THE IMPACT OF POLISH PENSION REFORM ON PRESENT AND ANTICIPATED CONDITIONS OF PUBLIC FINANCES

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Abstract

Demographic aging of the population in economically developed countries (including Poland) and significant changes in the labour market (delayed start period of work associated with longer average education period, periods of activity interspersed with periods of unemployment, etc.). - it all creates a very serious challenge to pension systems, which should provide for the maintenance of older people at the end of their professional activity. Pension systems in most countries of the world (including Poland) have lost the ability to self-financing and require funding from the state budget. Therefore construction which institutional and economic functioning of the mechanism of pension systems have a very significant impact on the public finances, they can heat their stability. Attempt to respond to these challenges have been pension reforms introduced in most European Union countries at the turn of the XX and XXI century and in different variants still continues.

The aim of this article is to analyze and assess the impact of pension reform in Poland on the current and projected state of the public finance. Polish pension reform and its financial consequences will be confronted with the similar problems of pension reforms in selected CEE countries.

Key words: *pension systems, population aging, pension reforms, public finances*

1. POLISH PENSION REFORM AND THE GROWTH OF PUBLIC DEBT BETWEEN 1999 AND 2012

In the late 1990s and in the first decade of XXI century pension reforms has been implemented in the countries of Central and Eastern Europe. The reforms were intended to respond to huge demographic and economic challenges connected with population aging (falling fertility levels and rising life expectancy) and transition of labour market from centrally planned economy to market economy. Many CEE countries – including Poland – introduced radical, systemic structural reforms, shifting from one pillar PAYG pension schemes towards multi-pillar systems with fully funded components (privately managed pension funds). These reforms were introduced during the 1998 – 2008 by eight countries (Hungary, Poland, Latvia, Estonia, Bulgaria, Lithuania, Slovakia and Romania) which become new EU member states from this region (in 2004 and 2007 enlargement rounds).

The different construction of pension schemes – especially different contribution level of the funded pillar, the different switching rules, and different choices made by employees, influenced the level of transition costs. The substantial differences between the pension systems of the CEE countries both in terms of their design and transition rules will not be addressed in this article which is focused mainly on Polish pension system. Valuable international comparisons of transition costs from one pillar to multi-pillar pension schemes in CEE countries are already available in the literature of pension economics (Bielawska, Chłoń-Domińczak & Stańko 2015).

Before the radical pension reform, until 1998 a uniform PAY-AS-YOU-GO pension system with defined benefit had existed in Poland. PAYG schemes are characterized by the contributions of working people financing current pension payments. In the system of defined benefit the actual amount of pension depends on the earnings during selected career years and insurance periods. Already in the 1990s this system was scarce and required subsidies from the state. Unfavorable demographic changes in Poland – as in other economically developed countries, including all European Union countries –associated with progressive population ageing (an increase in the amount of people of retirement age in relation to the generation of working individuals as a result of low fertility rates and lengthening life expectancy), resulted in a situation, when the maintenance of the

PAYG[1] scheme with a defined contribution could lead to a collapse of public finances. The main objective of the radical, systemic pension reform implemented in Poland in 1999 was to ensure the stability of the financial system and preserve solvency despite high deficit at the start.

The above goal was supposed to be achieved through a change in the pension formula (defined benefit to defined contribution) and the diversification of risk in the pension system. The idea was also to replace the PAYG system with a mixed multi-pillar PAYG - funded pension system.

The creators of the reform assumed that the introduction of the two sources of funding (first PAYG pillar, administered by the state - the Social Insurance Institution, and the second pillar - newly established privately managed pension funds) would increase the safety of future pension payments due to risk diversification. Supplementary pension systems (the so-called *third pillar*) were supposed to support the public pension system. They included both occupational and individual pension systems. However, so far in Poland they have remained quite underdeveloped. The new pension system covered people born after 1949. People born before 1949 continue to collect pension benefits on the pre-reform basis.

Creating a capital pillar (pension funds) has not been accompanied by an increase in pension contributions. As a result, the contributions paid to pension funds have reduced the funds used to finance current pensions. This difference has to be financed by increased subsidy from the budget. Pension reform in the so-called *transitional period* of coexisting PAYG system with defined benefit (for those born before 1949) and the new multi-pillar PAYG – funded pension system (for people born after 1949) has caused a very serious loss for the pension fund and has deepened the imbalance. This transition period lasts approximately 50-60 years. For example, the refund in respect of the contributions transferred to pension funds (abbreviation: OFE) in 2007-2013 resulted in cumulative additional expenditure of 8.3% of GDP.

If the loss of contributions directed to pension funds were to be entirely financed by public debt, the cost could reach up to 112% of GDP (The Ministry of Finance 2013, p. 41). The original idea of the creators of the reform, which assumed that the source of funding for the additional expenditure related to the implementation of the new pension system in its transition period (50-60 years), would be located in the privatization of state assets after the first 13 years of the reform proved to be unrealistic. Revenues from privatization turned out to be insufficient and irregular, and the loss of a part of all pension contributions transferred to pension funds had to be covered by increasing public debt (primarily through the issuance and sale of government securities). After taking into account the cost of operating this additional debt, its value in the years 1999-2012 amounted to 279.4 billion PLN, which accounted for half of the increase of public debt at that time (The Ministry of Finance 2013, p.32). Polish pension reform turned out to be very expensive. The idea of partial privatising of the public pension system - and especially its costs for the public finance - met with the matter of fierce criticism (Orenstein 2013, Oręziak 2014). There were also comments in support of the concept of risk diversification in the pension system, but drawing attention to the very high proportion of the fully funded pillar and the underestimation of the cost of the transition from the old to the new single, multi-pillar system (Szczepański 2013).

2. THE ADJUSTMENTS OF PENSION REFORM IN POLAND AND IN SELECTED CEE COUNTRIES

The adjustments of the pension reform introduced in 2011-2013 aimed at reducing the role of the funded pillar in the public pension system and reducing subsidies to refund contributions paid to open pension funds. In 2011 the contribution was reduced from 7.3% to 2.3% of gross salary (the whole pension contribution amounts to 19.52% of the salary) and, since 2013 open pension funds became voluntary. Since 2013 a gradual extension of the retirement age from 65 years of age for men and 60

[1] Contributors to a public PAYG system receive promises from government that future earmarked taxes (compulsory contributions) will provide them with goods and services in their old age. When there is not enough tax revenue to meet pension promises, a distributional crisis can result (Willomre 2004).

years of age for women has been taking place. The target is 67 years of age for both sexes. It was also supposed to improve the financial condition of the Social Insurance Fund and reduce the burden on the state budget subsidies to the pension system.

After 2008 the CEE countries introduced a new wave of pension systems changes. The common denominator of these changes was the reduction funded components or even reversals of multi-pillar schemes. In consequence of economic, public finance and pension system developments after 2008, which can be attributed to both external and internal factors, the wave of pension systems changes was initiated again, this time leading to reduction funded components or even reversals of multi-pillar schemes. Such changes were implemented in seven out of eight discussed countries (see table 1).

Table 1. Reversals of funded parts of multi-pillar systems in 8 CEE countries

Country	**Short description of the change to contributions and assets**
Bulgaria	**No change**
Estonia	**Temporary reduction with off-set.** 6% contribution rate cat to 0% between June 2009 and January 2011 and shifted to PAYG. Gradual increase from 2011. Rate sat at 3% in January 2011 and 6% in January 2012. In 2014-2017 at 8% to offset missed contributions.
Latvia	**Partial reduction.** 8% contribution rate to 2% in May 2009. Rates increased to4% from 2013.
Lithuania	**Partial reduction.** 5.5% contribution rate reduced to 2% in July 2009. Rated further lowered to 1.5% in January 2012 and 2.5% in 2013.Chnge to 3% (2% +1%) January 2014, voluntary participation. Additional contribution at 2% in 2016-2019.
Hungary	**Permanent reversal.** Contribution rate reduced to 0% in January 2011, assets transferred to the mandatory PAYG system.
Poland	**Permanent reduction and partial reversal.** Contribution rate reversed to 2.3% in May 2011.From February 2014 assets invested in government bonds transferred to PAYG scheme and redeemed. In 2014 made opt-out and opt-in in specified time slots. Assets from FF transferred gradually to PAYG 10 years prior to retirement.
Romania	**Temporary reduction.** Reduction in planned growth path of contribution rate from 2% to 6%.Rate froze at 2% started to increase from 2011 at annual rate of 0.5pp.
Slovakia	**Permanent reduction.** 9% contribution reduced to 4% in 2013 with planned further increase to 6% in 2024. Funded scheme opt-out and opt-in system.

Source: Schwarz and Arias (2014) updated by Bielawska, Chłoń-Domińczak, Stańko (2015, p. 17).

Analyzing the changes in the Polish pension system in comparison with the second wave of pension reforms in other CEE countries, an interesting regularity can be observed. During the first wave of reforms Poland belonged to countries where the partial privatization of public pension systems had gone furthest. On the other hand, during the second wave of reform, after the global financial crisis,

also in Poland the reduction of capital pillar in the public pension scheme and the reversal from the systemic pension reform was very radical. This begs the question of opportunity cost as implemented pension reform.

Currently, there is no doubt that the cost of the transformation of the pension system at the time the pension reform in 1999 was underpriced, which had a negative impact on the public, funding in the first 15 years of implementation of the reform. But reversals from the 1999 reform also cause risk to the public finance. As aptly stated by Bielawska, K. "fiscal crisis brought back retirement age priority actions to the agenda" (Bielawska 2015, p. 286). January 1, 2013 marked an entry into force of the provisions of the Act of 11 May 2012, amending the law on pensions from the Social Insurance Fund. The most important changes included the following:

1) gradual raising of the retirement age for women and men to reach an equal level of 67 years of age (about one month in relation to people born in each quarter of the year, which is gradually about four months per year),
2) reduction of the basis for calculating pensions according to defined-contribution by the amount of previously received pensions, granted before reaching retirement age,
3) introduction of the possibility of partial retirement before reaching the statutory retirement age,
4) gradual unification of insurance coverage for women and men - up to 25 years - qualifying for the lowest pension (effective as of 2022).

After the transfer of half of assets of pension funds invested in treasury bonds to PAYG scheme public debt has been temporally reduced but the hidden debt (liabilities in PAYG scheme for the future pensioners) has been at the same time increased. The value of pension liabilities (registered on individual accounts in PAYG part of public pension system in Poland) amounts to 2.27 trillion, while Polish public debt will reach at the end of 2016 year 1.01 trillion dollars (Pawlak 2016), which represents 51% of GDP. In the medium term (next 20 years), and long-term (30-50 years) Polish pension system remains financially unsustainable and will constitute a threat to the public finance. This will force introduction of further changes – e.g. increasing of pension contributions or general taxes, reducing benefits, the extension of the statutory retirement age (the latter - has already begun).

3. NEW CHALLENGES RELATED TO RETURNING TO THE PREVIOUS RETIREMENT AGE IN POLAND

After the presidential and parliamentary election in 2015, the new president of Poland - Andrzej Duda, and Law and Justice Party with its majority in Parliament, announced a return to the previous retirement age (65 for men and 60 for women) with a possibility of longer work for those interested.

What will be the economic and social impact of further changes to such an important parameter of the pension system as the legal age for retirement? What changes can appear in public finances and the labor market right after the introduction and over the next 20-30 years (while analyzing pension systems a longer period must be taken into account)?

Before attempting to answer these questions – provided that it is a preliminary assessment and that the final version of the bill will differ from the currently discussed project – it is worth pointing the impact of demographics on the finances of the pension system. PAYG systems are particularly sensitive to demographic risk and capital financing does not fully eliminate the threat.

Changes in the ratio between the working population and retirees (indicated by old-age dependency ratio), detrimental to the financial sustainability of pension systems, will occur in the years 2020-2030 (see. Fig.1).

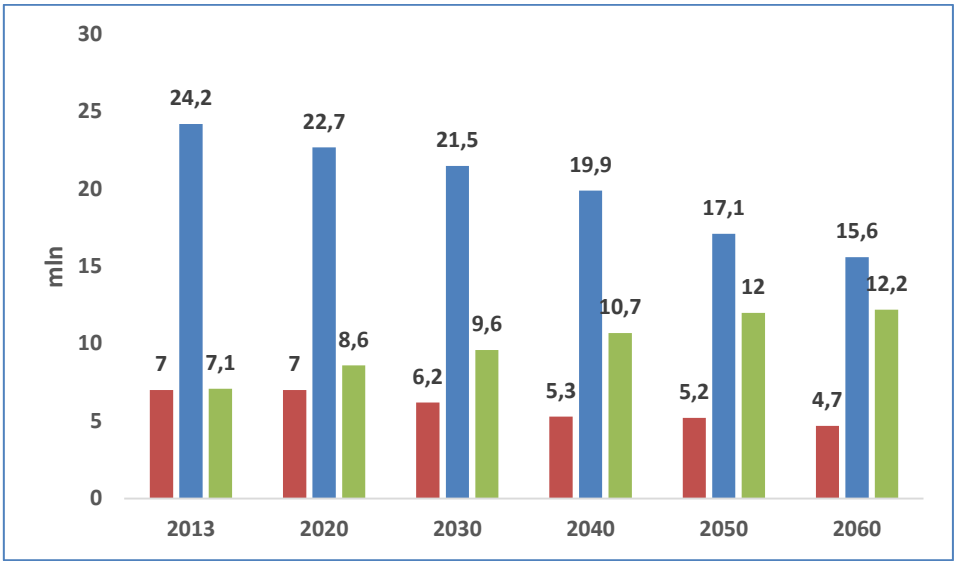

Fig. 1. Polish population according to economic age groups (pre-working age, working age and post-working age - group definitions before the raise in the retirement age).

Source: ZUS (Social Insurance Institution) 2013, p. 13.

Eurostat demographic forecast predicts that the ratio of the number of people of working age to the number of people of post-working age will rise over the years until 2060. Both in the variant with an increased retirement age and without it (faster in the latter case). While in 2013 1,000 people of working age corresponded to 295 retirement age individuals, in 2060 this number is expected to reach 786 people. Figuratively speaking, if statistically today there is one pensioner for about 3 persons of working age, in 2030 there will be only 2 persons, and in 2060 - only 1.4.

Like any long-term forecast, this one is based on certain assumptions and may not be one hundred percent accurate. An active pro-family policy will be able to somewhat mitigate the negative consequences of demographic aging, but a complete reversal of the trend currently appears unlikely.

Of course, the aforementioned demographic processes represent a very serious challenge to the long-term financial sustainability of pension systems. At the moment in Poland the balance of the Social Insurance Fund (SIF), from which pensions are paid, is negative, and subsidies from the state budget to ensure the continuity of the payment amount to more than 50 billion PLN.

Medium-term forecast of revenue and expenditure of SIF indicates its deficit's durability, despite a decrease in new pensions due to the gradual raising of the retirement age since 2013 (about four months a year, eventually to a uniform level of 67 years of age for men and women). If the statutory retirement age gets again reduced to 65 years of age for men and 60 for women, this deficit will increase even more.

Depending on the development of economic situation, the balance of SIF in the perspective up to 2020 (relatively near) will remain permanently negative (see. Table 2).

Table 2. The balance of SIF in 3 variants of revenue and expenditure forecast of the Social Insurance Fund for the years 2016 - 2020

Description		**2016**	**2017**	**2018**	**2019**	**2020**
1.		2.	3.	4.	5.	6.
Variant 1 forecasts (basic)	SIF balance billion PLN	- 54	-56	-59	-62	-62
	SIF balance in % of GDP	-2,9	-2,8	-2,7	-2,6	-2,6
1.		2.	3.	4.	5.	6.
Variant 2 forecasts (pessimistic)	SIF balance billion PLN	-61	-66	-70	-75	-79
	SIF balance in % of GDP	-3,4	-3,4	-3,5	-3,5	-3,6
Variant 3 forecasts (optimistic)	SIF balance billion PLN	-47	-46	-46	-44	-43
	SIF balance in % of GDP	-2,5	-2,3	-2,1	-1,9	-1,4

Source: Revenue and expenditure forecast of the Social Insurance Fund for the years 2016-2020.

ZUS (Social Insurance Institution) 2014, p. 28-30.

Further proposals for changes in the pension system regarding the statutory retirement age can only be assessed against a wider context of the "reforming the reform" of 1999 or - according to critics - a destruction of that reform.

They refer to undoing the changes started in 2013 (gradual lengthening and aligning of the retirement age). The justification of the presidential project submitted in the Sejm's previous term of office indicated that the total cost of lowering the retirement age for public finances in the years 2016-2019 will amount to approx. 40 billion PLN, of which approx. 30 billion PLN for the state budget. The document lacks any specific calculations and many experts claim that the real cost will be much higher. It would also be helpful to prepare a long-term forecast of the cost of restoring the general retirement age from 2012 to 2050, and at least for the next 30 years. The effects of pension reforms should be considered in such long-term perspectives.

In the long term it would deepen the projected deficit of the Social Insurance Fund. The changes are also going against those in most European Union countries. In the EU member states the general, statutory retirement age varies: in 2013 it varied for men from 62 years of age in Slovakia to 67 years of age in Greece and Sweden. For women it ranged from 59 years and 7 months in Bulgaria and Romania up to 67 years of age in Greece and Sweden. The vast majority of EU countries have already decided to increase the statutory retirement age for both men and women. In some countries there is already a mechanism for the automatic adjustment (lengthening) of the general retirement age to the average further life expectancy - e.g. The Czech Republic, Denmark, The Netherlands, Greece, Cyprus, Italy and Portugal (Bielawska, Pieńkowska-Kamieniecka 2015 p.88).

From a macroeconomic point of view, shortening the period of working life is not advisable. A decrease in the number of people participating in the GDP has a significant impact on the operation and financial condition of pension systems (Góra, Rutecka 2013, p.735). It can also weaken economic growth. From the point of view of an individual person the assessment of retirement or longer work period is more complicated. In the new pension system in force since 1999, which is based on individual retirement accounts, the amount of pension is determined by the following two factors: the state of individual retirement accounts and the start of receiving benefits. Thus, early retirement automatically reduces the benefits. Early retirement in defined contribution systems means a reduction in benefits in case of the postponement of this decision and further work. No one denies this fact and some Poles seem to have realized this. However, for many people, because of health reasons or bad relations at work or other important causes (e.g.: help in the education of grandchildren for women), the decision to retire at the age proposed in the draft of the presidential project will also be rational.

However, such people will not maximize their usefulness in microeconomic terms (by working longer they would receive higher pension benefits).

Therefore, there are no strong economic arguments in favor of returning to the general retirement age in force in Poland prior to 2012. This does not mean, however, that there are no advantages stemming from the presidential draft. Undoubtedly Andrzej Duda is right when he points out that the extension of the statutory retirement age was introduced without any sound public consultation and without social consensus for such far-reaching changes affecting millions of people and their families. Moreover, the period of healthy life after crossing the threshold of old age in Poland is shorter than in many other European countries, where the statutory retirement age has already been extended or prolonged. Providing people with a choice to retire or continue working seems to make sense, but a better solution would be to introduce a flexible retirement age after working out a specific insurance coverage.

A significant threat of restoring the statutory retirement age prior to 2013 is a situation when employers start to push women aged 60 and men aged 65 out of the labor market, even though such people would want to work longer. However, reaching the statutory retirement age should not constitute any grounds for making anybody redundant, but in many corporations this is happening. It is necessary to introduce statutory guarantees for employees who wish to work and restrictions for employers who would like to dismiss them just because the former have already obtained the right to retire. The choice for citizens whether to carry on working or retire should be real and guaranteed by the state. Moreover, it seems that the presidential draft should be encased in concrete incentives to collect additional voluntary pension savings under the third pillar, which in Poland remains extremely underdeveloped (see. Rutecka et al. 2014). In addition, the participants of the pension system should receive detailed, binding information regarding their pensions. For example, what amount a person would get if they retired at 60 or 65 years of age and what would happen if they decided to continue working longer, assuming the current salaries and payment of pension contributions. Many people may voluntarily decide to work longer, but they must have reasonable grounds for doing so. Vague information is insufficient.

It seems that in the long term, re-extending the retirement age will be necessary, and it will be enforced by demographics and economic balance. It is necessary to start a serious discussion on the overall pension system adaptation to projected demographic and economic changes, considering good and bad experiences with the implementation of the pension reform introduced in 1999. Poland is not the only country where the process of reforming the pension system is not ending and, in fact, has become permanent.

CONCLUSIONS

The experience of the Polish pension reform implemented since 1999 and partially reversed since 2011 suggests that at the stage of its preparation (till the end of 1998) were committed significant errors. The implementation of the new pension system has proved to be very costly during the co-existence of the old PAYG system and the new, mixed PAYG-pre-funded pension system (this period will last till 2045 and according some projections even longer). The effects of the implementation of pension reform were not sufficiently monitored from the point of view of their impact on public finance. This could have helped to make much earlier the appropriate adjustments (reduction of pension contributions transferred to pension funds). This would have prevented an additional debt associated with pension reform.

Reduction of retirement pension contributions transferred to the funded part of the pension (II pillar, pension funds) in 2011 was justified. However, the marginalization of parts of the capital in 2013-2014 and to transfer half of the assets held in pension funds to the PAYG system undermined the fundamental principle of pension reform from 1999, which was the diversification of risk in the pension system (“security though diversity”).

It can be assumed that the demographic changes already in the next 15-20 years will force further changes in the Polish pension system. Even if temporarily statutory retirement age will be set at the level of the previous regulation (65 for men and 60 for women), the demographics will force the extension of the retirement age. An alternative would be to increase pension contributions, which would also cause an increase of the cost of labor. Other option would be to turn down pension benefits. Both of these solutions not only to encounter strong public resistance, but would also be unfavorable for the Polish economy and the living standards of the population. Finally, the level of future pensions will be determined by the size of future GDP for distribution among the working generation and the generation of retirees. It is also in the interest of future retirees that the burden of financing public pension system will not be a threat to economic growth and the public finance in the next decades.

REFERENCES

1. Bielawska, K. 2015, '*Skutki finansowe odwrotu od reform emerytalnej z 1999 roku dla Funduszu Ubezpieczeń Społecznych'*, in: Sułkowska W., Strupczewski G. (eds), *Dylematy teorii i praktyki ubezpieczeń* [Financial impact of the retreat from the pension reform of 1999 for Social Security Fund, in: Dilemmas of insurance theory and practice], Poltext, Warszawa 2015, pp. 283-293.
2. Bielawska, K, Chłoń-Domińczak, A., Stańko, D., *Retreat from mandatory pension funds in countries of the Eastern and Central Europe in result of financial and fiscal crisis: Causes, effects and recommendations for fiscal rules*, Warsaw, June 2015, viewed 20 April 2016, <http://uczelnia.sgh.waw.pl/pl/uczelnia/badania/grupy_badawcze/ppg/Documents/NCN%20Sta%C5%84ko%202015/Report%20CEE%20reversals%20-%20final.pdf >.
3. Góra, M., Rutecka,, L J. 2013, 'Elastyczny system emerytalny a obecne i przyszłe potrzeby jego uczestników' [Flexible pension system and the current and future needs of its participants], *Ekonomista*, no. 6, pp. 735-753.
4. Ministerstwo Finansów 2013, *Przegląd finasowania systemu emerytalnego. Bezpieczeństwo dzięki zrównoważeniu* [Pension system financing review. Safety due to sustainability], Ministerstwo Finansów [Ministry of Finance], Warszawa 2013.
5. OECD 1998, *Maintaining Prosperity in an Ageing Society*, OECD, Paris.
6. Orenstein, MA 2013, *Prywatyzacja emerytur* [The privatization of pensions], Polskie Wydawnictwo Ekonomiczne, Warszawa.
7. Oręziak, L., *OFE Katastrofa emerytur w Polsce* [OFE Disaster of pensions in Poland], Książka I Prasa, Warszawa.
8. Pawlak, M. 2016, 'Emerytury pogrążą finanse państwa' [Pensions plunge the state finances], *Rzeczpospolita*, 28 April, pp. B2-B3.
9. Rutecka J. 2014, ed., *Dodatkowy system emerytalny w Polsce – diagnoza i rekomendacje zmian. Raport dla Kancelarii Prezydenta RP opracowany przez zespół w składzie: K.Bielawska, R.Petru, S.Pieńkowska-Kamieniecka, M.Szczepański, M.Żukowski* [Additional pension system in Poland – diagnosis and recommendation of changes. Report for the Chancellery of the President of Poland prepared by the following team of people: K.Bielawska, R.Petru, S.Pieńkowska-Kamieniecka, M.Szczepański, M.Żukowski], Towarzystwo Ekonomistów Polskich, Warszawa.
10. Szumlicz T. 2006, *Ubezpieczenie społeczne. Teoria dla praktyki* [Social insurance. Theory for practice], Oficyna Wydawnicza Branta, Bydgoszcz -Warszawa.
11. Szczepański M. 2013, 'Bezpieczeństwo dzięki zrównoważeniu – wstępna ocena proponowanych zmian' [Safety due to sustainability – an initial assessment of the proposed changes], in: Szczepański M., *Reformowanie systemów emerytalnych – porównania i oceny. Pension reforms – comparison and evaluation*, Publishing House of Poznań University of Technology, Poznań, pp. 147-175.

12. Willmore, L. 2004, 'Population ageing and pay-as-you-go pensions', *Aging Horizons – Oxford Institute of Aging*, no. 1, pp. 1-11, viewed 20 April 2016, < http://www.ageing.ox.ac.uk/files/AH%201%20Willmore.pdf>.
13. *World Report on Aging and Health* [2015], World Health Organization, New York.
14. ZUS 2013, *Prognozy wydatków i wpływów funduszu emerytalnego do 2060 roku* [Estimates of expenditure and income of the pension fund by 2060], Warszawa.