POSSIBILITIES FOR OVERCOMING ISSUES IN THE PHASE OF OLD-AGE PENSION PAYMENTS FROM AN UNIVERSAL PENSION FUND

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Abstract: The structuring of the pension model, the exploration of its characteristics and parameters, as well as of pension products, their role, and the potential to ensure long-term social security in an environment marked by socio-economic and demographic challenges, is a significant and relevant thematic area.

The focus of the study is on presenting the structure, the regime, the insurance parameters, the pension products, and the functioning model of insurance in an universal pension fund. The conclusion reached is that the most payments to the first pensioners are deferred for a period of up to three years, while lifelong payments constitute a very small portion. This fact raises questions about the level of social security, and consequently, the ability of the second pillar of the multi-pillar pension model to fulfill the assumed public commitments and meet personal expectations.

Possibilities have been outlined to increase the proportion of pensionners receiving lifelong pensions while decreasing the proportion of those receiving deferred and one-time payments. This, in turn, will lead to long-term and, at the same time, higher social security for Bulgarian pensioners.

Keywords: social policy, pension insurance, universal pension fund, lifelong pension.

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Introduction

The contemporary structuring of social security, particularly the multipillar pension model, is part of the systemic issues and one of the most significant problems faced by society, addressed by social policy. By the beginning of the century, based entirely on a pay-as-you-go principle, the pension system in Bulgaria, functioning and evolving in a situation characterized by emerging unfavorable demographic and socio-economic trends (population aging, an increase in the percentage of the poor and at-risk-ofpoverty individuals, including particularly vulnerable elderly individuals, rising economic inequalities, labor market issues, income policies, and many other significant challenges), has faced serious difficulties in providing adequate to the economic conditions social security that would meet the expectations of Bulgarian pensioners for an acceptable and dignified standard of living.

In response to this challenge, since the beginning of the century, a new three-pillar pension model has been functioning in our country, based and structured following the example of multi-pillar social security schemes. This model is burdened with the difficult task, in the conditions of specific demographic imbalances and dynamic economic indicators, to increase the level of provided social security by achieving a 70-80% income replacement rate for individuals before retirement and ensuring relative sustainability and independence of the pension system. In this context, the structure of the current pension model, its characteristics and parameters, along with pension products, their role, and potential in the context of the outlined challenges, have become a significant thematic area for public discussions and scientific research, which on its own defines **the relevance and the importance of the chosen topic.**

The issue of supplementary pension insurance, from various perspectives, has been explored in publications by numerous authors such as N. Pavlov, B. Petkov, Y. Hristoskov, B. Manov, Pl. Yordanov, R. Erusalimov, T. Ilieva, St. Dimitrov, L. Hristov, and others. However, the problems of longterm social security provided by universal pension funds in the current legislative and socio-economic environment as well as the specific opportunities for their resolution are under-researched.

In this article, in the conditions of clearly defined legislative changes as of February 2021 regulating the pension payment phase from the Universal Pension Fund, based on data from the Financial Supervision Commission (FSC) regarding the number and proportions of pensioners receiving different types of pension products, an issue arises concerning the long-term social security of eligible payment beneficiaries. Specifically, attention is directed

towards identifying possibilities to reduce one-time and fixed for a period of up to 3 years payments, which compromise the social security provided by the second pillar of the multi-pillar pension insurance model in our country.

The object of this study is to examine the Universal Pension Fund insurance, and the subject - its potential to provide lifelong social security to the Bulgarian pensioners.

A change is needed in the Universal Pension Fund insurance, aiming to increase the proportion of lifelong payments while minimizing those of a oneoff and fixed nature. A comprehensive approach, including raising contributions to the Universal Pension Funds, enhancing the awareness of social security of the population, and regulating the right to choose a pension product, has the potential to yield such a result.

Formulated in this manner, **the research thesis defines the main purpose of this study:** to outline possibilities to overcome the issue of lifelong social security for pensioners receiving payments from the Universal Pension Fund.

In line with the thus presented purpose the following **research tasks** have been formulated:

 \succ To outline the organizational and economic dimensions of the Universal Pension Fund insurance in Bulgaria.

> To formulate the existing problem concerning the Universal Pension Fund insurance, directly associated with the current functioning model, within the context of the changes in the Law for Amendment and Supplement to the Social Insurance Code from 2021, regulating the payment phase and the specific pension products.

 \succ To describe possibilities for overcoming the issues related to low financial accumulations and the lifelong nature of pension payments.

Outside the scope of the study remain, for instance:

> Detailed regulation in the normative framework regarding the described possibility for the right to choose a pension product by retirees, regardless of the size of the funds accumulated in their personal insurance accounts.

> In-depth investigation of attitudes, possibilities, and methods for implementing a consistent, long-term, and responsible policy aimed at enhancing the population's awareness of social security and its benefits.

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The reform in the Bulgarian pension insurance model introduced compulsory insurance for individuals born after December 31, 1959 in established for the purpose Universal Pension Funds (UPFs), managed by licensed pension insurance companies. This marked the beginning of the existence and functioning of the multi-pillar pension insurance model in Bulgaria. The model consists of public pension insurance with integrated elements of securety, supplementary compulsory pension insurance in Universal and Professional Pension Funds, and supplementary voluntary pension insurance in Voluntary Pension Funds and Voluntary Pension Funds with occupational schemes. The primary goal of the model is to achieve a higher level of income replacement for individuals after retirement, given the emerging trends of dynamic socio-economic and demographic processes. These trends pose serious challenges to social policy, social protection systems, public finances, including revenues from insurance contributions¹, and the expenses required for payments from the country's pension system (Durzhavnoto obshtestveno osiguryavane prez 2022 g., 2022)².

The supplementary compulsory pension insurance in the Universal Pension Funds (UPF) covers individuals born after December 31, 1959, who are subject to insurance in the Pensions Fund of the State Social Insurance (SSI), and those who have not benefited from their rights under Article 4(b) of the Social Insurance Code (SIC). The insurance is carried out on a capital-funded basis with monthly social security contributions calculated as a percentage of the individual's income, jointly paid by the employer and the insured person³. The covered risks include disability, old age, and death.

¹ During the period of 2000–2010, the size of the social security contribution to the Pensions Fund decreased as follows: from January 1, 2001 - by 3%; from January 1, 2006 by 6%; from October 1, 2007 – by an additional 1%. This series of reductions in the social security contribution led to a significant increase in the deficit – about three times during the period from 2004 to 2008. In 2009, changes in the Social Insurance Code regulated the state's participation with a 12% transfer on the annual social security income of insured individuals. In the same year, the social security contribution to the Pensions Fund was reduced by an additional 4%, and from January 2010 - by another 2%. In 2011, the social security contribution to the Pensions Fund was increased by 1.8% (Analiz na pensiite za osiguritelen staj i vuzrast 2000–2015, 2016) and remained unchanged until the end of 2016 – at 17.8%. Changes in the Social Insurance Code from 2015 stipulated an increase in the contribution rate by 1% at the beginning of 2017 and by an additional 1% from the beginning of 2018 (Kodeks za sotsialno osiguryavane 2019, chl. 70, al. 1, 2 i 3). The overall reduction in the social security contribution for the Pensions Fund during the period of 2000–2014 was by 14.2%, partially compensated by the state's involvement as an insurer with the 12% transfer from the annual social security income of insured persons, effective by 2017. Thus, intentionally or not, a lasting dependency of the Pensions Fund on the state budget was created, covering over half of the fund's expenses for pension payments every year.

 $^{^2}$ In 2022, all accrued social security revenues in the budget of the Pensions Fund amounted to BGN 6,615,225.0 thousand, including BGN 6,578,574.9 thousand from social security contributions. The expenditures and transfers in the Pensions Fund budget for the same year amounted to BGN 12,796,665.3 thousand. This indicates a shortfall of BGN 6,218,090.4 thousand or 51.6%. The latter is covered by a subsidy from the state budget.

 $^{^3}$ The contribution for the Universal Pension Fund (UPF) is 5%, with the employer contributing 2.8%, and the insured person contributing 2.2%

Individuals eligible for old-age pension from the UPF are those who have reached the retirement age under Article 68, Paragraph 1 of the SIC⁴ (for 2023, it is 64 years and 6 months for men and 62 years for women, with an envisaged increase and equalization of the retirement age for both sexes to 65 years). Individuals may retire one year earlier if they have accumulated an amount allowing for the payment of an additional old-age pension not lower than the current minimum pension amount for insurance length and age specified for the respective year by the State Social Insurance Budget.

With the adoption of the Law for Amendment and Supplement to the Social Insurance Code in February 2021 (Zakon za izmenenie i dopulnenie na Kodeksa za sotsialno osiguryavane (obn. DV, br. 19 ot mart 2021 g.), 2021) the phase of pension payouts was regulated for the first time since the start of operations in the Universal Pension Funds (UPF). The long-awaited specification in the social security legislation regarding pension payments, the method of their calculation, the obligations of pension insurance companies concerning their disbursement ((Glava shestnadeseta ot KSO,izm. i dop., br. 25 ot 29.03.20,,,Fondove za izvarshvane na plashtaniyata i rezervi za izpalnenie na zadalzheniyata na pensionnoosiguritelnoto druzhestvo" (Zagl. izm. – DV, br. 92/2017., br. 19/2021), chl. 191, 192, 192a, 192b), 2022) and other significant matters regulate the following types of payments (pension products) for old age:

> supplementary lifelong old-age pensions, granted to an individual if the accumulated funds in their individual account allow for a calculated pension amount not lower than 15% of the minimum pension for insurance length and age set by the State Social Security Budget Act (SSSBA)⁵. According to the Social Insurance Code (SIC), lifelong pensions from UPFs can be: life pension without additional conditions; life pension with a guaranteed payout period⁶; life pension including deferred payments of part of the funds until the pensioner reaches a stipulated age⁷. The amount of the lifelong pension is determined based on the funds in the individual account,

⁴ From the end of 2016, the age stipulated in Article 68(1) of the Social Insurance Code (SIC) for eligibility for a pension for men and women increases annually. The scheme for this increase anticipates that by 2037, the retirement age for both men and women will be equalized and reach 65 years.

⁵ The payment is made in calculated amounts until the death of the person, and for this purpose, the pension insurance company managing the respective Universal Pension Fund (UPF) transfers the accumulated funds to a fund for disbursing lifelong pensions.

⁶ The payout period can range from 2 to 10 years, as chosen by the individual (Article 167, paragraph 5 of the Social Insurance Code, Issue 25 dated March 29, 2022, effective from July 8, 2022).

⁷ The payment begins with a deferred payment, which may have a higher amount, and the allocated sum for it can be inherited. Following the deferred payment, the lifelong pension payments commence.

allocated according to the average life expectancy, averaged for both genders from the Mortality Table and the average life expectancy of the population, published by the National Statistical Institute (NSI), and the technical interest rate used by the pension insurance company approved by the Financial Supervision Commission (FSC).

> Deferred payment of the accumulated funds in the individual account of the insured person in the Universal Pension Fund (UPF) is made on the condition that the amount is insufficient to grant a lifelong pension for old age (calculated pension amount below 15% of the minimum pension amount for periods of social insurance and old age), but is higher than three times the minimum pension for periods of social insurance Code. The monthly amount of the deferred payment as of its determination date cannot be greater than the minimum pension amount for the insurance period and age or less than 15% of its amount. The payment amount depends on the accumulated sum, the technical interest rate, and the chosen period for payment by the retiree.

> One-off payment of the amount accumulated in the individual account is made if the accumulated sum of the person is smaller than three times the determined minimum pension amount for periods of social insurance and old age, as defined in the State Social Security Budget Act. The payment amount depends on the accumulated sum in the individual account of the person.

Regarding covered risks of disability and death, individuals insured in the Universal Pension Fund have the right to:

> One-off or deferred payment of up to 50% of the funds accumulated in the individual account in case of a permanently reduced working capacity exceeding 89.99%.

 \succ One-off or deferred payment of sums to the heirs of a deceased insured person.

> One-time payment of sums to the heirs of a pensioner who passed away during a guaranteed or deferred payment $period^8$.

* * *

⁸ In the event of the death of a pensioner receiving a pension under Article 167, paragraph 4, item 2 of the Social Insurance Code before the expiration of the guaranteed payment period, the current value of the remaining payments due until the end of the guaranteed payment period is disbursed to the heirs under paragraph 1 in a lump sum.

In the event of the death of a pensioner receiving deferred payments under Article 167a, paragraph 1 of the Social Insurance Code, the remaining amount of due payments to the deceased is disbursed to the heirs in lump sum.

According to the provisions of the Social Security Code (SSC), for an individual to receive a lifelong pension, the calculated amount of the lifelong payment must be at least 15% of the minimum pension amount for periods of social insurance and old age. With changes in the State Social Security Budget Act from July 1, 2022, the minimum pension amount for periods of social insurance and old age is 467 BGN, increasing to 523.04 BGN from July 1, 2023 (Zakon za byudzheta na durzhavnoto obshtestveno osiguryavane za 2022 g., Obn., SG, br. 18 ot 04.03.2022 g., v sila ot 01.01.2022 g., 2022). For a calculated lifelong payment of 78.45 BGN (15% of 523.04 BGN), the individual should have accumulated at least 15,000 BGN in their individual account (Kalkulator za izchislyavane na pozhiznena pensiya bez dopulnitelni usloviya at POK "Doverie" AD, 2023). This amount will enable them to receive a monthly personal lifelong pension without additional conditions amounting to 80.19 BGN, which exceeds 78.45 BGN⁹. For lower accumulated amounts in the individual's account, the calculated monthly lifelong pension without additional conditions will be lower, and they will receive the amount deferred for a period of their choice - in accordance with legislative requirements from one to three years.

According to the Financial Supervision Commission data as of September 30, 2022, individuals insured in the Universal Pension Fund (UPF) are 3,924,816 (women - 1,892,441 and men - 2,032,375) with an average accumulated amount for individuals in the age range of 60-64 years being 4,237.90 BGN¹⁰ (4,633.96 BGN for men and 3,826.40 BGN for women). (Osigureni litsa i natrupani sredstva v pensionnite fondove kam 30.09.2022g. po vuzrast i pol, 2022). The low amount of accumulations is due to numerous factors acting cumulatively, including incomplete periods of insurance in the UPF - from 2002 until September 2021, when the first pensions for women began to be paid; periods without insurance, i.e., failure to pay insurance

⁹ The calculations were made using the calculator for estimating pensions without additional conditions at "Doverie" Pension Insurance Company. The pension was calculated based on the retirement age according to Article 68, paragraph 1 of the Social Insurance Code, the current Mortality Table and Average Life Expectancy, determined by the Board of Directors of "Doverie" Pension Insurance Company, with an approved technical interest rate of 0.35%, and a hypothetical accumulated amount of 15,000 BGN (Kalkulator za izchislyavane na pozhiznena pensiya bez dopulnitelni usloviya at POK "Doverie" AD, 2023).

¹⁰ The individual amount of accumulated funds in the accounts of insured persons varies widely and depends on multiple factors such as the duration of the insurance period; the insurance contribution and income; the regularity of contributions to the fund; withheld fees; achieved profitability, and others. When calculating the average amount of accumulated funds for an insured person, individuals under § 4b, para. 1 of the Regulations on the Implementation of the Social Insurance Code, whose accounts have no accumulated funds, are not included.

contributions¹¹; low achieved profitability for the entire period of managing funds in the UPF¹²; fees charged by pension companies upon receiving contributions in the individual accounts, investment fees¹³, and other important aspects. This means that a significant portion of retiring individuals in the coming years, especially the first generations, with periods of insurance considerably shorter than the full period, will not have the opportunity to accumulate substantial amounts. Consequently, they will not receive a lifelong pension from the UPF based on the regulated requirements in the payment phase, which place limitations on receiving this pension product according to the calculated pension amount. (Kodeks za sotsialno osiguryavane, chl. 167. (Izm. - DV, br. 67 ot 2003 g., br. 100 ot 2010 g., v sila ot 1.01.2011 g., br. 92 ot 2017 g., br. 19 ot 2021 g.) al. 3 ot KSO (izm. i dop., br. 25 ot 29.03.2022 g., v sila ot 8.07.2022 g.), 2021).

As of the end of 2021, seven funds for lifelong pension payments and nine funds for deferred payments had been established. During the period from September 1, 2021, to December 31, 2021, a total of 270 pension contracts for supplementary lifelong old-age pensions and 1,863 contracts for deferred payments were concluded. These contracts were with individuals who were insured in the Universal Pension Fund (UPF) and had reached retirement age as per Article 68 of the Social Insurance Code (SIC). To facilitate payments to these individuals during the period from September 1, 2021, to December 31, 2021, amounts of 4,479 thousand BGN were transferred from their individual accounts to the lifelong pension payment fund and 8,635 thousand BGN were

¹¹ The full potential of coverage in the Universal Pension Funds (UPF) can be realized with a complete insurance period of 40 years for men and 37 years for women (insurance length that will be required by 2027 according to the conditions and retirement rules for insurance length and age regulated in Article 68, paragraphs 1 and 2 of the Social Insurance Code). The first age groups with additional pensions from UPF will have an incomplete insurance period (from 2002 to September 2021), but it will increase in the future..

 $^{^{12}}$ Since the establishment of pension funds, the average annual return for the Universal Pension Funds (UPF) from 2002 to June 2021 has reached 5.00%. For Occupational Pension Funds (PPF), it was 4.95%, and for Voluntary Pension Funds, it was 5.30% (The Chairman of the BADAPO participates with informational material regarding the phase of second pension payouts in the 3-month bulletin of the Association of Banks in Bulgaria) (Informacionen material otnosno fazata na izplashtane na vtorite pensii v 3- mesechniya byuletin na Asociatsiyata na bankite v Bulgaria , 2022).

¹³ According to the provisions of the Social Insurance Code, companies managing universal pension funds can collect a fee of up to 4% on each incoming social security contribution, applicable until 2018, and up to 3.75% from 2019 onwards.

According to Article 201, paragraph 1, item 2 of the Social Insurance Code, the pension insurance company calculates an investment fee of up to 0.8% for 2018 and up to 0.75% from 2019 onwards on the value of the net assets of the fund (sum of the assets of individual persons). This fee is equivalent to a charge on the value accumulated in the individual insurance account of the person.

transferred to the deferred payment fund. During the same period, 53 thousand BGN were disbursed from the lifelong pension payment fund, and 596 thousand BGN were disbursed from the deferred payment fund for deferred payments to insured individuals. Additionally, a lump sum of 8 thousand BGN was paid to heirs of insured individuals who had received deferred payments. Furthermore, a lump sum totalling 58 thousand BGN was disbursed from the UPF to insured individuals who had reached retirement age. (Okonchatelni rezultati ot deynostta po dopalnitelno pensionno osiguryavane za 2021 g., 2022). The funds allocated from the Universal Pension Fund (UPF) for one-off payments to insured individuals who became eligible for a pension between January 1, 2022, and March 31, 2022, amounted to 72,000 BGN. (Statistika na KFN, Nachisleni i izplateni sumi ot UPF za perioda 01.01.2022 g. - 31.03.2022 g., 2022).

The newly granted pensions from lifelong pension funds, according to data from the Financial Supervision Commission (FSC) for the period between January 1, 2022, and March 31, 2022 c. (Rezultati ot deynostta po dopalnitelno pensionno osiguryavane za parvo trimesechie na 2022 g., 2022), were 193. Out of these, 165 pensions (85.5%) include deferred payments, 26 pensions (13.5%) involve guaranteed payment periods, and only 2 pensions (1%) have no additional conditions. At the end of the period, there were 463 pensioners, with the highest number having pensions including deferred payments (368 pensions), which is 79.5% of the total.

The average monthly pension for the first quarter of 2022 from lifelong pension payment funds for lifelong pensions is 197.61 BGN. The highest amount corresponds to lifelong pensions with deferred payments, at 233.95 BGN. The lifelong pensions without additional conditions and those with guaranteed payment periods average at 63 BGN (see Table 1). (Rezultati ot deynostta po dopalnitelno pensionno osiguryavane za parvo trimesechie na 2022 g., 2022).

The individuals receiving newly disbursed payments from the deferred payment funds are 1,649 in number. The majority of these individuals, comprising 952 (58%), have chosen deferred payments for a duration of 1 to 3 years, followed by 632 individuals (38%) who have selected a payment period of less than 1 year. Only 65 individuals (4%) have opted for payments spanning a period exceeding 3 years. At the end of the period, 3,445 individuals are receiving payments, with 1,669 having a payment period of 1 to 3 years, 1,638 with a payment period of less than 1 year, and only 138 individuals with a payment period exceeding 3 years. The total number of payments made during the quarter is 5,160, with an average monthly payment amounting to 303.55 BGN. (see Table 2) (Rezultati ot deynostta po dopalnitelno pensionno osiguryavane za parvo trimesechie na 2022 g., 2022).

Table 1

Pensions granted and paid out from the pension funds for disbursement of lifelong pensions in the period from January 1, 2022, to March 31, 2022

193
2
26
165
463
10
85
368
837
14
164
659
197,6
63,33
63,07
233,9

Източник: Financial Supervision Commission (Statistika i analizi 2022 (KFN), Otpusnati i izplateni pensii ot fondovete za izplashtane na pozhizneni pensii v perioda 01.01.2022–31.03.2022 g.).

Table 2

Disbursed payments from the deferred payment funds for the period of January 1st, 2022, to March 31st, 2022

	Individuals with newly disbursed payments:	1 649
\checkmark	including those with a remaining period of up to 1 year	632
\checkmark	including those with a remaining period between 1 and 3 years	952
\checkmark	including those with a remaining period over 3 years	65
	Individuals receiving deferred payments at the end of the period:	3 445
\checkmark	including those with a remaining period of up to 1 year	1 638
\checkmark	including those with a remaining period between 1 and 3 years	1 669
\checkmark	including those with a remaining period over 3 years	138
	Number of payments made during the period:	5 160
	Average amount of monthly payment (in BGN)	303,5

Source: Financial Supervision Commission (Statistika i analizi 2022 (KFN), Otpusnati plashtania ot fondovete za razsrocheni plashtania za perioda 01.01.2022– 31.03.2022 g.). Based on the presented statistics, *newly disbursed deferred payments* from the supplementary pension funds represent 89.5%, while newly disbursed lifelong payments comprise only 10.5% of the total number of newly disbursed payments, which amounts to 1,842 for the first quarter of 2022 from the Supplementary Compulsory Pension Insurance Funds ¹⁴ (Rezultati ot deynostta po dopalnitelno pensionno osiguryavane za parvo trimesechie na 2022 g., 2022). In this regard, we can note that the mass payment to the first retiring individuals from the Supplementary Compulsory Pension Insurance Funds will be a deferred payment ranging from one to three years, followed by deferred payment for a period of up to one year. The conclusion is directly related to the low accumulated sum in the individual accounts, which, according to the regulated requirements for receiving pension products from the Supplementary Compulsory Pension Insurance Funds, automatically entitles them to deferred payment of the accumulated funds within the individual account.

In thus described environment, the high number of deferred payments and the low number of lifelong pensions are indicative of the capacities of the second-pillar system and represent a problem as one of the primary requirements and challenges for social policy, including the pension system, is to ensure adequate to the economic conditions social security for Bulgarian pensioners, primarily through payments that can be lifelong in order to perform the function of a pension income¹⁵.

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¹⁴ Here, it is necessary to note that these are the individuals who have chosen to keep their insurance in the UPF (insurance according to Article 4b of the Social Insurance Code), assuming that they have made this choice based on informed and justified reasons, meaning that it is the better option for them. Some individuals have chosen to transfer their funds to the National Social Security Institute (NSSI), indicating that, based on their informed decision, this is the more advantageous option for them.

¹⁵ The needs of the oldest segment of society suggest an increased demand for healthcare services and daily support in household and social activities (such as meal preparation, heating provision, home cleaning, personal hygiene assistance, help with visiting healthcare facilities, etc.). The specific nature of the needs of elderly people (primarily individuals of retirement age) implies a higher financial resource for meeting those needs. According to data from the National Statistical Institute for 2021, the highest relative share of poor households is within the group of households of one person over 65 years living alone (55.4%). This is further confirmed by social support policies targeting poverty and social exclusion. Based on the defined differential coefficients of social groups at risk of falling into poverty, the most vulnerable are individuals over 75 years old living alone, followed by those over 65 years old living alone, individuals with a permanently decreased work capacity of 90% or more, and individuals with a permanently decreased work capacity of 50% or more, living alone.

To determine whether the issue with lifelong pensions from the UPF is systemic or transitional and based on a complex set of factors, with a key one being the incomplete period of insurance¹⁶, we will perform calculations based on conditional assumptions. These assumptions involve a hypothesis of a 40-year insurance period for men and 37 years for women, retirement age of 65 for both genders, a 1% return rate distributed among individual accounts, and four variants of income: option 1 - 75% of the country's average monthly income ¹⁷ or 1,064 BGN; option 2 - 100% of the country's average monthly income or 1,418 BGN; option 3 - 125% of the country's average monthly income or 1,773 BGN. Option 4 - 150% of the country's average monthly income or 2,127 BGN.

These calculations will be performed using the calculator provided by the POK "Doverie" (Kalkulator pozhiznena pensia bez dopalnitelni uslovia, 2023). This approach aims to closely align with the methodological framework, informational resources, and practices of pension insurance companies when calculating pension payments.

For the purposes of this example, we will employ an average growth rate of 8% for income during the period of insurance, aligning with the country's average income growth rate from 2013 to 2023. During the same period, the minimum pension amount for the length of service and old-age increased by an average annual rate of 12%. To maintain the established proportion as of 2023 between the minimum pension amount for the length of service and old age and the average income, we assume an increase rate for the minimum pension amount equal to the growth rate of the average income, which is 8%.

The results from the calculations show that for men, after 40 years of contributing to the UPF, the following amounts will be accumulated: option 1 – 77 635,90 BGN; option 2 – 83 813,46 BGN; option 3 – 87 905,96 BGN; option 4 – 90 622,22 BGN. The data from these example calculations indicate that the size of the lifelong pension will be respectively 469.57 BGN, 506.93

¹⁶ At present, entitled to payment are women who have reached the retirement age according to Article 68, Paragraph 1 of the Social Insurance Code (SIC) and have been accumulating funds since 2002. The first eligible individuals began receiving payments in September 2021. Thus, their accumulated funds have been generated and managed over a period of 20 years. The required insurance period according to Article 68, Paragraphs 1 and 2 of the SIC, as a condition for receiving a pension based on insurance period and age, as well as the right to receive a supplementary pension from the Pension Fund for men, will reach 40 years, and for women, it will be 37 years, at an age of 65 for both genders. This means that in principle, this period of accumulation of funds would be optimal.

¹⁷ According to data from the National Statistical Institute for the period of January 1, 2023, to September 30, 2023, the average monthly insurance income for the country is 1418.16 BGN..

BGN, 531.69 BGN, and 548.11 BGN for the different options from 1 to 4. However, at the expected retirement time in 2063, according to the assumed annual growth rate of 8% for the minimum pension amount based on insurance length and age, it will have reached 10,814.16 BGN. According to legislative requirements, the individual to receive a lifelong pension, the payment size should be at least 1,622.10 BGN (15% of the minimum pension amount based on the length of the insurance period and age, which will be 10,814.16 BGN). In this regard, the example illustrates that there will be no individuals from the collective group who will receive a lifelong pension. Similarly, the data from analogous calculations for women indicate that after 37 years of contributing to the UPF, the accumulated amounts will be as follows: option 1: 69,532.68 BGN; option 2: 75,527.74 BGN; option 3: 79,499.33 BGN; option 4: 82,135.35 BGN. Again, similar to the collective group of insured men, the accumulations in the pension account cannot provide a pension amount higher than 1,622.10 BGN, which would enable its lifelong disbursement.

The example illustrates that even with a complete contribution period under such regulated requirements, retirees would not be able to receive a lifelong pension. The accumulated funds in individual accounts, according to calculations, should be available for a period from 1 to 3 years. In reality, within the pool of insured individuals in the Universal Pension Fund (UPF) who qualify for payment, some will have accumulated larger sums, enabling them to receive a lifelong pension. However, others will have generated much lower amounts, which implies that they will receive their accumulations as a one-off payment. At the moment, we cannot determine the proportion of future pensioners securing themselves in the UPF that will fit within these outlined frameworks due to numerous factors. Some of these factors include late initiation of work activity, considering the increasing demands for education and specific qualifications, prolonged periods of unemployment, low insurance income, part-time employment, and others. For these individuals, it is advisable to make an informed choice and decide whether not to take advantage of their right under Article 4b of the SIC (Kodeks za sotsialno osiguryavane, chl. 4b, v sila ot 1.01.2018 g., br. 19 ot 2021 g., 2023) to entirely transition to the Pensions Fund within the National Social Security Institute (NSSI). By doing so, they forfeit their right to a supplementary pension from the second pillar but secure a full state pension upon retirement. In some cases, this state pension could turn out to be more favorable for them compared to the sum of the two pensions - a reduced pension from the Pensions Fund of the NSSI and a supplementary pension from the UPF.

The solution to the problem of low accumulations in individual insurance accounts and subsequently, the provision of supplementary pensions

from the Universal Pension Fund (UPF) is strictly individual but fundamentally requires influence on factors both individually and cumulatively affecting the size of the accumulated amount upon retirement. One key factor is the size of the insurance contribution.

Upon the establishment of UPFs in 2002, the insurance contribution was 3%, which later increased to 4%. In 2007, following another raise, it reached 5%. There were plans to increase the contribution to 7%, which, to this day, have not been implemented. Thus, for over 16 years, the UPFs have been operating in a phase of accumulation with no change in the size of contribution. However, this occurs in a dynamic socio-economic and demographic environment posing greater challenges to this capital-funded pension scheme, thereby jeopardizing the fulfillment of personal and public commitments.

In 2022, the revenues from insurance contributions to the "Pensions" fund of the National Social Security Institute cover 46.3% of the expenses for pension payments and supplements from the fund. The ratio of received insurance contributions to expenditures for pensions from the fund for previous years is as follows: for 2021 - 44.6%, for 2020 - 52.7%, for 2019 -57.7%, for 2018 - 54.2%, for 2017 - 49.4% (Darzhavnoto obshtestveno osiguryavane prez 2022 g.). Due to actions and/or inactions, which can be categorized as both causes and policies accompanying the public insurance model over the last 20 years, the system faces considerable deficits in the Pensions Fund that are covered by state budget funds. All this occurs against a backdrop of socio-economic and demographic challenges affecting both the revenue and expenditure aspects of public pension insurance. On the other hand, functioning on a capital-funded principle, universal funds distribute what has been accumulated in personal insurance accounts. The amount accumulated in the individual account is a result of insurance income, the period of insurance, the size of the insurance contribution, the return on managed funds, reduced by fees and deductions of the pension insurance companies. In this regard, it is probably necessary to seek equity between the two pension pillars, which should generally work in symbiosis rather than opposition. Consequently, it might be necessary to consider incrementally increasing the contribution to the UPF over specific timeframes and/or with certain changes in key macroeconomic and social parameters. It is possible that this increment could be tied to the growth in state budget allocations to the Pensions Fund to cover public pension payments. Another crucial aspect in this direction is the necessity for the contribution to be a size adequate to the expected and sought-after amount of the supplementary pension. In other words, if we anticipate higher pension payments from the UPF, it is logical to be willing to contribute more.

If we hypothetically assume that the contribution to the UPF increases from the current 5% to 10% over a 40-year insurance period for men based on the country's average income that grows by 8% annually and yields 1% return, the accumulated funds at the end of the period would reach 93,413.10 BGN. However, these funds would allow a payment of 564.99 BGN, which is still considerably lower than 1,622.10 BGN—the hypothetical threshold for receiving a lifelong pension. For women with a 37-year insurance period and the same assumption regarding the annual increase in the average income, that grows by 8% annually and yields 1% return, the accumulated funds at the end of the period would generate 71,206.69 BGN. Again, the accumulated amount would not be sufficient to provide a lifelong pension.

The conclusion drawn from these calculations using the pension calculator of POK Doverie is that even with a doubling of the contribution, individuals with income around the country's average would not have accumulated amounts in their accounts sufficient for receiving a lifelong pension, equal to at least 15% of the minimum pension for insurance period and old-age. This example illustrates and argues for the direction of increasing the size of the insurance contribution as part of a complex set of necessary changes, including legislative actions.

The key to overcoming this individual problem, which also has social dimensions, lies in introducing legislation that regulates the right of individuals to choose a pension product, regardless of the amount accumulated in their individual fund. Acknowledging the necessity of such an approach could limit the group of individuals opting for immediate or one-off payments, thereby affecting one of the primary characteristics of pension benefits, including those from the UPF, which is to provide lifelong social security.

The social security culture of the population should be considered and embraced as a factor in the development and improvement of the pension insurance model, particularly in securing funds in Universal Pension Funds (UPF). Although it may not directly affect the amount of accumulated savings and, consequently, the calculated pension, this factor undoubtedly has a positive effect in several ways: it serves as an incentive for longer periods of insurance and higher income contributions, including demands and control over the insurer for fairness and compliance with labour legislation. It also encourages interest and responsibility towards the initial selection of a UPF, as well as the subsequent processes of managing personal funds by the chosen fund.

The outlined possibilities, analyzed individually and in their entirety, would to some extent contribute to an increase in the accumulated amount in the insurance account of the insured person. This, in turn, would allow a greater number of pensioners to receive supplementary lifelong old-age pension from the UPF. Providing the option to choose a pension product in the distribution phase offers an opportunity for those who have not achieved high accumulations to select between a low-sized lifelong pension, fixed-term, or one-off payment. These highlighted opportunities have the potential to serve as solutions, or at least partial ones, to the issues related to low savings and consequently, to the sustainability of payments from the UPF. However, these possibilities affect various socio-economic interests and should be subjected to broad public debate. A comprehensive and objective discussion should deeply explore the attitudes and capacities of employers, insured individuals, and pension companies to assume these responsibilities in the name of the longterm social security of Bulgarian pensioners and a fair, adequate, and sustainable pension system that serves the interests of the elderly population.

Conclusion

The complexities of shaping and organizing social security, a linchpin of modern societal stability, pose pivotal challenges in social policy. Contemporary socio-economic trends and demographic shifts present formidable hurdles, especially for our pension system. In an era marked by an aging population and labor market uncertainties, compounded by income disparities, there is an increasing need for adaptable protective measures related to individual or collective savings and accumulation of funds, effectively complementing public pension schemes.

In summarizing the achieved results, the following important conclusions can be drawn:

> The newly disbursed deferred payments during the first quarter of 2022, predominantly spanning a period of 1 to 3 years, account for 89.5% of the total newly allocated payments. Conversely, the share of newly issued lifelong payments, primarily in the form of deferred payments, stands at a mere 10.5%.

> The anticipated trend in disbursing initial pensions from the Pension Fund suggests a deferment period ranging from one to three years, followed by deferred payments extending up to one year.

> The substantial prevalence of deferred payments alongside the relatively limited number of lifelong pensions underscore the constrained capacity of the second pillar to provide lifelong social security adequate to the economic conditions, which is a significant social challenge.

> Calculations based on assumed scenarios regarding the maximum insurance period for both men and women, income variations, and even doubled insurance contributions indicate that accumulations by the end of the period would likely not suffice for the provision of lifelong payments.

 \triangleright Potential legislative amendments allowing the choice of a pension product during the distribution phase might enable individuals unable to accumulate substantial funds to opt for a lifelong pension, albeit at a lower rate, instead of receiving fixed-term or one-off payments.

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