



**NATIONAL BANK OF SERBIA**

**INSURANCE SUPERVISION DEPARTMENT  
PENSION FUNDS SUPERVISION DIVISION**

# **VOLUNTARY PENSION FUNDS IN SERBIA**

**Second Quarter Report 2016**



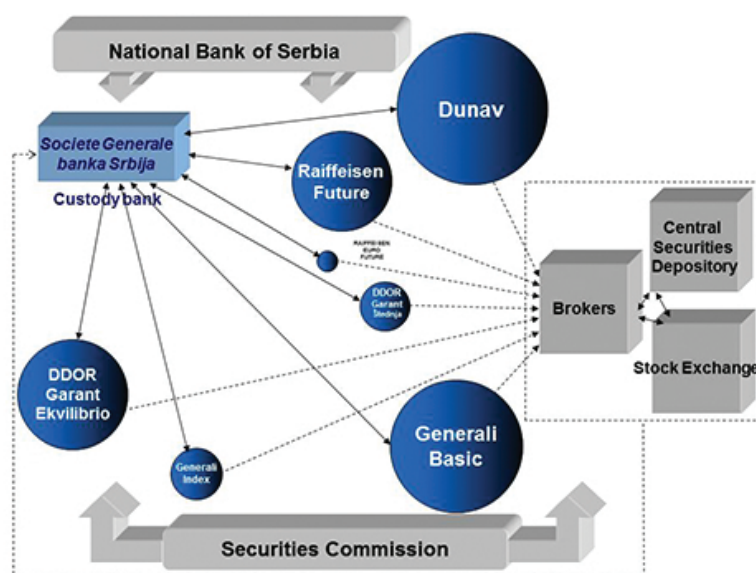
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## 1. Market participants

At end-Q2 2016, the market of voluntary pension funds (VPFs) included four companies managing seven VPFs, one custody bank and five agent banks.<sup>1</sup>

**Market participants**



At end-Q2 2016, total employment in VPF management companies was 124, up by six persons from a quarter earlier.

Based on completed professional examination and the fulfilment of other requirements, by end-Q2 2016 the NBS licensed 683 sales agents to disseminate information about VPF operation.

By end-Q2 2016, 83 sales agents were engaged by management companies and 376 by intermediary banks.

## 2. VPF net assets

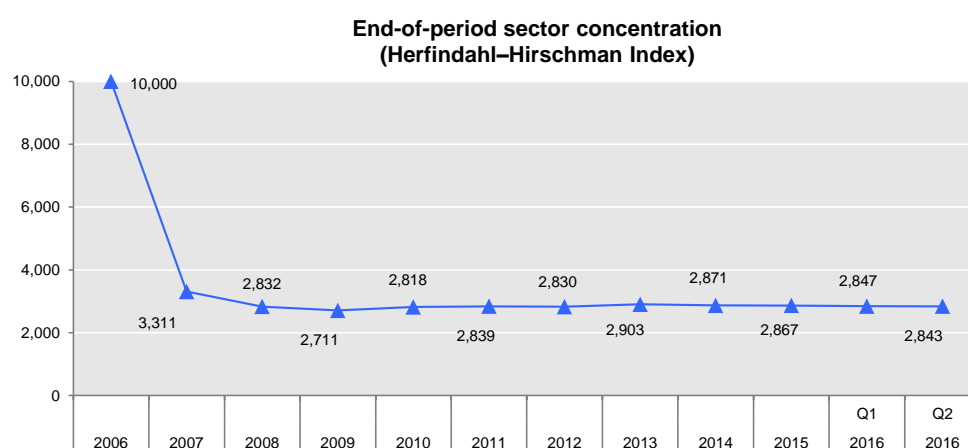
At end-Q2 2016, net assets of VPFs came to RSD 30.7 bln, up by 3.6% quarter-on-quarter. The changes in the value of assets reflect changes in net contributions,<sup>2</sup> withdrawals of funds and investment returns. In Q2 2016, total contributions amounted to RSD 738.8 mln, withdrawals to RSD 302.3 mln and investment returns to RSD 649.2 mln.

*At end-Q2 2016, net assets amounted to RSD 30.7 bln.*

<sup>1</sup> Raiffeisen banka 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.

End-of-period net assets of the VPF sector (in RSD bln)										
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
									T1	T2
3.1	4.6	7.2	9.9	12.5	16.0	19.7	23.6	28.9	29.6	30.7

Source: National Bank of Serbia



Source: National Bank of Serbia

Measured by HHI, market concentration in the sector<sup>3</sup> at end-Q2 amounted to 2,843 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%.

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	
										T1	T2
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

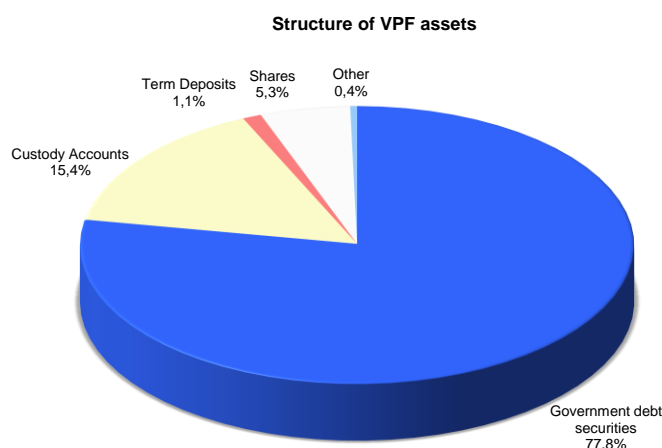
<sup>2</sup> Net contributions are total contributions minus the front-load fee.

<sup>3</sup> In terms of the share in total net assets.

### 3. Structure of VPF assets

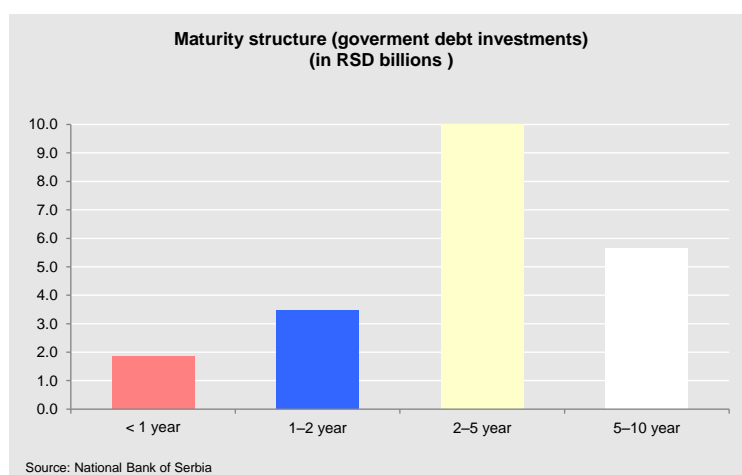
At end-Q2 2016, the structure of investment of VPF assets remained broadly unchanged. Government bonds accounted for the major part of VPF assets – 77.8%. Balances in custody accounts and bank time deposits made up 16.5%, and shares 5.3% of total VPF assets. Investment in real estate, units of open-end investment funds and receivables made up the category “other” which accounted for 0.4%.

*Most assets were invested in government debt instruments – 77.8%.*



Source: National Bank of Serbia

At end-Q2 2016, 7.7% of government debt instruments were with maturity of up to one year, 14.5% between one and two years, 54.3% between two and five years, and 23.5% between five and ten years.



Source: National Bank of Serbia

The average maturity of assets<sup>4</sup> invested in government debt securities was four years.

At end-Q1 2016, 87.2% of total assets were in dinars and 12.8% of total assets (in EUR) were in a foreign currency.

#### 4. Return on investment

At end-Q2 2016, the FONDex<sup>5</sup> reached 2,494.25 points.<sup>6</sup> The return of the FONDex, as the weighted average return of all funds, came at 2.2% in Q2, or 14.2% for the past year. Since the start of VPF operation,<sup>7</sup> the return of the FONDex has equalled 10%.

Given the structure of VPF investment, the return is influenced by the change in the yield curve on government debt instruments<sup>8</sup>, 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) decreased from Q4 2015, as did the discount rates.

The total market value of dinar-denominated issues in Q2 2016 was RSD 49.9 bln. Most issued were three-year (RSD 28.1 bln), two-year (RSD 10.5 bln) and one-year instruments (RSD 11.2 bln).

Accepted rates on dinar instruments declined quarter-on-quarter.

<b>Market value of issued dinar-denominated government debt instruments, by maturity (in RSD bln)</b>					
Maturity	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
3m	5.7	5.8	5.7	3.6	-
6m	2.7	2.6	5.8	2.8	-
12m	19.9	17.0	24.1	17.2	11.2
18m	-	-	-	-	-
24m	39.3	19.3	28.1	28.0	10.5
36m	11.6	26.2	-	31.6	28.1
60m	-	-	14.9	-	-
84m	-	-	-	-	-
120m	-	-	-	-	0.1
Total	79.3	70.9	78.7	83.2	49.9

Source: Ministry of Finance.

<sup>4</sup> The maturity of instruments weighted by their share in total investment in government debt instruments.

<sup>5</sup> The FONDex shows movements in investment units of all VPFs in the market.

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

<sup>7</sup> Annual rate.

<sup>8</sup> A decline in 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.

<b>Accepted rate of issued dinar-denominated government debt instruments, by maturity</b>					
Maturity	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
3m	5.6%	4.4%	2.9%	2.8%	-
6m	5.3%	4.6%	3.3%	3.3%	-
12m	6.2%	5.0%	4.1%	4.0%	4.0%
18m	-	-	-	-	-
24m	7.2%	6.8%	5.0%	5.0%	4.3%
36m	8.2%	6.6%	-	6.0%	5.4%
60m	-	-	6.5%	-	-
84m	-	-	-	-	-
120m	-	-	-	-	4.2%

Source: Ministry of Finance.

Q2 2016 saw the issue of euro-denominated government debt instruments worth EUR 380.8 mln – three-year (EUR 148.7 mln) at a 2.6% rate, one-year (EUR 123.9 mln) at a 0.9% rate, two-year (EUR 108.3 mln) at a 1.2% rate. Interest rates recorded a gradual fall relative to a quarter earlier.

<b>Market value of issued euro-denominated government debt instruments, by maturity (in RSD bln)</b>						
Maturity	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
12m	44.6	116.3	30.5	35.7	98.4	123.9
24m	92.8	50.1	91.2	96.8	119.7	108.3
36m	77.0	41.4	33.3	22.5	144.3	148.7
60m	80.1	-	-	47.8	71.8	-
84m	-	-	-	-	-	-
120m	-	-	70.7	21.9	-	-
Total	294.5	207.9	225.6	224.8	434.3	380.8

Source: Ministry of Finance.

<b>Accepted rate of issued euro-denominated government debt instruments, by maturity</b>						
Maturity	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
12m	2.5%	1.6%	1.6%	1.6%	1.1%	0.9%
24m	3.5%	2.9%	2.2%	1.8%	1.8%	1.2%
36m	4.3%	3.9%	3.9%	3.5%	3.3%	2.6%
60m	4.8%	-	-	4.0%	3.5%	-
84m	-	-	-	-	-	-
120m	-	-	4.5%	4.4%	-	-

Source: Ministry of Finance.



Prices of Belgrade Stock Exchange (BSE) shares, measured by BELEX15<sup>9</sup> fell by 0.2% in Q2 2016 (reaching 604.7 at end-June). The index fell by 6.4% over the past year.

The key policy rate equalled 4.25% at end-June 2016. The interest rates earned by funds on dinar balances in custody accounts mirrored movements in the key policy rate.

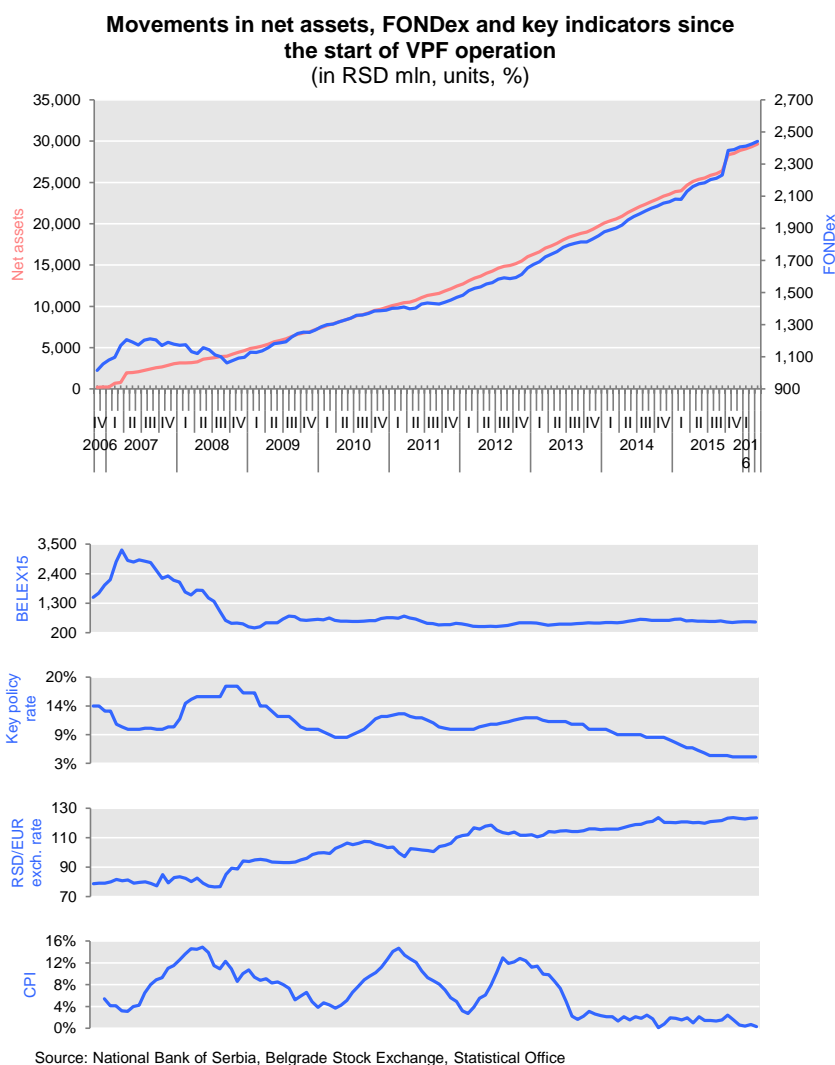
In Q2 2016, the dinar depreciated vis-à-vis the euro, declining by around 0.3% relative to end-Q1 2016. In the same period, the dinar lost around 2.3% against the US dollar.

Price growth rates came at 0.4%, 0.1% and 0.1% in April, May and June, respectively. Consumer prices gained 0.3% in June 2016 year-on-year.<sup>10</sup>

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<sup>9</sup> 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.

<sup>10</sup> 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. Contribution and management fees may not exceed 3% and 2% of the accounting value of net assets, respectively, while the account transfer fee may not exceed the actual transfer costs.

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

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,<sup>11</sup> while the contribution fee is not capped. At present, VPF net assets amount to around 0.76%<sup>12</sup> 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 at 1.84% in Q2 2016. The relative proportion of the two fees has changed – at the start of VPF operation, contribution fees were higher, while today the management fee accounts for around 91% 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 q2 2016, the management fee equalled RSD 150.2 mln. Over the past year, the management fee equalled RSD 567.2 mln and profit reached RSD 3.7 bln. A further rise in net assets and increased competition among funds may result in gradual lowering of the management fee.

<b>Fees charged by management companies</b>											
(in RSD mln)											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
										Q1	Q2
Contribution fee	42.9	56.9	54.9	59.4	57.9	60.1	58.7	55.4	53.0	13.6	14.2
Management fee	37.8	73.5	117.3	170.7	220.0	284.1	357.8	432.8	514.9	145.4	150.2

Source: National Bank of Serbia

<sup>11</sup> 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).

<sup>12</sup> Source: GDP – database of the Serbian Statistical Office, quarterly GDP at current prices, seasonally non-adjusted data.

## 6. Trading in securities

VPF trading volumes equalled RSD 2.3 bln in Q2 2016.

The share of VPFs in BSE trading was 3.3% at end-Q2 2016.

<b>VPF securities trading</b> (in RSD bln)											
	2008	2009	2010	2011	2012	2013	2014	2015	2016		
									Q1	Q2	
Securities trading	1.7	13.1	14.9	19.3	13.2	12.9	21.2	14.5	1.6	2.3	
Purchases	1.8	8.1	8.1	10.6	7.1	9.0	12.1	7.9	1.1	0.8	
Belgrade Stock Exchange	0.8	0.4	1.3	0.7	0.3	0.4	0.5	0.9	0.4	0.3	
Unregulated market	0.3	0.4	0.3	1.3	0.1	0.7	0.9	1.8	0.6	0.1	
Auctions of government securities	0.0	7.3	6.5	8.6	6.7	7.9	10.7	5.2	0.1	0.4	
Sales	0.4	0.4	0.8	3.8	4.2	2.0	5.4	3.6	0.2	0.7	
Belgrade Stock Exchange	0.1	0.1	0.6	0.4	0.3	0.6	0.3	0.5	0.2	0.2	
Unregulated market	0.3	0.3	0.2	3.4	3.9	1.4	5.0	3.2	0.0	0.6	
Maturity	0.2	4.6	6.1	4.9	2.0	2.0	3.7	2.9	0.3	0.7	
Purchase to sale and maturity ratio	2.4	1.6	1.2	1.2	1.1	2.3	1.3	1.2	2.1	0.5	
Share in total BSE trading (in%)	1.2%	1.1%	8.0%	3.8%	2.6%	3.4%	4.1%	6.1%	9.5%	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 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.

Central Securities Depository fees, charged against VPF assets, accounted for the largest portion of transaction costs, whereas brokerage fees made up the bulk of costs paid by management companies from their assets.

<b>Amount of transaction costs</b> (in RSD mln)											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
										Q1	Q2
Total	10.0	5.3	7.4	9.5	7.0	4.7	6.0	6.2	5.6	1.5	2.5
Brokerage fees	4.5	2.2	3.8	4.5	2.9	2.0	2.5	2.0	1.3	0.5	0.8
Custody bank fees	1.8	1.5	2.0	2.4	2.2	1.5	1.9	2.0	2.0	0.5	0.5
Stock exchange fees	1.6	0.8	0.4	1.1	0.8	0.3	0.6	0.6	0.8	0.2	0.3
Central Securities Depository fees	1.0	0.6	1.2	1.5	1.1	0.9	0.9	1.6	1.6	0.3	0.8
Transfer tax relating to the acquisition of securities	1.1	0.2	-	-	-	-	0.1	0.0	-	-	-

Source: National Bank of Serbia

## 8. Number and structure of VPF users

At end-Q2 2016, 185,636 VPF users<sup>13</sup> were in the accumulation phase.<sup>14</sup> Total membership contracts<sup>15</sup> stood at 251,927.

VPF users accounted for 9.7%<sup>16</sup> of total employees.

<b>Number of contracts and users</b> (in thousands)											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
										Q1	Q2
No of contracts	159	201.6	215.7	220.4	234.4	240.4	244.5	252.1	258.1	252.4	251.9
No of users	-	156	165.2	166.8	174.9	179.8	183.5	188.0	190.5	185.8	185.6
Share of active users (in %)	-	41.6%	36.0%	43.9%	35.1%	30.5%	30.3%	31.3%	25.3%	26.5%	25.2%

Source: National Bank of Serbia

<b>Structure of users by payment dynamics</b> (in units and %)			
	Period	No of users	Share (%)
Active users	1 month	46,688	25%
	3 months	53,375	29%
	6 months	55,739	30%
	12 months	59,237	32%
	From the start of membership (1)	161,513	87%
	No holdings (2)	24,123	13%
Total (1+2)		185,636	

Source: 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 190,000 and is constantly rising.

At end-Q2 2016, the number of users who are members of two or more VPFs was 38,149 or 20% of the total number of users.

<sup>13</sup> 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.

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

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

<sup>16</sup> The source for the number of employees: National Bank of Serbia.

**Average accumulated funds at the period-end**  
 (in RSD thousand)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
									Q1	Q2
-	34.6	52.2	70.5	84.5	105.3	127.3	148.3	179.45	183.44	190.2

Source: National Bank of Serbia

In terms of gender composition and the respective amounts of funds, Q2 2016 saw no significant changes relative to prior periods. Men remained dominant, accounting for around 60% of all users.

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

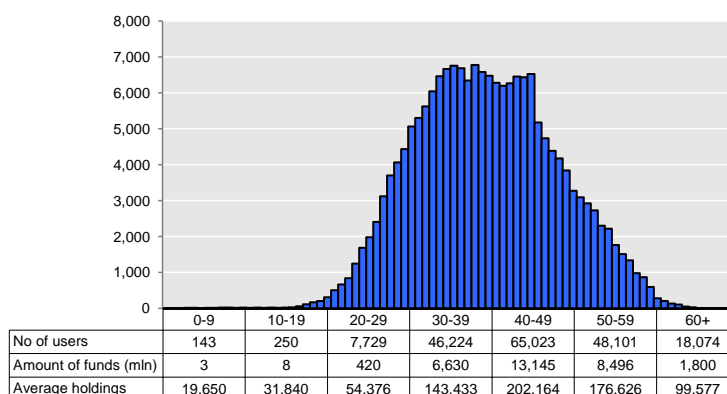
No of funds	No of users
1	147,487
2	29,821
3	8,225
4	94
5	5
6	3
7	1
<b>Total</b>	<b>185,636</b>

Source: National Bank of Serbia

**Number of users by membership contract**  
 (in units)

No of contracts	No of users
1	136,004
2	36,973
3	9,712
4	2,194
5	540
6	152
7	45
8	7
9	8
10	1
<b>Total</b>	<b>185,636</b>

Source: National Bank of Serbia

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


Source: National Bank of Serbia

At end-Q2 2016, the average age of VPF users was around 45 years, with users aged 30–50 making up the dominant share of around 60%. 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% of the total.

## 9. Contributions, withdrawals and transfers

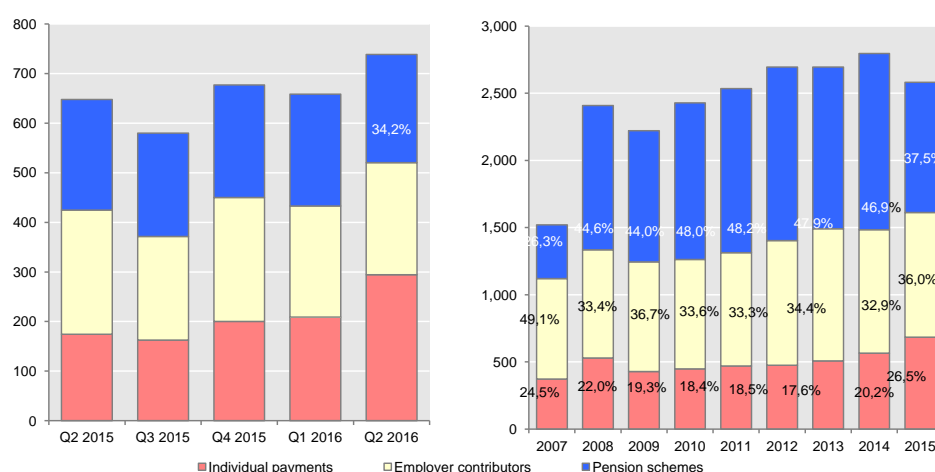
In Q2 2016, of total contributions, individual payments accounted for 40%, employer contributions for 30% and pension schemes for 30%. The ratio has stayed broadly unchanged for the past seven years.

*Net contribution payments came at RSD 724.6 mln in Q2 2016.*

Total contributions (in RSD bln)										
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
									Q1	Q2
1.52	2.41	2.22	2.43	2.53	2.7	2.70	2.80	2.58	0.66	0.74

Source: National Bank of Serbia

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



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 5,501<sup>17</sup> 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.

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	
									Q1	Q2
141.4	384.6	448.5	458.1	517.6	751.7	945.2	1213.4	1226.2	288.8	302.3

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 Q2 2016, total withdrawals amounted to RSD 302.3 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 Q2 2016, transfers came at RSD 58.1 mln.*

**Total inter-fund transfers**  
(in RSD mln)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
									Q1	Q2
19.5	235.1	141.5	216.1	165.9	72.3	137.2	126.3	219.7	60.3	58.1

Source: National Bank of Serbia

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