

NATIONAL BANK OF SERBIA

INSURANCE SUPERVISION DEPARTMENT PENSION FUNDS SUPERVISION DIVISION

VOLUNTARY PENSION FUNDS SECTOR IN SERBIA

Third Quarter Report 2020

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1 Market participants

At end-Q3 2020, the market of voluntary pension funds (VPFs) included four companies managing seven VPFs, one custody bank, five intermediary banks and one insurance brokerage undertaking¹.

Market participants **National Bank of Serbia Dunav** Banka Srbija Raiffeisen **Future** Custody bank Central Securities Depository **Brokers** Stock **DDOR** Exchange Garant Ekvilibrio Generali **Basic Securities Commission**

At end-Q3 2020, VPF management companies employed 123 persons, the same as a quarter earlier.

The NBS licenses sales agents, who passed professional examinations and fulfilled other requirements, to disseminate information about VPF operation. By end-Q3 2020, 882 sales agent licences were granted.

As brokers – management companies, banks and insurance undertakings may engage sales agents. At end-Q3 2020 management companies hired 103 persons, intermediary banks 458 persons and the insurance undertaking 45 persons as sales agents.

¹ Raiffeisen Bank a.d. Beograd, OTP banka Srbija a.d. Beograd, NLB banka a.d. Beograd, Addiko Bank a.d. Beograd and Sberbank a.d.Beograd, joint-stock insurance undertaking DDOR Novi Sad, Novi Sad.

2 Net VPF assets

At end-Q3 2020, net VPF assets equalled RSD 45.9 bn, up by 1.6% q-o-q. The change in the value of net assets reflects net contributions², withdrawals and investment returns. In Q3 2020, total contributions amounted to RSD 844 mn,

At end-Q3 2020, net assets equalled RSD 45.9 bn.

withdrawals to RSD 625 mn and investment return to RSD 517.4 mn.

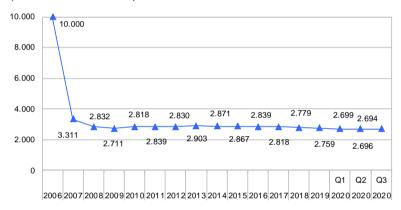
End-of-period net assets of the VPF sector

(III KS	(ווט ספ											
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		2020	
2010	2011	2012	2013	2014	2013	2010	2017	2010	2013	Q1	Q2	Q2
9.9	12.5	16.1	19.7	23.6	28.9	32.8	36.2	40.2	45.2	44.6	45.14	45.14

Source: National Bank of Serbia.

End-of-period sector concentration

(Herfindahl-Hirschman Index)



Source: National Bank of Serbia.

Measured by HHI, market concentration in the sector³ at end-Q3 2020 amounted to 2,694 points, indicating high concentration in the VPF market.

According to the size of net assets of a VPF relative to total net assets of the sector, two funds were classified as "large" and two as "medium". Together, they held 94% of the market share, with the largest fund accounting for around 39%.

Number of funds by groups divided by market share

(in units) Share in net assets 2010 2011 2012 2013 2014 2015 2016 2017 2018 (%) Q1 Q2 Q3 Large (20 and 2 2 2 2 2 abov e) 2 2 2 2 2 2 2 2 Small (0 - 4.99) 4 3 3

² Net contributions are total contributions minus the front-load fee.

³ In terms of the share in total net assets.

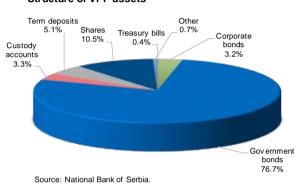
3 Structure of VPF assets

At end-Q3 2020, the structure of investment of VPF assets remained broadly unchanged. Government bonds accounted for the major part of VPF assets – 76.7%. Balances held in custody

The bulk of assets was invested in government debt instruments – 77.1%.

accounts and term deposits with banks made up 8.4%, shares 10.5%, T-bills 0.4%, and corporate bonds 3.2% of total VPF assets. Investment in units of open-end investment funds and receivables made up the category "other" which accounted for 0.7%.

Structure of VPF assets

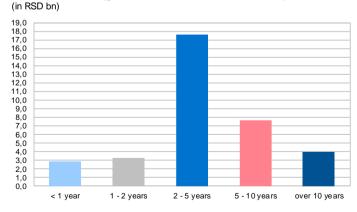


Government debt instruments (bonds and T-bills) kept the dominant position in total fund assets at the end of this period. The share of these financial instruments in fund assets decreased mildly from 79% at end-Q2 to 77.1%.

On the other hand, aggregate exposure to the shares of domestic legal persons increased from the end of the previous quarter – from 9.8% to 10.5% of total fund assets as a result of recent trends in the Serbian financial market.

At end-Q3 2020, 8.2% of government debt instruments were with the maturity of up to one year, 9.1% between one and two years, 49.9% between two and five years, 21.6% between five and ten years, and 11.3% over ten years.

Maturity structure (government fixed income securities)



The average maturity of assets⁴ invested in government debt instruments was 4.5 years.

At end-Q3 2020, 85.2% of total assets were in dinars and 14.8% in a foreign currency (EUR).

4 Return on investment

At end-Q3 2020, the value of FONDex⁵ reached 3,043.60⁶. The rise in FONDex is the weighted average return on all funds, and it came at 1.9% for the past year. Since the start of VPF operation⁷, FONDex return has equalled 8.4%.

Given the structure of VPF investment, the return is influenced by: the change in the yield curve on government debt instruments⁸, change in the prices of shares, level of the key policy rate and banks' interest rates, and changes in the dinar exchange rate against the euro and the dollar.

Market value of issued dinar-denominated government debt instruments, by maturity

RSD	

Maturity	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020
3m	-	-	-	-	-
6m	-	-	-	-	-
12m	-	-	-	34.4	-
18m	-	-	-	-	-
24m	-	-	-	38.9	9.0
36m	-	-	-	54.0	-
60m	-	13.1	20.1	26.5	13.2
84m	41.0	24.1	-	-	-
120m	-	-	-	-	-
144m	-	-	37.5	4.8	1.5
Total	41.0	37.2	57.6	158.5	23.6

Source: Ministry of Finance.

of longer-maturity instruments are more sensitive to interest rate changes.

⁴ The maturity of instruments weighted by their share in total investment in government debt instruments.

⁵ FONDex is the index which indicates movements in investment units of all VPFs in the market.

⁶ The initial FONDex value on the first business day of the first VPF, 15 November 2006, was 1,000.

⁷ Annual rate.

Annual rate.

8 A decline in interest rate leads to an increase in the prices of debt instruments and vice versa. The prices

Accepted rate of issued dinar-denominated government debt instruments, by maturity

Maturity	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020
3m	-	-	-	-	-
6m	-	-	-	-	-
12m	-	-	-	1.8%	-
18m	-	-	-	-	-
24m	-	-	-	2.0%	2.0%
36m	-	-	-	2.2%	-
60m	-	2.3%	2.6%	2.6%	2.7%
84m	3.4%	2.7%	-	-	-
120m	-	-	-	-	-
144m	_	-	3.4%	3.9%	4.0%

Source: Ministry of Finance.

In Q3 2020, the primary market of dinar-denominated government debt instruments saw the issue of two-year securities (RSD 9 bn) at the rate of 2%, five-year (RSD 13.2 bn) at the rate of 2.7%, and twelve-year securities (RSD 1.5 bn) at the rate of 4%.

There was no issue of euro-denominated government debt instruments in Q3 2020.

Market value of issued euro-denominated government debt instruments, by maturity

(in EUR mln)						
Maturity	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020
12m	-	-	-	-	-	-
24m	74.6	-	-	59.9	40.2	-
36m	53.6	-	58.9	-	-	-
60m	92.4	-	-	4.4	-	-
84m	-	-	-	-	-	-
120m	-	-	34.5	-	-	-
144m	-	-	-	100.6	-	-
180m	-	-	-	-	-	-
240m	-	-	-	161.2	-	-
Total	220.6	-	93.4	326.0	40.2	-

Source: Ministry of Finance.

Accepted rate of issued euro-denominated government debt instruments, by maturity

Maturity	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020
12m	-	-	-	-	-	-
24m	0.8%	-	-	0.5%	0.5%	-
36m	1.2%	-	0.6%	-	-	-
60m	1.5%	-	-	1.1%	-	-
84m	-	-	-	-	-	-
120m	-	-	1.9%	-	-	-
144m	-	-	-	1.9%	-	-
180m	-	-	-	-	-	-
240m	-	-	-	3.0%	-	-

Source: Ministry of Finance.

The prices of shares on the Belgrade Stock Exchange (BSE), measured by the BELEX15 index⁹, fell by 1% at end-Q3 2020 (the value of the index was 659.67 at end-September). The index fell by 12.2% over the past year.

The key policy rate equalled 1.25% at end-September 2020. The level of interest rates earned by funds on dinar assets in custody accounts mirrored the movements of the key policy rate.

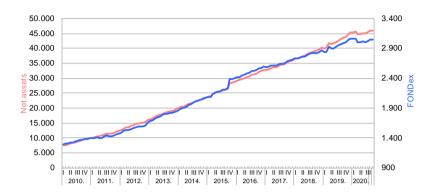
In Q3 2020, the dinar slightly depreciated vis-à-vis the euro, edging down by around 0.004% relative to end-Q2. In the same period, the dinar gained 4.3% against the US dollar.

Price growth rates came at 0.2%, -0.1% and -0.5% in July, August and September, respectively. Y-o-y, consumer prices gained 1.8% in September 2020. 10

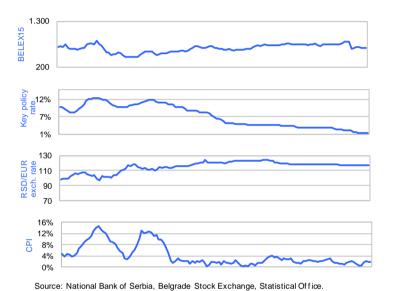
⁹ Of the total investment in shares, the bulk pertained to the shares covered by BELEX15, which means that BELEX15 is a relevant benchmark for the shares in the funds' portfolio.

¹⁰ Source: Statistical Office of the Republic of Serbia.

Movements in net assets, FONDex and key indicators of VPF (in RSD mn. units. %)



5



Fees charged by management companies

The Law on Voluntary Pension Funds and Pension Schemes sets out that management companies charge fees for their services and account transfer to fund members. Management company fees entail contribution and management fees. The account transfer fee may not exceed the actual transfer costs.

Though fees are among the parameters that members should consider when choosing a fund, they should not be viewed in isolation. The level of fees is contingent on the fund's investment policy and its investment activity. As a rule, more active funds, intended for younger persons who will pay contributions over a longer horizon, invest more in more complex instruments, assuming a higher degree of risk. Such funds are expected to post higher returns, hence their fees are higher. On the other hand, a fund investing passively in safer financial instruments should charge lower fees. A fund's investment policy, i.e. planned investment of the fund members' assets, the expected return, the level of risk assumed by funds (and members), and fees charged by companies, should all be taken into account when opting for a fund.

The contribution fee is paid only once, as a front-load fee. Though visible in the first instance, it is not the largest cost incurred by a member.

The total amount of contribution fees paid in Q3 2020 amounted to RSD 18.9 mn and the level of the fee in the same period was 2.2% on average.

The management fee is calculated daily against the value of net VPF assets and is included directly in the investment unit value, meaning that the calculated and published investment unit value is exclusive of the management fee.

In Q3 2020, the total value of management fees equalled RSD 142.8 mn, which is around 88% of the total fees charged.

Over the past year, the management fee equalled RSD 562.1 mn, while profit of RSD 871 mn was earned in the same period.

Fees charged by management companies

														2020	
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Q1	Q2	Q3
Contribution fee	56.9	54.9	59.4	57.9	60.1	58.7	55.4	53.0	56.8	61.0	66.3	71.8	18.4	18.6	18.9
Management fee	73.5	117.3	170.7	220.0	284.1	357.8	432.8	514.9	614.4	678.7	474.0	526.7	140.6	139.6	142.8

6 Trading in securities

VPF trading volumes equalled RSD 4.7 bn in Q3 2020.

The average share of VPFs in BSE trading was 13.8% during the quarter.

VPF securities trading (in RSD bn)

(ווו מסטווו)											
	2012	2012	2014	2015	2016	2017	2018	2010		2020	
	2012	2013	2014	2015	2016	2017	2016	2019	Q1	Q2	Q3
Securities trading	13.2	12.9	21.2	14.5	11.5	24.2	16.1	48.7	15.4	2.0	4.7
Purchases	7.1	9.0	12.1	7.9	6.4	14.7	9.3	27.1	8.5	1.0	2.4
Belgrade Stock Exchange	0.3	0.4	0.5	0.9	1.1	3.7	2.7	3.2	1.3	0.3	0.3
Unregulated market	0.1	0.7	0.9	1.8	1.1	5.8	3.2	16.7	4.5	0.6	1.7
Auctions of government secur	6.7	7.9	10.7	5.2	4.2	5.1	3.4	7.1	2.7	0.2	0.4
Sales	4.2	2.0	5.4	3.6	3.0	7.4	5.5	19.6	6.4	0.4	2.2
Belgrade Stock Exchange	0.3	0.6	0.3	0.5	1.9	2.7	3.2	1.4	1.0	0.1	0.7
Unregulated market	3.9	1.4	5.0	3.2	1.1	4.7	2.3	18.1	5.4	0.4	1.5
Maturity	2.0	2.0	3.7	2.9	2.1	2.2	1.3	2.1	0.5	0.5	0.9
Purchase to sale and maturity ratio	1.1	2.3	1.3	1.2	7.5	1.5	1.4	1.3	1.2	1.1	1.0
Share in total BSE trading (in%)	2.6%	3.4%	4.1%	6.1%	6.7%	33.0%	9.4	5.1	10.6	3.3	13.8

Source: National Bank of Serbia, Belgrade Stock Exchange.

7 Transaction costs

Transaction costs incurred in the purchase, sale and transfer of securities (Central Securities Depository fees, stock exchange fees, tax charges) and the costs of current

maintenance of real estate property that fund assets are invested in are charged against fund assets. Other costs are charged against the assets of management companies.

The total transaction costs in Q3 2020 amounted to RSD 2.4 mn. In the same period, Central Securities Depository fees had a greater share in transaction costs compared to stock exchange fees, while brokerage fees made up the bulk of costs paid by management companies from their assets compared to custody bank fees.

Amount of transaction costs

(in RSD mn)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 -		2020	
	2010	2011	2012	2013	2014	2013	2010	2017	2010	2019	Q1	Q2	Q3
Total	9.5	7.0	4.7	6.0	6.2	5.6	7.3	10.5	8.3	17.2	3.4	2.3	2.4
Brokerage fees	4.5	2.9	2.0	2.5	2.0	1.3	2.3	4.4	3.0	8.0	1.2	1.2	0.7
Custody bank fees	2.4	2.2	1.5	1.9	2.0	2.0	2.0	1.9	1.8	3.1	0.8	0.4	0.6
Stock exchange fees	1.1	0.8	0.3	0.6	0.6	0.8	1.0	1.8	1.3	1.9	0.4	0.2	0.3
Central Securities Depository fees	1.5	1.1	0.9	0.9	1.6	1.6	2.0	1.8	1.6	3.4	1.0	0.2	0.6
Other fees	-	-	-	0.1	0.0	-	0.0	0.6	0.6	0.7	0.2	0.2	0.3

Source: National Bank of Serbia.

8 Number and structure of VPF users

At end-Q3 2020, 203,564 users¹¹ were in the accumulation phase¹², up by 4,270 relative to the same period in 2019. Total VPF membership contracts¹³ stood at 278,457.

Number of contracts and users

(in thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		2020	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Q1	Q2	Q3
No of contracts	220.4	234.4	240.4	244.5	252.1	258.1	250.5	253.9	261.7	275.8	277.6	277.7	278.5
No of users	166.8	174.9	179.8	183.5	188.0	190.5	183.6	185.4	192.3	201.6	202.9	203.0	203.6
Percentage of active users (in %)	43.9%	35.1%	30.5%	30.3%	31.3%	25.3%	28.5%	33.6%	33.4%	34.4%	31.3%	32.1%	33.5%

Source: National Bank of Serbia.

VPF users accounted for 9.4% ¹⁴ of the total number of employees.

¹¹ The number of users is the number of people who are members of VPF(s). This number is lower than the number of membership contracts, as there is a significant number of users with more than one membership contract in one or several VPFs.

¹² VPF membership has two phases – the accumulation phase (when contributions are made) and the withdrawal phase (when the accumulated funds are withdrawn).

¹³ The number of membership contracts is the sum total of individual membership contracts and the number of members of all pension schemes.

¹⁴ The source for the number of employees: NBS.

Structure of users by payment dynamics

(in units and %)

	Period	No of users	Share (%)
D ,,	1 month	68.284	33.5%
tions	3 months	74.481	36.6%
tribu	6 months	77.136	37.9%
50 0 3 months 4 months 6 months 12 months	12 months	84.415	41.5%
	From the start of membership (1)	181.242	89.0%
holding	s (2)	22.322	11.0%
al (1+2	2)	203.564	

Source: National Bank of Serbia.

The amount of accumulated funds depends on the amount of contributions, return earned by funds, level of fees, and the length of the accumulation phase. As the level of contributions and the period of accumulation increase and funds earn returns, average balances in members' individual accounts go up. The average amount of funds accumulated in the accounts of members who have made at least one contribution payment was RSD 253 thousand. At end-Q3 2020, the number of users who were members of two or more VPFs was 41,803 or around 21% of the total number of users.

Average accumulated funds at end-period

(in RSD thousand) 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 -Q1 Q2 O3 84.5 105.3 127.3 148.3 179.4 200.6 219.3 235.8 239.9 247.4 249.9 253.0

Source: National Bank of Serbia

In terms of gender composition and the respective amounts of funds, Q3 2020 saw no significant changes relative to prior periods. Men remained dominant, accounting for 58% of all users.

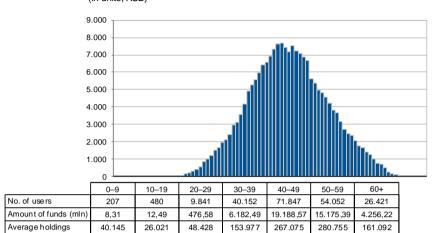
Number of users by number
of funds in which they are
members
(in units)

()	
No of funds	No of users
1	161.761
2	34.629
3	6.921
4	226
5	22
6	3
7	2

Number of users by membership contract (in units)

No of contracts	No of users
1	147.252
2	42.777
3	9.575
4	3.168
5	563
6	177
7	41
8	9
9	2
Total	203.564

Distribution of users and accumulated funds by age (in units, RSD)



Source: National Bank of Serbia.

At end-Q3 2020, the average age of VPF users was around 47 years, with users aged 40–60 making up the dominant share of around 62%. The percentage of users above the age of 53 was similar as in prior years, accounting for 29.5% of the total.

9 Contributions, withdrawals and transfers

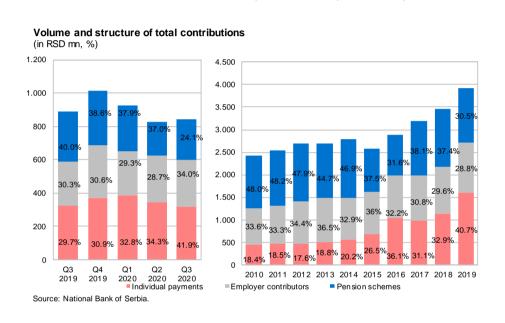
Of total contributions in Q3 2020, individual payments accounted for 37.5%, employer contributions for 33.6% and pension schemes for 28.9%. The total contributions to VPFs in Q3 2020 amounted to RSD 844 mn.

Net contributions came at RSD 825.1 mn in Q3 2020.

Total contributions

(in RS	D bn)											
2010	2010 2011 2012 2013 2014 2015 2016 2017 2018	2010	2018 2010		2020							
2010		2012 201	2013	2013 2014	2013	2016	2017	2016	2019	Q1	Q2	Q3
2.43	2.53	2.70	2.70	2.80	2.58	2.89	3.19	3.47	3.92	0.93	0.83	0.84

Though the Law allows for individual contributions, most contributions are made through employers who, in this way, display a high level of responsibility towards their staff. Ample potential for further growth in the membership base are companies with high staffing levels. This way, employees and employers can save up since contributions from employer's funds up to RSD 5,984¹⁵ per employee per month are exempt from the household income tax and contributions for mandatory social insurance. Payments in the same amount made by the employer through wage garnishment are also tax-exempt. This represents an additional incentive to employees and employers to direct a part of the wage to saving in VPFs.



Withdrawals are generally lump-sum. Since the withdrawals are made by the members who fulfil the requirements, and are not long-standing fund members, their accumulated sum is relatively small, and this kind of withdrawals is expected, even though it contradicts the nature of VPFs which assumes the use of accumulated funds over a longer period. The share of scheduled and other types of withdrawals rises with the lengthening of the accumulation periods and increase in the accumulated sums. In Q3 2020, lump sum withdrawals accounted for the bulk of withdrawals (RSD 543.1 mn), while scheduled and partial withdrawals measured RSD 81.9 mn.

	witho (Dmn)		als									
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
2010	2011									Q1	Q2	Q3
458.1	517.6	751.7	945.2	1213.4	1226.2	1195.6	1342.4	1412.0	1679.8	558.7	492.3	625.0

¹⁵ Under the Government decision, this amount is adjusted for previous-year inflation once a year.

Total withdrawals rise from year to year. In Q3 2020 they amounted to RSD 625 mn

as a result of system development. Namely, as contributions and net assets increase and the VPF system matures, the amount of withdrawals will also rise in absolute terms.

In Q3 2020, total withdrawals amounted to RSD 625 mn.

Transfers represent inter-fund transfers. A member may transfer a part or all of his assets from one fund to another, covering only the actual transfer costs.

In Q3 2020, transfers equalled RSD 31.4 mn.

In Q3 2020, the amount of assets transferred to another fund equalled RSD 31.4 mn.

Total inter-fund transfers

(in RS	Dmn)											
2010 2011	2011	2011 2012	2012 2013	2014	2015	2015 2016	2017	2018	2019	2020		
2010	2011				2013					Q1	Q2	Q3
216.1	165.9	72.3	137.2	126.3	219.7	267.5	263.0	229.7	210.3	80.8	82.8	31.4