

NATIONAL BANK OF SERBIA

INSURANCE SUPERVISION DEPARTMENT PENSION FUNDS SUPERVISION DIVISION

VOLUNTARY PENSION FUNDS IN SERBIA

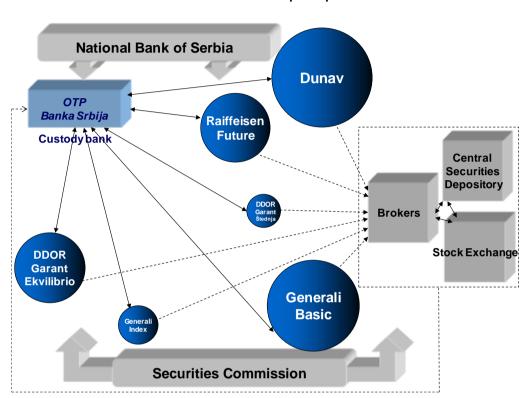
Second Quarter Report 2020

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1 Market participants

At end-Q2 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.



Picture: Market participants

At end-Q2 2020, VPF management companies employed 123 persons, down by one from a quarter earlier.

The NBS licenses sales agents, who passed professional examinations and fulfilled other requirements, to disseminate information about VPF operation. By end-Q2 2020, 869 sales agent licences were granted.

As brokers – management companies, banks and insurance undertakings may engage sales agents. At end-Q2 2020 management companies hired 101 persons, intermediary banks 445 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.

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2 Net VPF assets

At end-Q2 2020, net VPF assets equalled RSD 45.1 bn, up by 1.1% q-o-q. The change in the value of net assets reflects net contributions,² withdrawals and investment returns. In Q2 2020, total contributions

At end-Q2 2020, net assets equalled RSD 45.1 bn.

amounted to RSD 826 mn, withdrawals to RSD 492.3 mn and investment returns to RSD 183.3 mn

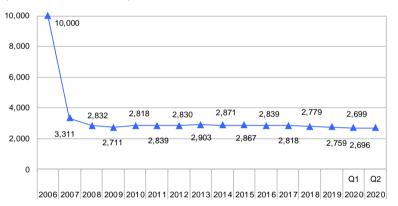
End-of-period net assets of the VPF sector

(in RS	D bn)										
2010	2011	2012	2012	2014	2015	2016	2017	2019	2010	20	020
2010	2011	2012	2013	2014	2013	2010	2017	2010	2019	Q1	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

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-Q2 2020 amounted to 2,696 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	2019	20	20
(%)	2010	2011	2012	2013	2014	2013	2010	2017	2010	2019	Q1	Q2
Large (20 and												
above)	3	2	2	2	2	2	2	2	2	2	2	2
Medium (5 - 19.99)	1	2	2	2	2	2	2	2	2	2	2	2
Small (0 - 4.99)	4	5	5	2	2	3	3	3	3	3	3	3

Source: National Bank of Serbia.

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

³ In terms of the share in total net assets.

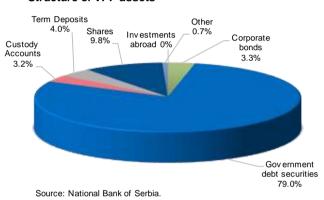
3 Structure of VPF assets

At end-Q2 2020, the structure of investment of VPF assets remained broadly unchanged. Government bonds accounted for the major part of VPF assets – 78.6%. Balances

Majority of assets were invested in government debt instruments – 79.0%.

held in custody accounts and term deposits with banks made up 7.2%, shares 9.8% and corporate securities 3.3% of total VPF assets. Investment in units of open-end investment funds and receivables made up the category "other" which accounted for 0.7%. In this quarter, for the first time since November 2014, 0.4% of fund assets were invested in T-bills.

Structure of VPF assets



Government debt instruments kept the dominant position in total fund assets at the end of this period, too. The share of these financial instruments in fund assets decreased mildly from 80.8% at end-Q1 to 79.0%.

On the other hand, aggregate exposure to the shares of domestic legal persons increased from the end of the previous quarter – from 9.0% to 9.8% of total fund assets as a result of recent trends in the Serbian financial market.

At end-Q2 2020, 6.4% of government debt instruments were with the maturity of up to one year, 13.5% between one and two years, 47.2% between two and five years, 21.5% between five and ten years, and 11.5% over ten years.

The average maturity of assets⁴ invested in government debt instruments was 4.7 years.

Maturity structure (government	ent fixed inco	ome securities)	
maturity	Q2 2020	%	
< 1 year	2.3	6.4%	
1 - 2 years	4.8	13.5%	
2 - 5 years	16.9	47.2%	
5 - 10 years	7.7	21.5%	
over 10 years	4.1	11.5%	
Source: National Bank of Serbias			

At end-Q2 2020, 85.2% of total assets were in dinars and 14.8% in a foreign currency (EUR).

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

4 Return on investment

At end-Q2 2020, the value of FONDex⁵ reached 3,009.03.⁶ The rise in FONDex is the weighted average return on all funds, and it came at 2.9% for the past year. Since the start of VPF operation, ⁷ 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.

In Q2 2020, the primary market of dinar-denominated government debt instruments saw the issue of one-year securities (RSD 34.4 bn) at the rate of 1.8%, two-year (RSD 38.9 bn) at the rate of 2%, three-year (RSD 54 bn) at the rate of 2.2%, five-year (RSD 26.5 bn) at the rate of 2.6%, and twelve-year securities (RSD 4.8 mn) at the rate of 3.9%.

Market value of issued dinar-denominated government debt instruments, by maturity
(in RSD bn)

Maturity	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
3m	-	-	-	-	-
6m	-	-	-	-	-
12m	-	-	-	-	34.4
18m	-	-	-	-	-
24m	-	-	-	-	38.9
36m	25.6	-	-	-	54.0
60m	-	-	13.1	20.1	26.5
84m	48.6	41.0	24.1	-	-
120m	-	-	-	-	-
144m	-	-	-	37.5	4.8
Total	74.2	41.0	37.2	57.6	158.5

Source: Ministry of Finance.

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

Maturity	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
3m	-	-	-	-	-
6m	-	-	-	-	-
12m	-	-	-	-	1.8%
18m	-	-	-	-	-
24m	-	-	-	-	2.0%
36m	3.4%	-	-	-	2.2%
60m	-	-	2.3%	2.6%	2.6%
84m	4.4%	3.4%	2.7%	-	-
120m	-	-	-	-	-
144m	-	-	-	3.4%	3.9%

Source: Ministry of Finance.

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.

⁸ A decline in interest rate leads to an increase in the prices of debt instruments and vice versa. The prices of longer-maturity instruments are more sensitive to interest rate changes.

There was one issue of euro-denominated government debt instruments in Q2 2020: two-year (RSD 40.2 mn) at the rate of 0.5%.

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

(in EUR mln)						
Maturity	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
12m	-	-	-	-	-	-
24m	71.0	74.6	-	-	59.9	40.2
36m	64.2	53.6	-	58.9	-	-
60m	41.2	92.4	-	-	4.4	-
84m	-	-	-	-	-	-
120m	69.7	-	-	34.5	-	-
144m	-	-	-	-	100.6	-
180m	49.4	-	-	-	-	-
240m	-	-	-	-	161.2	-
Total	295.5	220.6	-	93.4	326.0	40.2

Source: Ministry of Finance.

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

Maturity	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
12m	-	-	-	-	-	-
24m	1.0%	0.8%	-	-	0.5%	0.5%
36m	1.3%	1.2%	-	0.6%	-	-
60m	1.8%	1.5%	-	-	1.1%	-
84m	-	-	-	-	-	-
120m	3.3%	-	-	1.9%	-	-
144m	-	-	-	-	1.9%	-
180m	3.6%	-	-	-	-	-
240m	-	-	-	-	3.0%	-

Source: Ministry of Finance.

The prices of shares in the Belgrade Stock Exchange (BSE), measured by the BELEX15 index⁹, rose by 4.6% in Q2 2020 (the value of the index was 665.85 at end-June). The index fell by 9% over the past year.

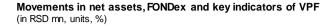
The key policy rate equalled 1.25% at end-June 2020. The level of interest rates earned by funds on dinar assets in custody accounts mirrored the movements of the key policy rate.

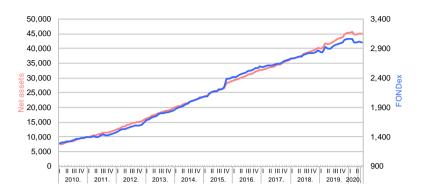
In Q2 2020, the dinar slightly depreciated vis-à-vis the euro, edging down by around 0.1% relative to end-Q1. In the same period, the dinar gained around 1.9% against the US dollar.

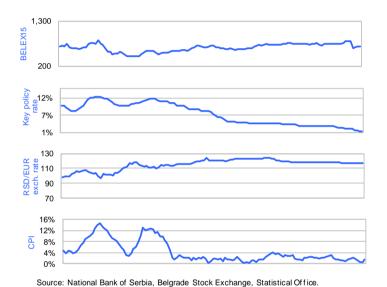
Price growth rates came at 0%, -0.2% and 0.6% in April, May and June, respectively. Y-o-y, consumer prices gained 1.6% in June 2020.¹⁰

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.







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 Q2 2020 amounted to RSD 18.6 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.

At end-Q2 2020, the total value of management fees equalled RSD 139.6 mn, which is around 88% of the total fees charged.

Over the past year, the management fee equalled RSD 553.8 mn, while profit of RSD 1.3 bn was earned in the same period.

Fees charged by management companies

	2008	2009	2010	2011	2012	2012	2014	2015	2016	2017	2010	2010	20:	20
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Q1	Q2
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
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

6 Trading in securities

VPF trading volumes equalled RSD 2 bn in Q2 2020.

The average share of VPFs in BSE trading was 3.3% at the end of the quarter.

VPF securities trading

	0040	0040	0044	0045	0040	0047	0040	0040		2020
	2012	2013	2014	2015	2016	2017	2018	2019	Q1	Q2
Securities trading	13.2	12.9	21.2	14.5	11.5	24.2	16.1	48.7	15.4	2.0
Purchases	7.1	9.0	12.1	7.9	6.4	14.7	9.3	27.1	8.5	1.0
Belgrade Stock Exchange	0.3	0.4	0.5	0.9	1.1	3.7	2.7	3.2	1.3	0.3
Unregulated market	0.1	0.7	0.9	1.8	1.1	5.8	3.2	16.7	4.5	0.6
Auctions of government secur	6.7	7.9	10.7	5.2	4.2	5.1	3.4	7.1	2.7	0.2
Sales	4.2	2.0	5.4	3.6	3.0	7.4	5.5	19.6	6.4	0.4
Belgrade Stock Exchange	0.3	0.6	0.3	0.5	1.9	2.7	3.2	1.4	1.0	0.1
Unregulated market	3.9	1.4	5.0	3.2	1.1	4.7	2.3	18.1	5.4	0.4
Maturity	2.0	2.0	3.7	2.9	2.1	2.2	1.3	2.1	0.5	0.5
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
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

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 Q2 2020 amounted to RSD 2.3 mn. In the same period, Central Securities Depository fees and stock exchange fees, charged against VPF assets, had an almost equal share in transaction costs, whereas 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 I	RSD	mn)
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	2010	2011	2012	2013	2014	2015	2016	2017	17 2018	2019	20	020
	2010	2011	2012	2013	2017	2013	2010	2017			Q1	Q2
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
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
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
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
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
Other fees	-	-	-	0.1	0.0	-	0.0	0.6	0.6	0.7	0.2	0.2

Source: National Bank of Serbia.

8 Number and structure of VPF users

At end-Q2 2020, 203,039 users¹¹ were in the accumulation phase¹², up by 5,514 relative to the same period in 2019. Total VPF membership contracts¹³ stood at 277,650.

VPF users accounted for 9.2% ¹⁴ of the total number of employees.

Number of contracts and users

	2010	2011	2012	2012	2014	2015	2016	2017	2018	2010	20	20
	2010	2011	2012	2013	2014	2015	2016	2017	2010	2019	Q1	Q2
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
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
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%

Source: National Bank of Serbia.

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 0	1 month	65,241	32.1%		
Users making contributions	3 months	73,351	36.1%		
's m tribu	6 months	78,789	38.8%		
Jser	12 months	84,024	41.4%		
	From the start of membership (1)	180,668	89.0%		
No holding	s (2)	22,371	11.0%		
otal (1+2	2)	203,039			

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 249.9 thousand. At end-Q2 2020, the number of users who are members of two or more VPFs was 41,886 or around 21% of the total number of users.

Average accumulated funds at end-period

(in RSE	thous	and)										
2009	2010	2011	2012	2012	2014	2015	2016	2017	2018	2010	20	20
2009	2010	2011	2012	2013	2014	2015	2016	2017	2016	2019	Q1	Q2
52.2	70.5	84.5	105.3	127.3	148.3	179.4	200.6	219.3	235.8	239.9	247.4	249.9

Source: National Bank of Serbia.

In terms of gender composition and the respective amounts of funds, Q2 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	161,153
2	34,638
3	6,999
4	222
5	22
6	3
7	2
Total	203,039
Source: National B	ank of Serbia

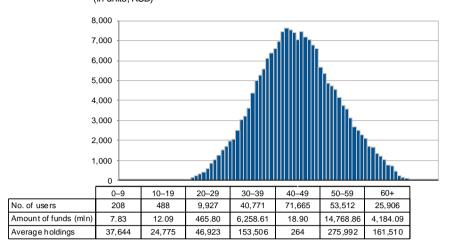
Number of users by membership contract

(in units)

No of contracts	No of users
1	146,971
2	42,502
3	9,659
4	3,127
5	554
6	175
7	40
8	9
9	2
Total	203,039

Source: National Bank of Serbia

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



Source: National Bank of Serbia.

At end-Q2 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% of the total.

9 Contributions, withdrawals and transfers

Of total contributions in Q2 2020, individual payments accounted for 42%, employer contributions for 34% and pension schemes for 24%. The total contributions to VPFs in Q2 2020 amounted to RSD 826 mn.

Net contributions came at RSD 807.4 mn in Q2 2020.

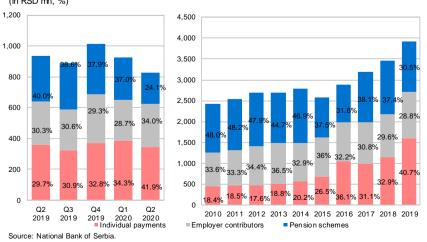
Total contributions

(in RSD bn)

2007	2009	2000	2010	2011	2012	2012	2014	2015	2016	2017	2018	2010	20	20
2007	2006	2009	2010	2011	2012	2013	2014	2013	2010	2017	2010	2019 -	Q1	Q2
1.50	2.25	2.22	2.43	2.53	2.70	2.70	2.80	2.58	2.89	3.19	3.47	3.92	0.93	0.83

Source: National Bank of Serbia.

Volume and structure of total contributions (in RSD mn, %)



12

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 Q2 2020, lump sum withdrawals accounted for the bulk of withdrawals (RSD 419.2 mn), while scheduled and partial withdrawals measured RSD 73.1 mn.

Total withdrawals	Total	withdr	awals
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0007									0040	20	020			
2007	2008	2009	2010 20	2011	2012	2013	2014	2015	2016	2017	2018	2019	Q1	Q2
141.4	384.6	448.5	458.1	517.6	751.7	945.2	1213.4	1226.2	1195.6	1342.4	1412.0	1679.8	558.7	492.3

Total withdrawals rise from year to year. In Q2 2020 they amounted to RSD 492.3

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 Q2 2020, total withdrawals amounted to RSD 492.3 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 Q2 2020, transfers came at RSD 82.8 mn.

In Q2 2020, the amount of assets transferred to another fund equalled RSD 82.8 mn.

Total inter-fund transfers

(in RSD mn)

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2010 Q1 Q2

19.5 235.1 141.5 216.1 165.9 72.3 137.2 126.3 219.7 267.5 263.0 229.7 210.3 80.8 82.8

Source: National Bank of Serbia.

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