



NATIONAL BANK OF SERBIA

**INSURANCE SUPERVISION DEPARTMENT
PENSION FUNDS SUPERVISION DIVISION**

VOLUNTARY PENSION FUNDS IN SERBIA

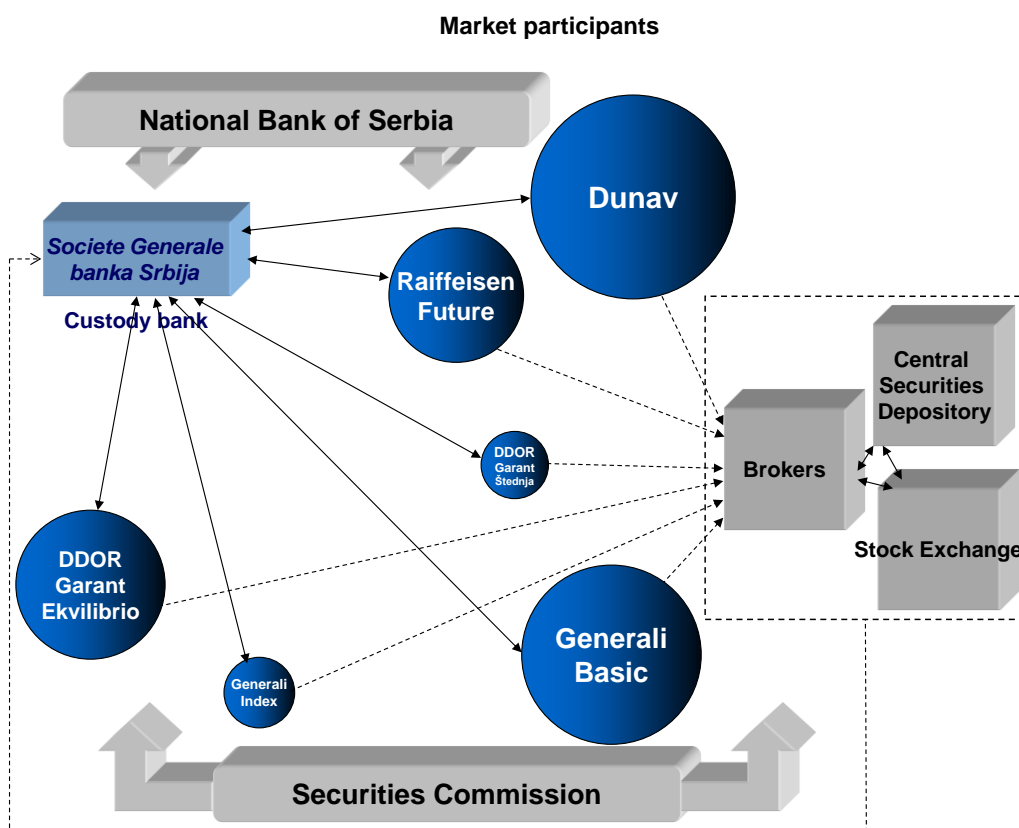
First quarter report 2017

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1. Market participants

At end-Q1 2017 the market of voluntary pension funds (VPFs) included four companies managing seven VPFs, one custody bank and five agent banks ¹.



At end-Q1 2017, total employment in VPF management companies was 120, the same as in a quarter earlier.

The NBS licenses for dissemination of information about VPF operation, based on completed professional examination and the fulfilment of other requirements. By end-Q1 2017 the NBS issued 710 licenses to sales agents.

At end-Q1 2017, 86 sales agents were engaged by management companies and 422 by intermediary banks.

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

2. VPF net assets

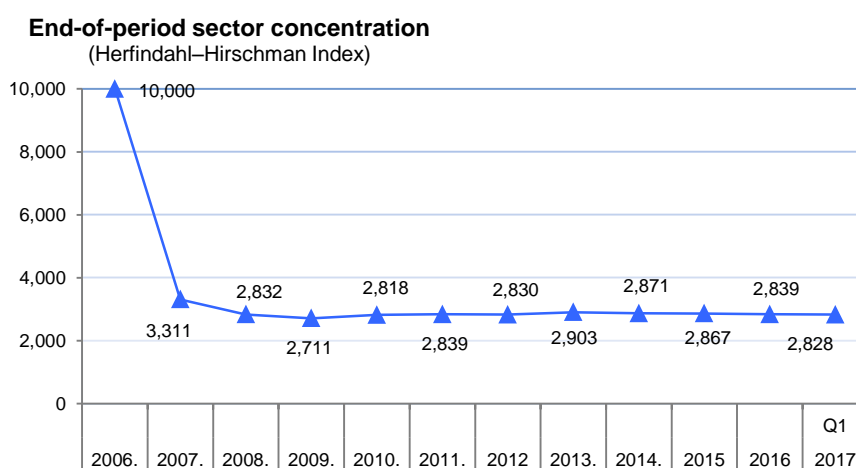
At end-Q1 2017, net assets of VPFs came to RSD 33.4 bln, up by 1,8%. The changes in the value of net assets reflect changes in net contributions², withdrawals of funds and investment returns. In Q1 2017, total contributions amounted to RSD 726.6 mln, withdrawals to RSD 330.4 mln, and investment returns to RSD 206.6 mln.

At end-Q1 2017 net assets came to RSD 33.4bln.

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

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
3.1	4.6	7.2	9.9	12.5	16.0	19.7	23.6	28.9	32.8	33.4

Source: National Bank of Serbia.



Source: National Bank of Serbia.

Measured by Herfindahl Hirschman index (HHI), market concentration in the sector³ at end-Q1 2017, amounted to 2,828 points, which indicates high concentration in the VPF market.

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 made up 96% of the market, with the largest fund accounting for around 41%.

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

³ In terms of the share in total net assets.

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 Q1
Large (20 and above)	3	2	2	3	2	2	2	2	2	2	2
Medium (5 - 19.99)	-	2	3	1	2	2	2	2	2	2	2
Small (0 - 4.99)	4	6	5	4	5	5	2	2	3	3	3

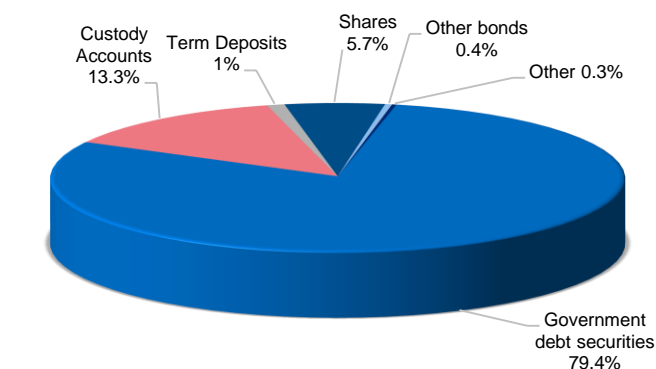
Source: National Bank of Serbia.

3. Structure of VPF assets

At end-Q1 2017, the structure of investment of VPF assets remained broadly unchanged. Government bonds accounted for the major part of VPF assets – 79.4%. Balances in custody accounts and bank time deposits made up 14.3%, shares 5.7%, and other securities (the EBRD's bond) 0.4% of total VPF assets. Investment in real estate, units of open-end investment funds and receivables made up the category “other” which accounted for 0.2%.

Most assets were invested in government debt instruments – 79.4%.

Structure of VPF assets



Source: National Bank of Serbia.

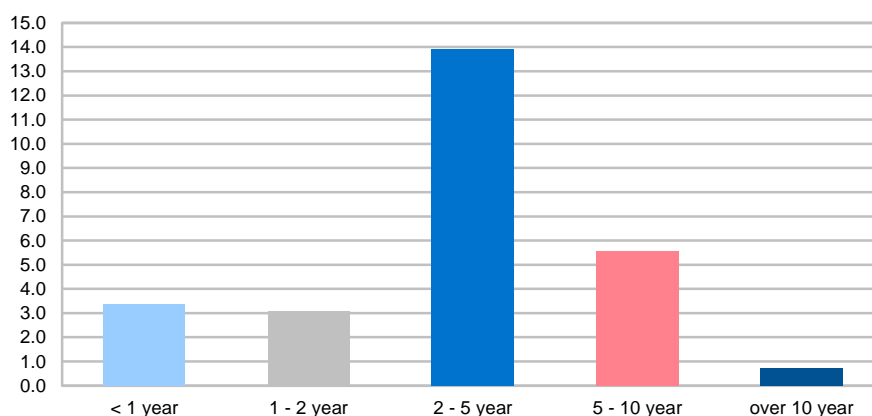
At end-Q1 2017, 12.7% of government debt instruments were with maturity of up to one year, 11.6% between one and two years, 52.2% between two and five years, 20.8% between five and ten years, and 2.7% over ten years.

The average maturity of assets⁴ invested in government debt securities was 4.2 years.

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

At end-Q1 2017, 86.2 % of total assets were in dinars and 13.8% of total assets were in a foreign currency (EUR and USD).

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



Source: National Bank of Serbia

4. Return on investment

At end-Q1 2017, the FONDex⁵ reached 2,608.715.⁶ The return of the FONDex, as the weighted average return of all funds, came at 0.6%, in Q1 2017 or 6.8% for the

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

Maturity	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017
3m	3.6	-	-	-	-
6m	2.8	-	0.7	-	0.8
12m	17.2	11.2	9.8	7.5	1.7
18m	-	-	-	-	-
24m	28.0	10.5	-	-	24.5
36m	31.6	28.1	17.2	38.3	-
60m	-	-	-	-	-
84m	-	-	28.0	23.9	-
120m	-	0.1	-	-	0.8
Total	83.2	49.9	55.7	69.7	27.1

Source: Ministry of Finance.

⁵ The FONDex shows movements in investment units of all VPFs in the market.

⁶ The initial FONDex value of 1,000 points was recorded on 15 November 2006 when the first VPF began to operate.

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

Maturity	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017
3m	2.8%	-	-	-	-
6m	3.3%	-	2.7%	-	2.6%
12m	4.0%	4.0%	3.6%	3.5%	3.5%
18m	-	-	-	-	-
24m	5.0%	4.3%	-	-	4.7%
36m	6.0%	5.4%	5.0%	4.7%	-
60m	-	-	-	-	-
84m	-	-	6.0%	5.6%	-
120m	-	4.2%	-	-	4.0%

Source: Ministry of Finance.

past year. Since the start of VPF operation⁷ the return of the FONDex has equalled 9.7%.

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 of the dinar exchange rate against the euro.

The volume of issues in the primary market of government debt instruments (T-bills and treasury bonds) dropped as compared to Q4 2016, while the discount rates decreased.

The total market value of issues of long-term government instruments dinar-denominated in Q1 2017 was RSD 27.1 bln. Most issued were two-year (RSD 24.5 bln) and one-year securities (RSD 1.7 bln).

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

Maturity	T4 2015.	T1 2016.	T2 2016.	T3 2016.	T4 2016.	T1 2017.
12m	35.7	98.4	123.9	49.6	49.6	52.7
24m	96.8	119.7	108.3	23.0	74.0	71.4
36m	22.5	144.3	148.7	-	44.2	92.8
60m	47.8	71.8	-	98.2	-	97.6
84m	-	-	-	-	-	-
120m	21.9	-	-	-	-	-
180m	-	-	-	-	71.3	-
Total	224.8	434.3	380.8	170.7	239.1	314.6

Source: Ministry of Finance.

⁷ Annual rate.

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

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

Maturity	T4 2015.	T12016.	T2 2016.	T3 2016.	T4 2016.	T12017.
12m	16%	11%	0.9%	0.8%	0.8%	0.7%
24m	18%	18%	1.2%	1.1%	1.1%	1.1%
36m	3.5%	3.3%	2.6%	-	1.7%	1.9%
60m	4.0%	3.5%	-	2.9%	-	2.7%
84m	-	-	-	-	-	-
120m	4.4%	-	-	-	-	-
180m	-	-	-	-	4.2%	-

Source: Ministry of Finance.

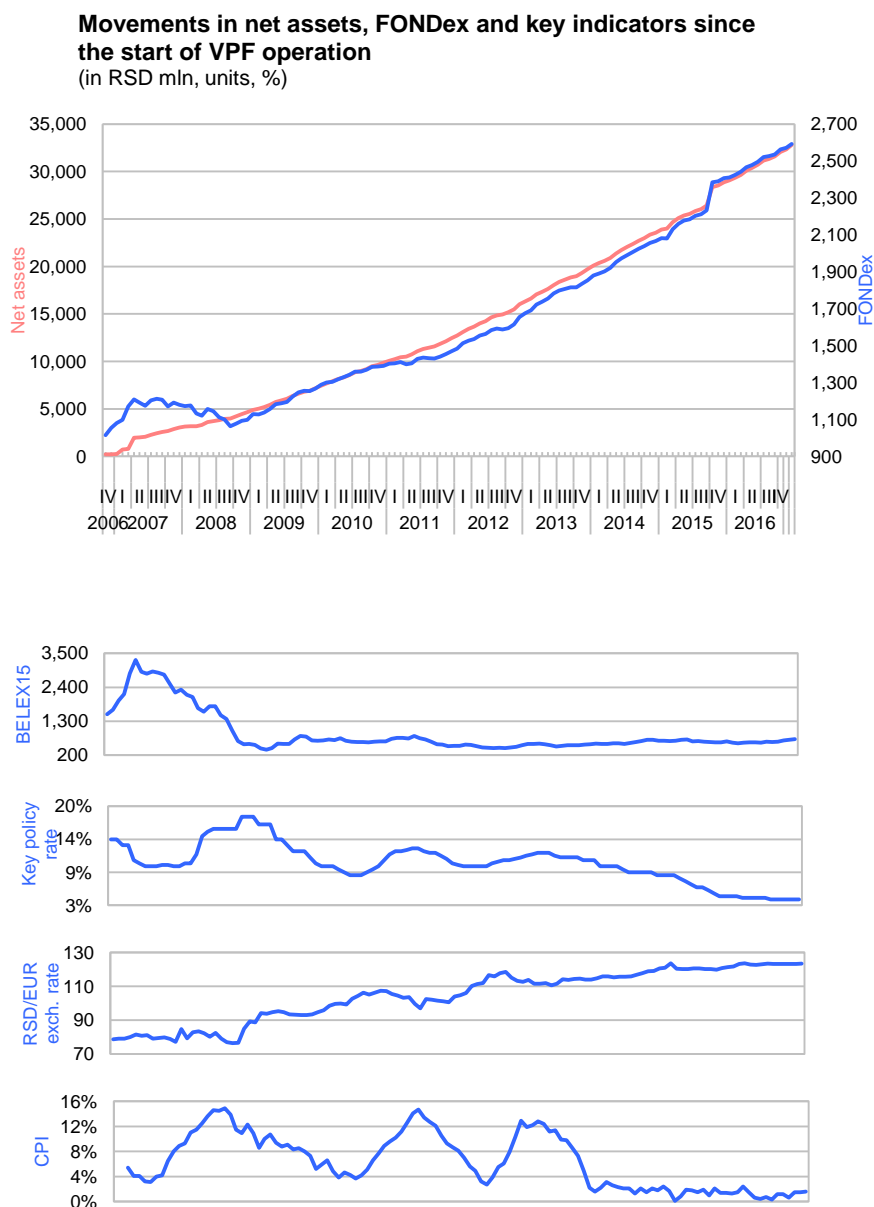
Q1 2017 saw the issue of euro-denominated government debt instruments worth EUR 314.6 mln: five-year (EUR 97.6 mln) at the rate of 2.7%, three-year (EUR 92.8 mln) at the rate of 1.9%, two-year (EUR 71.4 mln) at the rate of 1.1% and one-year (EUR 52.7 mln) at the rate of 0.7%.

Prices of Belgrade Stock Exchange (BSE) shares, measured by BELEX15⁹ rose by 2.1% in Q1 2017 (reaching 732.51 at end-March). The index rose by 20.9% over the past year.

The key policy rate equalled 4% at end-March 2017. The level of interest rates earned by funds on dinar balances in custody accounts mirrored movements in the key policy rate.

In Q1 2017, the dinar depreciated vis-à-vis the euro, declining by around 0.4% relative to end-Q4 2016. In the same period, the dinar lost around 0.9% against the US dollar.

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



Price growth rates came at 1.4%, 0.7% and 0.2% in January, February and March, respectively. Consumer prices gained 3.6%¹⁰ in March 2017, as compared to the same month last year.

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 maximum fees that may be charged to fund members. Company fees entail contribution and management fees.

Management fees will be limited to 1.25% once net assets of all funds reach at least 0.75% of GDP.

Contribution fee may not exceed 3% of the contribution amount and management fee may not exceed 2% of the accounting value of net assets, while the account transfer fee may not exceed the actual transfer costs.

The amended Law, adopted in early May 2011, envisages different fees charged by management companies, to be applied once net assets of all funds reach 0.75% of GDP. The maximum management fee is set at 1.25% per annum of the accounting value of net assets,¹¹ while the contribution fee is not capped. At present, VPF net assets amount to around 0.78%¹² of GDP.

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, funds actively investing in more complex instruments are intended for younger persons who pay contributions over a longer horizon. Such funds charge higher fees, but assume a higher degree of risk and are expected to post higher returns. 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 fund members' assets, the expected return, the level of risk assumed by a fund (and a member), and fees charged by companies, should all be taken into account when opting for a fund.

Since the start of operation, companies have charged a 2% management fee, while the contribution fee declined and came to 2.08% in Q1 2017. The relative proportion of the two fees has changed – at the start of VPF operation, contribution fees were higher, while at end-Q1 2017 the management fee accounts for around 92% of the total fees charged. This came as a result of a rise in VPF net asset value and an ever-larger base to which management fees are applied. The contribution fee, though visible in the first instance, is not the largest cost incurred by a member. It is paid only once, as a front-load fee.

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.

In Q1 2017, the management fee equalled RSD 162.4 mln. Over the past year, the management fee equalled RSD 631.4 mln and profit reached RSD 2.1 bln.

¹¹ Article 23, paragraph 2, item 2 of the Law on Voluntary Pension Funds and Pension Schemes (RS Official Gazette, Nos 85/2005 and 31/2011).

¹² Source: GDP – database of the Statistical Office of the Republic of Serbia, quarterly GDP at current prices, seasonally non-adjusted data.

Fees charged by management companies

(in RSD mln)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
Contribution fee	42.9	56.9	54.9	59.4	57.9	60.1	58.7	55.4	53.0	15.2	14.5
Management fee	37.77	73.5	117.3	171	220	284	357.8	432.79	514.86	161.8	162.4

Source: National Bank of Serbia.

6. Trading in securities

VPF trading volumes equalled RSD 3.7 bln in Q1 2017.

The share of VPFs in BSE trading was around 13% at end-Q1 2017.

VPF securities trading

(in RSD bln)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
Securities trading	1.7	13.1	14.9	19.3	13.2	12.9	21.2	14.5	11.5	3.7
Purchases	1.8	8.1	8.1	10.6	7.1	9.0	12.1	7.9	6.4	2.3
Belgrade Stock Exchange	0.8	0.4	1.3	0.7	0.3	0.4	0.5	0.9	1.1	0.8
Unregulated market	0.3	0.4	0.3	1.3	0.1	0.7	0.9	1.8	1.1	0.9
Auctions of government sec	0.0	7.3	6.5	8.6	6.7	7.9	10.7	5.2	4.2	0.7
Sales	0.4	0.4	0.8	3.8	4.2	2.0	5.4	3.6	3.0	1.0
Belgrade Stock Exchange	0.1	0.1	0.6	0.4	0.3	0.6	0.3	0.5	1.9	0.9
Unregulated market	0.3	0.3	0.2	3.4	3.9	1.4	5.0	3.2	1.1	0.0
Maturity	0.2	4.6	6.1	4.9	2.0	2.0	3.7	2.9	2.1	0.4
Purchase to sale and maturity ratio	2.4	16	12	12	11	2.3	13	12	7.5	17
Share in total BSE trading (in%)	12%	1%	8.0%	3.8%	2.6%	3.4%	4.1%	6.1%	6.7%	13.3%

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 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 2017, Central Securities Depository fees, charged against VPF assets, accounted for much smaller portions of transaction costs than stock exchange fees whereas brokerage fees made up the bulk of costs paid by management companies from their assets.

Amount of transaction costs

(in RSD mln)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017.0 Q1
Total	10.0	5.3	7.4	9.5	7.0	4.7	6.0	6.2	5.6	7.3	3.6
Brokerage fees	4.5	2.2	3.8	4.5	2.9	2.0	2.5	2.0	1.3	2.3	2.0
Custody bank fees	1.8	1.5	2.0	2.4	2.2	1.5	1.9	2.0	2.0	2.0	0.4
Stock exchange fees	1.6	0.8	0.4	1.1	0.8	0.3	0.6	0.6	0.8	1.0	0.7
Central Securities Depository fees	1.0	0.6	1.2	1.5	1.1	0.9	0.9	1.6	1.6	2.0	0.4
Other fees	1.1	0.2	-	-	-	-	0.1	0.0	-	0.0	0.1

Source: National Bank of Serbia.

8. Number and structure of VPF users

At end-Q1 2017, 185,173 VPF users¹³ were in the accumulation phase.¹⁴ Total membership contracts¹⁵ stood at 252,521.¹⁵

VPF users accounted for 9.5%¹⁶ of total employees.

Number of contracts and users

(in thousands)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
No. of contracts	158.5	201.6	215.7	220.4	234.4	240.4	244.5	252.1	258.1	250.5	252.5
No. of users	-	156.0	165.2	166.8	174.9	179.8	183.5	188.0	190.5	183.6	185.2
Percentage of active users (in %)	-	41.6%	36.0%	43.9%	35.1%	30.5%	30.3%	31.3%	25.3%	28.5%	28.8%

Source: National Bank of Serbia.

Structure of users by payment dynamics

(in units and %)

	Period	No. of users	Share (%)
Members who made a contribution payment	1 month	53,405	29%
	3 months	57,241	31%
	6 months	59,669	32%
	12 months	62,613	34%
	From the start of membership (1)	164,849	89%
No holdings (2)		20,324	11%
Total (1+2)		185,173	

Source: National Bank of Serbia.

¹³ The number of users is the number of members of one or more VPFs. This number is smaller than the number of membership contracts as a significant number of users have more than one membership contract in one or several funds.

¹⁴ VPF membership has two phases – the accumulation phase (when contributions are made) and the withdrawal phase (when the accumulated funds are withdrawn).

¹⁵ The number of membership contracts is the sum total of individual membership contracts and the number of members of all pension schemes.

¹⁶ The source for the number of employees: National Bank of Serbia.

The amount of accumulated funds per user depends on the amount of contributions, returns earned by the fund, 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 slightly above RSD 202,000 and is constantly rising.

At end-Q1 2017, the number of users who are members of two or more VPFs was 39,615 or 21% of the total number of users.

Average accumulated funds at the period-end

(in RSD thousand)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
-	34.6	52.2	70.5	84.5	105.3	127.3	148.3	179.4	200.6	202.5

Source: National Bank of Serbia.

In terms of gender composition and the respective amounts of funds, Q1 2017 saw no significant changes relative to prior periods. Men remained dominant, accounting for 59% of all users.

Number of users by number of funds in which they are members

(in units)

No. of funds	No. of users
1	145,558
2	31,603
3	7,876
4	123
5	8
6	3
7	2
Total	185,173

Source: National Bank of Serbia.

Number of users by membership contract

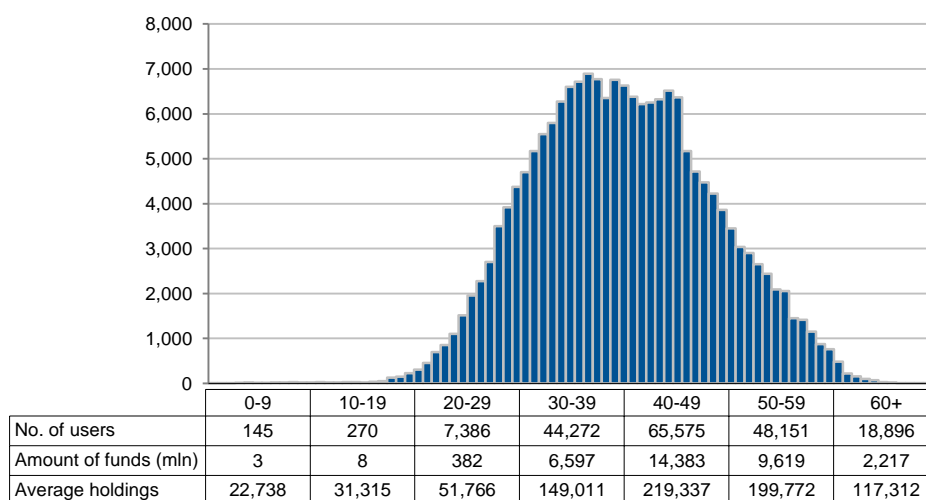
(in units)

No. of contracts	No. of users
1	134,049
2	38,924
3	9,215
4	2,244
5	526
6	157
7	43
8	6
9	8
10	1
Total	185,173

Source: National Bank of Serbia.

At end-Q1 2017, the average age of VPF users was around 46 years, with users aged 30–50 making up the dominant share of around 59%. Such user structure has not changed since the start of VPF operation. Further, the percentage of users above the age of 53 was similar as in prior years, accounting for 25.8% of the total.

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



Source: National Bank of Serbia.

9. Contributions, withdrawals and transfers

In Q1 2017, of total contributions, individual payments accounted for 31.9%, employer contributions for 31.8% and pension schemes for 36.3%. The ratio has stayed broadly unchanged for the past eight years.

Net contribution payments came at RSD 712 mln in Q1 2017.

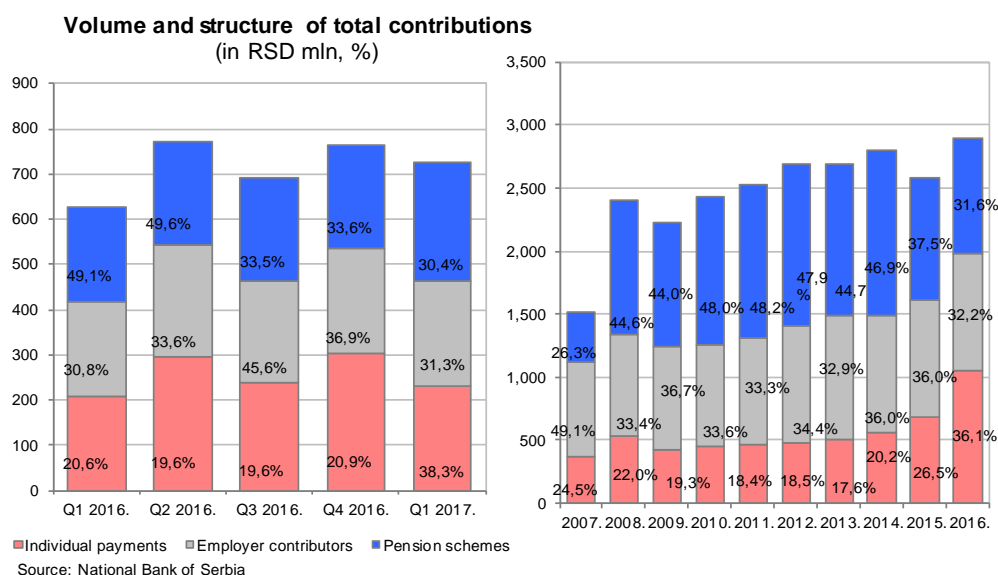
Total contributions (in RSD bln)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
1.50	2.25	2.22	2.43	2.53	2.70	2.70	2.80	2.58	2.89	0.73

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. Contributions from employers' funds up to a specified amount are exempt from the household income tax and contributions for mandatory social insurance. The non-taxable contribution amount is set at RSD 5,589¹⁷ per employee per month. 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 contributions to saving in VPFs.

¹⁷ Under Government decree, this amount is adjusted for previous-year inflation once a year.



Withdrawals are generally lump-sum. Though this contradicts the nature of VPFs which assumes the use of accumulated funds over a longer period, such practice of withdrawal is expected as members entitled to withdrawal are not long-standing fund members and their accumulated sum is therefore relatively small. The next period is likely to see an increase in scheduled and other types of withdrawals, as the accumulation phase lengthens and the accumulated sum goes up.

Total withdrawals (in RSD mln)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
1414	384.6	448.5	458.1	517.6	751.7	945.2	1213.4	1226.2	1195.6	330.4

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 third pillar matures, the amount of withdrawals will also rise in absolute terms.

In Q1 2017, total withdrawals amounted to RSD 330.4 mln.

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 2017 transfers came at RSD 48.8 mln.

Total inter-fund transfers (in RSD mln)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Q1
19.5	235.1	141.5	216.1	165.9	72.3	137.17	126.3	219.7	267.5	48.8

Source: National Bank of Serbia.