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Retirement behaviour of citizens in the Polish pension system

Reactions to changes in the pension system

Incentives encouraging additional savings in old age

Vocational deactivation in the foreground
of elderliness



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Dear Reader,

behavioural science is firmly rooted in the Polish academic debate on the future of the pension system. It is the analysis of human behaviour that has become the basis for shaping the system and its parameters. Retirement policy is not perceived only in the context of achieving the general goals of the pension system such as the adequacy of pension benefits or the financial stability of the pension system, or the specific pension system features such as the way of calculating benefits, the contribution rates, the retirement age or broadly understood pension savings. Behavioural economists have been proving for several decades that in economics people do not behave rationally, even if they have knowledge about the economic principles underlying the functioning of a pension system. Thus, in any academic analysis it is necessary to take into account the societal reaction to the existing pension systems, their reforms and modifications, as well as the new instruments that are announced and introduced, such as additional possibilities for pension savings. Only if the societal reaction to the incentives follows the policy goals, do pension policies become effective and efficient.

We present to you the volume of the quarterly “Ubezpieczenia Społeczne. Teoria i praktyka”, devoted entirely to the behavioural aspect of the functioning of the Polish pension system under the academic editorship of Ewa Marciniak of the University of Warsaw and Agnieszka Chłoń-Domińczak of the SGH Warsaw School of Economics.

The volume starts with two articles that present the political discussion and public opinion on the social insurance system. The first article in this volume, by Marta Seredyńska, deals with how the two largest Polish political parties (Law and Justice and Civic Platform) shaped the messages related to the changes in the pension system in the pre-election periods. This is followed by the article by Adrianna Binaś, who analyses the societal assessment of pension systems. As it turns out, Poles' behaviour towards the pension system is one thing, and how they assess it is another. According to research carried out, among others, by the Public Opinion Research Center over the past decade, the percentage of respondents positively evaluating Social Insurance Institution – ZUS, *i.e.*, the institution responsible for the fundamental part of the pension system, has increased, but this does not change the fact that knowledge about it is still poor.

Then, the article by Agnieszka Chłoń-Domińczak shows that any changes in the law, especially those that extend access to pensions, such as introducing early retirement options or lowering the retirement age alone, lead to an increased take up of retirement benefits. Over the past 30 years, no reforms aimed at motivating people to postpone retirement decisions have worked successfully on Poles. An increase in the replacement rate that can be achieved primarily by raising the retirement age and equalizing it between the sexes seems necessary to compensate for the observed increases in life expectancy and to ensure the financial adequacy of pensions. These are also important to reduce the gender gap in the decades to come.

Behavioural economics is quite a new branch of economics, however it often offers more realistic assumptions for the reasons behind human behaviour than those adopted in neoclassical models. In another article, Anna Ruzik-Sierdzińska explains citizens' behaviour towards retirement age on the example of three mechanisms elaborated by the researchers from this new trend in economy: hyperbolic discounting, social norms, and the framing effect. Sylwia Pieńkowska-Kamieniecka has undertaken an analysis of behaviour regarding the accumulation of individual savings for retirement outside the mandatory system, and is also considering the effectiveness of the instrument so called auto-enrolment as a stimulus for saving. Magdalena Jagodzińska, in turn, presented and discussed the problem of individual retirement decisions based on the results of a pilot study conducted on a group of seniors from Universities of the Third Age in selected cities in Poland, regarding their individual retirement decisions.

The author of the fifth text, Anita Abramowska-Kmon, undertook an analysis of factors differentiating the chances of retirement among people aged 50-69 in Poland. It shows that the family situation and care for other people may increase the likelihood of occupational deactivation of people at retirement age, and above all women who more often than men look after dependent family members or grandchildren. Data from the two waves of the Polish Generations and Gender Survey (GGS-PL) carried out for the years 2010-2011 and 2014-2015 were used in the article.

We wish you a thought-provoking read.

The Editors

Political discourse on old-age pension issues in the election programmes of the largest political parties in Poland

The political discourse used by individual political parties or politicians to communicate with their addressees is important in the context of the language used in communication about retirement economics. In particular, we can observe the development of political discourse in the media, thanks to which messages addressed by politicians reach their recipients. The media today are intermediaries between the senders of political messages and their recipients, *i.e.*, citizens. The frequency of political communications increases particularly during a pre-election period. The article analyses the party political programmes of Platforma Obywatelska [Civic Platform] and Prawo i Sprawiedliwość [Law and Justice] – in terms of the content that appeared during campaigns prior to the parliamentary elections in 2007, 2011, 2015. The focus is placed on issues related to the old-age pension system, proposed changes and the positions taken by the above-mentioned groupings in the specific years. The results of this comparative analysis reveal a picture of the political discourse regarding pension issues in Poland in the 21st century, and its evolution with the changes seen in many areas of social life.

Key words: discourse, (old-age) pension system, pension issues, political discourse, retirement

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Introduction

Old-age pension issues have been one of the components of political parties' programmes prior to recent elections. They are one of the most important issues for Polish social policy, particularly when faced with the problem of an ageing society, which is why the views of individual politicians evoke noticeable emotions among voters. However, it is interesting how pre-election declarations compare with the changes introduced after winning an election, as well as which of such declarations enjoy the most popularity amongst society as a whole. The aim of this article is to characterise the political discourse on pension issues in Poland in the years 2007–2015 based on the proposals of two political parties – Platforma Obywatelska [Civic Platform] and Prawo i Sprawiedliwość [Law and Justice].¹ Those parties have been chosen as a result of them enjoying the greatest public support and the fact that in the discussed period each of them were once in government and once in opposition. Individual political parties have different views on old-age security, which is why their proposals made during election campaigns differ. In the further part of the text, after explaining the definition of political discourse and indicating its theoretical assumptions, their changes over the past few years will be presented, as well as the extent to which the citizens were guaranteed the maintenance of the current standard of living, and whether these beliefs had a chance to be implemented. The analysis of the phenomenon is based on a comparison of the pre-election programmes of Civic Platform and Law and Justice for the elections in 2007, 2011 and 2015, as well as on the *exposés* of prime ministers on taking office, as well as information from online media.

Since the 2004 European elections and parliamentary elections in 2005 Poles' electoral sympathies have been transformed. Previously, the parliamentary political scene was based on a pattern of

division into post-communist and post-solidarity parties, which resulted in the polar alternation of power following subsequent parliamentary elections.²

This mechanism was subject to gradual decomposition, resulting in a drop in left-wing support, together with the growing importance and strengthening of such parties as PO and PiS. The first parliamentary election, to which the author refers, was held on 21 October 2007 as a result of the adoption by the Sejm of the resolution on shortening the term of office for the Sejm and the Senate.³ PO won the election, gaining 41.51% of votes, while PiS received 32.11%.⁴ A comparison of the results of the 2007-2015 parliamentary elections is presented in Figure 1.

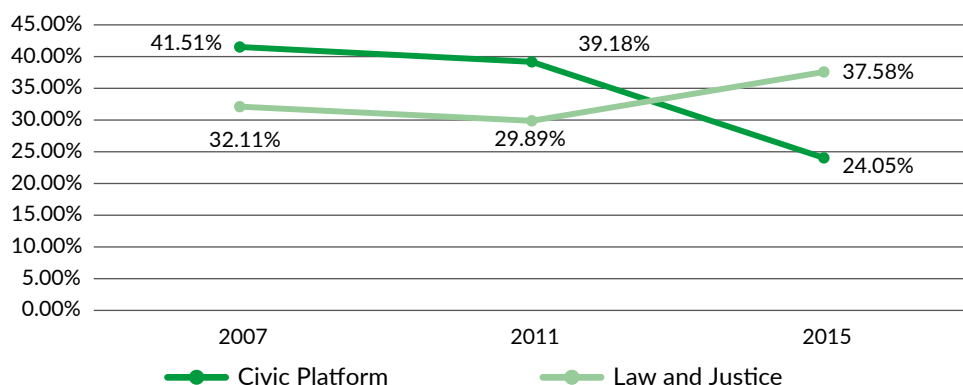
¹ In the remainder of the article, the names of both parties will be also written in the abbreviated form, respectively: Civic Platform – PO, Law and Justice – PiS.

² See *Wybory parlamentarne w 2011*, ed. A. Turska-Kawa, W. Wojtasik, Sosnowiec 2012.

³ See the resolution of 7 September 2007 on shortening the term of office of the Sejm of the Republic of Poland (Journal of Laws of 2007 No. 163, item 1154).

⁴ All data on the results of parliamentary elections given in the article come from the website of the State Election Commission (pkw.gov.pl). All data relate to elections to the Sejm of the Republic of Poland.

Figure 1. Results of elections to the Sejm of the Republic of Poland for the years 2007–2015



Source: own study based on data from the State Election Commission

The concept of discourse

Before analysing individual postulates related to the pension system, it is worth explaining the very concept of the discourse. It seems popular, in particular as used and emphasised by the media, but it is not always clear where it comes from and what contexts it can be associated with.

The theory of discourse arises from reflection on language and its role in the process of shaping social reality. It should be noted that the term “discourse” is on the one hand included in the set of features characteristic of the concept of “communication,” and on the other hand, it possesses its own autonomous features. As Aleksandra Synowiec claims:

the term “discourse” comes from the Latin *discursus* and is an old definition of conversation, discussion, speech. The dictionary definition locates the term “discourse” in the area of oral communication. On the other hand, the adjective “discursive” in the first sense refers to the philosophical term that defines conversation, the mental recognition of reality. In the second sense, the adjective “discursive” is understood as a logical category. This means “based on inference, where each link in the chain of reasoning depends on the previous one and conditions the next.”⁵

Discourse could be considered a complementary component of the language communication scheme proposed by Roman Jakobson, which includes the sender, the recipient, the code, the contact, the message and the context.⁶ It can also be treated as a means

⁵ A. Synowiec, *W stronę analizy tekstu – wprowadzenie do teorii dyskursu*, “Zeszyty Naukowe. Organizacja i Zarządzanie” 2013, No. 65, p. 384.

⁶ R. Jakobson, *W poszukiwaniu istoty języka*, Warszawa 1989, p. 81.

of communication with others, because it is commonly identified with such terms as dialogue or conversation. Undoubtedly, this is a category derived from linguistics, linked with language organisation as part of the utterance. Formerly it was referred to as a synonym for the concept of “language” itself, but now it is treated as part of the process of communication, both spoken and written. Indeed, language can interpret reality, adopt a certain point of view – the communication process can set the rules for the relationship between the sender and the recipient of content, certain patterns and conventions that determine the way of thinking.

Michel Foucault has also dealt with the issue of discourse. The French researcher claimed that the concept of “discourse”:

in the most general and most labile system meant [...] a set of verbal relations (between the word and reality) – and thus the discourse was understood in this case as something that has been created in terms of sets of characters. But the discourse was also understood as a set of formulation acts, a series of grammatical or logical sentences.⁷

This means that discourse consists of a sequence of characters (or sets of such sequences) that make up the utterance. This can be more or less complex and relate to any topic. A given sequence forming a series of linguistic behaviours is related to the topic, purpose and manner of forming the utterance. It is worth noting that in addition to the typically linguistic approach, M. Foucault has also presented a different approach to the definition of discourse – he combined it with power. In his opinion, the structures and mechanisms of power are visible in the meanings that are constructed by a society. According to him, every discourse will be associated with the system of power, because it means that a given view, opinion is imposed on a certain number of persons. At the same time – which is worth emphasising – one discourse prevailing at a given moment will dominate the others.⁸

Teun van Dijk, in turn, considers the use of “discourse” in everyday communication as a starting point for determining what discourse is. He adopts a theoretical model based on the definition of three main dimensions of discourse: language use, communication of ideas and interaction in social situations.⁹ In T. van Dijk’s opinion we have to bear in mind that:

discourse as a social activity is situated within the framework of understanding, communication and interpersonal interaction, which in turn are part of a wider context.¹⁰

Such an understanding of the word “discourse” shows that it is related to the process of communication, and also, to have a chance to occur, it must depend on such factors as the context or situation of communication. T. van Dijk rightly notes that the discussed term

7 S.J. Rittel, *Komunikacja polityczna. Dyskurs polityczny. Język w przestrzeni politycznej*, Kielce 2003, p. 91.

8 A. Synowiec, *op. cit.*, p. 389.

9 *Ibid.*, p. 392.

10 *Dyskurs jako struktura i proces*, ed. T. van Dijk, Warszawa 2001, p. 31.

depends on the use of language itself – the very decision in this respect determines the subsequent steps in the communication process. The style of the content shared and the type of discourse will depend on the idea we convey and to whom we address it. However, Anna Duszak notes that the values

reproduced in patterns of communication behaviours shape communication expectations – they create and promote specific attitudes towards texts and communication partners.¹¹

This is a valid observation, because in this way a model of utterance conveyed to the recipient – and thus a kind of discourse – is created. The researcher has also noted that in Poland, the common concept of discourse seems to function in a relatively limited scope. It is related to a spoken rather than to a written utterance.

Political discourse

Within each of the sciences, the concept of discourse will have a different interpretation, depending on the situation in which it occurs. Karolina Lokert has noted that today language and communication are integrally connected with power, and in the existing social system they are used to manipulate and achieve specific goals.¹² Political discourse, *i.e.*, a politicised communication message, is an example of such language. As noted by Izabela Kujawa, the political discourse can be considered to be one of the components of contemporary culture and as an instrument of power or a tool for creating reality. According to this researcher, it can be defined as

a whole of heterogeneous utterances (texts, behaviours) having a similar driving force, similar action, origin and context, occurring not in isolation, but creating a dialogue, being in a specific relation (also in opposition) to other groups of utterances.¹³

In turn, Marek Czyżewski defines political discourse as

the process of the communication of symbolic elites, *i.e.*, groups and persons who exercise power over mass communication centres, first of all journalists and politicians.¹⁴

He also proposes defining as political discourse all communication events that take place within symbolic elites in connection with political events. In this way, he emphasises

¹¹ A. Duszak, *Tekst, dyskurs, komunikacja międzykulturowa*, Warszawa 1998, p. 242.

¹² K. Lokert, *Dyskurs polityczny – analiza KAD*, "Językoznawstwo: Współczesne Badania, Problemy i Analizy Językoznawcze" 2011, No. 1 (5), p. 82.

¹³ I. Kujawa, *Strategie dyskursu politycznego a medialny obraz świata*, "Annales UMCS Sectio FF" 2009, No. 23, p. 47.

¹⁴ A. Balczyńska-Kosman, *Język dyskursu publicznego w polskim systemie politycznym*, "Środkowoeuropejskie Studia Polityczne" 2013, No. 2, p. 150.

that this kind of discourse is important from the point of view of creating social reality and integration into the communication practices that take place therein. The basic functions of this type of communication include *e.g.*:

- the function of presenting the politicians' view of the world,
- the function of presenting the political goals of specific groups or individuals,
- the function of creating reality in a way similar to the views of politicians,
- propaganda and manipulative functions.¹⁵

As concerns the recipients of political discourse, generally speaking, it is the whole of society, *i.e.*, the group of recipients differentiated by age, gender, place of residence, education. In this case, the language in which the messages are formulated must be understandable to everyone, without omitting any group. Usually, the linguistic means used to convey political information have persuasive features – inducing the recipient to act in accordance with the sender's intentions, to accept or reject certain ideas or views. Such a communication system is very well reflected in programmes addressed to the public during election campaigns, to which the further part of the article will be devoted.

It can be noted that media coverage is that dimension which remains open to political discourse and in which such discourse may be carried out in a specific way. Individual media (the press, television, radio, and in particular the Internet – the most-widely used today) are characterised by dynamics and variability, giving and processing messages at a speed depending on the political or social situation.¹⁶ Contemporary political discourse can therefore be considered as a way politicians communicate with society, build their image, as well as a kind of polemic between individual actors on the political scene (both individuals and political parties). As Janina Fras claims:

The ideal model of democracy implies large media participation in public debates that should mould citizens to participate within the communication community.¹⁷

The theoretical assumption for discourse to function is that it should be universal and also democratic in nature and should not limit the way the message is formulated, as opposed to other acts of speech. The following may be *inter alia* mentioned as elements of political discourse: the language of propaganda, persuasion, convincing argumentation. Depending on the competence of the senders and the perceptive capabilities of the recipients, these will be more or less intense. The present-day lexicon of political language in Poland is rich and includes

many thousands of words referring to the public life of Poles (social, economic, political, cultural, religious).¹⁸

¹⁵ *Ibid.*, pp. 146–147.

¹⁶ See H. Batorowska, R. Klepka, O. Wasiuta, *Media jako instrument wpływu informacyjnego i manipulacji społeczeństwem*, Kraków 2019, p. 9.

¹⁷ *Ibid.*

¹⁸ K. Ożóg, *O języku współczesnej polityki*, "Polityka i Społeczeństwo" 2007, No. 4, p. 105.

The use of a variety of phrases is also forced by the very nature of political activity – the way of communication with citizens is determined by solving social problems and ruling the country. Therefore, it is not surprising that contemporary Polish politicians use persuasive messages that at the same time refer to the most important spheres of public life and the everyday life of citizens. On the other hand, appeals for a specific position – as in the case of parliamentary, presidential and local elections – strengthen the recipients' sense of being important within the communication process.

Old-age pension system in Poland

Before presenting the positions of Civic Platform and Law and Justice on pension issues, it is worth recalling the very functioning of the pension system in Poland. Old-age pension security is one of the elements of social security. In general, it can be considered as a system guaranteeing income to all persons covered thereby throughout the entire period after the end of professional activity.¹⁹ As noted by Iwona Olejnik, the pension system can be composed of:

- legal regulations governing its operation,
- institutions managing and supervising its proper operation,
- employed persons who pay pension contributions or for whom such contributions are paid or who additionally save for their old age,
- persons receiving pension benefits.²⁰

Indeed, these are the components of the old-age pension system in force in Poland, and each of them seems to be important and dependent upon others. But how has the approach to pensions changed over the years? The Polish pension system post 1989 has undergone changes, but for the author of this article the most important of them were those introduced since 1999. A radical change was made at that time and we are still facing its consequences. Until 1998, the pay-as-you-go (PAYG) pension system was in operation in Poland, based on a defined benefit. In such a system, the old-age pension amount depended on the earnings from selected years of one's professional career and on the period of insurance coverage. There were also many possibilities of early retirement. The radical reform of 1999 instigated changes, in particular related to the creation of the three-pillar system, which is still valid today. This made it possible to link the level of a future pension to the amount of all contributions paid. Important issues raised by politicians related to the old-age pension include the retirement age, pension privileges and privileged groups for early retirement, types of old-age pensions (individual, matrimonial, bridging). These issues are used as arguments in election campaigns. Individual

¹⁹ See M. Góra, *System emerytalny*, Warszawa 2003.

²⁰ I. Olejnik, *Zabezpieczenie emerytalne. Modele i determinanty zachowań polskich gospodarstw domowych*, Poznań 2016, p. 51.

actors on the political scene are committed to improve the Polish pension system in such a way as to meet the expectations and needs of citizens. As I. Olejnik wrote:

The ideal situation is when the old-age security guarantees financial independence in the retirement period. This means that the pensioner's income from pension benefits and/or private savings (assets, resources) enables him/her to satisfy his/her needs not only in a satisfactory manner, but also in a manner allowing them to maintain a minimum standard of living as was the case when they worked.²¹

Retirement issues in the election programmes of political parties

In 2007, PO proposed the programme entitled *Polska zasługuje na cud gospodarczy* [Poland deserves an economic miracle]. Bronisław Komorowski wrote in the programme introduction:

We want to repair the state and not to destroy it, we want to strengthen, not weaken democracy and the free market, we want a faster march towards western standards of life and development, so that everyone in Poland can live a better life.²²

The message formulated in this way at the beginning of the election programme was building a friendly discourse, encouraging people to support PO, because thanks to this party every citizen would live at a better level than before. As regards the pension issues, they were not presented in any one specific section of the programme, but were discussed several times in connection with taxes or family policy.

The chapter on social policy indicated the need for principles aimed at allowing those on maternity and child-care leave to continue their pension insurance. Attention was also paid to the elderly and their standard of living. In the field of pensions, PO mainly proposed limiting the possibility of early retirement, increasing the average age of people retiring from the labour market, as well as extending the pension age for women, so that by 2015-2020 it would be equal to the retirement age of men (it was assumed that by 2025 the retirement age for both women and men would be 67 years). The issue of bridging pensions also appeared – they were intended for those who worked in specific conditions and on specific positions. PO also planned to create an institution that would guarantee the efficient operation of the pension system – a national actuary office, to strengthen the role of the Demographic Reserve Fund, to stabilise the Social Insurance Institution [Zakład Ubezpieczeń Społecznych, ZUS], to introduce changes in the agricultural pensions system and to reform the Agricultural Social Insurance Fund [Kasa

²¹ *Ibid.*, p. 19.

²² *Program PO. Polska Zasługuje na cud gospodarczy*, 2007, <https://mamprawowiedziec.pl/file/14512> (online access: 15.1.2019).

Rolniczego Ubezpieczenia Społecznego, KRUS]. Thus PO was willing to convince voters that the pension system required modification, in particular through comprehensive changes, considering an individual rather as part of the functioning mechanism.

In turn, PiS emphasised fairly strongly the social aspect of pensions. The issue of decent pensions which would improve the quality of life was singled out. Planned was to increase the amount of benefits by 6%, to increase pension contributions for those raising children, to introduce an act on bridging pensions and an act on the method of payment of pensions from open pension funds. PiS intended to prevent poverty in old age, which is why they planned to introduce personal income tax relief for those who decide to save in the long-term (each person could deduct PLN 1,000 a year from their income if they devoted it to retirement). As for the changes in the operation of pension institutions themselves, they claimed that ZUS could be transferred from an organisational unit with its own legal personality into a classic state budget unit. In this way, funding could come directly from the budget, which would ensure control over expenses. According to PiS politicians, in this way older people would gain the security of stable and secure pension payments. “We are aware that there are many people in Poland who are not doing well. That is why we want them to receive help as part of social solidarity, which will allow them to get back on their feet,”²³ assured Jarosław Kaczyński, the PiS President.

Focus on institutional matters was clearly visible in PO’s narrative on pension issues. The politicians of this party were rather thinking about improving institutional operations and the mechanism for collecting pension funds and their use in the future. On the other hand, PiS paid more attention to the quality of life of citizens in old age and to its improvement, which is why they promoted the introduction of solutions that would also ensure controls over pension expenditure.

In the discourse of both political parties one can notice a direct approach to society, so that everyone could feel to be the recipient of their ideas. However, the language of PiS seemed more accessible – speaking about old age security for citizens, which could be close to people casting votes for this party. On the other hand, thanks to a comprehensive approach presented by PO, aimed to ensure that, as the electoral slogan proclaimed, “everyone in Poland could live a better life,” even the increase in the retirement age, usually met with reluctance, did not reduce this grouping’s support. Interestingly, after winning the election, Prime Minister Donald Tusk announced in his *exposé* that the work on the pension reform would be completed as soon as possible, so that as of 1 January 2009 it would be possible to pay out pensions under the new system.²⁴ Indeed – the bridging pensions were introduced in 2009, thus limiting the possibility of early retirement for certain professions. As Marcin Bojanowski and Leszek Kostrzewski wrote on the Wyborcza.biz website, only 270 thousand people

23 See Prawo i Sprawiedliwość–Dokumenty, <http://old.pis.org.pl/dokumenty.php?s=partia> (online access 31.7.2019).

24 See *Exposé premiera Donalda Tuska [STENOGRAM]*, Wyborcza.pl 18 November 2011, http://wyborcza.pl/1,75398,10668035,Expose_premiera_Donald_Tuska__STENOGRAM_.html (online access: 31.7.2019).

working in the most difficult conditions, such as steelworkers or miners, had been granted the right to early retirement, while 900 thousand people, including journalists and artists, had lost their retirement privileges. However, the election programme assumptions concerning KRUS reform or the equalisation of the retirement age for women and men were not met.²⁵

In 2011, following a four-year term of rule by the PO-PSL (PSL is an abbreviation of Polskie Stronnictwo Ludowe [Polish People's Party]) coalition, pre-election polls gave them a good chance to extend their term of office. As a result of elections held on 9 October, PO won again, obtaining 39.18% of the vote, which enabled the PO-PSL coalition to continue in office. In 2011, as before, PiS ranked second with 29.89% of the vote. What impact did this have on pension issues and had the 2007 postulates been realised?

In 2011,

PO's offer was clearly ideologised in terms of the programme. [...] the image of the Platform was promoted as a party for the average citizen, not fitting in to any one ideological trend, and combining different styles of thinking about the state.²⁶

Thus, the offer had become more friendly to various social groups, being written in a simple and communicative language, with a clear content message. The *Następny krok. Razem* [The next step. Together] programme was divided into four sections: innovation and social capital, family and security, a free citizen and an effective state: pension issues were discussed in the last section, although to a lesser extent than they had been in the 2007 election programme. Attention was paid to the four-year achievements of D. Tusk's government, with proposal of only those changes that had no chance of being implemented before. Such a situation (maintaining power) builds a slightly different discourse than in the situation of a struggle for power, which is why the messages formulated by PO may have seemed less elaborate. First of all, it was proposed to increase tax relief for persons voluntarily saving for their pensions to an amount of up to 6% of their income, to increase the efficiency of open pension funds management, and to reform the pensions for the uniformed services. Efficient pension system operations would be supported by the transfer of state revenues from shale gas extraction to ensure the security of any future pensions. In its programme, PO emphasised the achievements of the previous four years, including the reduction of the fee charged by OFEs from 7% to 3.5%, the introduction of bridging pensions, increase in the retirement age (which was supposed to bring savings to the state budget) and the increase in the amount of granted pensions.

The opposition, which in 2011 included PiS, started its campaign before the parliamentary elections in difficult situation. First of all, this was just after the Smolensk catastrophe, in which many political figures from the party had died. It also resulted

²⁵ See M. Bojanowski, L. Kostrzewski, *Kto zepsuł reformę emerytalną. Wszyscy mają "za uszami"*, Wyborcza.biz 16 March 2011, http://wyborcza.biz/biznes/1,147880,9258706,Kto_zepsul_reforme_emerytalna__Wszyscy_maja__za_uszami_.html?disableRedirects=true (online access: 31.7.2019).

²⁶ *Wybory...*, *op. cit.*, p. 264.

in the loss of PiS influence in several key state institutions. However, this did not prevent the development of a very extensive election programme entitled *Polska Nowoczesna, Solidarna, Bezpieczna* [A Modern and Safe Poland based on Solidarity]. It contains two types of messages: the first – criticising the policies of those currently in power, and the second – announcing the need for change. It was stated, *inter alia*, that:

A Poland based on solidarity is a country where [...] citizens are guaranteed decent pensions and assistance in difficult situations. On the other hand, the reduction of resources allocated to open pension funds should be assessed as a halfway measure that does not solve any problem in the long term. The PiS proposal to introduce a free choice between ZUS and open pension funds has been rejected. It assumed the departure from a bizarre solution in which the state first collects public contributions in the form of pension insurance payments, in the form of pension insurance contributions, deemed forced savings, and then privatises these funds, imposing thus on citizens such a way of spending their money.²⁷

Thus, the government's policy was strongly opposed and a discourse based on opposition and assurances of reversing the situation was built. It was also emphasised that every citizen should have the right of choice. For this reason the proposal of allowing citizens to choose between ZUS or open pension funds, an idea rejected by PO, was promoted. This proposal was justified by giving society greater flexibility over its way of life. In the parliamentary election campaign in 2011, PiS devoted much more attention to pension issues than they had in 2007. They *inter alia* planned to grant those holding the title of professor, conferred by the President of the Republic of Poland, similar pension rights to those enjoyed by judges and prosecutors; to grant an allowance to the old-age or disability pension for volunteer firefighters for their long service in Volunteer Fire Brigade units; to ensure pension security for parents taking care of disabled children, if this requires them to resign from professional work; to add a lifetime matrimonial pension to a lifetime funded pension; to introduce a *quota* indexation of old-age and disability pensions and an allowance for persons receiving benefits lower than PLN 1,300. PiS politicians admitted in their programme that ZUS activities should be improved – to ensure that citizens feel more comfortable, the number of customer service centres should be increased, their working hours should be adjusted to the needs of insured persons and entrepreneurs, and Internet services should be enabled. Attention was also drawn to promoting activity amongst those of retirement age so that they would not leave the labour market too quickly, at the risk of low pensions. It was also proposed to abolish limits on earning extra money by those entitled to an old-age pension in order to prevent the professional deactivation of such persons and the development of an informal economy, as well as to abolish such limits for those receiving pre-retirement allowances and benefits.

The pensions discussion conducted by PO proved that their politicians still intended – as in 2007 – to focus on systemic changes. This shows that their discourse

²⁷ See Prawo i Sprawiedliwość–Dokumenty, *op. cit.*

on pension issues was targeted rather at people familiar with the operation of the entire mechanism of receiving benefits and aware of the importance of other policy areas for the efficient functioning of the pension system. Above all, however, it should be noted that emphasised were the merits gained from the four-year term of office and used as an supporting argument in the new election campaign. Such a method of communication suggests that citizens satisfied with the existing pension rights, would certainly support PO in its efforts to develop the reforms that had been implemented and those that had been initiated. On the other hand, the discourse undertaken by PiS shows that even greater focus was being put on the individual than had been the case in the 2007 campaign and that the communication was targeted at individual citizens. Thanks to individual-group focused communication, citizens may identify themselves more willingly with the election programme of a given party. PiS applied this method, while at the same time highlighting the errors of the current government. However, the increasingly diverse messages emanating from both parties did not alter their support – for it remained at a level similar to that of 2007.

In his *exposé* of 18 November 2011, Prime Minister D. Tusk announced the continuation and extension of the pension reform undertaken by PO in the years 2007–2011. He proposed that as of 2013, the retirement age should be gradually increased to 67 years. “Therefore, we propose the following system: every four months we will extend the retirement age by one month, which means that every year we will work longer by three months” – he said in his speech.²⁸ This meant that 67 years was to have been reached in 2020 for men and 2040 for women. Interestingly, Łukasz Paradowski, in analysing the discourse in the Internet media regarding the pension reform carried out in 2012, noted that according to a survey conducted by Public Opinion Research Centre [Centrum Badań Opinii Społecznej, CBOS] in 2012, “most Poles were unsatisfied with the proposal to increase the retirement age. 75% of women and 64% of men were strongly against this solution.”²⁹ The author also noted that individual online media conducted detailed analyses for raising the retirement age and prepared tables in this respect (these media included the most popular portals, such as Interia.pl, Onet.pl, Gazeta.pl, WP.pl, which commented on the changes on an ongoing basis).³⁰ However, as Ł. Paradowski notes, there were few comments from politicians themselves, especially in social media:

politicians who have their profiles on such websites as Facebook or nk.pl, after initiating the discussion on the changes in the pension system, to a large extent did not participate in the discussion. They could not or did not want to present arguments for and against the reform. At the same time, a negligible percentage of politicians who decided to take

²⁸ *Exposé premiera Donalda...*, *op. cit.*

²⁹ Ł. Paradowski, *Dyskurs w mediach internetowych dotyczący reformy emerytalnej w 2012 roku*, “Nowe Media” 2013, No. 4, p. 56.

³⁰ *Ibid.*, pp. 62–66.

part in the discussion only repeated slogans known from other media. They could not justify their position.³¹

This type of behaviour was not to have a positive impact on the perception of the introduced changes. In an interview conducted by Paweł Pieniążek from “Krytyka Polityczna”, Krzysztof Hegemajer noted that an increase in the retirement age was not necessary, but it was important that the retirement age for women and men was equalised and that funds for future pensions were saved in the state budget.³²

2015 was a time of leadership change on the Polish political scene. The parliamentary election held on 25 October 2015 ended with PiS winning with 37.58% support and PO in second place with a score of 24.05%. What had both parties proposed to improve in the situation of pensioners in Poland, and what impact could this have had on the election result?

During the election campaign, PO postulated compulsory social insurance coverage for contracts of mandate (on the total remuneration in this respect), which would guarantee higher future benefits. The issue of prolonging professional activity to make the retirement age equal for women and men and amounting to 67 years had returned.

Without this reform, weakening the negative effects of the ageing population, the number of people of working age would decrease by 5 million by 2040. Reducing the retirement age again would condemn millions of Poles to starvation pensions and ruin the state's finances.³³

There was also an idea to upgrade the pension system with a more widespread third pillar.

In the PiS election programme called *Zdrowie, rodzina, praca. Program Prawa i Sprawiedliwości 2014* [Health, family, work. The Law and Justice Programme 2014] announced before the 2015 election, once again – as four years previously – there were allegations regarding the government's actions in the area of pensions:

The government completely disregards social dialogue [...]. Despite strong opposition, it hits pensions, raises the retirement age in a very limited way, often ridiculing the poorest part of society.³⁴

As a counterargument, it was announced that protection against dismissal from work would be maintained for 4 years before reaching the retirement age, that the period of care for a small child would be included in the pension insurance period, that the

³¹ *Ibid.*, p. 70.

³² See P. Pieniążek, *Wyższy wiek emerytalny? Przede wszystkim wyższe emerytury*, “Krytyka Polityczna” 22 February 2012, <https://krytykapolityczna.pl/kraj/wyzszy-wiek-emerytalny-przede-wszystkim-wyzsze-emerytury/> (online access: 31.7.2019).

³³ See M. Stopka, *Polska przyszłości. Program Platformy Obywatelskiej RR*, 2015, <http://www.michalstopka.pl/wp-content/uploads/2015/10/Polska-Przyszlosci-Program-PO.pdf> (online access: 31.7.2019).

³⁴ See *Prawo i Sprawiedliwość—Dokumenty*, *op. cit.*

retirement age would be reduced (which was described as not forcing people to work until the age of 67, but only creating such a possibility for those who would like to remain in the labour market), and that citizens would be able to choose between ZUS and open pension funds. Everyone should decide on their own whether they want to transfer part of their contributions to open pension funds. A separate pension system for the military was also proposed.

Definitely, the election programmes of both parties during the campaign before the parliamentary election in 2015 maintained a line of arguments similar to those of previous years, however, the issue of the pension system was presented in a more specific, matter-of-fact language, using substantive arguments. Once again, there was the juxtaposing of two ideas: the position of the ruling party wishing to maintain power and proving that the implemented changes in pensions were correct and had improved the system; and the position of the opposition party, criticising government ideas, proposing proprietary solutions regarding pensions. A comparison of programmes for all three years of election campaigning is presented in Table 1. It shows that both groupings used communicative language, accessible to the average recipient. The differences mainly consist in the proposals of both parties and their arguments – putting the system (PO) or the citizen (PiS) at the centre. For both parties, the discourse on pension issues was built either on goals already achieved or on criticism of the predecessor's government. Depending on the election campaign year, the arguments were expanded on or made more concrete, consistently describing the position of the party and contributing to the creation of views and the image of reality by society.

After winning the election, Prime Minister Beata Szydło said in her *exposé*:

In the long run, we will have a serious debate on the pension system. The decision will depend on citizens themselves. We will ask citizens about all matters important to them.³⁵

She also announced a reduction in the retirement age – to 65 for men and 60 for women – and an attempt to increase the level of pensions. Since 2015, Law and Justice has not only reduced the retirement age as announced in its election programme, but also ensured four years of protection against dismissal for employees at pre-retirement age, an increase in the minimum pension,³⁶ as well as having introduced in 2019 the so-called maternity pensions (for mothers who have given birth to a minimum of four children).³⁷

35 *Exposé premier Beaty Szydło – stenogram*, 2015, <https://www.premier.gov.pl/expose-premier-beaty-szydlo-stenogram.html> (online access: 31.7.2019).

36 See L. Kostrzewski, *Pięć ważnych zmian w emeryturach w 2017 roku. Obniżony wiek emerytalny, waloryzacja po nowemu*, Wyborcza.biz 3 January 2017, <http://wyborcza.biz/biznes/1,147880,21197614,pienc-waznych-zmian-w-emeryturach-w-2017-roku-obnizony-wiek.html> (online access: 31.7.2019).

37 See *Emerytura dla matek. Kto otrzyma świadczenie w ramach programu "Mama 4 Plus?"*, Gazeta.pl 18 January 2019, <http://wiadomosci.gazeta.pl/wiadomosci/7,114883,24376574,emerytura-maczyna-kto-otrzyma-swiadczenie-w-ramach-programu.html> (online access: 31.7.2019).

Table 1. Civic Platform and Law and Justice programme regarding the pension system during pre-election campaigns for the years: 2007, 2011, 2015

| | Civic Platform | Law and Justice |
|----------------------------|---|--|
| Most important assumptions | <ul style="list-style-type: none"> • continuation of pension benefits for persons on maternity and child-care leave, • limiting the possibility of early retirement, • equalisation of the retirement age for men and women, • raising the retirement age to 67 years, • introduction of bridging pensions, • establishment of institutions that would ensure the smooth functioning of the pension system, • increasing tax relief for persons voluntarily saving, • uniformed services pensions reform, • increasing the amount of granted old-age pensions, • transfer of state revenues from shale gas extraction to ensure the security of future pensions, • upgrading the pension system with a more common third pillar. | <ul style="list-style-type: none"> • increase in the level of old-age pensions, • introduction of bridging pensions, • introduction of tax relief within personal income tax for those who want to save, • transformations within ZUS, • citizens' freedom of choice between ZUS and open pension funds, • change of pension conditions for persons holding the title of professor, • allowance to the old-age pension for volunteer firefighters accrediting long service, • pension security for parents taking care of disabled children, who are forced to resign from work, • improvement in ZUS functioning, • promoting activity amongst people of retirement age and protection against dismissal from work for 4 years before reaching the retirement age, • abolishing the limits on earning extra money for those entitled to an old-age pension, • including the period of care of a small child to the pension insurance period, • retirement age: 60 years for women and 65 for men, • a separate pension system for military personnel. |
| Language of messages | <ul style="list-style-type: none"> • simple and communicative, • targeted at different groups of recipients, • direct targeting of own position to the recipient, • moderately attacking its opponents. | <ul style="list-style-type: none"> • simple and communicative, • targeted at different groups of recipients, • direct targeting of own position to the recipient, • strongly attacking its opponents. |
| Arguments | <ul style="list-style-type: none"> • arguing that in the future the standard of living may improve in Poland, • funds to allow a decent standard of living in retirement must be found in the budget, • the increased retirement age guarantees higher benefits as well as higher activity and allows people to remain in the labour market, • the entire pension system must be improved to ensure that higher benefits are received in the future, • drawing attention to professional groups – uniformed services and personnel. | <ul style="list-style-type: none"> • a decent pension improves the seniors' standard of living, • criticism of the PO government – insufficient measures in the field of pension policy, the need for changes, • citizens must not have solutions imposed on them or be forced e.g., to save money simultaneously in ZUS and open pension funds, • focusing on family issues related to the pension system, • ZUS functioning should be improved, • drawing attention to professional groups: professors, military service personnel. |

Source: own study

Summary

The article presents the views of two political parties with different programmes on issues of pensions – Civic Platform and Law and Justice, with a theoretical introduction based on a definition of political discourse. The concepts of both groupings were analysed in the context of three election campaigns – in 2007, 2011 and 2015. Issues discussed during each of them included pensions, however, new arguments were provided each year in an attempt to convince society of the proposed solutions. The political discourse of both parties shows their different positions and proposals for improving the pension system, in order to best serve its recipients. A comprehensive approach was contrasted with focus on the individual, while keeping in mind that the message should be as clear as possible and should reach every citizen. The differences in the narration of both parties consist in more (PiS) or less (PO) direct targeting of information at an individual citizen and paying attention to their particular problems and concerns. At the same time, each of these parties emphasised the importance of the quality of life of Poles and, in the slogans proclaimed during election campaigns, announced that after winning the election the standard of living would be better. The effectiveness of pre-election activities is reflected in the election results, which also show how PO and PiS formulate their message depending on the position they hold: those in power or those in opposition. The proposals regarding pension issues presented in the pre-election programmes were reflected in legislative activities performed by the government of PO (jointly with Polish People's Party) and by the subsequent PiS government, which resulted in pension changes in Poland, ones still continued in 2019.

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Dyskurs polityczny na temat spraw emerytalnych w programach wyborczych największych partii w Polsce

Dyskurs polityczny, jakim komunikują się z odbiorcami poszczególne partie polityczne czy sami politycy, jest dziś istotny w kontekście przekazu językowego dotyczącego ekonomii emerytalnej. Szczególnie zaobserwować możemy rozwój dyskursu politycznego w mediach, dzięki którym komunikaty skierowane przez polityków trafiają do odbiorców. To media dziś są pośrednikiem pomiędzy nadawcami politycznych komunikatów a ich odbiorcami, którymi są obywatele. Częstotliwość komunikatów o charakterze politycznym wzrasta w szczególności w okresie przedwyborczym. W artykule zostały zanalizowane treści pojawiające się w programach partii politycznych – Platformy Obywatelskiej oraz Prawa i Sprawiedliwości – w czasie kampanii przed wyborami parlamentarnymi w latach: 2007, 2011, 2015. Skupiono się na sprawach związanych z systemem emerytalnym, proponowanych zmianach oraz stanowiskach wskazanych ugrupowań w konkretnych latach. Z wyników analizy porównawczej wyłania się obraz dyskursu politycznego na temat spraw emerytalnych, który funkcjonuje w Polsce w XXI w., oraz jego ewolucji związanej ze zmianami zachodzącymi w społeczeństwie w wielu dziedzinach życia.

Słowa kluczowe: dyskurs, system emerytalny, kwestie emerytalne, dyskurs polityczny, emerytura

The assessment of old-age pension systems in Public Opinion Research Centre surveys – a retrospective analysis (1995–2013)

The main topic of the article is the assessment of pension systems in Public Opinion Research Centre [Centrum Badań Opinii Społecznej, CBOS] surveys for the years 1995–2013. At the beginning a definition of public opinion is presented. The importance of public opinion polls, their advantages and disadvantages are then highlighted. The next part of the article includes a presentation of the principles of the functioning of the following old-age pension systems: the pay-as-you-go (PAYG) system, the funded pensions system and the PAYG/funded pensions system introduced by the Act of 17 December 1998 on pensions from the Social Insurance Fund. The main part of the study is devoted to an analysis of the results of the assessment of pension systems in Poland and the activities of the Social Insurance Institution [Zakład Ubezpieczeń Społecznych, ZUS]. Among others, Poles' opinions on pension system solutions and on responsibility for old age security have been compared. Results of the analysis are presented for particular socio-demographic groups, taking into account such factors as education, professional situation, size of the place of residence or material status. The results of the analysis have been also compared with selected macroeconomic factors.

Key words: pension system, public opinion, Public Opinion Research Centre (CBOS), Social Insurance Institution (ZUS), social research

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Introduction

Experts in Poland have been arguing about pension system solutions for many years. In these discussions, the role of the insured persons is increasingly recognised. Emphasis is put on the need for public education as a factor contributing to an increase in social awareness and on the need to show insured persons that they have a real impact on the shape of the pension system itself.¹

The aim of the article is to present public opinion on the pay-as-you-go pension system (PAYG) and PAYG/funded pensions system over a dozen or so years, taking into account socio-demographic variables such as: age, education, place of residence or membership of a socio-professional category. The text is based on the results of surveys carried out by Public Opinion Research Centre [Centrum Badania Opinii Społecznej, CBOS] surveys for the years 1995–2013.

The hypothesis adopted in the text is that assessment of the pension system operation is varied, as is the knowledge of Poles about social insurance. This hypothesis has been adopted on the basis of an analysis of the subject literature and the results of previous research in this area, including the report from the quantitative survey by Janusz Czapiński and Marek Góra *Świadomość “emerytalna” Polaków* [Poles’ ‘retirement’ awareness].²

In the course of the study, the author has tried to answer the following research questions: whether and how Poles’ assessment of the pension system changed in the years 1995–2013; do socio-demographic factors differentiate respondents’ answers; what are the relations between the pension system as assessment by Poles and the socio-economic situation of the country.

The analysis has covered nine CBOS reports on pension system assessment and four reports containing assessment of the activities of the Social Insurance Institution [Zakład Ubezpieczeń Społecznych, ZUS]. The selected surveys contain identical blocks of questions, which makes it possible to compare respondents’ answers concerning, among others, an overall assessment of the system operation, responsibility for old age security and the best pension system solutions.

The 1999 reform was a significant event in the development of pension insurance. In the course of the study, public opinion in three periods was compared. The first is the period before the Act came into force in 1998. During this period, Poles assessed the system in three surveys conducted in 1995. The second period covers the first ten years after the pension reform. Public opinion from 2001, 2007 and 2008 has been compared from this period. In the third period, the results of the 2010, 2011 and 2013 surveys were analysed.

The analysis also refers to assessment of the activities of the institution conducting social insurance tasks in Poland, *i.e.*, the Social Insurance Institution. Due to the fact that CBOS has conducted regular research in this area only since 2009, only the reports from 2010, 2011 and 2013 have been compared.

¹ F. Chybalski, I. Staniec, *10 lat reformy emerytalnej w Polsce – efekty, szanse, perspektywy i zagrożenia*, Łódź 2009, p. 6.

² J. Czapiński, M. Góra, *Świadomość “emerytalna” Polaków*, Warszawa 2016.

Results of surveys conducted by CBOS have been also compared with macroeconomic factors, such as the unemployment level in a given period, inflation or the process of population ageing.

Public opinion polls

In the subject literature, public opinion is defined as the state of social groups awareness that is subject to constant changes. This awareness is influenced by views and beliefs about controversial issues whose resolution has a direct or indirect impact on the interests of society. It performs four basic functions: explanatory, integration, consultative and control functions. A manifestation of public opinion is the result of disclosing the views of individual members of social groups as a result of their interactions.³ In addition, these beliefs are presented in a free and sovereign manner, independently of external factors.⁴

In Poland, public opinion polls are called sociological or social surveys, commonly referred to as surveys. At present, they are considered to be an autonomous, institutionally separated field of social research.⁵ They are based on the standardisation principle, which consists in asking each respondent the same questions in the same order. In nationwide surveys, a random, representative research sample is most often used, with respondents approached by a network of specialised interviewers.⁶

The most important role in public opinion polls is played by the range of the public opinion, determined by social groups representing given beliefs. In addition, it is important to indicate the repetitiveness of a given public opinion. It should be noted that surveys usually do not provide us with the reasons or motivations for one or another given answer. To this end, one should explore the attitudes, needs, as well as the norms and values in force in the surveyed society and the interrelationships between them. With this type of research, it is possible both to analyse current social opinions and to predict the views of given communities in the future.⁷

Public opinion polls provide knowledge about social moods and needs and contribute to accurate and rational decision-making. The publication of survey results contributes to the development of the self-awareness of social groups, as well as to the increase of their political culture. Thanks to access to this type of information, individuals are guided not only by their own interests, but also perceive the goals important for society as a whole. Moreover, the publication of public opinion poll results highlights key issues and current political and social

3 S. Kuśmierski, *Świadomość społeczna, opinia publiczna, propaganda*, Warszawa 1987, p. 63.

4 E. Młyniec, *Opinia publiczna – elementy teorii i praktyki politycznej*, Toruń 2015, p. 87.

5 A. Sulek, *Sondaż polski – przygarść rozpraw o badaniach ankietowych*, Warszawa 2001, pp. 14-16.

6 S. Kuśmierski, *Świadomość... op. cit.*, pp. 173-175.

7 R. Dyoniziak, *Sondaże a manipulowanie społeczeństwem*, Kraków 1997, p.14.

activities. The subject literature indicates that surveys also contribute to a deepening of the democratisation process and to detecting many weaknesses among social life mechanisms.⁸

However, despite the above mentioned advantages of surveys, one can also mention their numerous disadvantages. First of all, it should be noted that there are various types of social stereotypes, myths, phobias or superstitions, which often contribute to an irrationality within public opinion. It seems natural that these factors shape human beliefs or attitudes, which is why it is important to determine the extent to which statements made by the surveyed population are saturated with them.⁹ In addition, public opinion polls can be used for propaganda and public manipulation purposes.

In Poland, the CBOS is one of the largest public opinion research centres. This institution was established in 1982, and its research covers social, economic as well as political and cultural topics.¹⁰ CBOS conducts its research on a sample of about a thousand people. This population consists of people over 18 years of age, registered in Poland. They are selected in a random manner.¹¹

Models of old-age pension systems

The history of universal social insurance dates back to the second half of the nineteenth century, when Otto von Bismarck introduced three laws concerning insurance against accidents at work, old age and invalidity. Responsibility for social risks ceased to be a private matter.¹² It was then that the world's first universal and compulsory old-age pension system, based on contributions, was established, in which the retirement age was 70 years.¹³

There are many definitions for an old-age pension system. One of them is presented by Tadeusz Szumlicz, who indicates that it is:

an existing institutional solution, generally aimed at establishing the rules for: 1) accumulating pension savings and 2) the payment of pension benefits – to provide system participants with adequate non-earning means of subsistence for their old age.¹⁴

As a result of the methods employed for the establishment of pension systems, they can be divided into two main models, *i.e.*, the pay-as-you-go system and the funded pensions system.¹⁵ Both of them are part of the mandatory institutionalised system. However,

8 S. Kuśmierski, *Opinia publiczna: wprowadzenie do teorii*, Warszawa 1996, pp. 106-108.

9 E. Młyniec, *op. cit.*, p. 325.

10 Centrum Badania Opinii Społecznej [Public Opinion Research Centre], *Metody realizacji badań*, https://www.cbos.pl/PL/badania/metody_realizacji.php (online access: 4.9.2019).

11 *Ibid.*

12 B. Sosenko, *Wprowadzenie do teorii systemów zabezpieczenia emerytalno-rentowego*, Kraków 2002, p. 24.

13 F. Chybalski, *Skuteczność i efektywność systemu emerytalnego, koncepcja analizy i próba pomiaru*, Łódź 2012, p. 20.

14 T. Szumlicz, *Ubezpieczenie w polityce społecznej: teksty i komentarze*, Warszawa 2015, p. 281.

15 F. Chybalski, *op. cit.*, p. 29.

they differ in terms of the manner of generating funds for future old-age benefits. In the PAYG system, people are required to pay contributions-taxes, which are the source of old-age pensions payment. Whereas, in the funded pensions system, people buy back from the previous generation the assets that the previous generation bought during the period of professional activity.¹⁶

The PAYG pension system is strongly associated with the Bismarck tradition, in which intergenerational solidarity played a major role. In this system, working people share their income with retirees. This system is opposed to the funded, savings system based on the defined contribution principle. After retirement, everyone uses a part of his or her accumulated income. A common feature of both systems is that the goods consumed by retirees must be produced by working people.¹⁷

In Poland, the PAYG system, also known as the solidarity system, was in force until 31 December 1998. The retirement age and the employment (insurance) period were the basic conditions for acquiring the right to an old-age pension at that time in Poland. This right could have been acquired by a person who had reached a retirement age of 60 for women and 65 for men, and had been employed for 20 years for women and 25 years for men. With time, these periods began to be called contributory and non-contributory.¹⁸ It should be also noted that non-contributory periods were taken into account at a rate not exceeding one third of the contributory periods.¹⁹

However, this system had exhausted its potential over time. The problem arose due to the earlier resignation from professional activity of a significant part of Polish society. Besides, the amount of insurance contributions in the PAYG system had been constantly growing. In 1981 it amounted to 25% of the remuneration, but by 1998 it had already increased to 45%.²⁰ To stop the growing, unrecoverable part of the debt of the system, a mixed system has been in operation since 1 January 1999, which is a combination of the PAYG system and the funded pensions system.²¹

The main purpose of the old-age pension reform was to introduce a principle enabling the long-term self-financing of the pension system. For this purpose individual accounts have been created at the level of insured persons. The system was to be financed only from contributions paid by the persons insured and their employers. And the benefits amount, in accordance with the assumptions of the reform, was to depend on the amount of funds collected by the future beneficiary and the average life expectancy at the time of retirement.²²

16 M. Góra, *System emerytalny*, Warszawa 2003, p. 42.

17 *Ibid.*, pp. 41-43.

18 G. Uścińska, *System ubezpieczeń pracowniczych w Polsce*, Bydgoszcz 1993, p. 152.

19 G. Uścińska, *System ubezpieczeń społecznych w Polsce*, Bydgoszcz 1994, p. 102.

20 A. Kasprzyk, *Reforma systemu emerytalnego w Polsce*, "Acta Scientifica Academiae Ostroviensis" 1999, No. 4, pp. 47-73.

21 M. Góra, *op. cit.*, p. 183.

22 Komisja Nadzoru Finansowego [The Polish Financial Supervision Authority], *Sektor funduszy emerytalnych w Polsce – ewolucja, kształt, perspektywy*, Warszawa 2016, p. 7.

At that time a three-pillar pension system was introduced. The PAYG part of the system is represented by the reformed ZUS under the first pillar, while the funded part is represented by Open Pension Funds under the second pillar. Both pillars are obligatory and based on the defined contribution principle. The social objective of both pillars is to ensure the determined social level of protection. The third pillar is represented by Occupational Pension Programmes [pracownicze programy emerytalne, PPEs], Individual Pension Accounts [indywidualne konta emerytalne, IKEs] and Individual Pension Security Accounts [indywidualne konta zabezpieczenia emerytalnego, IKZE]. Participation in this pillar is voluntary, based on the capital principle of financing, and its social objective is to provide additional pension benefits.²³

Following the implementation of the 1999 reform, the pension system has undergone numerous additional modifications that concerned the universality of the system, its efficiency and financing method. However, its essential feature, namely it being based on a defined contribution, has not changed.²⁴

Assessment of the PAYG pension system in 1995

The first CBOS report presenting Poles' opinions on the pension system was published in August 1995 and entitled *System emerytalno-rentowy w opinii społecznej* [The pension system in public opinion]. At that time, as many as 74% of respondents negatively assessed the functioning of the then pension system. Only 18% of respondents expressed a positive opinion, while 8% had no opinion on the subject. The most negative opinions were expressed by people aged 35-64 (80% of the population in this age group). It should be noted that young people aged 25-34 (20% of positive replies), as well as older people aged 65 and more (24% of positive replies) were more satisfied with the functioning of the system. Pensioners were much more satisfied with the system than full-time employees.²⁵

Respondents' answers vary depending on their place of residence. In the case of large cities, 88% of respondents negatively assessed the pension system, 9% considered it to be good, and 3% of respondents were not able to clearly express their opinion. As many as 62% of respondents living in rural areas considered the system to be bad, 27% as good, and the rest was hesitant.²⁶ In addition, more educated people rated the system much more negatively than people with lesser education.²⁷

23 Centrum Obsługi Emerytalnej, *Reforma emerytalna*, <http://centrumobslugiemerytalnej.pl/system-emerytalny-w-polsce/reforma-emerytalna-w-polsce/> (online access: 4.9.2019).

24 Komisja Nadzoru Finansowego [The Polish Financial Supervision Authority], *op. cit.*, p. 8.

25 Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *System emerytalno-rentowy w opinii społecznej*, No. BS/151/127/95, Warszawa, August 1995, p. 2.

26 *Ibid.*, p. 2.

27 *Ibid.*, p. 3.

In November 1995, the results of the survey entitled *Spoleczne reakcje na propozycje reformy emerytalno-rentowej* [Social responses to the pension reform proposal] were published, in which respondents also assessed the pension system. However, the results of these two surveys cannot be compared due to the diverse mixture of answers in the prepared interview questionnaires. During the survey, whose results were published in November 1995, Poles could indicate their lack of knowledge about the rules of the current pension system. As many as 20% of respondents gave this answer. In the case of the August survey, such an option was not available.²⁸

In 1995, CBOS also conducted a public opinion survey entitled *Model systemu emerytalnego, wynikający z oczekiwań Polaków* [A pension system model derived from Poles' expectations]. At that time, respondents *inter alia* expressed their opinion about who should be entitled to an old-age pension. The vast majority of respondents indicated that only those who had worked and had paid contributions should receive old-age pensions (62% of replies). Less than half of the respondents, because only 33%, indicated that this benefit should be received by every person who has reached the retirement age, even if he/she has not worked and has not paid pension insurance contributions. The respondents claimed that everyone should be provided with a small pension in old age. The rest of the surveyed population refrained from giving a clear answer.²⁹

Assessment of the PAYG pension system in the years 2001–2008

The first survey of Poles' opinions on the assessment of the pension system after the reform was carried out in 2001. According to the report entitled *Nadzieje czy niepewność? System emerytalny po zmianie* [Hope or uncertainty? The old-age pension system after the change], 38% of respondents indicated their dissatisfaction with the reformed pension system, 26% were satisfied with its operation, of which only 3% were sure of their opinion. It is worth mentioning the high level of hesitation among Poles. As many as 36% of respondents indicated that it was difficult for them to comment on the subject.³⁰

The most sceptical with regard to the pension system operation were people from the youngest age group, *i.e.*, 18–24. In this group of respondents as many as 45% gave negative opinions. It is worth noting that the dissatisfaction high also among the 25–34 age group. Negative answers were given by 31% of respondents.³¹

28 Centrum Badania Opinii Społecznej [Public Opinion Research Centre], *Spoleczne reakcje na propozycje reformy emerytalno-rentowej*, No. BS/193/168/95, Warszawa, November 1995, p. 1.

29 Centrum Badania Opinii Społecznej [Public Opinion Research Centre], *Model systemu emerytalnego, wynikający z oczekiwań Polaków*, No. BS/156/132/95, Warszawa, August 1995, p. 3.

30 Centrum Badania Opinii Społecznej [Public Opinion Research Centre], *Nadzieje czy niepewność? System emerytalny po zmianie*, No. BS/18/2001, Warszawa, February 2001, p. 2.

31 *Ibid.*, p. 2.

In 2007, CBOS conducted another survey on Poles' opinions on the pension system operation, called *Opinie o systemie ubezpieczeń emerytalnych* [Opinions on the old-age pension insurance system]. During this survey, respondents *inter alia* addressed pension solutions. 38% of them answered that each employee should pay contributions to his or her own account in the pension fund, from which his/her future pension would be paid. Only 5% of respondents indicated that the persons employed should pay the contributions that would be intended to finance the benefits of current pensioners. Some respondents (36%) supported, as the most advantageous, the solution providing for a combination of both methods, in which part of the employee's contribution would be allocated to the payment of current pensions, while another part set aside for his/her future old-age pension. A high percentage of respondents (21%) had no opinion on this subject. According to the analysed report, young, more educated people, the intelligentsia and persons in managerial positions are more in favour of the funded pensions system. The so-called mixed pension system, currently in force, is usually supported by respondents who run their own businesses.³²

According to the results of the survey, in 2007 almost half of the respondents (47%) were dissatisfied with the pension system operation. 28% of respondents indicated their satisfaction, and 25% were not able to clearly express their opinion. The latter group includes the youngest respondents.³³

In 2008, CBOS presented the results of the survey entitled *System emerytalny – oceny i postulaty* [Pension system – assessments and proposals]. At that time, as many as 70% of respondents were of the opinion that the state itself should provide its citizens for old age. An answer that it was the responsibility of citizens themselves was only given by 23% of the surveyed population. A mere 7% of respondents were not able to give a clear answer in this regard. During the survey it was noticed that the higher the education level and the income of the respondents, the more frequent the belief that the individual was responsible for his/her old age security.³⁴

As in the case of the 2007 survey, respondents were also asked about the best solution for pension benefits. In 2008, almost half of the respondents (49%) indicated, as the best solution, a mixed system, *i.e.*, one combining the funded pensions system and the PAYG system. Definitely fewer respondents, namely 31% of them, were in favour of the funded pensions system, and 9% in favour of the PAYG system. 11% of respondents refrained from giving a specific answer. In 2008, people aged 25-34 and well-educated, were most likely to support the funded pensions system.³⁵

During the 2008 survey, respondents were also asked to assess the functioning of the current pension system. 31% of respondents were definitely dissatisfied, and 34% rather dissatisfied.

32 Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *Opinie o systemie ubezpieczeń emerytalnych*, No. BS/154/2007, Warszawa, October 2007, p. 2.

33 *Ibid.*, p. 3.

34 Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *System emerytalny – oceny i postulaty*, No. BS/169/2008, Warszawa, November 2008, p. 2.

35 *Ibid.*, p. 4.

Only 26% of respondents indicated their satisfaction with the functioning system, of which only 8% of respondents were determined in their opinion. Positive opinions were expressed most frequently by actual pensioners (31%) and the recipients of disability pensions (39%).³⁶

Assessment of the PAYG pension system in the years 2010-2013

In 2010, CBOS conducted another survey on the assessment of the pension system entitled *Oceny proponowanych zmian w systemie emerytalnym* [Assessment of proposed changes in the pension system]. Half of the respondents (50%) negatively assessed the functioning of the pension system in Poland. Satisfaction was indicated by 24% of respondents, however, a high level of indecision could still be noted. 26% of respondents answered "It's hard to say." According to the survey results, the largest number of people dissatisfied with the functioning of the system was among business owners (85%). And the most positive opinions were presented by pensioners (32%).³⁷

In 2010, the majority of respondents (42%) were in favour of the funded pensions system as the best solution for pensions. The solution proposing a combination of the funded pensions system and the PAYG system gained 10% fewer votes. The PAYG system was supported only by 8% of respondents, while 18% were not able to make a clear statement in this regard. The funded pensions system was best assessed by people aged 25-44, the well-educated and the inhabitants of large cities. On the other hand, the combination between the funded pensions system and the PAYG system is mainly supported by the elderly, the least educated, those living in rural areas, as well as the economically inactive people.³⁸

In February 2011, Poles were asked identical questions regarding the pension system assessment. The results of the survey are presented in the report *Opinie o planowanych zmianach w systemie emerytalnym* [Opinions on planned changes in the pension system]. According to the report, as many as 56% of respondents were dissatisfied with the functioning of the pension system. Only 27% of respondents expressed their satisfaction. However, a relatively large part of the surveyed population (17%) did not have any opinion on the functioning of the system. The most positive opinions in this regard were expressed by pensions' recipients and persons of retirement age.³⁹

In 2011, 41% of respondents supported the solution assuming that each employee would pay contributions to their own account in the pension system, from which their

³⁶ *Ibid*, p. 6.

³⁷ Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *Oceny proponowanych zmian w systemie emerytalnym*, No. BS/41/2010, Warszawa, March 2010, p. 2.

³⁸ *Ibid*, pp. 3-4.

³⁹ Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *Opinie o planowanych zmianach w systemie emerytalnym*, No. BS/14/2011, Warszawa, February 2011, p. 2.

future pension would be paid. Only 8% of respondents supported a solution in which pensions would be paid from the contributions of currently employed persons. A significant part of respondents, as many as 35%, indicated the combination of the two above described options as the best possible solution. In addition, 16% of respondents did not express their opinion clearly. The first option regarding the funded pensions system was most often supported by people aged 25-44, the well-educated, and those holding managerial positions. The mixed system, combining the funded pensions system and the PAYG system, was best assessed by city dwellers, pupils and students.⁴⁰

The most recent survey of Poles' opinions on the pension system was conducted in July 2013. The report and its findings was entitled *Reakcje na planowane zmiany dotyczące OFE* [Reaction to planned changes regarding Open Pension Funds] contains, among others, information on Poles' opinions on the functioning of the pension system, responsibility for old age security, and citizens' pensions.⁴¹

In 2013, as many as 71% of respondents considered that the state itself should provide its citizens for old age. Only 22% of respondents indicated that citizens themselves should take care of their own pension security. The rest of the respondents (7%) did not have a clear opinion on this subject. The solution with the leading role of the state as the party responsible for old age security was rated the highest in each group of respondents according to the level of education. However, it is worth noting that with an increase in the education level, the respondents more often opted for the dominant role of the individual in the field of social security. In addition, this solution was indicated by better-off people living in large cities and often holding managerial positions.⁴²

In 2013, contrary to previous years, Poles were not asked about their satisfaction with the functioning of the pension system, but rather about its most salient components. In the first place, they indicated the certainty of pension payment (44%). It was only in second place that its amount was indicated, which was pointed to by 34% of respondents. Voluntary participation in the pension system proved to be the most important for 12% of respondents. Only 3% of the surveyed Poles indicated low pension contributions, and 7% of them could not identify any element of the pension system as being the most important.⁴³

In addition, in 2013, 55% of Poles did not support the introduction of citizens' pensions, in which the state guarantees a minimum pension to citizens, and the persons concerned themselves provide for additional security. Thus, this result is consistent with the responses concerning the leading role of the state in the area of responsibility for old age security.⁴⁴

⁴⁰ *Ibid.*, pp. 3-4.

⁴¹ Centrum Badania Opinii Społecznej [Public Opinion Research Centre], *Reakcje na planowane zmiany dotyczące OFE*, No. BS/108/2013, Warszawa, July 2013, p. 15.

⁴² *Ibid.*, p. 15.

⁴³ *Ibid.*, p. 16.

⁴⁴ *Ibid.*, p. 17.

Assessment of activities of the Social Insurance Institution

CBOS has been conducting research on the assessment of activities of public institutions since 1984. The first survey concerning the Social Insurance Institution was carried out in 1999, but it did not involve an assessment of ZUS activities. The survey referred to Poles' opinions on ZUS debtors. Only since 2009, CBOS has been conducting surveys on the assessment of ZUS activities on a regular basis.

According to the CBOS report of 2010 entitled *Opinie o działalności prezydenta, parlamentu, ZUS i OFE* [Opinions on the activities of the president, parliament, ZUS and Open Pension Funds] over half of those Poles surveyed (57%) negatively assessed the activities of the Social Insurance Institution. Only 22% of respondents expressed a positive opinion and 21% refrained from giving an answer. ZUS activities are unfavourably assessed by all socio-demographic groups. However, the majority of negative opinions were expressed by the most educated people, coming from large cities, holding managerial positions. Pensioners and economically inactive people expressed more positive opinions on the subject of ZUS.⁴⁵

In 2011, the assessment of ZUS activities slightly improved. According to the report *Ocena działalności parlamentu, prezydenta, ZUS i OFE* [Assessment of the activities of the parliament, president, ZUS and Open Pension Funds], 29% of respondents gave a positive opinion. Exactly half of the respondents expressed a negative opinion on the subject of ZUS, while for 21% of Poles it was still difficult to give a clear answer.⁴⁶ This public institution was best rated by pensioners and the least educated.

In 2013, the assessment of ZUS activities slightly changed when compared to 2011. Slightly over a half of Poles (51%) assessed its activities unfavourably. Only 28% of respondents expressed a positive opinion, while 21%, as before, refrained from expressing their view on this subject. ZUS's assessment rating has not changed in terms of socio-demographic groups. Recipients of old-age pensions still had the best opinion about this institution.⁴⁷

It is worth noting that the latest survey results in the analysed area were published in March 2017. According to surveys, 37% of respondents positively assessed ZUS activity, 43% expressed a negative opinion, and 20% of respondents did not express an unequivocal opinion on this subject. Pensioners are still the most positive in their opinions as to ZUS's functioning.⁴⁸

45 Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *Opinie o działalności prezydenta, parlamentu, ZUS i OFE*, No. BS/6/2010, Warszawa, January 2010, p. 6.

46 Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *Ocena działalności parlamentu, prezydenta, ZUS i OFE*, No. BS/45/2011, Warszawa, April 2011, pp. 4-5.

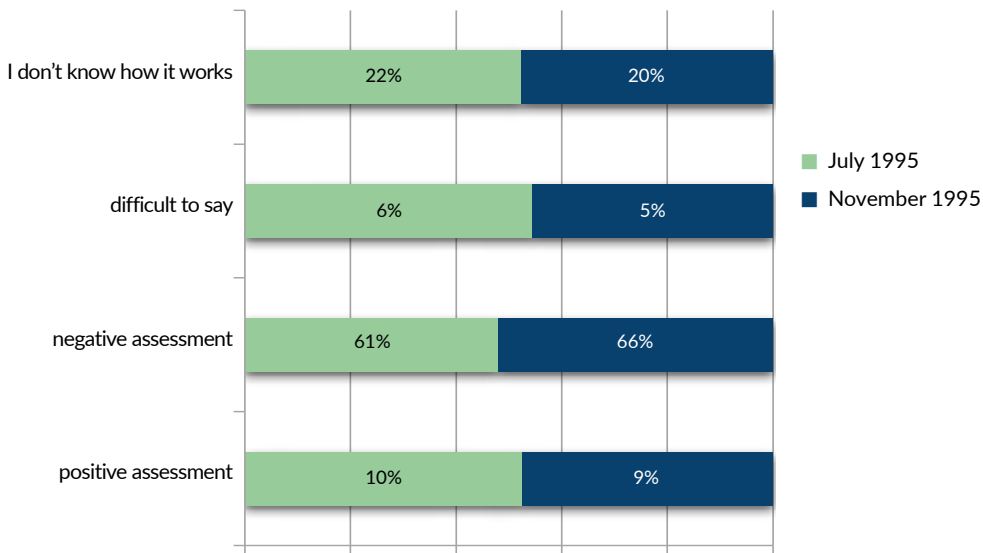
47 Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *Oceny instytucji publicznych*, No. BS/160/2013, Warszawa, November 2013, p. 6.

48 Centrum Badań Opinii Społecznej [Public Opinion Research Centre], *Oceny instytucji publicznych*, No. 32/2017, Warszawa, March 2017, p. 10.

Summary

Poles have negatively assessed the PAYG pension system. Both in August and November 1995, over 60% of Poles surveyed expressed a negative opinion on that system. It is worth noting that about 20% of respondents were unable to clearly express their opinion. The most negative opinion was given by those of middle and older age, the well-educated, those living in large and medium-sized cities.

Diagram 1. Old-age pension system assessment in 1995



Source: own study based on the CBOS report No. BS/156/132/95 and No. BS/193/168/95

Apart from socio-demographic variables, the presented respondents' assessment could also be influenced by macroeconomic factors, the socio-economic situation of the country at the time.

In 1995, the registered unemployment rate in Poland was 14.9%. This was a decrease when compared to previous years – the unemployment rate was 16.4%, in 1993 and 16% in 1994. However, the unemployment level in Poland was still very high.⁴⁹ It should be noted that, apart from the ratio of the number of pension recipients to the number of economically active people and the burden of those economically active, the employment rate in the economy is one of the factors determining the amount of the old-age pension.⁵⁰ In addition, in 1995 the country was struggling with high inflation (27%),

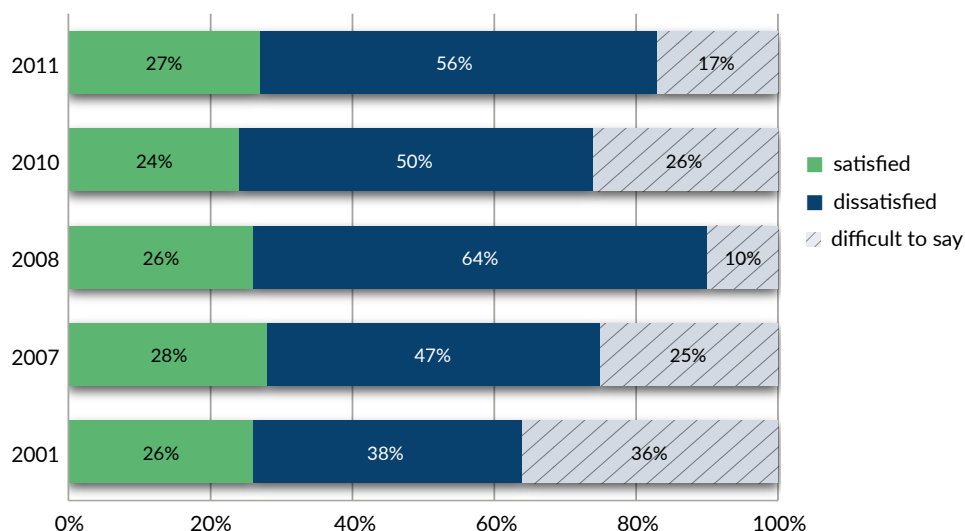
⁴⁹ Główny Urząd Statystyczny [Statistics Poland], *Stopa bezrobocia rejestrowanego w latach 1990-2019*, <https://stat.gov.pl/obszary-tematyczne/rynek-pracy/bezrobocie-rejestrowane/stopa-bezrobocia-rejestrowanego-w-latach-1990-2019,4,1.html> (online access: 4.9.2019).

⁵⁰ J. Czapiński, M. Góra, *op. cit.*, p. 3.

average price levels in the economy were rising.⁵¹ Thus, state failures can be combined with a negative assessment of the PAYG system. It is worth noting that in 1995 the most dissatisfied group of respondents were working-age people whose contributions were the source of payment for old-age pensions.

In the period from 2001-2011, Poles expressed their opinions on the functioning of the PAYG/funded pension system. As in the previous case, it was assessed negatively.

Diagram 2. Assessment of the pension system functioning in the years 2001-2011



Source: own study based on CBOS reports No. BS/18/2001, BS/154/2007, BS/169/2008, BS/41/2010 and BS/45/2011

The most negative assessments appeared in the 2008 survey, when as many as 64% of respondents were dissatisfied with the functioning of the pension system. In subsequent years, dissatisfaction remained at a level above 50%.

For the years 2001-2011 the registered unemployment rate in Poland dropped from 17.5% in 2001 to 12.4% in 2011.⁵² There was also a fall in inflation from 5.5% in 2001 to 4.3% in 2011⁵³. The highest level of dissatisfaction with the current pension system in 2008 can be attributed, *inter alia*, to the global economic crisis. It was the period when Poland remained the so called green island on the map of Europe, but the crisis shaped public discourse to a large extent.

There is no constant regularity when it comes to the assessment of the pension system in individual groups of respondents. However, as the 2008 survey shows, dissatisfaction

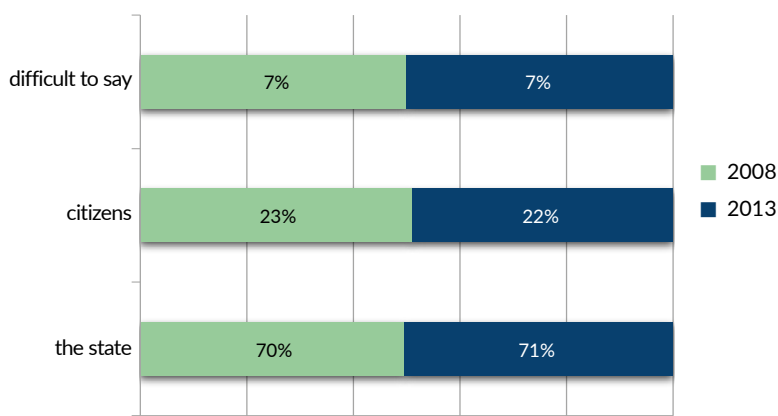
⁵¹ Główny Urząd Statystyczny [Statistics Poland], *Roczne wskaźniki cen towarów i usług konsumpcyjnych od 1950 roku*, <https://stat.gov.pl/obszary-tematyczne/ceny-handel/wskaźniki-cen/wskaźniki-cen-towarow-i-uslug-konsumpcyjnych-pot-inflacja-roczne-wskaźniki-cen-towarow-i-uslug-konsumpcyjnych/> (online access: 4.9.2019).

⁵² Główny Urząd Statystyczny [Statistics Poland], *Stopa bezrobocia...*, *op. cit.*

⁵³ Główny Urząd Statystyczny [Statistics Poland], *Roczne wskaźniki...*, *op. cit.*

prevailed in all socio-professional groups, and the most positive opinions about the system were expressed by pensioners. This trend continued in 2010 and 2011. It is worth noting that the dissatisfaction with the functioning of the pension system went unchanged among business owners. Moreover, since 2001, a high percentage of respondents have not been able to clearly express their opinion. The 2007 survey showed that the youngest respondents in the 18-24 age group were least aware of the rules of the pension system functioning. This result is quite evident. The youngest group of respondents would only benefit from the pension system in a relatively distant future, which could have resulted in low level of interest in its functioning. As illustrated by the results of the 2013 CBOS survey, certainty in old-age pension payment and its amount is the most important for Poles in the functioning of the pension system.

Diagram 3. Responsibility for old age security

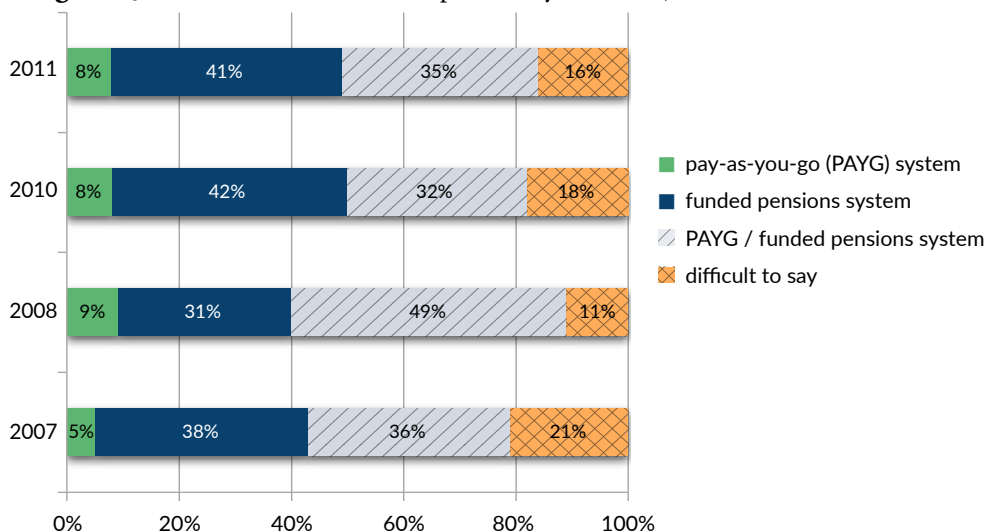


Source: CBOS report No. BS/108/2013

In Poles' opinion, it is primarily the state that should provide its citizens for old age. Such was the view of about 70% of respondents both in 2008 and in 2013. In both surveys, slightly more than 20% of citizens considered that this should be the responsibility of the individual citizen. The conviction of the state's responsibility for providing for old age prevails in all socio-professional groups. It can be, however, noted that this view loses its import among those with higher education, the better-off and those living in larger cities (over 500,000 inhabitants). These answers are consistent with the results of the survey entitled *Wiedza i postawy wobec ubezpieczeń społecznych* [Knowledge and attitudes towards social insurance in 2016], presented in the report of the Institute of Public Affairs [Instytut Spraw Publicznych] and published by ZUS, in which as many as 63% of respondents indicated that the state should provide its citizens for old age. Only 28% of respondents answered that it was the responsibility of citizens themselves.⁵⁴

⁵⁴ Instytut Spraw Publicznych [Institute of Public Affairs], *Wiedza i postawy wobec ubezpieczeń społecznych*, Warszawa 2016, p. 44.

Diagram 4. The best solution for the pension system 2007-2011



Source: own study based on CBOS Reports No. BS/154/2007, BS/169/2008, BS/41/2010 and BS/45/2011

Poles expressed their opinion on the best solution for the pension system in four CBOS studies – in 2007, 2008, 2010 and 2011. The PAYG system gained the highest support in 2008. In the remaining years, respondents considered the funded pensions system to be the best solution. It can be noted that this system is more often supported by respondents in the 25-44 age group, those with a higher education, the well-off, those living in large cities and often holding managerial positions. The disadvantaged and inactive, chiefly pupils and students, are more likely to favour the mixed system. In 2007, hesitation to support a specific solution (21%) was noticed among the answers. Respondents with basic education and a poor financial situation had problems with providing an answer. In addition, it should be noted that our country is in the phase of demographic old age. This occurs when the share of people over 60 exceeds 12% of the total population.⁵⁵ This ration is constantly increasing in Poland. In 1995 it was 13.8%, while in 2013 it was as high as 18.4%. An awareness of an ageing population can contribute to the growing support for the funded pensions system.

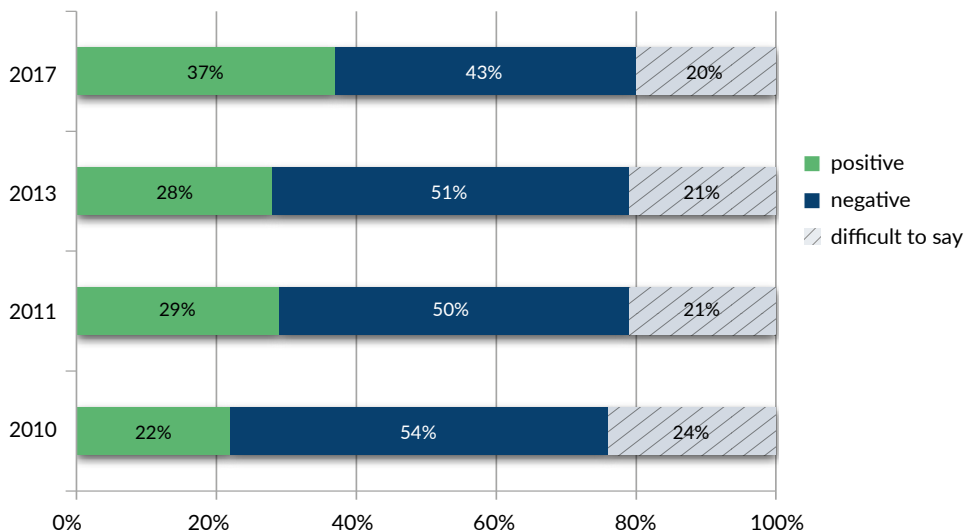
It should be also noted that better educated and better-off respondents are more willing to support the funded pensions system. They may be attracted by a solution providing for contributions payment to their own accounts, to save for their own future.⁵⁶

⁵⁵ Instytut Pracy i Spraw Socjalnych [Institute of Labour and Social Studies], *Raport na temat sytuacji osób starszych w Polsce*, Warszawa 2012.

⁵⁶ E. Karpowicz, *Ubezpieczenia emerytalne w opiniach społecznych* [in:] *System emerytalny 9 lat po reformie*, ed. B. Kłos, Warszawa 2008, p. 161.

Besides, Poles have been regularly assessing the activities of the Social Insurance Institution since 2009.

Diagram 5. Assessment of the activities of the Social Insurance Institution in the years 2010-2017



Source: own study based on CBOS reports No. BS/6/2010, BS/45/2011, BS/160/2013, 32/2017

Since 2010, respondents have negatively assessed the activities of the Social Insurance Institution. In the years 2010-2013, in the opinion of over 50% of them, this institution did not function properly. This opinion was expressed mainly by the most educated respondents, from large cities, often holding managerial positions. Pensioners and poorly educated people had the most favourable opinion about ZUS activities. A decrease in negative opinions (to 43%) was noted in 2017, as compared to 2013 when negative opinions were expressed by as many as 51% of respondents. A positive phenomenon was the relatively more positive assessment of ZUS by respondents who had had direct contact with this institution and could assess its functioning on the basis of their own experience.

Moreover, it should be noted that the question about ZUS activities is quite general, and its meaning could be interpreted by each respondent in a different context and area of its activity. Persons who do not yet receive any pension benefits may, in their opinion on the functioning of ZUS, be influenced by their assessment of the old-age pension system as a whole.

To sum up, it should be pointed out that according to the results of CBOS surveys, Poles negatively assessed both the PAYG system and the PAYG/funded pensions system. This concerned all socio-demographic groups. However, relatively the best opinions about the system are expressed by those who use it. Negative opinions about the system coincide with unfavourable assessment of the activities of the Social Insurance Institution as such.

It should be mentioned here that, in accordance with the adopted survey research methodology, surveys should take into account the level of respondents' knowledge on the topic and check how they understand the issues raised in the survey. It is worth noting that a high percentage of respondents' answers in the conducted surveys had the following content: "I don't know the rules and provisions/how it works" or "Difficult to say." Thus, it can be concluded that the subject matter of the survey was problematic to respondents, and the assessment of the degree of satisfaction or dissatisfaction with the pension system operation in many cases may not have been based on any substantive knowledge of the subject. Pension system research is characterised by a high level of complexity. Questions posed to the respondents should be conveyed in a clear and transparent manner.⁵⁷ This does not change the fact that Poles' knowledge about the functioning of the pension system is quite negligible, something that is also confirmed by other studies in this area, *i.e.*, the ZUS report entitled *Wiedza i postawy wobec ubezpieczeń społecznych* or *Świadomość "emerytalna" Polaków* from 2016.

⁵⁷ *Ibid*, p. 175.

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Ocena systemów emerytalnych w badaniach CBOS – analiza retrospektywna (1995–2013)

Głównym tematem artykułu jest ocena systemów emerytalnych w badaniach Centrum Badań Opinii Społecznej (CBOS) w latach 1995–2013. Na początku przedstawiono definicję opinii publicznej. Następnie wskazano znaczenie badań opinii publicznej, ich wady i zalety. W kolejnej części artykułu przedstawiono zasady funkcjonowania repartycyjnego, kapitałowego oraz repartycyjno–kapitałowego systemu emerytalnego, wprowadzonego ustawą z dnia 17 grudnia 1998 r. o emeryturach i rentach z Funduszu Ubezpieczeń Społecznych. Zasadniczą część opracowania stanowi analiza wyników oceny systemów emerytalnych w naszym kraju i działalności Zakładu Ubezpieczeń Społecznych. Porównano m.in. opinię Polaków w zakresie najlepszego rozwiązania dotyczącego systemu emerytalnego czy odpowiedzialności za zabezpieczenie na starość. Wyniki analizy przedstawiono z uwzględnieniem odpowiedzi poszczególnych grup społeczno – demograficznych, ze względu na wykształcenie, sytuację zawodową, wielkość miejscowości zamieszkania czy status materialny. Wyniki analizy zestawiono również z wybranymi czynnikami makroekonomicznymi.

Słowa kluczowe: system emerytalny, opinia publiczna, Centrum Badań Opinii Społecznej (CBOS), Zakład Ubezpieczeń Społecznych (ZUS), badania społeczne

Impact of retirement age changes on the old-age pension take up in Poland after 1990

The article presents an analysis of the retirement behaviour in Poland in the past 30 years within the context of evolution of the legal retirement age and access to early retirement benefits. It shows that any change in the law, particularly those that widen access to pensions, such as introducing early retirement opportunities or lowering the retirement age itself, lead to an increased take up of pension benefits. The majority of employees claim their pensions at the earliest age that they accrue pension rights, or no more than a couple of years afterwards. This behaviour has not changed over the course of the past 30 years, despite significant changes in a pension system that has moved from the defined benefit to the defined contribution principle, and which has increased the incentives to postpone retirement decisions. People above the age of 50 still want to retire as soon as possible. A shift towards a defined contribution system, combined with a lower retirement age, particularly for women, leads to a declining ratio between pensions and wages. Raising the retirement age and equalising it between sexes seems to be necessary to compensate for increasing life expectancy and to ensure the adequacy of pensions and for the reduction of the gender pension gap over the coming decades.

Key words: life expectancy, old-age, old-age pension, retirement age, retirement behaviour

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Introduction

The retirement decisions of individuals have an impact both on the individual situation of retirees as well as the overall situation of pension systems. On the individual level, the age of claiming a pension divides an individual life course between periods of economic activity and inactivity due to retirement and has an impact on the old-age income. On the macro level, the retirement behaviour of employees affects the ratio between contributors and pensioners – the system dependency ratio.

The legal retirement age and access to early retirement benefits are one of the most important parameters of a pension system, ones which have an important impact on retirement decisions. Nicholas Barr underlines that many people retire at the earliest permissible age, even at a pension that is low and which would be larger if they had delayed retirement.¹ If pensions bear an actuarial relationship to a person's expected duration of retirement, the combination of longer lives and retirement at the earliest permissible date inescapably aggravates poverty amongst the elderly.

The aim of this article is to assess, how changes in the legal retirement age in Poland in the past three decades have influenced transitions to retirement and the pension system outcomes. I propose three research hypotheses:

- H1. Legal opportunities to retire are one of the most important factors affecting retirement decisions in Poland.
- H2. Changes in the legal retirement age led to a rise in the actual retirement age, but these changes are not sufficient to compensate for the increases in life expectancy.
- H3. Changes in legal retirement age affect the retirement expectations of subsequent cohorts.

The article is structured as follows. In the first part, presented is a review of the international and Polish literature related to retirement age policy. The second part briefly presents the changes to the pension system in Poland and the impact of retirement age on pensions. The third part discusses the retirement behaviour of employees in Poland over the past three decades, including the number of newly granted pensions, the use of early retirement transfers within the context of the employment rate of older employees and the pension system dependency rate. Finally, the changes in retirement expectations between 2006 and 2017 are discussed. The conclusions refer to the formulated research hypotheses and the retirement behaviour of older people in Poland.

¹ N. Barr, *Pensions: overview of the issues*, "Oxford Review of Economic Policy" 2006, No. 22, p. 8, <https://doi.org/10.1093/oxrep/grj001>.

Retirement age as an instrument of pension policy – evidence from the subject literature

In the past decades, many developed countries have introduced various measures that are aimed at prolonging working lives and increasing retirement ages. Hila Axelrad and Kevin J. Mahoney² in their review of policies aimed at increasing the pensionable age indicate that 19 out of 34 analysed Organisation for Economic Co-operation and Development (OECD) countries have increased the retirement age and 20 countries are planning further increases in the future. The European Commission in its *White Paper. An Agenda for Adequate, Safe and Sustainable Pensions*³ calls for linking retirement age to gains in life expectancy. By 2018, 17 European Union (EU) countries introduced measures that balance pension systems through automatic balancing mechanisms (Sweden, Germany, Spain, Lithuania), linking either pension benefits (Italy, Latvia, Poland, Sweden, France, Finland, Portugal, Spain) or retirement age (Italy, Finland, Portugal, Greece, Denmark, the Netherlands, Cyprus, Slovakia, and Malta) to life expectancy as recommended by the European Commission.⁴

Gwenith G. Fisher, Dorey S. Chaffee and Amanda Sonnega⁵ provide a comprehensive multidisciplinary and international review of the retirement literature as it relates to retirement timing. They propose a framework model that specifies a number of individual, family, work-related and macro-economic and socio-cultural factors that are antecedents to as well as consequences of retirement timing within the life course context. They underline that the trend toward the later retirement timing observed in many developed economies will undoubtedly be beneficial for both individual and public finances, the retirement of the large baby boom generation may present challenges without pursuing further policies to accommodate their retirement transition. That requires continuing research to track retirement trends over time and the impact on system finances, particularly based on longitudinal surveys (such as SHARE – Survey on Health, Ageing and Retirement in Europe).

There is also a gendered approach to policies increasing the retirement age. Clare E. Edge, Anna M. Cooper and Margaret Coffey⁶ focus on factors that are supporting a longer labour market participation of women. They conclude that special attention should be paid to the role of individual level factors such as caring responsibilities and macro level factors such as opportunities for training and development and challenging unhelpful social norms and stereotypes.

2 H. Axelrad, K.J. Mahoney, *Increasing the Pensionable Age: What Changes Are OECD Countries Making? What Considerations Are Driving Policy?*, "Open Journal of Social Sciences" 5 July 2017, pp. 56–70, <https://doi.org/10.4236/ojs.2017.57005>.

3 European Commission, *White Paper. An Agenda for Adequate, Safe and Sustainable Pensions*, COM(2012) 55 Final, 2012.

4 European Commission Directorate-General for Economic and Financial Affairs, *The 2018 Ageing Report. Economic & Budgetary Projections for the 28 EU Member States (2016-2070)*, "Institutional Paper" 2018, <https://doi.org/10.2765/615631>.

5 G.G. Fisher, D.S. Chaffee, A. Sonnega, *Retirement Timing: A Review and Recommendations for Future Research*, 2016, pp. 1–32, <https://doi.org/10.1093/workar/waw001>.

6 C.E. Edge, A.M. Cooper, M. Coffey, *Barriers and Facilitators to Extended Working Lives in Europe: A Gender Focus*, *Public Health Reviews*, 2017, <https://doi.org/10.1186/s40985-017-0053-8>, and in some countries (e.g. the UK).

Finally, the need for a comprehensive approach to understand the interlinks between labour market and retirement policies. For example, Tuulia Hakola and Roope Uusitalo⁷ show that the experience-rating of early retirement benefits matters. The reduction in the exit rates was larger in firms that faced larger increases in the cost of early retirement. Introducing incentives in the pension system is one of the policies to increase the actual retirement age. Erik Hernæs, Simen Markussen and others⁸ suggest that transparent, substantial, and successfully communicated increases in work incentives may constitute a highly efficient strategy for increasing mature labour force participation. However, evidence from countries that have a similar pension system design as Poland also shows that introducing incentives to postpone retirement, without changing regulations on the legal retirement age, do not lead to the postponement of retirement decisions. In Sweden, a low retirement age and few incentives to prolong working lives were one of the arguments for introducing pension reform itself. When the earnings-related system was introduced in 1960, the standard legal retirement age was 67, then in the 1970s, several options to draw benefits early were introduced in the public scheme. In 1976, the legal retirement was lowered to 65. Benefits could be withdrawn early from the age 60 with an actuarial adjustment or postponed until the age of 70. A partial retirement benefit allowed older workers to reduce the number of hours worked and receive a benefit in lieu of lost earnings from the age of 60. As a result, the actual retirement age (that is the average age of retirement for men and women) has decreased over time and was at the time of the reform around 62 years old for men and remained around this level for women (slightly increasing in the late 1990s). As shown by Annika Sundén,⁹ after the implementation of the pension reform in the late 1990s, the retirement age did not increase much, which indicates that the incentives embedded in the new system are not sufficient to prolong working lives.

Maciej Żukowski and Antoni Malaka¹⁰ in their monograph following the conference of the Polish Society of Social Insurance [Polskie Stowarzyszenie Ubezpieczenia Społecznego] have underlined that the retirement age is one of the most important parameters of any pension systems. They remind one that in the period following World War II, many countries reduced their retirement age, which was seen as an element of social progress, but currently, as a result of demographic and economic reasons developed countries have reversed these policies and in many countries retirement ages are increased. Also Gertruda Uścińska¹¹ analyses the trends related to changing retirement ages in European Union countries as well as any policy lessons for Poland. She presents arguments for the increase of pensionable age in European countries, including economic

7 T. Hakola, R. Uusitalo, *Not so Voluntary Retirement Decisions? Evidence from a Pension Reform*, "Journal of Public Economics" 2005, Vol. 89, Issue 11–12, pp. 2121–36, <https://doi.org/10.1016/j.jpubeco.2004.12.001>.

8 E. Hernæs, S. Markussen, *Pension reform and labor supply*, "Journal of Public Economics" 2016, No. 142, pp. 39–55, <https://doi.org/10.1016/j.jpubeco.2016.08.009>.

9 A. Sundén, *The Swedish Experience with Pension Reform*, "Oxford Review of Economic Policy" 2006, Vol. 22, Issue 1, pp. 133–48, <https://doi.org/10.1093/oxrep/grj009>.

10 M. Żukowski, A. Malaka, *Wiek emerytalny*, Kazimierz Dolny 2012.

11 G. Uścińska, *Wiek emerytalny w krajach Unii Europejskiej – obowiązujące rozwiązania i proponowane kierunki zmian* [in:] *Wiek emerytalny*, op. cit., pp. 23–38.

ones (necessity to maintain the financial sustainability of the social insurance system), demographic (the necessity to prolong working lives given population ageing and its consequences) as well as social (the necessity to ensure adequate income and living standards at retirement).

The new pension system in Poland and gender-specific retirement age

The legal retirement age is one of the parameters of the pension system in almost every country, including also Poland. Evolution of the retirement age needs to be seen in the context of the pension system in the country. Therefore, considerations on retirement age changes can be divided into two periods: before the change of the pension system in 1999 and after this change. Prior to 1999, the Polish pension system was based on a traditionally defined benefit pay-as-you-go system and the retirement age did not affect the value of pension benefits. For each year of additional work, beneficiaries were credited 1.3% of their assessment base (that is individual earnings relative to the average salary in the economy).

The new pension system introduced in Poland in 1999 is based on the defined-contribution principle. It is based on the multi-pillar approach – the mandatory old-age contribution was split between two accounts: non-financial defined contributions (NDC account) and funded defined contributions (FDC account). This approach for reforming pension systems was common in the Central and Eastern European region. Throughout the past 20 years, these reforms underwent significant changes, including partial or full reversals of the funded components, something widely discussed in the subject literature.¹²

In Poland the financing mix of future pensions has changed and currently, according to the legislation, old-age pensions will be fully paid out from the non-financial part. At the same time, the defined-contribution nature of the pension system has remained, which is presented in detail by Sonia Buchholtz, Agnieszka Chłoń-Domińczak and Marek Góra.¹³

12 See for example: S. Domonkos, A. Simonovits, *Pensions in transition in EU11 countries between 1990 and 2015*, 2016; J. Drahekoupil, S. Domonkos, *Averting the Funding-Gap Crisis: East European Pension Reforms since 2008*, "Global Social Policy" 2012, pp. 283–99, <https://doi.org/10.1177/1468018112455653>; M. Naczyk, S. Domonkos, *The Financial Crisis and Varieties of Pension Privatization Reversals in Eastern Europe*, "Governance" 2015; M.A. Orenstein, *Privatising Pensions: The Transnational Campaign for Social Security Reform*, Princetown 2008; M.A. Orenstein, *Pension Privatization in Crisis: Death or Rebirth of a Global Policy Trend?*, "International Social Security Review" 2011, Vol. 64, Issue 3; M. Heneghan, M.A. Orenstein, *Organizing for Impact: International Organizations and Global Pension Policy*, "Global Social Policy" 2019, <https://doi.org/10.1177/1468018119834730>; K. Bielawska, A. Chłoń-Domińczak, D. Stańko, *Retreat from Mandatory Pension Funds in Countries of the Eastern and Central Europe in Result of Financial and Fiscal Crisis: Causes and Effects*, Paper presented at 2018 ASSA Meeting in Philadelphia, 2018; K. Bielawska, A. Chłoń-Domińczak, D. Stańko, *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*, 2015.

13 S. Buchholtz, A. Chłoń-Domińczak, M. Góra, *The Polish NDC Scheme: Success in the Face of Adversity* [in:] *Progress and Challenges of Nonfinancial Defined Contribution Pension Schemes: Volume 1. Addressing Marginalization, Polarization, and the Labor Market*, ed. by R. Holzmann, E. Palmer, R. Palacios, 2019, https://doi.org/10.1596/978-1-4648-1453-2_ch5.

The shift from a defined benefit to a defined contribution system also means that the role of the retirement age has changed. While in the old system it constituted one of the parameters important for the accrual of pension rights, in the new system – it also has an impact on the size of pension benefits, something discussed later in this chapter.

The retirement age in Poland prior to pension reform in 1999

Marcin Zieleniecki¹⁴ reminds one that the basic legal retirement age in Poland (that is the standard age set out in the relevant legislation) was set at 60 years for women and 65 years for men already in 1954. However, early retirement (5 or 10 years prior to reaching the retirement age) was introduced in many occupations. Early retirement expanded significantly in the 1970s. It was treated as an instrument to manage the labour supply. The policies followed the “lump-of-labour” fallacy, that retirement of older people would free workplaces for the baby boom generation. Upon economic transition, at the end of 1980s and beginning of 1990s the Council of Ministers used its legislative possibility to provide early retirement to those laid off by companies that were closing down as well as to the parents of children with disabilities. Early retirement was also granted to the long-term unemployed, who had long working lives (35 years for women and 40 years for men). Women could also retire at age of 55, if they had worked for 30 years. The last change affecting the retirement age of people covered by the old pension system was implemented in May 2008. According to the ruling of the Constitutional Tribunal of October 2007, early retirement was granted to men who had reached the age of 60 and who had 35 years of work experience (this applied to those born in the years 1943-1948).

The extent of such early retirement opportunities meant that the actual age of claiming old-age pensions in the old pension system was around 5 years below the one legally in force. The early retirement privileges were to have a significant economic and financial consequences, these being discussed by Damian Walczak.¹⁵ The need to raise the actual retirement age was one of the reasons for the implementation of the new old-age pension system.

The retirement age in the new pension system

The role of retirement age changed with the introduction of the new pension system in 1999. The new pension system is based on a defined contribution principle. This means that the pensions for those born in 1949 and later,¹⁶ introduced was a close link between pension benefits and retirement age. Namely, old-age pensions are calculated by dividing the accumulated lifetime contributions indexed to wage and GDP growth by unisex life expectancy at retirement age.

¹⁴ M. Zieleniecki, *Ewolucja wieku emerytalnego w ustawodawstwie polskim – perspektywa historyczna* [in:] *Wiek emerytalny, op. cit.*, pp. 8–22.

¹⁵ D. Walczak, *Przywileje w zabezpieczeniu na starość w Polsce*, Toruń 2019.

¹⁶ With exception of those covered by transitory rules, including those who fulfilled pension criteria by the end of 2008.

The issue of retirement age was also widely discussed during the development of the assumptions of the new pension system and after its implementation. The initial reform concept, presented in the report *Security through Diversity* included the proposal to equalise the retirement age of both men and women at 62 years.¹⁷ However, this proposal did not gain political acceptance and the standard legal retirement age remained unchanged. Igor Guardiancich,¹⁸ in his analysis of the political economy of pension reforms, shows that the lack of political consensus to raise and equalise retirement ages was common in Central and Eastern Europe during the wave of pension reforms in the late 1990s and at the turn of the century.

While the legal retirement age remained the same as in the old system, in the new system the incentive to postpone retirement is higher. With each year of postponed retirement, the pension benefits increase both through increased accrued pension capital and reduced life expectancy.

This is illustrated in Table 1. As one can see, postponing the retirement decision by one year leads to an increase in the old-age pension of 10%. If someone decided to postpone retirement by five years, his or her pension doubles, compared to the potential benefit at retirement age. This is an important economic incentive to extend working life beyond the legal retirement age.

Table 1. Old-age pension simulation: value of NDC accounts and old age pensions at retirement age and with postponed retirement

| | Retirement age | Value of NDC-1 and NDC-2 accounts | Life expectancy at retirement age | Old-age pension | Old-age pension at later retirement age/old-age pension at legal retirement age |
|-------|----------------|-----------------------------------|-----------------------------------|-----------------|---|
| Women | | | | | |
| 2016 | 60 | 321,054.93 PLN | 259.5 | 1,237.21 PLN | |
| 2017 | 61 | 347,749.49 PLN | 254.2 | 1,368.02 PLN | 110.6 |
| 2018 | 62 | 378,997.91 PLN | 244.2 | 1,552.00 PLN | 125.4 |
| 2019 | 63 | 420,796.58 PLN | 234.1 | 1,797.51 PLN | 145.3 |
| 2020 | 64 | 468,993.67 PLN | 225.5 | 2,079.79 PLN | 168.1 |
| 2021 | 65 | 575,400.63 PLN | 217.1 | 2,650.39 PLN | 214.2 |
| Men | | | | | |
| 2016 | 65 | 328,806.92 PLN | 216.1 | 1,521.55 PLN | |
| 2017 | 66 | 355,501.48 PLN | 211.3 | 1,682.45 PLN | 110.6 |
| 2018 | 67 | 386,749.90 PLN | 201.8 | 1,916.50 PLN | 126.0 |
| 2019 | 68 | 428,548.57 PLN | 192.6 | 2,225.07 PLN | 146.2 |
| 2020 | 69 | 476,745.66 PLN | 184.6 | 2,582.59 PLN | 169.7 |
| 2021 | 70 | 583,152.62 PLN | 176.8 | 3,298.37 PLN | 216.8 |

Assumptions: a person reached retirement age in 2016, the value of the NDC-1 and NDC-2 accounts is based on the average value of these accounts for the relevant cohort, as reported by Social Insurance Institution [Zakład Ubezpieczeń Społecznych, ZUS] individuals continue to work, and they earn the average national wage.

Source: own simulations based on Social Insurance Institution data (initial capital and pension accounts values)

¹⁷ For details of the proposal see for example: A. Chłoń, M. Góra, M. Rutkowski, *Shaping Pension Reform in Poland: Security through Diversity*, World Bank: SP Discussion Paper, 1999.

¹⁸ I. Guardiancich, *Pension Reforms in Central, Eastern and Southeastern Europe: Legislation, Implementation and Sustainability*, doctoral thesis, European University Institute, 2009, <https://doi.org/10.2870/1700>.

Over the past decade, the regulations on the retirement age in Poland have been changed many times. One of the important assumptions of the new pension system was to scale down access to early retirement after the transition period. From 2009, following the implementation of the so-called bridging pensions, access to early retirement was significantly limited, following the new definitions of work in special conditions and of a special character, which has led to an increase in the actual retirement age, which is discussed later in the article. This change, expected in 2007 was postponed by two years, due to strong social resistance. As underlined by Piotr Szukalski,¹⁹ early retirement was perceived as reward for a long period of work for relatively low remuneration and reducing access to early retirement was perceived as a withdrawal of this privilege. Recent research by Janusz Czapiński and Michał Góra²⁰ suggests, however, that around a quarter of respondents in the survey focusing on pension awareness among Polish adults expects to work beyond retirement age (including more than a third of women and 13.5% of men).

Reduction of access to early retirement in 2009 was followed by the further rise and equalisation of the retirement age to 67 years that started in 2013. From October 2017, after the parliamentary elections and change of government, the legal retirement age was decreased again to the pre-2013 level. Both the increase in the retirement age and then the reversal of this process is widely discussed in the subject literature. Tomasz Jedynak²¹ raises the demographic and economic arguments underlying the need to increase and equalize the retirement age in Poland. M. Żukowski²² underlines that higher retirement age is necessary in response to increasing life expectancy and a rapidly shrinking working age population. Such a policy change leads to higher labour supply as well as improvement in the financial situation of the pension system, at the same time providing higher pensions to individuals. He also points out that the social insurance system needs to adjust to the changing socio-economic environment and the raising of the retirement age is indeed such an adjustment.

Joanna Ratajczak-Tuchołka²³ discusses the differences in the opinions and perceptions on different retirement ages for men and women. While equalising the retirement age does not raise controversies among experts, it is not supported by public opinion, which is a result of low pension literacy, combined with the fear of the lack of possibility to continue work until retirement. Some economists (for example Mateusz Guzikowski²⁴)

19 P. Szukalski, *Wiek przechodzenia na emeryturę w Polsce*, "Demografia i Gerontologia Społeczna – Biuletyn Informacyjny" 2016, Vol. 8, <http://www.zus.pl/default.asp?p=5&id=5> (online access: 21.6.2019).

20 J. Czapiński, M. Góra, *Świadomość emerytalna Polaków*, 2016, http://uczelnia.sgh.waw.pl/pl/uczelnia/badania/grupy_badawcze/ppg/Documents/Publikacje/Gora/SEM_EKF_2016.pdf (online access: 20.6.2019).

21 T. Jedynak, *Naukowe przesłanki kształtowania wysokości minimalnego wieku emerytalnego*, "Zeszyty Naukowe UEK" 2016, No. 10 (958), pp. 33–49, <https://doi.org/10.15678/ZNUEK.2016.0958.1003>.

22 M. Żukowski, *Podwyższanie wieku emerytalnego w perspektywie demografii i sytuacji na rynku pracy* [in:] *Wiek emerytalny, op. cit.*, pp. 39–50.

23 J. Ratajczak-Tuchołka, *Wyrównywanie i podwyższanie wieku emerytalnego kobiet i mężczyzn* [in:] *Wiek emerytalny, op. cit.*, pp. 61–75.

24 M. Guzikowski, *Dlaczego musimy podwyższać ustawowy wiek emerytalny?*, "Analiza FOR" 2012, No. 6, p. 26, http://static.presspublica.pl/red/rp/doc/mojaemerytura/Analiza_FOR_6_2012_Dlaczego_musimy_podwyzszac_ustawowy_w.pdf (online access: 21.6.2019).

have even argued that the pace of this increase (that is a quarter of a year per calendar year) was too slow. Retirement age regulations are also an instrument affecting the employment of older workers. J. Ratajczak-Tuchołka²⁵ underlines, following findings in the international literature, that raising the labour market participation of older employees also requires improved work conditions and its refer to adjustment of the needs and health conditions of older workers as well as better access to various LLL programmes and initiatives. Radosław Pacud²⁶ calls for a coherent long-term care strategy to reduce pressure on the need for informal care. Elderly care provided by family members is one of the pull factors supporting retirement decisions (particularly amongst women).

Reducing the retirement age back to the previous level from 2017 has also been widely commented on in the subject literature. Anna Ruzik-Sierdzińska²⁷ and Filip Wnęk²⁸ point out that reducing the retirement age will have a negative impact on public finance, levels of pensions as well as affecting a steeper decline of the labour force and economic growth potential in the future. Marek Szczepański²⁹ also clearly presents that there are no strong economic arguments that any support reduction of the retirement age to the level before 2012. He admits that there are some explanations of a social nature, related to the choice between claiming a pension and continuing to work further, particularly for people who due to their health, economic and social status want to continue being economically activity.

Changes in the legal retirement age and performance of the old-age pension system in Poland

Changes in the legal retirement age and the availability of early retirement pensions shape both retirement expectations and retirement behaviour. In this section, these developments are analysed within the Polish context. This includes the evolution of legal and actual retirement ages, people's expectations regarding the timing of retirement, inflows into the old-age pension system as well as changes in early retirement. Finally, the system dependency ratio is compared with the demographic dependency, to assess, to what extent changes in retirement age and retirement behaviour have affected the sustainability of the social insurance system in Poland.

25 I. Mandrzejewska-Smól, *Aktywność zawodowa osób starszych na współczesnym rynku pracy*, "Problemy Profesjologii" 2014, No. 2, pp. 175–87.

26 R. Pacud, *Dylematy stanowienia wieku emerytalnego*, "Polityka Społeczna" 2006, Vol. 43, Issue 2 (503), pp. 2–8.

27 A. Ruzik-Sierdzińska, *O zmianach wieku emerytalnego w Polsce*, "Analiza" 2016, No. 9.

28 F. Wnęk, *Ekonomiczne skutki powrotu do niższego wieku przechodzenia na emeryturę*, "Optimum. Economic Studies" 2018, No. 1 (91), pp. 33–49, <https://doi.org/10.15290/oes.2018.01.91.03>.

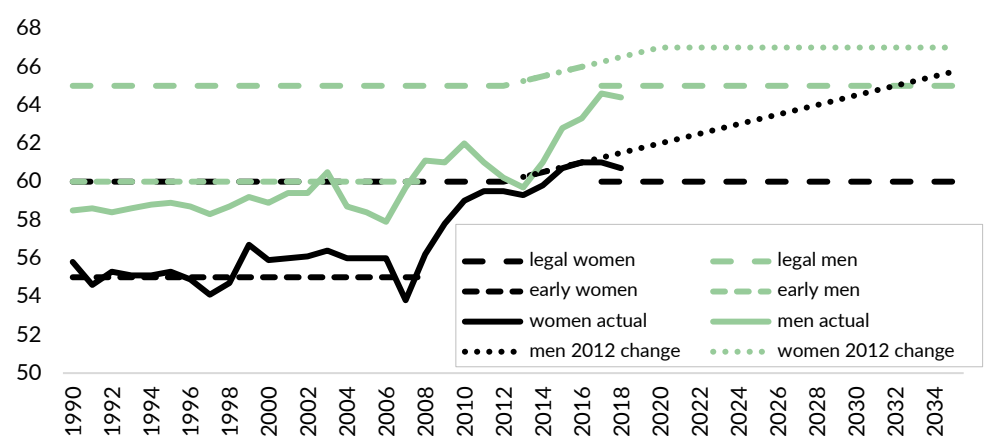
29 M. Szczepański, *Analiza i ocena proponowanych zmian ustawowego wieku emerytalnego w Polsce*, "Finanse, Rynki Finansowe, Ubezpieczenia" 2016, Vol. 1, No. 79, pp. 739–51, <https://doi.org/10.18276/frfu.2016.79-58>.

Legal and actual retirement age

In the past three decades there has been a significant evolution in both the legal retirement age and the early retirement pathways that have affected the actual retirement age (Figure 1). As discussed earlier, the first marked change in the legal opportunities to claim old-age pensions is the limitation of access to early retirement that came into force from 2009, with the introduction of the bridging pensions. At the same time, broader access to early retirement was limited. This change affected particularly women aged 55 with work experience of 30 years as well as others who had worked in sectors or positions that had a right to early retirement (such as, for example, railway workers). Then, the raising of the legal retirement age from 2013 and its reversal from 2017 had an impact on access to retirement benefits.

Figure 1 also presents the evolution of the actual average age of retirement of people claiming pensions within the general social insurance system in Poland. The development of the actual retirement age follows the evolution in the relevant legislation and can be divided into four periods. First, prior to 2008, the retirement age of women evolved around 55-56 years and for men around 58-59 years. Second, from 2009, it started to rise gradually and in the case of women it was close to 60 years by 2011. In the case of men, the actual retirement age started to rise in 2014 and later, when men covered by the new pension system (born in 1949 and later) reached the legal retirement age. Third, from 2013 until 2017, there is a further increase in the actual retirement age due to the 2012 gradual rise of the legal retirement age. Finally, in 2017 and 2018 there occurs a stagnation in the actual retirement age at the level of around 60 years for women and below 65 years for men, following the reversal of the retirement age rise. Overall, the actual retirement age became closer to the legal retirement age and, if further changes are not introduced, it should stabilise at the currently observed values.

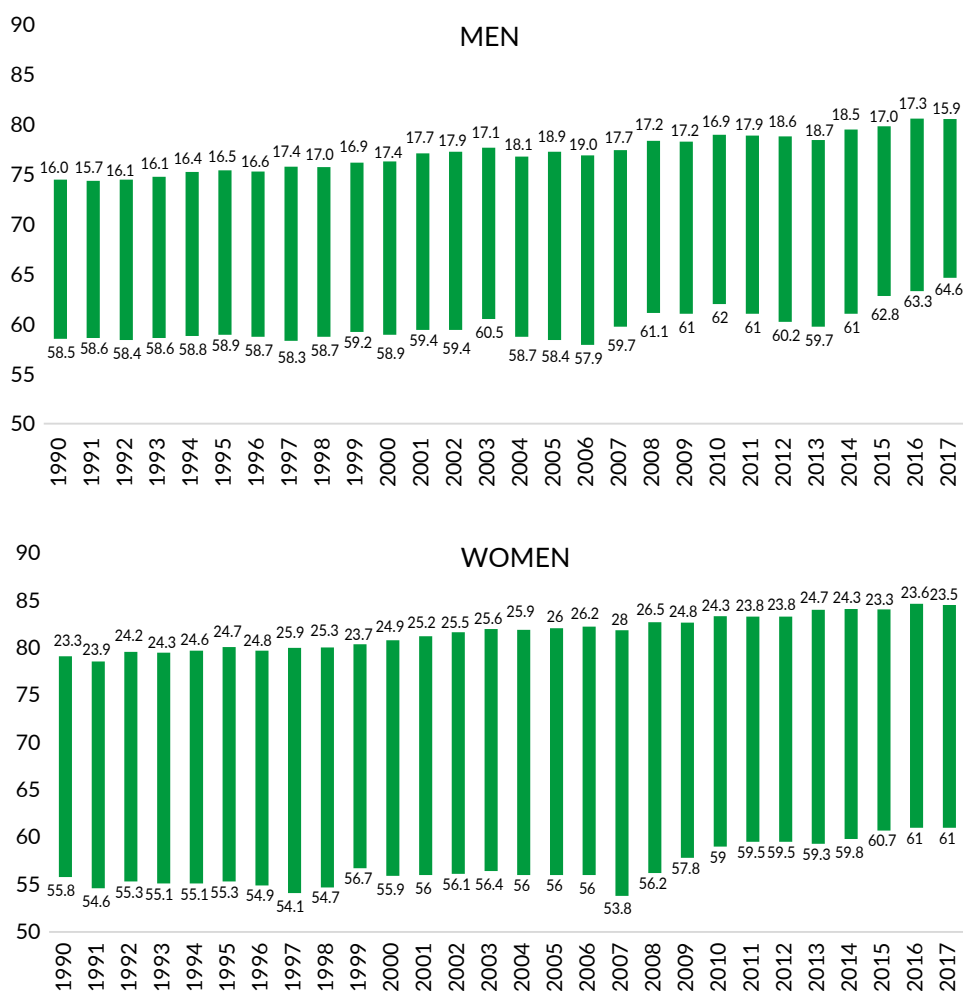
Figure 1. Legal, early and actual retirement age in Poland, 1990-2035



Source: own analysis and Social Insurance Institution data

Changes in the actual retirement age also affect the period of receiving old-age pensions. Figure 2 presents the average expected life span at the actual retirement age of men and women. There are two issues that emerge from these figures. First, women receive old-age pensions for around 8 years longer than men, due to their lower retirement age as well as higher life expectancy. Second, the expected time of receiving pensions increased between 1990 and 2006 by 3 years for both men and women. After 2006, following the observed increase in the actual retirement age, the expected time of receiving a pension dropped to around 16 years for men and 23.5 years for women, which is similar to the one observed in 1990.

Figure 2. Life expectancy at actual retirement age



Note: life expectancy is provided for the closest age expressed in years, separately for men and women.

Source: own analysis based on Statistics Poland (<http://demografia.stat.gov.pl/bazademografia/TrwanieZycia.aspx> [online access: 30.6.2019]) and Social Insurance Institution data

Differences in the legal retirement age, but also the gender gap on the labour market also affect the size of pension benefits and the risk of obtaining only the minimum pension. In their analysis, Agnieszka Chłoń-Domińczak and Paweł Strzelecki³⁰ have shown that women have much a higher risk of obtaining minimum pensions, due to their shorter working lives, lower wage income and lower retirement age. The high price of a low retirement age in Poland understood as low pensions for women is assessed by Joanna Tyrowicz and Magda Malec.³¹

Summing up, withdrawal of the right to early retirement and the temporary increase in the retirement age were important factors affecting the change of the actual retirement age in Poland. The increase in the actual retirement age achieved in the past 30 years compensated for the increases in the life expectancy over the same period. These developments are not likely to continue, with reduction of the legal retirement age from 2019 and a low retirement age, particularly for women will lead to lower pensions in the future, particularly for women.

Inflows to the pension system

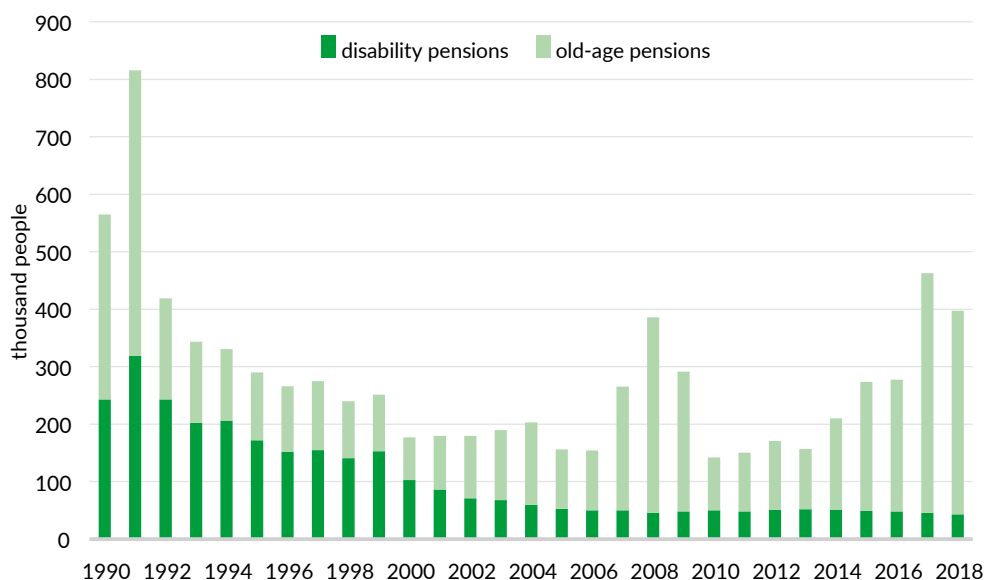
Changes in the retirement age legislation influence the number of people that claim pensions. As discussed in the first section, in the early 1990s access to early retirement was relatively broad, as the government could grant early retirement to workers laid-off for company reasons. In addition, the disability assessment was also very generous. This helped to absorb the excess labour force with outdated skills and qualifications who could not find jobs in the rapidly changing labour market conditions. Between 1990 and 1992 almost 1.8 million people claimed pensions from the social insurance system. The tightening of disability conditions and the elimination of discretionary access to early retirement led to a stabilisation in the new pensions granted between 2000 and 2006 at a level of below 200 thousand annually (Figure 3).

Legislative changes in 2008 also led to an increased inflow to old-age pensions. Between 2007 and 2009 (that is around the time of phasing out early retirement for working in special conditions as well as transitional rights to early retirement for men) the total inflow to old-age pensions was almost 800 thousand people and combined with disability pensions this was almost 950 thousand people. Finally, after the reversal of the retirement age increases in 2017 and 2018, also almost a further 800 thousand people claimed old-age benefits. This clearly illustrates that changes to the legal retirement age, particularly access to benefits at earlier age, leads to an increased interest in claiming old-age pensions.

30 A. Chłoń-Domińczak, P. Strzelecki, *The minimum pension as an instrument of poverty protection in the defined contribution pension system – an example of Poland*, "Journal of Pension Economics and Finance" 2013, Vol. 12 (3), pp.1-32, in which the pension distribution reflects to a larger extent the wage distribution. Additionally, relatively shorter working lives of those that have lower earnings increase the risk of receiving lower benefits. The aim of the paper is to present the changing role of a minimum pension as a tool of redistribution in the country that replaced a defined benefit (DB).

31 M. Malec, J. Tyrowicz, *Low Retirement Age, High Price* [in:] *Population ageing, labour market and public finance in Poland*, ed. by P. Lewandowski, J. Rutkowski, 2017, pp. 29–34, <https://doi.org/10.2775/9>.

Figure 3. Number of newly granted disability and old-age pensions, 1990-2018



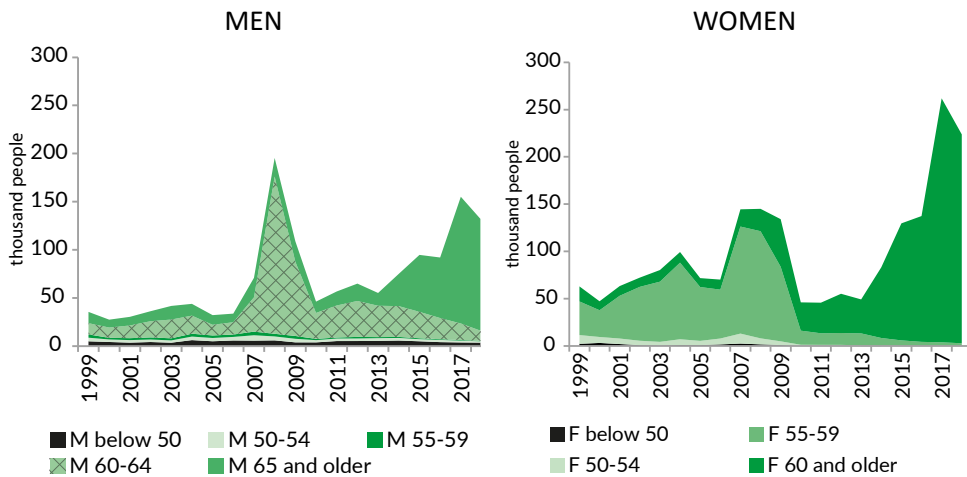
Source: Social Insurance Institution data

While the propensity to claim old-age pensions seems to be a common feature of the observed three discussed “peak periods,” there are also differences, particularly in the age composition of the new benefits (Figure 4). In the period of 2007-2009 the bulk of both men and women claiming old-age pensions did not reach the legal retirement age. In recent years the majority of those claiming old-age pensions (both men and women) are at or above retirement age.

Figure 4 also shows that the inflow to old-age scheme around 2008 was related not only to the new pension rights of men, but also to a large extent by the retirement decisions of women who decided to actively use their accrued pension rights. This applied, in particular, to women born between 1949 and 1953, who could retire at the age of 55, according to the old pension system rules following the transitional arrangements in the pension legislation. In many cases early retirement decisions could be driven by an (unjustified) fear that they will not be able to claim their pension rights once the new legislation came into force.

The increase inflow to old-age pensions observed from 2014 is a combination of two developments. First, people who were born after 1949 (men) and 1953 (women) reached the legal retirement age and could claim their old-age benefits. Second, from October 2017, after the reduction of the legal retirement age old-age pensions could be claimed by women aged 60 and over and men aged 65 and over who had not retired due to the higher legal retirement age before, which almost doubled the number of new pensions granted in 2017 and 2018, compared to those observed in 2014-2016.

Figure 4. Inflows to old-age pensions by age and sex, 1999-2018



Note: decomposition initially proposed by Piotr Lewandowski.

Source: own analysis and Social Insurance Institution data

The data on the inflow to the pension system indicates that people claim their old-age benefits as soon as it is possible also under the new pension system. This happens despite the increase incentives to postpone retirement decisions, embedded in the pension formula, that follows a defined contribution principle.

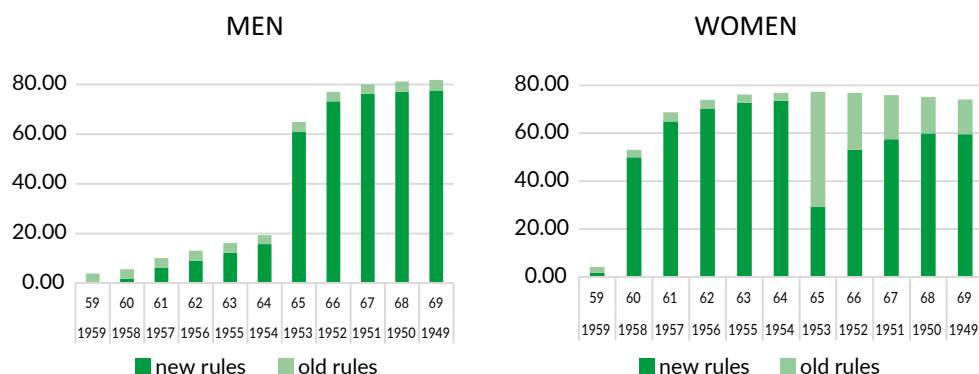
Pensioners and pensions in the new pension system

The dominant impact of the legal retirement age on retirement decisions is also visible when analysing the age distribution of old-age pensioners in the new system (Figure 5). Both for men and for women, there is a sharp increase in the share of the cohort receiving pensions at the legal retirement age.

In December 2018, around half of women aged 60 were receiving old-age pensions, for those aged 62 the share was above 74%. Interestingly, only around 30% of women born in 1953 receive pensions according to the new system, while almost 50% of women born in this year receive pensions according to the old rules. In the case of older women (those born between 1949 and 1952), the share of those receiving benefits according to the old rules is smaller. This indicates that the last cohort of women who could claim early retirement pensions according to the old system rules used this opportunity more often than the older groups. This might be an outcome of increased media discussion on this issue.

Men retire mainly at the age 65, and in 2018 around 65% of 65-year old men received old-age pensions. At the same year, the share of 67-years old receiving benefits was around 80%, which seems to be the total share of men receiving old-age pensions. Contrary to women, the share of men receiving pensions according to the rules of the old system is small (around 4%) and covers mainly miners.

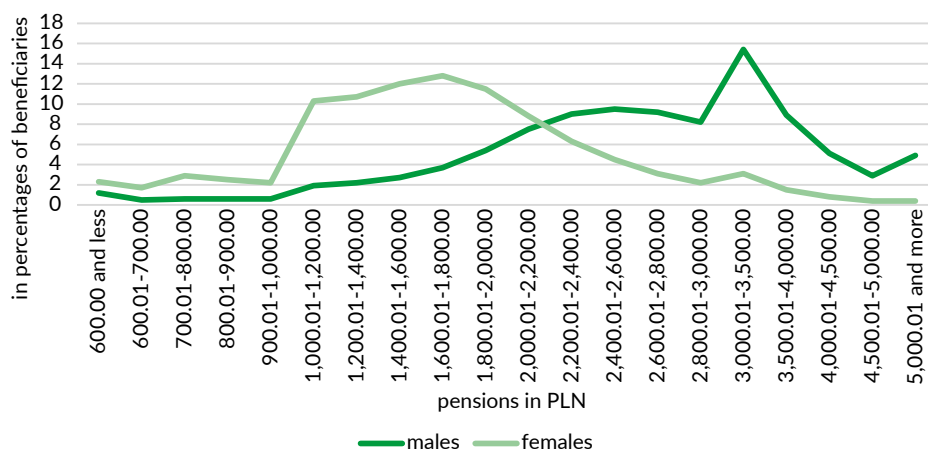
Figure 5. Recipients of old-age pensions payable by ZUS, by age and sex as of December 2018 as % of a birth cohort



Source: own analysis based on Social Insurance Institution data (old-age pensioners) and Statistics Poland (demography database)

Difference in the retirement age of men and women in the new system also leads to differences in pension levels (Figure 6).

Figure 6. Distribution of pension levels in December 2018 by sex



Source: Social Insurance Institution data

In 2017, with the reversal of the increased retirement age, the average pension granted to men (2,080.36 PLN) was by 67% higher than the average pension granted to women (1,614.39 PLN).³² The distribution of pension size is also significantly different for men and for women. Almost 60% of women receive pensions in the range of between 1,000 and 2,000 PLN, while over 60% of men receive benefits ranging from 2,200 PLN to

³² Zakład Ubezpieczeń Społecznych [Social Insurance Institution], *Raport Roczny ZUS 2017* [Annual Report ZUS 2017], 2018.

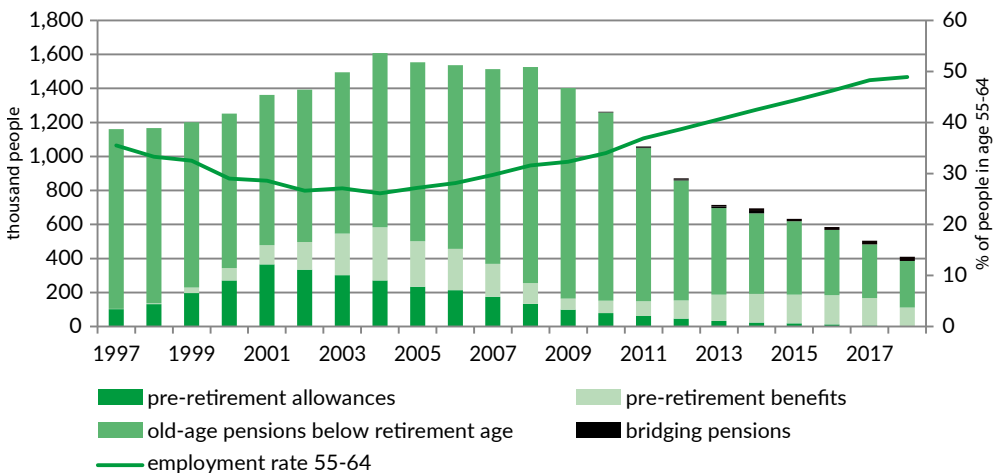
4,000 PLN. Around 10% of women received pensions between 1,000 and 2,000 PLN, that is minimum pensions or slightly higher, while in the case of men this share was below 2%.

Take-up on early retirement and employment rate of older workers

Changes in the early retirement policy mean that there are fewer people receiving various types of early retirement transfers. While in the late 1990s and the beginning of the century, early retirement was widespread and increasing, mainly due to the introduction of per-retirement benefits and pre-retirement allowances that replaced early retirement due to difficulties at the company level, there was an increase in the number of people receiving early retirement transfers that reached a peak of 1.6 million people in 2004. Reduction in access to pre-retirement transfers from 2005 (following the increase of the eligibility age for such benefits) and a further reduction in early retirement possibilities after 2008 led to a sharp decline in the number of people with early retirement transfers that by 2016 had decreased 4 times compared to the peak year. At the same time, the employment rate in the age group 55-64 increased from 26.1% to 48.9% (Figure 7).

These developments also confirm that changes in regulations have a significant impact on the use of various types of social transfers. Reduction of access to early retirement, combined with the introduction of pre-retirement benefits resulted in the substitution of the former by the latter. Only after the eligibility age for pre-retirement benefits was raised and access to early retirement was significantly reduced, the take-up of social benefits before retirement age declined and the employment rate of older workers increased.

Figure 7. Number of people receiving early retirement transfers and employment rate of workers 55-64 in Poland, 1997-2018.



Source: own analysis based on Social Insurance Institution data (beneficiaries) and Eurostat (employment rate)

Old-age and system dependency rates

Changes in the access to old-age pensions discussed earlier also affect the overall performance of the pension system. One of the measures that can be used to assess the stability of the pension system is the system dependency rate expressed as the number of pensioners per 100 insured employees.

In the past three decades both the number of pensioners and the number of insured people has evolved, following both changes in the pension system, as described earlier as well as due to labour market developments (Figure 8). In the early 1990s, the number of employees insured in social insurance declined and at the same time the number of pensioners increased, which led to the sharp increase of the system dependency rate in less than a decade from 38.0 in 1990 to 56.4 in 1998. Between 2001 and 2005 the system dependency rate was relatively stable around 55. From 2007, the system dependency rate remains below 51 and from 2015 it is below 50.

Figure 8. Number of insured workers and beneficiaries in social insurance system in Poland, 1990-2018

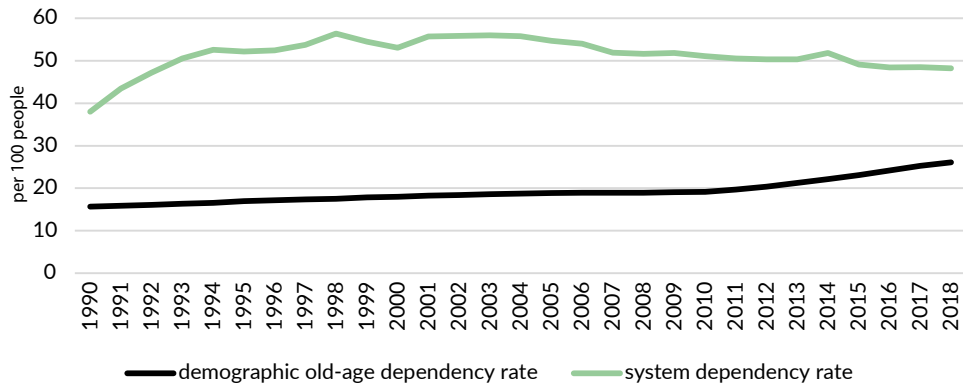


Source: Social Insurance Institution data

Figure 9 presents the system dependency rate compared to the demographic dependency (the number of people in the age group 65 and over per 100 people in the age group 15-64). As one can see, the gap between these two measures widened at the end of the 20th century and narrowed recently. The difference between these two measures of dependency increased from around 22 in 1990 to more than 37 between 1998 and 2004. Afterwards it slowly declined again to around 22, mainly due to the rise in the demographic dependency.

The persistent large gap between demographic and old-age dependency rates is linked both to the relatively low employment rate of the working-age population, particularly among workers aged 50 and over and the lower retirement age of women.

Figure 9. System dependency and old-age demographic dependency in Poland, 1990-2018

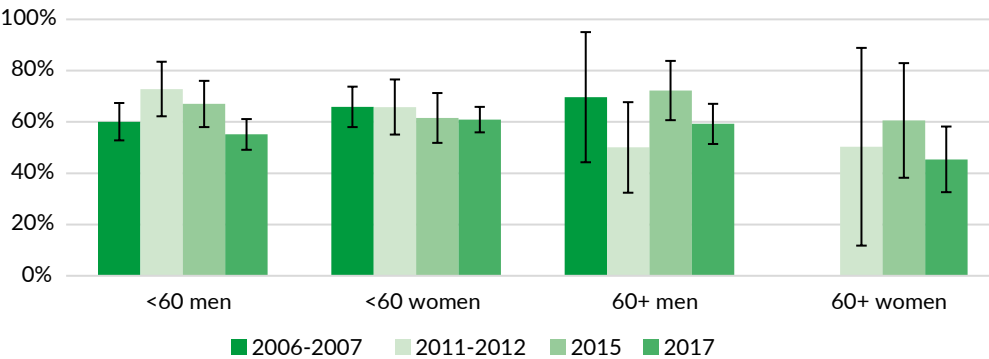


Source: own analysis based on Social Insurance Institution data (system dependency), Eurostat and Statistics Poland (demographic dependency)

Retirement expectations

The quick transition to retirement is also confirmed by the retirement expectations. The data from the SHARE in Europe indicate that more than half of people aged 50 and over would like to retire as early as possible. These shares varied in the course of the past decade, which partially reflects the changes in the retirement age, they were the highest around 2011-2012 and 2015, with higher retirement age expectations, while they declined in 2017, after the retirement age was reduced. Still, 51% of men below the age 60 and 61% of women in the same age, declared retirement as early as possible (Figure 10). For those above the age of 60 the percentages also changed with the reduction of retirement ages, but also remain high (59% of men and 45% of women).

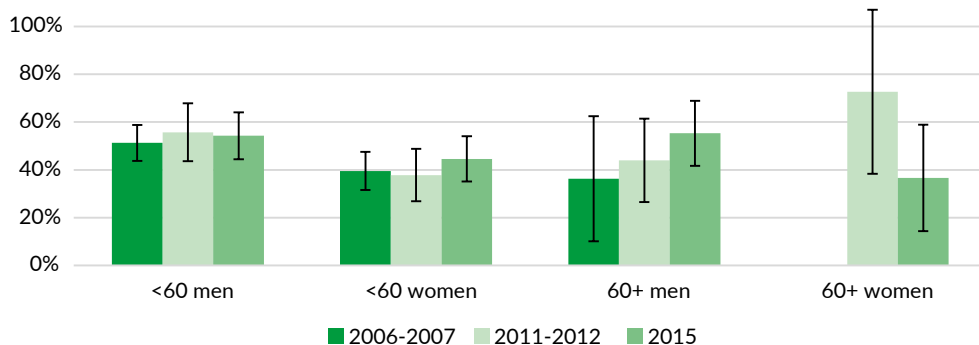
Figure 10. Share of people declaring a wish to retire as early as possible



Source: own analysis based on SHARE data: waves 2, 4, 6 and 7

The retirement expectations are also driven by the perception of health status. More than half of men (54%) and 45% of women between the ages of 50 and 60 in 2015 declared that their health might be an obstacle to work until the retirement age (Figure 11). These shares are relatively stable for those below the age of 60 and increasing for men above the age of 60 (probably due to the increased retirement age at the time of the respective SHARE waves, while for women there was a decline between 2011-2012 and 2015).

Figure 11. Share of people who believed that they will not be able to work until retirement age due to their health



Source: own analysis based on SHARE data: waves 2, 4 and 6

There are several potential reasons why people in Poland wish to retire as early as possible. One of them are working conditions. SHARE results indicate that older workers in Poland are not satisfied with their work conditions. A. Chłóń-Domińczak³³ shows that employees above 50 in Europe can be divided into four groups: those who are satisfied with their work conditions, those that feel tired with a job that is demanding physically, those that feel tired with a job that is overly routine and those who are not satisfied with their work conditions. The share of satisfied workers in Poland is one of the lowest among European countries, while the share of those who are not satisfied or tired is one of the largest (Figure 12). Therefore, working conditions may be one of the reasons that push people to retirement.

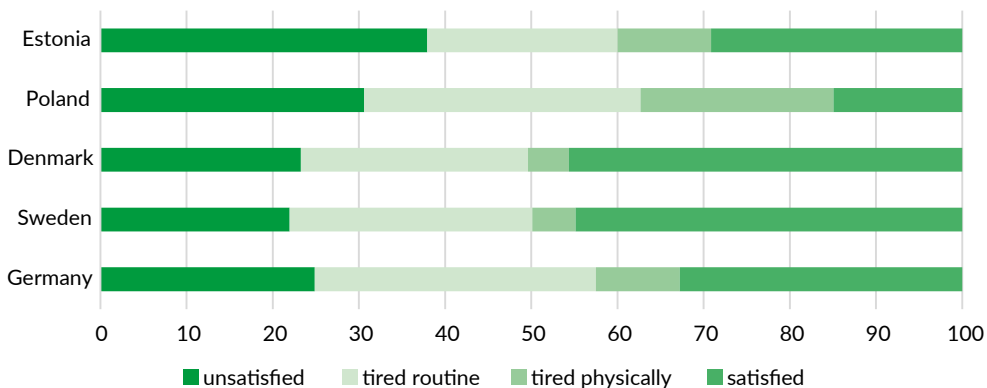
More detailed analysis of the retirement expectations in Poland³⁴ based on the SHARE data shows that people with lower educational attainment more often declare the need to retire as soon as possible compared to people with higher education. Self-employed people declare a wish to retire as early as possible less frequently than those with permanent contracts. People whose health condition as well as the physical load related to their work in their own opinion may lead to dismissal or retirement more

33 A. Chłóń-Domińczak, *Analityczny Raport Uzupełniający Nr 3 Polacy po pięćdziesiątce: praca i emerytura*, 2017, <https://doi.org/10.6103/SHARE.w2.600>.

34 I.E. Kotowska, A. Chłóń-Domińczak, D. Holzer-Żelaźewska, *Pokolenia 50+ w Polsce i w Europie: aktywność, stan zdrowia, warunki pracy, relacje międzypokoleniowe i wykluczenie. Raport podsumowujący wyniki badań 7. Rundy badania SHARE: 50+ w Europie*, 2019, p. 37.

often declare a desire for retirement as early as possible. Furthermore, people who often work in a painful position and those working in low temperatures have a higher desire to retire as soon as possible compared to those who have never worked in such a position. On the other hand, people who have contact with clients and other people often or sometimes in their work, are less likely to need to retire earlier. People 50+ in Poland have also poor health status. Analyses of Wróblewska and Antczak based on SHARE data³⁵ shows that among people aged 50+, the occurrence of various health problems is more common in Poland than in other European countries. This includes occurrence of chronic conditions limiting everyday functional and mobile activities and serious health problems that affect the ability to function independently and perform basic daily activities. Every tenth person aged 60-69 in Poland has limitations on independent functioning on a daily basis and the related necessity to rely on the help of others. In older age groups, the increase in the share of people with health problems occurs at a rapid pace that is not observed in other countries. There is also a high risk of obesity among those aged 50+.

Figure 12. Share of workers aged 50 and over according to their job satisfaction in selected SHARE countries



Source: own analysis based on SHARE data (wave 6)

Another potential reason for not postponing retirement decisions, particularly in the case of women, are the caring obligations related to caring for elderly parents or grandchildren. While the SHARE data shows that more than a third of people 50+ in Poland provide regular care for their grandchildren.³⁶

Another potential explanation of retirement as early as possible is the lack of trust towards the pension system and changing pension regulations that encourages people to take up their pensions as soon as they acquire pension rights. At the same time, as

³⁵ *Ibid.*, p. 69-84.

³⁶ *Ibid.*, p. 42.

discussed by J. Czapiński and M. Góra,³⁷ failure to recognise the scale and rate of increase in pensions together with the delayed retirement decisions indicates huge neglect in the field of retirement education. They claim that people would be much more open to the prospect of working longer if they took into account not only the concerns, but also the benefits that can be achieved by postponing the retirement.

Conclusions

The issue of retirement age is one of the most frequently discussed parameters of the pension system. The changes in the legal retirement age were followed by changes in the actual retirement age as well as increased inflow of new pensioners claiming their benefits, particularly with the changes leading to the reduction of the legal retirement age. This confirms the first hypothesis, that legal opportunities to retire are one of the most important factors affecting retirement decisions in Poland. This holds not only for people who were covered by the old pension system, but also those in the new one. The majority of this group claim their old-age pensions at retirement age or not more than two years after reaching retirement age, despite the incentives to postpone retirement.

Life expectancy in Poland is increasing gradually, which means that the expected time for retirement benefits is also changing. With a low actual retirement age until 2008, the life expectancy from retirement age was seen to increase, with it declining after the actual retirement age increased. However, the life expectancy at retirement in 2017 is similar to that in 1990, which confirms the second hypothesis that the changes in the legal retirement age led to a rise in the actual retirement age, but they were not sufficient to compensate for the increases in life expectancy.

Finally, there is also a small change in retirement expectations that can be observed in recent years. With reduction of the legal retirement age as well as the rise of the employment rate of older employees, there is some decline in the share of people stating that they expect to retire as soon as possible. However, still more than half of people expecting retirement in about a decade confirm that they would like to retire as soon as possible.

This means, that despite existing incentives people retire as soon as they can, with lower retirement benefits. With further rises in life expectancy this increases the risk of old-age poverty, particularly among women. Already more than one fifth of women receiving pensions from the new system have benefits below 1,200 PLN, that is below the minimum benefit, at this level or slightly above. Retiring at the earliest possible age in Poland seems to be a combination of a general lack of satisfaction with working conditions, poorer health status and foreseen caring obligations. At the same time, the awareness of the potential increases in pensions due to postponed retirement is very low.

³⁷ J. Czapiński, M. Góra, *op. cit.*, p. 29.

Changing retirement behaviour in the future will not be possible merely through an increase in knowledge about the existing incentives in the pension system related to higher benefits resulting from a prolonged working life and a higher retirement age. An increase in legal retirement is necessary in the future to maintain the adequacy of pension benefits while maintaining the financial sustainability of the pension system.

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Wpływ zmian wieku emerytalnego na podejmowanie decyzji o przejściu na emeryturę w Polsce po 1990 roku

Artykuł przedstawia analizę zachowań emerytalnych w Polsce w ciągu ostatnich 30 lat w kontekście ewolucji ustawowego wieku emerytalnego i dostępu do świadczeń z tytułu wcześniejszej emerytury. Tekst dowodzi, że wszelkie zmiany w prawie, zwłaszcza te, które rozszerzają dostęp do emerytur, takie jak wprowadzenie możliwości wcześniejszego przejścia na emeryturę lub obniżenie samego wieku emerytalnego, prowadzą do zwiększonego wykorzystania świadczeń emerytalnych. Większość pracowników występuje o emeryturę jak najwcześniej, czyli w wieku, w którym nabywają uprawnienia emerytalne, ewentualnie najwyżej kilka lat później. Zachowanie to nie zmieniło się w ciągu ostatnich 30 lat pomimo istotnych zmian w systemie emerytalnym: z systemu zdefiniowanego świadczenia w system zdefiniowanej składki, motywując do odkładania decyzji emerytalnych. Osoby w wieku powyżej 50 lat nadal chcą jak najszybciej przejść na emeryturę. Przejście w kierunku systemu określonych składek w połączeniu z niższym wiekiem emerytalnym, szczególnie w przypadku kobiet, prowadzi do malejącej stopy zastąpienia między emeryturą a ostatnią płacą. Podnoszenie wieku emerytalnego i wyrównywanie go między płciami wydaje się konieczne, aby zrekompensować wzrost oczekiwanej długości życia, zapewnić adekwatność emerytur oraz zmniejszyć różnicę ich wysokości między kobietami a mężczyznami w nadchodzących dziesięcioleciach.

Słowa kluczowe: starość, wiek emerytalny, zachowanie emerytalne, oczekiwana długość życia, emerytura

Retirement decisions

The objective of the paper is to analyse how various phenomena examined by behavioural economics can explain the labour supply of people at near-retirement age. The early retirement of some may be explained by the assumption of a hyperbolic discounting of current and future incomes, while social norms for labour force participation in old age diversify the effective age of labour market exit between countries. In terms of policies encouraging people to end their economic activity later, the framing effect on retirement decisions is important.

Key words: hyperbolic discounting, framing effect, retirement, old-age pension, social norms, retirement age

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Introduction

The objective of the paper is to discuss, based on literature from the field of behavioural economics, the factors affecting the labour supply and labour force participation of people at near-retirement age, in particular the choice of a specific retirement age.

The first studies on the impact of social security systems on labour-market exit age appeared in the 1970s.¹ They were based on rational choice theory or life-cycle theory. Since the late 1980s, researchers have been using more advanced models to take into account uncertainty, and they have also analysed labour supply decisions made within households. Most of these approaches were still grounded on classical assumptions about people making rational decisions based on all the information available to them. One of the models of neoclassical economics, one which offers an explanation of the way people make decisions about labour supply and the level of current consumption, is the life-cycle model. In this paradigm, individuals maximise throughout their lives their own utility, with budget constraints resulting, *inter alia*, from income expected in subsequent periods. Consumption levels and spare time resources (which determine labour supply) in each year are the variables, while the optimal moment of retirement results directly from the framing of the model, as well as from the individual function of the utility and income earned throughout life.

The life cycle model does not explain well the observed retirement decisions, since people actually do not retire at the moment viewed as optimal by this model or nor by taking into account the maximisation of their expected pension income. Behavioural economics provides tools to partially explain the reasons for such a situation. This area of economics differs from the classical approach – *inter alia* due to the elimination or mitigation of assumptions about people's rationality and the invariability of their preferences over time, as well as thanks to the perfect information and the possibility of the unrestricted processing of the knowledge available.² It seems that the tools developed and applied in behavioural economics may help to better explain the observed types of labour market behaviour of people at near-retirement age. Researchers more and more often note that people's expectations in relation to the future financial situation of their household (after the retirement of its members) have no rational basis, and their decisions to save money or to retire at a given age are not based on exhaustive knowledge.³

¹ M.J. Boskin, M.D. Hurd, *The Effect of Social Security on Early Retirement*, "Journal of Public Economics" 1978, Vol. 10; M. Feldstein, *Social Security, Induced Retirement and Aggregate Capital Accumulation*, "Journal of Political Economy" 1974, No. 5.

² See e.g. A. Solek, *Ekonomia behawioralna a ekonomia neoklasyczna*, "Zeszyty Naukowe" 2010, No. 8, pp. 21-34.

³ L. Bissonnette, A. van Soest, *Retirement expectations, preferences, and decisions*, June 2010 or S. Buchholtz, J. Gąska, M. Góra, *Pension strategies of workers in a country getting old before getting rich*, 2018.

Retirement age

The increase in average life expectancy, including healthy life expectancy, noted for several decades, should result in a postponement in the age of labour market exit and in higher labour force participation of older people, to maintain the stability of social security systems in a situation of observed low fertility rates. The literature examining factors important for older people's decisions on labour supply underlines the importance of old-age pension system regulation in many countries, including Poland.⁴

It appears that whenever the introduction of, or change in, the minimum eligibility age for old-age pension postpones exit from the labour force, people usually decide to stop working as early as possible. Research referred to by Melissa Knoll⁵ for the United States shows that while before 1920 employees were retiring at different ages, since 1940, *i.e.*, a few years after the introduction of regulations governing the general pension system and the minimum eligibility age for benefits, men tended to leave the labour market more often at the statutory retirement age of 65.

Similar regularities are also visible in statistics regarding Poland. The graphs below show the chosen retirement age (in completed years), according to the respondent declarations from the Labour Force Survey (LFS) carried out by the Statistics Poland. A comparison was made between the responses of persons who retired in the period 2007-2008 and those who retired in the period 2016-2017. During these periods, there were different regulations governing the minimum eligibility age for the benefit in question. By the end of 2008, the standard retirement age within the general social security system was 60 years for women and 65 for men. In 2008,⁶ it was also possible to retire early in the case of a long insurance period of at least 30 contributory and non-contributory years for women and 35 years for men respectively, or in connection with work in special conditions or of a specific nature. In this case, the right to the benefit could be already obtained by 55-year-old women and 60-year-old men.

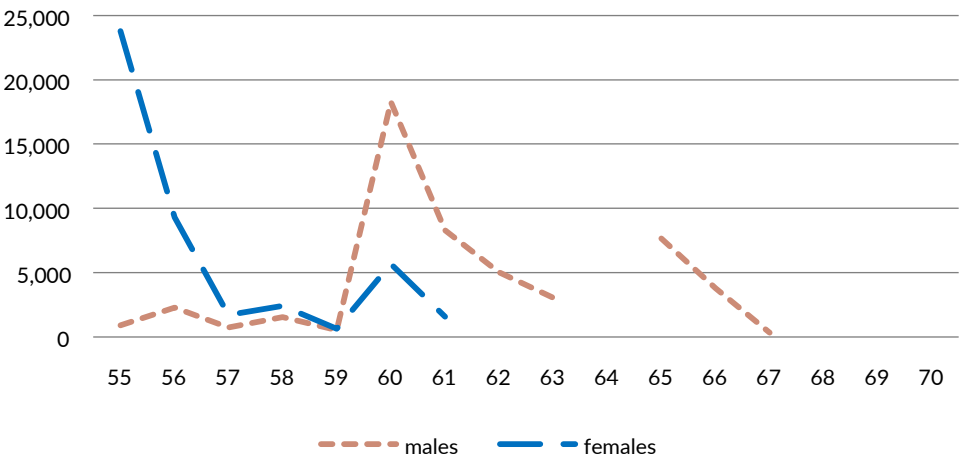
Graph 1 shows that most people have chosen the age of 55 and 60 as the moment for retirement, while the next culmination of decisions to leave the labour force was observed at the age of 60 and 65.

4 See *e.g.*, S. Blöndal, S. Scarpetta, *The Retirement Decisions in OECD Countries*, Paris 1999; *Social Security and Retirement Around the World*, ed. J. Gruber, D.A. Wise, Chicago 1999; *Social Security Programs and Retirement Around the World: Micro Estimation*, ed. J. Gruber, D.A. Wise, 2002; G. Kula, *Decyzja o przejściu na emeryturę – przegląd literatury*, "Ekonomista" 2007, No. 2, pp. 251-268; A. Ruzik-Sierdzińska, *An Attempt to Identify Factors Influencing Retirement Decisions in Poland*, "Acta Universitatis Lodzianensis. Folia Oeconomica" 2018, No. 4 (336), pp. 43-59.

5 M.A.Z. Knoll, *Behavioral and Psychological Aspects of the Retirement Decision*, "Social Security Bulletin" 2011, No. 71/4, pp. 15-32.

6 In 2008, the early retirement of men with 35 years of contributory and non-contributory periods who had reached 60 years of age was possible pursuant to legal changes following the judgement of the Constitutional Tribunal of 23 October 2007. The legislation had equalised the early retirement rights of men born before 1 January 1949 with similar women's rights.

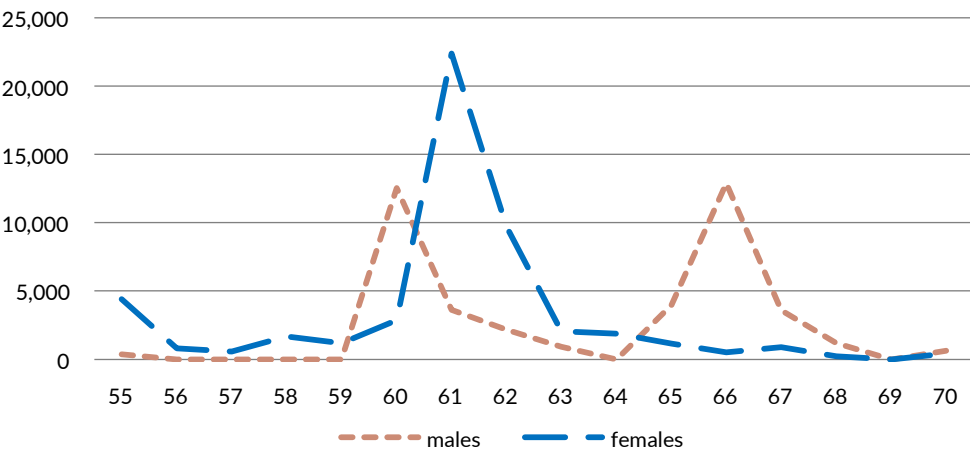
Graph 1. Number of persons who retired between Q3 2007 and Q3 2008
[by gender and age]



Source: author's calculations using individual LFS data

Early retirement was eliminated for a major part of the population in 2009 (except for miners and uniformed services personnel; temporary compensatory benefits and bridging pensions were also introduced), and, from the beginning of 2013, the retirement age has been gradually increased: in Q3 2017 it was 61 years and 2 months for women and 66 years and 2 months for men. Graph 2 shows that persons retiring in this period reacted to both changes, but they were delaying their labour market exit usually only until reaching the new minimum eligibility age for these benefits.

Graph 2. Number of persons who retired between Q3 2016 and Q3 2017
[by gender and age]



Source: author's calculations using individual LFS data

Among all LFS respondents in Q3 2017 (not only those who retired during the previous 12 months), 22% of women retired exactly at the age of 55 and 17.5% at the age of 60. In turn, 20% of men aged 60 and 13% of 65-olds were pensioners.

Frank van Erp, Niels Vermeer and Daniel van Vuuren⁷ show a similar relationship between the standard retirement age laid down in the legislation and the chosen timing of retirement in the Netherlands. The high dependence of the actual and the earliest possible age when the pension becomes payable has not changed even after the introduction of an actuarially neutral pension scheme (*i.e.*, one where the retirement age does not affect the expected amount of future benefits). The authors of these analyses conclude that such behaviour cannot only be due to the financial factors which affect pension decisions, and explanations for the observed phenomenon should be sought in psychology and sociology.

Explanations of retirement decisions offered by behavioural economics

As regards old-age pensions, behavioural economics initially dealt with the reasons for the propensity to save voluntarily for old age,⁸ but attempts at explaining the choice of a given retirement age can be also found in the recent subject literature. In this publication I will focus on three mechanisms described in the subject literature, mainly English-language sources. These are:

- hyperbolic discounting,
- social norms,
- framing effect.

Hyperbolic discounting

Classic models usually assume exponential discounting over time, *i.e.*, people's time-consistent preferences for consumption in the short and long term. Behavioural economics research, however, shows that preferences change over time, and that discounting is steeper closer in time than at a more distant future, while in the longer term the discount rate is lower.⁹ This type of discounting may result in time-inconsistent preferences (changes in decisions as a result of the passage of time). This effect, known

⁷ F. van Erp, N. Vermeer, D. van Vuuren, *Non-financial determinants of retirement*, The Hague 2013.

⁸ For example R.H. Thaler, S. Benartzi, *Save More Tomorrow™: Using Behavioral Economics to Increase Employee Saving*, "Journal of Political Economy" 2004, No. 112 (S1), pp. S164-S187 and B.C. Madrian, D.F. Shea, *The Power Of Suggestion: Inertia In 401(k) Participation And Savings Behavior*, "Quarterly Journal of Economics" 2001, Vol. 116, pp. 1149-1187.

⁹ S. Frederick, F. Loewenstein, T. O'Donoghue, *Time discounting and time preference: a critical review*, "Journal of Economic Literature" 2002, No. 40, pp. 351-401.

as hyperbolic discounting, allows one to explain the choice between a larger, but later reward (income, payout) and a smaller, but sooner reward. It also explains why people choose a smaller-sooner reward, or why it is difficult for them to take actions to achieve a delayed goal.

This type of discounting, as compared to the neoclassical approach, assumes a change in people's preferences for future consumption as the time to retire approaches. In the above-referred study, M. Knoll shows that hyperbolic discounting explains changes in retirement preferences, ones observed by researchers, as people grow older. When retirement is far in the future, *i.e.*, when we ask rather young people about their preferences, they usually declare an intention to retire later. However, as the time when people may retire approaches, the prospect of receiving a monthly benefit immediately overwhelms the benefits of a more distant, though higher, pension. This has been confirmed *inter alia* by the analyses of John Bidewell, Barbara Griffin and Beryl Hesketh,¹⁰ who have explained that the closer individuals are to the minimum retirement age, the more future income they are willing to sacrifice – they want to start drawing benefits as early as possible.

Such a decision can be described as unreasonable in terms of income obtained later in life. Old-age pensions account for a significant part of people's income in old age, so their level affects the funding opportunities of pensioners each year after retirement. While a lower pension may be sufficient to cover the expenses of fairly young and able-bodied pensioners, it usually means the exclusion from certain activities or consumption opportunities of 80- or 90-year-olds, who usually spend more on care services and health care. It seems that in the notion of life after retirement, people ending their professional careers at a younger age do not take into account the distant consequences of early retirement.

Social norms

Retirement decisions are also affected by another factor: social norms concerning work and the age of becoming economically inactive in a given country, region or specific social group.¹¹ They determine the decisions or specify the behaviour expected in a given community. Social norms may be also different for women and men, an example being the expected early labour market exit by economically active women and the expected long careers of men. Research shows that such norms have a strong impact on individual decisions, and data on transition into retirement in different countries show discrepancies that cannot be explained only by different average health condition, the wealth of the population or the generosity of pension systems.

¹⁰ J. Bidewell, B. Griffin, B. Hesketh, *Timing of retirement: Including a delay discounting perspective in retirement models*, "Journal of Vocational Behavior" 2006, No. 68, pp. 368-387.

¹¹ B. Krauth, *Social interactions in small groups*, "Canadian Journal of Economics" 2006, No. 39 (2), pp. 414-433.

Table 1. Effective and statutory age of labour market exit in selected European countries in 2016

| | Men | | Women | |
|----------------|---------|-----------|---------|-----------|
| | average | statutory | average | statutory |
| Estonia | 65.8 | 63.0 | 65.2 | 63.0 |
| France | 60.5 | 62.0 | 60.6 | 62.0 |
| Spain | 62.2 | 65.0 | 61.6 | 65.0 |
| Ireland | 66.0 | 66.0 | 64.2 | 66.0 |
| Germany | 63.6 | 65.0 | 63.4 | 65.0 |
| Poland | 62.7 | 66.3 | 60.0 | 61.3 |
| Portugal | 69.6 | 66.3 | 65.6 | 66.3 |
| Slovakia | 60.7 | 62.2 | 59.4 | 62.2 |
| Sweden | 66.0 | 65.0 | 65.1 | 65.0 |
| Hungary | 63.3 | 63.5 | 60.2 | 60.0 |
| United Kingdom | 65.0 | 65.0 | 63.9 | 64.0 |

Source: Organisation for Economic Co-operation and Development, *Effective age of labour market exit* [in:] *Pensions at a Glance 2017: OECD and G20 Indicators*, Paris 2017

A departure from a community standard reduces the utility of the person making a non-standard decision.¹² This means that the decision to end the economic activity at the age chosen by the majority of the population increases the utility of retirement *ceteris paribus*. The theory of striving to comply with social norms allows one to explain why individuals in a particular age group in a given period and a given community most often retire. At the same time, change in social norms is a challenge for policies which aim to encourage a later exit from the labour market. Changes in norms are usually slow, and when they occur people gradually adjust their behaviour to the new rules.

Framing effect

In the 1970s, Daniel Kahneman and Amos Tversky¹³ published the results of their research showing that decisions on choosing a particular option are affected by the manner of its presentation, the one that highlights the advantages or disadvantages of a particular decision. A different way of framing early or later retirement may influence people's decisions on the age of labour market exit. An individual choice made in conditions of uncertainty is determined, *inter alia*, by the adoption of an appropriate benchmark.

¹² A. Lindbeck, S. Nyberg, J. Weibull, *Social norms and economic incentives in the welfare state*, "Quarterly Journal of Economics" 1999, No. 114 (1), pp. 1-35; F. van Erp, N. Vermeer, D. van Vuuren, *op. cit.*

¹³ D. Kahneman, A. Tversky, *Prospect theory: An analysis of decision under risk*, "Econometrica" 1979, No. 47, pp. 263-291.

The limited rationality of individuals making retirement decisions causes people to become sensitive to the way of presenting available options with the default retirement age.¹⁴ For example, if an insurance institution sends a simulation of the expected monthly benefit of the insured person several years before retirement and shows the minimum retirement age as the first one and a pension increase dependent on each subsequent year of employment, the reader would rather opt for the lowest possible age as a reference point and treat the pension increase in subsequent years as a profit. However, if the simulations show a higher retirement age as the benchmark and a lower monthly pension when an earlier labour market exit is chosen, then the indicated age will rather serve as the reference age and an early exit can be seen as a loss, *i.e.*, a lower monthly benefit. Since people with a greater aversion to risk are more likely to avoid loss than to seek equivalent benefit, the second presentation of their expected future pension may induce them to postpone their retirement.¹⁵

Establishment of a default option, which indicates what will happen if the decision-maker does not take any action, also has an impact. Research by Daniel Kahneman, Jack Knetsch, Richard Thaler¹⁶ or Richard H. Thaler and Cass Sunstein¹⁷ shows that as a result of default options, more individuals will not to change their position, because this would require some effort and people prefer an option where they do not have to take additional action. The retirement decisions are associated with the problem of the competent comparison of different options which may differ in many ways. Individuals who lack financial knowledge or are less able to absorb and use complex information, are not able to assess whether it is better for them to retire later or earlier and therefore they choose the default solution.

The above-described phenomena of the default retirement age and the specific age as a reference point for an individual decision explain the high retirement rates showed by the data when people reach the indicated age.

At this point it is worth recalling that early retirement was once perceived as a positive phenomenon also for another reason. It was assessed not only in the context of individual experience – as more spare time available with guaranteed income, but also in a macroeconomic perspective, *i.e.*, as a way to reduce the unemployment of young people who would take the jobs vacated by pensioners. Only since the end of the 20th century have economists been showing that an early labour market exit by older people does not improve the situation of people just entering the labour market.¹⁸ For this reason,

14 L. Behaghel, D. Blau, *Framing social security reform: Behavioral responses to changes in the full retirement age*, Michigan 2010.

15 This was confirmed by the experiment described by D. Fetherstonhaugh, L. Ross, *Framing Effects and Income Flow Preferences in Decisions about Social Security* [in:] *Behavioral Dimensions of Retirement Economics*, ed. H.J. Aaron, Washington 1999, pp. 187-209, referred to by M. Knoll, *op. cit.*

16 D. Kahneman, J. Knetsch, R. Thaler, *The endowment effect, loss aversion, and the status quo bias*, "Journal of Economic Perspectives" 1991, No. 5 (1), pp. 193-206.

17 R.H. Thaler, C. Sunstein, *Nudge: Improving decisions about health, wealth, and happiness*, New Haven 2008.

18 N. Barr, P. Diamond, *Reforming pensions: Principles, analytical errors and policy directions*, "International Social Security Review" 2009, No. 62 (2), pp. 5-29; J. Gruber, D.A. Wise, *Social Security Programs and Retirement around the World: The Relationship to Youth Employment*, Chicago 2010.

the old-age pension system reforms, introduced in recent decades in many countries, have resulted in an increase in the retirement age, weakened financial incentives for early retirement or even made it impossible.

Summary

The presented discussion of behavioural mechanisms for choosing the age to retire at shows what measures encourage a later exit from the labour market and can prove effective in the face of demographic change within population structures.

First of all, it is effective to raise the standard eligibility age for benefits,¹⁹ as the statutory retirement age is often an important benchmark for decisions on labour supply in old age.

Secondly, it seems that social norms concerning the exit age are also important for a significant part of the population. Luc Behaghel and David Blau²⁰ underline the importance of norms, especially for individuals with less capacity to process complex information on the rules governing old-age pension schemes.

Both described phenomena explain why people in many countries tend to retire at a certain age, even though this is not the best decision in their individual circumstances, *e.g.*, when their health condition and labour market situation allow them to work longer and at the same time would ensure a higher pension in the future.

As a result of hyperbolic discounting, individuals prefer lower and immediate pensions to higher ones that they will receive only in the future. However, this mechanism does not explain the observed maximum exit rates exactly at the minimum retirement age itself. The effects of hyperbolic discounting are being widely studied by economists dealing with behavioural approaches to consumption and saving. However, when analysing the retirement age, this does not seem to be the main explanation for the relationships observed in the data.

The results of behavioural economics research also stress the framing effect, *i.e.*, the impact of the appropriate presentation of different retirement options. The term “early retirement” has positive connotations, which may encourage more people to choose such an option,²¹ while terms describing different retirement options in another way may cause people to stop working several years later. Perhaps the term “early retirement” should be replaced by “lower pension,” while instead of using the terms: “delayed” or “postponed” retirement, it is better to speak of “higher pension.”

To sum up, behavioural economics is quite a new branch of economics, but it often offers more realistic assumptions for the reasons of human behaviour than those adopted

¹⁹ Apart from the unpopularity of such a reform among many voters.

²⁰ L. Behaghel, D. Blau, *Framing social security reform: Behavioral responses to changes in the full retirement age*, Michigan 2010.

²¹ S. Vernon, *Beyond Defaults: Using Behavioral Economics to Improve Retirement Outcomes*, “Benefits Magazine” 2019, Vol. 56, No. 3.

in neoclassical models. In spite of the criticism of some the generalisations that have emerged in connection with the results of experiments carried out by behaviourists, it seems worth considering also the use of behavioural economics research methods to deepen analyses of retirement decisions.

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Decyzje o przejściu na emeryturę

Celem artykułu jest przeanalizowanie, jak różne zjawiska badane przez ekonomię behawioralną mogą tłumaczyć podaż pracy osób w wieku okołomerytalnym. Założenie o hiperbolicznym dyskontowaniu obecnych i przyszłych dochodów może wyjaśniać dość szybkie przechodzenie niektórych osób na emeryturę, zaś normy społeczne dotyczące aktywności zawodowej w starszym wieku różnicują między krajami efektywny wiek odejścia z rynku pracy. Z punktu widzenia polityki zachęcającej ludzi do coraz późniejszego kończenia aktywności zawodowej istotny jest wpływ efektu sformułowania (ang. *framing effect*) na decyzje emerytalne.

Słowa kluczowe: dyskontowanie hiperboliczne, efekt sformułowania, emerytura, normy społeczne, wiek emerytalny

Diagnosis of the behavioural basis of decisions made in the area of pension provision and application in stimulating additional savings for old age

The paper draws attention to the behavioural aspects of decisions in the area of supplementary pensions and indicates the use that can be made of behavioural economics achievements in stimulating long-term savings for old age. The types of cognitive errors that affect the retirement savings decisions are presented and discussed, as well as automatic enrolment options and saving rules applicable in occupational pension plans conducive to increasing retirement savings.

Key words: automatic investment strategies, automatic pension scheme, behavioural economics, cognitive errors, escalation of contribution

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Introduction

Achieving and maintaining an adequate living standards in retirement is the problem for many people in the world. This also applies to Poland, where this problem will continue to grow in the face of the ageing of the population and a reduced retirement age. There is a clear increase in the number of people receiving benefits in the defined-contribution system at an increasingly lower level, which is reflected in a decrease in the ratio of average pension to average wage¹ (from 59.8% in 2014 to 52.9% in 2018).² In view of these changes, additional savings for retirement are becoming increasingly important in relation to the basic security itself.³

Different factors affect both retirement planning decisions and decisions on retirement age. While the most common emphasis is placed on institutional, economic or fiscal barriers to savings,⁴ the behavioural economics trend indicates that there are other equally important obstacles to accumulating savings for old age.

Classical economic theory assumes that when making decisions, people maximise the utility function. During this process, they analyse and properly balance all the possible constraints and preferences.⁵ They efficiently consider all possible options and choose the one that is best for them. What is more, everything takes place with fully accessible and complete information,⁶ where informed and financially competent consumers act in their own best interest.⁷ On the other hand, proponents of behavioural economics believe that people do not behave exactly as predicted by conventional knowledge, in particular in the context of complex decisions, including retirement decisions.⁸ Richard H. Thaler claims that if we want to develop useful theories about how people save for retirement, we should not assume that they behave as if they were experts.⁹ However, one should undoubtedly note and agree with Marek Szczepański that

¹ Average monthly wage in the national economy reduced by pension and sickness insurance contributions deducted from insured persons' earnings.

² S. Buchholtz, A. Chłoń-Domińczak, M. Góra, *The Polish NDC Scheme: Success in the Face of Adversity*, "Social Protection & Jobs. Discussion Paper" 2019, No. 1904, pp. 32–33.

³ J. Rutecka, *Dodatkowe zabezpieczenie emerytalne – charakterystyka i czynniki rozwoju*, "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu" 2014, No. 342, p. 256.

⁴ M. Szczepański, *Badanie możliwości wykorzystania ekonomii behawioralnej w reformowaniu systemów emerytalnych*, "Finanse, Rynki Finansowe, Ubezpieczenia" 2017, No. 5 (89), Part 1, p. 424.

⁵ M.A. Knoll, *The Role of Behavioral Economics and Behavioral Decision Making in Americans' Retirement Savings Decisions*, "Social Security Bulletin" 2010, No. 70 (4), pp. 1–23.

⁶ *The Individual's Saving Decision*, London 2007, p. 8.

⁷ *Improving Financial Education Effectiveness Through Behavioural Economics. OECD Key Findings and Way Forward*, 2013, p. 7.

⁸ A. Fertig, J. Lefkowitz, A. Fishbane, *Using Behavioral Science to Increase Retirement Savings. A New Look at Voluntary Pension Contributions in Mexico*, 2015, p. 6, https://www.ideas42.org/wp-content/uploads/2015/11/I42_571_MexicoPensionsReport_ENG_final_digital.pdf (online access: 19.10.2019).

⁹ R.H. Thaler, *Zachowania niepoprawne. Tworzenie ekonomii behawioralnej*, Poznań 2018, p. 71.

behavioural economics has not replaced mainstream economics with its assumption of the rationality of the managing entity, but it complements it and opens up new, interesting cognitive perspectives.¹⁰

The behavioural perspective draws attention to the fact that psychological, institutional, cultural and biological factors also influence the way individuals behave.¹¹ Brigitte Madrian¹² also points out that sociology, anthropology and even cognitive neuroscience can enrich standard economic models with their ability to understand and predict human behaviour, shape public policies, and achieve better economic results for businesses.

The aim of the study is, on the one hand, to present the behavioural aspects of decisions in the area of supplementary pensions and, on the other hand, to indicate how the achievements of behavioural economics can be used to stimulate long-term savings for old age.

As an example, one could mention automatic enrolment schemes, which are of particular interest to behavioural economists and which have been recently implemented in many countries around the world, including Poland.

Under the provisions of the Act on Employee Capital Plans,¹³ which entered into force on 1 January 2019, employers are obliged to establish Employee Capital Plans (ECP) [pracownicze plany kapitałowe, PPK]. However, the order in which ECPs must be created depends on the size and type of the enterprise. At the earliest (from 1 July 2019), the Act applies to the largest enterprises, *i.e.*, those with more than 250 employees, and at the latest (from 1 January 2021) to other employing entities, *i.e.*, entities other than those employing more than 20 people, including too public finance sector entities. This is an automatic enrolment scheme based on the experience of other countries. Employees enrolled may resign from saving in the plan.

Behavioural aspects of the decision on supplementary retirement savings

Personal finance is an interesting and common area of interest for behavioural economists. Consumer choices and decisions regarding financial products, including pension products, are particularly vulnerable to numerous behavioural biases. Classified in the area of preferences, beliefs and decision-making, they are influenced by various factors (Figure 1).

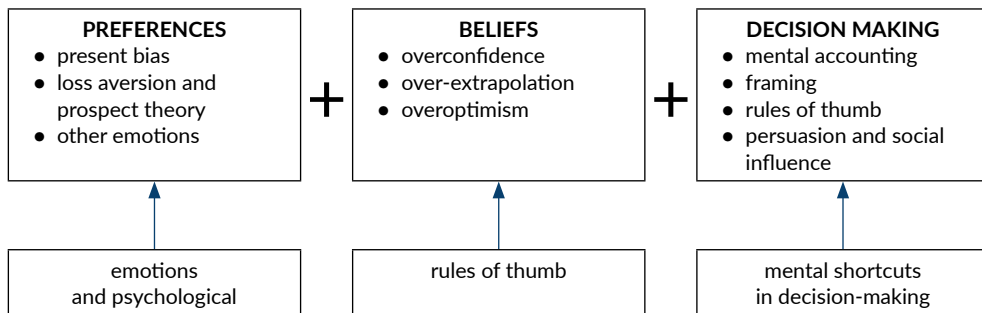
¹⁰ M. Szczepański, *op. cit.*, p. 426.

¹¹ *Handbook of Contemporary Behavioral Economics. Foundations and Development*, ed. M. Altman, New York 2015, p. XVII.

¹² B. Madrian, *Lessons from Behavioral Economics for Promoting Retirement Income Security*, Washington DC 2018, p. 2, <http://www.nber.org/2018rrc/slides1/2.5%20-%20Lunch%20Speaker%20-%20Madrian.pdf> (online access: 22.6.2019).

¹³ Act of 4 October 2018 on Employee Capital Plans (Journal of Laws item 2215).

Figure 1. The most common behavioural biases in the process of choosing pension products and factors affecting them



Source: K. Erta, S. Hunt *et al.*, *Applying Behavioural Economics at the Financial Conduct Authority*, “Occasional Paper” 2013, No. 1, pp. 15–19

The present bias, also expressed in terms of short-sightedness (myopia), manifests itself in excessive attempts to obtain an advantage now, *i.e.*, preferring present consumption to future consumption.¹⁴ In behavioural economics, much attention is focused on the time (temporal) discounting theory, which involves investigating differences in values (*e.g.*, of money or goods) at different points of time.¹⁵ It turns out that people show a preference for rewards that arrive sooner rather than later. Robert Strotz¹⁶ was the first in the world to prove that only when some advantages can be obtained at two points in time in the future, are people willing to choose the more distant, greater advantage. In short points of time, we prefer even lower, but faster to gain advantages (profits). An important conclusion from studies by Gopi Goda, Matthew Levy *et al.*¹⁷ is that less preference for the *status quo* leads to higher regular contributions to the pension plan, greater wealth and a greater propensity to invest in more liquid assets. Therefore, time plays a significant role in pre-retirement decisions, especially as most people are characterised by a high discount rate of time¹⁸ (with excessive attachment to profits “here and now”).

In their prospect theory, Daniel Kahneman and Amos Tversky¹⁹ refer to the question of profit and loss assessment in relation to the reference point, which is usually zero profit/loss.²⁰ Since from a psychological point of view, losses are felt more strongly than

¹⁴ F. Chybalski, E. Marcinkiewicz, *Myopic Behaviour and State Involvement in a Pension System: A Cross-section Study for OECD Countries*, “*Ekonomista*” 2018, No. 1, pp. 68–88.

¹⁵ S. Frederick, G. Loewenstein, T. O’Donoghue, *Time Discounting and Time Preference: A Critical Review*, “*Journal of Economic Literature*” 2002, No. 40, pp. 351–401.

¹⁶ R.H. Strotz, *Myopia and Inconsistency in Dynamic Utility Maximization*, “*Review of Economic Studies*” 1956, No. 23, pp. 165–180.

¹⁷ G.S. Goda, M. Levy *et al.*, *Predicting Retirement Savings Using Survey Measures of Exponential-Growth Bias and Present Bias*, “*IZA DP*” 2018, No. 11762, pp. 34–35.

¹⁸ N. Goodwin, J. Harris *et al.*, *Microeconomics in Context. Fourth Edition*, New York 2018, p. 149.

¹⁹ D. Kahneman, A. Tversky, *Prospect Theory. An Analysis of Decisions under Risk*, “*Econometrica*” 1979, Vol. 47, No. 2, pp. 263–292.

²⁰ B. Dzik, *Daniel Kahneman i Amos Tversky*, “*Decyzje*” 2004, No. 1, p. 131.

profits,²¹ even twice as strong,²² paradoxically, people with a loss aversion risk increasing potential losses. At the same time, people are too “slow” (showing inertia and procrastination) to stop loss accumulation. Our behaviour may be also affected by emotions, such as stress, anxiety or fear that in the future we will regret missed opportunities, not seized in the past.²³ The emotionality of decisions is certainly an undervalued area, which can be influenced both in order to suppress them – for suboptimal actions taken under their influence (*e.g.*, in the case of buying insurance cover, which is excessive in relation to the needs for peace of “mind”²⁴), and to stimulate them – to induce an individual to accumulate retirement savings, if he/she did not have them earlier, also for behavioural reasons.

Behavioural economists also draw attention to overconfidence or overoptimism in decision-making. People tend to overestimate their own opportunities and abilities. For example, the research of Patrick R. Heck, Daniel J. Simons, Christopher F. Chabris²⁵ shows that 65% of Americans, especially men and better educated people, believe that they are smarter than everyone else. Overconfidence in finance may relate to financial knowledge (subjective knowledge higher than objective knowledge²⁶) or to retirement investments, resulting in underestimation of the amount of capital needed for old age.²⁷ In addition, as pointed out by John Turner,²⁸ it can result in overestimation of the investor’s ability to choose the right investment portfolio, as well as in too aggressive investments. If this is also linked with over-extrapolation, there is a good chance that overoptimistic estimates will be made as to the level of capital that a person concerned will have in his or her old age. Most people do not know statistics, and make decisions based on insufficient experience and observations, *e.g.*, covering too short a time horizon. This can be reflected, for example, in the case of an intention to invest in certain long-term investment funds based on the rates of return achieved by them in too short a period of time.

Moreover, people are guided in their beliefs and decisions by heuristics, *i.e.*, rules that control mental processes, through which they find solutions to problems encountered.²⁹ In the case of retirement decisions it is usually the so-called rule of

21 N. Sirven, T. Barnay, *Expectations, Loss Aversion, and Retirement Decisions in the Context of the 2009 Crisis in Europe*, 2016, p. 2, <https://halshs.archives-ouvertes.fr/halshs-01374462> (online access: 24.6.2019).

22 M. Rabin, R.H. Thaler, *Anomalies. Risk Aversion*, “Journal of Economic Perspectives” 2001, Vol. 15, No. 1, p. 226.

23 K. Erta, S. Hunt *et al.*, *Applying Behavioural Economics at the Financial Conduct Authority*, “Occasional Paper” 2013, No. 1, p. 5.

24 *Ibid.*, p. 17.

25 P. Heck, D.J. Simons, C.F. Chabris, *65% of Americans Believe They Are Above Average in Intelligence: Results of Two Nationally Representative Surveys*, “PLOS ONE” 2018, No. 13 (7), pp. 1-11.

26 S. Białowas, *Subjective vs. Objective Assessment Of Financial Literacy – Do Beliefs Meet Reality?*, “Journal of Insurance, Financial Markets and Consumer Protection” 2018, No. 29 (3), pp. 27-36.

27 S. Pieńkowska-Kamieniecka, *Wybrane aspekty dodatkowego oszczędzania emerytalnego – perspektywa behawioralna*, “Studia Oeconomica Posnaniensia” 2017, Vol. 5, No. 10, p. 16.

28 J. Turner, *Designing 401(K) Plans That Encourage Retirement Savings: Lessons from Behavioral Finance*, “Issue Brief” 2006, No. 80, p. 12.

29 A. Buczek, *Heurystyka* [in:] *Powszechna encyklopedia filozofii*, Vol. 3, Lublin 2002, p. 418.

thumb, which consists in making often even the most important choices in life in a simple way. As an example we may mention ending professional activity at the minimum statutory retirement age or as soon as the individual replacement rate reaches the assumed level (*e.g.*, 75% of the current remuneration).³⁰ In terms of pre-retirement decisions, the rule of thumb may manifest itself, *e.g.*, in the choice of the “first better” pension product.³¹

Behavioural economics also focuses on the way people process the information they receive. People may behave differently even in two identical situations, depending on how the information or problem is presented to them (from a profit or loss perspective).³² Morris Altman points out that the framing effect can be positively used in prospectuses and documents forming the content of investment products (including pension products) in such a way as to help people understand this content (*e.g.*, easily accessible and understandable key terms; appropriate letter size in the document).

On the other hand, Alain Samson³³ refers to the social environment and claims that our preferences are shaped by altruism, reciprocity, fairness or trust, *e.g.*, in financial advisers and the pension products and solutions that they propose.

Justification for automatic supplementary retirement saving schemes

In terms of behavioural economics, automatic occupational pension plans play their role in increasing participation in supplementary pension provision increasingly strongly in the world. Paul Secunda³⁴ claims that schemes based on the achievements of behavioural economics are a more effective solution compared to completely voluntary pension schemes. Their design takes into account heuristics and the mistakes made by individuals, which means that the employee is “pushed” towards well-diversified and low-cost default pension funds, organised and regulated by the state. Numerous studies show that even if people are aware of the low level of benefits they will receive in retirement and declare their intention to save, inertia, procrastination or loss aversion effectively discourage them or make it difficult for them to do so. It is enough to read the results of the study by the Organisation for Economic Co-operation and Development International Network on Financial Education (OECD/INFE), which shows that only

30 G. Burtless, *Social Norms, Rules of Thumb, and Retirement: Evidence for Rationality in Retirement Planning*, 2004, pp. 2–17, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.504.791&rep=rep1&type=pdf> (online access: 26.6.2019).

31 K. Erta, S. Hunt *et al.*, *op. cit.*, p. 19.

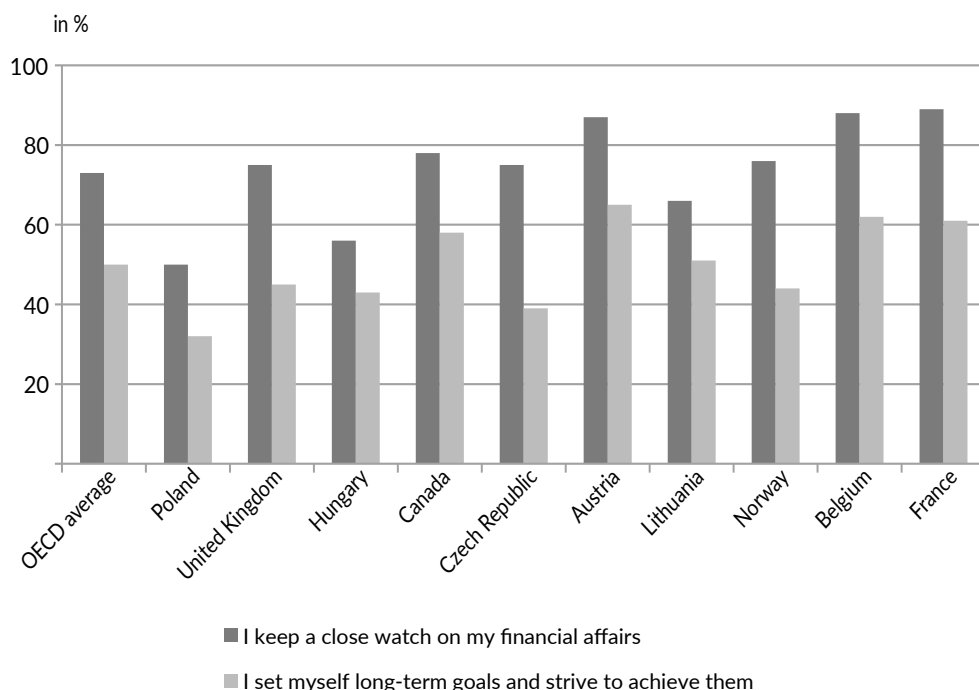
32 A. Tversky, D. Kahneman, *Rational Choice and the Framing of Decisions*, “The Journal of Business” 1986, Vol. 59, No. 4, Part 2, p. 257.

33 A. Samson, *Behavioral Science: Theory And Practice* [in:] *The Behavioral Economics Guide 2015*, ed. A. Samson, 2015, p. 1, <http://www.behavioraleconomics.com/BEGuide2015.pdf> (online access: 26.6.2019).

34 P.M. Secunda, *The Behavioral Economic Case for Paternalistic Workplace Retirement Plans*, “Indiana Law Journal” 2016, Vol. 91, Issue 2, Article 8, p. 505.

50% of persons set long-term goals (including those related to retirement) and strive to achieve them. In Poland, this result is at the lowest level among all OECD countries (Diagram 1).

Diagram 1. Approach to long-term financial planning in selected OECD countries
[in % of responses]



Source: own study based on *OECD/INFE International Survey of Adult Financial Literacy Competencies*, Paris 2016, p. 37

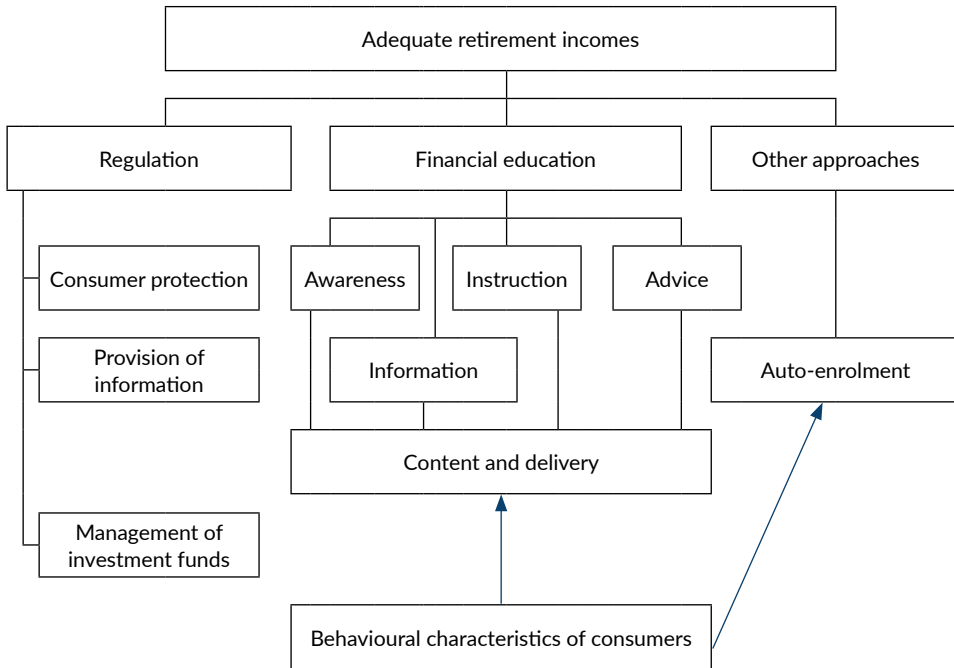
It should be noted that most employees do not have sufficient knowledge of financial markets and investments.³⁵ Although financial education programmes are undoubtedly needed to raise financial awareness they have, however, a limited impact on appropriate financial market behaviour. Knowledge alone proves to be insufficient to improve the results of a significant part of the population in achieving better financial security in old age.³⁶ Financial education should be supported by other measures, such as consumer protection regulations.³⁷ The effectiveness of pension schemes referred to as auto-enrolment schemes, is also mentioned (Diagram 2).

³⁵ M. Szczepański, *op. cit.*, p. 426.

³⁶ S. Vernon, *Beyond Defaults: Using Behavioral Economics to Improve Retirement Outcomes*, "Benefits Magazine" 2019, Vol. 56, No. 3, p. 44.

³⁷ See T. Szumlicz, *Świadomość ryzyka społecznego jako podstawa wiedzy o systemie ubezpieczeń społecznych*, "Ubezpieczenia Społeczne. Teoria i praktyka" 2017, No. 1 (132), pp. 3–16.

Diagram 2. Tools for achieving adequate retirement incomes



Source: Organisation for Economic Co-operation and Development, *Financial Education and Saving for Retirement*, p. 12, <http://www.oecd.org/finance/privatepensions/39197801.pdf> (online access: 26.6.2019)

Automatic pension schemes are based on the concept of paternalism, although they do not exist in a pure form. Gerald Dworkin understands paternalism as the interference with a person's liberty or actions justified by his/her well-being, interest, values, happiness and needs.³⁸ Perceiving unfavourable connotations of paternalism in legal and public discourse, Nicolas Cornell³⁹ points out that it assumes that the person concerned is not able to make decisions favourable to themselves, that they act irrationally. On the other hand, David Birks claims that paternalism is harmful only when it undermines the autonomy (independence) of the individual.⁴⁰ Richard H. Thaler and Cass R. Sunstein refer to a situation when the state tries to improve the welfare of society by influencing the choices of its members in a non-invasive manner, as "libertarian paternalism."⁴¹ Automatic pension schemes are, in principle, the opt-out schemes, *i.e.*, the employer usually organises the scheme on a mandatory basis, and the employee is automatically enrolled and participates therein until they decide to stop saving. This means that some freedom of action is maintained for the participants. For this reason, such schemes are

³⁸ G. Dworkin, *Paternalism* [in:] *Morality and the Law*, ed. R.A. Wasserstrom, Belmont 1971, p. 181.

³⁹ N. Cornell, *A Third Theory of Paternalism*, "Michigan Law Review" 2015, Vol. 113, pp. 1296-1297.

⁴⁰ D. Birks, *How Wrong is Paternalism*, "Journal of Moral Philosophy" 2018, No. 15, p. 136.

⁴¹ R.H. Thaler, C.R. Sunstein, *Libertarian Paternalism*, "The American Economic Review" 2003, Vol. 93, No. 2, p. 176.

classified as voluntary,⁴² because they give employees an opportunity to “do what they want.” Thus, the libertarian paternalism of R.H. Thaler and C.R. Sunstein, built on the concept of Milton Friedman, according to the principle that people “should be free to choose,⁴³” refers, on the one hand, to the direct or indirect influence of the state on people’s choices (“paternalism”), and on the other hand to the fact that the final choice belongs to the individual (“libertarian”).

Functioning of automatic solutions in occupational pension plans

Behavioural economists point out that decisions and choices can be influenced by using so-called choice architecture.⁴⁴ The way in which solutions in the pension scheme are designed and presented is of great importance for the results achieved in the scheme.⁴⁵ Automatic entry and saving in the plan is one of the solutions based on choice architecture.

Automation in the supplementary occupational pension scheme concerns three main areas: automatic enrolment of employees into the pension plan, automatic investment strategy and automatic increase in the contribution rate. In addition, a default scheme provider is proposed to facilitate the choice. Not all of these mechanisms always come together. The basic solution is the automatic enrolment of employees to the plan, which for employers may be mandatory under law (*e.g.*, New Zealand, the United Kingdom, Poland) or voluntary (the United States, Canada, Germany).

The basic⁴⁶ characteristics of automatic pension schemes in the world are presented in Table 1.

Auto-enrolment schemes also use automatic transfer of funds from the remuneration to a pension fund account, which helps to enforce the employee’s self-control and causes that their potential loss aversion ceases to be an obstacle to saving for old age. The lower net remuneration, which includes automatic deductions for the pension plan, becomes the *status quo*, a new benchmark. According to the simple rule “If you don’t have something, you don’t lose it,” an employee has no sense of losing money, when deductions for future retirement are included in the remuneration that he or she receives,⁴⁷ while out-of-pocket expenses are usually more often felt.

42 *Private Pensions: OECD Classification and Glossary*, Paris 2005, p. 52.

43 M. Friedman, R. Friedman, *Free to Choose: A Personal Statement*, New York 1980.

44 W. Sieczkowski, *Behawioralne aspekty decyzji dotyczących dodatkowego zabezpieczenia emerytalnego (wnioski dla Polski)*, “Wiadomości Ubezpieczeniowe” 2018, No. 4, p. 22.

45 M.M. Kane, *Overcoming Obstacles to Retirement Plan Success. Inertia, Myopia and Loss Aversion*, “Journal of Pension Benefits” 2014, p. 2, <http://plansponsorconsultants.com/wp-content/uploads/2014/01/Article-Jan-2014.pdf> (online access: 26.6.2019).

46 For more, see *e.g.*, S. Pieńkowska-Kamieniecka, *Rola...*, *op. cit.*, pp. 295-296.

47 M.A. Knoll, *op. cit.*, p. 11.

Table 1. Synthetic characteristics of automatic pension schemes in the world

| Country (implementation date) | Degree of freedom of creation | Contribution – employer | Contribution – employee | Surcharge – state | Opt-out |
|-------------------------------|---|---|---|---|---|
| Chile (2012) | compulsory | 10% of the assessment basis (payments to individual pension accounts) | | - | at the time of submitting tax returns |
| Canada (2012) | creation possible only in some provinces (in Quebec – compulsory) | voluntary | voluntary | - | 60 days |
| New Zealand (2007) | compulsory | 3% to choose ("default contribution"), 4%, 8% as well as 6% and 10% (from 1.4.2019) | min. 3% | welcome surcharge 1,000 NZD – to 2015; subsidies to employee contributions 50 cents to each 1 NZD – maximum 521.43 NZD/year | between 2nd and 8th week |
| Germany (2018) | voluntary | depending on collective agreements, max. 4% assessment basis | depending on collective agreements | - | at any time |
| Poland (2019) | compulsory | compulsory, min. 1.5%, max. 4% | compulsory, min. 2%, max. 4% | welcome surcharge 250 PLN, annual welcome surcharge of 240 PLN | at any time, re-enrolment every 4 years |
| The United States | 1998 – voluntary (occupational plans) | depending on the rules set | depending on the rules set | - | 90 days |
| | 2017 – auto-IRA, compulsory in some states | none | depending on the state | - | depending on the state |
| The United Kingdom (2012) | compulsory | from 6 April 2019, 3% on eligible income, i.e., in the range from 6,136 GBP and 50,000 GBP (2019/2020). | from 6 April 2019, 5% on eligible income, i.e., in the range from 6,136 GBP and 50,000 GBP (2019/2020). | 1% (in the form of a tax credit in the contribution financed by the employee) | 1 month, re-enrolment every 3 years |
| Italy (2007) | compulsory | 6.91% | voluntary | - | 6 months |
| Turkey (2017) | compulsory | 3% of gross wage/salary | voluntary | 25% as matching contribution; welcome surcharge TRL 1,000; 5% state surcharge in the case of benefits in the form of an annuit (longer than 10 years) | 2 months, re-enrolment every 3 years |

NDA – No Data Available

Source: own study based on S. Pieńkowska-Kamieniecka, *Rola i zakres udziału pracodawców we wspieraniu długoterminowych oszczędności emerytalnych – przykład programów automatycznego zapisu* [in:] *Długoterminowe oszczędzanie. Postawy, strategie i wyzwania*, ed. J. Rutecka-Góra, Warszawa 2016, pp. 295-296; S. Pieńkowska-Kamieniecka, *Automatyczne plany emerytalne w systemie dodatkowego zabezpieczenia emerytalnego – przesłanki tworzenia i funkcjonowania* [in:] *Dobre zabezpieczenie społeczne. Idea i kontynuacja*, ed. M. Kawiński, Warszawa 2015; *OECD Pension Outlook 2018*, Paris 2018, p. 148; *OECD Economic Survey 2016 – Germany*, Paris 2016, p. 101; N. Paklina, *Role of Pension Supervisory Authorities in Automatic Enrolment*, "IOPS Working Papers on Effective Pensions Supervision" 2014, No. 22; IOPS Countries Profiles – Turkey, June 2017

The experience of countries that have introduced automatic enrolment schemes shows that participation rates in supplementary pension schemes are definitely higher in a situation where inertia (inactivity) leads to participation in the scheme than in the reverse scenario.⁴⁸ As early as 2001, Brigitte Madrian and Denis Shea⁴⁹ showed that the introduction of automatic enrolment in 401(k) occupational plans in the United States increased the participation rates of newly hired employees in these plans from 49% to 86%. Also the introduction of the KiwiSaver scheme in New Zealand in 2007 (with automatic enrolment) resulted in a sharp increase in the supplementary pension coverage rate from 15.2% (end-2007) to 64.4% (end-2013). In turn, in the United Kingdom, where auto-enrolment schemes were introduced in 2012, the rate of participation of private sector employees in supplementary pension schemes increased from 26% in 2011 to 35% in 2013.⁵⁰

An analysis of the solutions used in auto-enrolment to occupational pension plans shows that employees who have to be enrolled to the plan (*e.g.*, according to an age or income criterion) automatically become its participants until, at any or specified time (*e.g.*, several weeks) they make a declaration of withdrawal from the plan. At this point, an important issue needs to be highlighted. Although the Polish solution adopted within the framework of employee capital plans seems to function similarly as in other countries, it is based however on the principle of the possibility of “withdrawing” from the plan, *i.e.*, resigning from saving in ECP, *de facto* before the employee is automatically enrolled to the plan by the employer. The employer has been obliged to conclude an ECP management agreement, on behalf of and for all persons employed, on specific dates (*e.g.*, at entities employing at least 250 persons as of 31 December 2018 – until 12 November 2019), unless they submit a declaration of resignation from making payments to ECP before that date.⁵¹ Therefore, contrary to the solutions adopted in other countries, an automatic choice of the default option, which is saving in ECP, may not materialise at all if an active choice – not to make savings – is made before the conclusion of the ECP management agreement, on behalf of and for a given employee. The percentage analysis of employees’ resignation from saving in ECP in Poland before the automatic enrolment will certainly be an interesting area of comparative research in relation to other countries.

To overcome problems with self-control and other behavioural prejudices, Richard H. Thaler and Shlomo Benartzi⁵² proposed, as a supplement to the auto-enrolment in the pension plan, a mechanism of automatic increase in the contribution rate, thus aiming at an automatic increase in savings adequate to the achieved income. In their

48 *Ibid.*, p. 7.

49 B.C. Madrian, D.F. Shea, *The Power of Suggestion: Inertia in 401(k) Participation and Saving Behavior*, “Quarterly Journal of Economics” 2001, No. 116, pp. 1149-1225.

50 *Increasing Private Pension Coverage and Automatic Enrolment Schemes: Evidence From Six OECD Countries* [in:] *OECD Pension Outlook 2014*, Paris 2014, p. 152.

51 See Art. 134(2) of the ECP Act and *Niezbędnik pracodawcy. Pracownicze Plany Kapitałowe*, p. 19, https://www.mojepkp.pl/dam/jcr:9da660c8-9859-429b-b23b-481d68fe6a47/Niezbednik_pracodawcy_v.1.1.pdf (online access: 16.7.2019).

52 R.H. Thaler, S. Benartzi, *Save More Tomorrow™: Using Behavioral Economics to Increase Employee Saving*, “Journal of Political Economy” 2004, No. 112, pp. 164–187.

proprietary SMarT (Save More Tomorrow) plan, the contribution rate increases with each increase in the remuneration until it reaches the set maximum. At that time, despite the nominal increase in contribution charges, the employee still does not leave the plan, because from a behavioural point of view, the inertia and tendency to maintain the *status quo* effectively prevent them from doing so. The plan proved to be already a success in the first companies in which it was been implemented. 78% of participants in the 401(k) plans agreed to an automatic escalation of the contribution, and 98% of them, after a two-fold increase in the contribution rate, still remained in the plan.

The Callan Institute study of the US market shows that in 2018, about 71% of private sector employers offered supplementary automatic pension schemes for their employees. Most of them also offered an option of automatic increase in the contribution (70.8% in 2018; compared to 52.8% in 2014).⁵³ Also, in response to the low level of savings in auto-enrolment schemes in the United Kingdom, the two-fold increase in the minimum rate of contribution paid to these schemes, here introduced by the government,⁵⁴ did not affect the market of supplementary pension security. Moreover, the opt-out scale was even smaller after the increase in the contribution rate than before. The opt-out rate among persons included in the scheme in the months April-June 2018 amounted to 4.7% compared to 5.6% for the previous four years of scheme operation.⁵⁵

The problem of low payments concerns not only compulsory contributions, but also additional contributions. In New Zealand, additional payments by KiwiSaver participants in 2018 accounted for less than 1% of the total contributions of employees and employers.⁵⁶ The situation is similar in Poland, where in 2018 additional contributions accounted for only 3% of total payments⁵⁷ to employee occupational pension schemes (OPS). Based on experience with the operation of automatic schemes in the United States and the United Kingdom, it cannot be excluded that also in Poland the minimum rates of contributions to ECP will increase in the future.

Another automatic solution based on the achievements of behavioural economics is the use of default investment strategies. This is also widely used in automatic occupational pension plans in the world. S. Benartzi and R.H. Thaler⁵⁸ justify the introduction of default investment options by the fact that employees left alone, having a choice of many funds in which they can invest their savings, most often follow the strategy of “naïve” diversification. Relying on the rules of thumb and heuristics, they allocate their resources evenly between the available funds (according to the 1/n rule) and achieve

⁵³ *2018 Defined Contribution Trends*, p. 18, <https://www.callan.com/wp-content/uploads/2018/01/Callan-2018-DC-Survey.pl> (online access: 16.7.2019).

⁵⁴ With a total of 2% for employee and employer in 2012 and subsequent years up to 5% from April 2018 and 8% from April 2019, see J. Cribb, C. Emmerson, *What Happens When Employers Are Obligated To Nudge? Automatic Enrolment and Pension Saving In The UK*, “IFS Working Papers” 2016, No. W16/19, p. 11.

⁵⁵ *Automatic Enrolment Evaluation Report 2018*, London 2018, p. 59.

⁵⁶ <https://www.kiwisaver.govt.nz/statistics/annual/contributions/> (online access: 22.8.2019).

⁵⁷ *Pracownicze programy emerytalne w 2018 roku*, Warszawa 2019, p. 18.

⁵⁸ S. Benartzi, R.H. Thaler, *Naïve Diversification Strategies in Defined Contribution Saving Plans*, “The American Economic Review” 2001, Vol. 91, No. 1, pp. 79-98.

perverse (other than intended) investment effects. Default investment strategies are a response to the low financial and investment knowledge of future pensioners, as well as to their low involvement in the management of their investment portfolio. They may take a balanced form, with equally distributed (allocated) contribution to specific funds throughout the entire saving period, or the form of investment in life-cycle funds. The latter has also been the main trend in recent years, particularly in the United States, in the default investment strategy in automatic pension schemes. A variation of the life-cycle strategy are defined-date funds where the investment portfolio is based on an expected retirement date with gradual reduction of investment risk. The investment structure is automatically adjusted to the current age of the participant.⁵⁹ In the opinion of experts, an automatic reduction of exposure to risky assets when the saver approaches retirement age best serves the function of capital protection, taking into account the assumptions of behavioural economics.⁶⁰

As regards the ECP market in Poland, the key question nowadays is what will be the scale of withdrawals from the scheme. Undoubtedly, it is difficult to estimate, but based on the experience of countries that were the first in the world to introduce mandatory auto-enrolment in a pension scheme, the forecasts in this respect may be optimistic. In New Zealand, in the first six years after the introduction of KiwiSaver, the opt-out rate dropped by about 20% (to about 30% in 2013). Also in the United Kingdom it is lower than initially assumed (about 25%⁶¹). In the years 2014–2018, only about 5.5% of participants of the auto-enrolment scheme made an active decision to leave the scheme on an average annual basis, although the opt-out percentage was the highest among the top earners (7.4% in 2017/2018).⁶² Similarly, and here also in Poland, people with the highest incomes may be more often interested in leaving the scheme, especially as in occupational capital plans, unlike in the public system, there is no limitation as to the contribution assessment base.⁶³ Therefore, payments to ECP will come from every remuneration from which contributions for the universal pension insurance are calculated.

According to preliminary government calculations, approximately 11.5 million employees will be enrolled to the ECP, with a participation rate of about 50% deemed a success.⁶⁴ This result is theoretically confirmed in one of the first surveys on automatic pension plans⁶⁵ in Poland, which shows that about 65% of respondents declare that they

59 Organisation for Economic Co-operation and Development, *OECD Pension Outlook*, Paris 2018, p. 164.

60 A. Soldek, *Polityka inwestycyjna dobrowolnych funduszy emerytalnych – analiza i rekomendacje* [in:] *Współczesne zabezpieczenie emerytalne. Wybrane aspekty ekonomiczne, finansowe i demograficzne*, ed. F. Chybański, E. Marcinkiewicz, Łódź 2013, pp. 223–224.

61 D. Thurley, *Pensions: Automatic Enrolment – Current Issues*, “Briefing Paper” 2019, No. CBP-06417, p. 6.

62 *Automatic...*, *op. cit.*, pp. 62–64.

63 Up to the amount corresponding to thirty times the projected monthly earning in the national economy for a given year (PLN 142,950 in 2019).

64 *PPK będą sukcesem, jeśli 50 proc. uprawnionych pozostanie w programie*, 30 November 2018, <https://www.pit.pl/aktualnosci/ppk-beda-sukcesem-jesli-50-proc-uprawnionych-pozostanie-w-programie-941765> (online access: 22.8.2019).

65 *Monitor rynku pracy. Wyniki 34. edycji badania*, 2019, p. 63.

will remain in the scheme. It should be borne in mind, however, that the living conditions and savings behaviour standards of Poles are different than in other countries, so the ECP opt-out rate may be significantly higher still.

Summary

The achievements of behavioural economics indicate that even in conditions of excellent knowledge and information, consumers do not act according to their own needs and for their own good. Since many decisions are made rather intuitively and automatically, this assumption has become the basis for proposing such solutions in the capital accumulation phase, which use the known mechanisms of consumer behaviour. As a result, in recent years more and more countries in the world are implementing or are interested in introducing automatic pension plans. Although they undoubtedly increase the degree of participation in the supplementary pension provision, their impact on the amount of accumulated capital and on a higher standard of living in old age is, however, not so clear. When analysing the potential impact of ECP on improving pension adequacy, Tomasz Jedynak⁶⁶ argues that even the maximum contributions to the scheme paid in over the entire working life of an individual will not ensure the pensions gap be covered. Auto-enrolment should therefore be supplemented and supported by other programmed mechanisms, such as automatic contribution escalation corresponding to the increase in the saver's remuneration.

It should also be noted that the use of behavioural mechanisms is not always universally justified for the general public. Along with the increase in financial literacy, the presented behavioural aspects of pension behaviour are less frequently observed, because individuals with greater financial knowledge and awareness are more likely to think about their future financial situation by analysing the effects of their decisions. Actions in the area of improving consumer knowledge cannot therefore be replaced by solutions developed within the framework of behavioural economics.

66 T. Jedynak, *Wpływ wprowadzenia pracowniczych planów kapitałowych na wysokość przyszłych świadczeń emerytalnych w Polsce*, "Ubezpieczenia Społeczne. Teoria i praktyka" 2018, No. 2 (137), pp. 33-54.

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Podstawy behawioralne decyzji w obszarze zabezpieczenia emerytalnego – diagnoza i zastosowanie w stymulowaniu dodatkowych oszczędności na starość

W artykule zwrócono uwagę na behawioralne aspekty decyzji w obszarze dodatkowego zabezpieczenia emerytalnego oraz wskazano, jakie może być zastosowanie dorobku ekonomii behawioralnej w stymulowaniu długoterminowego oszczędzania na starość. Przedstawiono i omówiono rodzaje błędów poznawczych, które mają wpływ na podejmowanie decyzji o oszczędzaniu na emeryturę, oraz zaprezentowano opcje automatycznego wejścia i zasady oszczędzania w zakładowych programach emerytalnych sprzyjające zwiększaniu oszczędności na starość.

Słowa kluczowe: automatyczne strategie inwestycyjne, automatyczny program emerytalny, ekonomia behawioralna, błędy poznawcze, eskalacja składki

Individual retirement decisions in the financial, social and psychological context (a case study)

The article is devoted to issues related to making decisions on retirement. It refers to the decision-making process and models aimed to facilitate the choice. Understanding the problem itself and gathering reliable information to help assess the situation is an important element of this process. An integral part of the decision making process is the risk of uncertain, unforeseen events that affect the consequences of the choices made. It is also worth asking oneself whether the decision maker has sufficient knowledge about the problem and the possibilities of solving it. The article presents the results of a pilot survey conducted on a group of seniors from Universities of the Third Age in selected cities in Poland concerning their individual retirement decisions. The survey aimed to determine the impact of selected factors on the decision to retire, as well as the hierarchy of values of these factors in the surveyed group. Analysis of the responses allowed to divide them into the financial, social and psychological areas. The results of the survey highlight the nature of the impact of individual factors. Respondents' assessments are subjective, but they have common elements.

Key words: decision-making process, old-age pension insurance, old age, retirement decisions, University of the Third Age

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Introduction

Decision-making is one of the most important elements of human activity. In everyday situations we make decisions as if automatically – unconsciously, quickly and without any effort. The decision-making process itself is the subject of many sciences, such as psychology, sociology, anthropology or economics. The differences are visible primarily at the level of the questions asked, and thus – of the research methods and techniques used, as well as the method of analysis.

This article attempts to answer the question: what factors influence individual decisions to retire and what role do they play in the decision-making process. The key task from the point of view of the survey was to examine the questions that the respondents asked themselves before making this decision, as well as how known decision-making models could be helpful.

The conducted research took the form of telephone and field surveys, as individual in-depth interviews (IDI). The data obtained are of qualitative nature. The survey involved an in-depth interview with individual seniors.

The research questions concerned independence in decision-making, knowledge about the rights of insured persons and about the general social insurance system. A great deal of attention was devoted to the professional situation of the respondents, because it had the greatest impact on the retirement decisions of the surveyed group. An important element of this survey was also to establish the family situation and its role in this process. The last part of the survey was focused on the life of retired persons in Poland as presented by the media.

An important element of this study is presentation of the decision-making models and an attempt to determine whether respondents made retirement decisions based on any of them.

The assumption was that the family had the greatest impact on the decision to retire. Considering how important this decision is, it was assumed that it was not taken independently. For this reason the social and psychological context was highlighted. Great emphasis was also placed on the impact of financial issues, especially upon those respondents who have been working longer than the retirement age specified in the Act.

The first part of the article concerns the notion of the decision and the decision-making process. The next part deals with decision-making models and the last presents research results that do not confirm all of the research hypotheses.

Characteristics of the decision

The term “decision” refers to a conclusion, settlement or resolution. It is an act of choosing one of two or more options. Researchers in the field of organisation and management have come up with a scientific definition of this word, according to which it is “a conscious,

non-random choice of one of many (at least two) possible modes of operation.”¹ The interpretation process is accelerated by the knowledge of the decision-making situation. Difficulties may be caused by an excess of irrelevant or lack of relevant data, as well as methods of interpretation.

We tend to selectively extract and organise data. An important role is played by the context, which provides the rules for determining the type of rationality and prediction. The pattern recognition process consists of four stages: image registration, pattern features extraction, combining features into systems and patterns recognition, the choice of interpretation. Decision-making takes place in parallel at different levels of generality, which speeds up the decision-making process even if information is incomplete.²

The criteria in the decision-making process may be of a quantitative or qualitative nature. For economic decisions, these are usually quantitative measures of profits, costs, benefits and losses. The values of the criteria are numerically expressed, it is possible to set the thresholds for individual options. For example, in the case of a decision on a loan, the loan instalment may be the basic criterion. The identifiable parameters include the number of instalments, repayment amount, commission added to the loan amount, the interest rate. The level of each parameter allows one to assess the loan offer and make a decision on taking advantage of the offer of a specific bank.

Subjective risk assessment is an important element. The coefficients assigned to individual events depend on the subjective risk assessment by the decision-maker.³

The subjective risk assessment may differ from the numerical one. Discrepancies are individual and depend on how the decision-maker perceives the risk of an event – as inevitable or accidental, voluntary.

Decision-making process

Irrespective of its complexity, the decision-making process comprises the entity making the decision (the decision-maker), a set of acceptable methods of operation, and elements of the external world. The benefits and the risk of uncertainty associated with the state of the external world are also worth adding here. The decision-maker is responsible for the effects of choosing a given solution. The accuracy of the decision should be guaranteed by a feasible set of acceptable methods of operation. It should contain at least two options, with “no decision being taken” as one of the options. The choice of one of the

¹ K. Bolesta-Kukułka, *Decyzje menedżerskie w teorii i praktyce zarządzania*, Warszawa 2000, p. 110; R.W. Griffin, *Podstawy zarządzania organizacjami*, Warszawa 2006, p. 282.

² T. Szapiro, *Co decyduje o decyzji*, Warszawa 1993, p. 149.

³ It is also worth noting the usually exposed risk features, namely: the uncertainty of the occurrence and possibility of loss (J. Michalak, *Refleksje nad pojęciem ryzyka*, “Ruch Prawniczy, Ekonomiczny i Socjologiczny” 2004, Vol. 1). The risk relates to the conditions in which the decision will be implemented and the consequences of the failure of the chosen option.

modes of operation, but also an absence of any action means the choice of action. And all elements around the decision-maker are a set of states of the external world that directly or indirectly influence the decision-making process.⁴ It is also worth recalling here that the decision-maker is not able to assess the probability of random events, because they are difficult to foresee and unpredictable.

Researchers argue about the number of phases of the decision-making process, but irrespective of their number, the phases form a logical, ordered sequence of actions leading to the selection of the best solution. Ideas for solutions can be created when we correctly formulate the problem and collect the necessary amount of reliable information.

Each situation of making a choice requires representation in a certain abstract system of concepts, *i.e.*, a model. The model consists of an abstract representation of the choosing entity and its rationality, a representation of the material world in which choices are made, and finally a description of the manner of making the choice. The “art of carving”, *i.e.*, the ability to extract from the surrounding complex reality a fragment that is being modelled, requires one to answer the following questions: who makes the decisions, what is their rationality, in what decision scenario and for what purpose can the model be used, what limitations must be met by the decision-making situation in order for the model to be used. When organising information about different decision-making models, it is worth grouping them according to the concepts directly related to the decision-making process itself.⁵

Decision-making models

The decision-making model is a synthetic analytical representation of a decision-making problem in the form of a mathematical, statistical, psychological model, *etc.*⁶

In the subject literature we come across models for decision trees, linear programming, multi-criteria programming, game theories or analytical hierarchy procedures.

The decision tree is aimed to simplify situation assessment. It begins at the top of the tree and presents the course of events and its effects. It allows one to consider all the relevant options of events, their effects, and then make the right decision, as if automatically. Decision trees are often used to simplify complex strategic challenges, in order to help understand the consequences of individual outcomes.

Linear programming is mathematical programming. This method allows one to determine decisions under rigid conditions and with a given assessment criterion. Decisions are presented as vectors, conditions as linear inequalities, usefulness – by means of

4 A. Holska, *Teorie podejmowania decyzji* [in:] *Zarządzanie, organizacje i organizowanie – przegląd perspektyw teoretycznych*, ed. K. Klincewicz, Warszawa 2016.

5 T. Szapiro, *op. cit.*, p. 93.

6 W. Rebizant, *Metody podejmowania decyzji*, Wrocław 2012, p. 31.

a linear function. The choice principle is to minimise (or maximise) the usefulness of the decision. It is usually interpreted as profit or cost. The decision in this model is also made automatically.

For multi-variable problems, we can use the multi-criteria programming model. The multi-criteria decision-making situation can be characterised as follows: the number of measurable or graduated objectives that describe the object of the decision is identifiable, a set of criteria formulated in relation to the objectives is the basis for assessment and, in addition, there is a phenomenon of competitiveness in relation to these objectives, which causes that a higher degree of achievement for one objective means a lower degree of achievement for other objectives. The established procedural algorithm is open and uses the concept of a satisfactory solution, but it is not an optimal solution due to the variety of objectives.

Game theory applies itself in the event of a conflict of interest. A game is a conflict situation for which we are looking for a solution. The player is a person analysing the situation and the strategy of the opponent's actions. Each move is rewarded or punished depending on the principle, pre-defined in the rules of the game, expressed in utility units. In non-personal games we talk about solutions among which the optimal variant is sought. There are many types of games. The most popular of them relate to a fixed or variable sum, fair or unfair assessment against the expected win and zero or non-zero sum. This method assumes that players act rationally, placing emphasis on their large computing (information processing) capabilities, and that they are aware of the actions of other players. Each player is guided by the principle of maximising his or her own benefits.

The analytical hierarchy procedure is used in complex problems. In this model, the main problem is broken down into simpler problems with establishing the hierarchical relations between them. The decision-making problem is presented in the form of a decision tree in which the top is the goal, the branches represent the decision-making criteria, and the last level presents the decision-making options to choose from.⁷

The choice of the decision-making method depends on the problem itself and the context in which it is set. Irrespective of the method used, the knowledge and aspirations of the decision maker are the decisive factors. A reference to models in this article is intended to emphasise the value of their use. The survey shows that respondents unconsciously used certain elements of individual models. I hope that this article may launch further searches for professional tools that will facilitate decision-making in everyday life.

Introduction to the survey

At any moment, we unknowingly create certain expectations concerning what will happen in the near future. Unexpected events cause a state of agitation and emotional reaction. In psychology it is noted that a person's emotional experience results in a tendency

⁷ W. Rebizant, *op. cit.*, p. 44.

to perform certain actions. From the point of view of decision analysis, all this means that emotions interact by referring to the hierarchy of values, influencing the modification of assessment and the speed of information processing during the decision-making process.⁸

The purpose of this article is to show the reasons for making retirement decisions based on a survey that was conducted in a group of ten seniors. An important element of the survey was to capture the financial, social and psychological context and establish their hierarchy.

The decision-making problem related to the decision to retire. Under Polish law, persons entitled to retire are those who have reached the appropriate retirement age. The general retirement age from 1 October 2017 is 60 for women and 65 for men.⁹ The average retirement age in the Member States of the European Union is 63 years for women and 64 years for men. The retirement age is increasingly linked to life expectancy. Beside Finland, this mechanism is also available in Cyprus, Denmark, Estonia, Greece, Italy, the Netherlands, Portugal and Slovakia.¹⁰

The defined-contribution principle, which is in force in Polish law, means that the pension amount depends on the quotient of the total amount of contributions paid and the number of years of life expectancy.¹¹ The old-age pension contribution is set at an equal rate for all insured persons, constituting 19.52% of the contribution assessment basis, *i.e.*, gross remuneration.¹² The total resources accumulated on the individual accounts of insured persons are divided by the parameter of further life expectancy. The Social Insurance Institution [Zakład Ubezpieczeń Społecznych, ZUS] calculates in this way the old-age pension amount. The longer a person stays professionally active, the higher his or her retirement benefit will be. After reaching the retirement age, each additional year of employment means that the benefit will be higher by *ca* 8%. For example: if a 60-year-old woman whose old-age pension has already been calculated by ZUS in the amount of PLN 1.7 thousand, had extended her professional activity by 5 years, her pension would have increased by about PLN 600. Given the fact that the old-age pension is granted for life, this example shows the importance of the retirement decision.

The presented situation is very simplified and does not take into account earlier legal regulations. Some retired persons who decided to take part in the survey, have exercised their right to an old-age pension under various legal systems, about which they informed

8 T. Szapiro, *op. cit.*, p. 151.

9 No specific insurance period is required – the most important thing are the resources accumulated on the pension account in ZUS.

10 Information available on the Trading Economics portal: <https://tradingeconomics.com/country-list/retirement-age-men?continent=europe> (online access: 1.6.2019).

11 Pursuant to Art. 26(4) of the Act of 17 December 1998 on pensions from the Social Insurance Fund (Journal of Laws of 2017, items 1383, 1386 and 2120 and of 2018, items 138 and 357), the President of the Statistics Poland announces on an annual basis a table of the average life expectancy of men and women: <https://stat.gov.pl/sygnalne/komunikaty-i-obwieszczenia/lista-komunikatow-i-obwieszczen/komunikat-w-sprawie-tablicy-sredniego-dalszego-trwania-zycia-kobiet-i-mezczyzn,285,6.html>.

12 Legal basis: the Act of 13 October 1998 on the social insurance system (consolidated text: Journal of Laws of 2009, No. 205, Text 1585, as amended). Importantly, the basis of the assessment may differ for different groups of insured persons.

during interviews. The current legal status applies only to a small part of the respondents. The situation is described on a case-by-case basis.

Description of the survey

The survey was aimed to identify the determinants of the retirement decisions made by seniors in Poland. The in-depth interviews conducted with ten seniors were aimed at understanding their decisions and to check which of the indicated contexts played the biggest role in them. And although the number of respondents as a research sample is relatively small, the group was diversified in terms of gender and location of “universities.” The survey should be considered as an initial contribution to further research developing the issue of retirement decisions. If it is continued, quantitative research will be needed.

The results of the survey are an analysis of the respondents’ experience in the field of the reasons for retirement. The in-depth interviews have been conducted based on the disposition for the interview according to five thematic blocks. The first block concerned the general premises for retirement – time, difficulties, independence in making a decision about retiring. At the beginning, the respondents were also asked where they have learned about the old-age pension system and about their rights, as well as whether the changes in the law contributed to their decision. It proves necessary to acquire and collect all the available knowledge about the pension system and pension entitlements from the point of view of decision-making models.

The next block focused on attractiveness, and later on the confrontation of ideas about life in retirement with reality. It also concerned the changes in the forms of spending leisure time before and after retirement, as well as the social situation (contacts with other people and evolving needs in this respect). The third block concerned financial issues before and after retirement. The fourth part of the survey related to the professional situation of the respondents, their relations with superiors and colleagues, and their involvement in the final years of their employment. The last part focused on the family situation of the respondents, in particular on the influence of their family on their decision to retire. Questions asked in this part related to the need to care for family members, but also to the health condition of the respondents and the reactions of their relatives to the retirement decision. And while the financial aspect was quite easy to identify among the answers given, the psychological and social aspects were more difficult to identify. For the purposes of this study, the social factor takes into account the professional situation, family situation and the reception of media messages on old age and life in retirement. Other issues were included in psychological factors.

The hypotheses made when preparing the study assumed that the family was at the top of respondents’ hierarchy of values and that the closest family members (partners, children) had the largest share in the decision-making process. Financial considerations will be another important value. It was assumed that they determine a longer stay in the

workplace after reaching the statutory retirement age. The last assumption was that the employer's influence on the retirement decision was of the least importance.

The conducted research took the form of field and telephone surveys, as individual in-depth interviews (IDI). The results of the survey do not allow for the verification of research hypotheses. Interviews were conducted in the form of free conversation according to the pre-established guidelines. An average interview lasted about one hour. The interviews were conducted in December 2018 and January 2019 by telephone or at the respondents' place of residence, or in public places such as a cafe or a senior club.

Respondents

Participants of the survey included ten retired persons – eight women and two men. Gender selection was random. The respondents included former clerks, teachers, one policewoman and one manual worker. They were selected based on the “snowball” principle, where participants were recruited by other participants. The researcher's personal contacts were also used.

The respondents are active people, most of them active in the structures of the Universities of the Third Age in Warsaw, Toruń and in two towns with nearly 20,000 inhabitants in the Wielkopolskie [Greater Poland] Voivodeship.¹³

Table 1. Characteristics of the respondents participating in the survey by age, gender, occupation, retirement age, place of residence and the form of contact used for the survey

| Respondent's code | Age | Gender | Occupation | Retirement age | Place of residence | Contact |
|-------------------|-----|--------|-------------------------|----------------|---|--------------|
| R1 | 65 | female | teacher | 55 | small town in Wielkopolskie Voivodeship | by telephone |
| R2 | 70 | male | teacher | 60 | small town in Wielkopolskie Voivodeship | by telephone |
| R3 | 63 | female | clerk | 60 | Warsaw | personal |
| R4 | 63 | female | policewoman | 55 | Warsaw | personal |
| R5 | 70 | female | clerk | 60 | Warsaw | personal |
| R6 | 70 | female | clerk | 64 | Warsaw | personal |
| R7 | 62 | female | clerk | 60 | Toruń | by telephone |
| R8 | 66 | female | clerk | 60 | small town in Wielkopolskie Voivodeship | personal |
| R9 | 64 | male | manual worker | 55 | small town in Wielkopolskie Voivodeship | personal |
| R10 | 72 | female | entrepreneur (employer) | 63 | Warsaw | personal |

Source: own study based on research results

¹³ The name of the town would facilitate identification of the respondents, also taking into account their functions, as discussed later in this article.

Basic data on each of the respondents are presented in the table below. Due to the fact that answers are coded, the table provides a brief description of the respondents taking part in the survey. The further part of the article contains references to individual respondent statements. For example, the R3 code means respondent No. 3: a 63-year-old woman who was a clerk and retired at the age of 60. Currently she is resident in Warsaw, and the interview was conducted in person, not by telephone.

Research results

The social and cultural context is important from the point of view of individual retirement decisions. For this reason, the interviews conducted with respondents were aimed at examining three main areas: the professional situation, the family situation and the image of a senior in Poland as presented by the media. The retirement age as defined in the relevant legal act was not the main reason for retirement decisions made by participants of the survey. Half of the respondents worked longer than the statutory retirement age would indicate. The results of the survey confirm that changes in the working environment determined leaving the job and exercising the right to an old-age pension, also among those respondents who worked longer. “I felt that I didn’t want to work anymore, because the conditions at work had changed. If the conditions hadn’t changed so much, if it weren’t for personal issues, I would probably have stayed longer” (R1). Changes in the management proved to be particularly important at this point. “They gave me such a hard time. Things were that bad that I thought: ‘Wait, I am well over the retirement age’ – because I was already 64 years old. Things were getting bad, I felt it clearly that I was disturbing, that my age was already bothering the new boss. Therefore, I asked myself: why should I suffer? The bosses were younger and younger and the cooperation was becoming more and more difficult” (R6). One of the respondents also mentioned the fact that the company in which she had been employed was ending its activity. “If I had had an opportunity to work longer, I probably wouldn’t have decided to retire. However, I had reached the retirement age, the company was being liquidated, so anyone who could be safely sent home was welcome” (R5). In the case of the only employer who participated in the survey, the situation was determined by the effects of the economic crisis of 2007-2009. “I intended to work for about 5 years more, but it was a rat race, undermining each other. My florists were in shopping centres, so there was aggression, bribery, taking over florists and other such horrible things. In addition, the economic crisis began, because it was 2010 – a crisis year for business. Florists, because I had a network of florists, were no longer profitable. Some of them were in the red, some gave only a small income” (R10). In the case of respondents R3, R7 and R8 who have been “waiting” for the retirement age, their remaining outside the labour market was also caused by changes in their workplace. “I had been waiting until the retirement age without working, I had been

waiting until 60. People of my age were the first not being allowed to retire early, so I was waiting for the last 2 or 3 years to retire, taking care of the house. [...] I didn't have a job, because the company I had been working for during the last 12 or 13 years was wound up and ceased to exist" (R3).

According to the theoretical retirement model, which analyses factors pushing elderly people out of the labour market and attracting factors, much attention is paid in the foreign subject literature to discrimination¹⁴ and stereotypes associated with elderly workers.¹⁵ The assumption that seniors' labour resources are under-utilised is very strong. Elderly people are perceived as individuals not interested in raising their professional competences, having lower learning capabilities and a lower ability to adapt to new conditions than younger people. Stereotypes also include less flexibility and energy at work, as well as reluctance towards new technologies.¹⁶ This was reflected in the respondents' answers.

None of the respondents noticed differences in the way elderly people were addressed in their workplace. But what they were able to observe, were issues related to raising the qualifications of elderly employees, who were not sent by the employer on courses and training sessions at all or at best were sent less often. However, this situation met with understanding on the part of the respondents. "In my section, three of us or so were at retirement age, the rest of the employees were younger. The employer believed that young people learn faster and quickly know everything. They tended to send young people to training sessions. This was not an overt policy, but young people were more eagerly sent. I didn't blame them, because they were aware that I could leave at any time, that it wasn't worth counting too much on me, investing in me, as I could leave at any moment, because I had already worked out my old-age pension" (R6).

However, the further part of the survey provides interesting conclusions. There are strong social expectations in Poland indicating grandparents as the main caregivers of grandchildren¹⁷ or elderly parents. Study hypotheses also assumed a strong influence of the family on the decision to retire, mainly in the context of providing care services for individual family members. However, the vast majority of respondents made their own decisions about retirement. "At that time, my daughter had only Johnny [the grandson], but they got along. My children have never made it known that I should retire. Now I'm calling them to ask if I could help them. I am helping them, but it has never been that I have made this decision because of the children. And the parents were already gone" (R6). If they needed support in making this decision, they consulted their closest family.

¹⁴ J. Angus, P. Reeve, *Ageism: A Threat to "Aging Well" in the 21st Century*, "Journal of Applied Gerontology" 2006, No. 25.

¹⁵ M. Campion, R. Posthuma, *Age stereotypes in the Workplace: Common Stereotypes, Moderators and Future Research Directions*, "Journal of Management" 2009, No. 35.

¹⁶ K. Turek, *Znaczenie wieku na rynku pracy – model relacji pomiędzy pracownikiem i pracodawcą*, "Studia Socjologiczne" 2015, No. 2, p. 169.

¹⁷ Ł. Krzyżowski, *Strategie przechodzenia na emeryturę w Polsce po 1989 roku. Oczekiwania społeczne i praktyki kulturowe*, "Studia socjologiczne" 2011, No. 2.

“I’ve been trying to reach this decision for a month and a half, weighing up the pros and cons; asking my family about their opinions and what decision I should make. Discussing with my sister what to do next. And I’ve made the decision myself” (R4).

Although the old-age pension system determines who and when one can retire and this information is generally available, the issues of entitlements are not so obvious. HR departments at the workplace and their own search for information turned out to be a great support for elderly employees. It appears that direct contact with representatives of the Social Insurance Institution never took place or was needed only to determine the old-age pension amount itself.

“The accountant at my workplace provided me with information on my entitlements, what should be done. I was also once – as far as I remember – at ZUS to find out how much more I could work there and earn some extra money. Generally speaking, my documents were submitted to ZUS by the HR department” (R1). Such answers were given by four persons. Other respondents had knowledge in this regard due to the nature of their tasks. Being administrative staff, they were up to date with the relevant law and with its amendments that had come into force in a given period. “At the end of my professional career, I worked in the management board office and was up to date with legal regulations, so I could also follow the regulations that concerned me” (R5). One out of the ten respondents admitted that she had needed psychiatric support. The psychiatrist, knowing that the respondent had previously had negative experiences with a dishonest employer, and with a sick son at home had advised her not to take up a new job and encouraged her to stay at home with her child. “I was chosen to work in the clinic’s registration office and I went to a psychiatrist I knew to ask him for help in deciding what to do. Should I leave the sick son at home, not having any control over him, or rather the son is more important. And he [the psychiatrist] decided that if my financial situation allowed me not to work, I should stay at home, because my son would not be able to manage alone and control over him was important. And so it happened” (R3).

The first contact with ZUS related to the calculation of the amount of my old-age pension. “I remember that when I was 60, something legally was happening and my accountant advised me to quickly apply for the calculation of my old-age pension. ‘After all, you may have it calculated and suspend it.’ Some changes unfavourable for us were coming into force. Even my employer didn’t know that I had submitted the pension claim. I received some documents. And together with the claim for pension calculation I submitted a suspension request. I’ve worked for five years more” (R6).

Only one respondent mentioned that he had decided to retire together with his colleagues from work, which was also directly caused by changes in the workplace. “[...] I left because my friends were leaving, the director was leaving, a whole group of us left then. There was a change in the senior management and several persons left. Such was the situation. In any case I had been working longer than I could. [...] I had been working because there was no need for me to leave earlier. When a group of us decided to leave, I left together with the director. Our whole team left then. It was just easier to leave together” (R2).

So why did the respondents who have reached the statutory retirement age decide to work for those subsequent months and years? It appears that, both in the group that retired according to age, and among those who worked longer, it was not financial issues that played a decisive role. "The decision to retire was spontaneous. [...] I didn't think about whether it was advantageous from the financial point of view, and in fact it isn't profitable for me at all" (R1). Pension law amendments were important only for one of the respondents. "[...] anyone who could was running away for retirement, because it was known that the legislation would change and that we would have to work longer after reaching 60 years of age. It was the last period when one could escape" (R8). Apart from R8 and R2, who retired as part of a group, the remaining respondents mentioned other dilemmas. In this regard, the main question faced by the respondents at that time was: "What next?" "I have an old age pension as a former uniformed services employee. When I entered the service, according to the legislation in force, I could leave after 15 years of service. However, in such case my pension would have been limited to 40%. And I have an employment period of 35 years, so I am paid 75% of my last salary. It was rather connected with switching from acting on orders, to a slightly different life. Assuming that I don't have to do anything anymore, I can do what I like" (R4).

There were several ideas and ways of filling the free time when retired. The common denominator for persons participating in the survey was: University of the Third Age. "I was preparing for retirement much earlier, I started working on the topic. I was looking for opportunities to organise my time. That's when I came up with the idea of the University of the Third Age, which in my opinion is a brilliant proposal for retired persons" (R5). It is around this institution that the life of the respondents rotates. As it turned out, pensioners in Poland do not have much free time. "Pensioners do not have time. I found this University of the Third Age, I have tai chi, I have an allotment to tend from spring to autumn and I don't have time" (R7). They have many different activities and although these activities have a completely different character than before, the pensioners are very active. "I have more time. I used to run only once a week, and now I run every other day" (R6). Thanks to the university classes they learn many new things for which, as they say, they had never had time before. "I got involved in the University of the Third Age. I learned to swim thanks to the regular classes at the swimming pool. This year almost 200 people come to classes out of about 350 people enrolled. There is a very rich cultural programme: cinemas, museums, the Royal Castle, lectures twice a week, foreign languages, computer science, several types of gymnastics. There is really a lot to choose from. There are friendly meetings, birthdays, name days, when desks are joined together and homemade cakes grace the tabletops" (R3).

Three out of ten respondents are single persons who have never had a family or children. In six cases, the provision of care services for elderly parents or grandchildren or other family members did not concern the respondents at the time of retirement. Only one of the respondents mentioned the need to take care of her sick son, as was mentioned earlier. And although the situation of these people has changed, they still do not take

care of their grandchildren on a regular basis. “Sometimes I call my daughter to ask if she needs my help, but it’s not every day. The worst time is when the children get sick, then I am more needed and I help how I can, but my children know that I also have my own affairs and I won’t always help them. We’ve learned to respect our needs. They [my daughter and my son-in-law] know that I have my own affairs” (R7).

The University of the Third Age gives a sense of belonging, and provides many new social contacts. Besides, leaving the workplace loosens professional contacts over time. “When I worked and the children were small, it was not much time for such meetings outside the family. Now we have grown-up children, we help with the grandchildren occasionally, so there was a lot of time to spare, I was looking for other people and they are around me. I hadn’t noticed them before, and now we go for various trips together, we meet for coffee. [...] And I don’t have any contact with people from my workplace. Sometimes someone will write something from holidays, but we have not met for a long time” (R8). It was the University of the Third Age that allowed them to meet other seniors in their locality. “You see people around you. It turns out that this lady lives two blocks away, another one three, one here and the other there. We feel close to each other” (R5).

The statements cited indicate the social changes that the respondents have observed. They also notice financial changes. The survey has also shown diversity in terms of place of residence. Respondents from large cities, such as Warsaw or Toruń, use offers addressed to seniors and appreciate them. “Cinemas are cheaper before midday, about PLN 15. Being retired, I can use public transport for half the price, just like students. Moving around the city paying full price – it is expensive” (R3). Respondents from smaller towns do not notice these discounts, because such offers have not yet been developed in their towns. “It’s all a mockery, they don’t give many [discounts for seniors]. How large a discount do you have, PLN 2? The bus, for example, when I go to the poviát (district authority), there is no discount for seniors, discount is only on longer routes” (R2). It is worth noting here that Universities of the Third Age are trying to obtain discounts for their members, which in turn is already felt by all respondents. “[...] our members go to the swimming pool, they have much lower prices. When we take part in various types of classes, they are free or at a lower rate, so there is a possibility, but this applies only to university members” (R1).

Attempts to confront the media coverage of old age, the prevailing opinions about seniors have failed. Before retiring, the respondents were not interested in the subject at all. “I watched television. Sometimes there was a pensioner in a TV series, an elderly man, but I didn’t pay much attention to it. And today? The elderly people, as you say, are my colleagues with whom I spend my free time entertaining ourselves, so I have nothing to compare here” (R9). Besides, as it turns out, respondents do not spend much time watching TV or do not watch it at all. “I do not watch TV. I only read about such seniors who are active. I don’t know what’s happening with those who stay at home, who are ashamed, afraid to leave the house or simply don’t want to” (R3).

Finally, I would like to recall the words of one of the respondents, which will help illustrate the health condition of seniors. The surveyed group was very active, in good

psychophysical health. For some respondents, the first days of retirement went unnoticed because they left in summer, in the period when they were usually on holiday, and then they gradually filled their free time with additional activities. The respondents looked satisfied with their current situation. “Although I did like my job, I felt a kind of freedom. But I also observe people who were tired in their work, if not all the time, then in the last period, for various reasons. Most often these are personal problems with the boss or colleagues. If there is someone who doesn’t quite suit you, someone who doesn’t value you very much, someone who harasses you, insults you – people are just happy [in retirement]. They often say that many of the ailments they had once when working – are gone. Some headaches, some neuroses, some forms of depression – this goes away because there is no additional work-related stress, there is no additional stressor. Many people praise retirement. Perhaps I meet in such groups, but there are only a few people who would tell me that they are experiencing some trauma on account of their retirement” (R1).

None of the respondents believed that the decision to retire caused him or her a sense of danger and anxiety. It was more about feeling lost, about how to spend your free time. Additional development opportunities and forms of spending free time provided many positive experiences. It was said several times that it was one of the best decisions of their lives. “I often say that it has never been as good as now. I have time for myself. I don’t have to do anything and I can do almost everything” (R8). This sense of satisfaction results from an adequate pension level. Years of work and age allowed the participants of the survey to live the life they wanted. “Fortunately, I have a pension that is sufficient to support me” (R9). And although the pension is lower than the monthly salary of the respondents, they live peacefully, enjoying cultural and social life, and enjoying good health.

Summary

The results of the survey present factors that influence the retirement decision. The information obtained from respondents can be grouped and provides joint conclusions. The main reason for respondents’ retirement was the situation at the workplace. The retirement age of some of the respondents coincided with the collapse and closure of their respective companies. The decisive factor was also the change of senior management, management boards and difficult cooperation with the new superiors. Respondents who had been “waiting” for the retirement age, also spoke unfavourably about their last employer. Negative experiences prompted them to stay outside the labour market. The hypothesis regarding family concerns as the main factor influencing retirement decisions has not been confirmed. Although some of the respondents consulted their relatives, the decision was made independently in each case. Assumptions concerning the need to care for the younger (grandchildren) or older (parents) generation in the respondents’ family did not turn out to be true either. There were often talk of fatigue, burnout, or “dealing with superiors.”

Their health condition allows respondents to continue an active life. Thanks to the University of the Third Age, they can enjoy many cultural and sporting attractions. This place has automatically started to fill their free time, which has significantly increased after the end of the respondents' professional activity.

Financial changes after retirement, although noticeable, do not limit the further activity of respondents in any way. Financial issues were not one of the conditions in the decision-making process. Seniors may also take advantage of age-related discounts. These are much higher in large cities, where the offer addressed to pensioners is much broader.

The image of the senior in the media was not known to the respondents. Some respondents directly said that there was no such image. And some just do not watch TV. Since this topic is not interesting for them, this part of the survey did not bring any significant conclusions.

Contact with respondents and analysis of their statements give a positive picture of old age. They seem to be satisfied people, who have time to experience new things, visit new places and meet new people. And, as they emphasise, which was noticeable in each interview, "now I don't have to do anything and I can do everything."

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Indywidualne decyzje emerytalne w kontekście finansowym, społecznym i psychologicznym (analiza przypadków)

Artykuł poświęcono problematyce podejmowania decyzji o przejściu na emeryturę. Odniesiono się do procesu decyzyjnego i modeli, które mają na celu ułatwienie wyboru. Ważnym elementem tego procesu jest rozumienie samego problemu oraz zebranie rzetelnych informacji, które pomogą w ocenie sytuacji. Nieodłącznym elementem podejmowania decyzji jest ryzyko dotyczące zdarzeń niepewnych, nieprzewidywanych, które mają wpływ na skutki wyboru. Warto również zadać sobie pytanie, czy osoba podejmująca decyzję posiada wystarczającą wiedzę na temat samego problemu oraz możliwości jego rozwiązania. Artykuł przedstawia wyniki pilotażowego badania przeprowadzonego na grupie seniorów uniwersytetów trzeciego wieku z wybranych miast w Polsce dotyczącego ich indywidualnych decyzji emerytalnych. Badanie miało na celu ustalenie wpływu wybranych czynników na decyzję o przejściu na emeryturę, a także hierarchii wartości tych czynników w badanej grupie. Analiza odpowiedzi pozwoliła podzielić je na obszary – finansowy, społeczny i psychologiczny. Wyniki badań eksponują istotę wpływu poszczególnych czynników. Oceny respondentów są subiektywne, jednak posiadają wspólne elementy.

Słowa kluczowe: proces decyzyjny, ubezpieczenia emerytalne, starość, decyzje emerytalne, uniwersytet trzeciego wieku

Caring obligations and transition to retirement among people aged 50-69 in Poland

Family situation and caregiving duties may increase the chances of retirement among people in older productive age groups, mostly among women, who take care of dependent family members or grandchildren more often than men. The purpose of the paper was the analysis of the determinants of retirement among Poles aged 50-69 taking into account their caring obligations. Data from the two waves of the Polish Generations and Gender Survey (GGG-PL) carried out in the years 2010-2011 and 2014-2015 were used. The obtained results show that regular care provided to an adult was negatively associated with the probability of retirement for men, while this relationship was positive for women, although not statistically significant. However, the co-residence with an older parent increased the likelihood of retirement for women which may be a proxy for providing care to a dependent adult. It should be highlighted that this association holds for economically inactive individuals. Moreover, caring for grandchildren increases the probability of retirement, notably for not employed women.

Key words: care for dependent adults, care for grandchildren, caregiving, Generations and Gender Survey (GGG-PL), retirement

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Introduction

Ageing population in Poland, *i.e.*, the growing number and share of older people in the population, will be accompanied by a decline in the total population and in that of those of working-age and by the ageing potential of labour resources (*i.e.*, the growing share of people of an immobile age).¹ These changes entail many socio-economic effects, including an increase in expenditure on various types of benefits for the elderly.² To counteract the negative consequences of an ageing population, it is proposed, *inter alia*, to increase the employment of people less visible on the labour market (young people, women and persons of pre-retirement age), as well as to increase the effective (average) retirement age. In this context, one of the key issues is to mobilise people in the older working age groups and to keep them in the labour market. One way to achieve this is to improve working conditions, job quality and satisfaction, because study results reveal a relationship between job satisfaction and productivity, absenteeism and leaving employment.³ Family and caring obligations can also be a factor “pushing out” those at near-retirement age from the labour market. The intensive care provided for dependent elderly people is correlated with a deterioration in the carer’s health condition and an early exit from the labour market, especially among people with lower qualifications.⁴ Similarly, caring for grandchildren can contribute to early retirement, especially as regards women.⁵

It is therefore interesting to examine what factors affect the retirement decision in Poland. In particular, I would like to check to what extent (if at all) the personal demographic and social characteristics of individuals, their family situation and caregiving obligations are associated with the decision to exit the labour market. The main objective of this paper is therefore to analyse the determinants of retirement in people aged 50-69 in Poland. The paper consists of five parts. The next part presents a review of the literature regarding the determinants of retirement, as well as the objectives of this paper and the research questions posed. The third part presents data source and analysis methods. The subsequent part describes the results of the analyses. The paper ends with a summary.

1 Główny Urząd Statystyczny [Statistics Poland], *Prognoza ludnościowa 2014-2050*, Warszawa 2014.

2 European Commission, *The 2018 Ageing Report. Economic and budgetary projections for the 28 EU Member States (2016-2070)*, “European Economy Institutional Paper” 2018, No. 079.

3 S. Gazioglu, A. Tansel, *Job satisfaction in Britain: individual and job related factors*, “Applied Economics” 2006, No. 38 (10).

4 D. King, L. Pickard, *When is a carer’s employment at risk? Longitudinal analysis of unpaid care and employment in midlife in England*, “Health & Social Care in the Community” 2013, No. 21 (3).

5 R.L. Lumsdaine, S.J.C. Vermeer, *Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren*, “Demography” 2015, No. 52 (2).

Retirement determinants – a subject literature review, objectives of the paper and research questions

Cessation of employment is one of the most important events in an adult's life that affects the subjective quality of life.⁶ The decision to retire depends on many factors both at the macro and micro levels. The retirement process differs significantly between individuals, depending on their individual work history, health condition and attitudes towards an early exit from, or staying longer in, the labour market.⁷

At the macro level, the following constitute strong determinants of individual decisions regarding (early) retirement: the national pension system, the statutory retirement age and the possibility of early retirement.⁸ In addition, the labour market situation is a key factor in “pushing out” people at near-retirement age from or keeping them on the labour market.⁹ Cultural realities regarding the professional work of people in older working-age groups and their early exit from the labour market are also significant factors that determine any intentions and plans to leave employment. It is worth quoting here Justyna Wiktorowicz's results, who has shown that over 50% of employed persons aged 45-69 in Poland plan to retire as soon as possible,¹⁰ which may reflect the economic and cultural determinants of decisions on (early) exit from the labour market.

Personal characteristics are also major determinants of retirement decisions and of the final moment of their implementation. Gender is one of the key factors: women retire earlier than men,¹¹ which on the one hand may be associated with the difference in the statutory retirement ages between the genders, and on the other hand with the greater involvement of women in caring for the elderly or grandchildren. Ill health and long-term health problems also contribute to an earlier exit from the labour market.¹²

6 M. Wang, K. Henkens, H. van Solinge, *A review of theoretical and empirical advancements*, “The American Psychologist” 2011, No. 66 (3).

7 O. Gough, *Factors that influence voluntary and involuntary retirement*, “Pensions: An International Journal” 2002, No. 8 (3).

8 *Ibid.* More about the determinants of retirement decisions can be found, e.g., in: G. Kula, *Decyzja o przejściu na emeryturę – przegląd literatury*, “Ekonomista” 2007, No. 2 and A. Ruzik-Sierdzińska, *An Attempt to Identify Factors Influencing Retirement Decisions in Poland*, “Folia Oeconomica. Acta Universitatis Lodziensis” 2018, No. 4 (336).

9 M. Unt, E. Saar, *Determinants of Retirement and Late Careers in Estonia* [in:] *Delaying Retirement*, ed. D. Hofäcker, M. Hess, S. König, London 2016.

10 J. Wiktorowicz, *Wydłużenie aktywności zawodowej czy przejście na emeryturę? Studium mikroekonomiczne*, “Studia Demograficzne” 2014, No. 2 (166).

11 *Ibid.*; A. Chłóń-Domińczak, *Retirement Behaviour in Poland and the Potential Impact of Pension System Changes*, ENEPRI Research Report No. 61, 2009.

12 S.M. Alavinia, A. Burdorf, *Unemployment and retirement and ill-health: A cross-sectional analysis across European countries*, “International Archives of Occupational and Environmental Health” 2008, No. 82 (1); M. Damman, K. Henkens, M. Kalmijn, *Women's Retirement Intentions and Behavior: The Role of Childbearing and Marital Histories*, “European Journal of Population” 2015, No. 31 (4); M. Fleischmann, F. Koster, *From Early Exit to Postpon-*

For example, the results of analyses based on SHARE¹³ data have shown that over 37% of retired people aged 50-64 assessed their health condition as poor compared to 18% of employed people of the same age.¹⁴ In addition, half of the retirees have experienced long-term health problems compared to 36% of employed persons aged 50-64. Similarly, people enjoying excellent health were more likely to be employed after reaching the statutory retirement age.¹⁵ Furthermore, employed persons aged 45-69 who have rated their health condition more favourably were less likely to retire as soon as possible.¹⁶

Education is another factor differentiating the probability of retiring. Better educated people plan to exit the labour market and they actually stop working later than people with lower educational attainment (except for women with basic vocational education).¹⁷ Analyses carried out by Agnieszka Chłoń-Domińczak for Poland have shown that people with lower educational attainment are more likely to exit early the labour market than those with a better education.¹⁸ Also, according to J. Wiktorowicz, employed persons with tertiary-level education and aged 45-69 less frequently planned to retire as soon as possible than did less educated people.¹⁹ And according to analyses carried out by Martie Gillen and Claudia J. Heath,²⁰ tertiary education reduced the probability of early retirement among married women.

The financial situation in the period preceding retirement also significantly affects the decision to stop working. The results of studies carried out by Marleen Damman, Kène Henkens and Matthijs Kalmijn show that the less favourable financial situation of women at pre-retirement age has reduced the likelihood of an early exit from the labour market.²¹ However, the results of other analyses have shown that people assessing the financial situation of a household as negative were more likely to continue working after reaching the retirement age.²² Similarly, results of analyses for Poland indicate that higher earnings in the pre-retirement period are a strong incentive for extended professional activity.²³

ing Pension: How the Dutch Polder Model Shapes Retirement [in:] *Delaying Retirement*, *op. cit.*; M. Kallestrup-Lamb, A.B. Kock., J.T. Kristensen, *Lassoing the Determinants of Retirement*, "Econometric Reviews" 2016, No. 35 (8-10); J. Liwiński, A. Giza-Poleszczuk *et al.*, *Dezaktywizacja osób w wieku okołoemerytalnym. Raport z badań*, Warszawa 2008.

13 Survey of Health, Ageing and Retirement in Europe (SHARE).

14 S.M. Alavinia, A. Burdorf, *op. cit.*

15 A. de Wind, S. van der Pas *et al.*, *A life course perspective on working beyond retirement—results from a longitudinal study in the Netherlands*, "BMC Public Health" 2016, No. 16 (499).

16 J. Wiktorowicz, *op. cit.*

17 S.M. Alavinia, A. Burdorf, *op. cit.*; M. Unt, E. Saar, *op. cit.*

18 A. Chłoń-Domińczak, *op. cit.*

19 J. Wiktorowicz, *op. cit.*

20 M. Gillen, C.J. Heath, *Women's Timing of Receipt of Social Security Retirement Benefits*, "Journal of Family and Economic Issues" 2014, No. 35 (3).

21 M. Damman, K. Henkens, M. Kalmijn, *op. cit.*

22 A. de Wind, S. van der Pas *et al.*, *op. cit.*

23 A. Chłoń-Domińczak, *op. cit.*

The family situation is another factor differentiating the timing of retirement, especially for women. Single women were more likely to continue working, while having a partner was associated with early retirement and unemployment.²⁴ This may be due to the fact that married women often retire at a similar time as their spouses, who are, on average, several years older.²⁵ It is worth noting that no such relationship has been noted among men. The results of the M. Gillen and C.J. Heath analysis²⁶ have shown that a higher percentage of married women than single women planned and ultimately opted for early retirement. What is more, divorced women intended to retire later than married women and realised this intention later, while remarried women did not differ in this respect from women remaining in their first marriage. M. Damman, K. Henkens and M. Kalmijn have also shown that women who had given birth to a child at a later age and still lived in the same household with their children intended to retire late and did actually retire relatively late.²⁷

The results of the analyses show that people aged 50-69, mainly women, are largely involved in caring for other family members – dependent elderly persons or grandchildren.²⁸ The results of the analyses carried out for Poland also confirm that women of this age take care of other people more often than do men.²⁹ Support for third persons can also be a factor limiting labour market participation and reducing the number of hours worked, and in some cases may even lead to plans for and final decisions on (early) retirement.³⁰ This can be associated with an overburdening of care-giving duties and professional work, which leads to a deterioration in the carers' health condition.³¹ All the more so since many analyses document the negative impact of caring for the elderly on the health condition and life satisfaction of carers.³² The results of analyses carried out by Madelin Gomez-Leon, Maria Evandrou *et al.* have also shown that the personal care

24 S.M. Alavinia, A. Burdorf, *op. cit.*; M. Damman, K. Henkens, M. Kalmijn, *op. cit.*

25 L. Hospido, G. Zamarro, *Retirement patterns of couples in Europe*, "IZA Journal of European Labor Studies" 2014, No. 3 (1).

26 M. Gillen, C.J. Heath, *op. cit.*

27 M. Damman, K. Henkens, M. Kalmijn, *op. cit.*

28 N. Gerstel, S.K. Gallagher, *Men's caregiving: gender and the contingent character of care*, "Gender & Society" 2001, No. 15 (2); K. Haberkern, T. Schmid, M. Szydlik, *Gender differences in intergenerational care in European welfare states*, "Ageing & Society" 2015, No. 35 (2).

29 A. Abramowska-Kmon, *Determinanty sprawowania opieki nad starszymi rodzicami w Polsce w świetle danych badania GGS-PL*, "Studia Demograficzne" 2015, No. 2 (168); A. Abramowska-Kmon, I.E. Kotowska, *Usługi opiekuńcze dla osób starszych* [in:] *Rynek pracy i wykluczenie społeczne w kontekście percepcji Polaków – Diagnoza Społeczna 2009*, ed. I.E. Kotowska, Warszawa 2009; P. Czekanowski, *Family carers of elderly people* [in:] *Family caregiving for the elderly in Poland*, ed. B. Bień, Białystok 2006.

30 D. King, L. Pickard, *op. cit.*; J. Liwiński, A. Giza-Poleszczuk *et al.*, *op. cit.*

31 R. Schulz, P.R. Sherwood, *Physical and mental health effects of family caregiving*, "Journal of Social Work Education" 2008, No. 44 (3).

32 N.F. Marks, J.D. Lambert, H. Choi, *Transitions to caregiving, gender, and psychological well-being: A prospective U.S. national study*, "Journal of Marriage and Family" 2002, No. 64 (3); R.J.V. Montgomery, J.M. Rowe, K. Kosloski, *Family Caregiving* [in:] *Handbook of gerontology: evidence-based approaches to theory, practice, and policy*, ed. J.A. Blackburn, C.N. Dulmus, New Jersey 2007; R. Schulz, P.R. Sherwood, *op. cit.*

of an elderly person on a broader scale was associated with earlier exit from the labour market for both women and men.³³

Caring for grandchildren can also result in early exit from the labour market, especially in countries where the institutional care of young children does not meet demand.³⁴ The results of analyses for Poland published by J. Wiktorowicz have shown that employed people aged 45-69 who were not burdened with childcare, were most likely to extend their professional activity.³⁵ It should be also noted that married women, when there is a need to take care of their grandchildren, limit the number of hours worked weekly, while those who live with their grandchildren in one household are less likely to remain in employment than others.³⁶ It is worth presenting here the results of the analysis of opinions expressed by respondents aged 50-69 participating in the GGS-PL survey on the responsibility of adult children to care for their elderly parents. The vast majority of the analysed population (84%) agree or strongly agree with the view that children should be responsible for taking care of parents when they are in need. However, interestingly, almost half of the respondents aged 50-69 disagreed or strongly disagreed with the opinion that children should adjust their professional life to the needs of their parents, which suggests a preference for combining care and professional responsibilities rather than giving up on work. It should be also emphasised that one in two respondents aged 50-69 disagreed with the opinion that when parents are in need, their daughters should take care of them more than their sons. In turn, the vast majority of respondents aged 50-69 (68%) agreed or strongly agreed with the view that grandparents should take care of their grandchildren if their parents are not able to do so.

The aim of this paper is to identify factors differentiating the probability of retiring among people aged 50-69 in Poland, taking into account their personal socio-demographic and economic characteristics as well as family and caring obligations. The paper focuses on the relationship between caring for other people and retirement. In view of the above theoretical considerations, I hope to gain answers to the following research questions:

1. How do the personal characteristics of respondents (gender, age, educational attainment, marital status, labour market status, place of residence, health condition, household income situation) determine the probability of retiring?
2. Do the direction and intensity of the relationship between the explanatory variables and the explained variable of the model differ for women and men?
3. Does (and if yes, how) caring for dependent adults affect the probability of the transition to retirement?
4. Does caring for grandchildren contribute to the retirement transition?

33 M. Gomez-Leon, M. Evandrou *et al.*, *The dynamics of social care and employment in mid-life*, "Ageing & Society" 2017, No. 39 (2).

34 R.L. Lumsdaine, S.J.C. Vermeer, *Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren*, "Demography" 2015, No. 52 (2).

35 J. Wiktorowicz, *op. cit.*

36 C. Ho, *Grandchild care, intergenerational transfers, and grandparents' labor supply*, "Review of Economics of the Household" 2015, No. 13 (2).

Data and analytical approach

Data and variables

These analyses have been carried out with the use of data from the first and second wave of the Generations and Gender Survey (GGs-PL), implemented by the Institute of Statistics and Demography SGH in cooperation with the Statistics Poland [Główny Urząd Statystyczny]. The first wave of the survey was carried out at the turn of 2010 and 2011, while the second in 2014. This survey was conducted under the international Generations and Gender Programme (GGP).³⁷ It was aimed to obtain information on demographic processes in Poland allowing one to understand the causal mechanisms concerning, among others, the formation of families, development and dissolution, intergenerational relations or changes in the social roles of women and men.³⁸ In addition to the family, and professional, educational and migration biographies of respondents aged 18-84, the study has also collected information about their financial situation and social contacts, as well as about their standards, values and intentions. The original panel database contained information on nearly 12.3 thousand respondents aged 21-84. For the purposes of the present analyses, the sample has been limited to persons aged 50-69 in the first wave, who were not retired and for whom information on their labour market status was also collected in the second wave. The final analytical database contained information on over 2,200 persons.

Methods of analysis

To answer the research questions, *i.e.*, to define the determinants of retirement decisions taken between the first and second wave of the survey, logistic regression models have been estimated. The dependent variable was a binary variable created on the basis of information on the labour market status in the first and second wave of the survey, where 0 – means continuation of professional activity (employment or remaining unemployed) or remaining economically inactive (without acquiring old-age pension rights) in both waves of the survey, while 1 – means transition to retirement between the first and second wave of the survey (regardless of the labour market status in the first wave, except for persons already retired).³⁹ The models were estimated for people aged 50-69 who were not retired at the time of the first interview, separately for those employed and not employed

37 More information on the website: www.ggp-i.org. Access to the international, harmonised GGS database for registered users is free.

38 I.E. Kotowska, J. Józwiak, *Panelowe badanie przemian relacji między pokoleniami, w rodzinie oraz między kobietami i mężczyznami: Generacje, Rodziny i Płeć Kulturowa – GGS-PL*, “Studia Demograficzne” 2011, No. 1 (159); I.E. Kotowska, *Panelowe badanie przemian relacji między pokoleniami, w rodzinie oraz między kobietami i mężczyznami jako podstawa diagnozowania zmian demograficznych w Polsce*, “Studia Demograficzne” 2017, No. 2 (172).

39 Retirement should be understood as the withdrawal from the labour market of professionally active people (employed and unemployed) and the acquisition of old-age pension rights by the economically inactive people.

(unemployed and economically inactive) at the time of the first wave of the survey. Such a division allowed one to check whether the same factors differentiated the probability of retiring in a similar way. In addition, all models were estimated separately for both genders to check the direction and intensity of the relationship between the explanatory variables and the variable explained in the models.

The logistic regression model is one of many models that can be applied to analyses for a binary dependent variable. It may be written as follows⁴⁰:

$$P(y_i = 1) = \frac{\exp(\beta_0 + \mathbf{x}\boldsymbol{\beta})}{1 + \exp(\beta_0 + \mathbf{x}\boldsymbol{\beta})}$$

where:

$$\mathbf{x}\boldsymbol{\beta} = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k.$$

β_0 – constant in the model

In all models, independent variables were the basic socio-demographic variables of individuals (gender, age, place of residence, self-assessment of health condition, marital status,⁴¹ co-residence with a child, co-residence with a parent, having grandchildren) and the variable describing the economic situation (subjective assessment of the financial situation of the household⁴²), educational attainment and binary variables describing the regular care of an adult or grandchild during the first wave of the survey. In addition, a variable describing the labour market status (employed, unemployed, economically inactive), which was omitted in models estimated separately for employed and not employed people, was included in models for the entire population aged 50-69.

Almost all independent variables (with the exception of age and subjective assessment of the household's financial situation) were included in the model as qualitative variables recoded into binary variables, respectively. In this way, it was possible to distinguish factors differentiating the probability of retirement among people aged 50-69. In all estimated models, the reference categories of qualitative variables were as follows: gender (ref. man), educational attainment (ref. lower-secondary and lower), marital status (ref. without a partner), co-residence with a child (ref. no), co-residence with a parent (ref. no), having grandchildren (ref. no), labour market status (ref. employed), self-assessment of health condition (ref. good health), place of residence (ref. rural area), regular care of an adult (ref. no), regular care of grandchildren (ref. no).

⁴⁰ See, for example, J.M. Wooldridge, *Introductory econometrics: a modern approach*, Mason 2006.

⁴¹ This variable covered the following two categories: persons in partnership (formal or not) and persons without a partner.

⁴² In the present analyses, a variable describing the subjective assessment of the household's financial situation was used to assess the economic situation of a household: "How do you assess the current financial situation of the household, also taking into account the income contributed by other household members to the common budget? Is it easy for your household to 'make ends meet'?" with possible answers: 1. very difficult, 2. difficult, 3. rather difficult, 4. rather easy, 5. easy, 6. very easy. To sum up, the higher the value of this variable, the better the household's financial situation.

Table 1 presents descriptive statistics for the explanatory variables and those explained in the models whose specification has been described above. Women constituted 55% of the analysed group of people aged 50-69 who were not retired during the first wave of the GGS-PL survey. People aged 50-54 (44%) were in majority, and people aged 65-69 (4%) – in minority. Three fourth of the analysed sample were people with secondary or post-secondary education, 14% had third-level education, while almost every fifth person had lower secondary or lower education. More than 70% were people in partnerships (formal or not), however, it is worth noting that these shares differed significantly for women and men: almost 2/3 of women and 80% of men belonged to this marital status category. Almost half of the surveyed population lived with their children, women slightly more often than men (51% compared to 46%), while every tenth person lived with an older parent. Grandparents constituted 57% of the analysed group, women more often than men (62% compared to 50%). In turn, 47% of the examined sample assessed their health condition as good or very good, less frequently men (50%) than women (58%). As far as regular care of an adult is concerned, this situation concerned every tenth person, women were slightly more often involved in such activity than men (13% vs. 8%). Similarly, 15% respondents declared regular care of their grandchildren, women more often than men (19% vs. 11%). Persons in employment in the first wave of the survey constituted almost 2/3 of the analysed population, unemployed – 11%, and economically inactive – 26%. The surveyed group was composed in 61% of city residents. As for the subjective assessment of the financial situation of the household, the vast majority (63%) of the analysed population admitted that they had problems with “making ends meet”. In turn, more than 28% of respondents aged 50-69, 31% women and 24% men, retired between the waves of the survey.

Table 1. Descriptive statistics for independent variables in models

| Feature | Total | Men | Women |
|-------------------------------|-------|-------|-------|
| | share | share | share |
| Gender | | | |
| men | 0.45 | NA | NA |
| women | 0.55 | NA | NA |
| Age group | | | |
| 50-54 years | 0.44 | 0.39 | 0.47 |
| 55-59 years | 0.38 | 0.39 | 0.38 |
| 60-64 years | 0.14 | 0.19 | 0.10 |
| 65-69 years | 0.04 | 0.02 | 0.06 |
| Educational attainment | | | |
| lower-secondary and lower | 0.19 | 0.15 | 0.22 |
| secondary and post-secondary | 0.67 | 0.71 | 0.63 |
| third-level | 0.14 | 0.14 | 0.14 |

| Feature | Total | Men | Women |
|---|-------|-------|-------|
| | share | share | share |
| Marital status | | | |
| single | 0.29 | 0.20 | 0.36 |
| in partnership (married, in cohabitation) | 0.71 | 0.80 | 0.64 |
| Co-residence with a child | | | |
| yes | 0.49 | 0.46 | 0.51 |
| no | 0.51 | 0.54 | 0.49 |
| Co-residence with a parent | | | |
| yes | 0.12 | 0.14 | 0.10 |
| no | 0.88 | 0.86 | 0.90 |
| Has grandchildren | | | |
| no | 0.43 | 0.50 | 0.38 |
| yes | 0.57 | 0.50 | 0.62 |
| Self-assessed health condition | | | |
| good and very good | 0.46 | 0.50 | 0.42 |
| poor, very poor and fair | 0.55 | 0.50 | 0.58 |
| Regular care of an adult | | | |
| no | 0.89 | 0.92 | 0.87 |
| yes | 0.11 | 0.08 | 0.13 |
| Regular care of grandchildren | | | |
| no | 0.85 | 0.90 | 0.81 |
| yes | 0.15 | 0.11 | 0.19 |
| Labour market status in the first wave | | | |
| employed | 0.64 | 0.75 | 0.54 |
| unemployed | 0.11 | 0.12 | 0.10 |
| economically inactive | 0.26 | 0.14 | 0.35 |
| Place of residence | | | |
| rural area | 0.39 | 0.41 | 0.37 |
| urban area | 0.61 | 0.59 | 0.63 |
| Household income – “making ends meet” | | | |
| very difficult | 0.17 | 0.17 | 0.17 |
| difficult | 0.19 | 0.17 | 0.20 |
| rather difficult | 0.28 | 0.27 | 0.28 |
| rather easy | 0.24 | 0.27 | 0.21 |
| easy | 0.11 | 0.11 | 0.10 |
| very easy | 0.02 | 0.03 | 0.02 |
| Transition to retirement between waves | | | |
| no | 0.72 | 0.76 | 0.69 |
| yes | 0.28 | 0.24 | 0.31 |

Note: shares may not add up to 100 due to rounding up.

Source: own study based on the second wave of the Generations and Gender Survey (GGS-PL)
(non-weighted data)

Results

This section presents the results of the estimated models for all people aged 50-69 who were not retired in the first wave of the survey (regardless of their labour market status), and separately for people of the same age who were employed and not employed (unemployed and economically inactive). Generally, the obtained results are consistent with those described in the literature review.

Transition to retirement among people aged 50-69

The results of estimating the parameters of the logistic regression model for the probability of retirement among people aged 50-69 who were not retired at the time of the first interview (model 1) are presented in Table 2. In the model for both genders, the combined estimates of parameters with variables: gender, age, marital status, co-residence with a parent, regular care of grandchildren and the labour market status are statistically significant at the significance level of at most 0.1. For the remaining variables, statistically insignificant estimates have been obtained. As could be expected, the probability of retirement increases with age (by 32% with each subsequent year of life). Women are more likely to retire than men by 67%, which may be related to their early withdrawal from the labour market due to the statutory retirement age. The probability of retirement was higher by 56% for persons in a marriage/partnership than those without a partner. Co-residence with a parent increased the risk of retirement by almost 40%. Transition to retirement before the next wave of the survey was by 32% more probable for persons taking regular care of grandchildren. In contrast, economically inactive people aged 50 to 69 were more than twice as likely to retire as employed people.

Estimates for age, educational attainment, regular adult care and labour market status were statistically significant in the model estimated only for men, while in the model for women – estimates for age, marital status, co-residence with a child, co-residence with a parent, regular adult care and labour market status were statistically significant (at a significance level of at most 0.1). In both models estimated separately for women and men, the probability of retirement before the second wave of the survey increased with age. Men with higher educational attainment (secondary and post-secondary and third-level education) were characterised by significantly lower probability of retirement than those with at most lower secondary education – the probability was respectively by almost 40% and over 55% lower than for the least educated. On the other hand, men who have exercised regular care of an adult were by 65% less likely to retire than those not involved in adult care. As far as the labour market status is concerned, the probability of retirement of men unemployed during the first interview was lower by almost 60%, and for economically inactive men – almost 6 times higher than for employed men.

Women in a partnership (formal or informal) were more than half as likely to retire before the second wave of the survey than single women. This may be related to greater stability of the income situation of people in partnerships. Co-residence with a child

Table 2. The results of the logistic regression model for the probability of transition to retirement during the second wave of the survey for persons not retired during the first wave of the survey (Model 1)

| | Model 1. Total | | | | Model 1. Men | | | | Model 1. Women | | | | | | |
|---|------------------|-----------------|-----------------|-------------------|------------------|--------|-----------------|-------------------|------------------|-----|-----------------|-------------------|-------|-------|---|
| Variable | coeffi- cient | OR ¹ | stand. error | signifi- cance | coeffi- cient | OR | stand. error | signifi- cance | coeffi- cient | OR | stand. error | signifi- cance | | | |
| Gender (ref. men) | | | | | | | | | | | | | | | |
| women | 0.510 | 1.666 | 0.130 | 0.000 | *** | | | | | | | | | | |
| Age | 0.277 | 1.319 | 0.019 | 0.000 | *** | 0.351 | 1.420 | 0.033 | 0.000 | *** | 0.023 | 0.000 | *** | | |
| Educational attainment (ref. lower-secondary and lower) | | | | | | | | | | | | | | | |
| secondary and post-secondary | 0.059 | 1.061 | 0.161 | 0.713 | | -0.498 | 0.608 | 0.275 | 0.070 | * | 0.194 | 0.199 | 0.329 | | |
| tertiary-level | -0.080 | 0.924 | 0.244 | 0.744 | | -0.835 | 0.434 | 0.407 | 0.040 | ** | 0.089 | 0.304 | 0.770 | | |
| Marital status (ref. with no partner) | | | | | | | | | | | | | | | |
| in partnership | 0.446 | 1.562 | 0.143 | 0.002 | *** | 0.195 | 1.215 | 0.285 | 0.494 | | 0.426 | 0.164 | 0.009 | *** | |
| Lives with a child (ref. no) | | | | | | | | | | | | | | | |
| yes | -0.178 | 0.837 | 0.115 | 0.122 | | -0.025 | 0.975 | 0.211 | 0.904 | | -0.244 | 0.784 | 0.146 | 0.094 | * |
| Lives with a parent (ref. no) | | | | | | | | | | | | | | | |
| yes | 0.330 | 1.390 | 0.166 | 0.048 | ** | 0.364 | 1.439 | 0.296 | 0.218 | | 0.410 | 1.507 | 0.221 | 0.063 | * |
| Has grandchildren (ref. no) | | | | | | | | | | | | | | | |
| yes | 0.107 | 1.113 | 0.127 | 0.399 | | 0.156 | 1.169 | 0.217 | 0.474 | | 0.050 | 1.051 | 0.166 | 0.766 | |

| Self-assessed health condition (ref. good health) | | | | | | | | | | | | | | |
|---|--------|-------|-------|-------|-----|--------|-------|-------|-------|-----|--------|-------|-------|-------|
| poor health | 0.013 | 1.013 | 0.119 | 0.915 | | -0.085 | 0.918 | 0.202 | 0.674 | | -0.004 | 0.996 | 0.151 | 0.981 |
| Income in household | -0.077 | 0.926 | 0.050 | 0.125 | | -0.111 | 0.895 | 0.081 | 0.172 | | -0.044 | 0.957 | 0.065 | 0.498 |
| Regular care of an adult (ref. no) | | | | | | | | | | | | | | |
| yes | 0.049 | 1.050 | 0.173 | 0.776 | | -1.052 | 0.349 | 0.449 | 0.019 | ** | 0.288 | 1.334 | 0.192 | 0.134 |
| Regular care of grandchildren (ref. no) | | | | | | | | | | | | | | |
| yes | 0.279 | 1.322 | 0.157 | 0.076 | * | 0.280 | 1.322 | 0.322 | 0.385 | | 0.280 | 1.323 | 0.187 | 0.134 |
| Place of residence (ref. rural area) | | | | | | | | | | | | | | |
| urban area | -0.046 | 0.955 | 0.123 | 0.707 | | 0.175 | 1.191 | 0.210 | 0.404 | | -0.084 | 0.920 | 0.158 | 0.595 |
| Labour market status (ref. employed) | | | | | | | | | | | | | | |
| unemployed | -0.208 | 0.812 | 0.195 | 0.288 | | -0.865 | 0.421 | 0.359 | 0.016 | ** | 0.065 | 1.067 | 0.245 | 0.792 |
| economically inactive | 0.703 | 2.021 | 0.143 | 0.000 | *** | 1.761 | 5.820 | 0.285 | 0.000 | *** | 0.380 | 1.462 | 0.172 | 0.027 |
| Fixed | -17.27 | 0.000 | 1.129 | 0.000 | *** | -20.99 | 0.000 | 1.873 | 0.000 | *** | -15.10 | 0.000 | 1.339 | 0.000 |
| N | 2209 | | | | | 989 | | | | | 1220 | | | |
| Pseudo R2 | 0.238 | | | | | 0.358 | | | | | 0.188 | | | |

¹ OR means odds ratio, i.e., the ratio of the odds of an event occurring in one group to the odds of it occurring in selected reference groups.

Significance of parameters estimation *** p<0.01, ** p<0.05, * p<0.1

Source: own calculations based on the Generations and Gender Survey (GGS-PL) (non-weighted data)

reduced the risk of transition to retirement by 20%, while residence with a parent in the same household increased this risk by over 50%. Similarly, adult care meant a greater probability of retirement, although this result is statically insignificant⁴³. Therefore it can be concluded that co-residence with an older parent in practice means taking care of the parent⁴⁴, which indirectly may contribute to increasing the probability of retirement. These results confirm previous findings that women in near-retirement age involved in caring for others are more likely to retire. Economically inactive women aged 50-69 were by 46% more likely to retire between two waves of the GGS-PL survey compared to employed women.

Summing up the results in terms of the relationship between caring for other people and transition to retirement, it should be emphasised that involvement in care of grandchildren increases the probability of retiring among people aged 50-69, although this relationship is insignificant for women and men, which may be related to small populations. In turn, the relationship between taking care of an adult and exit from the labour market by people in retirement age is statistically insignificant, which may result from its different form among women (positive relationship) and men (negative relationship).

Transition to retirement among employed persons aged 50-69

The results of estimating the parameters of the logistic regression model for the probability of retirement among people aged 50-69 who were employed during the first wave (model 2) are presented in Table 3. In the model for both genders, the estimates of parameters with the following variables turned out to be statistically significant at the significance level of at most 0.05: gender, age, educational attainment, subjective assessment of the income situation of the household. The obtained results show that the probability of retirement increased with age. As before, women are more than 2.5 times more likely to retire than men. Employed people aged 50-69 with a third-level education were less likely to retire before the second wave of the survey than those with the lowest educational attainment. The better the subjective assessment of income situation of one's household, the less likely he/she is to retire.

In the model estimated for men, only estimates for age and subjective assessment of the household's income situation were statistically significant, while in the model for women – estimates for age and educational attainment. In both models estimated separately for women and men, the probability of retirement before the second wave of the survey increased with age. Men who assessed the income situation of a household better

43 It is worth mentioning that in the model without a variable describing co-residence with a parent, the probability of transition to retirement for women involved in regular support for adults was significantly higher than for women not involved in such an activity.

44 Living together with an older parent is often not perceived as caregiving (A. Abramowska-Kmon, I.E. Kotowska, *op. cit.*).

were significantly less likely to retire (by 17%). Women with better education were less likely to retire than those with the lowest education, although a significant estimate was obtained only for secondary and post-secondary education (by 40%). The results obtained for employed persons aged 50-69 show that regular care of other persons (grandchildren or adults) did not contribute to a significant increase in the probability of retirement.

Transition to retirement among persons not employed (unemployed and economically inactive) aged 50-69

The results of estimating the parameters of the logistic regression model for the probability of retirement among people aged 50-69 who were not employed during the first wave (model 3) are presented in Table 4. In the model for both genders, the estimates of parameters with the following variables were statistically significant at the significance level of at most 0.1: age, educational attainment, marital status, health condition self-assessment and regular care of grandchildren. Similarly as previously, the results show that the probability of retirement increased with age. Not employed people aged 50-69 who have a secondary and post-secondary education were characterised by the risk of retirement before the second wave of the survey higher by 40% than for people with the lowest educational attainment. Similarly, ill health and regular care of grandchildren significantly increased the probability of retirement by almost 50% and 66%, respectively.

Separate models for women and men show differences in factors (beside age) that significantly differentiate the probability of retirement – in the model for men these are the following: self-assessment of health condition, assessment of income situation of the household, regular care of an adult and place of residence, while in the model for women these are: educational attainment, marital status, co-residence with a parent and regular care of a grandchild. Men who assessed their health condition as poor were almost 2.5 times more likely to retire than those who assessed their health condition as good. Besides, the better the subjective assessment of a household's income situation, the higher is the risk of retirement. Men aged 50-69 who regularly cared for an adult were 60% more likely to retire than those who did not care for others. Similarly, men living in urban areas were 50% less likely to retire than rural dwellers. Surprisingly, women with better education were more likely to retire than those with the lowest possible educational attainment; while the probability of retirement was 63% higher for women with secondary and post-secondary education, and more than three times higher for women with tertiary-level education. This may be due to the fact that in the event of unemployment, retirement meant the acquisition of old-age pension rights. The risk of retiring was almost 70% higher for women in marriage/partnerships than for single women. Similarly as in Model 1, women's co-residence with an older parent doubled the probability of retirement in comparison to women not living with their parents in the same household. Regular care of grandchildren also increased the probability of retirement among unemployed women aged 50-69 by almost 60%.

Table 3. The results of the logistic regression model for the probability of transition to retirement before the second wave of the survey for persons employed during the first wave of the survey (Model 2)

| | Model 2. Total | | | | Model 2. Men | | | | Model 2. Women | | | | | | |
|---|------------------|-------|-----------------|-------------------|------------------|--------|-----------------|-------------------|------------------|-----|-----------------|-------------------|-------|-------|-----|
| Variable | coeffi- cient | OR | stand. error | signifi- cance | coeffi- cient | OR | stand. error | signifi- cance | coeffi- cient | OR | stand. error | signifi- cance | | | |
| Gender (ref. men) | | | | | | | | | | | | | | | |
| women | 0.980 | 2.663 | 0.176 | 0.000 | *** | | | | | | | | | | |
| Age | 0.346 | 1.413 | 0.028 | 0.000 | *** | 0.374 | 1.453 | 0.041 | 0.000 | *** | 0.328 | 1.388 | 0.040 | 0.000 | *** |
| Educational attainment (ref. lower-secondary and lower) | | | | | | | | | | | | | | | |
| secondary and post-secondary | -0.385 | 0.680 | 0.244 | 0.114 | | -0.200 | 0.818 | 0.388 | 0.605 | | -0.539 | 0.583 | 0.320 | 0.092 | * |
| tertiary-level | -0.690 | 0.501 | 0.324 | 0.033 | ** | -0.622 | 0.537 | 0.502 | 0.215 | | -0.697 | 0.498 | 0.428 | 0.104 | |
| Marital status (ref. with no partner) | | | | | | | | | | | | | | | |
| in partnership | 0.159 | 1.173 | 0.194 | 0.412 | | 0.014 | 1.014 | 0.335 | 0.966 | | 0.147 | 1.158 | 0.239 | 0.540 | |
| Lives with a child (ref. no) | | | | | | | | | | | | | | | |
| yes | -0.123 | 0.884 | 0.160 | 0.441 | | 0.041 | 1.042 | 0.240 | 0.865 | | -0.250 | 0.779 | 0.220 | 0.254 | |
| Lives with a parent (ref. no) | | | | | | | | | | | | | | | |
| yes | 0.237 | 1.267 | 0.239 | 0.322 | | 0.466 | 1.594 | 0.364 | 0.200 | | 0.112 | 1.118 | 0.319 | 0.727 | |

| Has grandchildren (ref. no) | | | | | | | | | | | | | | |
|---|---------|-------|-------|-------|-----|---------|-------|-------|-------|-----|---------|-------|-------|-----------|
| yes | 0.190 | 1.209 | 0.171 | 0.266 | | 0.117 | 1.125 | 0.247 | 0.635 | | 0.231 | 1.260 | 0.239 | 0.334 |
| Self-assessed health condition (ref. good health) | | | | | | | | | | | | | | |
| poor heath | -0.135 | 0.874 | 0.158 | 0.391 | | -0.201 | 0.818 | 0.229 | 0.379 | | -0.094 | 0.910 | 0.217 | 0.664 |
| Household Income | -0.133 | 0.875 | 0.067 | 0.047 | ** | -0.188 | 0.829 | 0.090 | 0.038 | ** | -0.094 | 0.911 | 0.099 | 0.346 |
| Regular care of an adult (ref. no) | | | | | | | | | | | | | | |
| yes | 0.040 | 1.040 | 0.255 | 0.876 | | -0.790 | 0.454 | 0.515 | 0.125 | | 0.419 | 1.520 | 0.294 | 0.154 |
| Regular care of grandchildren (ref. no) | | | | | | | | | | | | | | |
| yes | 0.080 | 1.084 | 0.256 | 0.753 | | 0.220 | 1.246 | 0.378 | 0.561 | | -0.066 | 0.936 | 0.351 | 0.850 |
| Place of residence (ref. rural area) | | | | | | | | | | | | | | |
| urban area | 0.024 | 1.024 | 0.172 | 0.889 | | 0.359 | 1.432 | 0.244 | 0.140 | | -0.259 | 0.772 | 0.239 | 0.279 |
| Fixed | -20.610 | 0.000 | 1.609 | 0.000 | *** | -22.271 | 0.000 | 2.303 | 0.000 | *** | -18.482 | 0.000 | 2.267 | 0.000 *** |
| N | 1399 | | | | | 736 | | | | | 663 | | | |
| Pseudo R2 | 0.232 | | | | | 0.256 | | | | | 0.217 | | | |

Significance of parameters estimation *** p<0.01, ** p<0.05, * p<0.1

Source: own calculations based on the Generations and Gender Survey (GGS-PL) (non-weighted data)

Table 4. The results of the logistic regression model for the probability of transition to retirement before the second wave of the survey for persons not employed (unemployed and economically inactive) during the first wave of the survey (Model 3)

| | Model 3. Total | | | | Model 3. Men | | | | Model 3. Women | | | | | | |
|---|------------------|-------|-----------------|-------------------|------------------|--------|-----------------|-------------------|------------------|-----|-----------------|-------------------|-------|-------|-----|
| Variable | coeffi- cient | OR | stand. error | signifi- cance | coeffi- cient | OR | stand. error | signifi- cance | coeffi- cient | OR | stand. error | signifi- cance | | | |
| Gender (ref. men) | | | | | | | | | | | | | | | |
| women | 0.146 | 1.157 | 0.188 | 0.440 | | | | | | | | | | | |
| Age | 0.251 | 1.286 | 0.026 | 0.000 | *** | 0.379 | 1.461 | 0.055 | 0.000 | *** | 0.223 | 1.250 | 0.029 | 0.000 | *** |
| Educational attainment (ref. lower-secondary and lower) | | | | | | | | | | | | | | | |
| secondary and post-secondary | 0.344 | 1.411 | 0.194 | 0.077 | * | -0.161 | 0.851 | 0.379 | 0.671 | | 0.491 | 1.634 | 0.234 | 0.036 | ** |
| tertiary-level | 0.638 | 1.892 | 0.507 | 0.208 | | -0.476 | 0.621 | 0.906 | 0.599 | | 1.141 | 3.128 | 0.577 | 0.048 | ** |
| Marital status (ref. with no partner) | | | | | | | | | | | | | | | |
| in partnership | 0.572 | 1.772 | 0.195 | 0.003 | *** | 0.266 | 1.305 | 0.420 | 0.526 | | 0.516 | 1.675 | 0.226 | 0.022 | ** |
| Lives with a child (ref. no) | | | | | | | | | | | | | | | |
| yes | -0.179 | 0.836 | 0.168 | 0.288 | | -0.287 | 0.750 | 0.383 | 0.454 | | -0.253 | 0.777 | 0.197 | 0.199 | |
| Lives with a parent (ref. no) | | | | | | | | | | | | | | | |
| yes | 0.366 | 1.442 | 0.252 | 0.146 | | -0.165 | 0.848 | 0.479 | 0.730 | | 0.725 | 2.065 | 0.334 | 0.030 | ** |

| Has grandchildren (ref. no) | | | | | | | | | | | |
|---|---------|-------|-------|-------|-----|---------|-------|-------|-------|--------|---------|
| yes | 0.069 | 1.071 | 0.197 | 0.726 | | 0.532 | 1.703 | 0.386 | 0.168 | -0.162 | 0.501 |
| Self-assessed health condition (ref. good health) | | | | | | | | | | | |
| poor health | 0.383 | 1.467 | 0.195 | 0.049 | ** | 0.879 | 2.408 | 0.412 | 0.033 | ** | 0.207 |
| Household income | 0.069 | 1.072 | 0.073 | 0.343 | | 0.323 | 1.381 | 0.160 | 0.044 | ** | 0.018 |
| Regular care of an adult (ref. no) | | | | | | | | | | | |
| yes | -0.013 | 0.987 | 0.242 | 0.958 | | -0.986 | 0.373 | 0.582 | 0.090 | * | 0.084 |
| Regular care of grandchildren (ref. no) | | | | | | | | | | | |
| yes | 0.508 | 1.661 | 0.203 | 0.013 | ** | 0.591 | 1.806 | 0.520 | 0.256 | | 0.450 |
| Place of residence (ref. rural area) | | | | | | | | | | | |
| urban area | -0.177 | 0.838 | 0.172 | 0.302 | | -0.665 | 0.514 | 0.355 | 0.061 | * | -0.006 |
| Fixed | -15.939 | 0.000 | 1.556 | 0.000 | *** | -23.608 | 0.000 | 3.260 | 0.000 | *** | -13.939 |
| N | 810 | | | | | 253 | | | | | 557 |
| Pseudo R2 | 0.185 | | | | | 0.366 | | | | | 0.149 |
| yes | | | | | | | | | | | |

Significance of parameters estimation *** p<0.01, ** p<0.05, * p<0.1

Source: own calculations based on the Generations and Gender Survey (GGS-PL) (non-weighted data)

Summary

The paper aimed to present the results of analysis of factors differentiating the probability of retirement among Poles aged 50-69. The obtained results are consistent with those described in the subject literature review. As expected, the probability of retirement increased substantially with age. The probability is higher among women than men, as well as among less educated people than those with a better education (in particular men). Marital status affected the probability of retirement, especially for women – those living with a partner or a spouse were more likely to retire than those living alone. The relationship between the regular care of adults and the transition to retirement proved to be statistically insignificant, which is due to its different nature for men and women. For men, regular care of adults was associated with a substantially lower probability of retirement, while for women – with a higher, although statistically insignificant, probability. A possible explanation for this situation may be the fact that men probably take care of their partners and, in order to ensure an adequate standard of living for their families, tend to perform gainful employment in spite of the burden of care. However, it should be stressed that in the case of women, the relationship between co-residence with an older parent and transition to retirement was significantly positive, which means that these women were more likely to retire, and thus their transition to retirement can be indirectly associated with providing support/care to an adult. It can be thus assumed that this result confirms the previous findings in this regard. The care of grandchildren increased the probability of retirement. Moreover, economically inactive persons (both women and men) were more likely to retire than those employed.

In turn, the results obtained for employed and not employed persons show the importance of employment for the relationship between caring for others and any transition to retirement. For employed persons, no significant impact of adult support or grandchildren's care on the likelihood of any transition to retirement was noted. On the other hand, for not employed persons (the unemployed and inactive) a positive relationship can be observed between caring for grandchildren and exit from the labour market, especially for women. Moreover, also for not employed women living with an older parent, the risk of a transition to retirement was higher than for other women.

With reference to the research questions, it should be concluded that:

1. Not all the analysed personal characteristics of respondents differentiated the probability of retirement (mainly: gender, age, educational attainment, household income situation, health condition). It is worth noting that the relationship between these factors and the transition to retirement was different for the employed and not employed population.
2. What is more, the significance of these factors for the likelihood of any transition to retirement was different for women and men.

3. There is a negative relationship between taking care of an adult and the transition to retirement for men, while for women this relationship is positive (reflected in co-residence with an older parent).
4. Regular care of grandchildren increased the probability of an exit from the labour market, especially for not employed women.

The results of the analyses presented in this paper do not fully cover issues related to the relationship between the family situation, care obligations and the transition to retirement of people aged 50-69 in Poland. First of all, the GGS-PL survey collected information on the regular care of adults or grandchildren, which could be understood differently by respondents. It would be more appropriate to include information on the intensity and duration of this care, because the burden on the carer is greater in the case of everyday, several-hour assistance to third persons than less frequent and less intensive support, and this can substantially increase the probability of retirement. Any further analysis should also include information on the degree of the relationship between the caregiver and the dependent adult as well as the quality of this relationship, as this may determine both the quality of the carer's life and their health condition, as well as their retirement decisions.

In conclusion, from the point of view of the proposed increase in employment of people at near-retirement age, including the postponing of any decision to retire, in particular as regards women, it is extremely important to identify in detail the determinants of exit from the labour market of this population in order to develop effective social policy tools. It is also worth considering the views of those who in 50% disagree with the opinion that the care of dependent family members should result in any withdrawal from the labour market. This means that social policy measures in the field of long-term care should be targeted both at older people and their carers, enabling them to combine professional work with their care obligations.

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Zobowiązania opiekuńcze a przejście na emeryturę osób w wieku 50–69 lat w Polsce

Sytuacja rodzinna oraz sprawowanie opieki nad innymi osobami mogą zwiększać prawdopodobieństwo dezaktywizacji zawodowej osób w wieku okołoemerytalnym, zwłaszcza kobiet, które częściej niż mężczyźni sprawują opiekę nad niesamodzielnymi członkami rodziny lub wnukami. Celem artykułu jest analiza czynników różnicujących szanse przejścia na emeryturę wśród osób w wieku 50–69 lat w Polsce. Do analiz wykorzystano dane z pierwszej i drugiej rundy badania „Generacje i Rodziny” (GGS-PL) przeprowadzonego w Polsce w latach 2010–2011 oraz 2014–2015. Wyniki analiz pokazują, że sprawowanie regularnej opieki nad osobą dorosłą wiązało się dla mężczyzn z istotnie mniejszym prawdopodobieństwem przejścia na emeryturę, zaś dla kobiet – z większym, choć nieistotnym statystycznie. Jednakże w przypadku kobiet relacja między współzamieszkiwaniem ze starszym rodzicem a przejściem na emeryturę była istotnie dodatnia, co oznacza większe szanse przejścia na emeryturę tej grupy kobiet i tym samym można pośrednio powiązać to z udzielaniem wsparcia osobie dorosłej. Należy podkreślić, że relacja ta była istotna statystycznie zwłaszcza wśród osób niepracujących. Sprawowanie opieki nad wnukami zwiększało szanse przejścia na emeryturę, głównie niepracujących kobiet.

Słowa kluczowe: opieka nad niesamodzielnymi dorosłymi, opieka nad wnukami, dezaktywizacja zawodowa, „Generacje i Rodziny” (GGS-PL), przejście na emeryturę

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