of accumulated funds</td><td>Unlimited possibilities</td></tr>
</table>

Source: compiled by the author

4. Pensions system structure and selected macroeconomic indicators

The pension reforms, aimed at introducing capital-based pillars, have the primary objective of ensuring the financial stability of the system, as reflected in the level of pensions expenditure as a percentage of GDP. This percentage would have been incomparably greater had the fully distributive system been left in place than it is projected to be as a result of the reforms. Table 4 shows projected amounts of pensions expenditure as a percentage of GDP in selected countries of Central and Eastern Europe in the years 2010–2050.

Table 4. State expenditure on pensions as a percentage of GDP (in %)

country /year	2010	2015	2020	2025	2030	2040	2050
Czech Republic	8.2	8.2	8.4	8.9	9.6	12.2	41.0
Estonia	8.9	8.8	9.3	10.4	11.8	15.2	15.7
Latvia	6.6	6.6	7.0	7.6	7.9	8.2	8.6
Lithuania	9.8	10.9	11.9	13.7	15.0	17.0	17.4
Hungary	11.1	11.6	12.5	13.0	13.5	16.0	17.1
Poland	11.3	9.8	9.7	9.5	9.2	8.6	8.0
Slovakia	6.7	6.6	7.0	7.3	7.7	8.2	9.0

Source: Salomaki A., *Public pension expenditure in EPC and the European Commission projections: an analysis of the projections results*, European Economy, European Commission, December 2006.

The data contained in the above table shows that Poland will probably be the only country where, in spite of a significant growth in the demographic dependency rate (see Table 1), the percentage level of public pensions expenditure will decrease. In the other countries the correlation between the analysed variables is significantly positive, which means that the increase in demographic dependency will be accompanied by growth in pensions expenditure in relation to GDP. What might be the reasons for this? Let us analyse the level of pensions contributions in the first and second pillar, as well as the number of fund members and the value of the assets accumulated by the funds in relation to population, which is a good measure of public engagement in the field of capital-based pensions provision offered by pension funds. The relevant indicators are shown in Table 5.

Table 5. Pensions contributions in the first and second pillars (total, paid by employee and employer), number of pension fund members and value of fund assets in relation to population, in selected Central and Eastern European countries in mid-2007

Country	Pensions contribution to first pillar (% of salary)	Pensions contribution to second pillar (% of salary)	Members of compulsory funds / population (%)	Members of voluntary funds / population (%)	Assets of compulsory funds / population (€)	Assets of voluntary funds / population (€)
Poland	12.22	7.3	35.96	0.16	1102.36	7.87
Hungary	18.5	8.0	28.83	13.92	745.53	298.21
Czech Republic	28.0	-	-	40.20	-	725.49
Slovakia	9.0	9.0	29.63	14.81	370.37	148.15
Croatia	15.0	5.0	32.95	3.18	725.00	27.27
Bulgaria	18.0	5.0	38.28	7.94	117.19	41.67
Slovenia	24.35	-	24.88	1.49	597.01	24.88
Baltic States	Estonia: 16.0 Lith.: 18.2 Latvia: 20.0	Estonia: 6.0 Lith.*: 5.5 Latvia: 4.0	35.00	2.86	242.86	28.57

Source: based on Eurostat; Polish Financial Supervisory Commission; Allianz Global Investors, *Central and Eastern European Pensions 2007*; www.privatepension.ro

* voluntary second pillar

The highest total pension contribution is found in the Czech Republic, which has voluntary pension fund membership, although the pension contribution paid to the first pillar amounts to 28.0%. There are also high pension contributions in Hungary (totalling 26.5%) and Slovenia (24.35%, paid in full to the first pillar). The lowest pension contributions are collected in Slovakia (totalling 18%, half to the first pillar and half to the second) and in Poland (totalling 19.52%, about two-thirds to the first pillar and the remainder to the second), where the public have been given greater opportunities to accumulate pension capital using free forms of saving (the third pillar), with people's prudence in insurance-related matters being relied on. However the Polish example shows that only a small percentage of that country's population makes use of voluntary pension funds, for example, and the amount of assets accumulated in such funds to date remains very small (see Table 5).

The data in Table 5 also shows that, in terms of the percentage of national population accumulating contributions in pension funds, the leading countries are Bulgaria with 46.22%, Slovakia (44.44% of the population belong to pension funds), Hungary (42.74%), and the Czech Republic, where four out of ten people are members of a pension fund and, importantly, those funds are voluntary: the Czech Republic does not have obligatory pension funds (there is no second pillar). However in terms of pension fund assets per fund member, a clear first place is taken by Poland (€1102.36 in obligatory funds and €7.87 in voluntary

funds), ahead of Hungary (€745.53 in obligatory funds and €298.21 in voluntary funds). It should be noted that Poland has the greatest public engagement in pension funds in terms of assets, almost totally concentrated in obligatory funds (the second pillar). That country also has the most favourable projections for the level of pensions expenditure in the years 2010–2050. The least favourable projections for that expenditure are those for the Czech Republic, one of the three among the analysed countries not to have introduced universal membership of pension funds. The same country is expected to have the highest demographic dependency rate by 2050, which will significantly impact the amount of future pensions expenditure. However, by way of comparison, the value of that indicator for Poland will be only 3.8 percentage points lower (see Table 1).

An analysis was also made of the rate of gross savings in the countries under consideration at the end of 2006 (see Table 6).

Table 6. Rate of gross savings by households in Central and Eastern European countries (end of 2006)

Country	Rate of gross household savings (%)
Czech Republic	9.1
Estonia	-3.0
Latvia	-3.6
Lithuania	1.2
Hungary	12.0
Poland	8.6
Slovenia	17.1
Slovakia	6.1

Source: www.analizy.pl

To supplement the information contained in the above table, it should be stated that in the EU-15 counties at the end of 2006 the gross savings rate was 13.7%, while in the EU-27 countries it was 11.1%. This means that those living in the “old” member countries have a greater propensity to save, which may be a consequence of both their wealth and their prudence in matters relating to insurance, including the making of financial provision for old age.

Among the analysed countries the highest savings rates is found in Slovenia, Hungary, the Czech Republic and Poland. Apart from Slovenia, these are also countries which recorded high values for the indicators considered in Table 5, being a measure of public engagement in

pension funds. The lowest rates of savings were recorded in the Baltic States, where public engagement in pension funds is also low, particularly when measured in terms of fund assets per head of population.

The above analysis shows Poland to be the country where pensions expenditure as a proportion of GDP will be most favourable, this undoubtedly being a result of the universal membership of pension funds and the relatively large amounts of assets accumulated in them. The analysis does not however reveal with certainty whether compulsory pension fund membership is the best solution, since in the case of the Czech Republic, which has only voluntary funds, although the projected ratio of pensions expenditure to GDP is less favourable, the rate of household savings at the end of 2006 was higher than in Poland.

5. Investment limits for pension funds and the system of remuneration for pension fund companies

Another feature enabling assessment of the degree of liberalization of the pensions system, particularly in relation to pension funds, is the investment limits that control how the funds invest the assets entrusted to them. It is possible to compare the freedom which pension funds have, both in investing in financial instruments issued domestically and in investing abroad. Table 7 shows the investment limits applicable to pension funds in selected countries of Central and Eastern Europe.

Table 7. Investment limits for compulsory pension funds in selected Central and Eastern European countries (% of assets)

Country	Treasury papers	Bank deposits	Corporate bonds	Shares	Investment fund units	Foreign investments
Bulgaria	min. 50	No limits	No limits	20	15	15
Croatia	min. 50	5	30	30	30	15
Czech Republic	No limits	10	No limits	No limits	No limits	No limits for OECD countries
Estonia	35	35	No limits	50	No limits	No limits for EFTA and CEFTA countries
Hungary	No limits	No limits	30	50	50	30
Latvia	No limits	No limits	20	30	No limits	No limits for EFTA and CEFTA countries

Poland	No limits	20	40 publicly traded 10 others	40	15 open-end 10 closed-end	5
Romania	70	No limits	No limits	50	No limits	data not available
Slovakia	min. 30	No limits	No limits	80	No limits	70
Slovenia	No limits	30	No limits	30	30	No limits for OECD countries

Source: based on Erdos M., *For good investment regulations. The CEE experience,* Nagy, Fater, 2006; Dybał M., *Indywidualne, kapitałowe fundusze emerytalne na świecie* in: "Rynek kapitałowy. Skuteczne inwestowanie. Część 1", Tarczyński W. (ed.), Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2007, pp. 433–443; Allianz Global Investors, *Central and Eastern European Pensions 2007*, Survey of investment regulations of pension funds, OECD 2007

The greatest freedom in investing assets in highly variable financial instruments – shares – is enjoyed by pension funds in the Czech Republic (no limits) and Slovakia (up to 80% of assets), as well as in Estonia, Hungary and Romania. It should be noted, however, that in the Czech Republic, where only a 10% limit for bank deposits has been set, all pension funds are voluntary third-pillar funds, while in the other countries the majority of assets are invested in the compulsory funds which make up the second pillar of the pensions system. There are also no quantitative limits in Slovakia and Romania on investments in bank deposits, corporate bonds or investment fund units, in Estonia on investments in company bonds or investment fund units, and in Hungary on investments in treasury papers or bank deposits. The most restrictive investment limits apply in Bulgaria, where funds can invest no more than 20% of the value of their assets in shares, and must invest at least half in treasury debt papers. In Croatia the same lower limit for treasury debt papers applies, and funds can invest a maximum of 30% of the value of their assets in shares. A 30% limit on investments in shares has been set also in Slovenia and Latvia. Moreover Latvia, Hungary, Croatia and Poland have set upper limits on investments in corporate bonds.

As regards limits on foreign investments, the most liberal solutions have been applied in the Czech Republic and Slovenia, where there are no limits on investment in OECD countries, and in Latvia, where funds can invest without limit in securities issued in the countries of EFTA and CEFTA. Poland has decidedly the least liberal measures in this regard: here funds can invest at most 5% of the value of their assets. In April 2009 the European Commission brought a case against Poland at the European Court of Justice concerning excessively restrictive limits on foreign investment by Open Pension Funds.

Also of importance are the systems of remuneration for pension fund companies, where particularly in the case of compulsory pension funds the remuneration of fund-managing institutions ought to depend to a high degree on the investment results attained. Then firstly there is a greater convergence between the interests of the fund members and those of the companies managing the funds, and secondly such a system is fairer, as it prevents situations where fund companies' revenue rises while the funds they manage are bringing losses, and thus their members' assets are diminishing (which happened in Poland, for example, in 2008, when the value of pension fund units fell by an average of 14.2%, while the profits of pension fund companies rose by 6.2%). The fees collected by the pension fund companies are primarily a fee on contributions, calculated as a percentage of the pension contributions paid to the fund, and a management fee, which may consist of a constant (basic) component, being a specified percentage of the value of the fund's assets, and a variable (additional, bonus) component, being a reward for profits, linked to the investment results achieved by the fund. Systems of remuneration for pension fund companies in selected countries of Central and Eastern Europe are presented in Table 8.

Table 8. System of fees collected by pension fund companies in selected Central and Eastern European countries

Country	Distribution fee	Asset management fee – constant part	Asset management fee – bonus part
Bulgaria	5%	1%	None
Croatia	0.8%	0.95%	25% of return
Czech Republic	No regulations	No regulations	None
Estonia	1%	2%	None
Hungary	4.5% since 2008, was 6% in 2007	0.8% since 2008, was 0.9% to end of 2007	
Latvia	No regulations	No regulations	None
Lithuania	10%	1%	None
Poland	7%, fee will decrease, and from 2014 upper limit will be 3.5%	max. 0.045% monthly	0.005% monthly for the best fund, 0% for the worst, for others proportional to rate of return achieved

Romania	2.5%	0.6%	10% of annual investment profit
Slovakia	1%	0.07% monthly	None
Slovenia	6%	1.5%	None

Source: Global Investors, *Central and Eastern European Pensions 2007*, Survey of investment regulations of pension funds, OECD 2007

The above information on investment limits and the fees collected by pension fund companies can be usefully compared with the investment results of pension funds in the period of financial crisis. Table 9 shows the percentage fall in the value of the assets of pension funds (compulsory and voluntary funds together) in the period from 30 June 2007 to 30 June 2008, namely in the initial phase of the downturn on the financial markets.

Table 9. Percentage fall in the value of the assets of pension funds caused by investment results in the period from 30 June 2007 to 30 June 2008

Country	Percentage fall in value of assets (%)
Czech Republic	2.84
Croatia	4.41
Baltic States	5.26
Slovakia	6.96
Poland	14.14
Hungary	20.10
Slovenia	64.00
Bulgaria	77.87

Source: www.privatepension.ro

The smallest percentage fall in the value of assets was in the Czech Republic (2.84%), where only voluntary pension funds operate. However, that country is the only one among those analysed where an absolute guaranteed rate of return has been set (the other countries have either a relative guaranteed rate of return or none at all), which forces pension funds to achieve positive rates of return for annual periods (see Allianz Global Investors, 2007). The Czech Republic also has no upper limits on the fees collected by pension fund companies. The country with the next smallest relative fall in the value of pension fund assets was Croatia

(4.41%), which although it has some of the least liberal investment limits, has the remuneration system which is linked most closely to investment results and least to the contributions paid in to the fund. Such a system motivates pension funds to achieve the best possible investment results, as it is these which largely determine the financial results of the fund management companies. The largest falls in values of assets were recorded in Bulgaria (77.87%) and Slovenia (64.00%). These countries apply a system of remuneration where there is no variable (bonus) component to the management fee; moreover Bulgaria has the most restrictive investment limits.

For comparison, in 2000–2005 the best investment results were recorded by pension funds in Poland (with an annual rate of return of 9.6%) and in Estonia (4.1%), while the Czech Republic had the lowest rate of return at 1.5%[3] (see Antolin, 2008).

6. Positive and negative aspects of the liberalization of pensions systems

The analysis presented above of the changes which have taken place in the general structures of pensions systems in the countries of Central and Eastern Europe, and the measures applied with respect to pension funds, which are the most significant innovation of the reformed systems, indicates that the system of pensions provision in Central and Eastern Europe is undergoing liberalization. It should be noted, however, that the period of less that 10 years that has elapsed since the beginning of pensions reform in the post-communist countries is too short for unambiguous opinions and recommendations to be formulated, particularly since the reforms are still continuing.

Also of importance for this process is the influence of globalization, which forces European countries to become more competitive with respect to other parts of the world, and thus shapes to a large extent the changes taking place in systems of social security as a whole. These changes are tending to reduce taxes and social spending by the state, which is hoped to make national economies more competitive and encourage increased incoming foreign investment (cf. Dozelova, 2001). Globalization, in forcing the liberalization of economic systems, also forces liberalization of the social security system.

However, this process is not proceeding uniformly in all of the analysed countries. The differences that occur, compared with the investment results of pension funds, the fees they charge and selected macroeconomic indicators, make it possible to formulate the following

[3] In 2004 the Czech Republic abolished its limit on investment in shares, which had stood at 25%.

conclusions relating to the positive and negative effects of liberalization of pensions systems in the post-communist European countries.

1. The basic question remains: to what extent should the pensions system be universal, based on compulsory insurance in the first and possibly the second pillar? It would appear that in the post-communist countries, whose populations still have a low propensity to save, and in any case have much less opportunity to save voluntarily than in Western Europe due to their level of earnings, the pensions system must be based on compulsory pension cover, in order to prevent the phenomenon of "free riders" – a group of people failing to save some of their earnings during their working lives, then expecting to be financed in old age by other taxpayers, including people who regularly accumulated capital for their own pensions.
2. Another argument in favour of the temporary retention of pensions systems with a significant compulsory part is the relatively low level of knowledge in post-communist societies about the functioning of financial markets and capital-based pensions systems. This is illustrated by the example of Poland, where a significant percentage of people do not even choose their pension fund, but allow themselves to be assigned randomly to a fund, while among those who do make the choice a significant proportion do so irrationally, without taking the funds' investment results into primary consideration. It has been noticed previously that only when society has adequate knowledge and information can the choice among pension products or the institutions offering them favour more effective market mechanisms and competitiveness (Barr, 2002). The example of the countries of Latin America, where pensions reform happened earlier, with the introduction of individual pension accounts, also confirms this, since the public's limited and poorly executed choice as regards pensions provision led to a reduction in market competitiveness and increased the administrative costs of the pensions system (see Arza, 2008).
3. With time, however, wishing to at least favour increased competitiveness between institutions offering pensions products, it would appear entirely sensible to reduce the compulsory part of pensions provision in favour of voluntary forms of saving for old age. As has been mentioned, however, this must go together with increased prudence in pension-related matters among the general public and increased knowledge relating to personal pensions finance.
4. The Czech example indicates that a pensions system based on a distributive pillar as the only compulsory one and on voluntary pension funds, where there is more liberal regulation of the investment activity of funds and no limit on the fees collected by the open

pension fund companies, but with funds subject to a guaranteed positive rate of return, may function effectively, as was shown in particular in the period of downturn on the financial markets. However this country has the highest pension contribution, paid in full to the distributive first pillar. Moreover the voluntary pension funds are obliged to compete for customers not only with each other, but also with other financial institutions offering pension products. A counterexample might be Poland, which has the largest compulsory pension funds market in terms of both number of members and value of assets, where although the market is divided between 14 firms, almost all of them have set their fees at a uniform level, the statutory maximum. They are therefore not competing with each other, nor do they have to compete with other firms in the financial marketplace, because this is of no importance for the overall number of persons insured with these funds. This is a significant defect in a solution based on universal pension fund membership, and an argument for further liberalization of the pensions system.

5. It would appear that the introduction, in all countries except the Czech Republic, Lithuania and partially Slovenia, of universal pension fund membership, which is a certain limitation on society as far as provision for financial security in old age is concerned, ought to make systems of remuneration for pension fund companies more closely linked to the investment results of funds. In the great majority of the analysed countries, the revenues of pension fund companies is dependent on the amount of contributions paid into the fund and the value of its assets, but is not directly impacted by the investment results attained. Exceptions are Croatia, Romania and Poland, although in the last case the link to fund results is negligible.
6. Pension funds, particularly compulsory ones, ought to be obliged to attain guaranteed rates of return, which is a certain limitation on the freedom of those entities in the implementation of investment strategies, but has an indirect impact on the safety of the investments made by the funds, and thus on the security of the financial assets accumulated on those funds, namely the pension capital of their members.
7. In many of the analysed countries, limits on the investments made by funds require further liberalization. Naturally that liberalization, like systems making fund companies' remuneration depend to a greater extent on the funds' investment results, which might tempt fund managers to take on too much investment risk, ought to be combined with a guaranteed rate of return as mentioned in paragraph 6. Liberalization would seem particularly desirable in relation to the limits on foreign investments, which may be of significant importance for the scope of geographic diversification in funds' investment

portfolios, particularly in a period of downturn on the financial markets. After all, the crisis does not affect all parts of the world uniformly, and may take on different dimensions in emerging markets than, for example, in developed markets. Arguments in favour of liberalization in this area include the rates of return represented by the principal indexes of selected worldwide stock markets (see Table 10).

Table 10. Half-yearly, yearly and three-year rates of return based on principal worldwide stock market indexes (as at 8 May 2009)

Country	Index	6-month rate of return (%)	Yearly rate of return (%)	3-year rate of return (%)
Czech Republic	PX	16.64	-41.32	-47.08
Hungary	BUX	21.85	-38.35	-44.99
USA	DJ Industrial	3.53	-33.41	-37.75
Germany	DAX	6.34	-30.16	-34.13
Norway	OSE ALL SHARE	25.19	-40.29	-39.50
Brazil	BOVESPA	49.52	-27.01	1.75
Chile	IPSA	18.12	0.65	-7.20
Argentina	MERVAL	49.97	-28.85	-28.93

Source: www.money.pl

The above rates of return indicate the advantage of a liberal policy in relation to limits on foreign investment by pension funds, since while the markets of Central and Eastern Europe were experiencing notable falls, other stock exchanges were recording smaller falls or rises, particularly as regards 3-year rates of return. Similarly, although over a six-month period there were significant rises on the stock markets of Hungary and the Czech Republic, in other countries it was possible to make even greater profits. Apart from the above argument, there is one more in favour of liberalization of foreign investment limits – the fact that the capitalization of the domestic stock market may be too low relative to the assets accumulated by the funds, which significantly restricts their investment possibilities.

8. The countries of Central and Eastern Europe ought as quickly as possible to introduce pension subfunds with differentiated levels of risk for members in various age groups, so that in case of downturn on the financial markets the pension capital of the oldest groups is

maximally protected through investment in safe financial instruments, while younger people can invest their savings in more aggressive funds, in view of the longer investment horizon. The question of whether the choice of subfund should be a completely free one or be restricted, like the possibility of allowing freedom of decision about pensions provision, depends on the public's level of prudence in matters of insurance and its knowledge about financial markets and investments.

The above specific conclusions drawn from the analysis make it possible to formulate an overall conclusion: that further liberalization in pensions provision in the countries of Central and Eastern Europe, in terms of both the general structure of the pensions system and the regulations applicable to the activity of pension funds, is desirable, as it will favour further growth in competition among financial institutions offering pensions products, and will broaden possibilities for pension funds to implement a bolder investment policy, but at the same time one which is more strongly diversified geographically. However a condition for that liberalization is a sufficiently high level of prudence in matters of insurance among the inhabitants of the post-communist countries, an awareness of responsibility for future pension benefits, and a sufficient level of knowledge about financial markets, investments and pension products. For this purpose it is necessary to make constant analysis of the investment choices being made by people in those countries, which will make it possible to answer the question of whether the listed conditions for further liberalization in pensions provision have been satisfied.

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