



**NATIONAL BANK OF SERBIA**

**INSURANCE SUPERVISION DEPARTMENT  
PENSION FUNDS SUPERVISION DIVISION**

# **VOLUNTARY PENSION FUNDS IN SERBIA**

**Second Quarter Report 2015**

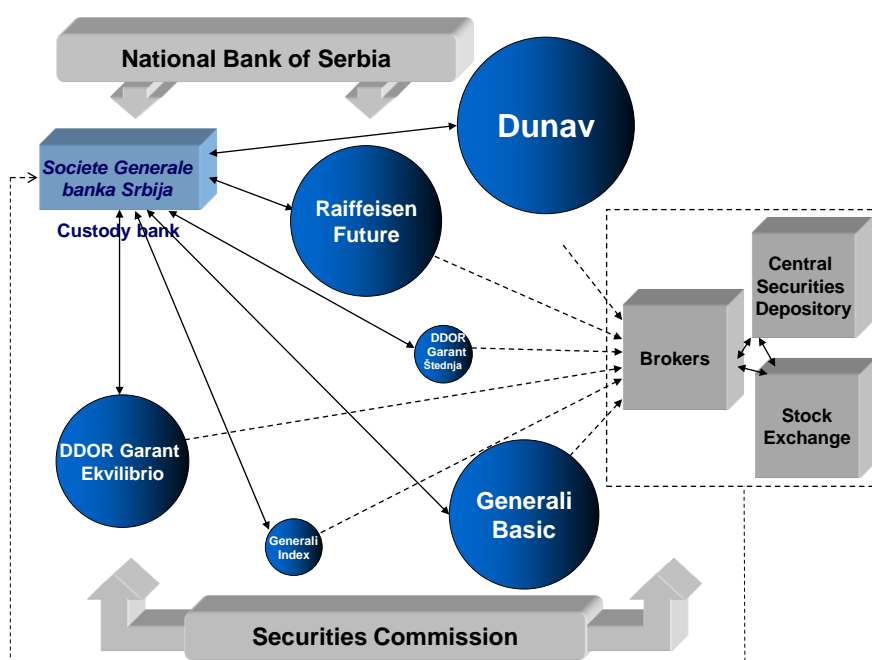
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## 1. Market participants

At the end of the second quarter of 2015, the market of voluntary pension funds (VPFs) comprised four companies managing six VPFs, one custody bank and four agent banks<sup>1</sup>.

Figure: VPF market participants



At end-Q2 2015, management companies employed a total of 114 persons, 1 person fewer from a quarter earlier.

Based on the successfully completed professional exam and other requirements met, the NBS issues a licence to disseminate information about the VPF operation. By the end of Q2 2015, it licensed a total of 627 sales agents.

Management companies and intermediary banks hire sales agents. At the closing of the second quarter of 2015, management companies and intermediary banks hired 79 and 317 persons, respectively.

<sup>1</sup> Raiffeisen banka a.d. Beograd, Societe Generale banka Srbija a.d. Beograd, NLB banka a.d. Beograd, and Sberbank a.d. Beograd

## 2. VPF net assets

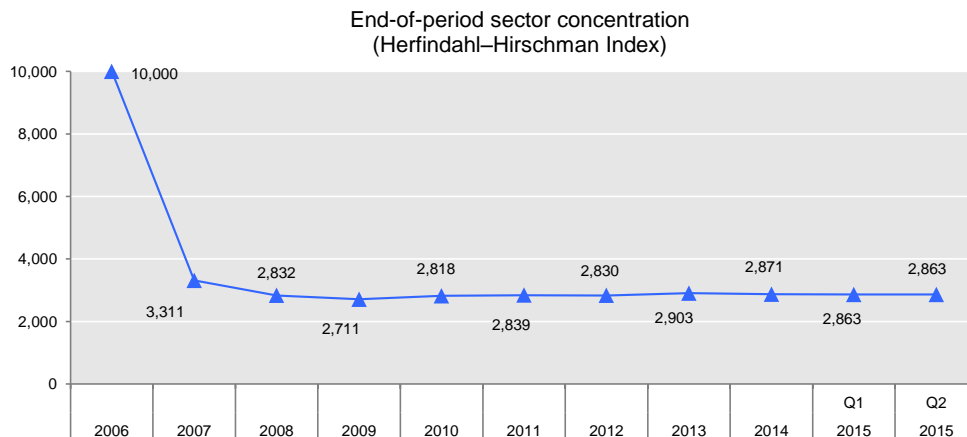
At end Q2-2015, net assets of the voluntary pension funds came at RSD 25.5 billion, rising by 3.6%. The value of net assets changes on account of net contributions<sup>2</sup>, withdrawals and the return on investment. In the second quarter of 2015, total contributions amounted to RSD 647.6 million, withdrawals totalled RSD 381.1 million and return on investment RSD 625.8 million.

*At end Q2-2015, net assets of the voluntary pension funds equalled RSD 25.5 billion.*

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

2007	2008	2009	2010	2011	2012	2013	2014	2015	
								Q1	Q2
3.1	4.6	7.2	9.9	12.5	16.0	19.7	23.6	24.6	25.5

Source: National Bank of Serbia.



Source: National Bank of Serbia.

Measured by HHI, market concentration in the sector<sup>3</sup> remained high – it equalled 2,860 points at end-Q2 2015.

If funds were classified into groups according to the size of VPF net assets relative to net sector assets, two funds would fall into “large” and “medium” category, making up over 97% of the market, while the largest fund would account for around 42%.

<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.

Number of funds by groups divided by market share (in units)										
Share in net assets (%)	2007	2008	2009	2010	2011	2012	2013	2014	2015	
									Q1	Q2
Large (20 and above)	3	2	2	3	2	2	2	2	2	2
Medium (5 - 19.99)	-	2	3	1	2	2	2	2	2	2
Small (0 - 4.99)	4	6	5	4	5	5	2	2	2	2

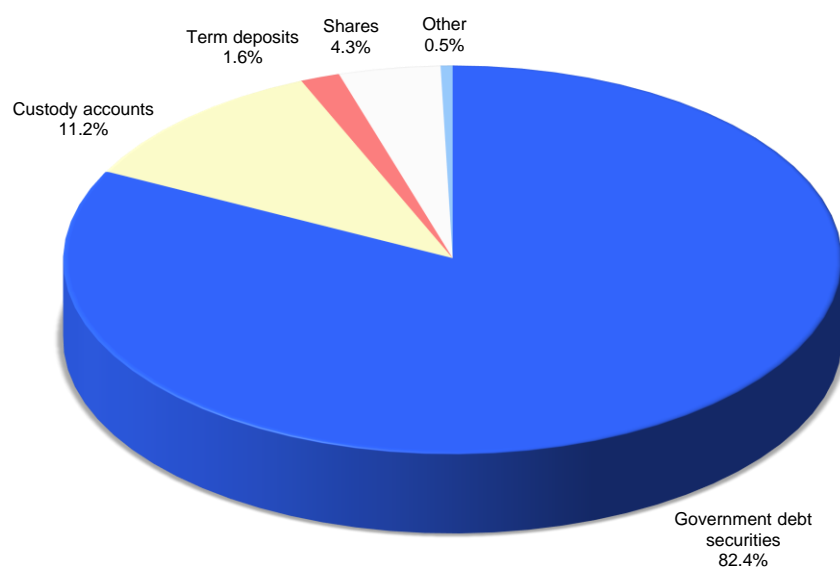
Source: National Bank of Serbia.

### 3. Structure of VPF net assets

At end-Q2 2015, the structure of VPF net assets remained largely unchanged. Government securities accounted for the major portion of VPF assets – 82.4%. Balances in custody accounts and term deposits made up 12.8% and shares 4.3% of total VPF assets. Investment in real estate, units of open-end investment funds and receivables made up the category ‘other’ which accounted for 0.5%. T-bills and corporate bonds were not present in the structure of VPF net assets.

*Most assets were invested in government debt instruments – 82.4%.*

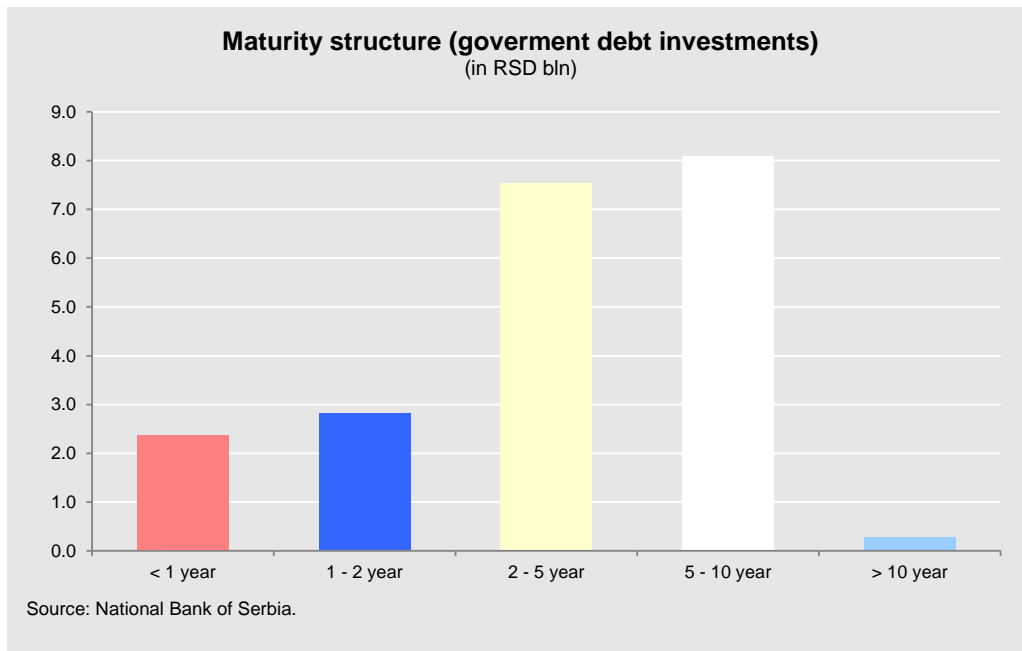
**Structure of VPF assets**



Source: National Bank of Serbia.

At the end of Q2 2015, the maturity structure of government debt instruments was as follows: 11.2% with the maturity of up to one year, 13.4% with the maturity of one–two years, 35.7% with the maturity of two–five years, 38.3% with the maturity of five–ten years, and 1.3% with the maturity over 10 years.

The average maturity of assets<sup>4</sup> invested into government debt instruments was 4.2 years.



At end-Q2 2015, dinar assets made up 85.8%, while foreign currency assets accounted for 14.2% (13.5% in EUR and 0.7% in USD) of total assets.

#### 4. Return on investment

At end-Q2 2015, FONDex<sup>5</sup> reached 2,184.10 points<sup>6</sup>. The return of FONDex, which represents the weighted average return of all funds, came at 2.5% in Q2 2015 as well, while the return for the last year measured 10.7%. Since the start of VPF operation, the return of FONDex<sup>7</sup> equalled 9.5%.

Given the structure of VPF investment, the return is under the influence of changes in the yield curve on government debt instruments<sup>8</sup>, changes in prices of shares, the level of the key policy rate and banks' interest rates, and changes of the dinar exchange rate against the euro.

An increase was recorded for the volume of issues in the primary market of government debt instruments (T-bills and government bonds) relative to Q1 2015, while discount rates went down.

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

<sup>5</sup> 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 the interest rate pushes up the price of the debt instrument and vice versa. Prices of longer-maturity instruments are more sensitive to interest rate changes.

The total market value of dinar-denominated issues came at RSD 79.3 billion in Q2 2015. Most issued were two-year (RSD 39.3 billion), one-year (19.9 billion) and three-year (11.6 billion) instruments. Accepted rates on dinar instruments recorded in Q2 were lower than the ones from the previous quarter.

<b>Market value of issued dinar-denominated government debt instruments, by maturity</b> (in RSD bln)					
Maturity	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015
3m	6.9	7.5	2.4	3.3	5.7
6m	5.5	2.3	3.9	0.6	2.7
12m	24.4	13.1	16.5	11.9	19.9
18m	-	-	-	-	-
24m	20.3	4.3	11.1	23.3	39.3
36m	15.7	20.0	5.2	48.4	11.6
60m	4.0	8.9	-	-	-
84m	13.7	9.6	5.9	45.6	-
120m	-	-	7.8	-	-
Total	90.5	65.7	52.9	133.2	79.3

Source: Ministry of Finance.

<b>Accepted rate of issued dinar-denominated government debt instruments, by maturity</b>					
Maturity	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015
3m	7.6%	6.9%	7.0%	7.0%	5.6%
6m	7.7%	7.2%	7.1%	7.0%	5.3%
12m	8.2%	8.2%	8.0%	8.4%	6.2%
18m	-	-	-	-	-
24m	9.0%	9.0%	9.4%	9.1%	7.2%
36m	10.0%	10.0%	9.7%	9.7%	8.2%
60m	10.8%	10.8%	-	-	-
84m	11.8%	11.8%	12.0%	12.3%	-
120m	-	-	13.0%	-	-

Source: Ministry of Finance.

Q2 saw the issue of euro-denominated government debt instruments worth EUR 207.9 million – one-year (EUR 116.3 million) at a 1.6% rate, two-year (EUR 50.1 million) at a 2.9% rate, three-year (EUR 41.4 million) at a 3.9% rate. Interest rates recorded a gradual fall relative to a quarter earlier.

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

Maturity	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015
12m	48.4	113.2	47.9	97.3	44.6	116.3
24m	68.5	128.6	26.5	175.1	92.8	50.1
36m	49.6	62.8	58.5	76.2	77.0	41.4
60m	47.3	23.9	37.6	34.4	80.1	-
120m	-	96.6	-	25.8	-	-
Total	213.8	424.1	170.5	408.8	294.5	207.9

Source: Ministry of Finance.

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

Maturity	Q1 2013	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015
12m	3.3%	3.2%	3.2%	2.5%	2.5%	1.6%
24m	4.1%	4.1%	4.0%	3.5%	3.5%	2.9%
36m	4.8%	4.7%	4.8%	4.5%	4.3%	3.9%
60m	5.1%	4.9%	5.0%	5.0%	4.8%	-
120m	-	5.5%	-	5.5%	-	-

Source: Ministry of Finance.

In the market of frozen FX savings bonds at end-Q2 2015, yields on A2016-series measured 2.23%.

Prices of Belgrade Stock Exchange (BSE) shares, measured by BELEX15<sup>9</sup>, fell by 3.9% in Q2 2015 (vs. 645.79 at end-June). The index gained 13.3% over the last year.

The key policy rate equalled 6% at end-Q2 2015. The interest rates earned by funds on dinar balances in custody accounts mirrored movements in the key policy rate.

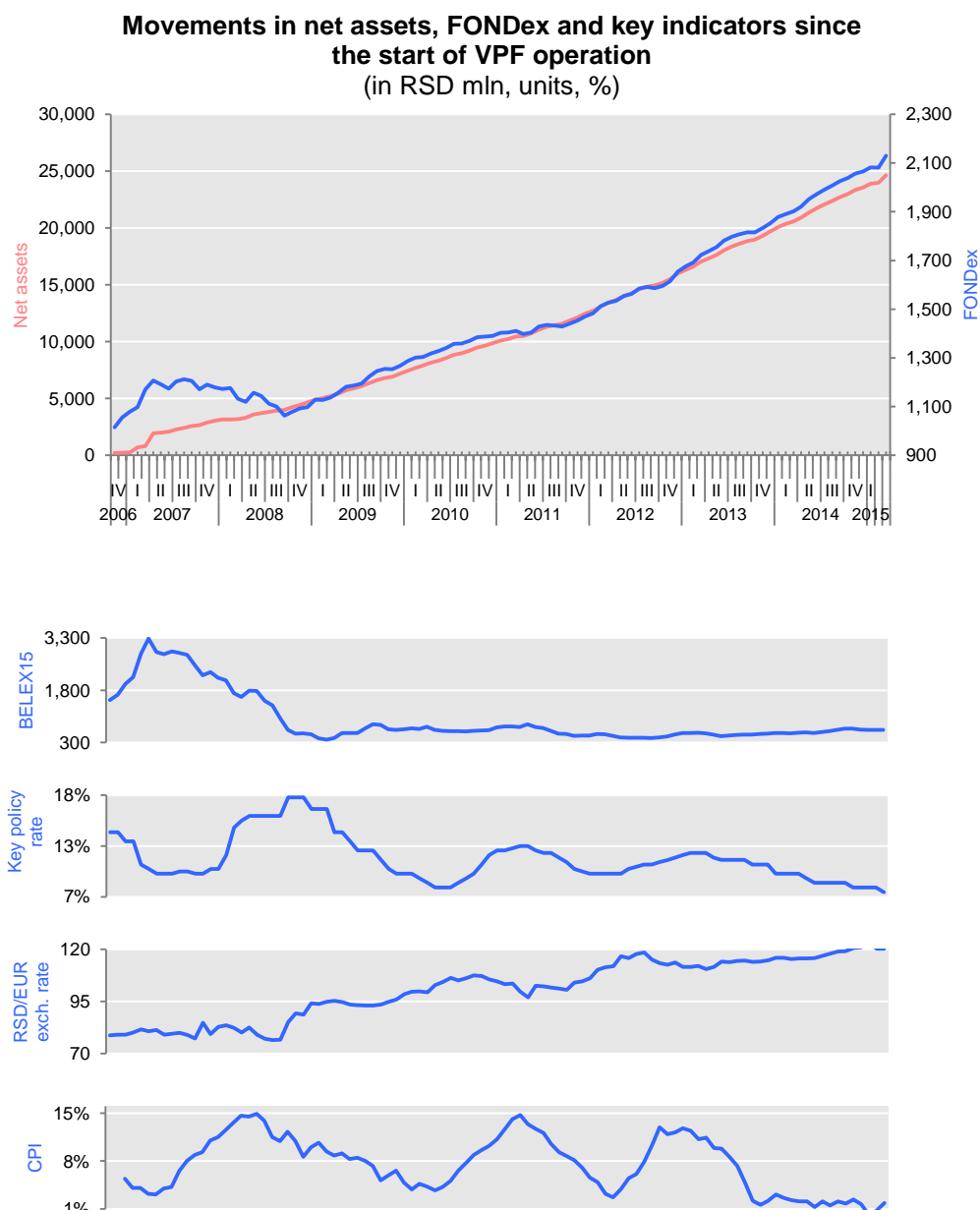
In Q2 2015, the dinar weakened vis-à-vis the euro, sliding down by 0.3% from the previous quarter. In the same period, the dinar gained 3.3% against the US dollar.

Inflation slowed down during the second quarter, one month even recording deflation. Monthly growth rate of consumer prices in April, May and June measured 0.5%, -0.3% and 0.5%, respectively. In y-o-y terms, June prices rose by 1.9%.<sup>10</sup>

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

<sup>10</sup> Source: Serbian Statistical Office.





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

## 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. These fees comprise fees charged at the time of payment of pension contributions and fund management fees. The fees charged at the time of payment may not exceed 3% of the payment made, whereas management fees may not exceed 2% of the accounting net value of assets. The account transfer fee may be charged only at the level of real transfer costs.

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

Under the amendments to the Law, adopted in early May 2011, fees charged by management companies were also changed – these fees will be applied once net assets of all funds reach 0.75% of GDP. The maximum management fee is set at 1.25% annually, while the contribution fee is not capped. VPF net assets currently account for around 0.66% of GDP.<sup>11</sup>

Fees are one of the parameters that members should bear in mind when choosing a fund, but should not be observed as an isolated factor. The fee level depends on the fund investment strategy and its performance. As a rule, more active funds, intended for younger persons who pay contributions over a longer horizon, invest in more complex instruments to a higher extent and assume greater risk, which is why they are expected to post higher return. However, they also charge higher fees. On the other hand, a fund investing passively in safer financial instruments should charge lower fees. Investment policy, i.e. scheduled investment by fund members, the expected fund return, the risk taken by a fund (and a member), and fees charged by companies, should be taken into account when opting for a fund.

Since the start of operation, companies charged a 2% management fee, while the contribution fee was cut progressively and came at 2.12% in Q2 2015. The relative proportion of the two fees reversed – at the start of VPF operation, contribution fees were dominant by contrast to the current 90% of management fees. This was a result of a rising net asset value and an enlarged base to which management fees are applied.

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

The management fee is charged every day on the value of VPF net assets and is contained directly in the investment unit value, meaning that the calculated and published value is deduced by the amount of the management fee.

In Q2 2015, the management fee equalled RSD 125.4 million, while the return on investment totalled RSD 625.8 million. Over the past year, the management fee equalled RSD 471.4 million and the profit reached RSD 2.4 billion. A further rise in net assets and boosted fund competition 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	
									Q1	Q2
Contribution fee	42.9	56.9	54.9	59.4	57.9	60.1	58.7	55.4	12.8	13.7
Management fee	37.8	73.5	117.3	170.7	220.0	284.1	357.8	432.8	117.8	125.4
Source: National Bank of Serbia.										

<sup>11</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 3.5 billion in Q2 2015.

The share of VPFs in BSE trading in Q2 2015 equalled 10.9%.

<b>VPF securities trading</b> (in RSD bln)									
	2008	2009	2010	2011	2012	2013	2014	2015	
								Q1	Q2
Securities trading	1.7	13.1	14.9	19.3	13.2	12.9	21.2	4.4	3.5
Purchases	1.8	8.1	8.1	10.6	7.1	9.0	12.1	2.4	2.1
Belgrade Stock Exchange	0.8	0.4	1.3	0.7	0.3	0.4	0.5	0.5	0.2
Unregulated market	0.3	0.4	0.3	1.3	0.1	0.7	0.9	0.9	0.6
Auctions of government securities	0.0	7.3	6.5	8.6	6.7	7.9	10.7	1.0	1.2
Sales	0.4	0.4	0.8	3.8	4.2	2.0	5.4	1.7	0.8
Belgrade Stock Exchange	0.1	0.1	0.6	0.4	0.3	0.6	3.5	0.1	0.0
Unregulated market	0.3	0.3	0.2	3.4	3.9	1.4	5.0	1.6	0.8
Maturity	0.2	4.6	6.1	4.9	2.0	2.0	3.7	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	1.4
Share in total BSE trading (in%)	1.2%	1.1%	8.0%	3.8%	2.6%	3.4%	4.1%	6.4%	10.9%

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 the current maintenance of property that fund assets are invested in are charged against fund assets. Other costs are incurred by management companies.

Central Securities Depository fees, charged against VPF assets, accounted for the largest portion of transaction costs, whereas custody bank 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	
									Q1	Q2
Total	10.0	5.3	7.4	9.5	7.0	4.7	6.0	6.2	1.8	1.8
Brokerage fees	4.5	2.2	3.8	4.5	2.9	2.0	2.5	2.0	0.5	0.3
Custody bank fees	1.8	1.5	2.0	2.4	2.2	1.5	1.9	2.0	0.6	0.6
Stock exchange fees	1.6	0.8	0.4	1.1	0.8	0.3	0.6	0.6	0.2	0.3
Central Securities Depository fees	1.0	0.6	1.2	1.5	1.1	0.9	0.9	1.6	0.5	0.6
Transfer tax relating to the acquisition of securities	1.1	0.2	-	-	-	-	0.1	0.0	-	-
Source: National Bank of Serbia.										

Source: National Bank of Serbia.

## 8. Number and structure of VPF users

At end-Q2 2015, 188,694 users<sup>12</sup> were in the accumulation phase<sup>13</sup>. Total membership contracts stood at 255,549<sup>14</sup>.

<b>Number of contracts and users</b> (in thousands)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	
									Q1	Q2
No. of contracts	158.5	201.6	215.7	220.4	234.4	240.4	244.5	252.1	255.4	255.5
No. of users	-	156.0	165.2	166.8	174.9	179.8	183.5	188.0	188.4	188.7
Percentage of active users (in %)	-	41.6%	36.0%	43.9%	35.1%	30.5%	30.3%	31.3%	27.7%	25.1%

Source: National Bank of Serbia.

VPF users accounted for 2.62% of the total population or 11.03% of total employees.

<b>Structure of users by payment dynamics</b> (in units and %)			
	Period	No. of users	Share (%)
Active users	1 month	47,410	25%
	3 months	53,229	28%
	6 months	64,596	34%
	12 months	71,900	38%
	From the start of membership (1)	158,866	84%
	No holdings (2)	29,828	16%
Total (1+2)		188,694	

Source: National Bank of Serbia.

The amount of accumulated funds per user depends on the amount of contributions, the funds' return, level of fees, and the length of the accumulation phase. With an increase in the level of contributions and the period of accumulation, alongside the returns, the amount of average balances in members' individual accounts increases. The average amount of accumulated funds of members who have made at least one contribution was somewhat above RSD 160,000 and is constantly rising.

<b>Average accumulated funds at the period-end</b> (in RSD thousand)									
2007	2008	2009	2010	2011	2012	2013	2014	2015	
								Q1	Q2
-	34.6	52.2	70.5	84.5	105.3	127.3	148.3	155.2	160.7

Source: National Bank of Serbia.

<sup>12</sup> The number of users is the number of members of one or more VPFs. The 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>13</sup> VPF membership has two phases – the accumulation phase (when contributions are made) and the withdrawal phase (when the accumulated funds are withdrawn).

<sup>14</sup> The number of membership contracts is the sum total of individual membership contracts and the number of members of all pension plans.

At end-Q2 2015, the number of members of two or more VPFs amounted to 38,185 or 20% of the total.

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

No. of funds	No. of users
1	150,509
2	28,956
3	9,137
4	88
5	1
6	3

Source: National Bank of Serbia.

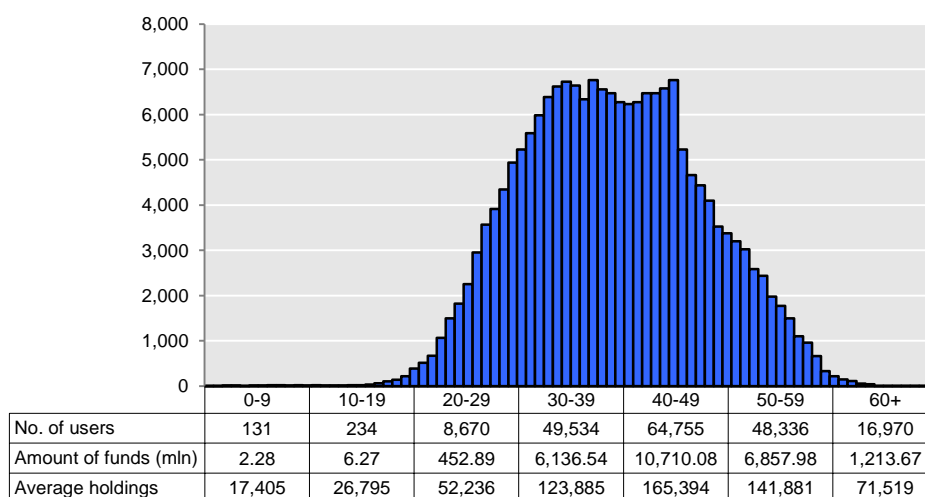
**Number of users by membership contract**  
(in units)

No. of contracts	No. of users
1	139,202
2	36,127
3	10,383
4	2,251
5	527
6	148
7	41
8	6
9	8
10	1

Source: National Bank of Serbia.

In terms of gender composition and the amount of their funds, Q2 2015 saw no significant changes relative to previous years. Men remained dominant at around 60%.

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



Source: National Bank of Serbia.

At end-Q2 2015, the average age of VPF users was around 45 years, while users aged 30–50 took up the dominant share of around 61%. Such user structure has not changed since the start of VPF operation. Furthermore, the percentage of users above the age of 53 was similar to previous years, accounting for 24% of the total.

## 9. Contribution payments, withdrawals and transfers

Apart from 2007 when most VPFs were set up and when contributions were the lowest, total contributions were stable throughout the years, ranging between RSD 2.2 and 2.8 billion a year. In Q2 2015, of total contributions, individual payments accounted for 26.9%, employer contributions 38.6% and pension plans 34.4%. This ratio has been broadly unchanged since 2008.

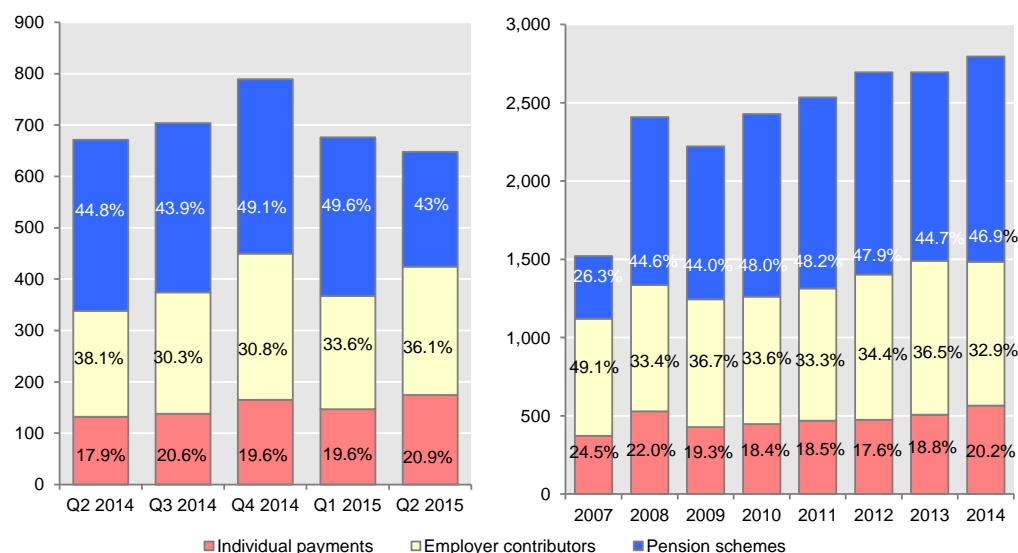
*Net contribution payments came at RSD 634 million in Q2 2015.*

**Total contributions**  
(in RSD bln)

2007	2008	2009	2010	2011	2012	2013	2014	2015	
								Q1	Q2
1.52	2.41	2.22	2.43	2.53	2.7	2.70	2.80	0.68	0.65

Source: National Bank of Serbia.

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



Source: National Bank of Serbia.

Though the Law envisages individual contributions, most are made through employers that thus show a high degree of responsibility towards their employees. Ample potential for further growth in the membership base are companies with high staffing levels. Contributions by individuals and employers 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 5,420<sup>15</sup> per employee per month. Payments in the same amount made by the employer through wage garnishment and payments from employee wages are also tax-exempt. This represents

<sup>15</sup> Under the Government decree, this amount is adjusted for previous-year inflation once a year.

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. Further period is likely to see an increase in scheduled and other types of withdrawals, in response to growth in accumulation years and the accumulated sum. Moreover, members who joined VPFs after the Law was amended in May 2011 are entitled to maximum lump-sum withdrawal of 30%.

<b>Total withdrawals</b> (in RSD mln)									
2007	2008	2009	2010	2011	2012	2013	2014	2015	
								Q1	Q2
141.4	384.6	448.5	458.1	517.6	751.7	945.2	1213.4	323.8	381.1

Source: National Bank of Serbia.

Withdrawals grow by the year as a result of system development – as contributions and net assets increase and the third pillar matures, absolute withdrawals will rise as well.

*In Q2 2015, total withdrawals amounted to RSD 381.1 million.*

Transfers represent inter-fund transfers. A member may transfer a part or all of his assets from one fund to another, and he has to cover only real transfer costs.

*In Q2 2015, transfers amounted to RSD 35.7 million.*

<b>Total inter-fund transfers</b> (in RSD mln)									
2007	2008	2009	2010	2011	2012	2013	2014	2015	
								Q1	Q2
19.5	235.1	141.5	216.1	165.9	72.3	137.17	126.3	76.0	35.7

Source: National Bank of Serbia.