

# ANNUAL FINANCIAL STABILITY REPORT



National Bank of Serbia

# 2010



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2010

**NATIONAL BANK OF SERBIA**

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## **Introductory note**

Under Amendments and Supplements to the Law on the National Bank of Serbia enacted in 2010 and in keeping with the latest international practice, the National Bank of Serbia is responsible for maintaining and strengthening the stability of the financial system. Namely, Article 3 of the Law on the National Bank of Serbia (RS Official Gazette, Nos 72/2003, 55/2004 and 44/2010) prescribes that the National Bank of Serbia shall, without prejudice to its primary objective of maintaining price stability, contribute not only to safeguarding, but also to strengthening of the stability of the financial system. To this end, it shall use an adequate set of instruments in order to enhance the system's resilience to potential risks on an ongoing basis.

Financial stability is defined as a condition in which financial institutions are sound and stable and their resilience to external shocks and risks inherent to financial operation is such that it enables effective financial intermediation and ensures stability and confidence in the financial system as a whole.

Hence, the purpose of the *Financial Stability Report* is to timely identify the existing and potential risks to the financial system, the banking sector in particular, and to assess the system's capacity to absorb those risks and remain stable, operational and capable of servicing its obligations.

Using supervisory instruments at its disposal, the National Bank of Serbia strives to maintain and strengthen the financial institutions' resilience to risks at a level conducive to the protection of their clients' interests and to their sustainable development. Aware of the importance of broad and transparent communication, through this *Report* the National Bank of Serbia seeks to inform about the condition of the financial system not only the legislative authority, as legally mandated, but also participants in the system and the public at large.

## **ABBREVIATIONS**

**bln** – billion

**EBRD** – European Bank for Reconstruction and Development

**GDP** – gross domestic product

**IMF** – International Monetary Fund

**mln** – million

**NPL** – non-performing loans (past due over 90 days)

**pp** – percentage points

**ROA** – return on assets

**ROE** – return on equity

**SEE** – South East Europe

**Tier 1** – core capital

Other generally accepted abbreviations are not cited.

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## Overview

Macroeconomic indicators for 2010 provide further evidence of gradual recovery of the Serbian economy, though the transition to strong and durable growth fuelled by domestic investment and production remains unlikely over the short run. It was expected that further growth would be underpinned by restored confidence of investors in the region of South East Europe, most notably investors from developed European markets.

The most potent risk underlying the system remains credit risk, largely induced by indirect FX risk implied by the relatively high level of exchange rate indexation of banks' portfolios. However, given exceptionally high levels of liquidity and capitalisation of the banking sector, existing capital buffers remain sufficient to cover all potential losses even in case of further, substantial deterioration in bank portfolios. Besides, as dinar lending has been, after a number of years, the main driver of growth in lending, the intensity of potential pressures on banking sector stability is judged to have lessened relative to the prior period.

Government subsidies to corporate and household sectors have played an important role in mitigating the crisis that spilt over from advanced world markets. However, this kind of economic incentive should be gradually abandoned given its unsustainability over a longer run and the need to forsake the idea of subsidies as an implied market instrument in designing business plans.

The key challenge in the coming period will concern further steps in financial sector dinarisation, which will reinforce financial stability in the medium and long run through greater orientation to the domestic market and new risk management avenues as risk diversification has so far been invariably expensive and often unfeasible.



# I. Macroeconomic environment

*Though relevant institutions in their analyses of 2009 mostly pointed to economic recovery and gradual exit from the crisis, optimism regarding the speed of recovery gradually waned in 2010. At the same time, 2010 brought about a reversal in risk perception in developing economies, South East Europe included. The markets expected to be most affected by the crisis proved more flexible, particularly those running floating exchange rate regimes. This contributed to the restoration of foreign investor confidence in the region and resulted in a substantial inflow of funds, which is likely to aid further stabilisation and economic growth. However, as stabilisation of the Serbian economy lacked firmness last year, serious macroeconomic risks remain unabated.*

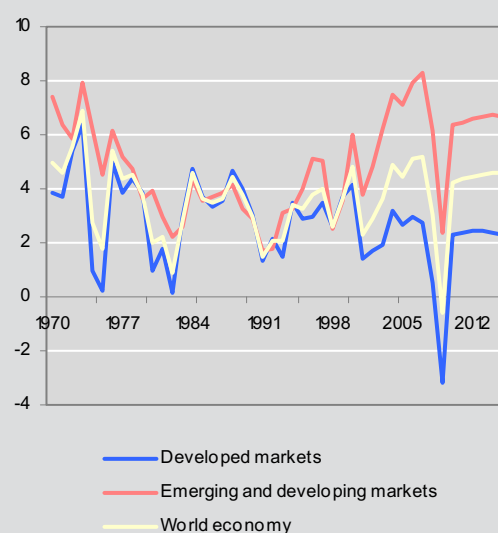
## 1. International macroeconomic environment

As government subsidies are soon to expire, doubts regarding smooth transition to sustainable global recovery are mounting. Events unfolding in financial markets in 2010 have shown that, though highly effective in the short-run, initial aid packages extended by governments in earlier years failed to provide the basis for sustainable growth. Consolidation and adjustment processes of world's large financial institutions and foreign governments are yet to take place. The most apparent example is the Greek crisis. Though activities implemented so far in the post-crisis period, as well as growth projections, show that emerging and developing countries are expected to be the main instigators of global economic growth, the region of South East Europe (SEE) experienced moderate growth in 2010, similar to that of more developed countries.

Faster growth in exports than imports testifies to gradual economic recovery, but not the recovery of aggregate demand due to the contraction in lending growth and stagnation in real wages.

Publication of results of ECB stress tests in summer 2010 instilled further concerns about banks' exposure to

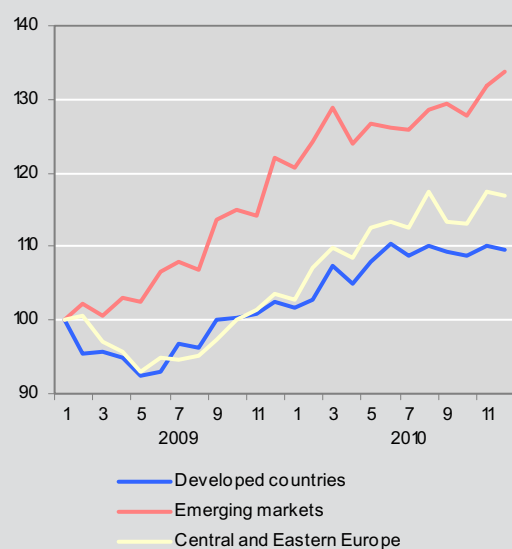
Chart 1.1. Global real GDP growth (in %)



Source: World Economic Outlook, IMF.

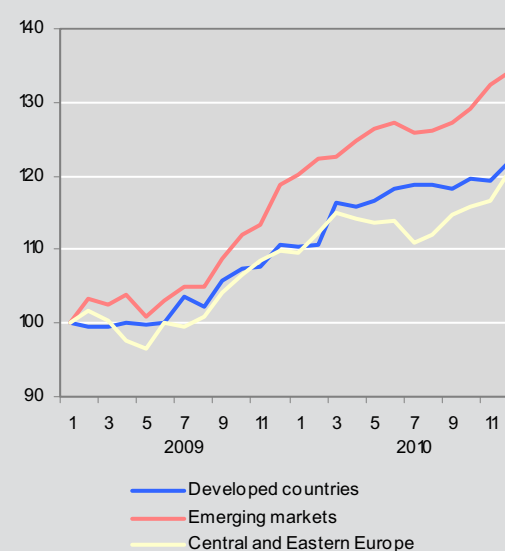
securities, bringing macroeconomic risks to the fore. This is corroborated by the IMF's recent initiative relating to the arrangement with the Republic of Ireland, while the potentially problematic economic situation in Spain, Portugal and Italy is still closely monitored.

**Chart 1.2. Global import trends**  
(index, I 2009 = 100)



Source: CPB - Netherlands Bureau for Economic Policy Analysis.

**Chart 1.3. Global export trends**  
(index, I 2009 = 100)



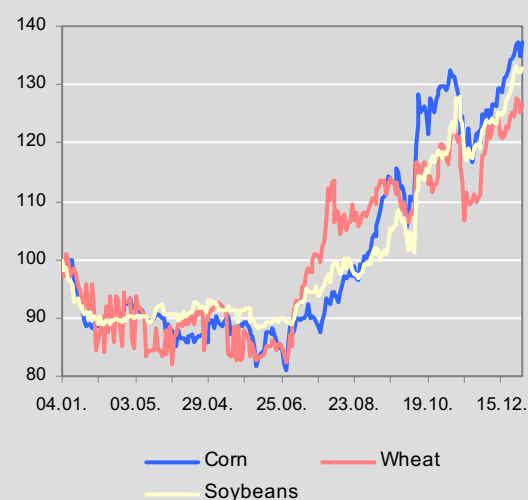
Source: CPB - Netherlands Bureau for Economic Policy Analysis.

Sovereign risk<sup>1</sup> is the main issue in the analysis of systemic risks internationally. Persistently high risk concentration even in most highly rated securities markets, giving rise to initiatives for further restrictive regulation of these markets, resulted in most concrete initiatives in England. The Bank of England, being among the first to introduce the *bank levy*<sup>2</sup> as a new prudential measure, intends to set in H1 2011 a cap on investment banking relative to deposit base in order to reduce international arbitrage and stimulate the return of funds to traditional banking channels as the persistently high level of credit risk triggers substantial outflows to money and capital markets. If such an initiative is taken up by other legislators (notably the European ones), further changes in the region could be expected – both positive, such as the reduction in risk of potential shocks of speculative capital, and negative, such as strained capital availability in developed European markets that are the key source of FDIs and creditors.

Despite its growing significance within banking sector balance sheets, this risk in Serbia is not so manifest compared to credit and indirect FX risks that remain dominant.

Global bank liquidity calls for enhanced vigilance at this particular point in time, notably in expectation of a strong

**Chart 1.4. Prices of primary agricultural commodities futures on the Chicago Mercantile Exchange in 2010**  
(in index points, 4.1.2010 = 100)



Source: Bloomberg.

impact of cross-border capital migration given the requirement to exit from sovereign aid packages. In such

<sup>1</sup> Risk of loss arising from exposure to government securities.

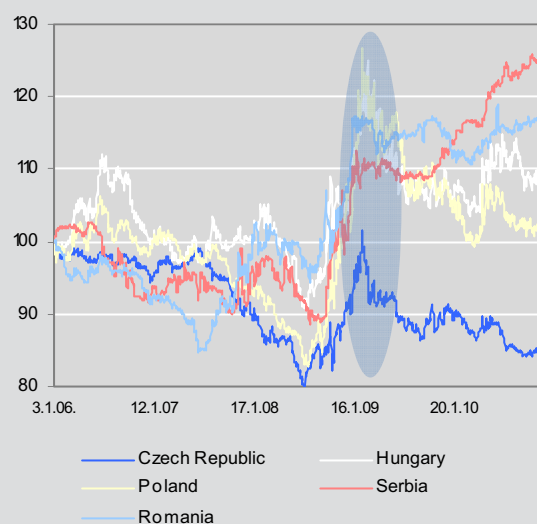
<sup>2</sup> Weighted banking tax on banks' total liabilities.

**Chart 1.5. Oil price movement**  
(in USD)



Source: World Economic Outlook, IMF.

**Chart 1.6. SEE exchange rate movements against euro**  
(index\*, 3. 1. 2006 = 100)



Source: National Bank of Serbia.

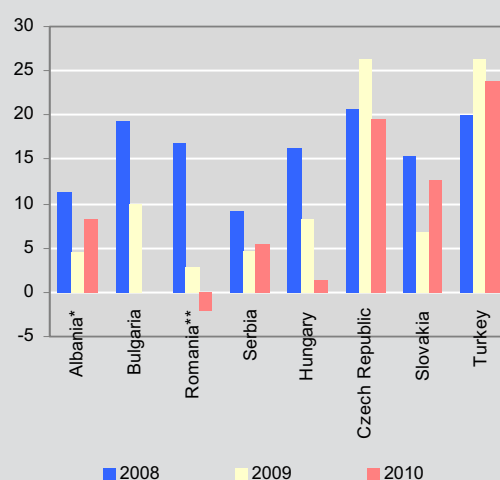
\* Index growth represents depreciation.

circumstances, the tendencies of capital consolidation at the group level in large international institutions are intensifying, which may have a significant impact, particularly in the SEE region.

Unexpected price hikes of primary products (notably agricultural commodities and oil) prevailing in the world market from Q3 2010, induced inflationary pressures which may exert a further adverse impact on both aggregate demand and the quality of banks' portfolios in the short- and long-run.

Though the SEE countries' choice to run floating exchange rate regimes has often been criticised due to expected depreciation pressures and jeopardising of the level of FX reserves in the crisis and post-crisis period, reactions of each of these countries indicate the regional character of pressures, largely depending on foreign investor risk perception. The risk abated by end-2010, signalling restored trust in the region as appetite for higher returns increased. Bank returns, which were practically halved in 2009 in most countries of the region, heralded the trend of stabilisation and recovery in 2010, except for some countries, such as Romania and Hungary. Given such circumstances, consolidation risk is likely to

**Chart 1.7. Banking sector ROE for countries in the region**  
(in %)



Source: NBS, IMF - FSI and countries' central banks.

\* June 2010.

\*\* September 2010.

lessen across the region, which should enable easier access to more affordable sources of corporate funding.

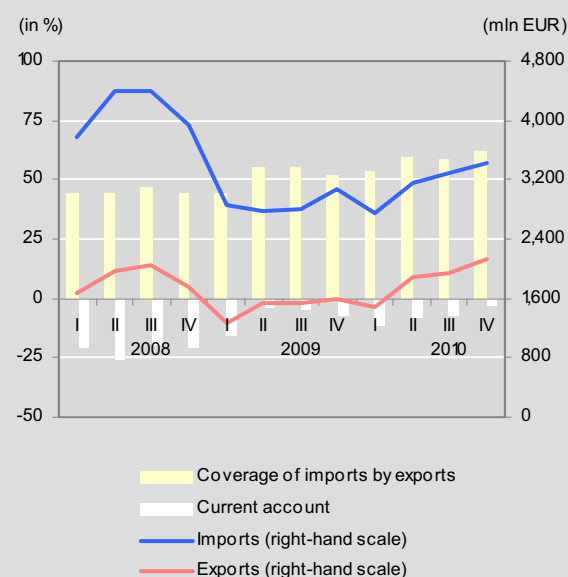
## 2. Domestic macroeconomic environment

The Serbian economy recovered from 2009, though indicators remained below the pre-crisis levels of 2008. Industrial output grew in 2010, but the services sector continued to provide the key impetus to GDP growth, which is why no serious steps towards sustainable economic growth are visible yet. Recovery is progressing at a relatively slow pace, chiefly due to delayed growth in aggregate demand, instigated by a real drop in wages and a marginal pick-up in lending that used to provide the key boost to GDP growth in the pre-crisis period.

Slower recovery of imports than exports continued, resulting in substantial improvement of the coverage of imports by exports (close to 62% in Q4). This bore down on current account deficit and mitigated depreciation pressures by end-2010 and in Q1 2011.

Expected increases in aggregate demand in the coming period are not likely to cause any significant balance of

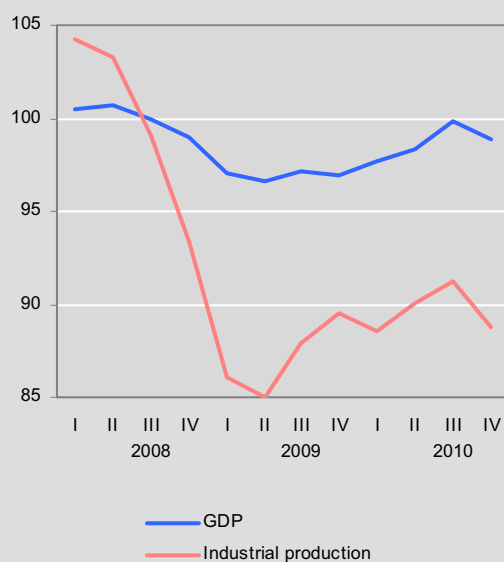
Chart 1.9. Balance of payments movements



Source: National Bank of Serbia.

Chart 1.8. GDP and industrial production growth rate

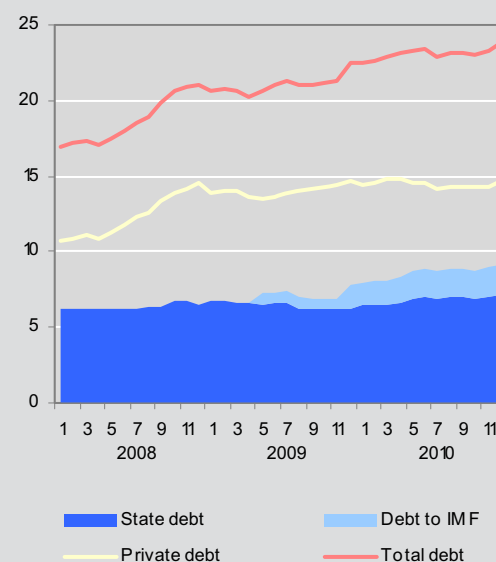
(in index points, 2008 = 100)



Source: National Bank of Serbia.

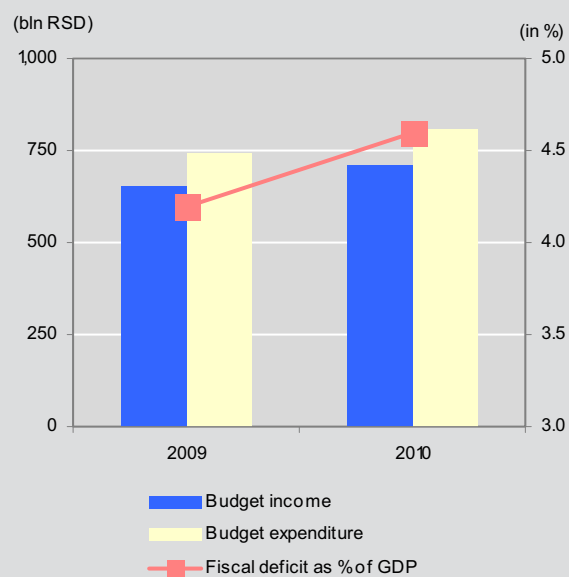
Chart 1.10. External debt of the Republic of Serbia

(bln EUR)



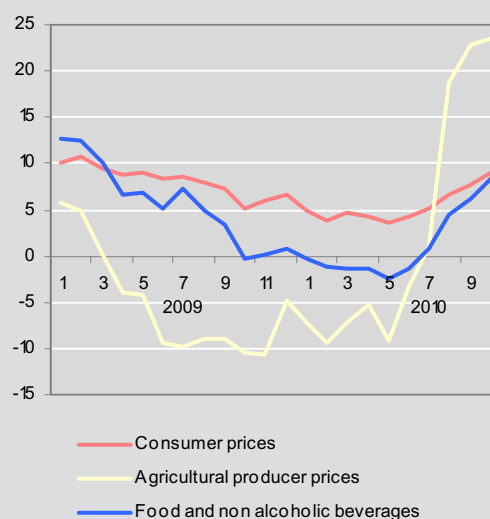
Source: National Bank of Serbia.

Chart 1.11. Fiscal movements



Source: National Bank of Serbia.

Chart 1.12. Price level movements in the Republic of Serbia (in %)



Source: National Bank of Serbia.

payments disturbances as potential changes should be the result of domestic investment activity.

The Republic of Serbia's overall external debt rose in 2010 only in response to government borrowing, notably from the IMF. As a result, the share of government debt in GDP reached 42.2% at the year-end, of which 25.1% related to government's external debt (according to the Ministry of Finance data).

Fiscal deficit rose slightly – from 4.2% to 4.6% of GDP. As movements in budget revenue/expenditure were relatively evenly balanced, restrictive fiscal adjustment will be indispensable for further deficit reduction.

The international wave of inflationary pressures in Q3 and Q4 2010 did not bypass Serbia. Inflation surged mainly in response to rising prices of primary agricultural commodities and food price hikes. This resulted in inflation's overshooting the target set by the NBS.





## II. Non-financial sector

*Though the households sector showed clear signs of recovery in 2010, the key risk remains excessive reliance on foreign currency, both in terms of borrowing and savings. This, however, is not true of the corporate sector that features more favourable trends in regard to FX risk, but remains strongly exposed to liquidity risk and is dependent on bank lending.*

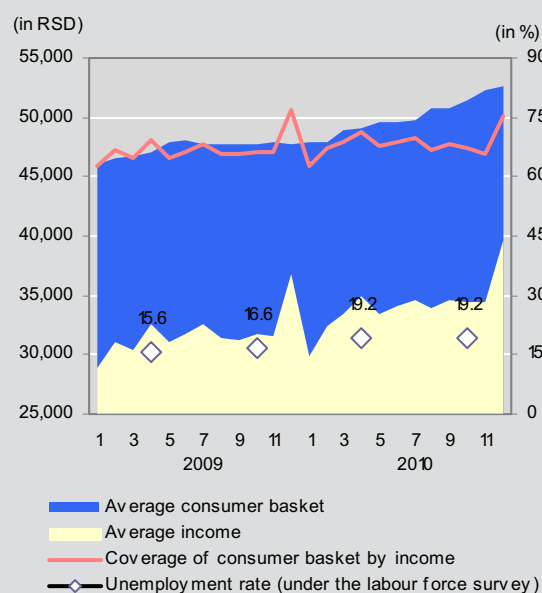
### 1. Households

Wage freezes, maintained across the public sector in 2010, including a real drop in private sector wages and rising unemployment, pushed down the disposable income of some household segments. However, despite such sluggish wage growth, the ratio of an average consumer basket to average wage in the Republic of Serbia picked up marginally relative to 2009 (from 66.92% to 68.2%). This did not weigh down on the

overall sector as banks' portfolios did not deteriorate to any significant extent, and households (with EUR 1.1 bln growth in FX savings p.a.) remained a significant net creditor of the financial sector.

Stagnation in lending recorded in post-crisis years did not continue in 2010 when lending to natural persons recovered significantly. However, given the concentration of growth in particular segments of lending, solid real growth (adjusted with dinar's depreciation) was recorded

**Chart 2.1. Coverage of consumer basket by income**



**Chart 2.2. Household lending (bln RSD)**

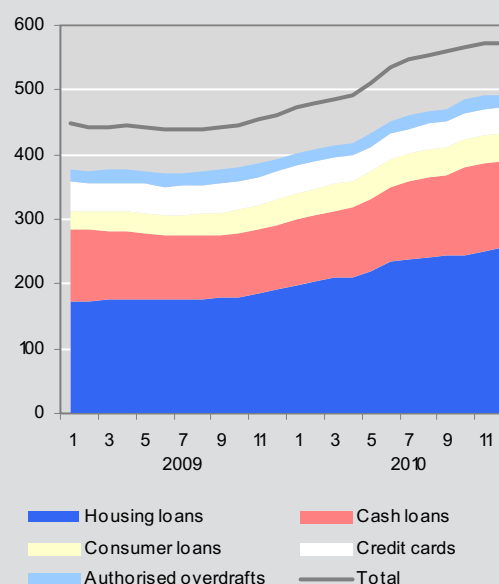
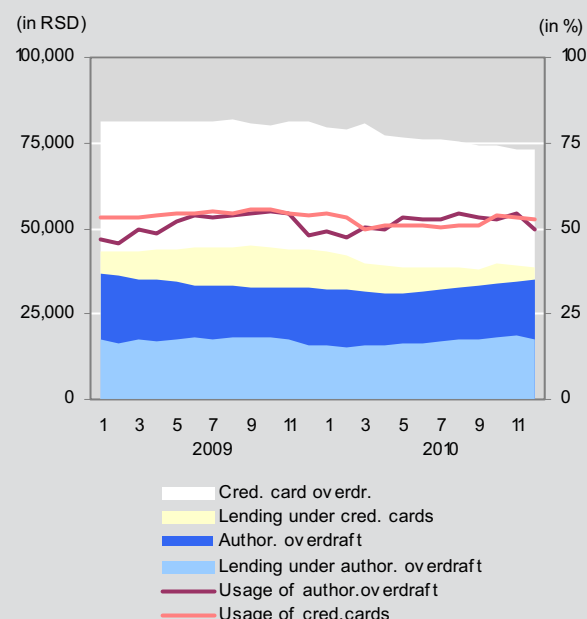


Chart 2.3. Usage of overdraft facilities



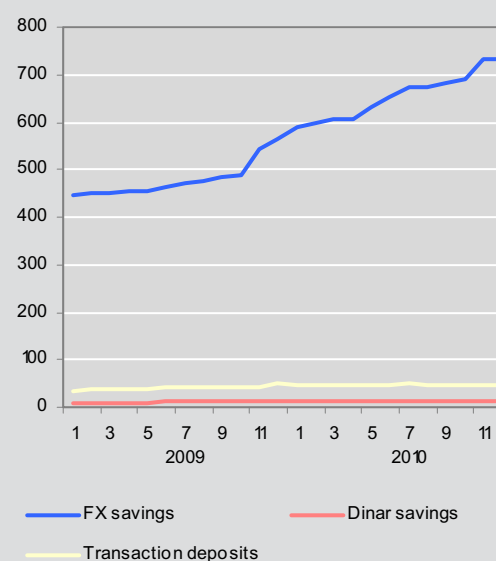
only with housing (c. 24%) and cash loans (26%, including a drastic structural change as the portion of dinar loans rose from 18.5% to 53%). A changed structure of cash loans indicates that growth was fuelled mainly by government subsidies. A positive trend is reflected in substantial refinancing of FX-indexed loans and a sharp decrease in the use of credit cards (c. 11%) which, being one of the most costly forms of borrowing, created a great burden in servicing of credit liabilities.

Such movements implied highly desirable adjustment in the households sector as borrowing for consumption purposes was dominantly financed from dinar funds.

The sharpest growth in financing was recorded with capital goods (housing construction). However, the risk stays in the system as such situation reflects high dependence on government subsidies rather than the real market circumstances. Therefore, additional effort should be directed to long-term sustainability of effective household lending.

Simultaneously with the stabilisation tendencies in borrowing, households boosted their FX savings as well. In the first two weeks of November alone, total FX household deposits increased in net terms – EUR 296 mln (which is ascribed to the “Savings Week” effect).

Chart 2.4. Household saving (bln RSD)



Judging by movements in credit and deposit activities in the year before, households remain a significant net creditor of the Serbian financial sector, with somewhat more serious disturbances recorded in the field of

Chart 2.5. Net household position towards the financial sector (bln RSD)

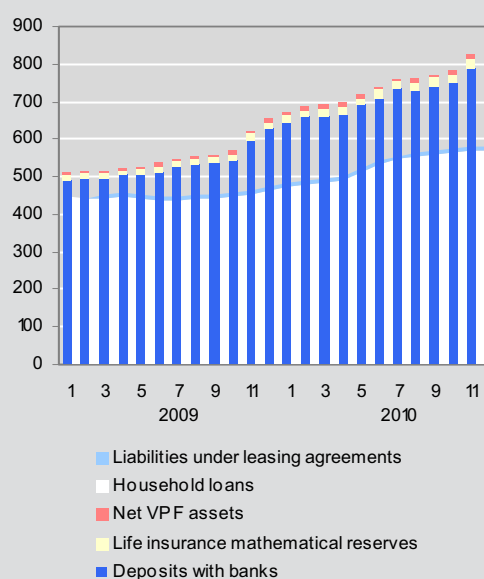


Table 2.1. **Average indebtedness of Serbian households**

|   | 2009    | 2010    |
|---|---------|---------|
| Debt by citizen                             | 63,112  | 77,968  |
| Debt by employee                            | 188,944 | 251,267 |
| Ratio of debt by employee to average income | 5.95    | 7.36    |
| Debt by loan beneficiary                    | 461,396 | 525,268 |

Source: National Bank of Serbia, Statistical Office and Association of Serbian Banks.

Table 2.2. **Enforced collection**

|                 | 2009   | 2010    |
|-----------------|--------|---------|
| Priority orders |        |         |
| First order     | 73,124 | 50,741  |
| Second order    | 47,042 | 31,052  |
| Third order     |        |         |
| Banks           | 90,101 | 100,098 |
| Intercompany    | 51,838 | 44,765  |

Source: National Bank of Serbia.

borrowing relative to credit growth due to falling employment numbers.

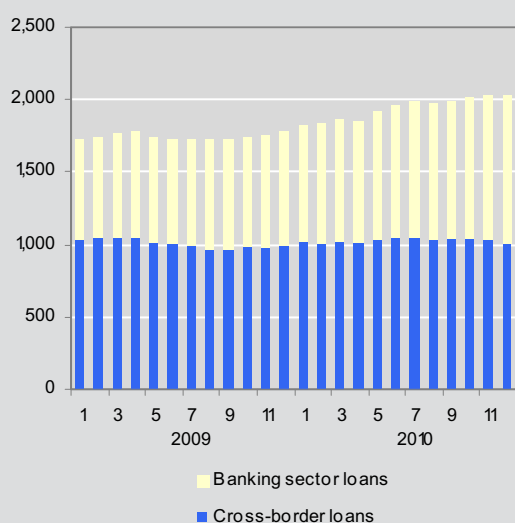
## 2. Corporate sector

Contraction in corporate liquidity, manifest since 2007, and plummeting shares on the Belgrade Stock Exchange, prevailed in 2010 as well. This weighed down most heavily on the loan servicing capacity across the country. Capital intensive activities implying relatively longer business cycles (manufacturing and construction), including retail and wholesale trade, faced once again the most severe liquidity constraints that adversely affected the quality of bank portfolios.

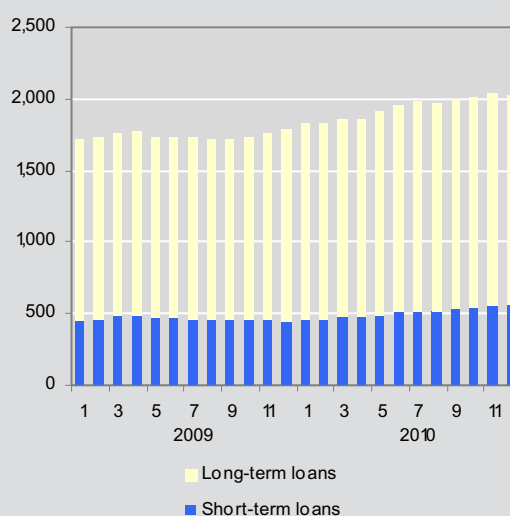
Beneficiaries of cross-border loans, however, experienced no major problems in foreign debt rollover, while the transformation of long-term into short-term debt continues. Long-term sustainability of such form of financing should therefore be particularly examined.

Based on enforced collection data, receivables declined significantly on 2009 for three main reasons:

- corporate debt restructuring enabled by relaxation of NBS regulations in September 2010;
- automatic institution of bankruptcy proceedings against debtors;
- deletion from the register of debtors undergoing enforced collection for longer than three years.

Chart 2.6. **Sources of funding of the Serbian corporate sector**  
(bln RSD)

Source: National Bank of Serbia.

Chart 2.7. **Maturity structure of corporate sector debt\***  
(bln RSD)

\* Including the domestic portfolio and cross-border loans.  
Source: National Bank of Serbia.

Such trends confirmed once again that there is no evidence of permanent deterioration in corporate activity in Serbia as the base of problematic enterprises continues to exist in administrative terms, painting an unrealistic picture of the overall economy. Prior government subsidies were helpful in overcoming liquidity constraints. Unlike the previous years when there was practically no demand for investment loans, the growth of RSD 24.2 bln in subsidised investment loans in 2010 is particularly encouraging.

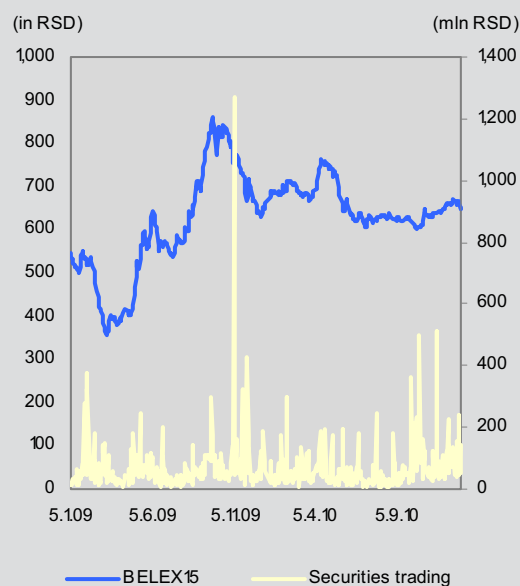
### 3. Capital market

The Serbian capital market was exposed in the prior period to most risks inherent to transition and emerging economies. The most blatant risk was probably the presence of sizeable volumes of speculative capital, largely withdrawn from the market in late 2008 and 2009. In such circumstances, the return to the pre-crisis levels of stock trading and index value depends heavily on foreign investors.

Such circumstances, however, are not local in character, but are typical of the overall SEE region, which is indicative of the significant influence of foreign investors' perception of the existing risks.

A contraction in stock exchange volumes was a result of trading in the unregulated market that almost halved in 2010 both in terms of trading volumes (from RSD 34 bln to 14.4 bln) and the number of transactions (chiefly due to

**Chart 2.8. Index value and BSE trade volumes**



reduced trading in shares). One of the drivers behind such contraction was the withdrawal of institutional investors (pension funds and insurance companies) in the initial post-crisis period. Their gradual comeback can be expected in the short run, notably in case of further development of government and private entities debt securities.

**Chart 2.9. Index movements on regional stock exchanges**  
(in national currencies)



### III. Financial sector

#### 1. Banking sector

##### Sources of funds

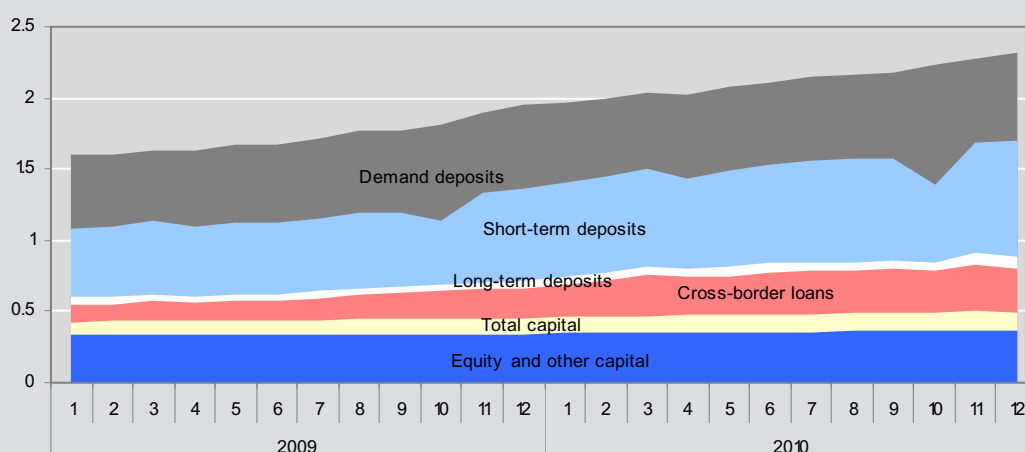
In 2010, the structure of banks' sources of funds did not undergo any major changes. As in the earlier period, the sharpest nominal growth was noted for external loans and short-term deposits (35% and 16.6% respectively).

Growth in long-term deposits continued (c. 74% nominally), whereby their share in total deposits rose from 7.8% to 11.5%. As most measures concerning the stabilisation of international markets are geared to restoring the traditional, stable sources of finance, further effort should be invested in strengthening the base of these types of deposits.

In March 2009, majority of banks with parent institutions based abroad signed the Vienna Initiative, thereby committing themselves to maintaining the exposure to the Republic of Serbia at least at 31 December 2008 levels. With the expiration of the Initiative in 2010, the risk of

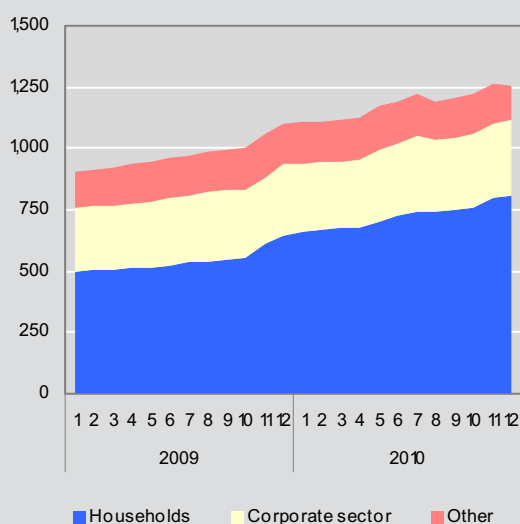
capital outflow amplified further. However, the restoration of trust in the SEE region and the Republic of Serbia was obvious in the course of 2010 as no outflow of capital took place though banks could have reduced their exposures following the April revision of the Initiative. Moreover, some banks even raised their exposure. Traditionally more favourable deposit rates on household FX deposits were applied during the "Savings Week" – the last week of October. Most term deposits remained short-term. Though the rollover of the deposit base is a clear signal of confidence in the banking sector, depositors should be encouraged to contract longer term maturities so that the banking sector could more efficiently exploit its high deposit base. At the same time, it should be borne in mind that prices of interbank loans (EURIBOR) are expected to rise internationally. Further enhancement of banking sector efficiency therefore relies on the possibility to substitute traditionally expensive short-term external loans (our banks tapped these loans mostly by means of revolving) with the domestic deposit potential. The importance of domestic sources is also reflected in the fact that favourable changes in the

Chart 3.1. **Banking sector sources of funding**  
(bln thousand RSD)



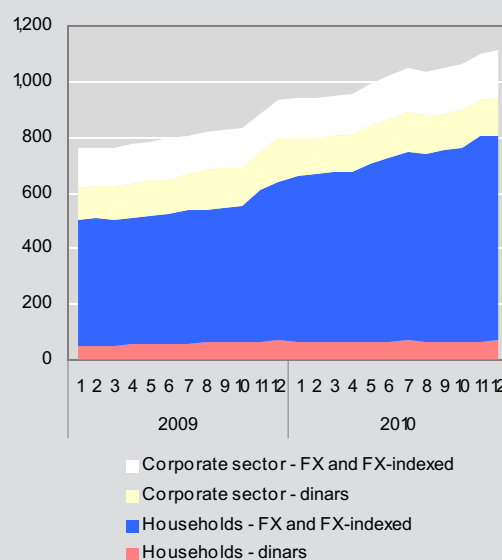
Source: National Bank of Serbia.

Chart 3.2. **Sectoral structure of deposits**  
(bln RSD)



Source: National Bank of Serbia.

Chart 3.3. **Currency structure of deposits**  
(bln RSD)



Source: National Bank of Serbia.

structure of banking sector assets (as greater portions of funds are channelled into dinar lending) will pose a challenge in the coming period due to strengthened competition in terms of attracting dinar sources of funds.

In October, aiming at dinarisation of banking sector balance sheets, the NBS presented its analysis of the profitability of dinar versus FX savings. Based on the analysis of market interest rates and taking into account the domestic currency depreciation, it was ascertained that dinar savings are in almost all aspects more lucrative than FX savings, particularly in the medium and long run. The NBS will continue to put effort in creating long-term positive market expectations in regard to macroeconomic stability with a view to setting a realistic basis for further development of the dinar deposit base.

Due to the specifics of portfolio development, some ratios of lending to maturity-adjusted deposits saw a decline relative to the prior period. The main underlying factor is the impact of government subsidies on the portfolio. A significant rise in corporate investment and household housing loans augmented the total base of long-term loans. The banking sector now needs to put additional effort in attracting long-term deposits.

## Liquidity

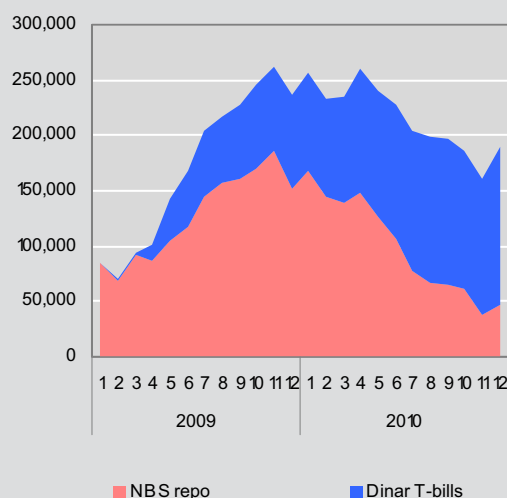
Reluctance to further increase financing on credit terms as well as a decision to rechannel bank funds into short-term repo securities of the NBS and T-bills of the Ministry of Finance resulted in the creation of an exceptionally high stock of liquid assets of banks. Together with ample

Table 3.1. **Loan to deposit ratios**

|                                    | 2007 | 2008 | 2009 | 2010 |      |      |      |
|------------------------------------|------|------|------|------|------|------|------|
|                                    |      |      |      | III  | VI   | IX   | XII  |
| Total loans/total deposits         | 0.89 | 1.04 | 0.92 | 1.00 | 1.06 | 1.08 | 1.08 |
| Total loans/term deposits          | 1.54 | 2.07 | 1.71 | 1.72 | 1.89 | 1.92 | 1.82 |
| Household loans/household deposits | 0.70 | 0.84 | 0.67 | 0.67 | 0.69 | 0.69 | 0.66 |
| Long-term deposits/long-term loans | 0.12 | 0.07 | 0.08 | 0.09 | 0.07 | 0.06 | 0.09 |

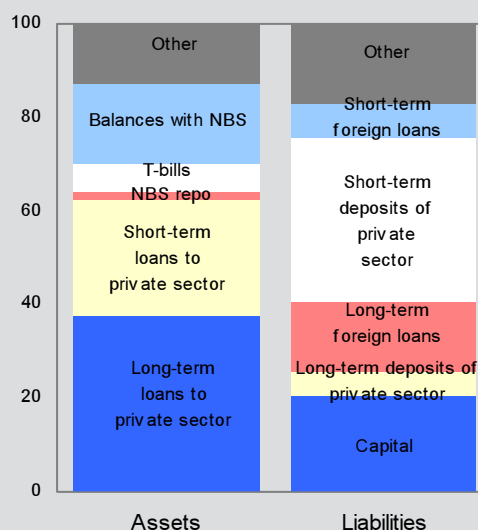
Source: National Bank of Serbia.

Chart 3.4. **Stock of T-bills and NBS repo with banks**  
(mln RSD)



Source: National Bank of Serbia.

Chart 3.5. **Banking sector asset-liability maturity matching**  
(in %)



Source: National Bank of Serbia.

capitalisation of the sector, these assets represent one of the main pillars of stability of the Serbian banking sector and the financial system as a whole.

Persistent (in many cases unwarranted) pressure of the media on the reputation and potential problems in markets of parent institutions of banks operating in Serbia, which marked the crisis and post-crisis period, began to wane last year, mainly in the SEE region. However, it should be underscored that despite highly comfortable liquidity positions of the banking sector, the NBS implemented enhanced monitoring of banking sector liquidity, notably of systemically important banks, as part of its prudential measures aimed at safeguarding financial stability.

As in the earlier years, all liquidity ratios of the banking sector were far above the thresholds prescribed. In the

period of high market sensitivity to banking sector signals, such high liquidity ratios underpinned the system stability. However, maintaining such liquidity levels in conditions of reduced market risk puts burden on the banking sector. A gradual decrease in liquid assets will logically ensue, which, however, is not likely to aggravate the stability of the financial system in the coming period.

The above tendencies in bank behaviour were noted in later part of 2010 through gradual abandonment of positions in NBS repo securities, occasioned by the need to offset the shortage of dinar liquidity triggered by NBS interventions in the FX market.

A significant contribution to easier management of banking sector liquidity should also come from secondary trading in government securities.

Table 3.2. **Liquidity indicators of the banking sector**

|  | 2008 | 2009 | 2010 |      |      |      |
|--|------|------|------|------|------|------|
|  |      |      | III  | VI   | IX   | XII  |
| Monthly average liquidity ratio              | 1.8  | 1.9  | 2.13 | 1.94 | 1.96 | 1.96 |
| Liquid assets/total assets                   | 0.31 | 0.34 | 0.32 | 0.29 | 0.27 | 0.25 |
| Liquid assets/total deposits                 | 0.54 | 0.56 | 0.56 | 0.52 | 0.47 | 0.42 |
| Liquid assets/total household deposits       | 1.18 | 1.17 | 1.08 | 0.97 | 0.87 | 0.79 |
| Liquid assets/short-term and demand deposits | 0.56 | 0.59 | 0.59 | 0.54 | 0.49 | 0.44 |

Source: National Bank of Serbia.

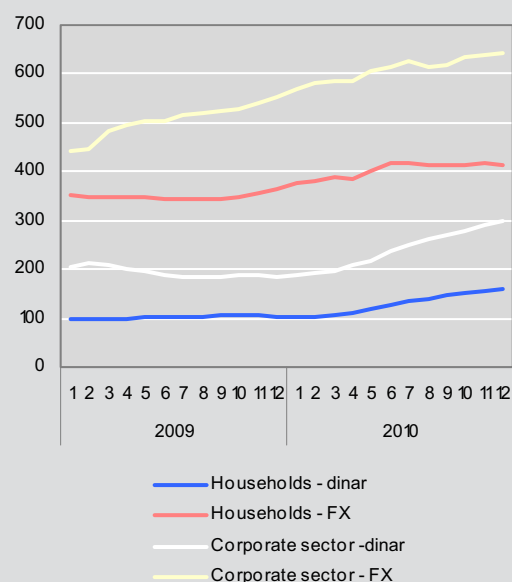
## Credit risk and portfolio quality

Measures taken over the past two years, aimed at sustaining lending growth in Serbia, proved to be worthwhile as the level of banking sector exposure was maintained.

Government subsidies to corporates and households provided a significant contribution as they encouraged a gradual exit from the period of banks' risk aversion and refrainment from lending.

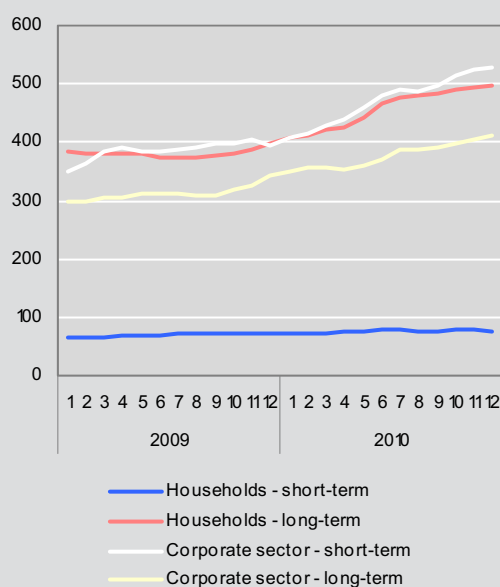
Nominal growth in private sector loans amounted to 26.6% in 2010, of which loans to corporates and households accounted for 67% and 33% respectively. Though the dinar and FX loans rose pretty equally in both sectors (in nominal terms), given the effect of 10 pp annual depreciation on the highly indexed portfolio, the real contribution to growth in dinar lending was much higher already in 2010. As indirect FX risk is identified as one of the largest in the system, and bearing in mind the number of unhedged borrowers, further growth in such lending is crucial for the protection against any future volatility of the dinar. This is particularly important for

**Chart 3.7. Currency structure of banking sector loans**  
(bln RSD)



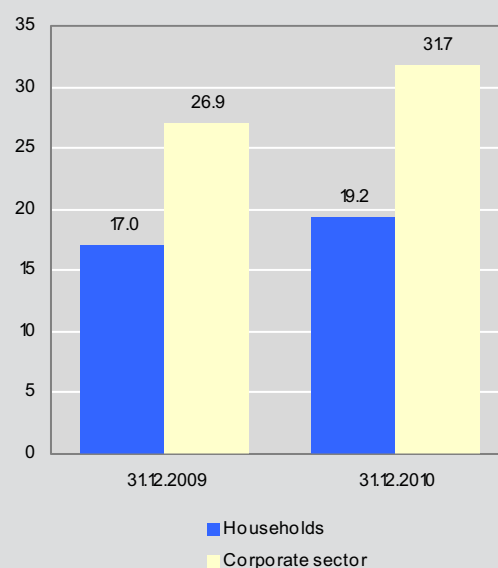
Source: National Bank of Serbia.

**Chart 3.6. Sectoral and maturity structure of banking sector loans**  
(bln RSD)



Source: National Bank of Serbia.

**Chart 3.8. Share of private sector loans in GDP**  
(in %)



Source: National Bank of Serbia.



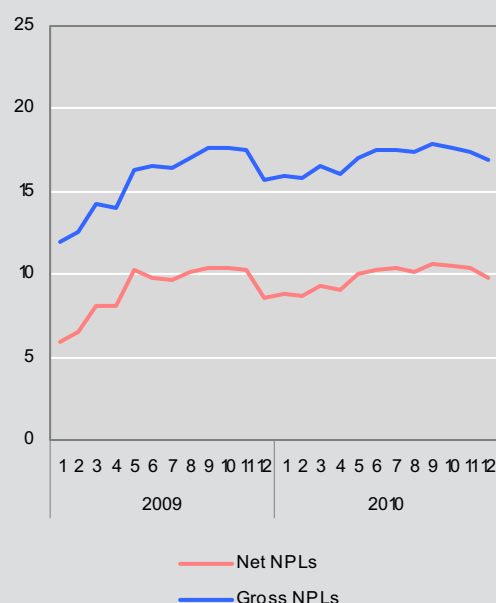
the households sector which is unable to effectively hedge against FX risk to which it is largely exposed.

*After the crisis-induced deterioration in 2009, the portfolio quality was sustained at a relatively stable level in 2010.*

The gap between credit growth and NPLs, which opened in response to sudden portfolio deterioration in 2009, was narrowed in 2010. Though widening throughout the year (in terms of NPLs growth), the gap tightened in Q4 2010 following a cyclical pattern.

As in earlier years, the greatest share in gross NPLs related to private enterprises (around 72% by end-2010). Dominant sectors in terms of lending activity and loans in arrears remained manufacturing and retail and wholesale trade (83% of gross NPLs). This can be put down to the simultaneous slowdown in economic growth and aggregate demand. Given the portfolio stock and the upward trend in exports, it is clear that additional effort should be placed in encouraging and financing of investment activity with a view to achieving sustainable growth. Besides, demand should be more vigorously

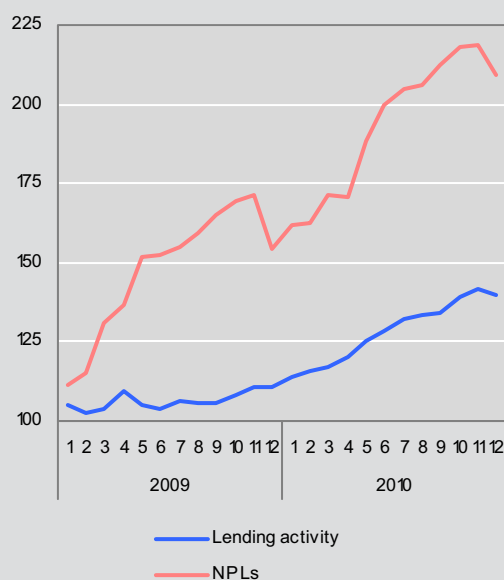
**Chart 3.10. Movement in gross and net NPLs (in %)**



Source: National Bank of Serbia.

**Chart 3.9. Lending activity slowdown effect and NPLs gap (in index points, 2008 = 100)**

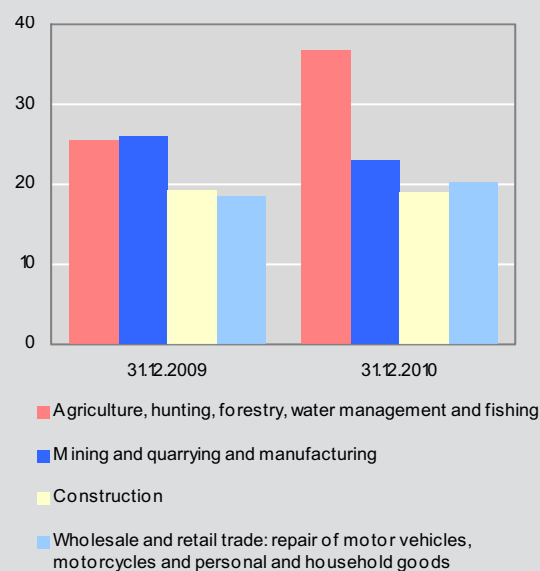
(in index points, 2008 = 100)



Source: National Bank of Serbia.

**Chart 3.11. NPLs of private enterprises by branches with greatest contribution to corporate sector NPLs growth (in %)**

(in %)



Source: National Bank of Serbia.

channelled to domestic products, with the aim to close the cause-effect chain of receding corporate liquidity and to tackle loan repayment issues in the industrial sector.

Though stabilised, the level of gross loans in arrears remained high compared to the SEE region, which explains the dominance of credit risk in the Serbian banking sector. The well-timed countercyclical prudential measures of the NBS are therefore directed to preserving a high ratio of loan loss provisioning. At end-2010, the ratio of NBS prescribed provision was high enough to cover 134% of gross NPLs in arrears. In such circumstances, though relatively substantial, losses from NPLs cannot trigger destabilising pressures on the Serbian banking sector.

## Capital quality

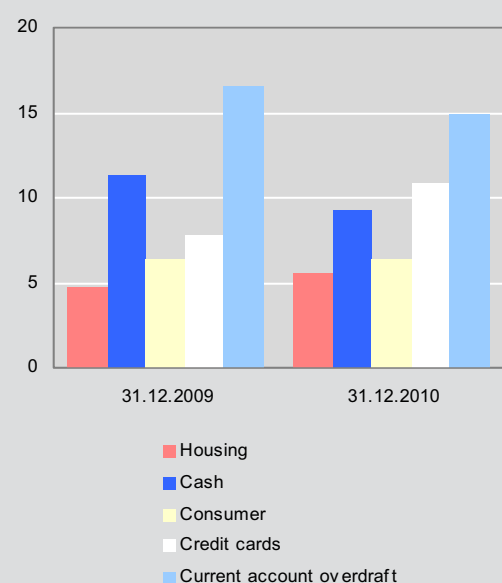
*Capital positions of the Serbian banking sector were maintained in the year before at levels way above the prescribed thresholds, with the dominant share of the highest quality groups of capital.*

A marginal decrease in consolidated ratios in 2010 was generally driven by the increase in risk assets (most of which FX-indexed) due to the depreciation of the dinar.

Banking sector capital continued to grow rather slowly relative to the pre-crisis period. The growth rate equalled 10.5%, with the highest quality Tier 1 capital providing the greatest contribution (up by 13 pp). The absence of a high degree of banks' capital increase (marking the period up to 2009, chiefly due to the prudential countercyclical supervision concept), and the maintenance of excess liquidity did not, however, lead to deterioration of the main elements of capital stability. Owing to such movements in capital positions, core capital (following deductions for a shortfall in reserves against on- and off-balance sheet items) made up as much as 80% of total banking sector regulatory capital, up by 3 pp from 2009. At the same time, the share of capital in the banking sector balance sheet total was maintained at a relatively stable level, ranging between 20.7% in early and 19.7% in late 2010.

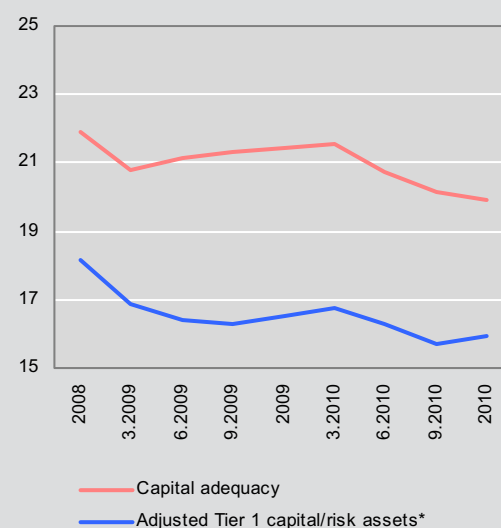
Such a high capital adequacy ratio (almost 8 pp above the prescribed threshold for Serbia and 12 pp above Basel II standards) will be particularly important in the upcoming transition to a new regulatory framework, fully aligned with Basel II standards. Modified banking regulations, to be applied as of end-2011, envisage the inclusion of additional risks to the banking sector, a change in credit risk weights and the deduction from capital of a shortfall in reserves, which is expected to bring about a decline in the consolidated level of capital adequacy. Owing to the

**Chart 3.12. Household loans in arrears by purpose**  
(in %)



Source: National Bank of Serbia.

**Chart 3.13. Banking sector capital positions**  
(in %)



\* Tier 1 capital minus the reserves shortfall on- and off-balance.

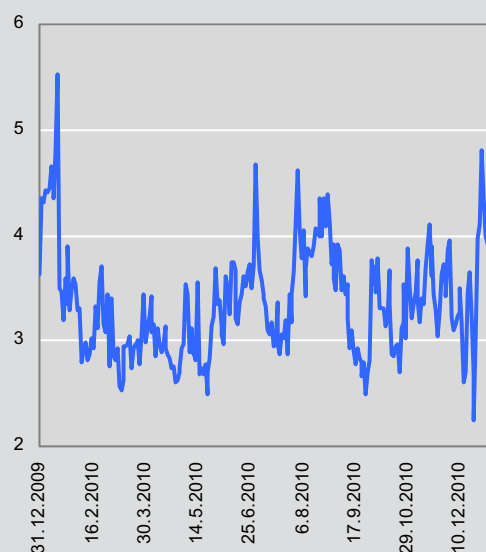
Source: National Bank of Serbia.

currently high capital base, the consolidated banking sector should remain way above the prescribed thresholds even with the implementation of the above changes relating to capital adequacy. A challenge that the NBS is likely to face in the next year is finding an adequate manner of presenting to the public the changes that are expected to take place since reduction in capital adequacy will not jeopardise the stability of the banking sector.

## Market risks

Small alterations in the structure of the banking sector portfolio did not trigger any major changes in terms of market risk exposure in 2010. Most securities, whose share in banks' assets is doubtless increasing, were NBS and Ministry of Finance short-term securities, implying that interest rate risk in the trade crisis remains less important than other systemic risks. Owing to high portfolio indexation, banks continue to successfully transfer FX risk to financial services consumers. However, in such conditions, FX risk management is given over to sectors unable to establish quality protection systems, which may adversely affect banks in the long run in terms of deterioration in the portfolio quality and a rising share of loans in arrears and bad debt (key instigators of NPL growth in the prior period).

**Chart 3.14. Ratio of net FX risk of the banking sector**  
(in %)



Source: National Bank of Serbia.

Aiming at further market development, FX risk hedging instruments were introduced – mainly through NBS's swap auctions (which can be considered an instrument of bank liquidity management). From April to August, trading in this instrument amounted to EUR 267 mln. However, the development of direct interbank trading is yet to ensue.

## Reputational risk

The year 2010 was marked by somewhat smaller exposure of banks to reputational risk. The criticism of banks' exposure to the SEE region is waning as the perception of regional risk is changing internationally. This brought about a change in the mood of the domestic public opinion towards banks with parent institutions based in Western Europe. The development of events inspired the NBS to highlight the insubstantiality of negative pressures that were among the main triggers of the crisis in Serbia in the prior period. Similar pressures currently surround the Greek crisis. The focus of discussions about Greece's fiscal problems is the increase in sovereign risk that Greek banks are exposed to. The NBS has underscored on a number of occasions that subsidiaries of Greek banks and all other banks of foreign origin are separate legal entities with equity capital based in Serbia, and are therefore not exposed to the same risks as banks at home. Therefore, the situation of Serbian banks can by no means be likened to that of Greek banks.

The share of banks of Greek origin in the Serbian banking sector has been relatively unchanged over the past three years (16.9% in 2008 and 2010, and 16.3% in 2009).

## Profitability

Profitability of the Serbian banking sector showed a trend of recovery following a drastic fall in 2009. At end-2010, net profit rose by 26.8% from 2009, giving a major boost to profitability (including the net effect of the indirect write-off of loans and provisioning). The change in the exchange rate differentials effect was marginal relative to the year before. A rise in interest earnings depended on several factors. First, banks' investment in repo and government securities rose significantly (particularly in H1). Besides, rather strong was also the effect of the shift of a portion of the private sector portfolio into dinar loans that carry higher return compared to interest on foreign currency borrowing. Banking sector stabilisation and further restoration of trust (shaken in Q4 2008) dragged down on deposit interest rates and lowered the share of interest expenses relative to liabilities from 5% in 2009 to

**Table 3.3. Banking sector profitability indicators**  
(in %)

|  | 31. 12.<br>2008 | 31. 03.<br>2009 | 30. 06.<br>2009 | 30. 09.<br>2009 | 31. 12.<br>2009 | 31. 03.<br>2010 | 30. 06.<br>2010 | 30. 09.<br>2010 | 31. 12.<br>2010 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| ROA  | 2.08            | 1.53            | 0.96            | 1.10            | 1.02            | 1.26            | 1.35            | 1.21            | 1.08            |
| ROE  | 9.28            | 6.44            | 4.10            | 4.75            | 4.62            | 6.05            | 6.58            | 5.91            | 5.37            |
| Financial result<br>(mln RSD)  | 34,739          | 6,856           | 8,747           | 15,397          | 20,025          | 6,941           | 15,231          | 20,700          | 25,398          |
| Net income from interest on balance<br>sheet assets                  | 5.70            | 5.25            | 5.35            | 5.27            | 5.11            | 4.68            | 4.67            | 4.68            | 4.62            |
| Income from interest on interest-bearing<br>assets                   | 12.80           | 12.11           | 12.20           | 11.93           | 11.63           | 10.56           | 10.44           | 10.44           | 10.31           |
| Operating expenses/Net income from<br>interest, fees and commissions | 146.37          | 141.05          | 143.10          | 144.70          | 142.95          | 148.99          | 148.37          | 147.73          | 143.48          |
| Operating expenses/Net income from<br>interest                       | 110.73          | 107.22          | 108.81          | 110.39          | 108.77          | 115.23          | 114.27          | 113.60          | 110.01          |

Source: National Bank of Serbia.

4.2% at end-2010, prompting a rise in net interest earnings.

As in the earlier years, the rates of return showed a downward tendency, particularly in the last quarter given the effects of interest liabilities on household deposits placed during the “Savings Week”. By the year-end, however, the return on equity rose much more than in 2009 owing to an increase in interest earnings and the net effect of the indirect write-off of loans and provisioning.

Banking sector efficiency remained relatively stable in 2010. The ratios recorded show that Serbian banks can post relatively solid operating profit that is generally based on traditional forms of banking (1.1 times). Given the global trend of limiting investment banking and restoration of traditional forms of investment, such operation of the Serbian banking sector contributes to the further improvement of its perception and outlook.

## 2. Non-banking financial sector

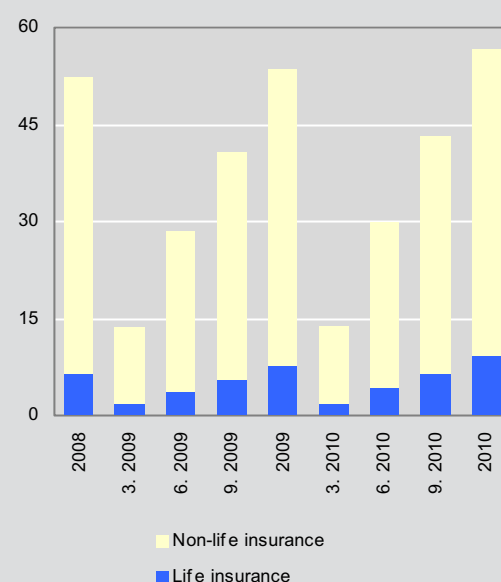
### Insurance

The effects of the global financial crisis that spilled over to the Serbian market in 2008 and caused stagnation in the insurance market in 2009, are still felt in operation of Serbian insurance companies.

Life insurance is the only type of insurance witnessing stable growth. Owing to a 18.7% premium increase, its share rose to 16.5% of total insurance premium. The importance of life insurance contribution is, however,

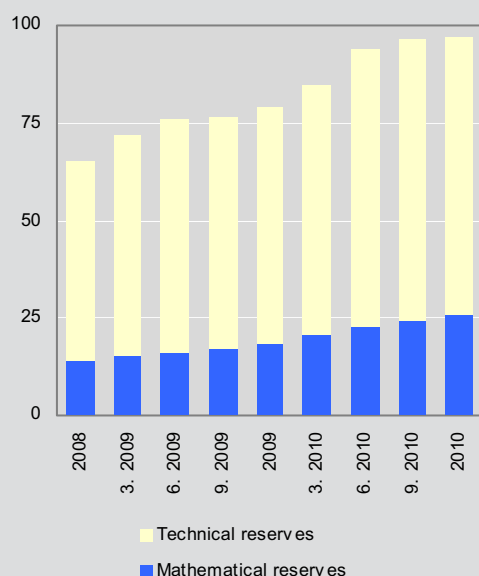
declining relative to the year earlier as all other categories are on the rise. That was not the case in 2009, so it could be concluded that the insurance sector was restored to the pre-crisis level in 2010. Though favourable, such market developments indicate reluctance of the general public to take out insurance cover, unless expressly requested (life and mandatory automobile liability insurance). Therefore, relatively swift return to the trend of sustainable growth cannot be expected with certainty.

**Chart 3.15. Insurance premium**  
(bln RSD)



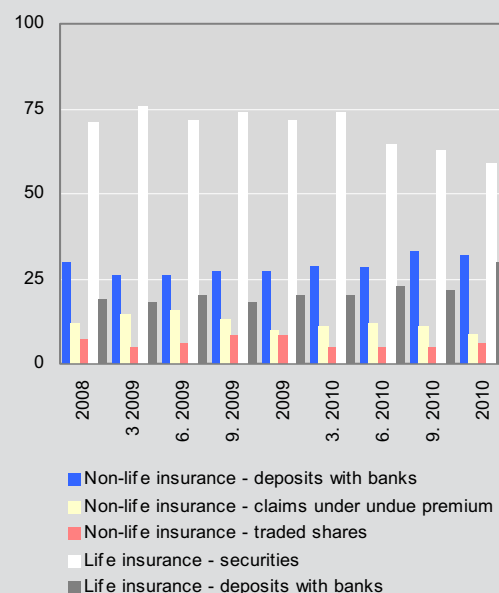
Source: National Bank of Serbia.

Chart 3.16. **Technical reserves**  
(bln RSD)



Source: National Bank of Serbia.

Chart 3.17. **Technical reserves coverage**  
(in %)



Source: National Bank of Serbia.

For a long time already, the Serbian insurance sector has faced no major difficulties or risks in its operation, but falls victim to the inability to achieve its growth potentials. However, positive development is likely with the issue of longer maturity T-bills that are expected to

bolster the development of debt securities in Serbia. Investment diversification avenues are key to the further development of the institutional investors market. It was already in 2010 that securities made up 55.1% of insurance companies assets.

Table 3.4. **Insurance sector performance indicators**  
(mln RSD)

|                                     | 2007   | 2008   | 2009   | 2010    |         |         |         |
|-------------------------------------|--------|--------|--------|---------|---------|---------|---------|
|                                     |        |        |        | III     | VI      | IX      | XII     |
| Total insurance premium             | 44,780 | 52,187 | 53,535 | 14,070  | 29,967  | 43,187  | 56,521  |
| Life insurance premium              | 4,940  | 6,347  | 7,881  | 1,958   | 4,242   | 6,401   | 9,353   |
| Share in total premium              | 11.0%  | 12.2%  | 14.7%  | 13.9%   | 14.2%   | 14.8%   | 16.5%   |
| Non-life insurance premium          | 39,841 | 45,840 | 45,653 | 12,112  | 25,725  | 36,786  | 47,168  |
| Share in total premium              | 89.0%  | 87.8%  | 85.3%  | 86.1%   | 85.8%   | 85.2%   | 83.5%   |
| Insurance density*<br>(in RSD)      | 6,066  | 6,964  | 7,313  | 7,736   |         |         |         |
| Life insurance density*<br>(in RSD) | 669    | 864    | 1,077  | 1,280   |         |         |         |
| Insurance penetration*              | 2.00%  | 2.00%  | 2.00%  | 1.90%   |         |         |         |
| Technical reserves                  | 39,529 | 51,494 | 60,544 | 64,434  | 71,047  | 72,410  | 71,131  |
| Mathematical reserves               | 9,172  | 13,711 | 18,670 | 20,314  | 22,607  | 24,182  | 25,596  |
| Insurance companies' capital        | 24,672 | 25,324 | 29,163 | 29,592  | 29,302  | 29,452  | 32,238  |
| Total assets of insurance companies | 70,624 | 84,807 | 99,227 | 106,245 | 115,149 | 117,423 | 117,116 |

\* Annualised data.

Source: National Bank of Serbia.

## Financial leasing

Reflecting a further downturn in the financial leasing market, set in train in 2008 in response to the set-up of rental and operational leasing companies, the consolidated sector posted a loss (RSD 868 mln) for the first time in 2010. Downswing was recorded in all balance sheet positions and is likely to deepen further. It

**Table 3.5. Performance indicators for financial leasing sector**  
(mln RSD)

|                                     | 2008    | 2009    | 2010   |
|-------------------------------------|---------|---------|--------|
| Total assets                        | 122,551 | 111,314 | 98,834 |
| Receivables under financial leasing | 95,688  | 83,549  | 73,921 |
| Loan obligations                    | 100,317 | 107,102 | 94,698 |
| Domestic banks                      | 6,086   | 5,900   | 4,170  |
| Cross-border loans                  | 94,231  | 101,202 | 90,475 |
| ROA                                 | 0.4%    | 1.8%    | 0.3%   |
| ROE                                 | 7.9%    | 27.1%   | -6.8%  |
| Net interest margin                 | 3.1%    | 5.8%    | 7.7%   |
| Number of contracts                 | 65,100  | 58,479  | 51,575 |

Source: National Bank of Serbia.

should be underscored that such tendencies stem from dampened demand for financial leasing products after more efficient substitutes entered the market – the price driven substitute in the form of bank loans and the administrative substitute in the form of operational leasing or rental companies (as liabilities to these companies are not recorded with the credit bureau).

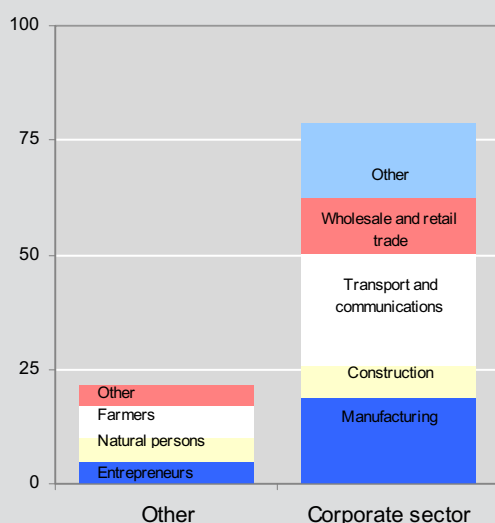
Most benefits of financial leasing substitutes are evident when used by natural persons. Reflecting a constant downturn in the sector, enterprises currently account for 85.6% of leasing services, while the share of entrepreneurs and natural persons is practically even (4.6% and 5.6% respectively).

## Voluntary pension funds

Just like the insurance sector, voluntary pension funds (VPFs) face no significant exposure to market risk. However, being institutional investors, they have a limited growth potential as their development is closely correlated with capital market development.

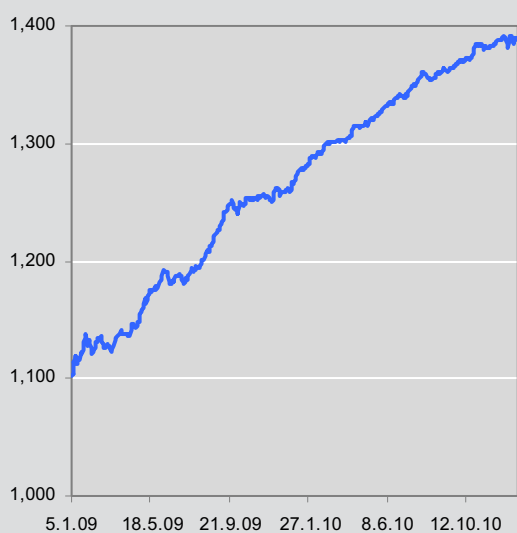
However, the trend of higher VPF return, initiated in September 2008, continued into 2010. VPF return has gone through three main phases – 1) rising return (since the start of VPF operation, from 15 November 2006 to May 2007); 2) declining return (from May 2007 to September 2008); 3) growing return taking the shape of a linear trend (from September 2008 until 2009 and 2010 – Chart 3.20), which continues into 2011. The reason for such movements is the funds' investment strategy. The strategy applied in the first and second phase implies a higher percentage of investment in BELEX15, notably shares covered by BELEX15, which is why the return in these phases is largely correlated with BELEX15 return. In September 2008, following the bankruptcy of Lehman Brothers, it became obvious that the declining trend in BELEX15, initiated in May 2007, will continue. To preserve the value of assets and achieve sustainable return, VPFs adopted a passive investment strategy by reducing the portion of shares to less than 10% and investing mainly in fixed-income financial instruments. Initially, due to the limited supply of these instruments in the market, most assets (c. 50%) were held in transaction accounts yielding the return adjusted with the NBS key policy rate. However, once T-bills were put into the market, a major part of assets was gradually directed to this instrument. At end-2010, 46.7% of assets were invested in T-bills, 18.1% in frozen FX savings bonds,

**Chart 3.18. Financial leasing structure by lessee in 2010**  
(in %)



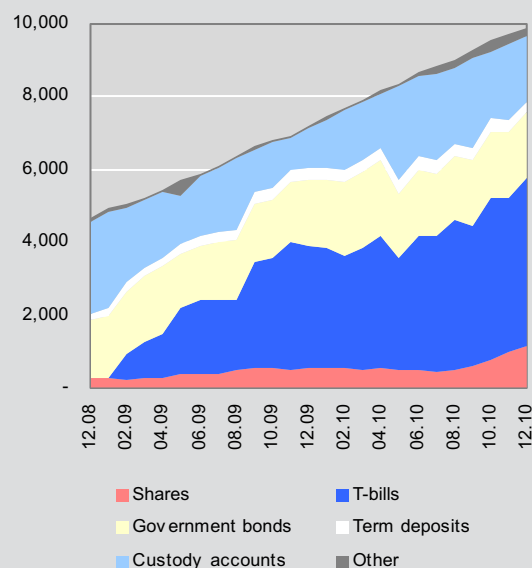
Source: National Bank of Serbia.

Chart 3.19. **FONDex movements**  
(in RSD)



Source: National Bank of Serbia.

Chart 3.20. **Structure of VPF net assets**  
(mln RSD)



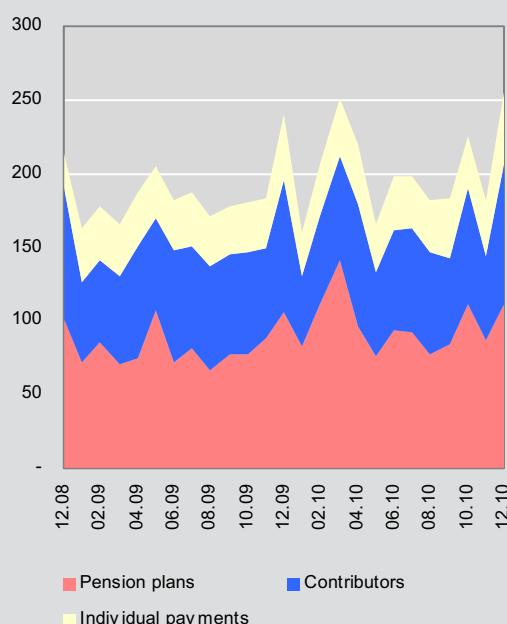
Source: National Bank of Serbia.

4.13% in other fixed-income instruments, 18.71% in transaction accounts, 11.4% in shares, and marginal 0.89% in real estate (see Chart 3.21). This accounts for the linear trend of movements in return and the mismatch of such return with the value of BSE shares. In 2010, the weighted average return of the sector (FONDex) amounted to 9.7%, while the return in BELEX15 was 1.8%, accounting for a 11.5% difference in 2010 alone. Since the start of VPF operation until end-2012, this difference would amount to 26.4% in favour of VPFs.

Given the current circumstances in the capital market, there is no reason to expect any major changes in VPFs' investment strategy, meaning that the same trend of return is likely to continue in 2011. This is indicative of strong resilience of the VPF sector to market shocks (systemic risk) that occurred since the onset of the global economic crisis.

In addition to stable return, essential for the stability of the VPF sector is stable assets growth. Net assets of the sector reached RSD 7.19 bln by end-2009 or RSD 9.86 bln by end-2010, up by 37.13% within one year only. However, such growth is no exception, but consistent with the linear trend in place since the start of VPF operation (Chart 3.20). A driver behind stable growth in

Chart 3.21. **Structure of contribution payments**  
(mln RSD)



Source: National Bank of Serbia.

fund assets is the very nature of this financial vehicle which implies, most often, the payment of regular monthly contributions by fund members (Chart 3.21). Other products, such as investment funds, cannot count on such stable assets growth as their sources of funds and the regularity with which money is paid into their accounts are quite different. Further growth in net assets of VPFs is based on stable return. Assets growth has a positive impact on the stability of the sector as it enables

a reduction in investment risk by investment diversification. Further, it enables a gradual reduction in fees charged by VPF management companies. Besides, such growth will doubtless prop up the overall sector. However, despite high growth rates, the value of net assets in absolute terms is very small, making up only 0.3% of GDP in 2010. Hence, until the percentage share of VPF assets in GDP is increased substantially, we may say that this sector is in the phase of stable assets growth and initial development.



## IV. Financial stability

### 1. Vienna Initiative

The Vienna Initiative (or *Financial Sector Support Program* – FSSP) was limited to the period until end-2010. As already mentioned, the expiry of the Initiative was linked to uncertainties regarding the exposure to Serbia of local banks with parent institutions based abroad. The Initiative was set up proactively – with a view to sending safety signals to the market exposed to a barrage of media speculations at the time. While the Initiative lasted, banks had an open liquidity channel with the NBS, but did not have to exploit it. At the same time, though banks were enabled to reduce their total exposure to 80% (relative to 31 December 2008 levels) following the Initiative review of April 2010, they did not withdraw their funds during the year. At the consolidated level, the end-of-year exposure was higher than initially agreed by 3 pp or 28.9% relative to April levels. Such trends in the domestic market show no need

for the renewal of the Initiative as risks that conditioned the adoption of these financial stability measures lessened significantly relative to the prior period.

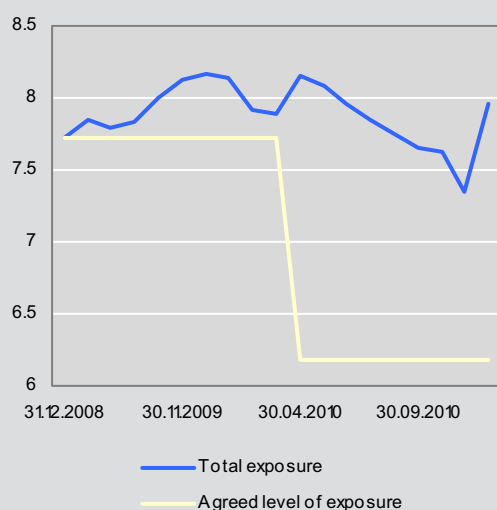
### 2. Challenges of Basel II introduction

The initial plan relating to the upgrade of the banking supervision regulatory framework and the improvement in risk management processes, envisaged the fully-fledged implementation of Basel II standards by end-2010. However, following examination of market circumstances, i.e. banks' capability to adjust to the new regulatory framework, introduction was postponed by one year.

As the existing banking regulation is based on Basel I standards, new regulations will mark a qualitative step forward. In this regard, the main objectives of the adoption of new regulations regard further strengthening of the banking sector safety and soundness (which should shore up financial system stability), upgrade of the supervision function through the development of risk-based supervision, as well as harmonisation with EU regulations, notably Directives 48/2006 and 49/2006 that incorporate Basel II standards.

In 2010, the NBS prepared and posted on its website draft regulations harmonised with Basel II standards, such as: the Decision on Bank Capital Adequacy, Decision on Bank Risk Management, Decision on Disclosing Bank Data and Information, Decision on Consolidated Supervision of Banking Group and Decision on Reporting on Bank Capital Adequacy. In addition, the NBS prepared and published a set of reports on capital and capital requirements for individual risks, harmonised with COREP reporting and applied in all EU member countries. A unified method of reporting will enable banking groups to more efficiently exchange data within a single reporting system, while supervisors will be able to more efficiently cooperate and coordinate their joint activities.

**Chart 4.1. Exposure of banks signatories to the Vienna Initiative**  
(bln EUR)



Source: National Bank of Serbia.

In regard to the initiative of banks and the Association of Serbian Banks relating to the implementation of Basel II standards, the NBS decided to postpone the timeframe for the full implementation of standards from 1 January to 31 December 2011 and to introduce the trial reporting period (as of 30 September 2011), harmonised with the new regulatory framework. This decision was made in light of the need for more significant investment in IT systems and human resources, and a longer time needed for harmonisation of business processes with the new framework.

### 3. Basel III challenges

Concurrently with the introduction and full implementation of Basel II standards in Serbia, the crisis period at the international level opened up the possibilities of upgrade through the introduction of new standards – Basel III. Though most developed European countries consider this process a major challenge (as confirmed by the proposed dynamics of introduction and implementation), the countercyclical prudential approach to supervision, applied in Serbia so far, shows that new standards pose no significant challenge to our banks.

Though no activities regarding possible introduction of new standards have been officially established, the NBS considers such circumstances an important signal of system stability and the confirmation of justifiability of the often criticised conservative approach to supervision.

### 4. Law on the Protection of Financial Services Consumers

In Q4 2010, the NBS prepared the Law on the Protection of Financial Services Consumers, adopted by the National Assembly on 25 May 2011. The Law aims to improve good business practice and fair treatment of financial services consumers by financial institutions, regulate the

protection of consumer rights and interests in line with EU practice, as well as to strengthen the trust of consumers in the financial sector, including its stability and development.<sup>3</sup>

The Law is almost fully aligned with the EU Directive 2008/48/EC. It introduces to the domestic market new *acquis communautaire* institutes, such as the consumers' right to withdraw from a credit agreement or leasing agreement where an option to purchase the lease object is laid down, or from a financial accommodation within 14 days from concluding the agreement, without specifying a reason. The early repayment fee may not exceed 1% or 0.5% (in specific cases) and is charged on the amount of credit repaid early. Furthermore, if the credit application is rejected, the consumer has the right to be supplied, free of charge, with data from the credit bureau. In addition to solutions drawing on European law, the Law incorporates other important institutes required for domestic market regulation, such as the determinacy of the contractual obligation, meaning that changes in the level of the contractual obligation may not be unilaterally determined by either of the parties involved. It also ensures that the official exchange rate is applied to granting and repayment of credit, the right to free of charge account and payment card termination, no payment of the cash withdrawal fee, etc. Aiming at comprehensive regulation of the financial services field, the Law also covers financial services that the above Directive does not regulate. For instance, while the Directive covers consumer credit of between EUR 200 and EUR 75 000 in the form of loans, financial leasing agreements, overdraft facilities, credit cards and financial accommodation (loans, deferred payment and other types of accommodation offered by traders), the Law, in addition to these services, covers all credit (both up to EUR 200 and over EUR 75 000), including housing loans, deposits, accounts, debit card payments, and other banking services.

Moreover, the Law will also apply to all contractual obligations falling due after its entry into force, regardless of the date of the agreement, in respect of determinacy

<sup>3</sup> The reform of the financial regulatory framework, prompted by the global financial crisis of 2007 implies in a number of countries the enhanced protection of financial services consumers with a view to strengthening the citizens' trust in the financial sector and reinforcement of its stability. For instance, in Great Britain it implies the establishment of the Consumer Protection and Markets Authority, aimed at strengthening of trust through the protection of financial services consumers (see: HM Treasury, *A New Approach to Financial Regulation: Judgment, Focus and Stability*, July 2010, p. 31–37).

and determinability of the contractual obligation – the interest rate, provided this obligation is not determinable as legally stipulated, or contains a provision referring, in regard to important agreement elements, to the business policy, or it is agreed that the bank may unilaterally change the level of the obligation. Harmonisation of the existing agreements in terms of undeterminable elements of interest rates will be made in such a way that the value of these elements at the moment of agreement conclusion will be taken into account for future instalments.

A well-regulated financial services market where transparent rules are applied in accordance with the principle of the equality of the consumer and the financial service provider, will contribute to strengthening of citizens' trust in the financial system, and thus to the stability of the overall system, which will be beneficial for the society as a whole.

## **5. Further steps in dinarisation of financial sector balance sheets**

As credit risk was generally triggered by indirect FX risk arising from a high degree of balance sheet indexation, it is considered a systemic problem in Serbia. The NBS will continue to invest effort in reducing the system exposure to this type of risk.

The key factor in these efforts will be the enhancement of accessibility and strengthening of trust in dinar financial products. The development of these products was relatively slow in the earlier period. The process implies significant institutional limitations of NBS's actions and its efficiency will largely depend on the positive approach of other relevant institutions and the market itself. Participants' readiness to shift the focus of their business and personal financial planning to a long-term perspective for the purpose of sustainable economic development is of paramount importance. From a long-term perspective, the exposure to FX risk and the underlying costs exceed

significantly the costs of interest rate disparity between dinar and euro-indexed products that currently exist in Serbia in the short term. Further harmonisation between fiscal and monetary policies is indispensable for the achievement of macroeconomic stability that is key to successful dinarisation and a reduction in currently high FX risk in Serbia.

Table 4.1. Financial soundness indicators\*

(in %)

|  | 31. 12.<br>2009 | 31. 12.<br>2010 |
|--|-----------------|-----------------|
| Regulatory capital/risk assets   | 21.4            | 19.9            |
| Core capital/risk assets   | 23.5            | 22.3            |
| Regulatory capital/balance sheet assets                                  | 17.1            | 16.1            |
| Balance sheet capital/assets   | 20.7            | 19.7            |
| Agricultural loans/total loans   | 2.7             | 2.7             |
| Industry loans/total loans   | 17.9            | 17.7            |
| Trade loans/total loans  | 18.3            | 15.3            |
| Construction loans/total loans   | 5.9             | 6.6             |
| Other loans to enterprises/total loans                                   | 10.8            | 9.3             |
| Loans to natural persons/total loans, of which                           | 32.8            | 30.6            |
| housing loans/total loans  | 15.7            | 15.4            |
| Loans to other sectors/total loans                                       | 11.7            | 17.8            |
| Net NPL/total net loans  | 8.5             | 9.8             |
| Gross NPL/total gross loans  | 15.7            | 16.9            |
| Net NPL/core capital   | 24.5            | 31.7            |
| Value adjustment of total loans/total gross loans                        | 9.6             | 9.1             |
| Value adjustment of NPL/gross NPL  | 50.9            | 47.2            |
| Sum of large exposures/core capital                                      | 37.4            | 43.4            |
| ROA  | 1.0             | 1.1             |
| ROE  | 4.6             | 5.4             |
| Interest margin/average balance sheet assets                             | 5.1             | 4.6             |
| Interest margin/total operational revenue                                | 62.6            | 64.3            |
| Non-interest expenses/total operational revenue                          | 87.5            | 84.8            |
| Non-interest expenses/average balance sheet assets                       | 7.1             | 6.1             |
| Wage expenses/non-interest expenses                                      | 28.0            | 28.9            |
| Liquid assets/total balance sheet assets                                 | 41.5            | 35.1            |
| Liquid assets/short-term liabilities                                     | 63.6            | 56.4            |
| Liquid assets (narrow definition)/total balance sheet assets             | 31.9            | 21.1            |
| Liquid assets (narrow definition)/short-term liabilities                 | 48.9            | 33.9            |
| Loans (FX and FX-indexed)/total loans                                    | 84.2            | 79.4            |
| Deposits (FX and FX-indexed)/total deposits                              | 75.4            | 79.1            |
| Loans/deposits   | 92.3            | 108.5           |
| Loans (FX and FX-indexed)/deposits (FX and FX-indexed)                   | 103.2           | 109.0           |
| Deposits/balance sheet total   | 60.2            | 59.4            |
| FX liabilities/total liabilities   | 75.9            | 78.9            |
| Total net open FX position/core capital                                  | 3.1             | 3.4             |
| Off-balance sheet items/total balance sheet assets                       | 106.7           | 97.7            |
| Off-balance sheet items classified/total balance sheet assets classified | 43.3            | 33.9            |

\* The methodological approach to banking sector supervision is used to calculate indicators.

Source: National Bank of Serbia.

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