



Republic of Serbia

**Fiscal Council**

**ANALYSES, POSITIONS AND SUGGESTIONS**

**15 YEARS OF PRIVATE PENSION FUNDS IN SERBIA:**

**Past developments and Reform recommendations**

*Public debate material*

**Belgrade, January 26<sup>th</sup> 2022**

## SUMMARY

- In 2005, the Republic of Serbia legislated the operation of voluntary private pension funds (VPFs) aimed at securing additional income in old age, to supplement the public system that was to remain as the main source of pension.
- In the 15 years since, the private pension funds realized real returns of 2.2% per annum but have failed to meet reform expectations:
  - their investment policy, which relies dominantly on government bonds, is unable to provide satisfactory rates of return going forward; in 2020 and 2021, these were negative in real terms (-0.3% and -6.1%).
  - Despite generous and exclusive tax benefits, the pension funds failed to gain traction on the labour market – less than 10% of employees have opened accounts with them, while only 3% are using them to save money with any semblance of regularity.
- In this public debate material, based on global experiences, the Fiscal Council provides recommendations for improvements of the existing system that would provide better rates of return for the citizens and expand the scope of pension savings:
  - Cancel the 10% limit on investments abroad;
  - Provide guarantees of positive nominal returns to funds that opt to invest solely into government bonds, reducing the fees charged from the members' manifold.
  - Existing regressive and generous tax benefits should be replaced with more modest and progressive direct budget subsidies.
- Tangible extension of pension savings coverage would require a fundamental change in the existing system and active government intervention to correct for the market failures inherent in the private pension provision:
  - Tender procedure for the selection of a private investment company that would passively invest pension savings on international stock markets, to provide for an optimal return for clients, with minimal cost.
  - Investment portfolios would be progressively transferred, 10 years prior to retirement age, into government bonds to avoid the risk of losing savings to stock market volatility (*life-cycle investing*).
  - A part of the funds would be passively invested at the Belgrade stock market and into government bonds, to stimulate the development of the Serbian capital market.
  - The participation in the new system would be voluntary, while the government could support the new system through potential guarantee for the restoration of invested funds and/or through an automatic employee registration system.
- A portal *e-Pension* should be set up, to provide employees with information on the status of their pension insurance contributions, expected level of public pension and possibilities for additional private pension savings.

**Review table: Shortcomings of the private pension savings system and recommendations**

Issue	Description	Recommendations
Private pension funds dominantly invest in the Republic of Serbia government bonds.	Since there is a limit on investments abroad, set at 10% of the assets, and the national capital market is underdeveloped, private pension funds have practically become “resellers” of government bonds.	<ul style="list-style-type: none"> <li>– Abolish the limit, allowing pension funds to freely invest in the country or abroad, in line with the principles of a prudent investment policy.</li> <li>– Set up specialized funds that would exclusively invest into government bonds with far lower fees and providing a guarantee for a positive nominal rate of return to their members.</li> </ul>
Exclusive tax exemptions for private pension funds discriminate against other legitimate forms of saving for retirement.	Saving deposits to pension funds of up to 6,062 dinars per month are exempt from salary tax and contributions, while long-term savings in banks or through life insurance are subject to regular tax.	<ul style="list-style-type: none"> <li>– Replace generous and exclusive regressive tax exemptions with more modest and progressive direct budget subsidies for pension savings.</li> <li>–Example: 100 Euros annual budget subsidy for workers saving 5% of their salary</li> <li>– Consider the option of including other intermediaries, such as banks, into the pension savings system.</li> </ul>
Pension funds have not gained any traction on the labour market – less than 10% of employees have accounts opened, while only 3% save with any level of regularity	Despite exclusive tax benefits over the last 15 years, citizens are predominantly avoiding this form of saving for retirement, instead mostly relying on banks, life insurance policies and purchase of real estate.	<ul style="list-style-type: none"> <li>– Establish the <i>e-Pension</i> portal where citizens can get informed on the future level of their public pension and opportunities for additional private retirement savings.</li> <li>– Consider limited duration of budget incentives for private savings, for a period of 10 years for example.</li> </ul>
Private pension provision features inherent market failures such as asymmetric information and unproductive sales costs	Even in the most developed countries, the majority of citizens lack financial education to rationally select the optimal method of saving for their retirement, creating a need for government intervention.	<ul style="list-style-type: none"> <li>– Organize a public-private partnership where a private investment company will passively invest on the international stock markets to provide optimal rates of return for members, at minimal cost.</li> <li>– Set up an automatic registration system with the possibility for employees to opt-out of the additional retirement saving system.</li> </ul>

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## 1. INTRODUCTION

Just like most other countries in Europe and world-wide, Serbia is facing *demographic aging*, as a result of extended life expectancy and decreased birth rate (fertility rate). Demographic aging leads to lower public pensions, which creates possibilities – and needs – for additional saving for retirement. Citizens can individually opt for saving in banks or through life insurance, but the practice of governments organizing systems for accessing retirement savings has become widespread globally, aiming to cover as many employees as possible and achieve more favourable rates of return.

By setting up voluntary private pension funds 15 years ago, Serbia also tried to establish an efficient system for additional savings. Unfortunately, the results achieved so far provide no cause for optimism: even with exclusive and generous tax exemptions, only 3% of employees make payments to their private pension savings account with any regularity. In addition, the existing structure, with high fees and investments almost exclusively into government bonds, is unable to provide satisfactory rates of return; in 2020 and 2021, these were negative in real terms (-0.3% and -6.1%, respectively).

In this analysis, we identify the possibilities for reform and improvement of this system: 1) change of the investment policy, so that the pension funds invest in international stock markets and increase their rates of return; significant reduction in fees for those funds that decide to continue to invest (solely) in government bonds; 2) replacement of generous and regressive tax exemptions with progressive budget subsidies aimed at employees with (below) average salaries; 3) considering introducing other intermediaries, such as banks, into the system to expand coverage of employees putting aside additional savings for their retirement.

Although these reforms would lead to significant performance improvement for the existing system, international experience shows that it takes a symbiosis of market mechanisms and government intervention to achieve optimal results. In this context, in Serbia, consideration of a public-private partnership would be the optimal approach; a private investment fund would be selected through an international tender procedure to passively invest (with minimum costs) in international stock markets to achieve optimal rates of return for the members.

This public debate material is organized in the following manner: in section two, we describe private pension funds performance over the last 15 years. In the third section, we present arguments that the existing tax exemptions are regressive and represent some of the most expensive budget subsidies, relative to the number of employees in the private pension fund industry. Section four looks at potential measures for the improvement of the existing system. The fifth section explains that a meaningful improvement would require a fundamental reform and establishment of a public-private partnership aimed at optimizing rates of return for the members. Conclusions are presented in the sixth section.

## 2. PRIVATE PENSION FUNDS PERFORMANCES

In 2005, the **Law on Voluntary Pension Funds and Pension Plans** established a legal framework for additional, voluntary savings for retirement, in addition to the public system based on Pay-As-You-Go financing. Once the necessary bylaws were adopted, the first private pension fund began operations at the end of 2006 and in 2007, the market expanded and several companies for the management of pension funds were established. Following the world economic crisis, the private pension fund market consolidated and, since 2013, it has been comprised of four management companies controlling seven different pension funds (see Table 1). The private pension fund industry employed a total of 123 persons in 2021.

**Pension funds in Serbia operate on the principles of capitalized savings where the insurance holders are not guaranteed the level of return in advance.** Like most countries in East Europe, Serbia has opted to introduce the so-called defined-contribution funds, so that employees can invest their savings. Unlike savings accounts in banks, where interest rates are known in advance, the rate of return for pension funds depends on the success of their investment policies – therefore, it is not known in advance and the members get no explicit guarantees for the returns they may expect. This concept relies on the expectation that investments into (international) capital markets should allow pension funds to provide their members with higher rates of return than bank savings, on average; however, due to the volatile nature of the capital market, it is impossible to guarantee the rate of return in advance. Although empirical results confirm, in general, that long-term pension savings are better invested into capital markets than kept in a bank savings account, the practice in numerous countries has shown problems and challenges, leading to poorer performance of private pension funds.

**Table 1 – General statistics of the private pension funds market in Serbia**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Num. of pension companies	7	9	9	6	6	6	4	4	4	4	4	4	4	4	4
Num. of pension funds	7	10	10	8	9	9	6	6	7	7	7	7	7	7	7
Num. of membership contracts	158,461	201,610	215,704	220,451	234,405	240,369	244,462	252,072	258,068	250,460	253,900	261,726	275,833	279,495	282,403
Num. of members	n.a.	155,954	165,244	166,780	174,868	179,823	183,508	187,997	190,492	183,553	185,445	192,295	201,587	204,969	206,830
<b>Members, % of employees</b>	<b>n.a.</b>	<b>7.5%</b>	<b>8.3%</b>	<b>8.8%</b>	<b>9.4%</b>	<b>9.6%</b>	<b>9.8%</b>	<b>10.2%</b>	<b>10.0%</b>	<b>9.6%</b>	<b>9.4%</b>	<b>9.6%</b>	<b>9.5%</b>	<b>9.4%</b>	
Active membership contracts	91,991	77,524	81,910	94,664	84,392	75,007	75,574	76,038	63,402	69,253	79,135	79,639	85,285	87,736	86,279
Num. of active members	n.a.	64,903	59,527	73,290	61,395	54,801	55,537	58,840	48,253	52,351	62,259	64,133	69,290	72,300	70,759
<b>Active members, % of employees</b>	<b>n.a.</b>	<b>3.1%</b>	<b>3.0%</b>	<b>3.9%</b>	<b>3.3%</b>	<b>2.9%</b>	<b>3.0%</b>	<b>3.2%</b>	<b>2.5%</b>	<b>2.7%</b>	<b>3.1%</b>	<b>3.1%</b>	<b>3.3%</b>	<b>3.4%</b>	<b>3.2%</b>

Source: National Bank of Serbia – Sector for pension fund supervision, Ministry of Finance for the total number of employees.

Note: Data for 2021 pertain to the first half of the year.

**The Law from 2005 recognizes only private pension funds as a legitimate form of retirement savings, stimulated by tax privileges.** It is also possible to save for retirement via savings accounts in banks, or life insurance packages, which many countries recognize as a legitimate form of savings that enjoys the same tax privileges as the pension funds. In fact, even before the Law on Pension Funds was adopted in 2005, insurance companies offered their clients life insurance policies based on the same principles of capitalized savings used by the pension funds. However, the Law from 2005 recognized only the specialized private pension funds as a legitimate, tax-preferred form of savings; that meant that over 100,000 policies of pension insurance based on capitalized savings had to be transferred from insurance companies into the newly formed pension funds.

**Less than 10% of employees are members of voluntary pension funds.** It's important to note that every citizen may enter into membership contracts with multiple pension funds, meaning that in 2020, 206,000 citizens had entered into approximately 280,000 pension fund membership contracts. As we can see from Table 1, at the beginning of pension fund operation in 2007 and 2008, the number of members exceeded 150,000, i.e., about 7.5% of employees – primarily due to the transfer of over 100,000 savings policies that had previously been provided by insurance companies. In the following fifteen years, the number of members showed only a modest increase, stabilizing at about 10% of employees, i.e., over 200,000 members in 2020.

**Only 3% of employees are active pension funds members.** For pension funds to provide adequate income in old age, employees must regularly contribute to their savings, making monthly deposits set aside from their salaries. However, official statistics show that only one in three pension funds members is active, meaning that they had at least one deposit into their savings account in the last 12 months. Inactive members cannot expect satisfactory pension levels, as confirmed by the official statistics – in June 2021, the average amount of accumulated savings in accounts of active members amounted to 450,000 dinars, compared to less than 120,000, on average, in the accounts of inactive members. At that, it should be noted that even active members don't make payments into their accounts regularly, every month – to be classified as active, the pension fund member need only make a single payment in the last 12 months. Thus, for example, a hypothetical insurance holder who has been making payments into their account regularly, every month, since 2007, and whose payments were equal to the statistical mean of all payments made in that month according to the records of the National Bank of Serbia, presented in Table 3, would have about 1.2 million dinars accumulated in 2021. This is almost three times more than the current average accumulation of the active members.

**Average real rate of return amounted to 3% in the period 2007-2019.** Accumulating a satisfactory amount of pension savings requires that employees, for their part, make regular deposits and that, on the other hand, the funds provide adequate rates of return.<sup>1</sup> From Table 2, we can calculate that the average real rate of return in the period 2007-2019 amounted to 3.05%, which can be considered an adequate result, especially bearing in mind the global financial crisis in 2008. However, these results are not sustainable in the long term as rates of return have been achieved, almost exclusively, by investments into the government bonds of the Republic of Serbia. Due to the fiscal crisis, these bonds provided extraordinary high interest rates in the period from 2012 to 2016.

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<sup>1</sup> We'd like to emphasize that it is important to monitor the real rate of return, i.e., rates of return minus the inflation rates, since inflation significantly devalues savings over a time period spanning many years.

**Table 2 – General financial performance of VPFs**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Nominal rate of return	12.25%	-6.96%	15.51%	9.65%	5.79%	12.54%	12.03%	11.44%	16.56%	7.69%	4.66%	5.51%	7.05%	0.97%	1.28%
Inflation	11.15%	9.54%	6.54%	10.45%	7.18%	12.07%	2.20%	1.70%	1.50%	1.60%	3.00%	2.00%	1.90%	1.30%	7.90%
<b>Real rate of return</b>	<b>1.0%</b>	<b>-15.1%</b>	<b>8.4%</b>	<b>-0.7%</b>	<b>-1.3%</b>	<b>0.4%</b>	<b>9.6%</b>	<b>9.6%</b>	<b>14.8%</b>	<b>6.0%</b>	<b>1.6%</b>	<b>3.4%</b>	<b>5.1%</b>	<b>-0.3%</b>	<b>-6.1%</b>
Accumulated assets, bil. RSD	3.1	4.6	7.2	9.9	12.5	16.0	19.7	23.6	28.9	32.8	36.2	40.2	45.3	47.0	48.2
Accumulated assets, % GDP	0.1%	0.2%	0.2%	0.3%	0.3%	0.4%	0.5%	0.6%	0.7%	0.7%	0.8%	0.8%	0.8%	0.9%	0.8%
Portfolio structure, in %															
Government bonds	38.6	33.7	71.8	64.9	74.9	69.6	83.9	86.8	82.8	77.0	83.6	83.1	78.2	73.5	77.3
Bank deposits	38.9	58.3	19.9	21.6	18.2	25.9	11.7	8.9	12.8	14.7	7.2	7.5	6.9	10.8	9.7
Equity shares	22.4	6.3	7.2	11.7	5.4	2.9	2.8	3.9	4.1	7.7	8.8	8.9	11.6	12.5	13.0
Other	0.0	1.7	1.1	1.9	1.4	1.7	1.6	0.3	0.2	0.6	0.3	0.3	3.3	3.2	0.0

Source: NBS, NSO.

**Since 2020, real returns of pension funds have become negative.** After a successful financial consolidation, interest rates on government bonds plummeted, which is reflected in decreased rates of return of pension funds. Despite the fact that there have been notable attempts to diversify the investment portfolios by investing into stocks in recent years, due to a modest supply on the national market and restrictions on investing in foreign capital markets, government bonds of the Republic of Serbia remained the dominant investments category. As a result, the real rate of return in 2020 came in slightly below zero, at -0.3%; as inflation accelerated in 2021, the real rate of return sank deep, to -6.1%.

**Funds are charging disproportionately high fees relative to the investment portfolio structure.** The annual management fee has been legislatively limited to 1.25% of the value of accumulated savings and practically all pension funds are charging this maximum permitted fee. Annual fees of up to 1.25% of the assets are not uncommon in the international practice, but only in the case of funds with highly diversified portfolios and varied investments on international capital markets. Funds that invest solely into domestic government bonds have far lower operational costs, so their fees stay below 0.3 to 0.4%, in general. Bearing in mind that government bonds (and bank deposits) dominate the domestic investment portfolio, we can conclude that Serbian pension funds charge disproportionately high fees compared to the international practice and the (low) value added that they create for their members. At that, it's important to note that annual management fees decrease the savings exponentially, meaning that a 1.25% annual fee decreases the accumulated assets of the client by about 25% over the course of 30-40 years of saving for retirement.



**Text box 1: Effect of fees on the decrease of the members' pension savings**

Market failures are a well-known shortcoming of the private pension provision. Hence, to protect clients, the initial Law from 2005 prescribed limitations of the fees that companies were allowed to charge for funds management. Deposit fees were limited to 3% of each payment, while the annual management fee was limited to 2% of the assets.

Fees related to deposits are not problematic, as they are visible to the clients (deducted from their monthly deposits) and lead to a linear decrease in savings (a fee of 3% for each deposit lowers the final amount of the pension savings by 3%), meaning that even financially unsavvy clients are aware of the consequences of this fee.

On the other hand, international experience shows that management fees are the main reason behind excessive reduction in clients' savings – because clients are not fully aware of the financial effects of this fee that is charged each year, as a percentage of accumulated savings, which gives it an exponential effect. Thus, a 2% annual management fees decrease the savings by about 40% over the course of 30-40 years of paying pension contributions.

To achieve better protection for clients, amendments to the Law from 2011 liberalized the collection of deposit fees, but the management fee was additionally decreased from 2% to 1.25% of the asset value. Unfortunately, a long transitional period was prescribed and this provision only started to be implemented in 2018. However, due to the existing simplistic structure of investment portfolios, even such an annual fee of 1.25% could be considered inappropriately high, requiring additional adjustments and decreases.

For more technical detail on the effects of management fees on the reduction of accumulated savings, see the Report of the Organisation for Economic Cooperation and Development (OECD, 2001) – *Administrative charges for funded pensions: Comparison and Assessment of 13 Countries*, Edward Whitehouse.

**National Bank of Serbia organized a high-quality supervision of the private pension funds industry in line with good international practice.** Successful functioning of the private pension funds industry requires that controversies or issues in operation that may jeopardize professional integrity, or trust among the citizens, be avoided. There were negative examples in countries in transition, where the citizens' trust in private pension funds was broken; the most recent of these took place in Montenegro in 2019, when clients of a certain fund lost their entire savings, as the assets of this pension fund (contrary to the established international practice) were encompassed by the bankruptcy estate of the bank that had established the pension fund management company. To ensure the highest level of financial and business integrity, supervision over the pension funds was entrusted to the National Bank of Serbia (NBS). Over the last 15 years, the voluntary pension fund supervision sector ensured credible operation of this industry, organizing a transparent and comprehensive statistical monitoring system in line with good international practice.

### 3. TAX EXEMPTIONS AND SUBSIDIES FOR PENSION SAVINGS

**Governments invest efforts to stimulate pension savings.** As mentioned above, demographic aging leads to lower public pensions, creating the need for additional pension savings. However, despite the need and the capability of (at least a part of) the citizens to make additional savings for their old age, in practice, this doesn't happen to a sufficient degree. This is primarily due to insufficient financial literacy and myopia of the citizens: some individuals postpone saving for old age as far as they can, which leads them to the point where they no longer can save an adequate amount of pension funds. The citizens' near-sightedness was actually one of the guiding principles behind the decisions of numerous countries at the beginning of the 20th century to introduce mandatory national pension systems. Stimulation of voluntary private pension funds is frequently provided in the form of tax exemptions, with initial monthly deposits into the pension fund exempt from tax and contributions, and the funds' returns also exempt from tax, meaning that only the last stage of withdrawing the saved funds after retirement is subject to tax (the so-called *Exempt-Exempt-Tax* model). Serbia opted to stimulate retirement savings in this way, as well, back in 2005.<sup>2</sup>

**Pension fund deposits of up to 6,000 dinars per month are exempt from salary tax and social insurance contributions.** Deposits made by employees are exempt from salary tax, while deposits made by employers on behalf of their employees, or deposits made by employers within pension plans are exempt from the contributions for mandatory social insurance, in addition to the salary tax exemption. The monthly limit for tax exemptions is indexed every year in accordance to the inflation rate, so from the initial 3,000 dinars per month in 2007, it has grown to 6,062 dinars in 2021 (Table 3). Over the last 15 years, the amount of tax-exemption limit followed salary trends relatively closely, amounting to about 10% of the average salary. Average amount of total deposits into pension funds closely followed the maximum tax-exempt amount in the first several years, until 2010; since 2011, the growth of deposits has slowed down and they amounted to about 80% of the allowed tax-exempt limit in the period from 2011 to 2021.

**Table 3 – Tax-stimulated deposits and average deposits, 2007-2021, in RSD**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Monthly tax-exempt threshold	3,000	3,303	3,528	3,894	4,343	4,647	5,214	5,329	5,420	5,501	5,589	5,757	5,872	5,984	6,062
Average monthly deposit	n.a.	n.a.	3,281	3,600	3,689	3,953	4,054	4,236	4,444	4,944	4,707	4,812	4,946	4,343	4,311
Average net monthly salary	27,759	32,746	31,733	34,142	37,976	41,377	43,932	44,530	44,432	46,097	47,893	49,650	54,919	60,073	64,294

Source: NBS, NSO, Law on Income Tax of the Citizens. Data for 2021 pertain to the first half of the year.

**Empirical research raises the issue of the effectiveness of tax exemptions for pension savings.** The main dilemma regarding tax exemptions for retirement savings lies in the manner in which these stimulations change behaviour – are those citizens, which had previously not been saving, now starting to save, or are citizens who had previously also been saving now changing the form of their savings to utilize the tax privileges and make additional profits? Empirical findings in this respect are not homogeneous, but the results mostly show that a significant part of the savings covered by tax privileges does not represent new/additional savings, but merely a

<sup>2</sup> Actually, the withdrawal of retirement savings in Serbia is only partly taxed (in case of programmed payments) or not taxed at all (in the case of annuity purchases), which makes the domestic tax treatment significantly more favourable than the international practice. However, the tax experts of the International Monetary Fund indicate that the lack of taxation at all stages of accumulation breaches the fundamental principles of tax equity and that the Personal Income Tax Law should be harmonized with the international practice in this segment. For more details, see the report *Improving the efficiency and equity of direct taxes*, Mensur et al., March 2017.

relocation of the existing savings in order to benefit from tax exemptions. These findings raise serious questions regarding the effectiveness of tax exemptions intended to stimulate pension savings, making them look less justifiable from the fiscal point of view.

**Tax exemptions for pension savings are regressive.** In addition to the issues of effectiveness, an important aspect in trying to assess how justified these exemptions are lies in their redistributive effects. Namely, it is far more likely that well situated employees with high income will be able to save for their old age, compared to employees with below-average salaries, whose everyday needs often leave no room for additional savings. Hence, such tax exemptions redistribute the income regressively – from the citizens with lower earnings, towards those with higher salaries. The monthly limit of 6,000 dinars only limits, but does not remove, the inherent regressiveness of such tax exemptions.

**Direct budget subsidies are an alternative to tax exemptions for pension savings.** Aiming to increase effectiveness and decrease regressiveness, some countries have recently relied on direct budget subsidies rather than on tax exemptions for retirement savings. Motives for such change come from the fact that budget subsidies are “more visible” to the citizens, and increased visibility is expected to have a higher effect on behaviour change – enticing the citizens that had not been saving for their retirement before, to do so now. In addition, budget subsidies can be organized so that regressiveness of income redistribution is further decreased. For example, it can be prescribed that the citizens who save 1% of *their* salary are given a subsidy in the amount of 1% of the *average* salary, which financially favours citizens with below-average salaries compared to those with high salaries. Although direct budget subsidies undoubtedly have their advantages compared to tax exemptions, they too can be questionable from the fiscal standpoint. Hence, an increasing number of countries are turning to non-financial approaches, based on behavioural economics, to stimulate their citizens to save for retirement, which will be discussed in greater detail in the fifth section of this study.

**The existing system in Serbia diverges from the international practice and the main tax principles, as the tax privileges are provided exclusively to pension funds.** International practice suggests that tax exemptions should be made available for all legitimate forms of savings for old age, which are relevant in a given country. Thus, for example, Slovenia – and many other countries – provides tax exemptions to registered pension savings in banks. In addition, countries where saving via insurance companies is popular, such as Germany, allow tax exemptions for pension savings to be extended to this form of savings as well. Existing tax exemptions in Serbia diverge from international practice and contradict basic tax principles as they discriminate against legitimate forms of saving for old age, such as saving in banks, groundlessly favouring private pension funds.<sup>3</sup> This approach is all the more unfounded as savings in banks represent the most accessible form of long-term savings for the majority of citizens; excluding this form of savings greatly limits additional pension savings coverage.

**Tax exemptions for private pension funds decrease the revenues of the national budget by about 10 million Euros per year.** According to the official statistics of the NBS, total annual deposits to pension funds amounted to about 3.5 bn dinars, on average. The largest share of these deposits, about two thirds, pertain to deposits made by employers through pension plans and on behalf of their employees, which are exempt from salary tax and contributions. The remaining

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<sup>3</sup> Amendments to the Law on Income Tax for Citizens from 2013 extended the tax benefits afforded to voluntary pension funds to voluntary health insurance, which is a step in the right direction. However, the issue of tax discrimination against other legitimate forms of savings for old age remains, primarily long-term savings in banks.

amount are individual deposits that are only exempt from tax (or, in case they are made by unemployed persons, they are not afforded any exemption; but such cases are mostly marginal). We can, therefore, conclude that this is an annual decrease of budget revenues of 1.2 to 1.5 bn dinars, i.e., over 10 million Euros, for tax exemptions for private pension funds.

**By the number of employees, tax exemptions for the private pension funds industry are more generous than any other existing employment subsidies for investors.** In formal terms, beneficiaries of the tax exemptions are the employed citizens saving for their retirement. However, bearing in mind that these tax exemptions discriminate against other legitimate forms of saving for old age, they can also be seen as a form of a tax incentive for the private pension fund industry, as this is the only industry that can use them. This industry has 123 employees, of which many are sales representatives who work part-time; this is equivalent to 90 full-time employees. We can, therefore, conclude that tax exemptions for pension savings amount to more than 10,000 Euros per employee in the private pension fund industry, which is more generous than the highest existing employment subsidies for (foreign) investors. At that, these employment subsidies are paid as one-offs, while tax exemptions exceeding 10,000 Euros per employee in private pension funds are paid out every year. This fact emphasizes the issue of effectiveness and justification of the existing tax exemptions for the private pension fund system.

**Despite exclusive tax exemptions, pension funds are only modestly used relative to comparable saving instruments.** Accumulated savings in the pension funds amounts to about 50 bn dinars, which is only 3.3% of the total amount of savings in banks, which exceeds 1,500 bn dinars. Of course, savings in banks can have many purposes, but one of the purposes is saving for retirement. Compared to mixed life insurance policies, which – by their function – closely correspond to pension insurance and which have premiums exceeding 10 bn dinars per year, annual deposits into pension funds are three times lower and amount to about 3.5 bn dinars. Finally, there's an interesting comparison to investment funds operating on the same principles as pension funds but without tax exemptions and without age-related limitation for savings withdrawal. At the end of 2013, assets of investment funds were several times smaller than those of pension funds (5 bn and 20 bn, respectively), only to have investment funds post vibrant growth over the years and outperform pension funds with 70 bn dinars of assets in 2021.

#### 4. POSSIBILITIES FOR IMPROVING THE EXISTING SYSTEM

**There are three major shortcomings in the current voluntary pension savings system that need to be improved and rectified:**

- 1) Inability to provide adequate rates of return for savings and/or guarantees for rates of return to the clients
- 2) Insufficient interest among employees for this form of saving for retirement
- 3) Regressive tax exemptions of questionable justification and effectiveness.

#### POSSIBLE SOLUTIONS

**To allow for an increased rate of return in the upcoming period, the funds should be allowed to invest abroad freely.** The purpose of pension funds is to invest the funds of their members in diverse forms of financial instruments that, most often, are not available on the local markets of developing countries. Therefore, it is necessary to allow for the investment of funds on the international capital markets. Due to the limits on allowed investments abroad (10%), pension funds dominantly invest into Serbian government bonds. Although this “extorted” investment strategy provided a solid rate of return in the period from 2012 to 2017, after a successful fiscal consolidation, the interest rates on Serbian government bonds have plummeted. That led to a decline in rates of return of pension funds, which turned negative in 2020 in real terms (-0.3%), only to slip deeper below zero in 2021 (-6.1%) as inflation picked up pace. It is clear that if such a policy of investing into government bonds were to continue, adequate rates of return would no longer be achievable. Hence, the limitation allowing pension funds to invest only 10% of their assets abroad needs to be lifted, allowing them to invest into international capital markets, to achieve better rates of return for their members.<sup>4</sup>

**Funds that opt to invest solely into government bonds should guarantee positive nominal rates of return and slash the fees they charge from their clients.** A complementary approach to the lift of the limitation on investments abroad would be to optimize existing investment policies by having funds that opt to do so invest solely into government bonds in the Republic of Serbia (and bank deposits). Since government bonds are the overwhelmingly dominant category and since they, together with bank deposits, make up over 80% of investment portfolios, exclusion of other forms of investments (stocks, investment funds) would have no significant effect on the level of return that the pension funds currently achieve. However, this approach would allow pension funds to provide clients with explicit guarantees of positive nominal rates of return. Since funds would invest solely into government bonds, the Republic of Serbia would actually be the guarantor of positive nominal rates of return for pension funds clients, through the bonds that it issues. In addition, there would be a large decrease of operational costs for pension funds, which would allow them to lower the fees they charge from their clients by several times. Specifically, the current management fee could be decreased to 0.3% to 0.4% of the asset value, which is what

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<sup>4</sup> The fact is, pension funds are not even using the full existing 10% limit at the moment. However, reasons for lack of investments abroad are practical – when there is no adequate option of diversifying the investment portfolio in geographic terms, from the cost perspective it is not profitable for the funds to invest only 5% or 10% of their assets abroad, as this would not lead to a significant increase of rates of return for citizens, while their costs would increase disproportionately.

similar specialized funds abroad charge. Lowering the management fee from 1.25% to 0.3% would have a major effect members' savings which would cumulatively grow by over 15% for those clients who save regularly over 30-40 years of their working life (see Text box 1).

**Table 4 – Voluntary pension funds coverage in East Europe, data for 2015-2016**

Country	VPF statistics			
	Year of establishment	Number of management companies	% of employees that contribute	Assets, % of GDP
Bulgaria	1994	9	20.1%	0.9%
Croatia	2002	4	17.0%	1.1%
Czech Republic	1994	8	93.8%	9.0%
Hungary	1994	44	27.5%	3.4%
Latvia	2001	6	29.4%	1.4%
Romania	2007	9	4.6%	0.2%
Slovenia	2001	9	54.3%	4.3%
North Macedonia	2009	2	3.1%	0.1%
Serbia	2006	4	2.7%	0.7%

Source: Altiparmakov and Matković (2018) “The development of private pensions in Serbia: Caught between a generic blueprint and an uncondusive local environment”, *Transfer: European Review of Labour and Research*, Vol. 24 No. 1.

**Empirical evidence suggests that guaranteeing positive rates of return creates an important level of trust among the citizens.** Despite the volatility of capital markets from year to year, financial experts harbour no fears with regards to losses of pension savings, as they know it is practically impossible for the cumulative nominal rate of return (of a properly diversified portfolio) to end up negative over several decades of saving for retirement. However, majority of citizens are not financial experts and often shun savings that offer investments into the capital markets, such as stock markets. Hence, guaranteeing positive rates of return can have a positive effect on expanding the coverage of pension funds. Actually, from Table 4 it can be seen that two record-holding countries in East Europe in terms of savings in voluntary pension funds, Czech Republic and Slovenia, both provide their citizens guarantees of nominal rates of return for savings. In Serbia, as well, the aforementioned mixed life insurance policies reach collected premiums that are three times higher than the annual deposits in pension funds, which can at least partly be explained by the guarantee that insurance holders cannot lose funds they have invested into life insurance policies. Therefore, this approach to guaranteeing nominal rates of return for pension funds that invest into government bonds could help increase the very modest and stagnating coverage of employees who currently save in Serbian pension funds.<sup>5</sup>

**It is possible to consider including other financial intermediaries, such as banks, in the organized pension savings system.** In addition to the aforementioned two possibilities for the

<sup>5</sup> Requiring pension funds to guarantee positive nominal rates of return is not an optimal approach, as it leads to conservative investment portfolios that are dominantly invested into government bonds. And truly, real rates of return in Czech Republic or Slovenia hover around 0%, or are even slightly negative. However, since Serbian funds are currently dominantly investing into government bonds anyway, this approach could be considered a step in a good direction in the short term.

improvement of pension funds' investment policies, additional opportunities for increasing coverage of employees saving for their retirement in an organized way lie in the inclusion of other financial intermediaries, primarily banks. As we have mentioned, majority of European, and particularly Western European countries allow for qualified pension savings to be organized by relevant financial intermediaries, such as banks or insurance companies. Hence, to increase coverage in Serbia, it is possible to design diverse approaches to include the existing financial institutions, primarily banks which are most accessible to the majority of citizens into the provision of qualified forms of long-term retirement savings in a systemic manner.

**Low efficiency of regressive tax exemptions needs to be improved.** Instead of the existing tax and contributions exemptions, it is both possible and necessary to come up with a subsidy system that would be more “visible” to the citizens, less generous but better targeted at lower income employees. For example, it is possible to consider budget subsidies of 100 Euros per year for employees who save 5% of their salaries for their retirement. This would decrease the regressiveness of the existing tax benefits, as this type of budget subsidy is more generous towards employees with low and below-average salaries. Also, it would be possible to consider limiting the duration of subsidies and exemptions for pension savings to a period of 10 years for example. At that, the generally limited efficiency of financial incentives for pension savings needs to be kept in mind. This is why certain countries have opted for non-financial incentives, the most common of which is the system of “automatic registration”: instead of citizens volunteering to save, the government automatically registers all employees, and they can then opt out of the pension savings should they choose to. However, the automatic registration system means that the government is implying a guarantee of a credible and efficient functioning of the entire system which, in Serbia's case, would require a fundamental reform that we will consider in the next section.

## 5. SYSTEM REFORM PROPOSAL

**International practice clearly suggests that wide coverage of employees by pension savings requires active government intervention.** Reform measures considered above have unambiguous potential to remove some of the current system's most irrational properties, further increasing the appeal of voluntary pension savings. This increase of appeal will consequently lead to increased coverage of employees, who save for their old age, but the experiences of other Eastern European countries summarized in Table 4 indicate that the reach of such measures is – limited. Even in the case of Czech Republic and Slovenia, two countries that have achieved highest coverage, employees usually fail to make sufficient, or even sufficiently regular deposits into their savings accounts, which means that they cannot expect significant level of pension accumulation. To achieve a significant coverage of a retirement savings system that would represent, in the upcoming decades, a significant source of income in old age, active intervention of the government is necessary. In the most developed countries, such as Canada or Sweden, governments intervened by setting up a state capitalized pension fund. In East Europe, the dominant practice was to introduce mandatory savings in private pension funds (the so-called *second pension pillar*).

**Mandatory private pension funds in Eastern Europe underperformed compared to the existing public Pay-As-You-Go pension systems.** Despite great expectations two decades ago, it turned out that the controversial introduction of mandatory private pension funds failed to meet its promise, by a long shot. So, real return of mandatory private funds amounted to only about 1.5% in Lithuania or Bulgaria, a modest 0.5% in Slovakia and Estonia, while Latvia has been recording negative real rates of return of -0.4%. In addition, pension funds in many countries, such as Hungary, Poland, Croatia and Romania have dominantly invested funds entrusted to them back into government bonds, which is a PAYG financing in disguise that is inferior to traditional public PAYG financing. So, it turned out that the employees who saved in mandatory private funds would end up with significantly lower pensions than their colleagues who remained in the public system, which led to an uproar of dissatisfaction and eventually to the termination of the legal obligation for citizens to save in private funds, in most countries. Detailed elaboration of poor performance of private funds in Eastern Europe falls outside of the scope of our analysis, but poor performance and low rates of return can be correlated with market failures inherent in private pension provision present even in more developed markets such as Great Britain or Australia. Due to excessive operational and marketing costs, such systems often prevented their members from achieving satisfactory rates of return for their savings.<sup>6</sup>

**Performances of public pension funds in the most developed countries are impressive, but that approach is not suited to countries in transition.** To avoid inherent problems with the functioning of the competitive private pension provision, developed countries such as Canada, New Zealand, Norway or Sweden opted to have government institutions running pension accumulations, which cover all employees. Results they have achieved so far are impressive, with real rates of return of about 5% per year. However, it is important to note that the level of institutional quality in Canada or Sweden, which is of key importance for successful management of government-run pension funds, does not even exist in many OECD countries, let alone in countries in transition which often have numerous serious institutional failures. Even in those countries in transition where it would be possible to develop adequate public institutions to manage pension savings, this approach could hardly be expected to gain trust from the citizens that is necessary for a successful

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<sup>6</sup> For more details see “25 years of averting the old-age crisis in Eastern Europe”, *Global Social Policy*, Altiparmakov and Nedeljković (2021).



long-term functioning of such systems. Hence, in Serbian case, it is not justified to consider reforms that would include government institutions directly managing pension savings.

**In Serbia, a public-private partnership would be the optimal approach; a private investor passively investing pension savings on the international stock markets.** This approach seems like the only rational approach, taking into consideration the limited institutional capacities of the Republic of Serbia and the inherent problems in the functioning of private pension funds markets. The fact that only a negligible number of active investors manage to achieve higher rates of return than passive stock market indexes in the long term suggests that the proposed model would provide an optimal return for savers in Serbia, with minimal costs coming in at less than 0.1% of the assets for investments into stock markets of developed countries and at about 0.5% per year for investments into developing countries (in comparison to existing fees of 1.25% for investments mainly in domestic government bonds). In addition, a transparent selection of a private institutional investor at an international tender would neutralize any political risk of low-quality management of savings.

**Passive investment into international stock markets is the optimal approach to pension savings.** Not only do private pension funds markets suffer from inherent failures in the form of excessive operational costs that decrease the members' returns, even the existence of any value added can be questioned in this case. Namely, the efficient capital market hypothesis predicts that private investors cannot, in the long term, achieve higher returns than the average returns on the market, the so-called *passive stock market indexes*. Actually, if we look at the relevant stock market statistics, from the United States, through Canada, to Europe and Australia, we can see that the passive stock market indexes show superior performance compared to private funds. Thus, e.g., in the United States, the passive *S&P 500* stock market index provides higher returns than 60% of investment funds over a one-year period; however, this increases to 72% over a five-year period, 85% over a ten-year period and 92% of private funds with inferior returns compared to the stock-market index over a period of 15 years.<sup>7</sup> Over 30-40 years of pension savings, private funds that could surpass passive stock-market indexes fall in the domain of statistical errors. At that, even if such funds were to exist, even financial experts would be unable to know in advance, with any certainty, which private funds would manage to outperform stock market indexes.<sup>8</sup> For this reason, US Federal Government has organized retirement savings for its own employees via passive funds invested into stock market indexes (US Thrift Savings Plan <https://www.tsp.gov/>).

**Most citizens don't have the financial know-how to use the advantages of stock-market investments on their own.** The S&P-500 index produced annual real returns of about 6% over the 1981-2020 period, which is more than enough to provide a healthy pot of retirement savings for workers investing in passive market indices. Despite the fact that (passive) investments in international stock markets represent the optimal approach to pension savings, many citizens who lack the financial knowledge would not dare invest their savings on the international capital markets. Namely, research shows that the majority of citizens are highly risk-averse and therefore avoid investing into capital markets. Hence, guarantees for savings invested, which were offered by pension funds in the Czech Republic and Slovenia, or guarantees offered by insurance

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<sup>7</sup> For further detail, visit <https://www.spglobal.com/spdji/en/research-insights/spiva/>

<sup>8</sup> It is interesting to note the challenge issued by Warren Buffett, one of the wealthiest men in the world and the leading connoisseur of financial markets, to the managers of the largest specialized investment funds, the so-called hedge funds, to beat the S&P 500 index over the upcoming 10 years. They took the bet, but five of the leading hedge funds admitted defeat years before the deadline.

companies for mixed life insurance policies in Serbia play a major role in increasing the popularity of these saving instruments. However, financial experts are aware that, bearing in mind the performances of the capital markets in the previous decades and centuries, it is practically impossible to end up with negative nominal rates of return over several decades of pension savings. This allows for the possibility, and creates the need, for a government intervention, which would allow the majority of citizens, who are financially unsavvy, an access to optimal pension savings via stock-market indexes. One of the possible approaches is to have the government extend guarantees of positive nominal rates of return for savings so that the citizens would take the plunge, as such a guarantee would basically not give rise to any additional costs for the government, bearing in mind the statistical performance of capital markets over the past decades and centuries.<sup>9</sup> In addition, citizens can be stimulated by automatic registration for the new pension savings system.

**Automatic registration system would allow for a much broader coverage of workers by the new public-private partnership system.** The proposed system reform would eliminate irrational elements in the existing system and introduce an economically efficient retirement savings system, which would justify the introduction of the automatic registration system. Employees would be automatically registered for additional savings within the new system, having an option to opt-out of additional pension savings or to opt to continue saving in existing pension funds (or banks). From an operational standpoint, the automatic registration system would be implemented as an extension of the already existing digital services provided by the Pension and Disability Insurance Fund. Specifically, existing basic digital services covering contributions paid by the insurance holders would need to be extended into a comprehensive *e-Pension* system that would provide insurance holders with preliminary forecasts of the pension benefit they could expect from the public system and the options for additional private pension savings that are available to them. This would allow for a full integration of the public pension system with the private forms of pension savings, allowing the generations of current employees to better plan their future retirement incomes.

**The proposed system reform would also stimulate the development of the domestic capital market.** The majority of the funds would be passively invested in international stock markets, however, the possibility remains that a small share, about 5% of the assets, would be passively invested into the Belgrade stock market. This would provide a foreseeable cash inflow, homogeneously distributed to fund companies listed on the Belgrade stock exchange, without jeopardizing the principle of prudent investment portfolio diversification. In addition, in line with the life-cycle investing approach, the investment portfolios would be progressively transferred to government bonds, starting 10 years prior to the retirement age, to avoid the risk of employees nearing retirement suffering significant losses of their savings due to stock market volatility. These funds would be invested into Republic of Serbia's government bonds, which would additionally improve this part of the domestic capital market and facilitate state budget financing.

**The proposed model for investing pension savings would contribute to sustainable development in the upcoming decades.** Many East European countries insisted on dominantly investing pension savings into their national economies, but this approach failed to show any tangible effect on the acceleration of economic growth. In fact, due to the globalization and modernization of finance and financing sources, from the macroeconomic viewpoint, domestic

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<sup>9</sup> If we observe the results of the US stock market, only a person that retired at the peak of the economic depression in 1929-1931 could have seen negative nominal rates of return. However, such drastic outcomes are easy to avoid with government intervention over the few years it would take for the stock markets to recover.

competitiveness is imposed as the key factor of economic growth. On the other hand, investing pension savings on the international capital markets would decrease the pressures on the real appreciation of the dinar, which, as a rule of thumb, accompanies countries in development (the so-called Balassa-Samuelson effect), reducing their international competitiveness as they approach the standard of living of the developed countries. In addition, efficient access to international capital markets would represent an important alternative for numerous citizens that are currently saving solely by investing in real estate, which would decrease the risk of real estate value ballooning in the upcoming years, with its consequential negative social impacts that would arise out of numerous (young) families being unable to afford housing.

## 6. CLOSING REMARKS

**The public pension system will continue to be the dominant source of income for the elderly in the decades to come.** Still, as the population ages, public pensions will become relatively more modest in the future, so current generations of employees throughout Europe need to consider additional pension savings. For that purpose, the Republic of Serbia established a voluntary private pension fund (VPF) system in 2005. Unfortunately, after 15 years of its operation, we can say that this system has, for the most part, failed to meet the goals for which it was established: despite generous and exclusive tax exemptions, only 3% of employees are saving in these private funds with any level of regularity. In addition, due to disproportionately high fees and dominant investing into government bonds, VPFs are unable to provide satisfactory rates of return on savings, which has become obvious after the successful fiscal consolidation.

**Partial measures can be used to eliminate the greatest shortcomings of the current system.** By eliminating the limit on investments abroad, the VPFs will no longer be limited to the domestic capital market, which will allow them to properly diversify their investment portfolios and increase rates of return. As a complementary approach, VPFs can also become specialized and provide, with far lower fees, exclusive investments into government bonds of the Republic of Serbia, providing their clients with a guarantee of positive nominal rate of return. The existing system of generous and regressive tax exemptions for VPFs needs to be reformed and substituted by a more modest and more progressive system of direct budget subsidies for pension savings.

**Substantial integration of capitalized savings into the Serbian pension system will require a fundamental reform and change of the current approach.** Although the aforementioned partial measures can undoubtedly eliminate some of the obvious shortcomings of the current VPF system, international experience shows that active government intervention is necessary to ensure a broad coverage of employees with additional pension savings, to correct for the inherent shortcomings of the private pension funds market. Specifically, in Serbian case, this would mean the establishment of a public-private partnership, where a private investment fund would be selected through a public tender to passively invest the savings from all members on the international stock markets. Financial theory suggests that this is an appropriate approach to provide members with optimal rates of return, with minimal costs that would amount up to 0.1% of the value of assets to be invested on the stock markets of developed countries (compared to the existing annual fee of 1.25% of the assets). The role of the government would be reduced to stimulating citizens by potential guarantees for non-negative nominal returns on the invested funds,

and/or by providing an automatic system of registration with the new pension savings system. This would set up an efficient and credible pension savings system that would naturally integrate with the public pension system and provide future beneficiaries with more secure income in old age.

**Finally, the integrity of the reform process must be ensured; the reform must be steered solely by the interest of the contributors – current and future.** The purpose of every pension system is to provide an adequate income in old age. In case of public systems, the question of adequacy of pension income is primarily of a social-political nature, i.e., it relates to the intergenerational agreement on how the weight of demographic aging will be distributed between the current and future generations of employees and pensioners. However, since there is a need for additional savings, the financial industry becomes an active participant in the pension reform process. Indeed, the finance industry plays an important role in ensuring pension income in countries such as The Netherlands or Switzerland where public pensions have a welfare character. However, the key is to ensure a successful merger of the financial intermediaries into the public pension system, in the best interest of the members. This, sadly, was not the case in majority of the East European countries where mandatory private pension funds were introduced to the detriment of the public system, in a way that had not been implemented in any developed country in Western Europe. It is thus important for Serbia to avoid the painful East European experiences and implement future private pension savings reforms in line with the local capacities and limitations, taking into consideration the good practice of Western European countries, such as Germany, whose example the Serbian pension system has been following since its establishment.