

# **BANKING SUPERVISION**

**Fourth Quarter Report 2009**

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## I. Banking sector in Q4 2009

### Banking sector structure as at 31 December 2009

#### Number of banks and their organisational network

The number of banks operating in the Republic of Serbia at end-Q4 2009 was the same as at end-Q3 (34).

The overall banking network included 2,635 business units, branches, branch offices, teller units, agencies and exchange offices, which is a decrease of 25 from a quarter earlier.

**Table 1.** Number of banks and their organisational network

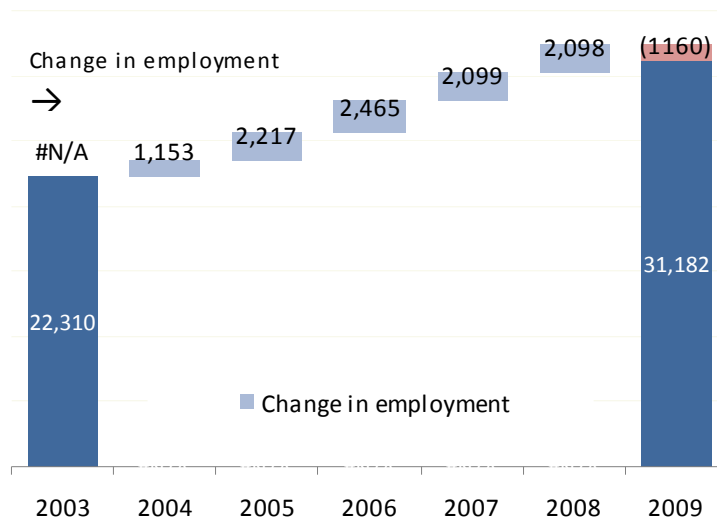
Number of	Dec 2007	Dec 2008	Dec 2009
Banks	35	34	34
Organisational units:	2,435	2,711	2,635
A. Business units	80	70	68
B. Branches, branch offices and teller units	2,321	2,607	2,545
C. Other	34	34	22

#### Banking sector employment

At end-Q4 2009, 31,182 people were employed in the banking sector. Relative to end-2008, banking sector employment declined by 3.6% or by 1,160 persons.

Of the total number of banks, two kept their staff numbers unchanged relative to Q3. Staff numbers were decreased by 16 (-450) and increased by another 16 banks (+108). Hence, the downward trend in banking sector employment continued – the number of persons employed fell by 342 or 1.1% from the previous quarter. Five banks that hired the most in the period under review were Komercijalna banka AD Beograd (15), Societe Generale banka AD Beograd (13), KBC banka AD Beograd and Čačanska banka AD Čačak (11 each), and UniCredit banka AD Beograd (9). Five banks that cut their staff numbers most were OTP banka AD Novi Sad (133), NLB banka AD Beograd (108), Raiffeisen banka AD Beograd (64), Hypo-Alpe-Adria banka AD Beograd (29) and ProCredit banka AD Beograd ( 28).

**Chart 1 – Banking sector employment (historical overview)**



It is important to note that Serbian banking sector employment decreased in 2009 for the first time in six years due to the financial and economic crisis. The only segment of the banking sector recording new employment were state-owned banks that increased their staff numbers by 533. At the same time, privately- and foreign-owned banks cut their staff by 1,693.

**Table 2. Serbian banking sector employment**

	Banks by ownership structure			
	State-owned	Privately-owned	Foreign-owned	Total
Employment, December 2009	7981	1.565	21.636	31.182
Change in employment*	533	(557)	(1.136)	(1.160)

\* Relative to December 2008.

## Bank ownership structure

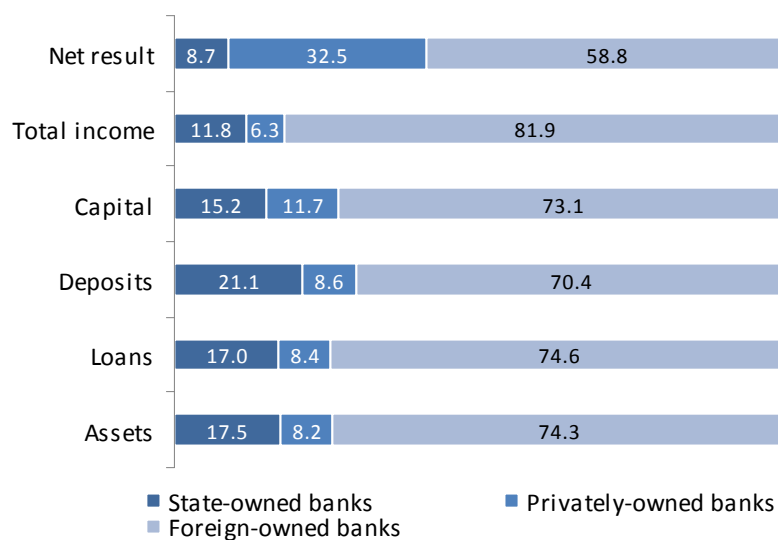
At end-December 2009:

- 20 banks were in majority foreign ownership,
- 4 banks were in majority ownership of domestic natural and legal persons,
- 10 were in majority ownership of the Republic of Serbia.<sup>1</sup>

A more detailed overview of the banking sector balance sheet and income statement positions by ownership structure is presented in Chart 2.

<sup>1</sup> Banks in which the RS is the largest, majority or individual, direct or indirect, shareholder. On 14 July 2009, Metals banka, AD Novi Sad had its capital increased by AP Vojvodina and DDOR Novi Sad, AD Novi Sad. In turn, the RS became its majority owner.

**Chart 2.** Overview of selected balance sheet and income statement positions by ownership structure (in %, December 2009)

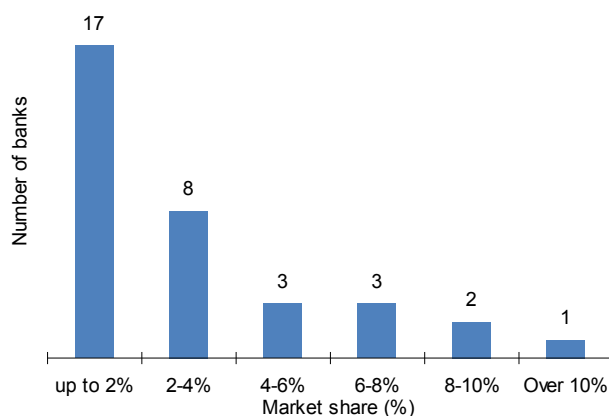


## Market share

Banking sector assets totalled RSD 2,160.4 billion at end-December 2009.

Chart 3 shows the distribution of banks based on their market share.

**Chart 3.** Banks by market share (assets, December 2009)



The banking sector is considerably fragmented, as reflected in the fact that as many as 17 banks hold a market share of less than 2% (measured by the share of individual bank's assets in total banking sector assets).

At end-Q4, only one bank had a market share exceeding 10% – Banca Intesa (14.25%).

Table 3 shows the market share of banks. On 31 December 2009, top ten banks accounted for 69.4% of the total assets.

**Table 3.** Market share of banks (December 2009)

No.	Bank	Share(%)	No.	Bank	Share (%)
1)	Banca Intesa	14.25	18)	Credit Agricole banka Srbija	1.85
2)	Komercijalna banka	9.50	19)	Poštanska štedionica	1.49
3)	Raiffeisen banka	8.96	20)	Univerzal banka	1.47
4)	Eurobank EFG	6.80	21)	Privredna banka Bgd.	1.32
5)	Hypo Alpe-Adria-bank	6.44	22)	Metals banka	1.25
6)	UNICREDIT BANK	6.28	23)	Marfin bank	1.10
7)	Aik banka Niš	5.06	24)	Cacanska banka	1.02
8)	Societe Gen.Banka Srbija	4.62	25)	KBC banka	0.80
9)	Vojvodjanska banka	4.03	26)	FINDOMESTIC BANKA	0.60
10)	ALPHA BANK	3.41	27)	Srpska banka Bgd.	0.55
11)	VolksBank	3.20	28)	Jugoboanka K.Mitrovica	0.37
12)	ProCredit Bank	3.01	29)	Credy banka	0.36
13)	Agrobanka	2.73	30)	Jubmes banka	0.35
14)	Erste Bank Novi Sad	2.41	31)	Privredna banka Pan.	0.21
15)	Piraeus bank	2.08	32)	Opportunity banka	0.20
16)	OTP BANKA SRBIJA	2.08	33)	Moskovska banka a.d.- Beograd	0.11
17)	NLB banka	2.06	34)	Kosovsko metohijska banka	0.03

At the same time, the Herfindahl Hirschman index<sup>2</sup>, which measures banking sector concentration, declined from the previous quarter to reach 636 index points. The lowest level of HHI was measured in October 2008 (611 index points). Though the trend of HHI is rising, it is still well below 1,000, the level indicating moderate concentration.

**Table 4.** Banking sector competitiveness and concentration indicators

Year	Month	Share of top five banks (%)	Share of top ten banks (%)	HHI assets
2009	December	45.95%	69.35%	636
	September	46.57%	69.44%	654
	June	46.28%	69.31%	650
	March	46.38%	68.20%	642
2008	December	46.17%	68.49%	627
	September	45.20%	68.71%	617

<sup>2</sup> *Hirschman Herfindahl Index(HHI)* – up to 1000 indicates that there is no market concentration; 1000-1800 indicates moderate concentration; above 1800 indicates high concentration.

## Banking sector balance sheet

As at 31 December 2009, balance sheet total of the banking sector stood at RSD 2,160.4 billion, up by RSD 197.5 billion or 10.1% from Q3 2009, i.e. by RSD 383.5 billion or 21.6% from the start of the year.

Some changes were recorded in terms of the structure of balance sheet assets relative to the previous quarter. *Loans, advances and deposits* accounted for the largest part (55.5% v. 56.5% in September), followed by *callable credits and deposits* (20.3% v. 20% in September). *Cash and cash equivalents* made up 12% of banking sector balance sheet assets (12.6% in September), while *securities* increased their share to 4.2%. As in September, the share of all other items was below 4%.

Relative to early-2009, changes in the structure of balance sheet assets were even more conspicuous in light of the continued downward trend in the share of *loans, advances and deposits* in total assets despite their positive growth in absolute terms (up by RSD 130.6 billion since the beginning of the year, whereas their share declined by 4.6 percentage points at end-2008 to 55.5% at end-2009). At the same time, *callable credits and deposits* increased by additional RSD 163.3 billion in absolute terms, or by 4.8 percentage points in terms of their share. Such a strong rise in *callable credits and deposits* is due, inter alia, to NBS repo operations that are recorded within this position – at end-2008, repo operations came to RSD 77.8 billion, whereas at end-2009, they stood at RSD 151.7 billion. At the same time, the increase in securities by as much as 362% was related to bank investment in government bills<sup>3</sup> which are carried as securities available for sale or held to maturity. At end-2009, bank investments in public sector securities equalled RSD 118.3 billion (of which RSD 85.9 billion or 72.6% in dinar public sector securities). The volume of such investments at the end of 2008 was practically nil.

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<sup>3</sup> Given a RSD 70.1 billion lending to the Republic of Serbia at end-September 2009, the rest belongs to the *cash and cash equivalents* item in addition to the item of *securities investment*.

**Table 5.** Banking sector balance sheet <sup>4</sup> (in RSD billion)

ASSETS	31 Dec 2007		31 Dec 2008		31 Dec 2009		Growth index for 2009	Growth index for 2008	Growth index for 2007
	Amount	Share in %	Amount	Share in %	Amount	Share in %			
Cash and cash equivalents	80.3	5.1	266.7	15	258.3	12.0	97	332	111
Callable deposits and credits	551.5	35.3	276.2	15.5	439.6	20.3	159	50	133
Interest, fees and commission receivables, change in fair value of derivatives and other receivables	6.6	0.4	9.7	0.6	13.5	0.6	139	148	131
Loans, advances and deposits	774.3	49.6	1,068.5	60.1	1,199.1	55.5	112	138	144
Securities	19.3	1.2	19.7	1.1	91.0	4.2	462	102	73
Equity investments	6.2	0.4	5.4	0.3	7.3	0.3	135	87	143
Other lending	45.4	2.9	37.6	2.1	42.1	1.9	112	83	131
Intangible assets	6.1	0.4	6.3	0.4	7.1	0.3	113	104	104
Property, plant and equipment and investment property	57.0	3.7	66.2	3.7	67.2	3.1	102	116	113
Non-current assets held for sale and discontinued operations	0.3	0.0	0.2	0.0	0.5	0.0	235	64	85
Deferred tax assets	2.5	0.2	2.5	0.2	2.1	0.1	85	100	102
Other assets	12.3	0.8	17.8	1.0	32.6	1.5	183	145	96
Losses in excess of capital									
<b>TOTAL</b>	<b>1,561.8</b>	<b>100</b>	<b>1,776.9</b>	<b>100</b>	<b>2,160.4</b>	<b>100</b>	<b>122</b>	<b>114</b>	<b>134</b>

LIABILITIES	31 Dec 2007		31 Dec 2008		31 Dec 2009		Growth index for 2009	Growth index for 2008	Growth index for 2007
	Amount	Share in %	Amount	Share in %	Amount	Share in %			
<b>LIABILITIES</b>	<b>1,233.3</b>	<b>79</b>	<b>1,357.0</b>	<b>76.4</b>	<b>1,712.9</b>	<b>79.3</b>	<b>126</b>	<b>110</b>	<b>129</b>
Transaction deposits	300.5	19.2	271.3	15.3	302.0	14.0	111	90	134
Other deposits	659.6	42.2	753.4	42.4	999.2	46.3	133	114	149
Borrowings	169.6	10.9	189.5	10.7	247.4	11.5	131	112	79
Liabilities on securities	2.6	0.2	0.0	0.0	0.8	0.0		1	25960
Interest, fees and commissions payable and change in fair value of derivatives	2.8	0.2	2.1	0.1	1.7	0.1	80	75	284
Provisions	11.3	0.8	14.0	0.8	13.6	0.6	97	123	120
Tax liabilities	0.6	0.0	0.7	0.0	0.4	0.0	57		
Liabilities from profit	0.6	0.0	1.2	0.1	0.9	0.0	73	184	90
Liabilities on non-current assets held for sale and discontinued operations									
Deferred tax liabilities	0.6	0.0	0.6	0.0	0.6	0.0	108	104	80
Other liabilities	85.1	5.5	124.2	7.0	146.3	6.8	118	146	143
<b>CAPITAL</b>	<b>328.5</b>	<b>21</b>	<b>419.9</b>	<b>23.6</b>	<b>447.5</b>	<b>20.7</b>	<b>107</b>	<b>128</b>	<b>152</b>
Share capital and other capital	272.8	17.5	332.7	18.7	340.7	15.8	102	122	149
Reserves	47.6	3	74.3	4.2	104.6	4.8	141	156	156
Unrealized losses on securities			0.1	0.0	0.1	0.0	85		
Accumulated gains/losses	8.0	0.5	13.0	0.7	2.3	0.1	18	162	246
<b>TOTAL</b>	<b>1,561.8</b>	<b>100</b>	<b>1,776.9</b>	<b>100</b>	<b>2,160.4</b>	<b>100</b>	<b>122</b>	<b>114</b>	<b>134</b>

<sup>4</sup> As of 1 July 2008 the following regulations are in force: new *Chart of Accounts and Content of Accounts within the Chart of Accounts for Banks, Guidelines on the Obligation and Methodology of Recording, Compiling, Processing and Delivery of Data on the Stock and Structure of Lending, Receivables and Liabilities of Banks, and Rules on the Forms and Content of Items in Financial Statement Forms to be Completed by Banks*. Data for 2007 are presented for the sake of comparison.



Certain changes relative to the previous quarter were also recorded on the liabilities side of the banking sector balance sheet. Borrowed funds accounted for 79.3% of the banking sector balance sheet liabilities (v. 77.4% in September), and capital for the remaining 20.7% (v. 22.6% in September). Borrowed funds consisted of *other deposits* (46.3% v. 44.6% in September), *transaction deposits* (14% v. 13.7% in September) and *borrowings* (11.5% v. 11.3% in September).

Rising by RSD 27.6 billion or 6.6% on Q4 2008, bank capital reached RSD 447.5 billion (v. RSD 444.4 billion in September). *Share capital and other capital* amounted to RSD 340.7 billion, which is a 2.4% increase on Q4 2008. Next in size were *reserves* rising by 40.8% since early 2009 to RSD 104.6 billion in Q4 2009. The increase in reserves by RSD 30.3 billion came primarily at the expense of accumulated gains and is in line with the trend of general deterioration in asset quality observed in 2009.

Down by RSD 426.7 billion or 15.6% from a quarter earlier, off-balance sheet items of banks came to RSD 2,304.5 billion (v. RSD 2,731.2 billion in September). The largest single off-balance sheet item were *other off-balance sheet assets*<sup>5</sup> (RSD 1,324.5 billion with a share of 57.5% v. 57.9% in September), followed by *guarantees and sureties* (RSD 268.3 billion with a share of 16.6% v. 14.1% in September). Most off-balance sheet assets were non risk-weighted<sup>6</sup> – in December mere 25.4% or RSD 585 billion (v. 21.6% or RSD 589.4 billion in September) of total off-balance sheet assets was classified as risky.

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<sup>5</sup> Received guarantees and other sureties, funds from custody operations and other off-balance sheet assets.

<sup>6</sup> "Non risk-weighted and risk weighted" assets imply existence of exposure to credit risk. A part of off-balance sheet assets considered risky in terms of exposure to credit risk is subject to classification in respect of which banks have to calculate reserves for potential losses.

## Lending activity

The table below gives an overview of changes in the composition of bank lending:

**Table 6. Bank lending** (in RSD billion)

Sector	31 Dec 2007		31 Dec 2008		31 Dec 2009		Growth index for 2009	Growth index for 2008	Growth index for 2007
	Amount	Share in %	Amount	Share in %	Amount	Share in %			
ENTERPRISES	437.4	57.5	632.2	61.5	750.4	58.7	119	145	135
HOUSEHOLDS	302.5	39.8	364.3	35.5	395.0	30.9	108	120	154
housing construction	89.4	11.8	160.8	15.6	188.0	14.7	117	180	189
PUBLIC SECTOR	13.9	1.8	17.4	1.7	118.0	9.2	678	125	64
Serbia&Montenegro	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
Republic of Serbia	7.0	0.9	8.2	0.8	106.7	8.4	1302	117	42
Local government	6.9	0.9	9.1	0.9	11.3	0.9	124	132	146
OTHER FINANCIAL ORGANISATIONS	1.2	0.1	10.6	1.0	9.3	0.7	88	867	161
NONPROFIT INSTITUTIONS	5.8	0.8	3.1	0.3	5.6	0.4	181	54	138
<b>TOTAL</b>	<b>760.9</b>	<b>100.0</b>	<b>1,027.6</b>	<b>100.0</b>	<b>1,278.3</b>	<b>100</b>	<b>124</b>	<b>135</b>	<b>139</b>

Bank lending reached RSD 1,278.3 billion in Q4 (v. RSD 1,192.1 billion in September), up by RSD 250.7 billion or 24.4% on Q4 2008.

Relative to Q3 2009, bank lending rose by RSD 86.2 billion, of which enterprises disbursed around RSD 35.1 billion, public sector RSD 30.9 billion (Republic of Serbia – RSD 29.5 billion, i.e. 95.5% of the sum approved)) and households RSD 19.7 billion (RSD 12.9 billion for housing construction).

We may speak of bank lending kickstarting in Q4, especially in light of the figures for Q3 which reveal the lowest volume of newly approved loans<sup>7</sup> in 2009 – mere RSD 33 billion. On the other hand, the worst quarter for lending to households and enterprises was the second quarter, when lending to enterprises practically came to a standstill (RSD 0.3 billion) and lending to households fell by RSD 4.7 billion. At the same time, no loans at all were approved for housing construction. Instead, banks channeled their lending to the public sector, which increased by the unprecedented RSD 52.3 billion in Q2 alone. See table 6a for more detail.

<sup>7</sup> Newly approved loans in this context refer to the difference in the stock of lending between two cut-off dates. As a certain amount of loans was repaid in the period under review, the real amount of newly approved loans was actually higher than stated above.

**Table 6a.** Bank lending by quarter (in RSD billion)

	2008	Q1	Q2	Q3	Q4	2009
ENTERPRISES	632.2	+ 66.9	+ 0.3	+ 15.9	+ 35.1	= 750.4
HOUSEHOLDS	364.3	+ 10.6	- 4.7	+ 5.1	+ 19.7	= 395.0
housing construction	160.8	+ 11.2	0.0	+ 3.1	+ 12.9	= 188.0
PUBLIC SECTOR	17.4	+ 4.2	+ 52.3	+ 13.2	+ 30.9	= 118.0
Serbia&Montenegro	0	0.0	0.0	0.0	0.0	= 0.0
Republic of Serbia	8.2	+ 3.8	+ 52.5	+ 12.7	+ 29.5	= 106.7
Local government	9.1	+ 0.6	- 0.3	+ 0.5	+ 1.4	= 11.3
OTHER FINANCIAL ORGANISATIONS	10.6	+ 0.6	- 1.3	- 0.8	+ 0.2	= 9.3
NONPROFIT INSTITUTIONS	3.1	0.0	+ 2.3	- 0.1	+ 0.3	= 5.6
<b>TOTAL</b>	<b>1,027.6</b>	<b>+ 82.3</b>	<b>+ 48.9</b>	<b>+ 33.3</b>	<b>+ 86.2</b>	<b>= 1,278.3</b>

Relative to the previous quarter, the highest growth (38.2%) was recorded for lending to the Republic of Serbia (local government 14.1%) that has been rising steadily since the beginning of the year and currently stands at RSD 106.7 billion or 8.4% of total lending (RSD 118 billion – the entire public sector or 9.2% of total lending). Other categories of lending recorded significantly lower growth rates – lending to households grew 5.2%, but most of this growth was accounted for by housing loans that rose 7.4% on the previous quarter, while lending to enterprises gained around 4.9%. Lending to nonprofit institutions and other financial organisations increased by 5.7% and 2.2%, respectively.

The share of individual categories in total lending has changed slightly relative to the previous quarter – lending to enterprises remains dominant with a 58.7% share (60% in September), followed by lending to households (30.9% v. 31.5% in September) and lending to the public sector (9.2% v. 7.3%). Bank lending channelled to other categories was less than 1% of the overall lending pot.

**Table 7.** Loan concentration indicators

Year	Month	Share of top five banks (%)	Share of top ten banks (%)	HHI Loans
2009	December	46.37%	69.25%	650
	September	46.32%	69.78%	667
	June	47.22%	70.79%	676
	March	47.17%	69.57%	660
2008	December	48.13%	69.94%	668
	September	44.82%	67.60%	610

The share of top five and top ten banks in terms of the value of approved loans in total bank lending was 46.4% and 69.3%, respectively. The HHI of loan concentration equalled 650.

## Deposit activity

The table below gives a breakdown of deposits by sector:

**Table 8.** Bank deposit activity (in RSD billion)

Sector	31 December 2007			31 December 2008			31 December 2009			Growth index for 2009	Growth index for 2008
	dinars	f/cy	total	dinars	f/cy	total	dinars	f/cy	total		
Banks	30.2	93.4	123.7	56.1	98.3	154.4	40.2	65.4	105.5	68	125
Public enterprises	31.9	7.8	39.7	25.4	22.5	47.9	29.3	24.3	53.6	112	121
Other enterprises	185.1	105.6	290.7	152.8	115.2	268.0	154.1	139.0	293.1	109	92
Public sector	26.6	0.9	27.4	20.1	1.0	21.1	20.9	1.8	22.7	108	77
Foreign legal&natural persons	6.4	24.6	31.0	3.6	54.2	57.8	6.5	179.7	186.2	322	186
Households	46.8	381.4	428.2	52.4	414.5	467.0	49.5	565.2	614.7	132	109
Other	17.1	2.4	19.5	7.1	1.5	8.6	20.0	5.4	25.4	295	44
<b>Total</b>	<b>344.0</b>	<b>616.2</b>	<b>960.2</b>	<b>317.6</b>	<b>707.1</b>	<b>1,024.7</b>	<b>320.4</b>	<b>980.8</b>	<b>1,301.2</b>	<b>127</b>	<b>107</b>

Q4 banking sector deposits stood at RSD 1,301.2 billion (v. RSD 1,145.6 billion in September), up by RSD 276.5 billion or 27% on Q4 2008.

Relative to Q3, total deposits rose by as much as RSD 155.6 billion, or around 13.6%. The strongest increase in absolute terms was recorded with household deposits (RSD 88.9 billion, 93% of which relates to deposits accumulated in November and December i.e. the extended “Savings Week” period), followed by foreign legal and natural persons (RSD 50.5 billion), other enterprises and banks (RSD 15.8 and 11.2 billion, respectively). Public enterprise and public sector deposits declined by RSD 0.3 and 12.5 billion, respectively.

**Table 8a.** Bank deposit activity by quarter (in RSD billion)

	2008	Q1	Q2	Q3	Q4	2009
Banks	154.4	- 57.4	- 6.2	+ 3.5	+ 11.2	= 105.5
Public enterprises	47.9	+ 1.5	+ 9.6	- 5.1	- 0.3	= 53.6
Other enterprises	268.0	- 11.6	+ 14.5	+ 6.4	+ 15.8	= 293.1
Public sector	21.1	+ 14.4	+ 1.1	- 1.4	- 12.5	= 22.7
Foreign legal&natural persons	57.8	+ 53.3	+ 8.1	+ 16.5	+ 50.5	= 186.2
Households	467.0	+ 31.4	+ 4.4	+ 23.0	+ 88.9	= 614.7
Other	8.6	- 0.9	+ 13.7	+ 2.2	+ 1.8	= 25.4
<b>Total</b>	<b>1,024.7</b>	<b>+ 30.8</b>	<b>+ 45.2</b>	<b>+ 44.9</b>	<b>+ 155.6</b>	<b>= 1,301.2</b>

The strongest deposit growth rate relative to Q3 was once again recorded with foreign legal and natural persons (37.2%), followed by households (16.9%), banks (11.9%) and other enterprises (5.7%). Public enterprise and public sector deposits went down by 0.6% and 35.5%, respectively.

Q4 banking sector deposits made up 60.2% of total liabilities (v. 58.3% in September). Household deposits retained a dominant share in the overall structure of

deposits (47.2% v. 45.9% in September), followed by the deposits of other enterprises (22.5% v. 24.2% in September) and foreign entities (14.3% v. 11.9% in September).

Foreign currency deposits made up 75.4% (v. 72.5% in September) and dinar deposits 24.6% (v. 27.5% in September) of total deposits. Demand deposits<sup>8</sup> (45.8% v. 50% in September) were dominant, followed by short-term time deposits (49.9% v. 46.4% in September). Long-term deposits accounted for mere 4.3% (v. 3.6% in September) of total deposits.

**Table 9.** Deposit maturity structure (in RSD billion)

		<14d	0.5-1m	1-3m	3-6m	6-12m	>12m	Total
2009	December	596	74	217	133	226	56	1,301
	September	573	115	262	101	54	41	1,146
	June	545	91	187	173	61	43	1,101
	March	489	94	204	88	136	45	1,055
2008	December	504	81	180	78	137	45	1,025
	September	522	102	187	65	62	44	983

The share of top five and top ten banks in total banking sector deposits was 50.9% and 72.4%, respectively. HHI of deposit concentration stood at 731.

**Table 10.** Deposit concentration indicators

Year	Month	Share of top five banks (%)	Share of top ten banks (%)	HHI Deposits
2009	December	50.85%	72.44%	731
	September	51.88%	72.37%	768
	June	50.90%	72.79%	767
	March	51.07%	71.70%	758
2008	December	49.79%	71.66%	693
	September	49.42%	72.74%	705

Compared with assets, loans and income, the category of deposits showed the highest level of concentration – both for the top five and top ten banks. Still, HHI for deposits remains significantly below the level indicating moderate concentration (1,000).

## External borrowing by the banking sector

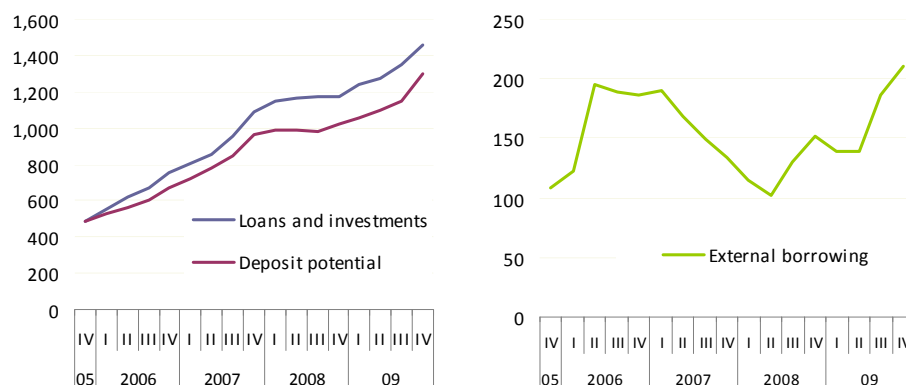
Total external borrowing by the banking sector (credits from foreign banks and foreign legal and natural persons) came to RSD 210.5 billion and related mostly to

<sup>8</sup> Deposits with no initial maturity, with no set term and up to 14 days.

loans maturing in more than five years (39% v. 49% in September). Two foreign-owned banks accounted for 30% (40% in September) of total borrowing.

During Q4 2009, external borrowing by banks recorded an increase of RSD 24.3 billion.

**Chart 4.** Loans<sup>9</sup>, deposits and external borrowing (in RSD billion)



## Banking sector risks

### 1. Credit risk

#### 1.1. Quality of balance sheet and off-balance sheet assets

To ensure adequate and efficient risk management, in its Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items, the National Bank of Serbia prescribed an obligation for banks to classify on a quarterly basis all receivables that carry credit risk into five categories by the assessed level of their collectibility and financial standing of the borrower. This in effect means that banks are required to classify those receivables that constitute the risk-weighted on- and off-balance sheet assets (hereinafter: BA and OA), which includes not only credits, but certain other on- and off-balance sheet items as well, as defined in the above Decision. The most adversely classified assets are those classified in categories D and E.

In Q4 2009, classified assets amounted to RSD 1,936 billion (v. RSD 1,873 billion in September) or 41.7% (v. 38.5% in September) of gross balance sheet assets and off-balance sheet items. After declining for two consecutive quarters, total classified assets rose in the last quarter by RSD 63 billion or 3.4%. It seems that the upward trend in the most adversely classified receivables ended as they came to RSD 373 billion at end-Q4 (v. RSD 374 billion at end-Q3).

<sup>9</sup> NBS repo included.

Further growth in classified assets and stagnation in movements of the most adversely classified receivables resulted in a decrease in the share of D and E classified assets that reached 19.3% at end-2009 (20% in September).

**Table 11.** Classified balance sheet and off-balance sheet assets (in RSD billion)

		Total classified assets	Classified assets		D+E / total classified assets (%)
			A+B+C	D+E	
December 2009	Balance sheet assets	1,351	1,051	299	22.2
	Off-balance sheet items	585	512	73	12.5
	TOTAL	1,936	1,563	373	19.3
September 2009	Balance sheet assets	1,284	985	299	23.3
	Off-balance sheet items	589	514	75	12.8
	TOTAL	1,873	1,499	374	20.0
June 2009	Balance sheet assets	1,266	983	283	22.3
	Off-balance sheet items	622	558	64	10.3
	TOTAL	1,888	1,541	347	18.4
March 2009	Balance sheet assets	1,270	1,031	239	18.8
	Off-balance sheet items	656	605	50	7.7
	TOTAL	1,925	1,636	289	15.0
December 2008	Balance sheet assets	1,178	982	196	16.6
	Off-balance sheet items	662	624	38	5.8
	TOTAL	1,840	1,605	234	12.7

Special reserves for potential losses on classified balance sheet assets and off-balance sheet items decreased by 1% – from RSD 342.4 billion in Q3 to RSD 339.0 billion in Q4, while balance sheet asset value adjustments and provisioning on off-balance sheet items rose by close to 1.6% – from RSD 141.5 billion in September to RSD 144.8 billion at the end of the year.

## 1.2. Non-performing loans (NPLs)

According to NPL composition reports submitted by banks to the National Bank of Serbia, at end-2009 the share of NPLs in total loans approved was 8.53% net, while in absolute terms, their level reached RSD 99 billion net.

**Table 12. NPLs by sector (%)**

	2009				2008	
	Q4	Q3	Q2	Q1	Q4	Q3
Financial sector	9.31	8.76	10.53	8.93	0.36	0.31
Public enterprises	0.08	0.24	1.41	2.2	1.14	0.74
Other enterprises	11.80	14.78	14.08	11.6	7.11	5.82
Entrepreneurs	9.05	7.84	6.99	3.94	2.79	2.97
Public sector	1.43	1.09	1.86	1.13	0.61	0.20
Households	4.08	4.42	3.76	3.58	3.81	2.66
Foreign entities	2.77	1.82	2.24	1.67	2.75	3.65
Private households*	7.86	7.85	7.08	5.28	5.72	3.67
Other clients	13.07	12.47	11.26	2.78	2.07	1.93
<b>TOTAL</b>	<b>8.53</b>	<b>10.36</b>	<b>9.74</b>	<b>8.12</b>	<b>5.29</b>	<b>4.33</b>

\* Including self-employed persons and registered agricultural producers.

Of the above 9 sectors, 3 sectors saw a decrease in the share of NPLs relative to September 2009:

- Other enterprises – 11.8% (down by 2.98 pp)
- Households – 4.08% (down by 0.34 pp)
- Public enterprises – 0.08% (down by 0.16 pp)

An increase in NPLs was recorded with the following sectors:

- Entrepreneurs – 9.05% (up by 1.21 pp)
- Foreign entities – 2.77% (up by 0.95 pp)
- Other clients – 13.07% (up by 0.60 pp)
- Financial sector – 9.31% (up by 0.55 pp)
- Public sector – 1.43% (up by 0.34 pp)
- Private households – 7.86% (up by 0.01 pp).

The most important sector both in terms of the volume of loans approved and its share in total NPLs was the sector of other enterprises. Its share in total NPLs drifted from 14.78% at end-Q3 down to 11.8% at end-2009. Other enterprises accounted for 76.5% or RSD 75.7 billion of the total amount of NPLs in the banking sector.

The share of natural persons' NPLs (Table 13) decreased to 4.56% of total net lending and measured RSD 19.3 billion at end-Q4. All categories of lending to natural persons, save credit card loans and loans for the performance of other activities (+0.39 pp and +1.93 pp, respectively), recorded a decline in the share of NPLs. The sharpest decrease was registered for current account overdrafts (1.04 pp), consumer loans (0.98 pp), other (0.71 pp) and housing construction (0.41 pp).



**Table 13.** NPLs – natural persons (%)

	2009				2008	
	Q4	Q3	Q2	Q1	Q4	Q3
Cash loans	5.02	5.03	4.53	4.09	4.61	2.97
Credit cards	2.82	2.43	1.99	1.58	1.77	1.66
Current account overdrafts	2.71	3.75	3.34	3.58	2.69	2.58
Consumer loans	2.68	3.66	2.47	3.88	2.59	3.88
Agricultural activity	7.82	7.90	7.45	5.82	5.74	3.06
Performance of other activities	8.62	6.69	6.03	3.23	1.75	1.43
Housing construction	3.80	4.21	3.21	3.02	3.58	1.82
Other	14.62	15.33	15.20	14.29	5.90	6.92
<b>TOTAL</b>	<b>4.56</b>	<b>4.73</b>	<b>4.06</b>	<b>3.62</b>	<b>3.63</b>	<b>2.58</b>

Of total NPLs (RSD 19.3 billion), housing and cash loans accounted for the largest shares (37% and 23%, respectively).

## 2. Liquidity risk

In December 2009, liquidity ratio for the banking sector as a whole averaged 1.86. The ratios of state- and foreign-owned banks equalled 2.11 and 1.73, respectively, while average liquidity ratio of private banks was significantly higher – 2.59.

Such liquidity ratios may be considered satisfactory especially in light of the relevant regulatory minimum (1).

Rising by 11.2% on the previous quarter, liquid assets reached RSD 743 billion (v. RSD 668 billion a quarter earlier), making up 34.4% of total balance sheet assets of the banking sector. Liquid assets consisted mainly of cash and cash equivalents, foreign exchange required reserves with the NBS, loans under repo transactions with the NBS, and RS government securities.

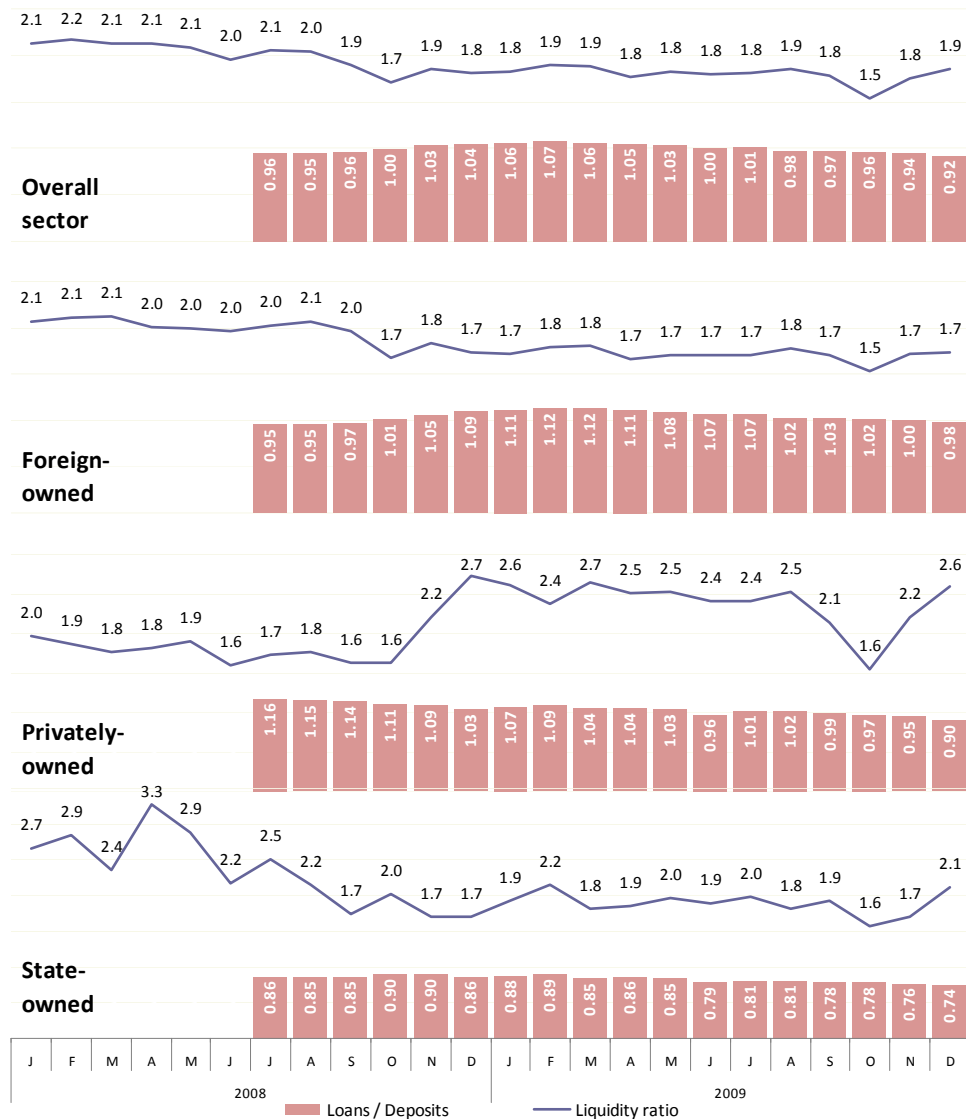
The ratio of liquid assets to total short-term deposits (including demand deposits) was 0.60 at end-Q4 (1.29 for households).

If short-term deposits are limited to 3-month maturity, this ratio is even more favourable – 0.84 (v. 0.7 in Q3). Such a leap in the value of the ratio is due to the change in the structure of deposits in favour of those with longer maturity. The change was brought about by banking sector activities during the “Savings Week” period (November 2009) and the resulting increase in deposits. However, as the ratio of liquid assets to total short-term deposits has remained practically unchanged, it may be argued that deposits over 1 year are still not sufficiently attractive for existing and potential depositors.

Over the past four quarters, the ratio of total liquid assets to total demand deposits never slipped below 1 (for household demand deposits, this ratio equalled 3.82 in Q4).

Table 16 and Chart 5 give a more detailed overview of the above ratios.

**Chart 5.** Average monthly liquidity ratio and loan<sup>10</sup> to deposit ratio for the banking sector as a



whole and for individual groups of banks

During the three months under review, liquidity ratios of individual banks were within the prescribed limits.

<sup>10</sup> Total loans and deposits on the asset side less loans under repo transactions with the NBS and excess liquidity deposits with the NBS

**Table 16.** Banking sector liquid assets

		LA* (RSD bln)	LA/ Total assets	Total deposits				Households		
				LA/Deposits	LA/ Demand deposits	LA / ST.D.**	LA / T.ST.D.***	LA / Deposits	LA / Demand deposits	LA / T.ST.D.***
2009	December	743	0.34	0.57	1.25	0.84	0.60	1.21	3.82	1.29
	September	668	0.34	0.58	1.17	0.70	0.61	1.27	3.19	1.35
	June	593	0.32	0.54	1.09	0.72	0.56	1.18	3.17	1.26
	March	534	0.30	0.51	1.09	0.68	0.53	1.09	3.19	1.17
2008	December	548	0.31	0.53	1.09	0.72	0.56	1.21	3.31	1.29
	September	584	0.34	0.59	1.12	0.72	0.62	1.25	2.94	1.34

\* LA – liquid assets (cash and cash equivalents, deposited excess liquidity, callable deposits and loans, repo loans, required reserves with the NBS, overnight loans, securities at fair value through income statement and securities held for sale)

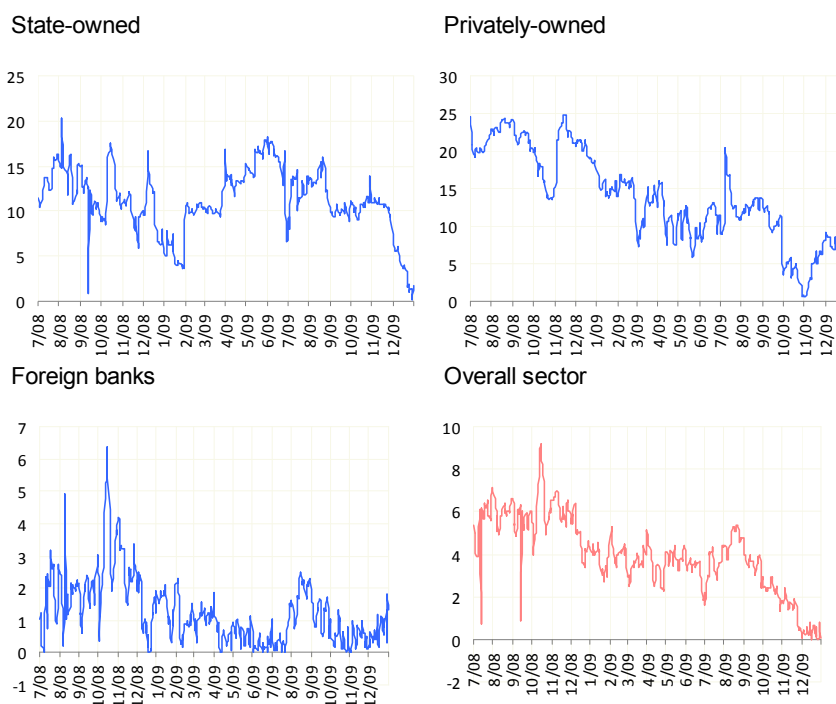
\*\* ST.D. – short-term deposits with maturity up to 3 months (including demand deposits)

\*\*\* T.ST.D. – total short-term deposits with maturity up to 1 year (including demand deposits)

### 3. Foreign exchange risk

On 31 December 2009, the foreign exchange risk ratio of the Serbian banking sector equalled 0.05%, while varying during the fourth quarter from minimum 0.02% to maximum 2.92%. Its movements are shown in more detail in Chart 6.

**Chart 6.** Foreign exchange risk ratio (in %)



The Serbian banking sector ended the last quarter of 2009 with a short net foreign currency position in two currencies – the euro and the US dollar. Net position in the Swiss franc and other currencies remained long. Given the importance of the position in euros for the overall foreign currency position of the banking sector, it is no wonder that the December short position in euros caused yet unprecedented frequency of alternance from long to short overall net foreign currency position of the banking sector within the span of one month only (8 times).

Movements in net open position by individual currency (EUR, USD, CHF and other) over the past six quarters are shown in Chart 7.

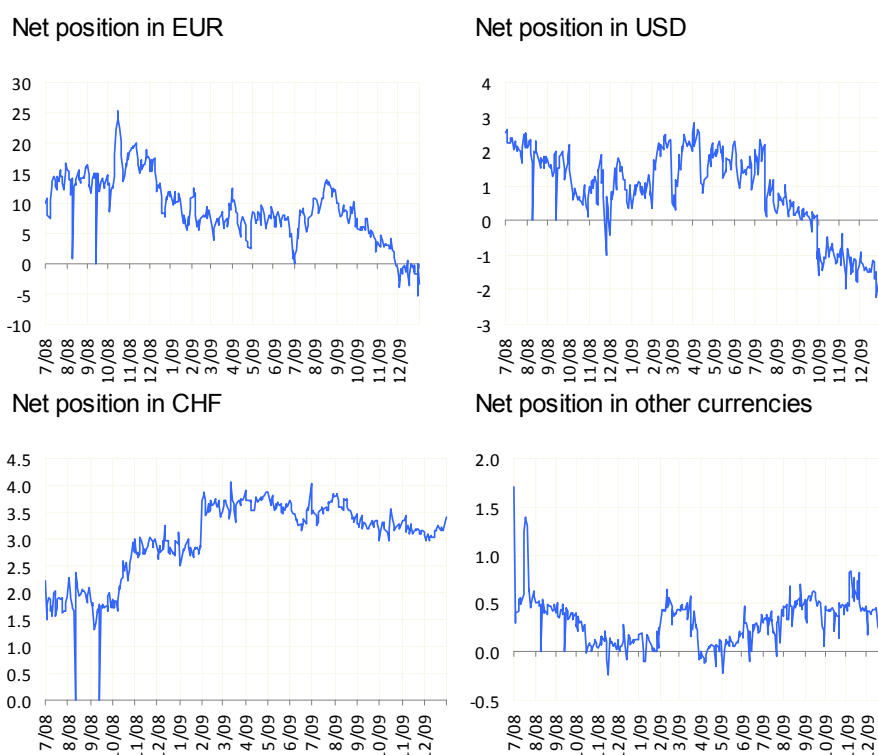


Chart 7. Net open position in selected currencies, July 2008 – December 2009 (in RSD billion)

## Capital adequacy

Capital adequacy ratio of the banking sector rose from 21.31% in Q3 to 21.44% in Q4.

Relative to the previous quarter, regulatory capital increased by RSD 19.7 billion or 5.6%. As total risk-weighted assets went up by RSD 81.4 billion or 5%, the capital adequacy ratio edged up by 0.13 percentage points.

The increase in total capital is due primarily to the increase in core capital and supplementary capital 1 and 2 in the amount of RSD 7.4 billion and RSD 2.1 billion,

respectively (1.9% and 2.3% growth) and to a sharp decrease in deductions from capital (by RSD 10.2 billion or 7.5%).

Higher volume of bank reserves allocated from earnings (by RSD 6.2 billion), as well as higher retained earnings (by RSD 5.9 billion) and the concurrent RSD 4.6 billion increase in uncovered losses from the current year induced a RSD 7.4 billion rise in the banking sector core capital relative to Q3 2009. At the same time, supplementary capital 1 gained RSD 2 billion due to the difference between the increase in subordinated liabilities (RSD 4.9 billion) and the increase in a portion of subordinated liabilities in excess of 75% of banks' core capital (RSD 2.8 billion).

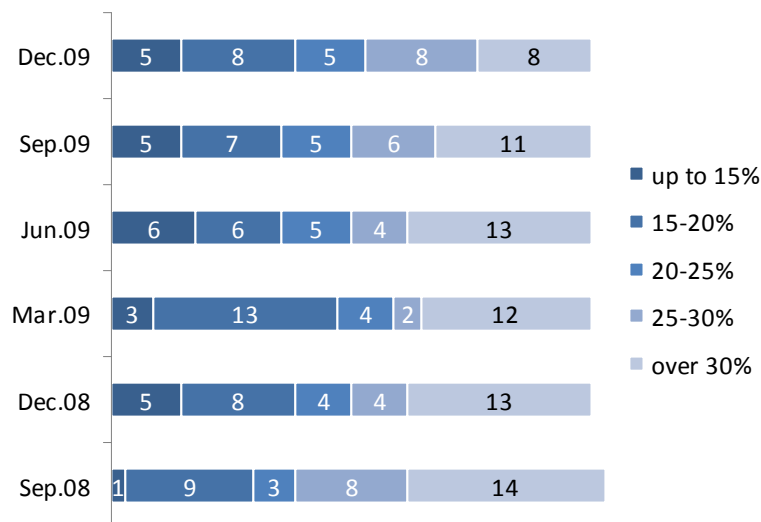
Overall risk-weighted assets rose by RSD 81.3 billion primarily owing to a RSD 84.6 billion growth in credit risk-weighted assets and a RSD 2.5 billion increase in foreign exchange risk exposure. At the same time, the category of other market risks fell by RSD 5.8 billion (of which RSD 5.7 billion relating to price risk exposure). Such a sharp fall in the above position can be credited to one bank only as it accounted for 88% of the overall decrease as at end-December.

**Table 17–** Elements of capital and risk assets (in RSD billion)

	2009			2008	
	December	September	June	March	December
1. Capital	368.6	348.9	350.5	353.8	363.8
i. Core capital	403.6	396.2	392.7	385.8	378.9
ii. Supplementary capital 1 and 2 eligible for inclusion in core capital	90.9	88.9	84.7	72.5	70.8
iii. Deductions from capital	125.9	136.2	126.8	104.5	85.8
2. Total risky assets	1,719.0	1,637.6	1,656.7	1,700.1	1,662.3
i. Credit risk-weighted assets	1,696.5	1,611.9	1,634.6	1,675.4	1,633.8
ii. Foreign exchange risk exposure	20.4	17.9	19.7	23.1	25.9
iii. Exposure to other market risks	2.0	7.8	2.4	1.6	2.7
3. Capital adequacy ratio (%)	21.44	21.31	21.16	20.81	21.89

The chart below gives a ranking of banks by capital adequacy ratio in the last 6 quarters.

**Chart 8.** Banks by capital adequacy ratio in the last 6 quarters

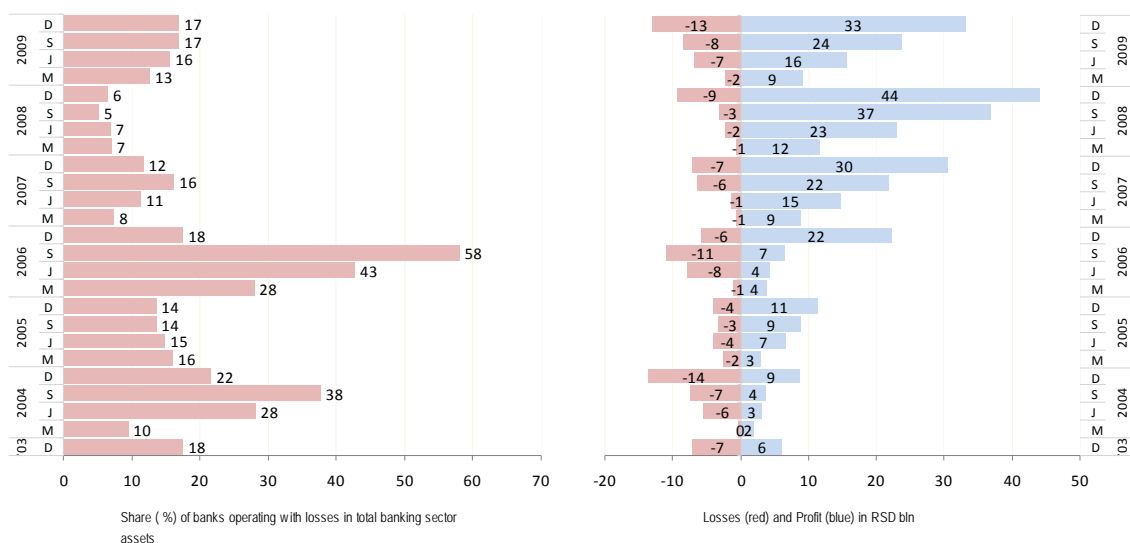


In Q4, 13 banks had a capital adequacy ratio of up to 20%, another 13 had their capital adequacy ratio between 20% and 30%, and 8 above 30%.

## Banking sector profitability indicators

Pre-tax profit posted by the banking sector in 2009 was RSD 20 billion, down by 42.3% from last year (RSD 34.7 billion). The number of banks operating with losses (14) remained unchanged from the previous quarter; they accounted for 17% of total balance sheet assets of the banking sector.

**Chart 9.** Banking sector performance and the share in total banking sector assets of banks operating with losses



The coverage of operating expenses with net interest income may be considered satisfactory. From March 2008 onwards, net interest income was sufficient to fully cover the operating expenses. In Q4 2009, this ratio stood at 1.09x compared to 1.1x in September. Net income from fees and commissions included, the coverage of operating expenses equalled 1.43x v. 1.45x in September.

A detailed overview of the levels and movements of the above ratios is shown in Table 18.

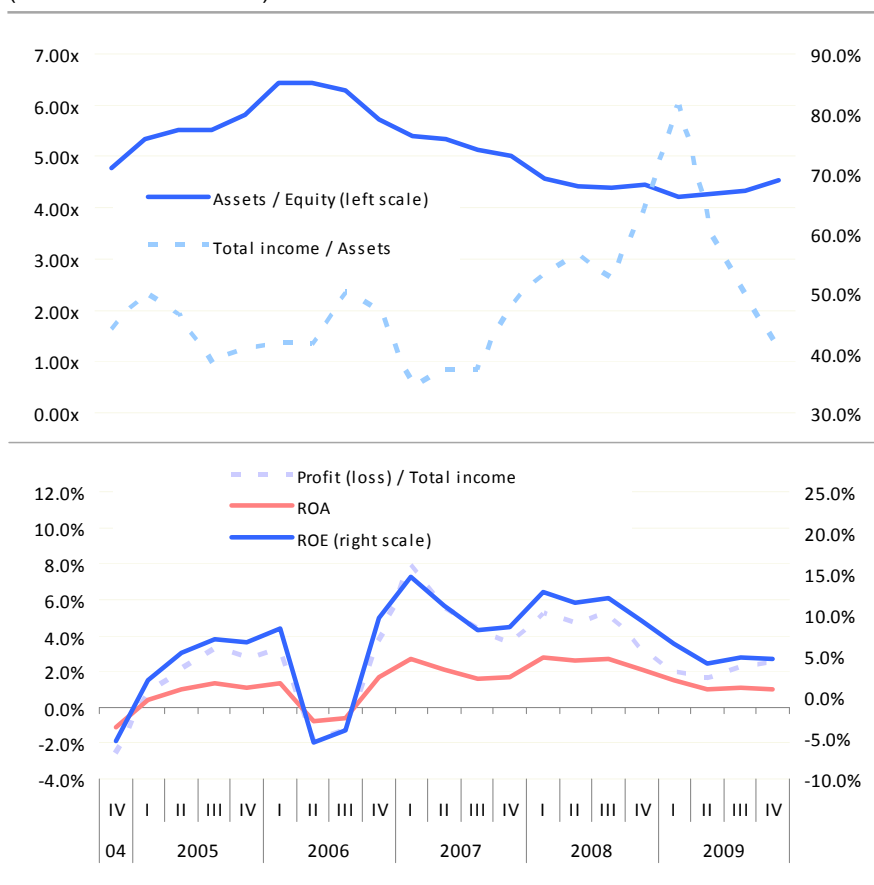
**Table 18.** Banking sector profitability – Overall result and coverage of operating expenses

		Profit (loss)* (RSD bln)	Profit (loss)* (RSD bln) -by quarter-	Net interest income / Operating expenses	Net interest and commissions income / Operating expenses
2009	December	20.03	4.63	1.09	1.43
	September	15.40	6.65	1.10	1.45
	June	8.75	1.89	1.09	1.43
	March	6.86	6.86	1.07	1.41
2008	December	34.74	1.06	1.11	1.46
	September	33.68	12.79	1.12	1.54
	June	20.89	9.87	1.12	1.53
	March	11.02	11.02	1.06	1.49

\* Pre-tax.

Chart 10 and Table 19 show the decomposition of the banking sector's financial result according to the *DuPont* methodology.

**Chart 10 – DuPont decomposition of banking sector profitability**  
(Dec. 2004 – Dec. 2009)



**Table 19 – Banking sector profitability at quarterly level –  
DuPont decomposition (annualised data)**

		Profit (loss) / Total income (%)	Total income / Assets (%)	ROA (%)	Assets / Equity	ROE (%)
		1	2	3=1x2	4	5=3x4
2009	December	2.5	40.3	1.0	4.5	4.6
	September	2.2	49.5	1.1	4.3	4.8
	June	1.6	59.9	1.0	4.3	4.1
	March	1.9	81.3	1.5	4.2	6.4
2008	December	3.2	64.1	2.1	4.5	9.3
	September	5.2	52.5	2.7	4.4	12.0
	June	4.6	56.5	2.6	4.4	11.5
	March	5.2	53.5	2.8	4.6	12.7

Profitability of the banking sector should also be analysed in terms of a more detailed breakdown of the profit and loss account presented in the table below.



**Table 20.** Banking sector profitability – Decomposition of the profit and loss account  
(annualised data)

		as % of average assets								
		Net interest	Net commissions	Net interest and commissions	Net exchange rate effect*	Net other income**	Credit loss***	Operating expenses	Pre-tax result (ROA)	Assets/Equity
		1	2	3=1+2	4	5	6	7	8=3+4+5+6+7	9
										10=8x9
2009	December	5.11	1.60	6.71	0.74	0.17	(1.83)	(4.77)	1.02	4.54
	September	5.27	1.64	6.91	0.76	0.19	(1.93)	(4.83)	1.10	4.33
	June	5.35	1.69	7.04	0.83	0.21	(2.15)	(4.97)	0.96	4.26
	March	5.25	1.66	6.90	1.12	0.28	(1.83)	(4.94)	1.53	4.20
2008	December	5.70	1.83	7.53	1.01	0.33	(1.56)	(5.24)	2.08	4.46
	September	5.46	2.01	7.47	0.75	0.29	(0.81)	(4.96)	2.74	4.39

\*Sum of net exchange rate gains/losses and net change in value of assets and liabilities

\*\*Income from dividends and equity investments, securities and other income

\*\*\*Net value adjustments and provisioning

## Summary statement of income and expenses

In 2009, the banking sector recorded pre-tax profits of RSD 20.03 billion. A total of 20 banks recorded a positive financial result, while 14 operated with losses.

A detailed overview of income and expenses is presented in the table below.

**Table 21.** Summary statement of income and expenses (in RSD mln)

Item	Dec-07	Dec-08	Dec-09
NET INTEREST INCOME/EXPENSES	63.404	95.935	100.525
Interest income	106.942	157.770	168.918
Interest expenses	(43.538)	(61.835)	(68.394)
NET FEES AND COMMISSIONS INCOME/EXPENSES	27.451	29.832	31.594
Fees and commissions income	34.433	38.954	42.081
Fees and commissions expenses	(6.983)	(9.122)	(10.487)
NET INTEREST, FEES AND COMMISSIONS INCOME/EXPENSES	90.854	125.767	132.118
NET INCOME FROM THE SALE OF SECURITIES	3.293	926	212
Securities income	3.295	1.195	515
Securities expenses	(2)	(269)	(303)
NET EXCHANGE RATE GAINS/LOSSES	6.959	(53.201)	(41.139)
INCOME ON DIVIDENDS AND EQUITY INVESTMENTS	1.081	985	60
OTHER OPERATING INCOME	53.445	81.473	108.177
EXPENSES ON INDIRECT WRITE-OFFS AND PROVISIONING	(61.149)	(103.899)	(141.121)
OTHER OPERATING EXPENSES	(72.712)	(87.189)	(93.930)
NET INCOME/EXPENSES ON CHANGE IN THE VALUE OF ASSETS AND LIABILITIES	1.702	70.094	55.648
Income on change in the value of assets and liabilities	64.271	209.070	175.070
Expenses on change in the value of assets and liabilities	(62.569)	(138.976)	(119.422)
OPERATING PROFIT/LOSS	<b>23.473</b>	<b>34.956</b>	<b>20.025</b>
Profit from discontinued operations	-	-	-
Losses from discontinued operations	-	-	-
<b>PROFIT/LOSSES BEFORE TAX</b>	<b>23.473</b>	<b>34.956</b>	<b>20.025</b>

Net interest income amounted to RSD 100.5 billion in 2009, up by 4.8% relative to end-2008 (in 2008 net interest income increased by as much as 51.3%). Similar growth

was recorded by net fees and commissions (5.9%), which amounted to RSD 31.6 billion. On the other hand, operating expenses reached RSD 93.9 billion, recording a 7.7% increase on 2008, which is noticeably lower than the increase recorded in 2008 (19.9%). The key reason behind significantly lower banking sector profits were credit losses (net<sup>11</sup>) that rose by RSD 10 billion or 38.4% on the previous year. At end-2009, net credit losses equalled RSD 36.1 billion (RSD 26.1 billion in 2008.). Pre-tax profit of the banking sector would have been even lower had it not been for the positive net effect of exchange rate gains/losses and changes in the value of assets and liabilities (around RSD 14.5 billion v. RSD 16.9 billion in 2008).

**Table 22.** Banking sector competitiveness indicators – Total income

Year	Month	Share of top five banks (%)	Share of top ten banks (%)	HHI Total income
2009	December	49.00	70.83	724
	September	48.56	71.45	698
	June	50.01	72.26	726
	March	52.37	74.63	772
2008	December	50.91	74.28	740
	September	47.96	72.56	679

Relative to Q3, the share of top five banks in total income rose negligibly to 49%, while the share of top ten banks fell to 70.8%. Consequently, the HHI increased from 698 to 724.

As indicated by the HHI, there is no concentration in terms of total income, though HHI for this category shows the largest degree of volatility among all categories observed.

## II. Regulatory activity of the National Bank of Serbia

In Q4 2009, the National Bank of Serbia amended the following secondary legislation under its regulatory remit in the field of banking supervision.

- ***Decision Amending the Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items (“RS Official Gazette“, No. 104/2009):***
  - Under certain conditions when the repayment period is extended because of the borrower’s current business financing needs, the criterion of timeliness in the settlement of liabilities may be relaxed;

<sup>11</sup> Net credit losses represent the difference between expenses on indirect write-offs and provisioning and income from the abolishment of indirect write-offs and provisioning.

- In the section relating to borrower's default status, the concept of materially significant amount of liability in default is replaced by the concept of a materially significant amount of default, while the amount of material significance is changed;
- Additional classification criteria are prescribed for borrowers founded for a special purpose or for the implementation of a pre-determined project;
- Banks are no longer required to allocate special reserves for estimated losses on receivables classified in category A;
- Banks are no longer obligated to down-classify receivables under which they are exposed to credit risk due to the impact of changes in the exchange rate of the dinar on the borrower's financial position, but are instead obligated to monitor them more closely.