

#### NATIONAL BANK OF SERBIA

#### PENSION FUNDS SUPERVISION DEPARTMENT

### **VOLUNTARY PENSION FUNDS IN SERBIA**

First Quarter Report 2013

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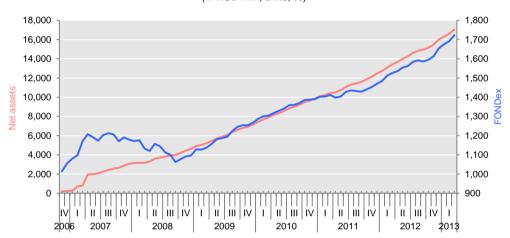
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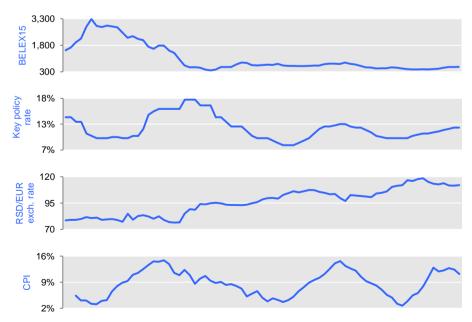
#### 1. Introduction

More than six years into their operation, voluntary pension funds (VPFs) have recorded a constant rise in their net assets that reached RSD 17 billion by end-Q1 2013, up by 6.5% quarter-on-quarter or 27% year-on-year.

Since the start of VPF operation, net assets have been on a continuous rise, reaching over RSD 17 billion in late Q1 2013.

Movements in net assets, FONDex and key indicators since the start of VPF operation (in RSD mln, units, %)



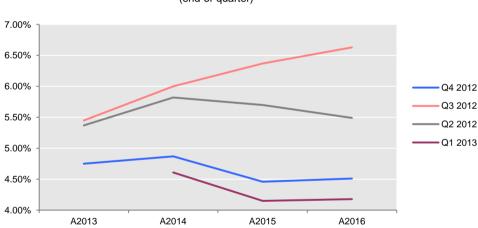


Source: National Bank of Serbia, Belgrade Stock Exchange, Statistical Office

Throughout the period observed, returns of funds were generally positive. At end-Q1 2013, FONDex<sup>1</sup> reached 1,722.77 points<sup>2</sup>. The return of FONDex, which represents the weighted average return of all funds, came at 4.1%, while the return for the last year measured 12.9%. Since the start of VPF operation<sup>3</sup>, the return of FONDEX equals 8.9%.

Prices of Belgrade Stock Exchange (BSE) shares, measured by BELEX15<sup>4</sup>, rose by around 10% in Q1 (the index value was 577.9 by end-March). The index rose by around 8% over the last year, as a consequence of a heftier drop in stock prices in Q2 2012.

Trading volumes came at RSD 15.4 billion in Q1 2013, which is significantly above the quarterly volumes recorded over the past several years. However, excluding block trading in shares of "Frikom a.d." Belgrade of close to RSD 11 billion, trading volumes remained at the level of previous quarters. Measured by the number of transactions, BSE activity contracted from the previous quarter (around 116,000 transactions).



Yield curve on frozen FX savings bonds (end-of-quarter)

Source: Belgrade Stock Exchange.

At end-Q1 2013, frozen FX savings bonds yield ranged from 4.15% to 4.61%<sup>5</sup> and the yield curve shifted down. Quarter-on-quarter, yields declined almost by the same degree, by 30 basis points on average. Year-on-year, yields fell by 134 basis points for A2014 series, 174 basis points for A2015, and 163 basis points for A2016 series.

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<sup>&</sup>lt;sup>1</sup> FONDex shows movements in investment units of all VPFs in the market.

<sup>&</sup>lt;sup>2</sup> The initial FONDex value of 1000 points was recorded on 15 November 2006 when the first VPF began to operate.

<sup>&</sup>lt;sup>3</sup> Annual rate.

<sup>&</sup>lt;sup>4</sup> Of total investment in shares, over 90% were shares covered by BELEX15, which means that BELEX15 is a relevant benchmark for shares in the funds' portfolio.

<sup>&</sup>lt;sup>5</sup> Excluding frozen FX savings bonds of A2013 series, with a 5.69% return and maturing on 31/05/2013. The yield on these bonds rises significantly prior to each due date.

An increase was recorded in the volume of issues in the primary market of government debt instruments (T-bills and government bonds). Discount rates decreased significantly relative to the previous quarter.

The total market value of dinar-denominated issues came at c. RSD 90.9 billion vs. RSD 67.6 billion in the previous quarter. Most issued were 1-year (27 billion), 2-year (24 billion) and 3-year (18 billion) bills. Also issued were 3-month, 6-month, 5-year and 7-year T-bills (total RSD 22 billion).

Accepted rates of issued dinar government debt instruments, by maturity
(%)

Maturity	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013
3m			13.0%	11.3%	9.5%
6m	10.5%	10.5%	13.5%	12.9%	9.5%
12m	12.7%	13.5%	14.6%	11.9%	10.0%
18m	13.1%	14.0%	15.0%	12.9%	
24m	13.5%	14.5%	14.5%	13.0%	10.8%
36m	14.7%	15.0%	16.0%	14.0%	11.4%
60m	14.7%	15.0%		14.7%	12.9%
84m					12.7%

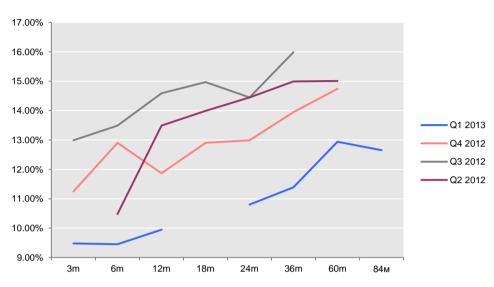
Source: Ministry of Finance.

## Market value of issued dinar government debt instruments, by maturity (RSD billion)

Maturity	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013
3m	-	-	10.7	6.7	9.0
6m	14.1	4.9	12.1	8.3	5.7
12m	26.3	23.0	16.2	19.2	27.1
18m	5.1	13.2	11.7	16.1	
24m	11.9	8.6	6.7	3.3	23.7
36m	17.1	4.7	23.7	9.9	18.3
60m	2.3	0.4	-	4.2	4.5
84m					2.6
Total	76.7	54.8	81.0	67.6	90.9
	·	·	·	·	·

Source: Ministry of Finance.

In the quarter under review, returns to maturity for dinar instruments declined significantly from the previous quarter – by over 200 basis points on average.



## Accepted rate on government dinar debt instruments (end-of-quarter)

Source: Ministry of Finance.

The period reviewed also saw the issue of euro-denominated government debt instruments worth c. RSD 128.1 million - 1-year (RSD 30 million) at a 3.93% rate, 2-year (RSD 50 million) at a 4.88% rate, and 3-year (RSD 30 million) at a 4.88% rate.

The appreciation trend which started in Q3 2012 continued in Q1 2013. In the quarter under review, the dinar gained 1.5% quarter-on-quarter.

Inflation decelerated in Q1 2013. Annual CPI rose by 11.2%, while monthly rates were up by 0.6%, 0.5% and 0% in January, February and March respectively.

The key policy rate was raised in Q1 2013 to 11.75% by end-March, up by 50 basis points quarter-on-quarter or 225 basis points year-on-year. Mirroring the increase in the key policy rate, the interest earned on dinar balances held in custody accounts went up as well.

#### 2. VPF operation

#### 2.1. Market participants

At end-Q1, the VPF market comprised five companies managing nine VPFs, three custody banks and four agent banks<sup>6</sup>.

<sup>&</sup>lt;sup>6</sup> NLB banka a.d. Belgrade, Raiffeisen banka a.d. Belgrade, Volksbank a.d. Beograd and Société Générale Banka Srbija a.d. Belgrade.

#### **National Bank of Serbia** ociete Generale Dunav banka Srbija Raiffeisen **Future** Central **Custody banks** Securities Komercijalna Depository banka **DDOR Brokers** Garant Stock **Exchange Unicredit Bank** Delta Generali Basic Triglav **Securities Commission**

#### VPF market participants

At end-Q1, total employment in VPF management companies was 152, the same as in the previous quarter.

#### 2.2. VPF net assets

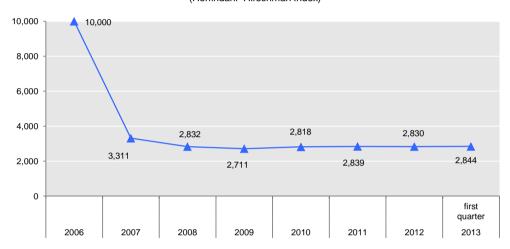
At end-Q1 2013, net assets totalled over RSD 17 billion, up by 6.5% quarter-on-quarter or 27% year-on-year. Return on investment had the strongest impact on a rise in net assets. Furthermore, RSD 618.5 million were paid into individual accounts. Total contributions, net of

Net assets reached RSD 17 billion and contribution payments RSD 618.5 million. Concentration in the sector remains high.

contribution fees, came to RSD 605 million, whereas withdrawals amounted to RSD 238.9 million. Total fees charged by companies were RSD 81.2 million.

End-of-period net assets of the VPF sector (in RSD billion)								
2007 2008	2009	2010	2011	2012 —	2013			
2007	2000	2009	2010	2011	2012	Q1		
3.1	4.6	7.2	9.9	12.5	16.0	17.0		
Course Nations	I Donk of Corbin							

End-of-period sector concentration (Herfindahl–Hirschman Index)



Source: National Bank of Serbia.

Measured by HHI, market concentration in the sector<sup>7</sup> remained high -2,844 points at end-Q1. What also attests to high market concentration are two funds classified as 'large' and two as 'medium', making up over 96% of the market, while the largest fund accounted for c. 42% of total net assets.

Number of fu (in units)	ınds by g	roups divi	ded by ma	arket shar	е		
Share in net	2007	2008	2009	2010	2011	2012	2013
assets (%)	assets (%)	2006	2009			2012 -	Q1
Large (20 and above)	3	2	2	3	2	2	2
Medium (5 - 19,99)	-	2	3	1	2	2	2
Small (0 - 4,99)	4	6	5	4	5	5	5

Source: National Bank of Serbia.

#### 2.3. Structure of VPF net assets

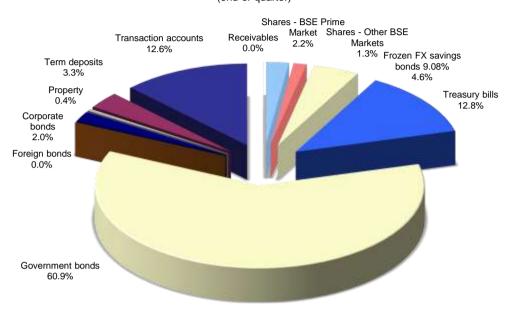
In Q1, government debt securities accounted for the major portion of VPF assets – 78.2%, of which government bonds made up 60.9%, T-bills

Most funds were invested in government instruments – 78.2%, while 20.5% of assets were in foreign currency.

<sup>&</sup>lt;sup>7</sup> In terms of the share in total net assets.

-12.8%, frozen FX savings bonds -4.6%, followed by demand deposits -12.6%, term deposits -3.3%, shares -3.5%, and property -0.4%.

## Structure of VPF assets (end-of-quarter)



Source: National Bank of Serbia.

Euro-denominated assets accounted for RSD 3.5 billion or 20.5%, while dinar assets made up RSD 13.6 billion or 79.5% of total assets.

#### 2.4. VPF trading

VPF trading volumes equalled RSD 5.2 billion in O1 2013.

Trading volumes came at RSD 5.2 billion, of which the purchase of government securities had the largest share.

<b>VPF</b>	securities	trading

(in RSD billion)

,						
	2008	2009	2010	2011	2012	2013
	2006	2009	2010	2011	2012 -	Q1
Securities trading	1.5	12.6	14.9	19.3	13.3	5.2
Purchases	1.1	8.1	8.1	10.6	7.1	3.5
Belgrade Stock Exchange	0.8	0.4	1.3	0.7	0.3	0.4
Unregulated market	0.3	0.4	0.3	1.3	0.1	0.2
Auctions of government securities	0.0	7.3	6.5	8.6	6.7	3.0
Sales	0.4	0.4	0.8	3.8	4.2	0.9
Belgrade Stock Exchange	0.1	0.1	0.6	0.4	0.3	0.5
Unregulated market	0.3	0.3	0.2	3.4	3.9	0.5
Maturity	0.1	4.1	6.1	4.9	2.0	0.7
Purchase to sale and maturity ratio	2.4	1.8	1.5	1.2	0.5	2.1
Share in total BSE trading (in %)	1.2%	1.1%	7.6%	3.8%	5.7%	5.5%
		,		,	,	,

Source: National Bank of Serbia, Belgrade Stock Exchange.

On the purchase side, the major part related to auctions of government debt instruments. The share of VPFs in BSE trading was around 5.5%.

#### 2.5. 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%

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

respectively, while the account transfer fee may be charged only at the level of real transfer costs.

The new Law, adopted in early May 2011, envisages different fees charged by management companies – 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%, while the contribution fee is not capped. VPF net assets currently account for c. 0.50% of GDP.

<sup>&</sup>lt;sup>8</sup> Source: GDP – database of the Serbian Statistical Office, quarterly GDP at current prices, seasonally non-adjusted data.

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 is contingent on the fund investment strategy and its performance. As a rule, funds actively investing in more complex and riskier instruments are intended for younger persons who pay contributions over a longer horizon. Such funds charge higher fees, but are also expected to post higher return in the long run. On the other hand, a fund investing passively in safe financial instruments should charge lower fees. Investment policy (scheduled investment by fund members), fees charged by companies, the expected fund return and the risk taken by the fund (and the member) should be taken into account when choosing a fund.

Since the start of operation, companies charged a 2% management fee, while the contribution fee was cut to 2.16% by end-Q1 2013. The relative proportion of the two fees reversed – at the start of VPF operation, contribution fees were dominant by contrast to the current 86% of management fees. This was a result of rising net asset value and an enlarged base to which management fees are applied.

Fees charged by management companies (in RSD million)									
	2007	2008	2009	2010	2011	2012	2013		
	2007	2000	2009	2010	2011	2012 -	Q1		
Contribution fee	43.5	56.9	54.9	59.3	57.9	60.1	15.1		
Management fee	33.4	72.2	117.2	170.6	220.0	284.1	64.2		
Source: National Bank of Serbia									

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 calculated 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. A further rise in net assets and boosted fund competition may result in gradual lowering of the management fee.

#### 2.6. Transaction costs

Transaction costs are incurred by management companies in securities trading. The new Law envisages that costs arising from 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 that are incurred by the management company are mostly brokerage fees.

Brokerage and custody bank fees account for the largest share of transaction costs. Transaction costs are directly related to the volume of management company trading and types of instruments being traded. The highest costs are incurred in stock trading

on the BSE and the lowest costs in T-bills trading. In Q1 2013, costs incurred by management companies accounted for 72% and those incurred by funds 28% of the total.

Amount of transaction (in RSD million)	costs						
	2007	2008	2009	2010	2011	2012	2013
		2000	2000	20.0			Q1
Total	10.0	5.3	7.4	9.7	7.0	4.7	3.1
Brokerage fees	4.5	2.2	3.8	4.5	2.9	2.0	1.4
Custody bank fees	1.8	1.5	2.0	2.4	2.2	1.5	0.9
Stock exchange fees	1.6	0.8	0.4	1.1	0.8	0.3	0.5
Central Securities Depository fees	1.0	0.6	1.2	1.5	1.1	0.9	0.3

0.2

1.1

Source: National Bank of Serbia

Other costs

In response to relatively high trading volumes at the start of operation, particularly trading on the BSE, transaction costs were the highest at the time. The economic crisis induced contraction in the activity of management companies that directed their investment to safer instruments implying lower costs. In 2009, the costs rose again in response to reduced balances in transaction accounts, a shift to government T-bills and a gradual increase in shares trading. At the same time, a rise in net assets pushed up the value of VPF transactions in absolute terms. Q1 saw a rise in transaction costs, as a consequence of more intensive investment activity of companies, i.e. greater investment in shares from the BSE Prime Market.

VPFs generally invest in long-term debt securities, while the portion of investment in shares is relatively low. Such structure of investment contributes to low transaction costs - c. 0.04% of net assets over the past year.

#### 2.7. Number and structure of VPF users

At end-Q1 2013, 180,850<sup>9</sup> of users were in the accumulation phase<sup>10</sup>. Total membership contracts<sup>11</sup> stood at 241,927. At the same time, 83 users holding 97 membership contracts, who are

Q1 2013 saw 1,558 new membership contracts and 1,027 new users.

currently in the withdrawal phase, are receiving scheduled payments. All information

<sup>&</sup>lt;sup>9</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>&</sup>lt;sup>10</sup> VPF membership has two phases – the accumulation phase (when contributions are made) and the withdrawal phase (when the accumulated funds are withdrawn).

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

from this point onwards, unless specified otherwise, refers to users in the accumulation phase.

In the 2008–2011 period, the strongest growth in the number of new users was recorded in 2009 and 2011 (close to 9,000 and 8,000), while 2010 saw a marginal increase. In 2012, the number of users rose by around 5,000. The upward trend continued in Q1 2013 when the number of users went up by 1,027.

Number of contrac in thousand)							2013
	2007	2008	2009	2010	2011	2012	Q1
No. of contracts	158.5	201.6	215.7	220.4	234.4	240.4	241.9
No. of users	<b>-</b> <sup>12</sup>	156	165.2	166.8	174.9	179.8	180.9
Percentage of active users (in %) <sup>13</sup>	-	41.10%	34.90%	33.60%	35.10%	30.50%	31.20%

As the percentage of active members ranges between 30% and 35% (within a month), and is broadly unchanged since 2009, we can assume that the majority of these users contribute to pension funds each month.

Structure of (in units and %)	users by payment dynami	ics		
	Period	No. of users	Share (%)	
SIS.	1 month	56.359	31.2%	
Active users	3 months	61.873	34.2%	
tive	6 months	66.442	36.7%	
Ac	12 months	71.846	39.7%	
	From the start of membership (1)	152.374	84.3%	
No holdings	(2)	28.476	15.8%	
Total	(1+2)	180.85		
Source: National Ba	ank of Serbia.			

Average accumulated funds per user depend on the amount of contributions, the funds' return and the length of the accumulation phase. All three factors impact on the growth in average funds in members' individual accounts. The average amount of accumulated funds of members who have made at least one contribution is somewhat above RSD 111,862 and is constantly rising.

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 $<sup>^{\</sup>rm 12}$  Data on the number of users are available as of June 2008.

<sup>&</sup>lt;sup>13</sup> The percentage of active users is the average percentage of active users per month in the relevant period.

VPF users in Serbia may be domestic and foreign persons. The number of domestic persons holding fund membership contracts is much higher than that held by foreign nationals who hold on average five times more funds in their accounts.

At end-Q1 2013, the number of members of two or more VPFs amounted to 34,925 or close to 19% of the total.

Average accumulated funds at the period-end (in RSD thousand)							
2007 2000 2000 2040 2044 2044							
2007	2008	2009	2010	2011	2012	Q1	
-	34.6	52.2	70.5	84.5	105.3	111.9	
Source: National Bank of Serbia.							

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

No. of funds	No. of users			
1	145,925			
2	24,546			
3	10,298			
4	66			
5	15			

Source: National Bank of Serbia.

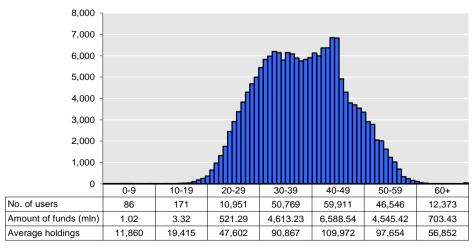
# Number of users by membership contract (in units)

No. of contracts	No. of users				
1	134,342				
2	33,765				
3	11,398				
4	970				
5	299				
6	46				
7	30				
Courses National Bank of Carbin					

Source: National Bank of Serbia.

In terms of gender composition, no significant changes were recorded relative to previous years. Men remained dominant with c. 59%. The gender ratio is slowly changing – among new members, around 70% were women.

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



Source: National Bank of Serbia.

At end-Q1 2013, the average age of VPF users was close to 44 years, while users aged 30–50 accounted for over 61%. Such structure has not changed since the start of VPF operation. Further, the percentage of users meeting the age requirement for the withdrawal of funds (53 years under the old Law) was largely similar to earlier years and accounted for approximately 22% of the total.

#### 2.8. 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 2.5 billion a year. In 2012, contributions equalled c. RSD 2.7 billion.

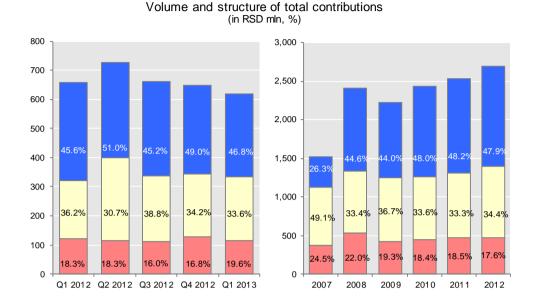
Contribution payments came at around RSD 619 million in Q1 2013.

In Q1 2013, contributions amounted to c. RSD 619 million.

Total contributions (in RSD billion)							
2007	2008	2009	2010	2011	2012	2013	
						Q1	
1.5	2.4	2.2	2.4	2.5	2.7	0.6	
Source: National Bank of Serbia.							

In Q1 2013, of total contributions, individual contributions accounted for 18.8%, employer contributions 35.1% and pension schemes c. 46.1%. This ratio has been broadly unchanged since 2008.

Though the Law envisages individual contributions, most were made through other contributors and pension schemes. Employers may contribute on behalf of their employees to save on tax payments. Ample potential for further growth in the membership base are companies with high staffing levels.



■ Employer contributors

Source: National Bank of Serbia.

Withdrawals are generally made lump-sum as members entitled to withdrawal do not usually have long membership history and their accumulated sum is therefore relatively small. In the period ahead, we are likely to see an increase

■Individual payments

In Q1 2013, withdrawals by eligible members amounted to RSD 238.9 million.

Pension schemes

in scheduled and other types of withdrawals, in response to an increase in accumulation years and the accumulated sum, particularly after the adoption of the new Law setting the maximum lump-sum withdrawal at 30%.

Total withdrawals (in RSD million)							
2007 2000	2009	2010	2011	2012	2013		
2007	2008	2009	2010	2011	2012	Q1	
141.4	384.6	448.5	458.1	517.6	751.7	238.9	
Source: National Bank of Serbia.							

Withdrawals grow by the year as a result of system development – as contributions and net assets increase, and the years of VPF operation increase, absolute withdrawals will rise as well. In Q1 2013, contributions exceeded withdrawals by c. RSD 380 million. However, what is atypical for the nature of VPFs is that withdrawals are made as soon as members meet the retirement conditions, even before they are eligible for state pension. One of the reasons is a short contribution period and small accumulated funds.

Transfers represent inter-fund transfers. A member may for any reason decide to transfer a part or all of his/her assets from one fund to another, and he/she has to cover only real transfer

Inter-fund transfers amounted to RSD 55 million in Q1 2013.

costs. The largest transfers were recorded in 2008. In H2 2011, average transfers were lower than in earlier years – they amounted to around RSD 27 million. The trend continued in 2012 when inter-fund transfers equalled RSD 72.4 million, or RSD 55 million in Q1 2013.

Inter-fund transfers (in RSD million)							
2007	2008	2009	2010	2011	2012	2013	
2007	2000	2009	2010	2011	2012	Q1	
19.5	235.1	141.5	216.1	165.9	72.3	55.0	
Source: National Bank of Serbia.							

#### 3. Conclusion

The number of VPF users is constantly rising and reached 180,850 at end-Q1 2013. The share of VPF users in total population is around 2.5%, with every tenth employee being a VPF member. In light of the above and the fact that companies have set the minimum contribution amount at the level which does not put too much pressure on members' budgets, there seems to be ample room for a considerable increase in the number of VPF users. Apart from the low budget of potential members, which is an indisputably important factor for the future development of the system, there is insufficient information available to citizens about the presence and manner of functioning of VPFs. To overcome these problems, management companies engage in marketing activities aimed at overcoming this issue and attracting prospective members, and hire natural persons to disseminate information about VPF operation. For the time being, there are 429 persons engaged in these activities who were licensed by the NBS after passing professional examination and meeting other eligibility requirements.

Tax reliefs are an incentive for the development of the VPF industry. Namely, contributions by individuals and employees up to a specified amount are exempt from payment of the household income tax and contributions for mandatory social insurance. The non-taxable contribution amount was set at RSD 4,647 for 2012 and RSD 5,214 for 2013. This represents an additional incentive to employers to direct a part of contributions for their employees to saving in VPFs.

Though accumulation-based pension funds were introduced relatively late (2006/2007) and the circumstances for their development were unfavourable (the economic crisis), significant results have been achieved so far. Clear signals about the need to save for old age, sent to citizens by economic and social policy makers, are likely to bolster the sector development. Further, awareness raising and education about VPFs will certainly enhance citizens' interest in securing additional retirement income. In such circumstances, coupled with the promotion of the dialogue between employers and employees about ensuring additional sources of income after retirement, it is reasonable to expect faster development of VPFs in future years and positive effects associated with their operation.