



NATIONAL BANK OF SERBIA

**INSURANCE SUPERVISION DEPARTMENT
PENSION FUNDS
SUPERVISION DIVISION**

VOLUNTARY PENSION FUNDS IN SERBIA

First Quarter Report 2019

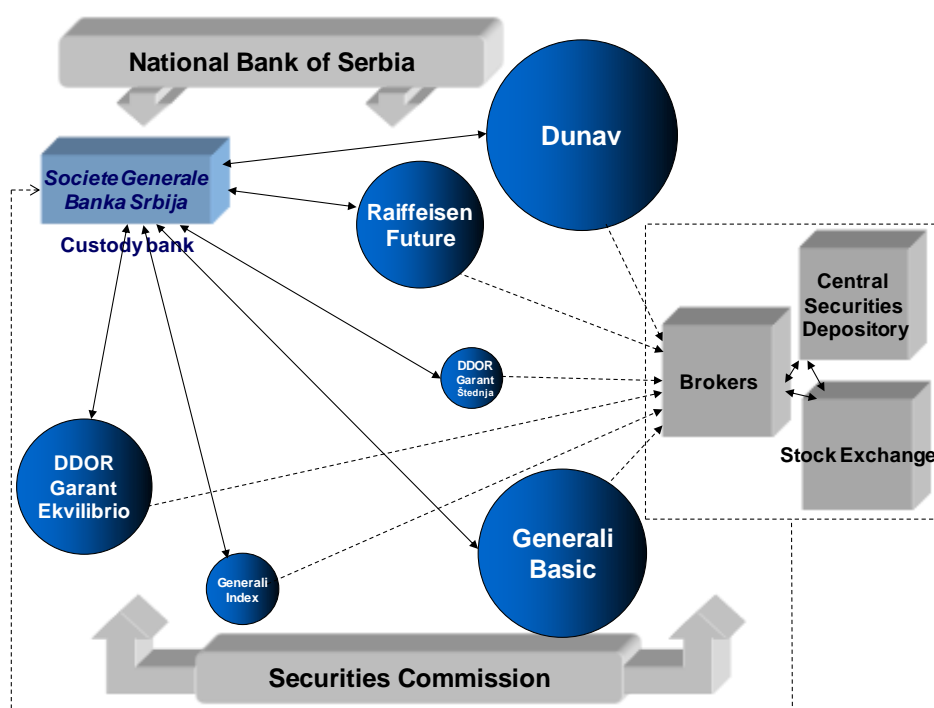
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1 Market participants

At end-Q1 2019, the market of voluntary pension funds (VPFs) included four companies managing seven VPFs, one custody bank, five intermediary banks¹ and one insurance brokerage undertaking².

Picture: Market participants



At end-Q1 2019, VPF management companies employed 122 persons, unchanged from a quarter earlier.

The NBS licences sales agents, who passed professional examinations and fulfilled other requirements, to disseminate information about VPF operation. By end-Q1 2019, a total of 792 sales agent licences were granted.

Management companies, banks and insurance undertakings as brokers may engage sales agents. At end-Q1 2019 management companies hired 94 persons, intermediary banks 446 persons and insurance undertaking 25 persons as sales agents.

¹ Raiffeisen Bank a.d. Beograd, Societe Generale banka Srbija a.d. Beograd, NLB banka a.d. Beograd, Addiko Bank a.d. Beograd and Sberbank a.d. Beograd

² DDOR NOVI SAD a.d.o. Novi Sad

2 VPF net assets

At end-Q1 2019, VPF net assets equalled RSD 41.6 bn. In Q1 net assets expanded by 3.6%. Changes in the value of net assets reflect net contributions,³ withdrawals and investment returns. In Q1 2019, total contributions amounted to RSD 1.08 bn, withdrawals to RSD 461.19 mn and investment returns to RSD 853.15 mn.

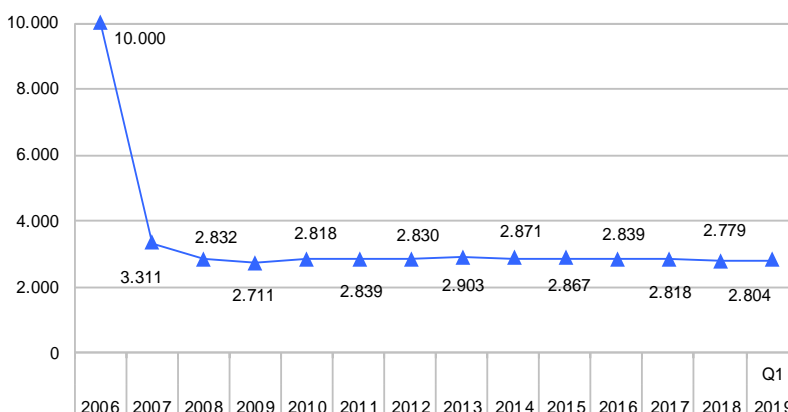
At end-Q1 2019, net assets equalled RSD 41.6 bn.

End-of-period net assets of the VPF sector
(in RSD bn)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
3.1	4.6	7.2	9.9	12.5	16.1	19.7	23.6	28.9	32.8	36.2	40.2	41.6

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 sector⁴ at end-Q1 amounted to 2,804 points, indicating high concentration in the VPF market.

³ Net contributions are total contributions minus the front-load fee.

⁴ In terms of the share in total net assets.

According to the size of VPF net assets relative to total net assets of the sector, two funds were classified as “large” and two as “medium”. Together, they held 95% of the market share, with the largest fund accounting for around 41%.

Number of funds by groups divided by market share
(in units)

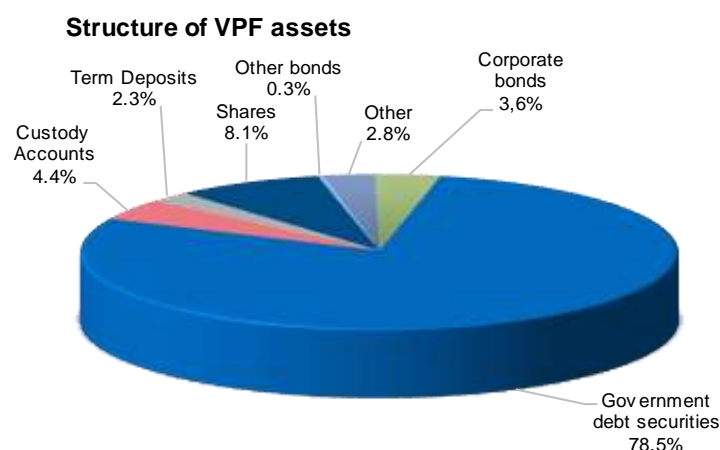
Share in net assets (%)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
Large (20 and above)	3	2	2	3	2	2	2	2	2	2	2	2	2
Medium (5 - 19.99)	-	2	3	1	2	2	2	2	2	2	2	2	2
Small (0 - 4.99)	4	6	5	4	5	5	2	2	3	3	3	3	3

Source: National Bank of Serbia.

3 Structure of VPF assets

At end-Q1 2019, the structure of investment of VPF assets remained broadly unchanged. Government bonds accounted for the major part of VPF assets – 78.5%. Balances in custody accounts and bank time deposits made up 6.7%, shares 8.1% and other securities (EBRD bond) 0.3% of total VPF assets. Investment in units of open-end investment funds and receivables made up the category “other” which accounted for 2.8%. In this quarter, corporate securities made up 3.6% of total assets.

Majority of assets were invested in government debt instruments – 78.5%.

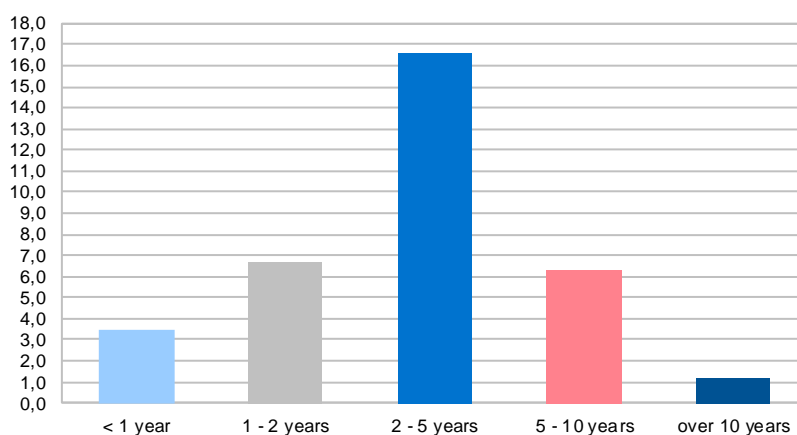


Source: National Bank of Serbia.

At end-Q1 2019, 10.1% of government debt instruments were with the maturity of up to one year, 19.4% between one and two years, 48.4% between two and five years, 18.5% between five and ten years, and 3.6% over ten years.

The average maturity of assets⁵ invested in government debt instruments was 3.6 years.

Maturity structure (government fixed income securities)
(in RSD bn)



Source: National Bank of Serbia.

At end-Q1 2019, 87.2% of total assets were in dinars and 12.8% in a foreign currency (EUR).

4 Return on investment

At end-Q1 2019, the value of FONDex⁶ reached 2,923.76.⁷ The rise in FONDex is the weighted average return on all funds, and it came at 2.1% in Q1 2019, or 6.4% for the past year. Since the start of VPF operation,⁸ FONDex return has equalled 9.1%.

Given the structure of VPF investment, the return is influenced by: the change in the yield curve on government debt instruments⁹, change in the prices of shares, level of the key policy rate and banks' interest rates, and changes of the dinar exchange rate against the euro and the dollar.

In Q1 2019, in the primary market of dinar-denominated government debt instruments, the securities with the following maturities were issued: three-year maturity (RSD 18.3 bn) at the rate of 3.73%, five-year maturity (RSD 10.6 bn) at the rate of 4%

⁵ The maturity of instruments weighted by their share in total investment in government debt instruments.

⁶ FONDex is the index which indicates movements in investment units of all VPFs in the market.

⁷ The initial FONDex value on the first business day of the first VPF, 15 November 2006, was 1,000.

⁸ Annual rate.

⁹ 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.

and seven-year maturity (RSD 18.3 bn) at the rate of 4.57%, with the total market value of RSD 47.2 bn.

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

Maturity	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
3m	-	-	-	-	-
6m	-	-	-	-	-
12m	-	-	-	-	-
18m	-	-	-	-	-
24m	-	-	-	-	-
36m	-	-	-	-	18.3
60m	57.7	27.0	18.5	-	10.6
84m	-	-	-	-	18.3
120m	76.7	20.0	10.9	-	-
Total	134.4	47.0	29.4	0,0	47.2

Source: Ministry of Finance.

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

Maturity	Q1 2017	Q2 2017	Q3 2018	Q4 2018	Q1 2019
3m	-	-	-	-	-
6m	-	-	-	-	-
12m	-	-	-	-	-
18m	-	-	-	-	-
24m	-	-	-	-	-
36m	-	-	-	-	3.7%
60m	4.2%	4.0%	3.7%	-	4.0%
84m	-	-	-	-	4.6%
120m	5.2%	4.9%	4.8%	-	-

Source: Ministry of Finance.

Q1 2019 saw the issue of euro-denominated government debt instruments worth a total of EUR 295.6 mn – two-year (EUR 71 mn) at the rate of 1%, three-year (EUR 64.2 mn) at the rate of 1.25%, five-year (EUR 41.2 mn) at the rate of 1.75%, ten-year (EUR 69.7 mn) at the rate of 3.25%, and fifteen-year (EUR 49.4 mn) at the rate of 3.6%.

**Market value of issued euro-denominated government debt instruments,
by maturity**
(in EUR mn)

Maturity	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
12m	49.8	48.8	49.8	-	-	-
24m	-	38.8	13.9	-	-	71.0
36m	74.7	100.3	27.0	-	-	64.2
60m	49.7	97.5	39.3	-	-	41.2
84m	-	-	65.1	-	-	-
120m	-	86.9	-	-	-	69.7
180m	-	-	-	-	-	49.4
Total	174.1	372.3	195.1	-	-	295.5

Source: Ministry of Finance.

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

Maturity	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
12m	0.5%	0.5%	0.5%	-	-	-
24m	-	1.0%	0.7%	-	-	1.0%
36m	1.5%	1.2%	1.2%	-	-	1.3%
60m	2.4%	1.9%	1.8%	-	-	1.8%
84m	-	-	2.5%	-	-	-
120m	-	3.5%	-	-	-	3.3%
180m	-	-	-	-	-	3.6%

Source: Ministry of Finance.

The prices of shares in the Belgrade Stock Exchange (BSE), measured by the BELEX15 index¹⁰ fell by 3.8% in Q1 2019 (the value of the index was 761.69 at end-December). The index fell by 1.3% over the past year.

The key policy rate equalled 3% at end-March 2019. The level of interest rates earned by funds on dinar assets in custody accounts mirrored movements in the key policy rate.

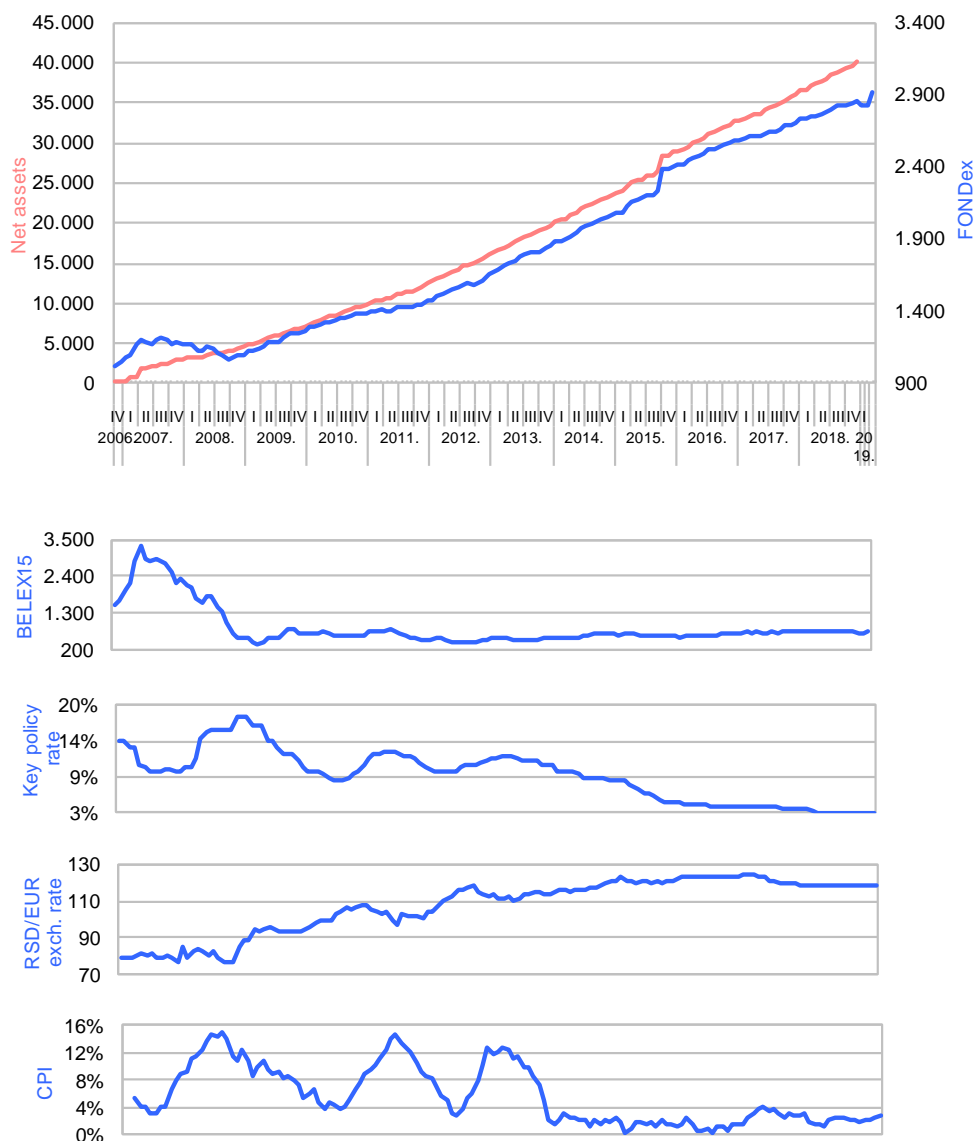
In Q1 2019, the dinar appreciated vis-à-vis the euro, edging up by around 0.2% relative to end of the previous quarter. In the same period, the dinar lost around 1.6% against the US dollar.

¹⁰ 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.

Price growth rates came at 0.4%, 0.7% and 0.4% in January, February and March, respectively. Consumer prices gained 2.8% in March 2019 year-on-year.¹¹

Movements in net assets, FONDEX and key indicators since the start of VPF operation

(in RSD mn, units, %)



Source: National Bank of Serbia, Belgrade Stock Exchange, Statistical Office.

¹¹ 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 include 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 the fund (and members), and fees charged by the management company, should all be taken into account when opting for a fund.

The contribution fee is paid only once by a member, 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 Q1 2019 amounted to RSD 16.2 mn and the level of the fee in the same period was 1.50% on average.

The management fee is calculated daily against the value of VPF net 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-Q1 2019, the total value of management fees equalled RSD 123.9 mn, which is around 88% of the total fees charged. Since the start of VPF operation, the total amount of management fees charged has been constantly rising. However, amended regulations according to which the rate for the calculation of management fees is reduced from 2% to a maximum of 1.25% annually brought about a decrease in the amount of management fees charged in 2018 relative to a year earlier.

Over the past year, the management fee equalled RSD 485.3 mn, while profit of RSD 2.4 bn was earned in the same period.

Fees charged by management companies

(in RSD mn)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
Contribution fee	42.9	56.9	54.9	59.4	57.9	60.1	58.7	55.4	53.0	56.8	61.0	18.4	16.2
Management fee	33.8	73.5	117.3	170.7	220.0	284.1	357.8	432.8	514.9	614.4	678.7	123.8	123.9

Source: National Bank of Serbia.

6 Trading in securities

VPF trading volumes equalled RSD 12.8 bn in Q1 2019.

The average share of VPFs in BSE trading was 9.1% at the end of the quarter.

VPF securities trading

(in RSD bn)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
Securities trading	14.9	19.3	13.2	12.9	21.2	14.5	11.5	24.2	3.2	12.8
Purchases	8.1	10.6	7.1	9.0	12.1	7.9	6.4	14.7	1.9	7.4
Belgrade Stock Exchange	1.3	0.7	0.3	0.4	0.5	0.9	1.1	3.7	1.0	1.0
Unregulated market	0.3	1.3	0.1	0.7	0.9	1.8	1.1	5.8	0.9	3.8
Auctions of government secur	6.5	8.6	6.7	7.9	10.7	5.2	4.2	5.1	0.0	2.6
Sales	0.8	3.8	4.2	2.0	5.4	3.6	3.0	7.4	1.0	4.0
Belgrade Stock Exchange	0.6	0.4	0.3	0.6	0.3	0.5	1.9	2.7	0.5	0.0
Unregulated market	0.2	3.4	3.9	1.4	5.0	3.2	1.1	4.7	0.5	4.0
Maturity	6.1	4.9	2.0	2.0	3.7	2.9	2.1	2.2	0.3	1.4
Purchase to sale and maturity ratio	1.2	1.2	1.1	2.3	1.3	1.2	7.5	1.5	1.4	0.0
Share in total BSE trading (in%)	8.0%	3.8%	2.6%	3.4%	4.1%	6.1%	6.7%	33.0%	8.3%	9.1%

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.

At end-Q1 2019, Central Securities Depository fees, charged against VPF assets, accounted for a bigger portion of transaction costs than stock exchange fees, 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 RSD mn)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
Total	5.3	7.4	9.5	7.0	4.7	6.0	6.2	5.6	7.3	10.5	3.6	7.8
Brokerage fees	2.2	3.8	4.5	2.9	2.0	2.5	2.0	1.3	2.3	4.4	2.0	5.3
Custody bank fees	1.5	2.0	2.4	2.2	1.5	1.9	2.0	2.0	2.0	1.9	0.6	0.7
Stock exchange fees	0.8	0.4	1.1	0.8	0.3	0.6	0.6	0.8	1.0	1.8	0.7	0.5
Central Securities Depository fees	0.6	1.2	1.5	1.1	0.9	0.9	1.6	1.6	2.0	1.8	0.3	1.1
Other fees	0.2	-	-	-	-	0.1	0.0	-	0.0	0.6	0.2	0.2

Source: National Bank of Serbia.

8 Number and structure of VPF users

At end-Q1 2019, 195,676 users¹² were in the accumulation phase.¹³ Total membership contracts¹⁴ in VPFs stood at 267,000.

VPF users accounted for 9.4%¹⁵ of the total number of employees.

Number of contracts and users

(in thousand)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
No of contracts	201.6	215.7	220.4	234.4	240.4	244.5	252.1	258.1	250.5	253.9	261.7	267.0
No of users	156.0	165.2	166.8	174.9	179.8	183.5	188.0	190.5	183.6	185.4	192.3	195.7
Percentage of active users (in %)	41.6 %	36.0 %	43.9 %	35.1 %	30.5 %	30.3 %	31.3 %	25.3 %	28.5 %	33.6 %	33.4 %	33.8 %

Source: National Bank of Serbia.

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 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 contracts in one or several VPFs.

¹⁴ The number of membership contracts is the sum total of individual membership contracts and the number of members of all pension schemes.

¹⁵ The source for the number of employees: National Bank of Serbia.

Structure of users by payment dynamics

(in units and %)

	Period	No of users	Share (%)
Users making contributions	1 month	66.203	34%
	3 months	71.409	36%
	6 months	76.107	39%
	12 months	79.757	41%
	From the start of membership (1)	173.578	89%
No holdings (2)		22.098	11%
Total (1+2)		195.676	

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 239.9 thousand and is constantly rising.

At end-Q1 2019, the number of users who are members of two or more VPFs was 41,399 or 21% of the total number of users.

Average accumulated funds at end-period

(in RSD thousand)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
-	34.6	52.2	70.5	84.5	105.3	127.3	148.3	179.4	200.6	219.3	235.8	239.9

Source: National Bank of Serbia.

In terms of gender composition and the respective amounts of funds, Q1 2019 saw no significant changes relative to prior periods. Men remained dominant, accounting for around 58% of all users.

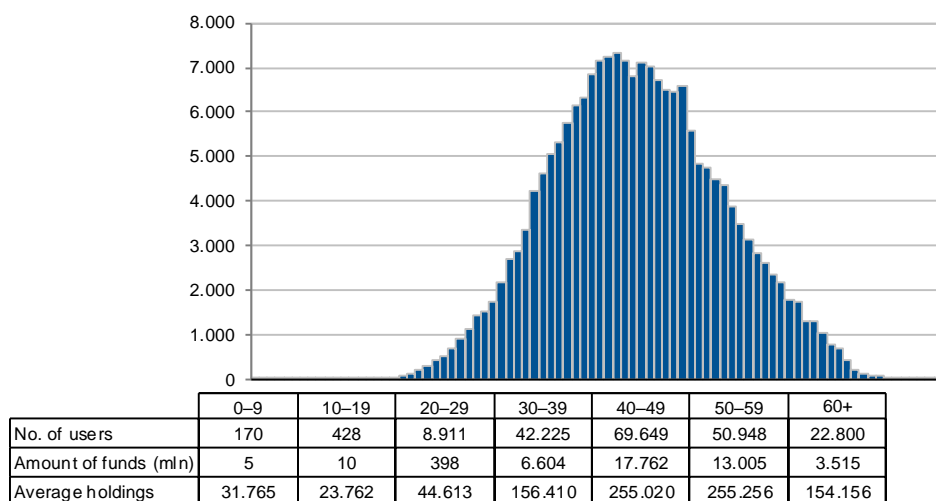
Number of users by number of funds in which they are members
(in units)

No of funds	No of users
1	154.277
2	33.722
3	7.465
4	188
5	19
6	3
7	2

Number of users by membership contract
(in units)

No of contracts	No of users
1	141.241
2	41.668
3	9.609
4	2.464
5	493
6	152
7	35
8	10
9	2
10	2

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



Source: National Bank of Serbia.

At end-Q1 2019, the average age of VPF users was around 46 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 28% of the total.

9 Contributions, withdrawals and transfers

In Q1 2019, of total contributions, individual payments accounted for 50%, employer contributions for 24% and pension schemes for 26%. Total contributions to VPFs had a rising trend for the past four years.

Net contributions came at RSD 1.1 bn in Q1 2019.

Total contributions

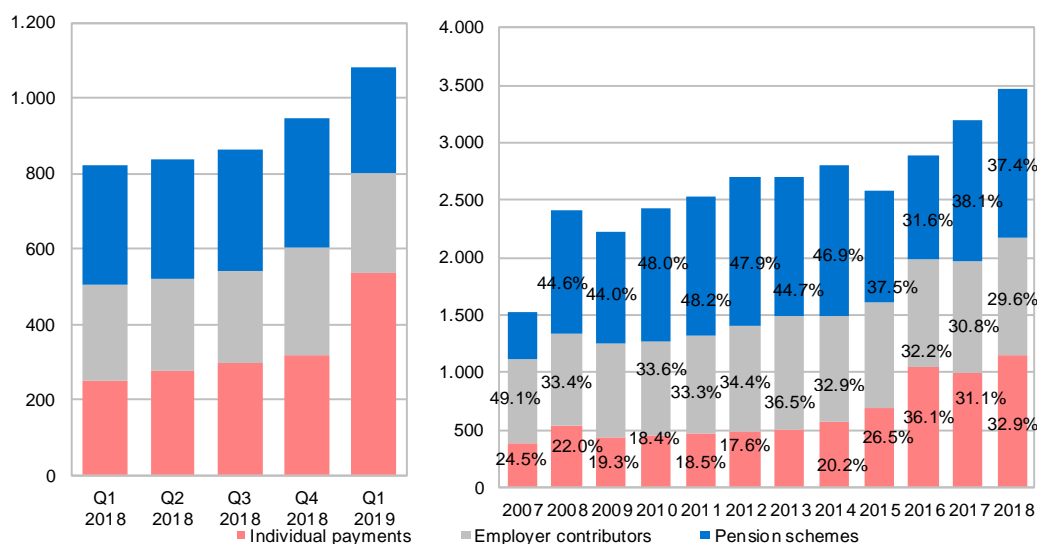
(in RSD bn)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1.50	2.25	2.22	2.43	2.53	2.70	2.70	2.80	2.58	2.89	3.19	3.47	1.08
												Q1

Source: National Bank of Serbia.

Volume and structure of total contributions

(in RSD mn, %)



Source: National Bank of Serbia.

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 5,872¹⁶ per employee per month are exempt from the personal income tax and contributions for mandatory social insurance. Payments in the same amount made by the employer through wage garnishment are also tax-exempt.

¹⁶ Under the Government decree, this amount is adjusted for previous-year inflation once a year.

This represents an additional incentive to employees and employers to direct a part of the earning 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 withdrawal is expected, even though it contradicts the nature of VPFs which assumes the use of accumulated funds over a longer period. The next period is likely to see an increase in scheduled and other types of withdrawals, with lengthening of the accumulation periods and increase in the accumulated sums.

Total withdrawals

(in RSD mn)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
141.4	384.6	448.5	458.1	517.6	751.7	945.2	1213.4	1226.2	1195.6	1342.4	1412.0	461.2

Source: National Bank of Serbia.

Withdrawals rise from year to year, 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 Q1 2019, total withdrawals amounted to RSD 461.2 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 Q1 2019, transfers came at RSD 46.4 mn.

Total inter-fund transfers

(in RSD mn)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q1
19.5	235.1	141.5	216.1	165.9	72.3	137.2	126.3	219.7	267.5	263.0	229.7	46.4

Source: National Bank of Serbia.