THE SELF-CARE IN PAYG PENSION SYSTEM OF STUDENTS

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Abstract: *Financial security during retirement years is a burgeoning issue in Europe. The role of self-care is becoming more significant, by the escalating number of people joining pension funds or starting other savings. In the future, the role of these institutions will be even more valued due to demographic changes. The trends are clear: pensions will be a significant issue in the upcoming decades. By contrast, the level of interest exhibited by the youth remains limited regarding pension funds. The research was oriented towards to answer the following question: given the current pension system, what are the attitudes of Hungarian students/young workers aged between 18-25 – who will form the basis of the labor market in the future – towards self-care. Quantitative, questionnaire-based survey research designs were adopted to provide the attitudes, financial awareness and self-care level of students.*

Keywords: pension system, PAYG, self-care, pension funds, retirement.

JEL classification: G53.

1. Introduction

The most critical resource of a country is its citizens (Tomka, 2009). Europe has been a significant world power since the early Middle Ages. At the end of the 16th century, its population was around 61.6 million (Stearns, 2020), it represented 13% of the world's population at that time (Aaron, 2019). This resource was particularly important in times of war as it was a measure of power and military prowess (Bárdos and Féltoronyi, 2012). Today, Europe's role in world politics has declined, and its nation-states are struggling with the ageing of their population. The life expectancy in Hungary between 1900 and 1970 has increased by more than 30 years, from 37.3 years to 69.1 years (Augusztinovics, Gál, Matits, Máté, Simonovits and Stahl 2002). According to the Population Research Institute under the worst-case scenario Hungary's population could fall to as low as 6 million 920 thousand people in 40 years (Kapitány and Rohr, 2013). This will fundamentally challenge the current pension system. It is foreseeable that, in addition to the state system, a more significant role will be given to self-sufficiency and, within this, to voluntary pension funds. The top 12 pension funds currently have 995,000 members and EUR 3.350 million in assets paid by their members. The research was oriented towards to answer the following question: given the current pension system, what are the attitudes of students/young workers aged between 18-25 – who will form the basis of the labor market in the future – towards self-care?

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2. Literature review

The negative impact of an aging population is currently difficult to perceive in welfare societies. However, over the long run, it will emerge, and by that point, the financing of the health and pension systems will become challenging. The development of the Hungarian pension system goes back a long time: it is not well known, but even in the time of Maria Theresa, there was already a rudimentary pension (Kozári, 2012). In fact, even in the early societies, the protection of the weak, children and the elderly was observed, and social risk communities were forged. Later on, multigenerational households served the same purpose, however, as the state's role in people's lives became more significant, pensions became the primary means of support for the elderly (Harari, 2015).

The current pension system is based on the assumptions of Paul A. Samuelson, i.e. the elderly are dependent on the active working population, and the ongoing contributions cover pension payments (Samuelson, 1958). The pay-as-you-go system can also be observed to be founded on intergenerational care, similar to that observed in traditional societies, and fostering the creation of social risk community (Bozsik and Paczolai, 2007). The greatest weakness of this system is the decline and ageing of the population. It upset the balance if the system and the active labor force are put under too much pressure. Loužek (2007) points out that the balance of the PAYG system depends on the equation:

$$s * w * N = p * D,$$

where:

- s stands for the contribution rate,
- w for the average wage,
- N for the number of workers,
- p is the average pension, and
- D is the number of pensioners.

It is easy to see that population decline affects the two sides of the equation in opposite directions. Therefore, it creates a greater unbalance. This can already be seen in the current data: if in 1970’s five workers contributed to the pension of one retiree, in 30 years' time, two workers will have to do the same (Szabó, 2018). It can be observed that the trends are not pointing in the right direction, and it will become increasingly challenging to cover the payment obligations. We can thus pose the question: Why has the transition to private pension funds not been made yet? Based on Aaron’s (1966) equation:

$$m + g > r,$$

where:

- m is population growth,
- g is the wage growth rate, and
- r is the rate of return on the private pension funds.

Basically, the left side gives the return rate of the PAYG system, so if r is bigger than that, it means that the private pension funds are a better choice. Nevertheless, one of the biggest problems of the current pension system is that it is practically impossible to convert any savings into another form of savings without harming the current pensioners (Slavik 2006). The best solution would be to have multiple pillars, and the transition should be undertaken continuously over a longer period. It is certain that the current pension system and its stakeholders will encounter significant challenges in the near future.

3. The aim of the empirical research

After a review of the relevant literature, a detailed understanding of the issue, and a thorough mapping of the market situation and environment, the design and conduct of the primary research began. The research was conducted using a self-administered, pretested standardized questionnaire based on a written, online survey. As the primary research method, the questionnaire survey has been chosen given that it is one of the best known and most frequently used quantitative research methodologies.

The population is essentially the same as the target group that is the focus of this paper. Therefore, the sample was composed of young people aged 18-25 years. The research aims to understand the target group's mindset, financial awareness, and goals, which will later form the basis for the construction of a marketing plan. Based on this, the following overarching research question was formed:

Given the current pension system, what are the attitudes of young students/workers aged 18-25, who will form the basis of the labor market in the future towards self-sufficiency, what are their pension aspirations and what steps are they taking to achieve these goals?

At the beginning of the research, the following hypotheses have been put forward:

1. Young people aged 18-25 do not believe that the state pension will be enough for their retirement.
2. Young people aged 18-25 currently have no pension savings, but their medium to long-term plans include savings for their retirement.

4. The applied methodology

During the research, the objective was to investigate the research question on a sufficiently large sample, to be able to reproduce the results later, to avoid overgeneralization and to get a clearer picture of the target group's thoughts and behavior, especially of their self-care tendencies.

The survey was conducted online. Respondents only needed an internet connection and a device to navigate through the questions and answer them. The questionnaire survey was anonymous.

The questionnaire consists of three sections: the first section (10 questions) gives an idea of the respondents' financial knowledge. The survey included some questions on general economic literacy, such as retirement age, average income, and others requiring basic economic and mathematical calculations. There are also gaps in the knowledge of respondents in areas that are considered commonplace. In addition to general financial knowledge, more specific areas such as inflation, the difference between the real and nominal value of money or more precise areas related to pensions were also assessed. These revealed respondents' knowledge of the minimum contributions for pension fund membership and the level of contribution support provided by the state.

The second section (10 questions) focused on respondents' financial awareness, including how conscious they were about their money and their retirement needs. One of the main aspects was to find out what their ideal retirement is and, within this, how realistic they are about the amount they need to save to reach their ideal payout. In the context of the two parts, it can be seen that those with a more comprehensive financial knowledge are more aware of how they spend their money.

The last section of the questionnaire (11 questions) contains demographic data. The questions include questions on the highest level of education, type of studies completed or in progress and type of residence. The extent to which these factors influence financial awareness were investigated, and who is the group most open to broadening their financial knowledge.

Answers that contained incomplete or irrelevant data were not included in the sample when the questionnaire was evaluated. On this basis, 416 of the 459 respondents were finally analyzed after filtering and cleaning. The survey did not contain any open questions, i.e. the 31-question questionnaire consisted entirely of closed questions, where respondents were allowed to choose from a set of defined answers for better evaluation.

4. Results

In the first question, respondents were asked what the average life expectancy is in Hungary. Based on Loužek's equation, it is clear that this data is crucial. The bigger life expectancy is there are more pensioners in the pension system. To see the pension system's issue, it is essential to be aware of this data. Respondents were given five predefined options to choose from. Based on the responses, the five answers were finally divided into three groups: correct answers, smaller answers and bigger answers. Less than half of the respondents, 48.6% to be precise, knew what the correct life expectancy in Hungary is, and almost a third of those who completed the questionnaire thought that the it is lower by ten years than the correct value.

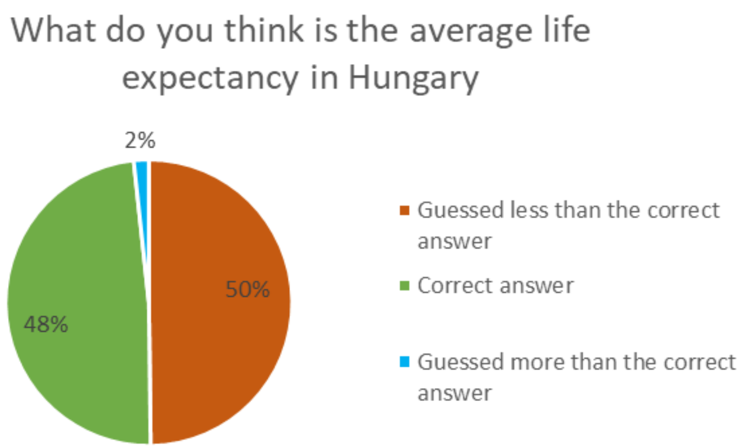

Figure 1: Average life expectancy in Hungary answers, n=416
Source: Authors' own construction

The next question was about the retirement age. This data is crucial in the equation as mentioned above as well because it is highly affecting the number of pensioners. Lower retirement age means a higher rate of beneficiaries in the pension system. As the state will be forced to make cuts to the pension system due to the crisis in the pension system, it is expected that the size of the pension and the starting date for payment will change. 79.8% of respondents knew what the current retirement age in Hungary is, and 26 respondents thought that the retirement age was the same as their life expectancy, so they are marked higher than the actual value.

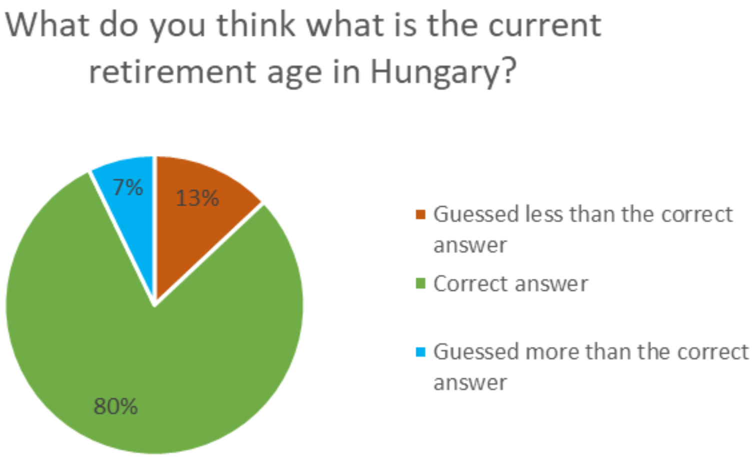

Figure 2: Retirement age in Hungary answers, n=416
Source: Authors' own construction

The themes identified in these responses show that the repliers know when they can expect their retirement years, and many of them replied with higher numbers, which can represent the future trends. It is certain that the entry age for retirement will not be reduced in the near future.
The wage was one of the elements of the equation as well. Therefore, we wanted to know how aware are the responders of the average wage. They were asked regarding that in the following question, and they could choose between six options. The answers were scaled into three correct answers, bigger and smaller. Nearly four-fifths of respondents do not know the average gross salary in Hungary, 78.6% think the amount is below the actual figure, and only a total of 15.7% gave the correct answer.

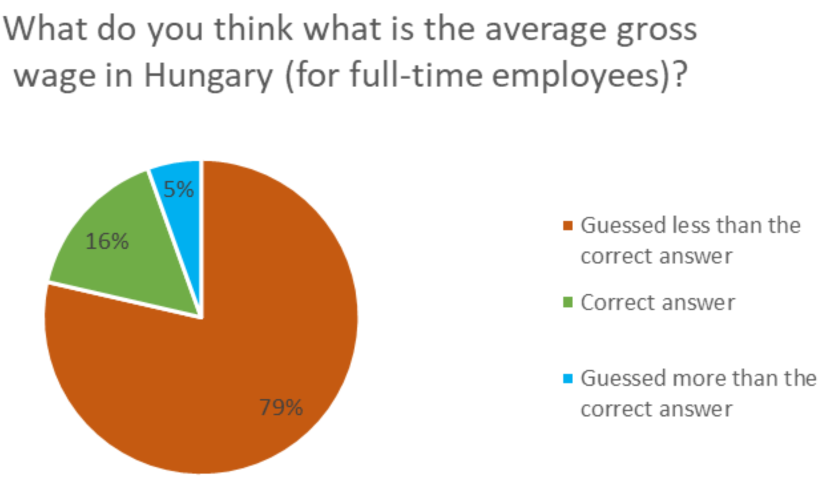

Figure 3: Average gross wage in Hungary answers, n=416
Source: Authors' own construction

The first step to understanding the financial process is to understand the process of money depreciation. This will show that the amount you put aside at home is losing its actual value. Those who are familiar with the concept of inflation will find it easier to understand why it is important to invest. Most of the time, the aim of investing is not to increase wealth but to avoid the effects of inflation. In long-term investments, the aim is to ensure that the money set aside does not depreciate in value at the end of the investment but retains, and in some cases even increases, its payment value. Understanding the concept of inflation or compound interest is essential to understanding the risk and return of saving in a pension fund or any investment. The first step in self-care is to recognize that it is not enough to put money aside; you need to ensure that it does not lose value. Just over half of respondents, 57%, were aware of inflation and its exponential accumulation, but many did not see how the value of their savings held at home had declined over the years. Knowing the effects of inflation, it is worth knowing the benefits of saving in a pension fund. It is worth starting as soon as possible, as pension funds offer other schemes in addition to the ones mentioned above, which allow you to increase the value of your savings even further, depending on the level of risk. According to an article in Moneycentre (2021), only one in three people know that the state subsidies their membership in a pension fund. Two-thirds of the respondents were aware that it is possible to join pension funds with contributions as low as a few thousand forints but were more skeptical about state support and did not know what contribution the state provides. The results obtained mirror the research mentioned earlier. Knowing the value of the discount is essential as it is one of the main advantages of pension funds.

In the case of the question on the value of the pension, the answers were evenly distributed between the three pre-selected options: this led to the conclusion that the majority of the population surveyed was not aware of the number of pension payments. According to the data collected, respondents tended to lean towards smaller pensions, thinking of pensions as much lower payments. Despite this, most responses were for the correct average pension of EUR 350.

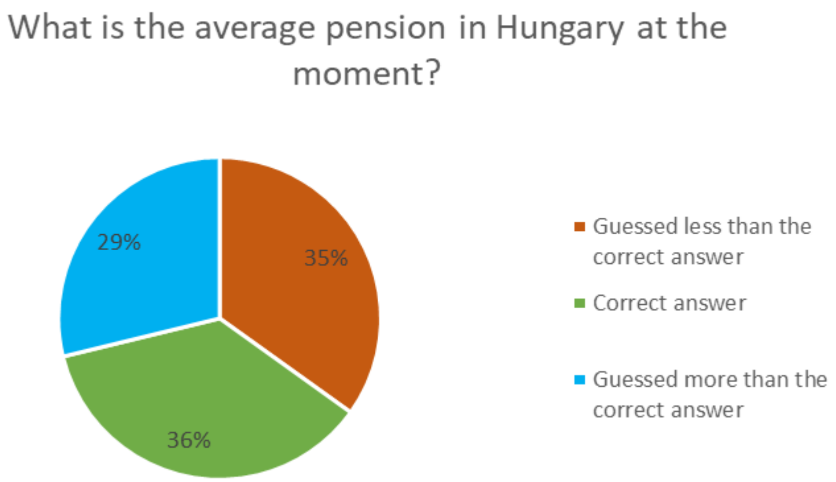

Figure 3: Average pension in Hungary answers, n=416
Source: Authors' own construction

After asking how much the average pension is, the ideal pension payment for the general population was dealt with. Based on the respondents' answers, the median value was the

pension payout group of EUR 550-650, with an average sum of around EUR 650. Most respondents would like to receive a pension of over EUR 750.
Based on the current average pension, this would require a minimum monthly pension supplement of EUR 350. This means that a pension fund would require a monthly saving of EUR 55 from the time of the first job or from the age of 25. The average pension requires savings of EUR 37,5. The later individuals start saving, the larger the amounts that need to be set aside to reach the ideal payout. There is a difference of EUR 200-250 between the ideal pension of the completers and the state pension. This seems to confirm the first hypothesis that young people aged 18-25 do not believe that the state pension will be sufficient for their retirement.
58.7% of the target group surveyed would start saving less than 20 years before retirement or perhaps not save at all. A high proportion of respondents would consider it appropriate to start saving for retirement 30-40 years before retirement.

5. Conlusions

It can be seen that the results obtained in this research support the results obtained in the literature research. Young university students are not yet fully aware of the financial basics and do not currently have any savings in pension funds. t is not an issue, as the findings indicate that the majority of them currently lack a stable income, making long-term financial planning challenging. Nevertheless, in a few years, they are expected to have a steady income. The responses further suggest that retirement savings are part of their future plans. The first hypothesis is supported by the fact that 84% of the respondents think that they need to save separately for their retirement, as the state pension will not be enough for them. This, in conjunction with the earlier presented data, implies that the first hypothesis is valid, indicating that young people aged 18-25 do not hold the belief that the state pension will be adequate for their retirement. Furthermore, the timing of when they started saving shows that 84% of respondents have pension savings as a medium to long term goal, which supports the second hypothesis that young people aged 18-25 do not currently have pension savings but have medium to long term plans to save for their retirement.
The current pay-as-you-go pension system will face severe problems in the near future, and the role of self-care will become more critical. The changes will mostly be felt by the current young generation in retirement. The state has little room for maneuver to prepare the pension system for demographic changes so that the emphasis will be on self-care by the individuals. The responses to the questionnaire show that respondents are aware of the limitations of the pension system. Despite this, they do not have any pension savings, which are included in their medium to long-term plans. The challenge is to make young people realize that the sooner they start saving for their retirement, the easier it will be for them to achieve their financial goals. The key findings were consistent with the literature presented. Education is a crucial factor regarding pension savings, and young adults first need to understand basic financial processes related to pension savings. Otherwise, they will not understand the long-term problems of the pension system.
Most importantly, they need to understand that saving earlier leads to a more prominent and more secure pension supplement. You do not need tens of thousands of forints a month to start saving, and you can start with as little as a few thousand forints and build up savings over the years, changing the amount you put in at any time. The other root cause of young people's lack of access to the pension system is that most financial information comes from their parents. The issue with this is that the voluntary pension scheme is relatively new, and many parents have only just started to get involved. See the example of Slovakia, where the time for pension savings has been fully extended to the last ten years of working life. The aim is to break the tendency to make retirement savings a critical thing to do only when approaching retirement age because by then, it is too late and difficult to save the necessary

amounts in the last years. Based on the results and the literature review an educative campaign could be beneficial to reach the younger generation. By increasing self-care and pension funds, it would make a secure retirement more widely available. Whether it is a centralized social campaign by the government or advertising by market players. It could be a catalyst and help to attract the younger generation to voluntary pension funds. The results of the research presented here are suitable to start the preparation of a specific marketing strategy to engage the target group.

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