

# POLISH PENSION SYSTEM AS A RESPONSE TO THE PROBLEMS OF AN AGING SOCIETY

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**Abstract.** *The pension system is an important element of social security. Its main objective is to provide citizens with a beyond retirement age standard of living. The realization of this purpose in the modern world faces increasingly difficulties, because on the whole world is observed adverse events, which may include, inter alia, an aging population and a decline in fertility. These developments, combined with permanently lengthening the life expectancy, caused a number of problems affecting the socio-economic and forced the governing changes in retirement systems. The aim of the paper is to show how authorities in Poland, trying to respond to the problem of an aging population, submit modifications to this area of social policy. In addition, in the study, primarily using descriptive and comparative method, there tried to rate the Polish pension system and there tried to show the directions and possibilities of its improvement. The conclusions and recommendations of this article can be also helpful for those responsible for the operation of pension systems in different countries.*

**Keywords:** *pension system, public authority, aging society.*

## 1. Introduction

One of the significant challenges facing us in the social sphere faced by both individual countries, as well as transnational and global groups is the phenomenon of an aging population. This process, showing some variation in relation to specific regions of the world, is universal, inevitable and irreversible for at least three or four generations. The increase in the proportion of older people in society on the one hand associated with lengthening of human life, which – as a result of the development of broadly understood civilization and progress – can be evaluated very positively. On the other hand, it is also the result of significantly reducing

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the level of fertility, which due to the consequences of (among other things on the functioning of the labor market and social security systems) is an important problem. From the point of view of the proper functioning of the state, within the meaning of the socio-economic efficiency, the key issue seems to be an implementation of the wider policy towards aging, generally understood as "actions intended to solve or reduce the problems associated with an increase in the proportion of old people society" [2]. To these activities we can include, among other things modifications currently functioning pension systems as key elements to security systems in the event of old age. As a result of demographic change and economic crises, most of these systems, especially of a public nature, were in fact on the path to financial collapse.

Therefore, the aim is to look at how authorities in specific countries cope with the problems of aging populations and how they adapt to the current conditions of pension systems. The purpose of this study is to analyze Polish solutions in this field, their assessment and make recommendations for improvement of the pension system, the functioning of which is after all one of the most important elements maintained by the state social policy [10]. Pension systems are in fact usually guaranteed by law and entered into a tradition and mentality of a society. So among other things, is in Poland, where the art. 67 of the Constitution guarantees citizens the right to social security "in the event of inability to work due to illness or disability, and after reaching retirement age". This means that the state takes over responsibility for social security of citizens (which is implemented on a rule) and creating mechanisms to protect them, inter alia, a significant drop in income and impoverishment in old age.

One of the rules, which is the basis of pension systems (PAYG), is the principle of social solidarity – which applies to both the creation of the financial resources of the system, as well as redistribution. Such a mechanism can function only if the number of people in the labor market functioning and which are also parties financially system power supply is greater than the number of people using the services financed by the system. In the event of an aging population, the system loses stability as the number of recipients of benefits exceeds the number of contributors. Due to the long-term nature of the phenomenon action becomes necessary by modifying previously developed solutions. This is due to the fact that the financial insufficiency of the pension system is felt both part of the society, which are the elderly, due to the significant deterioration in their financial situation and the whole of society in connection with the acquisition of funding at each of these people. The consequences of the

financial collapse of the system also affects the public finance sector (funding the pension system leads to an increase in public debt), as well as the economy as a whole due to the fact that increasing pension contribution increases the cost of business operation [15].

Attempts to optimize the pension schemes undertaken in different countries were related, *inter alia*, to actions such as: increasing the amount of pension contributions, reducing the amount of benefits paid, raising the age of eligibility to receive full and partial services, alterations in risk sharing in the field of social security, as and encouraging the public to take responsibility for their own security in old age – for example, through various forms of saving [1]. It should be remembered that changes to certain rules, especially if they involve additional expenditure or elimination of all kinds of privileges, are politically very difficult to implement, because usually encounter strong resistance in society. Cited above solutions are used in various countries, including the European Union. This is due to the fact that social policy (Treaty of Rome) is treated as an area of competence appropriate to individual Member States and not subject to harmonization. However, it is possible to identify some guidance in this area that have both normative (Directives and Regulations), as well as forming the so-called "soft law" (Open Method of Coordination). In this place should also mention of the request on the functioning of the labor market, especially the increase in the employment rate, which has been included, *inter alia*, the Europe 2020 Strategy and the European Commission's White Paper (2012) concerning the adequate and sustainable pensions.

Referring to the Polish solutions that will be presented hereafter study, it should be emphasized that in the case of Polish discussions and work on changing the shape of the social security system – which is one of the main elements of social policy – practically began after World War II, and proper gained momentum after the political transformation of 1989. As part of the undertaken actions there were regulations on state policy towards the unemployed (1989) [12], welfare (1990) [13], health care (1991) [14] and the pension system.

## **2. Polish pension system and the challenges of the present**

In recent decades, the aging of the population was observed primarily in Western Europe. The continuing trend was a warning signal to the countries of Central and Eastern Europe, who could expect the emergence of similar problems. In Poland, however, matters relating to the

improvement of the demographic situation were not a priority but rather progressive, demographic structure of not having to provide immediate and strong interference of the state in population policy.

Modifications introduced in the Polish pension system since the Second World War was rather the result of financial difficulties the state, and not fear the demographic crisis. In Poland after 1945, economic and social situation basically forced modifications and yet functioning capital system changed to PAYG – pay as you go. Lack of financial resources did not allow for the capital was individually collected. It was necessary to permanently transfer the contributions of people working on the benefits payable to pensioners in the so-called intergenerational contract. In this system, followed by a flow of current between the generation of children and their parents' generation, and so people economically active part of the earned money were paid by to the common cash, which were paid on a regular basis benefits. In addition, the Polish political system in which private property was limited, did not allow even a partial capitalization of the pension system. In addition, the Polish political system in which private property was limited, did not allow even a partial capitalization of the pension system.

Introduced in the postwar period change in the Polish pension system would not solve the problem of the budget deficit. Therefore it was necessary to introduce other solutions that would help deal with the functioning of financial troubles during the Polish People's Republic system. And so, for example, in the 50s of the twentieth century, the social security system included in the state budget, which meant that the Social Security revenues were revenues of the state budget and the state budget secreted social security spending. In 60-70 years of the twentieth century there were created and pooled funds. Then failure of the system and the continuing lack of funds to pay pensions, forcing authorities to raise additional funds, which resulted in that from the beginning of the 80's have permanently raised pension contributions. It is worth noting that since 1981 until 1998 the premium paid by the employer for its employee increased from 15.5% to 45%. Employers therefore incur huge costs associated with employment, because the premium was paid in full only by them. Apart from the fact that the system has a high-tax wages, which resulted in the transfer of employment to the gray area, he still had other disadvantages.

First of all, the system did not stimulate economic growth. The pension system freed the size of benefits from the contributions and encouraged their non-payment, and also characterized by a low level of domestic savings, a low level of investment efficiency and inefficient allocation of public resources. On the other hand, it was more resistant to the economic recession and inflation, to a greater extent, provides a sense of social security, it has a relatively low cost of operation and checked in difficult situations, for example, after the war.

Despite the above mentioned advantages, the Polish authorities, taking into account not only the growing shortage of financial resources in the system, which created the need for supplementation of the state budget, but was already noticeable aging of the population, in 1998, introduced a pension reform. In Poland, on 1 January 1999 were introduced a new pension system, which after some fairly significant changes already operates in principle to the present [16]. The result of the reform was the transition from the advantage of the supply system to the dominance of the insurance system, so changing the PAYG system to a mixed system – partially funded. One of the objectives of the reform was to reduce the risk of insolvency of the system over a long period of time through the diversification of sources, which will finance benefits, and thus enhance the financial security of citizens and their awareness of the need to save for the future. Implemented the reform had resulted in responsibility for retirement has been partially passed on the citizens themselves, and indirectly to private institutions operating in the second and third pillar pension system [5].

In addition, new solutions have to eliminate disadvantages characteristic of PAYG. In particular, by introducing a dominant part of the insurance model, seeks to motivate people to work and pay contributions on the entire salary, and not, as often was the case before, only on the parts. Previous solutions in which the amount of premiums paid did not reflected directly on the amount of the non-payment encouraged, thus expanding the underground economy. Such solutions from an economic point of view were beneficial both for employers who paid lower premiums, and employees, as thus saved funds in whole or in part, were transferred to them directly. In addition, the new system, by abolishing the privileges for specific professional groups, had to fight inequalities. Abolition of the

possibility of early retirement, including the incomplete seniority pension at an earlier age had a positive impact on the extending the period of productive [6].

The pension reform in Poland was modeled on the changes that have been successfully carried out in other countries, especially in Latin America. Country that provided the inspiration, it was Chile, where the whole capital solutions applied. It should be emphasized that the growing population on the need to save for their future retirement capital in the system completely Chileans took over a quarter of century. In view of the fact that this solution was not entirely appropriate, in many European countries, and also in Poland, it was decided to establish a system partially capitalized – mixed, the possible adverse effects would be less noticeable. To this day in most countries were introduced mixed systems, from a structural point of view, are very similar. The differences are, in principle, a number of issues. The first pillar differences relate mostly to the amount of the premium paid by the employer and the employee, the need to develop a certain number of years of service, or have adequate seniority pension or obtaining the appropriate retirement age – in recent years, often of increased inter alia, in Scandinavia, Great Britain, France, and Poland. In the second pillar of the differences in the various countries concerned, first, compulsory affiliation to the second pillar, on the other hand, to privatize the institutions responsible for the reproduction of capital from the second pillar, the third of the contribution and its distribution in the payment of the employer and the employee, and finally the fourth regulations on investment opportunities in the institution of the second pillar. However, in the third pillar, where participation is usually completely voluntary, the differences appear most frequently in countries incentives to save (e.g. deduction and tax) and investment limits. The third pillar usually is formed of private institutions, for which membership is largely dependent on the confidence of citizens, the level of savings and of course the financial performance of these companies. Another important factor is the benefits introduced for employers to support employees in savings.

Introduced in Poland in the late 90s of the twentieth century the system, as in many other countries in Europe and even the world, consists of three pillars. The first pillar is mandatory is a PAYG – benefits from it are financed mainly from current contributions and the budget and

managed by the Social Insurance Institution (ZUS). The right to a pension from the first pillar is every citizen, after completion of the relevant age or after completion of the required age and a specified number of years, which paid contributions. After the 1999 pension reform from the pillar, as a whole, are paid to a person:

- born before 1949, covered by the old rules – before the reform. It is therefore necessary to achieve their desired retirement age – 60 years for women and 65 for men, and to show the appropriate experience, which included the contributory and non-contributory years, limited to 1/3 of contribution – it is 20 years for women and 25 years for men. It should be emphasized that in the "old system" forced many rules that allowed for earlier retirement.
- born between 1949-1969, which, despite the possibility of accession to the second pillar, decided to remain only in the PAYG system – that is, only in the first pillar.

The second pillar, which was introduced in 1999 and by 2014, was mandatory for people who were born after 1969 and for those born between 1949 to 1969, but who decided to retire draining capital contributions. This pillar is a capital and financial resources are transferred to the Open Pension Funds (OFE). Every citizen has the right to choose freely which, from competing in the free market OFE will place their money. OFE are private entities obligated to multiply capital, which in the future should be the second part of the pension. OFE are supervised by the state and the law imposes a number of obligations on them.

Initially, since 1999 to pension funds were directed 7.3% of the remuneration base. In 2011, it was decided to reduce this percentage – to 2.3%, while announcing its gradual increase. As a result, in 2014, another reform was carried out and the end of July 2014, all citizens (regardless of date of birth), drain pension contributions have to decide whether they want to remain in the OFE and further drain where the amount of the premium in a revised amount 2.93%, or move their capital to Social Security Institution (ZUS) – in fact decide to go PAYG scheme. It was announced, however, that under the Social Security System it will be created an account where will be discharged – 12.22% of the remuneration base, and it will be created an sub-account where 7.3% of the remuneration base will be invested.

People who in 2014 decided to choose the second pillar pay contributions in the amount of: 12.22% for Social Security System, Social Security System- sub-account 4.38% and 2.92% of the base salary for the account funds OFE. It should be emphasized that, in any case, contributions are indexed, and every four years (from 2016) will be opened “transfer window”, through which it will be possible to move funds from ZUS on OFE and vice versa. In 2014 in order to protect future retirees, it was decided that the 10 years prior to retirement contributions of all efferent contributions to pension funds will be gradually transferred to the Social Insurance Institution (ZUS). It is worth noting that the gradual transfer of the money to Social Security Institution will also be beneficial from the point of view of the state, because the cash will continue to shape, how needed to secure pensions. In addition, in 2014 in the second pillar there have been many other modifications: OFE investment limits were changed, they were forbidden to invest in government bonds (previously OFE had to invest there) and ordered to investing in stocks. In order not to interfere with securities exchanges was ordered to open pension funds invest in stocks in 2014. 75% and the limit will be reduced in 2017 to 15%. The preliminary analysis conducted that in 2013 showed that about half of the insured choose draining contributions in the second pillar. As a result, it turned out that the decision was taken every sixth insured<sup>1</sup> [17]. Thus, in 2014 the majority of Poles returned to the PAYG system with a number of modifications.

The third pillar of the reform is voluntary, and is the source of the optional retirement benefits. This is an additional savings under the Occupational Pensions Authority (PPE), Individual Retirement Accounts (IKE) or Individual Retirement Account Security (IKZE). In order to encourage the savings the state provides additional policyholder certain privileges of a fiscal nature, eg.: in the case of the IKE – no need to pay the taxes on profits after the completion of a certain age and fulfilling other specific terms of the contract, and in cases IKZE – the ability to write off a certain amount of income in the year tax returns. Participation of Poles in the third pillar is negligible, and people with accounts do not pay regularly measures. The data for 2014 shows that in the third pillar of the Poles invested about 14 mld. PLN, and the total savings of Poles are more than 1 billion PLN [3;18]. There is a lot of causes the reluctance of savings. In

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<sup>1</sup> ZUS data show that in 2014 the OFE has remained 2 564 072 Poles.

particular, they can be classified as: lack of financial resources among the insured<sup>2</sup> [19], the relatively low limits on contributions to the third pillar, which discourages saving wealthy, because they have to look for other options – (IKE to 300% of the average wage in the year, IKZE – 1.2 an average of remuneration in the year), small incentives (tax exemption, but only after the age of retirement – IKE; whether the annual impairment on tax returns, with the need to levy a tax of 10% on the disbursement – IKZE), the uncertainty of return of capital, investment uncertainty.

Successive governments operating in Poland introduced a number of changes in the Polish pension system, moving from a system of capital, through PAYG, mixed to back most of the fees collected by a public body. Reforms after 1999 and the accompanying political disputes, including: OFE creation, reducing contributions to pension funds, changes in OFE investment limits, raising the retirement age to 67 years (for men until 2020, for women by 2040), the choice of ZUS and OFE, were aimed at improving the situation of future pensioners, but equally important was improvement in public finances.

The demographic crisis caused that the mixed system did not work in Poland. It turned out that after 14 years of operation of OFE Polish society has chosen pair PAYG system. It is therefore appropriate to ask, why OFE did not convinced a large group of employees, and why in other countries, such a system work? The answer to this is not clear, but certainly on the recent decisions of Poles influenced by several factors, among others:

- medium OFE financial results, which had to invest in state treasury bonds and were strongly reduced investments in stocks or foreign investment, which in other countries are unlikely to occur,
- lack of knowledge about business and pension fund,
- the relatively high costs of operating in the OFE,
- incorrect belief that it was not me as a citizen, not the amount of my contributions, not my investments, not the private sector and the state, as a whole should secure retirement,
- lack of knowledge and motivation to declare choose OFE-ZUS – the lack of a written notice of intent to join the OFE or stay in it, resulting in staying in ZUS,

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<sup>2</sup> Every second Pole has savings and this is the third lowest, next to Romania and Turkey, the result obtained in the study, which was conducted in October and November 2014, 13 European countries on a representative sample of 12,743 people.

- knowledge that for 10 years before retirement funds, and so will go back to ZUS,
- lack of confidence, that the amount of premiums paid by the insured have a significant impact on the amount of the pension.

### **3. Conclusion**

In response to the problems of an aging population, within a few decades, Poland has introduced many changes. On the one hand were the solutions to support the family as such – the introduction of free (years of the 60th of the twentieth century), and then paid parental leave (1981), gradually extended maternity leave, and most recently the introduction of parental leave (2013). On the other hand, the modifications related to the pension system.

Assessing successive reforms introduced in the Polish pension system should be stated that their main reason was closely linked to the difficulty, or rather the desire to overcome them, due to a decrease in revenues to fund the PAYG. Shortfall of funds in Social Insurance Institution had to cover the state budget, has increased the burden on the public finance system. It should be noted, however, that in a similar situation – in times of demographic crisis – there are many countries, not only with the EU, but also around the world. In such a situation, it is worth to learn from the experience of others, respectively adopting relevant and proven solutions and avoiding the mistakes that were made.

In conclusion, the Polish reform of 1999 was correct and necessary. However, not quite ingeniously OFE regulations, their excessive investment restriction resulted that they could not properly developed. Perhaps in the coming years, using the power of "transfer window" Polish society will give them more opportunities for development.

Increase the retirement age in Poland, as in other countries in Europe and the world, it was also inevitable, although at the moment it is difficult to assess whether it was necessary and effective. Surely, it was and it is a rather difficult socially area of social policy because of the conviction of a significant portion of the citizens of reducing social benefits due to them. Raising the retirement age should be – for example, the Canadian model – introduce some flexibility, through e.g. a decrease and an increase in benefits after going early and later retirement. Certainly, such a solution would avoid the situation that took place in Poland in 2011. At that

time – today already considered to be inconsistent with the Constitution of the Republic of Poland – the rules practically forced the persons entitled to a pension to terminate the contract of employment. Otherwise, the pension was suspended. It was negatively assumed that the exemption of older workers will improve the situation in the labor market, and in place of older people will come the young unemployed. It turned out, however, that such a simple relationship has not occurred. As a result, at present ZUS has to pay suspended retirement, while those who do not declared compensation get the contract. Introduced solution clearly showed that it is necessary to reward a job after graduating from retirement age, not discourage to it.

In addition, in the pension systems is necessary to clear the binding amount of the pension to the number of years of service, which somehow did reform introduced in Poland in 1999. Today, from the accumulated capital and the subsequent average life expectancy depends on the amount of benefit. In Poland, there is no need to demonstrate an appropriate internship pension scheme. It is required in the case of applying for a minimum pension.

No need to prove a certain number of years of work is the first step to take ongoing not only in Poland, the discussion on pensions for all citizens – "citizens pension", which could, in the same height, belong to all citizens after reaching retirement age. Such solutions exist, inter alia, in Denmark, Sweden, the Netherlands, the UK and Australia. With the introduction of civil pensions would certainly reduced poverty and the measures so far spent on social assistance. They are born, however, two basic questions. Firstly, do ensure of receiving benefits are not discouraged to work thereby threatening the stability of the pension system and the state budget. Secondly, how to raise funds for "citizens pension", and whether their introduction would not closely related to the significant increase in taxes, which is located in Denmark, where taxes are progressive, and very powerful. Data from Eurostat show that it is in Denmark, the ratio of the tax burden in relation to GDP is high and amounts to 48.1%. In this respect the following places in Europe occupied Belgium – 45.4%, France – 45.0%, Sweden – 44.2%, Finland – 44.1%, Italy – 44.0%, and Austria – 43.1%. The lowest taxes in 2012 were in Lithuania – 27.2%, Bulgaria and Latvia – by 27.9%, Romania and Slovakia – for 28.3% and Ireland – 28.7%. In Poland, in 2012, they amounted to 32.5% of GDP [11].

Strengthening the pension systems in all countries should be based also on strengthening the importance of the third pillar. Countries should strive to make the greatest possible incentives to accumulate savings, which is associated with changes in the law. These incentives should apply to both employees and employers. It is also appropriate to conduct educational policy and strengthen the awareness of citizens in this area. In 2014 Poland also changed the regulations concerning the operation of the third pillar, in particular IKZE. There has been modified investment limits and introduced a fixed tax (10%) that the insured pays before withdraw. Until now the tax depended on the tax threshold, and therefore income, which was located insured person.

In Poland, despite the introduction of a number of modifications to the pension system pensioners contemporary situation is not good, the benefits are low<sup>3</sup> [22], and the system does not respond well to the end of the problem of an aging population. On the conducted forecasts indicate that in the future the situation will not look better, but on the contrary. Unfavorable situation will be registered aftermath of high unemployment (12%)<sup>4</sup> [20], a large number of people working on civil contracts (13%)<sup>5</sup> [21] and a high percentage of people employed under a contract of employment, and earning the minimum wage (in 2013, 12%)<sup>6</sup> [21]. The challenge that stands in the area in front of the public authorities is primarily to support the labor market, as well as the inclusion of insurance as many people as economically active contributors.

Today's retirees are forced somehow to fundraising, allowing them a decent life. New instruments, which are designed to help pensioners, are reverse mortgages and lifetime annuity [4; 9]. These new financial services to allow the holders of real estate to obtain additional cash that can be used for any purpose. The mechanism of both products is relatively simple, but different. In the case of an annuity (sales model) the borrower includes a transaction in which a waiver of ownership of an apartment or house gets to the end of the cyclic life annuity under this head. It is important that the buyer entity locale, which may be a bank, fund, or insurance company, becomes the owner of the property at the time of signing the contract. A

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<sup>3</sup> Since 1 March 2015 minimum pension in Poland is 880, 45 PLN.

<sup>4</sup> February 2015.

<sup>5</sup> Data for 2013, National Labour Inspectorate (PIP).

<sup>6</sup> Data for 2013, National Labour Inspectorate (PIP).

person who uses a reverse mortgage, to the end of life remains the owner of the property, and the heirs, if they are willing to stop and repay its liabilities arising from the loan, keep it right. If they do not express such a will, they will be required to transfer ownership of the property to the bank, which will return the difference by which the value of the property exceeds the amount due under the contract of the bank's mortgage inverted, if such excess will be [7; 8]. Although the above presented solutions have been regulated in Poland, there are not very popular. Unfortunately still a shortage of funds is temporarily eliminated by the high interest credits, loan.

At the moment it is difficult to clearly assess the changes that have been introduced in the Polish pension system. This is mainly due to the fact that they will be felt only after a long time. They cannot also be considered as terminated due to the continued lack of stability of the system. This stability in the long term can be achieved, inter alia, by reversing the trends, which are the best, because the natural way to protect the system against failures, or at least mitigate their effects. However, this requires comprehensive actions not only in the area of pension security, but in the context of the broader social policy, with particular emphasis on family policy.

#### REFERENCES

- [1] N. Barr, P. Diamond (2014), *The reform of the pension system. Quick guide*, Polish Economic Association, Warsaw, pp. 19-20.
- [2] P. Błędowski (2012), *The policy towards the elderly – objectives and principles* [in:] G. Ciura, W. Zgliczyński (ed.), *The aging of the Polish society*, the Office of Research of the Sejm Chancellery of the Sejm, Warsaw, p. 205.
- [3] F. Chybalski, E. Marcinkiewicz, *We need a flexible third pillar*, <http://www.ekonomia.rp.pl/artykul/1176169.html>, access: 18.04.2015.
- [4] F. Colombo, A. Llana-Nozal, J. Mercier, F. Tjadens, *OECD Health Policy Studies Help Wanted? Providing and Paying for Long-Term Care*, [http://ec.europa.eu/health/reports/docs/oecd\\_helpwanted\\_en.pdf](http://ec.europa.eu/health/reports/docs/oecd_helpwanted_en.pdf), access: 05.04.2015.
- [5] R. Garbiec (2008), *Social security. The essence and elements*, Technical University of Czestochowa, Czestochowa, pp. 56-57.
- [6] E. Gubernat (2009), *Sustainable pension system in the light of the pension reform in 1999*, [in:] F. Chybalski, I. Staniec (ed.), *10 years of pension reform in Poland. Effects, opportunities, prospects and threats* Monographs Technical University of Lodz, Lodz, p. 10.
- [7] T. Kraemer, T. Kraemer (2007), *The Complete Guide to Reverse Mortgages: Turn Your Home Equity into Instant Income*, Published by Adams Business, Canada 2007, pp. 2-4.

- [8] B. LaFay, D. Barrell (2003), *Reverse Mortgages for Senior Homeowners*, Dearborn Real Estate Education, Chicago.
- [9] P. Łyszczak (2009), *Reverse mortgages as "the fourth pillar of retirement"*, [in:] F. Chybalski, I Staniec (ed.), *10 years of pension reform in Poland. Effects, opportunities, prospects and threats* Monographs Technical University of Lodz, Lodz, pp. 181-189.
- [10] J. Rosner (1973), *Operators of social policy* [in:] A. Rajkiewicz (ed.), *Social Policy*, National Economic Publishing House, Warsaw, p. 58.
- [11] *Taxation trends in the European Union Data for the EU Member States, Iceland and Norway*, EUROSTAT 2014, [http://ec.europa.eu/taxation\\_customs/resources/documents/taxation/gen\\_info/economic\\_analysis/tax\\_structures/2014/report.pdf](http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_structures/2014/report.pdf), access: 08.04.2015.
- [12] The Act of 29 December 1989, *Employment*, Dz.U. 198, nr. 75, poz. 446.
- [13] The Act of 29 November 1990, *On social assistance*, Dz. U. 1990, nr. 87, poz. 506.
- [14] The Act of 30 August 1991 On health care system, Dz.U. 1991, nr. 91 poz. 408.
- [15] W. Tkaczuk (2014), *Raising the retirement age and the problems of Polish social policy* [in] the W. Koczur, A. Rączaszek, *Social Policy towards the problem of social security in an era of socio-economic transformation*, Faculty Scientific Papers No. 179, University of Economics in Katowice, Katowice, pp. 197-198.
- [16] G. Uściska (2005), *Social security benefits in the regulations of international and Polish*, ILSS, Warsaw, pp. 207-240.
- [17] <http://gospodarka.dziennik.pl/emerytury-i-ofe/artykuly/467317,ofe-wybralo-ponad-2-5-mln-polakow-ostateczne-dane-zus.html>, access: 18.04.2015.
- [18] <http://www.analizy.pl>, access: 18.04.2015.
- [19] <http://www.bankier.pl/wiadomosc/Co-drugi-Polak-ma-oszczednosci-spada-cieczwiekszania-zadluzenia-ING-3303423.html>, access: 18.04.2015.
- [20] <http://www.mpips.gov.pl/analizy-i-raporty/bezrobocie-rejestrowane-w-polsce/rok-2015/> access: 07.04.2015.
- [21] <http://www.pip.gov.pl/pl/k/index>, access: 07.04.2015.
- [22] <http://www.zus.pl/>, access: 07.04.2015.