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Note

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The Economics Department carried out the drafting, English version and technical coordination.

Abbreviations

ALB	Leasing and Non-banking Financial Services Association
BIS	Bank for International Settlements
BSE	Bucharest Stock Exchange
CCR	Central Credit Register
CDS	credit default swaps
CEE	Central and Eastern Europe
EBIT	earnings before interest and taxes
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
EM	emerging markets
ESA	European System of Accounts
EU	European Union
EUROSTAT	Statistical Office of the European Union
FDI	foreign direct investment
FIC	Financial Investment Company
FMA	Fund Managers Association
GDP	Gross Domestic Product
GEO	Government Emergency Ordinance
GVA	gross value added
HH	Herfindahl Hirschmann index
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
ISC	Insurance Supervisory Commission
MPF	Ministry of Public Finance
NBFI	non-bank financial institutions
NBR	National Bank of Romania
NIS	National Institute of Statistics
NSC	National Securities Commission
NTRO	National Trade Register Office
OECD	Organisation for Economic Cooperation and Development
PPSSC	Private Pension Scheme Supervisory Commission
ReGIS	Romanian electronic Gross Interbank Settlement
ROA	return on assets
ROBOR	Romanian Bid Offered Interest Rate
ROE	return on equity
SaFIR	Settlement and Financial Instrument Registration
SENT	System for Electronic Net Settlement run by TransFonD
SMEs	small- and medium-sized enterprises
STFD	short-term foreign debt
WEO	World Economic Outlook

Contents

CHAPTER 1. OVERVIEW

Financial stability has faced significant challenges since the release of the previous *Report*, but remained robust. Bank capitalisation has increased to comfortable levels and adequate liquidity was maintained. These developments are the result of the efforts undertaken by credit institutions, while the National Bank of Romania's demands in this field and the signing of the financing arrangement by the Romanian authorities with the European Union and the International Monetary Fund, along with the commitments assumed under the European Bank Co-ordination Initiative by the nine largest foreign banks operating in Romania, were the major catalysts of these efforts.

Bank asset quality has recorded some worsening, with credit risk remaining the main vulnerability of the banking sector. Foreign-currency indebtedness is an ongoing concern of the authorities in terms of both prudential management of the existing loan stock and prevention, via an adequate and coordinated regulation at EU level, of resuming a fast growth of foreign exchange loans to the detriment of leu-denominated loans, especially regarding the unhedged borrowers. In response to these risks, the banking system stepped up its provisioning efforts, along with those aimed at ensuring capital adequacy. As a result, the provision coverage of unadjusted exposure of non-performing loans (principal and interest overdue for more than 90 days) remained above 90 percent.

Non-financial companies' capacity to continue their activity properly is constrained by the prolonged and deep economic contraction, as well as by liquidity constraints arising from the functioning of these entities in the context of supply chains additionally affected by unfavourable sectoral developments. There is a risk that such constraints could be passed through from one business partner to another and even be magnified. In turn, households have a significant degree of indebtedness, which affected, for some household categories, the possibility of properly servicing their debt in the context of economic adjustments induced by the recession.

The short-term outlook of the Romanian financial system hinge largely upon the restoration of confidence in the economy, the sustainable recovery of economic growth, as well as upon the international developments. In this regard, a tightening of lending standards in a pro-cyclical manner was noticeable, in line with the increase in provisions and with the global trend of decreasing banking intermediation over this period (also illustrated by lower vulnerability suggested by the loan-deposit ratio in aggregate terms) and some signs of a revival of lending were manifest, particularly as regards larger non-financial companies and, to a lower extent, real-estate loans granted to households. The NBR's prudential approach, also highlighted in the previous *Report*, continued and diversified via adequate liquidity injections, firm bank supervision and an improved prudential regulatory framework.

The world economy deteriorated significantly in 2009 (down 0.6 percent), its first contraction in 30 years, while the EU economy saw a sharper fall (more than 4 percent), the important government stimulus packages notwithstanding.

The Romanian economy followed a similar trend as the other countries in Central and Eastern Europe, except Poland. The economic contraction was sharp (7.1 percent) and the fiscal deficit widened substantially (to 7.4 percent of GDP). There was no need for public funds to support the banking sector, as the noticeable increase in capitalisation of credit institutions in Romania was fully achieved through the efforts undertaken by shareholders, also in response to the NBR's demands. The need for adjusting public expenditures in terms of both volume and structure will put indirect pressure on the financial system in the short run. However, fiscal consolidation is essential given the intolerance of international financial markets to substantial budget deficits and swift rises in public debt stock.

The current account deficit adjustment (from 11.6 percent of GDP in 2008 to 4.5 percent of GDP in 2009 and its maintenance close to this level in 2010 H1) helped to markedly reduce one of the vulnerabilities of the Romanian economy when the crisis broke out. At the same time, external deficit financing was achieved almost entirely via foreign direct investment (FDI), even though their volume decreased by about 45 percent against 2008. Medium-term forecasts point to an increase in the degree of FDI coverage for the current account deficit. Moreover, a substantial part of external private debt was rolled over for increasing maturities, to larger-than-initially-forecasted levels, despite the decline in banking intermediation at global level, and the short-term external debt stock, along with its share in total external debt, narrowed considerably, thus contributing to the reduction of the Romanian economy's second vulnerability since the crisis broke out. The largest contribution to the narrowing of the external deficit came from the systemically-important companies in the real sector. As far as these companies were concerned, after their trade deficit exceeded EUR 6 billion in 2008, in 2009 their external transactions posted a slight surplus of EUR 0.1 billion.

The companies that benefited from FDI weathered the crisis better than the rest of the economy. Their performance indicators deteriorated at a slower pace. These companies may contribute to a more sustainable convergence to the euro zone, as (i) they proved their structure allows them to withstand shocks more efficiently, (ii) they play a key role in generating value added in the economy (almost 40 percent of value added of non-financial companies) and (iii) account for more than 75 percent of Romania's exports. Nevertheless, these companies might have a smaller contribution to the short-term resumption of domestic lending, as in 2009 they showed a propensity for external financing (up by more than 20 percent), while their resort to domestic bank loans declined by almost 2 percent.

Total indebtedness stock of companies and households with financial institutions (banks and non-bank financial institutions-NBFIs, both domestic and foreign) rose slightly in real terms (December 2008 - June 2010). The debt-to-GDP ratio reached 63 percent in June 2010, particularly due to the base effect following the economic contraction. In June 2010, corporate and household financial indebtedness totalled about lei 310 billion, with domestic banks accounting for two thirds, local NBFIs for 9 percent and external creditors for 24 percent. Since the outbreak of the crisis, the loan supply for companies and households tightened in terms of both cost and volume, in line with a similar tightening in the region, with variations depending on the source. On the other hand, the demand for loans declined markedly. Against this background, the exposure of banks operating in Romania fell steadily – in annual real terms – from September 2009 to May 2010, with the first positive real annual increase (+2 percent) being recorded in June 2010, whereas the NBFIs' exposure decreased substantially. On the other hand, the loans granted by external lenders grew by 20 percent (December 2008 - June 2010).

An important vulnerability mentioned in the previous *Report*, the large share of short-term foreign debt, registered a decline. From December 2008 to June 2010, the share of short-term private external debt in total external debt narrowed by 11 percentage points (to about 17 percent from almost 28 percent).

The non-financial companies' sector recorded unfavourable developments in 2009. The persistence of financial constraints on debtor firms is attested by the decreasing capacity of net receipts (earnings before interest and taxes, EBIT) to cover interest costs. Companies' capacity to maintain a steady stream of cash flows is subject to constraints, largely driven, in case of some firms, by banks' credit lines becoming less readily accessible and by lower profitability. SMEs, especially micro-enterprises, were most affected by the diminished access to credit, as they were perceived by banks as having a higher credit risk than larger companies. The non-performing loan ratio generated by SMEs surpassed 10 percent (June 2010), whereas for corporations this indicator stands at about 2.5 percent. These developments confirm the expectations mentioned in the previous *Report*. Foreign-currency indebtedness of the companies having resorted to foreign currency borrowings is high (about 75 percent of equity) and rising. The highest risk in the short run is that, assuming a modest and relatively delayed economic recovery, along with the persistence of arrears of the government budget, the liquidity constraints arising from the functioning of these entities in the context of supply chains additionally affected by unfavourable sectoral developments might be exacerbated; therefore, such constraints could be passed through from one business partner to another and even be magnified.

According to the economic theory related to the functioning of the credit channel, larger companies appear to have used their position to enjoy relatively easier conditions for invoice payments, their behaviour putting pressure on small and very small companies in particular. During the economic boom of 2007-2008, corporations succeeded to lower slightly the duration of collecting claims from their clients. Over the same period, the smallest enterprises (micro-enterprises) faced a worsening of their claims collection period by around 15 percent. In 2009 H1, amid increased difficulties, the average duration of claims collection went up across the Romanian economy, increasing by 30 percent in the case of SMEs, as they felt the strongest shock, while in case of corporations the increase equalled merely 15 percent.

The household sector also put pressure on financial stability: being significantly indebted, the household sector may withstand with greater difficulty potentially unfavourable developments. Banks' portfolios witnessed some deterioration as regards this type of debtors (the non-performing loan ratio in this sector rose from 2.4 percent in December 2008 to 6.9 percent in June 2010). Households' net wealth declined in 2009, due mostly to the impact of the fall in prices of non-financial assets (real estate). Net wealth was also affected by the faster depreciation of the reselling value of assets purchased through credit (consumer goods and real estate) compared to the amortisation of related liabilities (debt contracted to purchase those assets).

The construction sector and real estate assets performed poorly in 2009, and there are indications that this trend might continue in 2010 H1. Mortgage (or mortgage-backed) bank portfolio worsened. In this case, the non-performing loan ratio increased from December 2008 through June 2010 from about 1 percent to 8.9 percent (for corporate loans) and from 0.8 percent to 4.5 percent (for household loans). The high share of real estate assets in companies' and households' balance sheets raises concerns about the effect of a possible further drop in these asset prices.

Foreign-currency lending from domestic and financial institutions from abroad is significant. Currency risk requires concerted solutions at EU level for both home and host countries in order to deter foreign exchange lending. These solutions should be applicable to parent banks and to their local subsidiaries alike, as well as to debtors. However, these solutions must be implemented differently, by types of loans, considering that: (i) the already significant stock of foreign-currency loans does not allow sharp and significant adjustments in the short term, hence an adequate prudential management is needed, (ii) some types of foreign-currency loans are justified from an economic point of view (for example, credit to companies with export activity, or other types of loans granted to hedged corporate borrowers). Moreover, the possibility of banks to ensure domestic currency financing over long term is limited by the small size and the short maturity of domestic savings, and therefore, efforts are needed to develop local currency markets over time.

Banks' balance sheets saw several structural changes. External resources (accounting for one third of aggregate liabilities) decreased slightly during 2009, in line with the regional trend. This caused banks' dependence on external financing to decrease. Concurrently, and in the context of financial deleveraging, parent banks promoted a deeper involvement of their subsidiaries in collecting resources from the local markets. Despite the reduction in aggregate loans relative to bank deposits, short-term deposits further prevailed (96 percent of total corporate and household deposits), but the asset-liability mismatch by maturity persisted overall. Credit institutions' own sources increased due to: (i) capital increases performed by shareholders, (ii) new subordinated loans granted by parent banks and (iii) channelling into reserves a substantial share of the 2008 profit. On the assets side, the fast dynamics of government credit partly counterbalanced the contraction in stock of loans granted to the private sector. The persisting worldwide uncertainties and home banks strategy reassessments could enhance the already clear changes in the balance sheets of credit institutions in Romania. The non-performing loan ratio (for loans overdue for more than 90 days – the most widely used indicator in reports worldwide, similar to that used in international comparisons and by IMF) followed an uptrend, rising from 2.8 percent in December 2008 to 10.2 percent in June 2010, slightly above the average for the region. Loans falling under "doubtful" and "loss" also followed a rising trend, reaching 15 percent at the end of 2009, but their pace slowed considerably in 2010. The loan loss provision coverage is above the EU average.

The risk to affect the loan supply assuming a substantial reduction in rolling over external liabilities, which was perceived as important when the crisis broke out, has mitigated. For households and companies, the ratio of loans to deposits improved from December 2008 to June 2010 (from 122 percent to 117 percent). This evolution is in line with the developments in banking sectors of other emerging economies in Europe. In terms of currency, the risk associated with EUR-denominated financing is higher given the low coverage with EUR-denominated deposits from domestic saving.

Banks' capitalisation increased to comfortable levels throughout 2009 to present (14.3 percent in June 2010 against the required level of 8 percent), which facilitated absorption of shocks in the domestic economy. The financing agreement with the EU, IMF and other international financial institutions had a decisive contribution to consolidating and increasing capitalisation. At the same time, on the initiative of IMF, EC and EBRD, the parent institutions of the nine largest subsidiaries in Romania signed, on 26 March 2009, the very first commitment letters to maintain an *ex ante* solvency ratio of at least 10 percent during the period of the above-mentioned financing agreement. Furthermore, they committed themselves to maintain exposure to Romania at group level consistent with that recorded on 31 March 2009.

The results of the latest stress test to economic shocks showed that the Romanian banking sector is adequately capitalised so as to withstand adverse macroeconomic developments. Accordingly, the solvency indicator at aggregate level declines by only one percentage point over the 2010-2011 horizon (13.5 percent at end-2011, far above the minimum required level of 8 percent). According to the scenario, at end-2011, the tier one capital ratio would drop by almost 3 percentage points (versus end-2009) to 10.5 percent, a comfortable level that compares favourably to the average reported by European banking groups. This exercise was conducted concurrently with that at European level under the coordination of CEBS, the European Commission and national supervisory authorities, both of them being linked in terms of the shocks considered, although the local test ran independently.

Credit risk is a rising vulnerability, which intensified in 2009, largely in the context of the economic recession and increasing unemployment. Non-performing loans stand at a manageable level, but the current trend calls for an ongoing close monitoring and further provisioning efforts. Banks have enough resources to cover potentially unexpected losses from credit risk that were left uncovered by the existing provisions and after the foreclosure on collateral. In the short term, the current loan quality developments are expected to carry on.

Liquidity risk was mitigated in 2009 given (i) the parent banks' commitment of the nine largest foreign-owned credit institutions to maintain exposure to Romania, (ii) the external financing agreements with EU, IMF and other international financial institutions, (iii) the NBR's liquidity-providing operations and (iv) banks' efforts to raise their internal financing sources and increase their holdings of government securities that are eligible assets for potential refinancing operations. The structure of domestically-attracted resources (largely in the short term) and the still significant presence of external financing remain the major vulnerability sources in case of possible liquidity crunches at global level or specific to parent banks.

Market risk has a moderate impact on banks' own funds. Adequate management of interest rate risk and the regulations on the net foreign currency position helped reduce banks' exposure to adverse market reactions.

In 2009, financial results of the banking sector were positive, but modest. In the early months of 2009, the rise in costs associated with specific credit risk provisions weighed heavily on the profitability of credit institutions, but most of them saw a turnaround in 2009 H2. In 2010 H1, profitability fell into negative territory, due mostly to the necessary increase in provisioning costs. Banks initiated cost control measures by both rescaling their territorial networks and delaying or scaling down investment programmes. The most frequently-used strategies that banks employed in order to improve their short-term financial position were to raise interest margins for lei and foreign currency, to sell fixed assets and to purchase government securities.

The other components of the financial system were affected by the financial crisis as well. The insurance market witnessed a slowdown in the growth rate of general insurance policies and a contraction in life insurance policies. The major risks are the persistence of a fragile economic environment and high costs on the car insurance segment.

Private pension funds continued to expand their financial asset portfolios and faced no major risks relative to investments. Contribution receipts declined somewhat during 2009 owing to the economic contraction, but returned to the upward trend in 2010 H1. Behind the positive performance stood the increase in contributions (from 2 percent to 2.5 percent in March 2010) and the relative stabilisation of the economy.

Non-bank financial institutions reduced their activity in 2009 as a result of (i) worsening of the loan portfolio quality, (ii) the less readily-available external financing amid international financial tensions and (iii) the decline in loan demand, as these entities provided a large amount of financing for car purchase, but car sales contracted markedly in the recessionary climate. The losses incurred as a result of higher provisioning costs required massive capital injections to prevent own funds from diminishing. The non-performing loan ratio remained high.

Investors' perception towards the risk attached to local capital market investments improved somewhat during 2009, but deteriorated again in 2010 Q2 given the unstable global environment following the sovereign debt crisis. The favourable performance in 2009 occurred against the backdrop of low liquidity, pointing to a decrease in volatility compared to end-2008 and the early months of 2009 rather than a resumption of the upward path. The local capital market, part of the European financial market, is sensitive to economic and financial developments in the region and around the world.

ReGIS payment system functioned normally during 2009 and 2010 H1. The temporary liquidity shortages in the money market were accommodated by the central bank via open market operations, so that interbank financial flows were not subject to disruptions.

The major challenge to financial stability remains credit risk. The identified actions should envisage:

1. a further improvement of the prudential regulation framework with a view to ensuring adequate management of the risks posed by household indebtedness;
2. continuing to deter foreign-currency lending, taking into consideration the banks' currently limited capacity to attract domestic currency-denominated resources in the long term and the difference between hedged and unhedged borrowers;
3. reviewing the policies on guaranteeing bank exposures with real-estate collateral at updated levels in order to achieve a better mix between the various lending criteria; and
4. improving the database managed by the Central Credit Register within the National Bank of Romania in order to gather additional risk information.

CHAPTER 2. INTERNATIONAL ECONOMIC AND FINANCIAL ENVIRONMENT

World economy posted a significant deterioration in 2009 and its recovery is expected to be uneven. The performance of the EU is foreseen to be one of the weakest. Monetary and fiscal stimuli have been considerable, but the lack of sustainability of public debt developments and the risk of higher prices bring into discussion the initiation of a gradual withdrawal of stimuli.

For the first time since 1980, world economic growth fell into negative territory (-0.6 percent), with the euro area economy declining 4.1 percent[1]. Trade has been adversely affected, dropping more than 20 percent at global level and 16 percent at European level, respectively.

A recovery, albeit uneven, of global economic growth is expected in 2010. It is estimated that the performance of EU Member States will be among the weakest, with a growth of 1 percent against 4.6 percent, on average, at world level. The recovery is envisaged to be generated by both the fiscal packages taken by the authorities and the rebound in the activity of the private sector, whose viability however, remains surrounded by uncertainties in the short run.

Government stimulus was significant in 2009: average fiscal deficit at EU level reached almost 7 percent of GDP and public debt as a share in GDP increased by 12 percentage points (and an additional rise by around 6 percentage points is foreseen for 2010). These developments are not sustainable and therefore call for fiscal consolidation measures in most European economies. The withdrawal of fiscal stimuli may hamper the resumption of economic growth in Romania's main trading partners and could adversely affect demand for Romanian exports in the future.

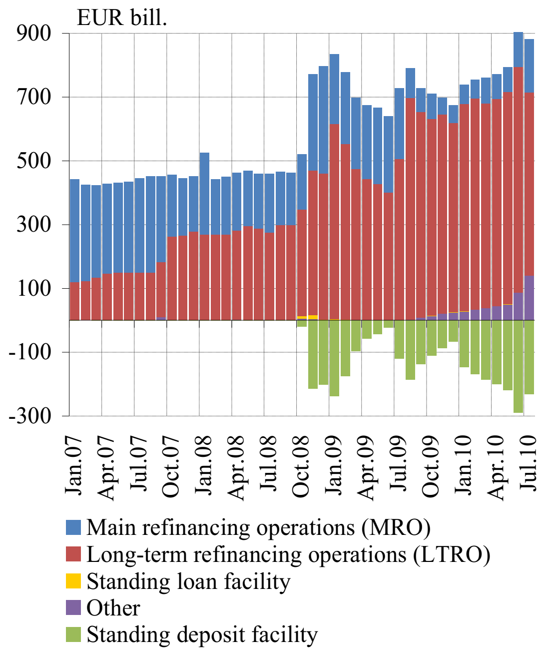
The international financial system received a strong support from monetary and fiscal authorities in 2009. Central banks in many developed economies resorted to extraordinary policy measures to provide liquidity[2]. Monetary policy rates dropped to historical lows (1 percent in the case of the single European currency and near 0 percent in the case of the US dollar).

Given that the standard monetary policy easing measures have been almost exhausted, some central banks switched from the yield-based approach to a quantitative one. For example, in the euro area, the measures implemented led to an increase in the volume of liquidity provided to the market (from approximately EUR 460 billion in September 2008 to around EUR 900 billion in July 2010, Chart 2.1). Hence, the central banks of those advanced economies saw a significant increase in the size of their balance sheets and in the maturities of their asset holdings.

[1] WEO Update, July 2010.

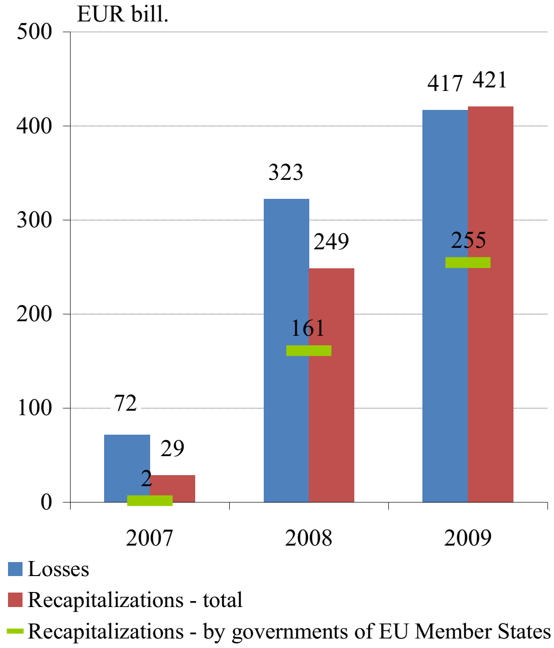
[2] For example, the measures implemented by the ECB to boost liquidity envisaged: to provide unlimited liquidity at fixed rate for all refinancing operations; to extend the longer-term refinancing operation maturities (from up to 3 months in the pre-crisis period to 1 year); to expand the list of eligible collateral; to ensure financing in other currencies (US dollars, Swiss francs, etc.) by establishing financing programmes between the ECB and other central banks; to purchase covered bonds.

Chart 2.1. Volume of operations performed by the ECB (end of the month)



Source: Bloomberg

Chart 2.2. Value of losses and recapitalisations in EU Member States



Source: Bloomberg

Banks used these additional resources asymmetrically. As regards the ECB, Greek credit institutions resorted extensively to the existing facilities, with the volume of refinancing operations exceeding 20 percent of GDP in December 2009. Thus, the phasing-out of these measures should be initiated by also taking into account the fact that some bank groups depend on external financing. In early 2010, the measures initiated by the ECB led to a further expansion in the financial support provided to banks.

In turn, fiscal authorities of some EU Member States took, in 2009 as well, measures aimed at underpinning the banking sector. This source accounted for over 60 percent of bank recapitalisations. Government measures allowed banks to cover, at end-2009, their losses via the new capital injections (Chart 2.2).

The banking sector in the CEE countries is dominated by bank groups originating in the euro area. This fact is also reflected in the homogeneity of the degree of vulnerability to regional shocks, with the common lender turning out as an important issue (Table 2.1). In 2009, the degree of contagion via the bank channel remained broadly unchanged for CEE countries (except for Russia, where the index of regional importance decreased). Poland, the Czech Republic, Romania and Russia remain the countries which may exert the strongest impact on the CEE region (via the common lender channel), due to the high exposure of euro area banks to these countries.

Table 2.1. Matrix of the importance of the transmission channels[3] of shocks calculated by using indirect exposures of the main bank groups as reported to the BIS (2010 Q1)

	BG	HR	CZ	HU	PL	RO	RU	TR	UA	Regional importance
BG		3	2	2	2	7	1	5	3	25
HR	7		8	8	4	9	4	1	8	49
CZ	8	18		11	6	14	7	6	12	83
HU	6	14	8		5	9	5	3	8	60
PL	13	15	9	10		14	11	13	13	98
RO	18	12	9	8	6		5	10	9	78
RU	6	10	7	7	7	8		7	9	62
TR	15	2	4	2	6	11	5		6	51
UA	3	4	3	3	2	4	2	2		22
Sensitivity to regional shocks	77	78	50	50	39	76	41	48	68	

Source: BIS, NBR, NBR calculations

[3] A high value of the indicator implies a high degree of contagion. The sums on rows indicate the importance of the respective country in the transmission of shocks at regional level, while the sums on columns show the vulnerability of the respective country to regional shocks. The matrix indicates the importance of the transmission channel between two countries based on the exposure to the common lender, taking into account only the bank channel and assuming an even transmission of the shock between the respective countries. The lender countries taken into account were: Austria, Greece, France, the Netherlands and Italy. The selection criterion was the importance of those countries' bank groups for the Romanian banking sector. The method used in calculating regional exposures is based on the BIS definitions regarding bank exposures and is employed by Fratzscher, M., in "On Currency Crises and Contagion", ECB Working Paper No. 139, April 2002.

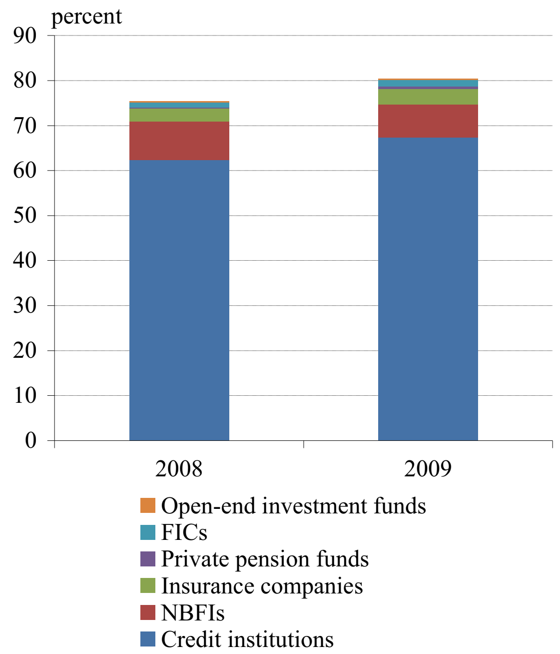
CHAPTER 3. FINANCIAL SYSTEM AND ITS RELATED RISKS

3.1. Structure of the financial system

Financial intermediation in Romania further expanded in 2009, but the growth rate slowed down markedly due to global financial turbulences that hindered financial market activity and domestic economy. Heightening risks required capital inflows, cost restructuring and a better management of liquidity with a view to preserving financial system stability. The domestic financial sector was closely connected to the external one, chiefly the European financial sector, via capital or financing relations and, therefore, its development and the evolution of risks hinged largely on the financial system stability.

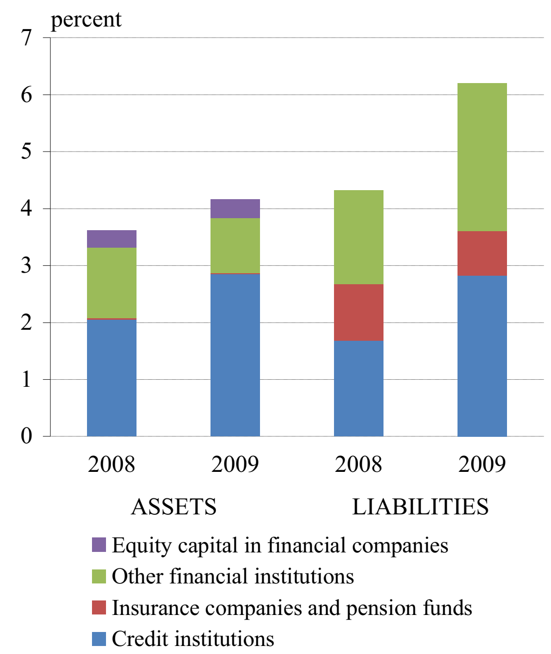
The level of financial intermediation, as a share to GDP, went up in 2009, but this development was also bolstered by the economic activity contraction, net assets of the financial sector posting a nominal increase of only 4.1 percent. Credit institutions and non-bank financial institutions (NBFIs) further accounted for more than 90 percent of the financial sector, while private pension funds reported the fastest dynamics (Chart 3.1.). At present, they hold an insignificant share in the financial system yet they benefit from the participants' ongoing contribution flows and, over a medium-time horizon, they will be able to manage a large volume of financial assets. However, the contribution receipts may decrease in the short run as a result of the fragile economic context and fiscal imbalances. The domestic financial system is dominated by credit institutions but the insurance sector and equity investment sector enjoy a high development potential in step with the convergence of domestic financial markets with the European ones.

Chart 3.1. Structure of the financial system (net assets as a share to GDP)



Source: NBR, PPSSC, MPF

Chapter 3.2. Exposure of credit institutions to the domestic financial sector



Source: NBR

The financial sector is highly sensitive to adverse developments as it attracts short-term resources and makes medium- and long-tern placements. This type of activity is not consistent for all financial institutions, yet it defines, to a certain extent, financial intermediation. The shocks to the domestic financial system may be exogenous, generated by foreign financial markets or the real sector, and endogenous. Endogenous shocks may be triggered by one or several market players and may spread across the financial sector by sheer contamination, as a result of lower confidence in financial institutions, or by balance-sheet and off-balance-sheet exposures, resulting in asset depreciation, cash withdrawals, payments or equity investment-related losses.

Credit institutions feature a low balance-sheet exposure in relation to the other financial institutions (Chart 3.2). This exposure widened in 2009, mainly on account of the pick-up in money market activity, substantial bank deposit interest rates and the preference for liquidity amid high aversion to risk. However, exposures were still contained and credit institution strong capitalisation and alternate liquidity resources, i.e. government securities or financing lines, may soften the possible shocks.

The exposures of financial institutions to the capital market are irrelevant, except for insurance companies, but in this case too the largest part of investment risk is passed onto customers. The indirect risk of insurance policy redemption was manifest in 2009, yet it did not impair the financial stability of life insurance companies and the rebound of the capital market starting with 2009 Q2 could result in larger fund inflows in the period ahead.

Table 3.1. Number of financial institutions operating in Romania*

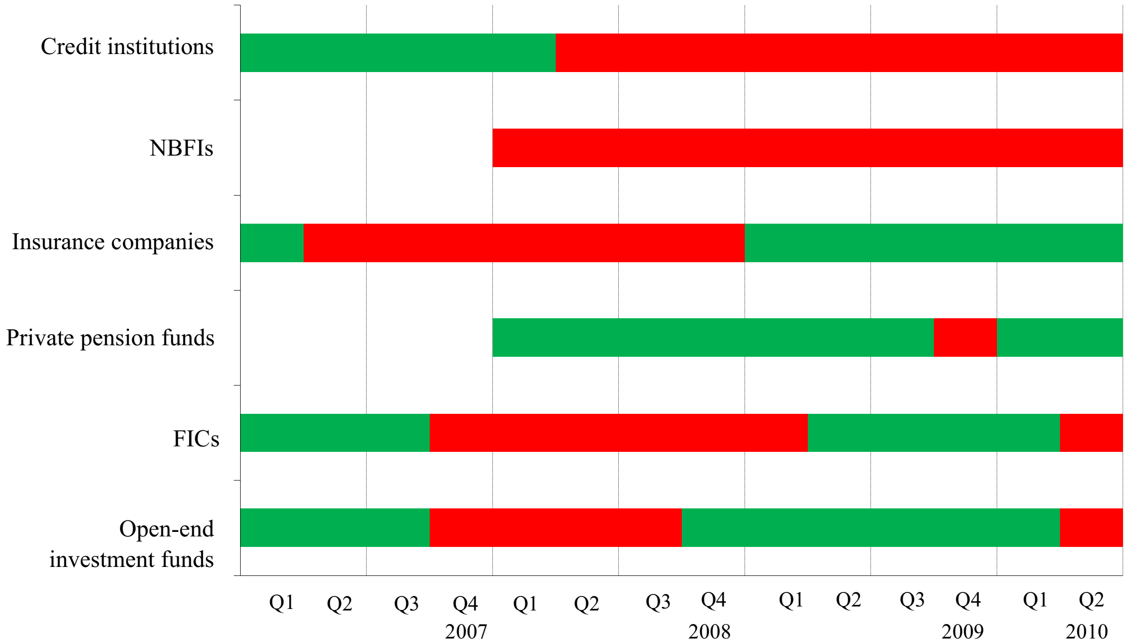
	2008	2009	Evolution
Credit institutions	43	42	↓
Insurance companies	44	45	↑
Insurance brokers	459	510	↑
Pension funds	23	25	↑
Open-end investment funds	54	52	↓
FICs	5	5	→
Financial investment services companies	66	64	↓
Non-bank financial institutions (General Register)	238	228	↓
Non-bank financial institutions (Entry Register)	4,513	4,802	↑

Source: NBR, NSC, ISC, PPSSC
*) end of year

The number of financial institutions remained almost unchanged in 2009. The tensions in the financial and economic sectors affected market players but mergers, acquisitions or the cessation of activity enabled only a sectoral consolidation not of the entire financial system. It is the case of the two mergers between private pension funds (Pillar II). The number of insurance brokers and small-sized NBFIs increased, remaining relatively unchanged in the case of other financial institutions (Table 3.1).

The turmoil on international financial markets was first manifest on the capital market, leading to higher volatility, lower liquidity level and the drop in the quotations of financial instruments. Due to the structure of the domestic financial system and the low exposures between sectors, these adverse developments on the capital market did not have a direct impact on the other financial institutions. In the next stage of global financial turmoil, the contraction of liquidity in the world financial system and the downturn in economic activity in the developed countries, especially for Romania’s trade partners, caused the fall in the volume of lending and the recession of domestic economy, and the gloomy expectations of players in the financial sector and the real sector deepened the imbalances. Therefore, the quality of loan portfolios held by credit institutions and NBFIs worsened and the rise in unemployment and lower incomes hindered the contributions to private pension funds in the latter part of 2009 (Chart 3.3).

Chart 3.3. Risks of financial institutions[4]



Note: 1. The red segment represents the mounting of risks compared to the previous quarter.
2. The green segment represents either the mitigation or the maintenance of risks at the previous quarter's level.

Source: NBR, BSE, ISC, PPSSC, MPF, www.kmarket.ro

Insurance companies were affected by the economic recession, but the impact was not that strong in terms of financial stability. Due to the policy regarding the market share expansion, the high costs on the segment of car insurance policies and the significant rise in technical reserves set up for Civil Auto Liability insurance policies (according to the legislation issued by the ISC), insurance companies reported adverse developments of profitability prior to the onset of the global financial turmoil. The economic recession was behind the slowdown of the insurance market expansion, the life insurance segment recording even a contraction, but the expenditure restructuring, the large returns on investment and the capital inflows pushed up profitability indicators starting with 2009 H1. Credit institutions and NBFIs raised their equity capital so as to prevent the worsening of their loan portfolios which would have eroded their financial stability.

The evolution of risks illustrated in Chart 3.3 does not show the magnitude of the movements, and the heightening of risks does not necessarily mean entering a period of financial instability. The shock to the capital market was strong upon the onset of the global financial crisis, and the subsequent rebound was manifest first at the level of investment funds and afterwards for stock exchange quotations. Concurrently, the heightening of credit risk in the economy was moderate and the low starting base maintains the quality of loan portfolios outside the significant risk area. NBFIs' portfolios were more exposed to risk compared to other credit institutions due to the much larger share of consumer loans in total exposures.

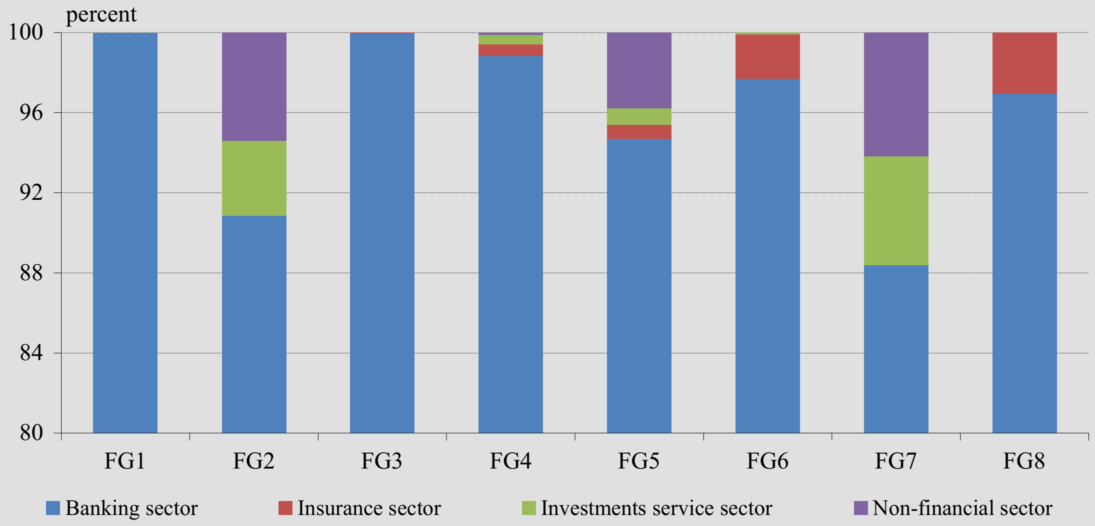
[4] With a view to assessing risks, the data used regarded the quality of loan portfolio, the profitability of financial institutions, net asset developments, fund flows, volatility of financial asset prices, and returns on managed assets.

Box 1. Financial groups in Romania composed of one credit institution, Romanian legal entity and the entities in which they hold equity stakes

There are two types of financial groups conducting business in Romania. The most relevant ones include subsidiaries ("daughter" companies) of some foreign "parent" institutions, which together with the entities developed by the "daughter" companies make up group structures in terms of the national jurisdiction, i.e. sub-group structures belonging to certain European or international groups. Another category of group structures developed around certain credit institutions, Romanian legal entities that do not have foreign shareholding and hold equity stakes in other financial entities. The complexity and magnitude of group structures are low and thus they do not generate additional pressures inside the financial system.

The identified financial groups feature a high degree of activity concentration around the banking sector, which holds more than 88 percent of the group's own funds. Developments on the insurance segment and the investment services segment are modest and have a limited effect of risk diversification within the financial groups. Credit institutions hold equity stakes in other financial companies mainly to prevent the outsourcing of financial services associated with banking business (e.g. insurance of loans or debtors, advice services to customers or asset management) that generate additional income rather than expand intensively in other financial sectors.

Structure of own funds of financial groups in Romania as at 30 July 2009



Note: FG = financial group

Source: NBR questionnaire

The concentration of financial groups around the banking sector does not pose risks associated with the organisational complexity or the contagion from the other group members towards credit institutions. For the same reason, the risk of wider imbalances manifest in the case of some financial group members and that of subsequent destabilisation of the domestic financial system are low.

3.2. Banking sector

3.2.1. Structural developments

In 2009 and 2010 H1, the structure of the Romanian banking system posted no significant changes in terms of the number of credit institutions, shareholding and concentration degree. Due to the economic crisis, credit institutions intensified their efforts to reduce costs by closing down unprofitable units and reducing labour. Financial intermediation is still below the European average, as well as below the values reported by the other EU Member States. The moderate concentration degree of the Romanian banking system, standing below the EU average, had continued its downward trend for four years until the end of 2009 and then entered a slightly upward course in 2010 H1.

In 2009 and 2010 H1, the structure of the Romanian banking system featured no significant changes[5] (Table 3.2).

Table 3.2. Structural indicators of the Romanian banking system

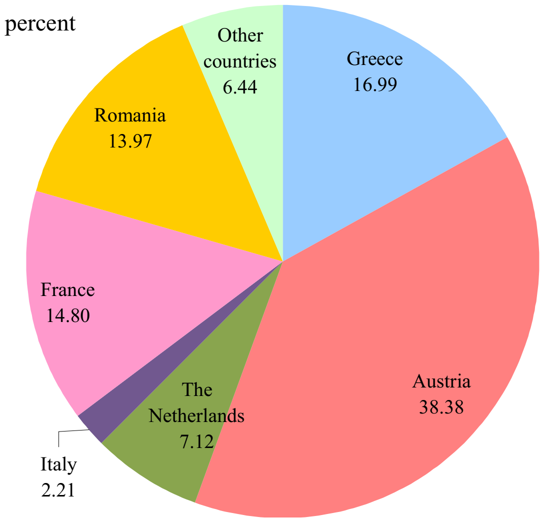
	2003	2004	2005	2006	2007	2008	2009	2010 Q1	2010 Q2
Number of credit institutions	39	40	40	39	42	43	42	42	42
Number of banks with majority private capital	36	38	38	37	40	41	40	40	40
Number of banks with majority foreign capital, *of which:*	29	30	30	33	36	37	35	35	35
-Foreign bank branches	8	7	6	7	10	10	10	10	9
Assets of banks with majority private capital/Total assets (%)	62.5	93.1	94	94.5	94.7	94.6	92.5	92.8	93.2
Assets of banks with foreign capital, including foreign bank branches/Total assets (%)	58.2	62.1	62.2	88.6	88	88.2	85.3	85.7	86.1
Assets of top five banks/Total assets (%)	63.9	59.2	58.8	60.3	56.3	54.3	52.4	53.2	53.1
Herfindahl-Hirschmann index	1,264	1,120	1,124	1,171	1,046	926	857	865	874

Note: end-of-period data.
Source: NBR

On 30 June 2010, banks with Austrian capital accounted for the largest market share, followed by banks with Greek capital (Chart 3.4), similar to the prior year. In terms of the country of origin of the capital invested in Romanian credit institutions, no significant changes were reported, Greece being still in the lead (Chart 3.5).

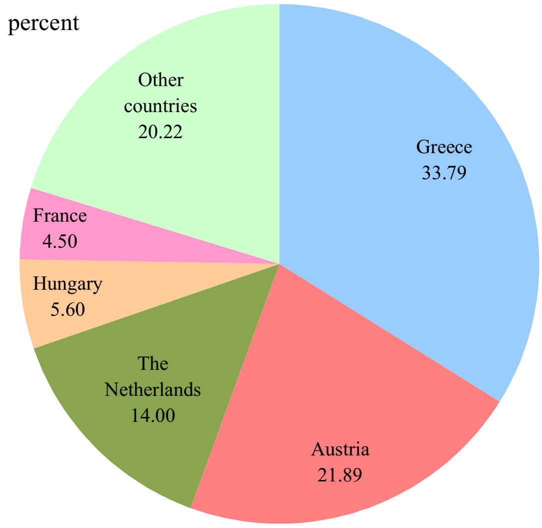
[5] The changes in the structure of the Romanian banking system in 2009 include: the change in the status of Citibank Romania, which was converted from a Romanian legal entity to a foreign bank branch, the closure, in August, of the Bucharest branch of Depfa Bank, the start of banking activity, in November, by Banca Comercială Feroviara, an institution with majority domestic capital and the merger, in December, between Raiffeisen Banca pentru Locuințe and HVB Banca pentru Locuințe through the absorption of the latter. In 2009, 18 foreign credit institutions notified the NBR about their intention to directly conduct financial services on the territory of Romania.

Chart 3.4. Market share of credit institutions by structure of shareholding as at 30 June 2010



Source: NBR

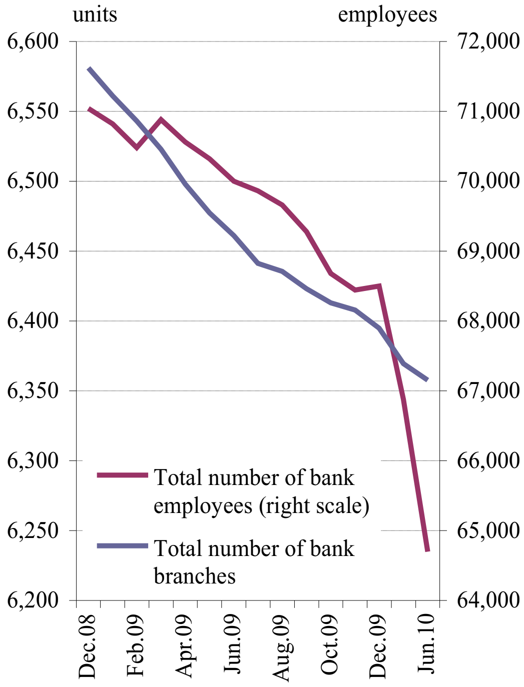
Chart 3.5. Structure of credit institutions' share capital by country of origin as at 30 June 2010 (percent in total foreign private share capital)



Source: NBR

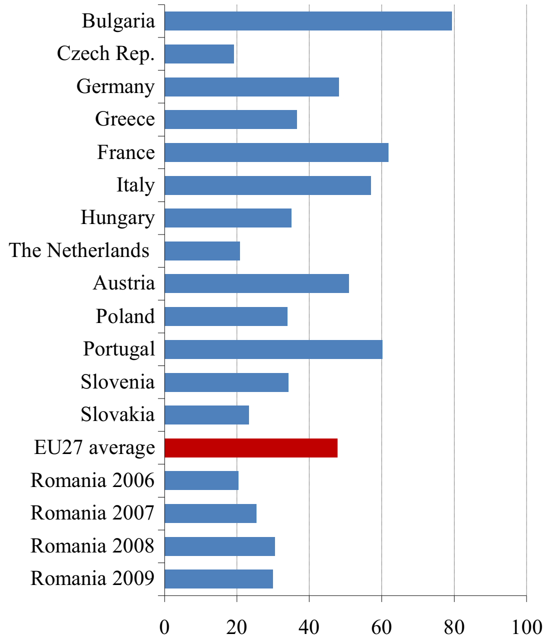
Amid the fallout from the economic crisis on lending, compared to the same year-earlier period, credit institutions cut payrolls by 2,068 and the number of units by 265 (Chart 3.6). In terms of the number of territorial units per 100,000 inhabitants, the Romanian banking system was still below the average of EU countries (Chart 3.7).

Chart 3.6. The number of bank branches and bank employees



Source: NBR

Chart 3.7. The number of bank branches per 100,000 inhabitants

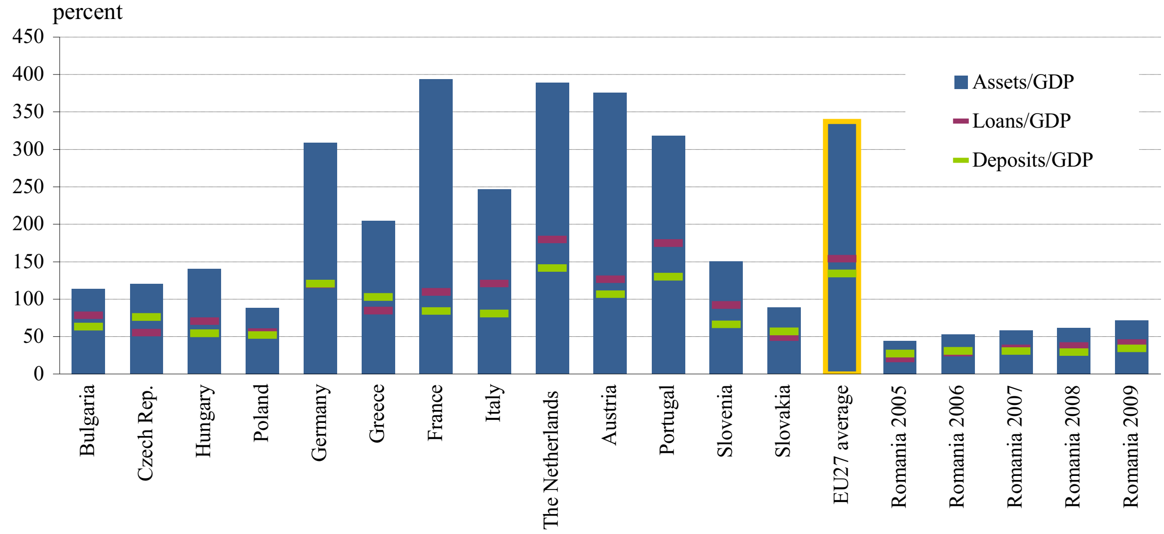


Note: For EU countries, data used refer to 2008

Source: NBR, Eurostat

Financial intermediation in Romania lagged far behind the average of EU countries and even behind the values reported by the other new EU Member States (Chart 3.8). The upward trend of financial intermediation calculated as a share of bank assets to GDP was largely bolstered, in 2008, by the fast pace of increase of non-government credit but, for 2009, the higher level of this indicator is mainly attributed to the impact of the GDP drop rather than the larger asset volume.

Chart 3.8. Financial intermediation (international comparisons)

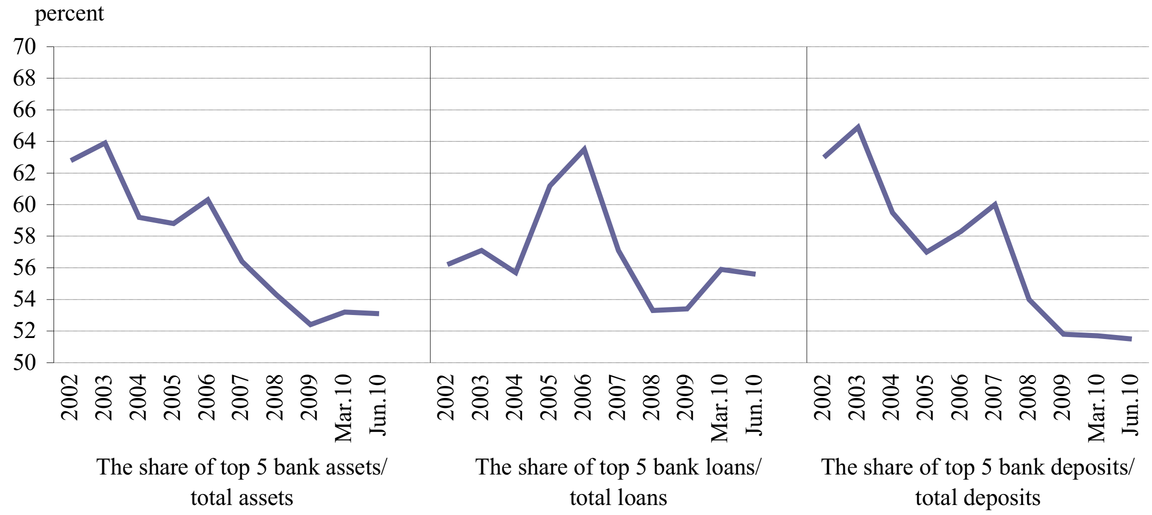


Note: For EU countries, data used refer to 2008

Source: NBR, Eurostat

The concentration of the Romanian banking system (Chart 3.9) had continued its downward trend for four years until end-2009, followed by a slightly upward path in 2010 H1.

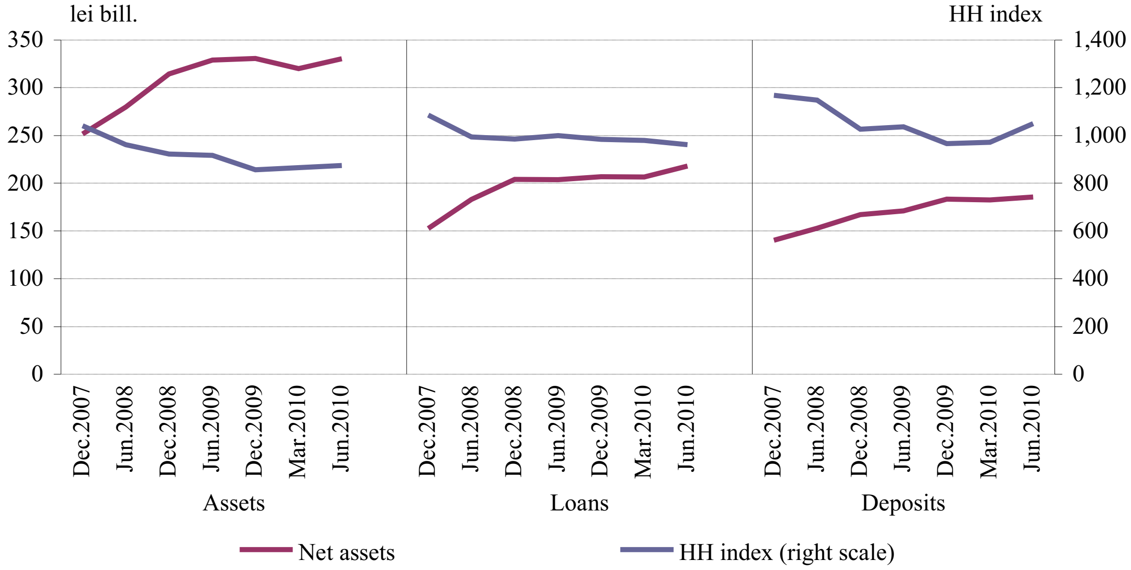
Chart 3.9. Concentration degree of the Romanian banking system



Source: NBR

Bank concentration, calculated based on the Herfindahl-Hirschmann index, was higher for deposits compared to the level calculated for assets (Chart 3.10).

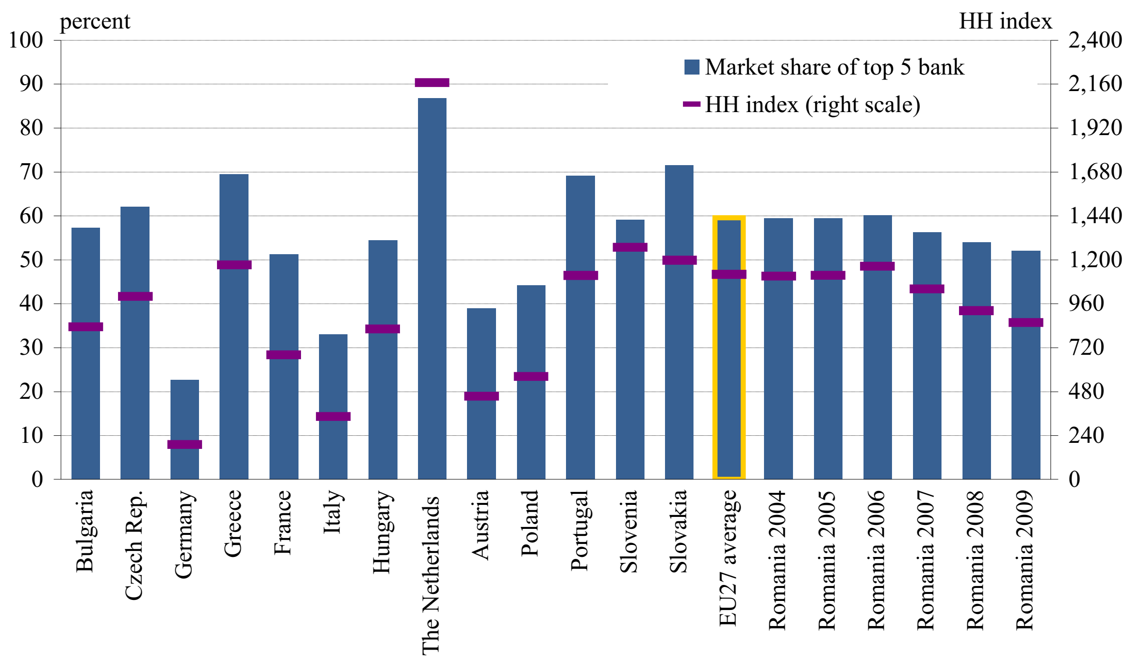
Chart 3.10. Developments and concentration degree of assets, loans and deposits



Source: NBR

On the assets side, starting with 2006, the value of the Herfindahl-Hirschmann index showed a slightly downward path, illustrative of a moderate concentration degree. The value of 857 points reported at end-2009 placed Romania below the 1,120 point average recorded in 2008 in the EU (Chart 3.11).

Chart 3.11. Concentration degree (international comparisons)



Note: For EU countries, data used refer to 2008
Source: NBR, Eurostat

3.2.2. Structure of assets and liabilities

External resources contracted slightly starting with 2009, in line with the regional trend, allowing banks to resort, to a lesser extent, to foreign financing. Parent banks supported subsidiaries in their effort to attract local market deposits. Hence, funds and deposits taken from resident natural entities went up slightly. The prevalence of short-term deposits fostered the maturity mismatch between assets and liabilities, with banks resorting to short-term resources to finance their long-term assets.

Own funds of credit institutions rose gradually on the back of additional capital increases, new subordinated loans from parent banks, as well as the allocation of a substantial amount from the 2008 profit to the reserve fund.

The placements of credit institutions were channelled to the domestic market, chiefly in the form of government securities; concurrently, after posting signs of contraction for the most part of the period under review, non-government credit saw a real increase in June 2010. The persistent uncertainties surrounding the global financial market and banks' corrective strategic response could cause further changes in the balance sheet structure of the Romanian banking sector.

3.2.2.1. Dynamics of bank assets

Against the unfavourable environment induced by the global economic and financial crisis, the dynamics and structure of aggregate assets of credit institutions in Romania have seen several changes since the release of the latest Financial Stability Report:

(i) extremely low dynamics of aggregate assets, mainly on account of lending contraction;

(ii) after posting signs of contraction for the most part of the period under review, non-government credit saw a real increase in June 2010;

(iii) faster growth of claims on the government sector;

(iv) the sharp downward trend of credit institutions' placements with the central bank given the cut in minimum reserve requirements.

The domestic market still ranked first among the options for credit institutions' placements, with claims on the domestic non-bank sector making the largest contribution (Table 3.3). The rising share of this component in aggregate assets of credit institutions was induced, starting with 2008 Q4, by the fast-paced dynamics of claims on the government sector, mirrored in the rising stock of government securities held by banks, dynamics upheld by the larger demand for loans of central government. The volume of securities issued by the Ministry of Public Finance in 2009 stood around lei 65 billion via 65 issues and, in 2010 H1, at about lei 21 billion. Moreover, the Ministry of Public Finance attracted foreign exchange resources from the domestic market via 4 issues of securities with one-year, three-year and four-year maturities, mobilising EUR 3.88 billion.

Table 3.3. Asset structure of credit institutions operating in Romania

percent of total assets

	2004	2005	2006	2007	Jun. 2008	Dec. 2008	Jun. 2009	Dec. 2009	Mar. 2010	Jun. 2010
Domestic assets, *of which:*	94.3	96.5	97.4	98.3	98.6	98.5	97.6	96.9	97.1	98.0
Claims on the NBR and credit institutions, *of which:*	36.5	40.0	34.9	28.8	24.5	23.8	21.5	18.6	15.9	16.2
– Claims on the NBR	28.5	37.5	31.3	24.9	21.4	21.8	19.8	15.7	12.9	13.8
Claims on domestic non-bank sector, *of which:*	48.1	48.5	54.8	61.2	63.8	63.4	66.0	67.5	70.4	71.1
– Claims on the government sector	2.4	1.9	1.6	3.7	3.7	5.0	10.3	12.7	14.2	14.1
– Claims on companies	32.7	30.2	30.8	29.9	30.8	29.2	27.7	27,3	28.5	28.8
– Claims on households	13.0	16.4	22.4	27.6	29.3	29.2	28.0	27.5	27.7	28.2
Other assets	9.6	8.0	7.7	8.3	10.3	11.3	10.1	10.8	10.8	10.7
Foreign assets	5.7	3.5	2.6	1.7	1.4	1.5	2.4	3.1	2.9	2.0

Source: NBR

Loans to the private sector slowed down markedly starting with 2008 Q4; the annual growth rate, in nominal terms, decelerated to 0.9 percent at end-2009 from 33.7 percent a year earlier. In January 2010, it stood in negative territory for the first time in the last decade (-3.5 percent in January, -3.7 percent in February and -1.6 percent in March) but it entered positive territory starting with April (+0.5 percent in April, +1.4 percent in May and +3.8 percent in June).

Both components of loans granted to the private sector (leu-denominated loans and foreign currency-denominated loans) posted a decelerating trend; at end-March 2010, they showed negative annual percentage changes for leu-denominated loans in the case of both segments (-5.5 percent for households and -4.4 percent for companies) and for foreign currency-denominated loans granted to households (-1.0 percent), the corporate sector showing a slight improvement (+2.6 percent).

At end-June 2010, non-government credit moved up 6.4 percent (2.0 percent in real terms) compared to the previous year, on account of the 13.0 percent rise in foreign currency-denominated loans expressed in lei (when expressed in euro, foreign currency-denominated loans rose by 8.8 percent) and the 3.0 percent drop in leu-denominated loans (-7.1 percent in real terms).

By maturity, all types of loans reported negative annual growth rates at end-March 2010, more pronounced in the case of medium-term loans (-6.0 percent) and short-term loans (-1.0 percent). Long-term loans saw a lesser decline (-0.05 percent). Structural analysis illustrates that long-term loans held 57.3 percent, medium-term loans and short-term loans accounted for 19.7 percent and 23 percent, respectively, of total loans granted to the private sector at end-June 2010. The evolution of long-term foreign currency-denominated loans was supported, on the one hand, by the larger volume of new EUR-denominated real estate loans (under the “First Home” project) for households and, on the other hand, by the restructuring operations conducted with a view to improving companies’ capacity to honour their debt service.

The further contraction of economic activity in 2009, rising unemployment, tighter lending standards, in the context of a larger volume of non-performing loans and collateral-related risk are factors exerting a dampening impact on the demand for and the supply of private sector loans.

Interbank placements, of which more than 80 percent are placed with the central bank further showed a downward trend given the cut in minimum reserve requirements.

Foreign assets posted a slightly upwards trend reversal as a result of the EUR-denominated loans granted to non-residents, the balance of which saw a threefold increase in 2009.

3.2.2.2. Developments of own, attracted and borrowed resources

The structure of liabilities of Romanian credit institutions (Table 3.4) showed several tendencies:

(i) the prevalence of short-term maturities of deposits taken from residents;

(ii) the widening of the negative change of deposits taken from central government in 2009 H1. Starting with 2009 H2, the annual change of these deposits was highly positive;

(iii) the growth of own funds via equity capital inflows, the rise in reserves and subordinated loans;

(iv) the drop in foreign liabilities, mainly deposits and short-term financial loans.

Table 3.4. Liabilities structure of credit institutions operating in Romania

percent of total liabilities

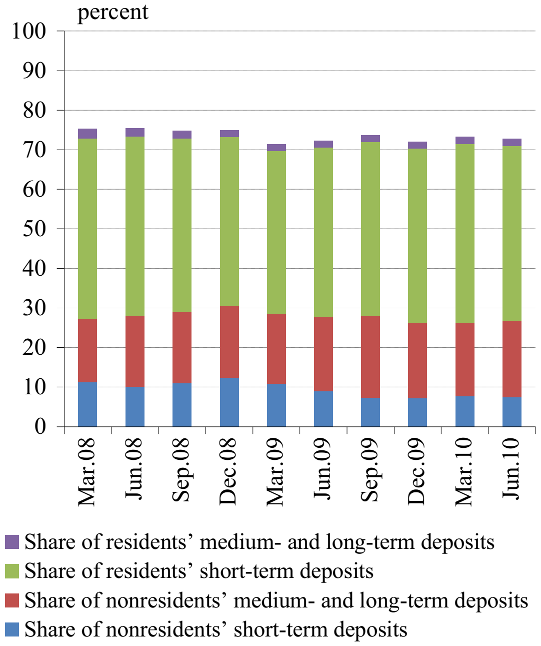
	2004	2005	2006	2007	Jun. 2008	Dec. 2008	Jun. 2009	Dec. 2009	Mar. 2010	Jun. 2010
Domestic liabilities, *of which:*	84.1	79.1	77.5	71.7	71.0	69.3	72.0	73.7	73.5	73.0
– Inter-bank deposits	3.0	2.5	3.6	3.8	3.0	2.1	6.0	5.4	2.9	2.4
– Government sector deposits	2.6	3.5	3.1	2.9	2.6	3.1	2.6	2.1	2.1	2.3
– Corporate and household deposits	62.3	57.5	55.0	49.7	47.4	44.6	44.4	46.0	47.1	45.9
– Capital and reserves	11.7	12.2	11.8	9.9	10.1	10.7	10.9	12.1	13.3	13.7
Other liabilities	4.5	3.4	4.0	5.4	7.8	8.8	8.1	8.1	8.1	8.7
Foreign liabilities	15.9	20.9	22.5	28.3	29.0	30.7	28.0	26.3	26.5	27.0

Source: NBR

Structural analysis of aggregate liabilities illustrates the consolidation (around 46 percent) of the largest share of deposits taken from resident non-bank clients. Overall, deposits of residents (households and companies) reported real annual increases of 5.8 percent at end-2009 and 3.1 percent at end-2010, respectively. By maturity, 96 percent of total deposits taken from residents are short-term deposits (Chart 3.12).

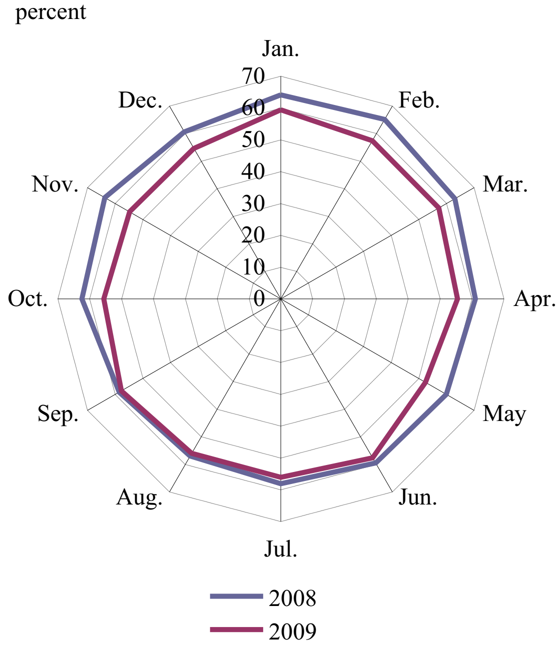
Foreign liabilities of the banking system fell slightly, especially on the back of short-term deposits taken from non-residents, their share in total deposits of non-residents decreasing markedly from 30.7 percent at end-2008 to 27.0 percent at end-June 2010 in favour of medium- and long-term deposits – in the context of measures taken by the central bank[6] and of the commitment taken by the parent banks of the nine leading credit institutions with foreign capital to maintain their exposure to Romania as long as the agreement concluded with the IMF and the EC is effective.

Chart 3.12. Share of deposits taken from residents (companies and households) and non-residents in total liabilities, by maturity



Source: NBR

Chart 3.13. External liabilities in foreign currency/foreign currency loans to private sector



Source: NBR

The ratio of foreign liabilities to foreign currency-denominated loans to the private sector declined slightly given the more difficult access of credit institutions to external financing at a pace faster than that reported for currency-denominated loans. In the context of the external financial crisis, the drop in this ratio was a natural response and has remained an objective aimed at reducing external vulnerability. On the other hand, this vulnerability was mitigated by the prevalence of resources taken from parent banks and by their maturities, mainly medium- and long-term maturities (Chart 3.13).

3.2.3. Capital adequacy

The capitalisation of Romanian banks stabilised (at end-June 2010, the solvency ratio stood at 14.3 percent and Tier 1 capital ratio was 13.4 percent), enabling the absorption of shocks originating in the domestic economy, over the past quarters, when the fallout from the global financial crisis was manifest. The comfortable level of capitalisation further provides an adequate protection against macroeconomic shocks, as illustrated by the results of the stress test conducted by the central bank for the banking system.

The shareholders of credit institutions made further efforts to increase own funds, at the recommendations of the central bank. Moreover, this favourable development was corroborated by the financial assistance agreement concluded with the EU, the IMF, the World Bank, the

[6] The cut in minimum reserves for foreign-currency liabilities with residual maturity longer than two years from 40 percent to 0 (zero) percent.

EIB and the EBRD, as well as by the initiative according to which the parent banks of the nine leading subsidiaries in Romania signed commitment letters on maintaining a solvency ratio of at least 10 percent as long as the agreement is effective (until April 2011).

The stabilisation of capital adequacy indicators at a comfortable level was also favoured by the contraction in lending as from 2008 Q4. As a result, the capitalisation level needs to be constantly revised once lending will be resumed. From this standpoint and due to the uncertainties still surrounding the economic rebound and the portfolio quality, further maintaining capitalisation within relatively wide margins above the minimum regulated level (8 percent) will continue to strengthen confidence in the banking sector.

3.2.3.1. Development of own funds of banks, Romanian legal entities

2009 and the first part of 2010 saw favourable developments regarding banks' own capitalisation resources, although the impact of the global financial crisis put further pressures on banks' capacity to generate profit. The main features of capitalisation are: (i) the increase of equity capital based solely on shareholders' financial effort, without any contribution from government funds; (ii) the allocation of a large share of banks' net profit to reserves; (iii) the commitment of the parent banks to grant new subordinated loans. With own funds being aimed at covering unexpected losses from banking business, the above-mentioned developments gain weight in assessing credit institutions' capacity to cope with exogenous shocks.

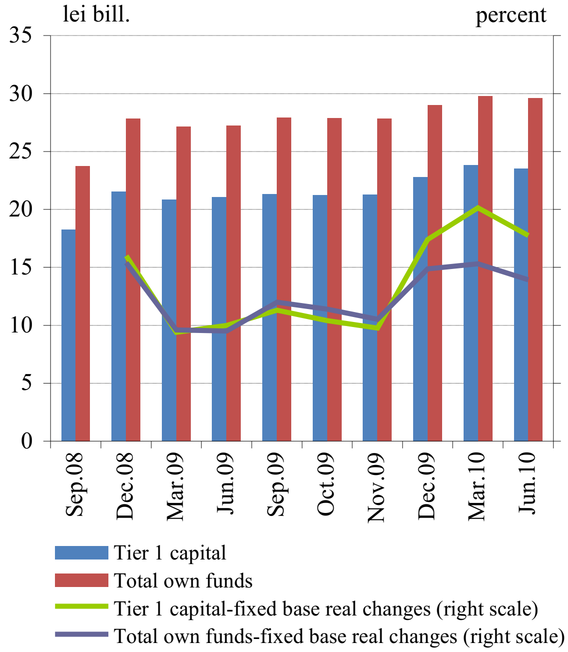
In 2009, the central bank amended banking prudential regulations on determining own funds in order to boost lending and, implicitly, to promote economic growth. The new provisions, effective since May 2009[7], stipulate the reintroduction, in the calculation of Tier 1 capital, of interim profit and profit brought forward relative to the prior financial year, provided it is audited by the credit institution's auditors. The central bank maintained the prudential approach of the regulation relative to the determination of own funds, deciding that where credit institutions incur accounting losses, they will be deducted from Tier 1 capital, regardless whether they were audited by the staff in charge of financial statement auditing or not.

The above-mentioned change had a limited impact: in 2009 H2, audited profit contributed only 1 percent to the volume of total own funds. This was due to banks' much lower capacity to generate profit in 2009. In 2010, the impact of the new regulations will depend on the level of deposit rates (they are expected to decline) and the quality of loan portfolios.

The assessment of the developments, in real terms, of own sources of credit institutions, Romanian legal entities, using as fixed base the own funds reported at end-September 2008, when the fallout from the global financial crisis started to affect the functioning of the Romanian banking system, highlights the persistence of a real positive growth of around 15 percent for total own funds and of more than 17 percent for Tier 1 capital during December 2009 - June 2010 (Chart 3.14). This development is the outcome of the efforts made, starting with end-2008, to raise equity capital, legal reserves and the amount of subordinated loans.

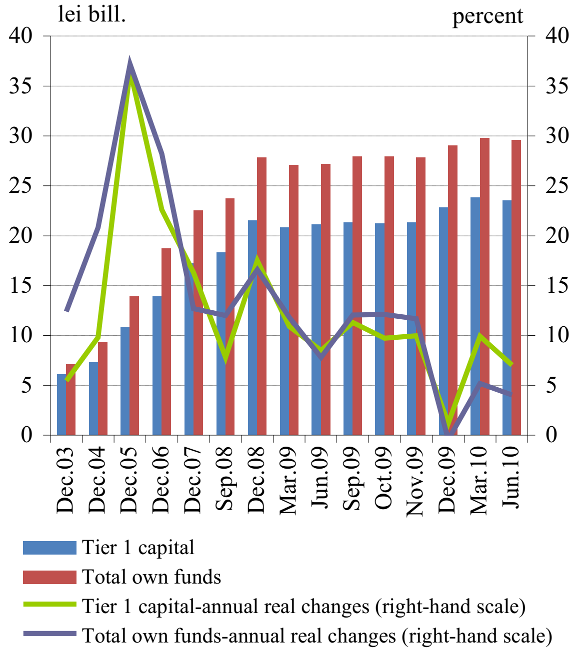
[7] Regulation No. 6/3/21 April 2009 issued by the NBR and the NSC amending and supplementing NBR Regulation No. 18/23/14 December 2006 issued by the NBR and the NSC on own funds of credit institutions and investment firms, Art. 1. This regulation supersedes Regulation No. 10/8/15 August 2008 in force during August 2008-April 2009, which abrogated provisions of Art. 4 letter d) on including, in the calculation of Tier 1 capital, "the net profit of the last fiscal year, brought forward until its distribution according to the destinations set by the General Meeting of Shareholders, to the limit intended to be allocated for any of the agreed destinations under letters a) - c)".

Chart 3.14. Total own funds and Tier 1 capital*



Source: NBR
*) fixed base 30 September 2008

Chart 3.15. Total own funds and Tier 1 capital



Source: NBR

The assessment of the annual real term developments of banks' own funds is also positive, taking into consideration the unfavourable macroeconomic environment in which banks conducted their business in 2009. Thus, the real annual growth rate registered by own funds and Tier 1 capital of banks, Romanian legal entities, stood at positive levels around 10 percent (Chart 3.15). The first contraction in seven years was observed in December 2009, but its level was immaterial. This development was first attributed to a base effect (given the high level of own funds reported for December 2008, which incorporated the equity capital increases made by the shareholders of 18 banks, profit allocations to the reserve fund and the larger balance on subordinated loans), as well as to the contraction of profit for 2009, regarded as a source of increasing own funds. Moreover, mention should be made of the negative impact of accounting losses incurred by 14 banks Romanian legal entities in 2009 financial year (totalling lei 1,265 million); these losses are deducted from Tier 1 capital. For the sake of a comparative analysis is to be mentioned that 11 banks, Romanian legal entities, recorded at end-2008, losses amounting to lei 360 million, the above-mentioned financial year representing for the Romanian banking system the end of a favourable economic cycle that reported historical profits. In 2010 H1, total own funds regained positive territory (up 4 percent), as a result of the rise in Tier 1 capital (7 percent).

The quality of banks' own funds was adequate in 2009, despite the harsh conditions determined by the fallout from the global financial crisis. This conclusion is based on the fact that primary capitalisation sources (i.e. Tier 1 capital) further accounted for the largest share (roughly 78 percent in 2009 and 80 percent in 2010 H1) of total own funds (Table 3.5). Structural analysis indicates, however, the constraints that banks had to cope with in 2009. The accounting losses incurred by many banks following the rise in expenses related to provisions and attracted sources eroded own funds by around 2 percent. Nevertheless, these negative effects were offset by capital injections and higher reserves, operations made by the shareholders, most of them at the recommendation of the central bank. Tier 2 capital made a smaller contribution to total own funds, and its share fell in 2009 due to the erosion of the contribution of revaluation reserves, with the weight of net subordinated loans remaining relatively constant (at gross value, the share of subordinated loans rose by 2 percentage points during December 2008-June 2010 up to 20.4 percent of total own funds).

Table 3.5. Own funds and capital adequacy indicators

percent

	Sep. 2008	Dec. 2008	Mar. 2009	Jun. 2009	Sep. 2009	Dec. 2009	Mar. 2010	Jun. 2010
Percent of total own funds:	100	100	100	100	100	100	100	100
Tier 1 capital, *of which:*	76.7	77.2	76.4	76.9	76.1	78.4	79.8	79.3
– Equity capital	48.7	43.7	45.7	48.2	47.7	46.0	47.3	49.8
– Equity premiums	4.4	3.8	4.6	4.0	3.9	4.0	6.1	6.1
– Legal reserves	28.2	34.6	33.5	33.0	32.1	33.4	33.0	32.6
– Current profit (audited)	-	-	-	-	0.9	3.75	0.0	0.0
– Current loss	-0.6	-0.7	-2.8	-4.0	-4.1	-2.2	-1.2	-3.0
Tier 2 capital, *of which:*	23.3	22.8	23.6	23.0	23.9	21.6	20.2	20.7
Revaluation reserves	9.6	8.1	8.4	7.8	7.6	6.06	5.9	5.6
Subordinated loans (net)	15.2	15.8	16.7	16.4	17.6	17.2	15.7	16.6
Subordinated loans (gross)	17.5	17.9	19.1	19.0	20.5	20.1	19.0	20.4
Solvency ratio (> 8 percent)	11.9	13.8	13.2	13.5	13.7	14.7	15.0	14.3
Tier 1 capital ratio	10.0	11.8	11.4	11.9	12.0	13.4	14.2	13.4

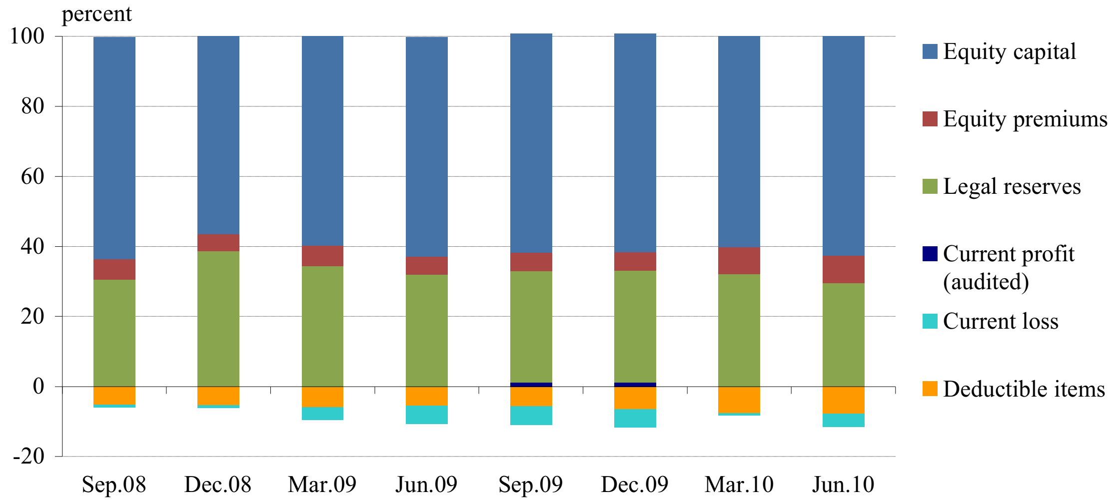
Source: NBR

As for the dynamics of the main items of Tier 1 capital, the following developments should be mentioned:

(i) Equity capital, share premiums included, was further the main item supporting Tier 1 capital (Chart 3.16), to which it contributed around 70 percent. This development was attributed to 14 banks, Romanian legal entities, that made additional capital contributions worth lei 1.3 billion (roughly EUR 325 million), leading to an annual real growth of equity capital of banks, Romanian legal entities, of about 6 percent (compared to 13 percent in the previous year). It is worth noting that part of these operations were conducted at the request of the central bank with the aim of enhancing banks' capacity to absorb accounting losses resulting from the contraction of activity, the rise in provision-related expenses and the growth of costs of domestic and external resources. Moreover, in 2010 H1, 12 banks increased their equity capital, the new injections exceeding the growth for 2009 (lei 1.9 billion).

(ii) Legal reserves are the second item supporting Tier 1 capital (Chart 3.16). The rise by more than 40 percent in the volume of legal reserves following distributions of 2008 net profit offset the losses incurred by banks in 2009. As regards 2009, banks further allocated profit for reserves, but in a smaller amount, given the lower financial performance.

Chart 3.16. Structure of Tier 1 capital



Source: NBR

The trends illustrated by the evolution of the main items of Tier 2 capital are the following: (i) subordinated loans (Table 3.5) are the key item to support secondary capitalisation resources. In 2009, their amount rose by 16 percent. Pursuant to banking prudential regulations[8], about 85 percent of the gross volume of subordinated loans was recognised in the calculation of own funds; (ii) Revaluation reserves remained another key item supporting the financing of Tier 2 capital, with a nearly 30 percent contribution.

3.2.3.2. Analysis of solvency

Capital adequacy slightly improved with the aggregate solvency ratio of credit institutions[9] at a comfortable level of about 14 percent, throughout 2009 and 2010 H1 (Chart 3.17).

This development is attributable to several factors:

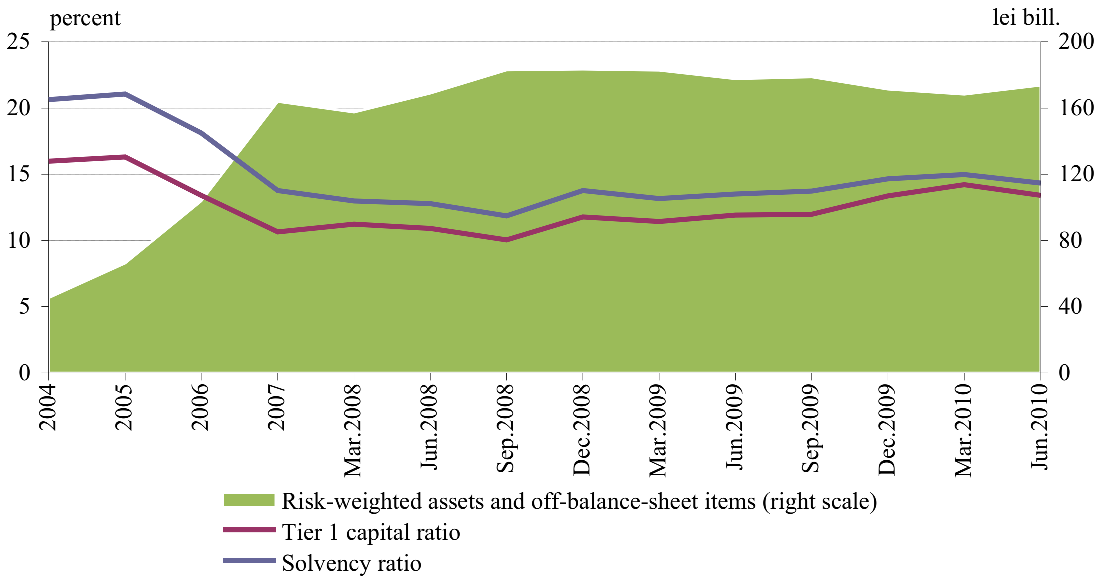
(i) the supervisory process required a minimum prudential level of 10 percent for the capital adequacy indicator, both in compliance with the provisions of the financing agreement concluded with the EU, the IMF and other international financial institutions and as a task of the supervisory authority. Concurrently, the parent banks of the nine largest subsidiaries in Romania signed a commitment letter to maintain capital adequacy ratio of at least 10 percent as long as the agreement is effective;

(ii) the contraction in non-government credit as a result of the drop in demand for and supply of loans (which impacted the solvency ratio by reducing the risk-weighted value of assets and off-balance-sheet items).

[8] Regulation No. 18/23/2006, issued by the NBR and the NSC, on own funds of credit institutions and investment firms, as subsequently amended and supplemented, contains the level of subordinated loans, for the purposes of determining own funds, at 50 percent of the value of Tier 1 capital. The regulation takes into consideration that subordinated loans do not rank among the primary capitalisation sources.

[9] Prudential requirements for own funds are not applicable to branches of foreign banks in EU Member States as they are subject to monitoring in the country of origin. Therefore, neither prudential indicators calculated based on own funds are applicable to these entities. Moreover, pursuant to Regulation No. 18/23/2006, issued by NBR and NSC, on own funds of credit institutions and investment firms, as subsequently amended and supplemented, starting with 1 January 2007, own funds of branches in Romania of foreign banks in EU Member States shall consist of Tier 1 capital.

Chart 3.17. Capital adequacy indicators (2004 - 2010 H1)



Source: NBR

Ever since the onset of the global financial crisis, the NBR took a proactive stance regarding both prudential supervision and regulations applicable to banks. Thus, in virtue of its responsibilities in the field of prudential supervision, the central bank required 19 banks to submit monthly capital adequacy reports[10]. The abovementioned decision was taken based on the following: (i) negative financial performance; (ii) solvency indicator below the average for the banking system; (iii) large volume of non-performing claims.

In this context, the need for additional capital reserves prompted the central bank to actually require 13 banks to maintain a solvency ratio of at least 10 percent.

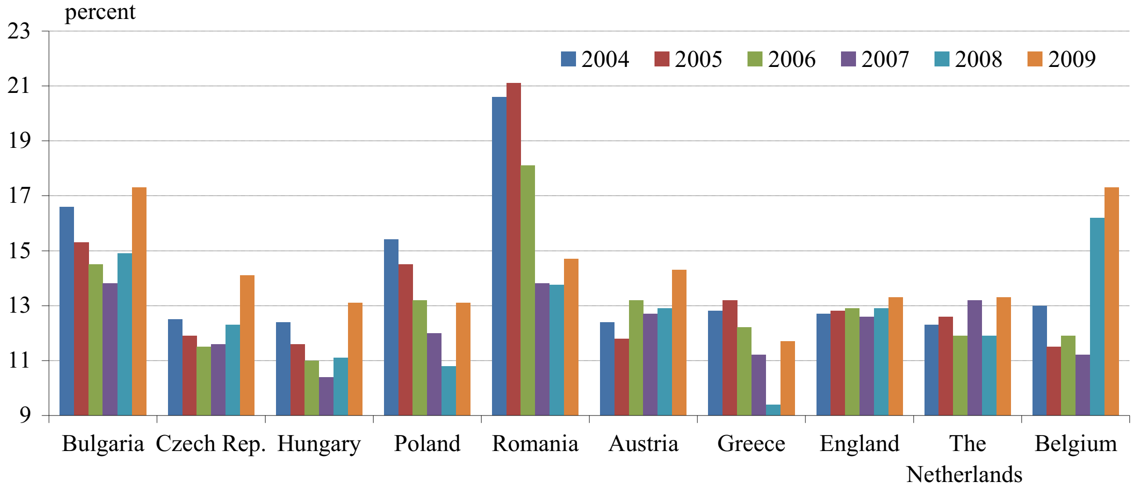
As regards the commitment taken by the parent banks, it is noteworthy that, under the European bank coordination initiative, the nine bank groups having subsidiaries in Romania reaffirmed their commitments to maintain adequate capital levels for their subsidiaries, i.e. above 10 percent, and to maintain group exposures to Romania in line with those reported at end-March 2009. At the last meeting held in July 2010, it was agreed that these exposures would be adjusted to 95 percent of the base level. The respective commitments – capitalisation higher than 10 percent and maintenance of exposures – were honoured, thereby contributing to the soundness of the Romanian banking system.

The capital adequacy level of Romanian banks was, since the release of the last Financial Stability Report, higher than the solvency indicator (median value) calculated for large and complex banking groups (LCBG) in the euro area[11] (13.3 percent in 2009 Q3), with most EU countries enhancing their efforts to improve the capital adequacy of credit institutions, some EU Member States even making use of public funds, as a measure to counteract the fallout from the global financial crisis (Chart 3.18).

[10] Pursuant to the prudential regulation in force, harmonised with prudential regulation in the EU, capital requirements reports are submitted on a quarterly basis.

[11] European Central Bank – Financial Stability review (December 2009).

Chart 3.18. Solvency ratio in EU Member States

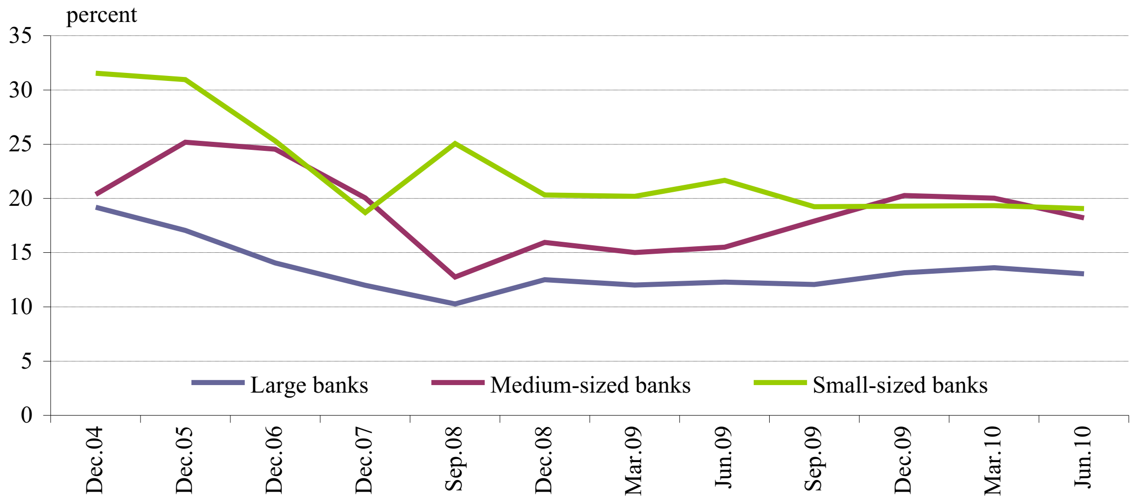


Source: IMF – Global Financial Stability Report (April 2010), NBR

All credit institutions in Romania are adequately capitalised: during June 2009-June 2010, all the entities reported a solvency ratio higher than the 10 percent threshold imposed by the supervisory process (the minimum regulated level in Romania, harmonised with the EU prudential norms is 8 percent).

Aggregate capital requirements decreased due to the lower requirements for credit risk, as a result of the downward trend of the volume of high-risk assets, along with the purchase of new government securities portfolios (to which a lower degree of risk is assigned, according to regulations). These changes had a greater impact on the structure of bank assets than the rise in capital requirements for overdue items (at end-June 2010, they held only 2 percent of capital requirements). On the other hand, operational risks induced higher capital requirements. Requirements for position risk, currency risk and commodity risk further posted low levels.

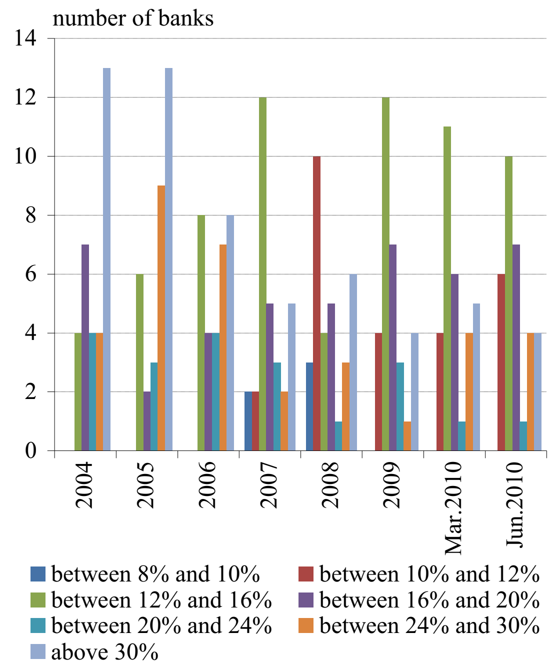
Chart 3.19. Solvency ratio by group of banks (2004-2010 H1)



Source: NBR

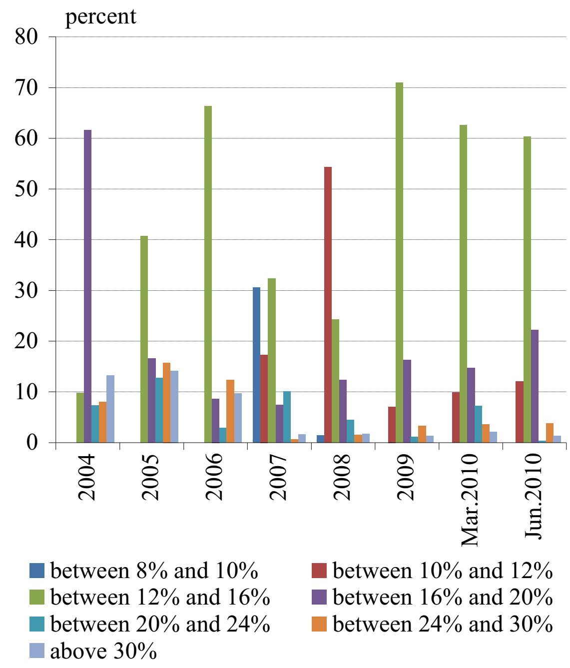
The assessment of the solvency ratio calculated by bank group based on the assets held[12] (Chart 3.19) shows the shareholders' efforts to fulfil the prudential requirements imposed by the central bank, as well as to withstand the challenges posed by the difficult macroeconomic conditions. Thus, although large banks further posted the lowest solvency level in relative terms (13 percent in December 2009 and June 2010), it rose markedly compared to September 2008. Small banks, on the other hand, continued to post the highest capitalisation level (19 percent December 2009 through June 2010), but it dropped considerably, mainly as a result of losses. The capitalisation of medium-sized banks improved significantly in 2009, followed by a slight setback (to 18 percent) in 2010.

Chart 3.20. Banks in terms of solvency ratio



Source: NBR

Chart 3.21. Bank assets in terms of solvency ratio



Source: NBR

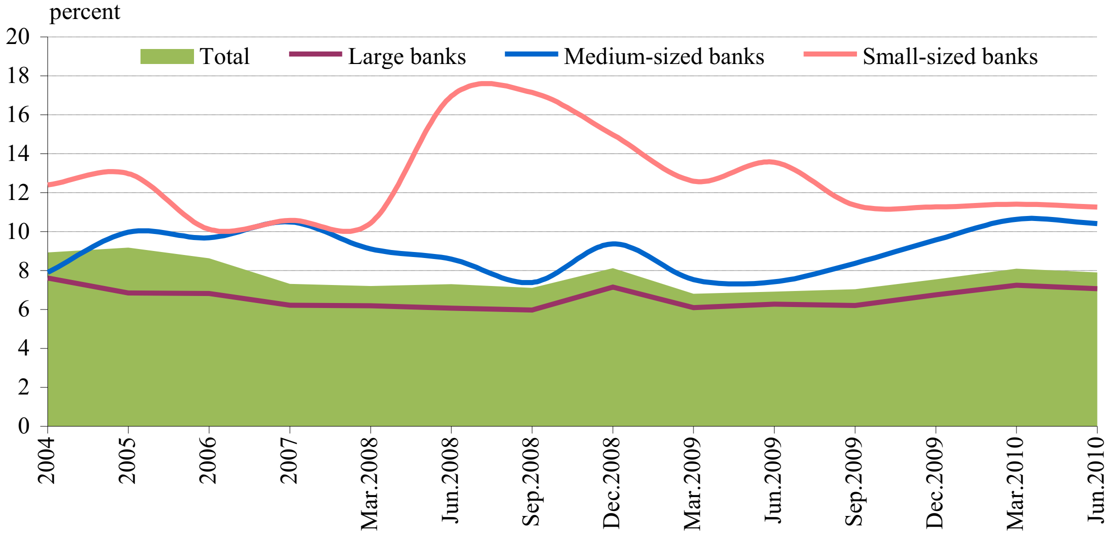
The efforts destined to enhance banks' capacity to absorb losses improved bank distribution by solvency ratio (Chart 3.20), in the period lapsed from the release of the last Financial Stability Report. As a result of the increase of the prudential solvency level up to 10 percent, there are no banks in the 8 percent-10 percent range, and only 6 banks within the next range. The highest concentration is reported in the 12 percent-16 percent range. At end-June 2010, 9 banks reported very high solvency levels (above 20 percent).

In 2010 H1, the distribution of bank assets by solvency ratio (Chart 3.21) saw a significant improvement. While in December 2008 more than half of the assets were held by banks showing a solvency level between 10 percent and 12 percent, starting with December 2009 a migration towards the next range could be noticed (60 percent of assets in June 2010). Behind this development stood the raising of the solvency level by the large banks to more than 12 percent.

[12] For assessment purposes, the NBR classifies banks in terms of their asset shares in total assets of the banking system. Large banks are defined as banks whose asset share is larger than 5 percent of total, medium-sized banks are banks whose assets hold shares ranging between 1 and 5 percent of total, while small-sized banks are defined as banks whose assets account for less than 1 percent of aggregate assets.

The second indicator defining capital adequacy, i.e. Tier 1 capital ratio[13] (Chart 3.17), posted a favourable trend in the period under review (reaching 13.4 percent in June 2010) as a result of the positive developments of primary sources of capitalisation and of risk-weighted assets and off-balance-sheet items. The level of the above-mentioned indicator was higher than that calculated for large and complex banking groups (LCBG) in the euro area (10 percent in September 2009 – median value).

Chart 3.22. Leverage ratio (total and by bank groups)



Source: NBR

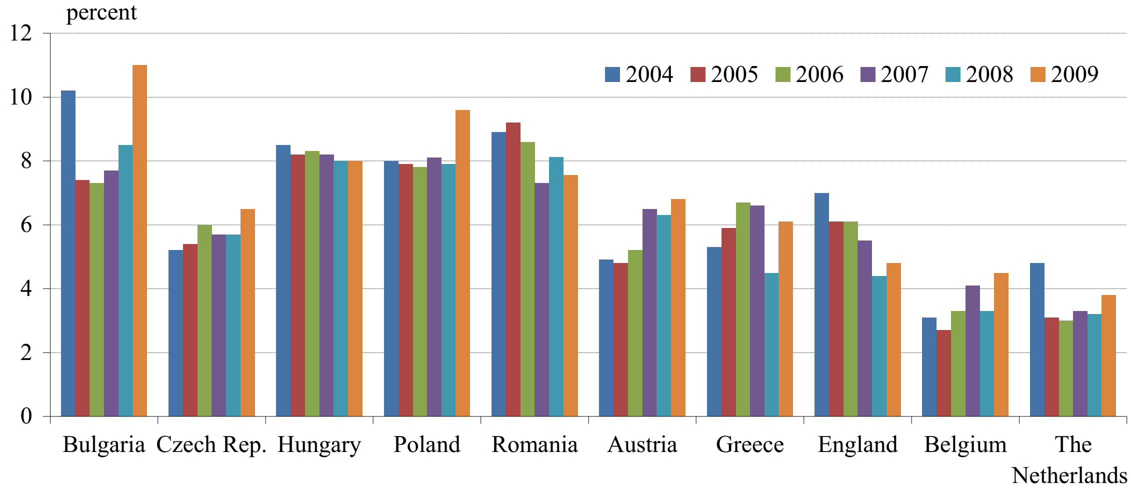
The leverage ratio[14] – as a measure of the extent the own funds are supportive of the bank's assets – tended to stabilise at a level close to that recorded prior to the onset of the crisis. In the first part of the period under review, this indicator posted a downward trend (due mainly to large banks), followed by an increase and stabilisation in the latter part, having a positive impact on markets' sentiment on the soundness of the Romanian banking system (Chart 3.22). It is noteworthy the evolution of the indicator associated with medium-sized banks, but the causes are mixed, including not only the rises in the volume of primary sources of capitalisation but also the nominal decline in assets, a trend that is not desirable to develop in the current context.

In 2009, the leverage ratio witnessed an improvement in many EU countries (Chart 3.23), due to the efforts made by their governments together with the supervisory authorities and central banks to restore financial stability conditions. However, the level of this indicator in the host countries remained high compared to the level reported by home countries.

[13] Tier 1 capital ratio is determined as a ratio of Tier 1 capital to total risk-weighted assets and off-balance-sheet items.

[14] The leverage ratio is determined as a ratio of Tier 1 capital to total assets at average value.

Chart 3.23. Leverage ratio in EU Member States



Source: IMF – Global Financial Stability Report (April 2010), NBR

3.2.3.3. Results of stress test in assessing the banking system

The latest stress test applied to banks in Romania, carried out by the central bank in July 2010, was part of a programme that provides for the regular conduct of such analyses. Similar to all exercises of this type, this last test was meant to assess the capacity of the banking system to withstand strong possible macroeconomic shocks that are not, however, likely to occur and that are not forecasted. The methodology used by the NBR was compiled in cooperation with the IMF and was validated by this institution.

The stress test exercise conducted by the NBR in July 2010 included credit institutions, Romanian legal entities and took into consideration a two-year horizon (2010-2011). The construction of this scenario was based on the recent projections on the national macroeconomic environment, taking into account a correlation of the considered shocks with those applied in the exercise conducted at European level in 2010 (under the coordination of the CEBS, the European Commission and the national supervisory authorities). However, the local test ran independently.

The assumptions of the scenario used by the NBR included further economic decline throughout the analysed time horizon, inflation outside the variation band around the central target, exchange rate depreciation and higher country risk premium, amid the maintenance of a constant margin between the average lending rate and the average deposit rate. Implicitly, the model envisages the depreciation of sovereign debt quality.

The impact on credit institutions is monitored through two channels: i) the direct shock transmission channel that measures the change in banks' incomes under adverse conditions and ii) the indirect shock transmission channel which helps anticipate the potential drop in own funds as a result of higher expenses associated with provisions for credit risk, amid a larger volume of non-performing loans.

According to the stress test results, the Romanian banking system is adequately capitalised to withstand the adverse conditions induced by the macroeconomic factors included in the scenario; this assessment is corroborated by the slight drop in the solvency indicator during the two years under consideration.

Thus, at aggregate level, the solvency indicator might decline by only 1 percentage point during the considered time horizon, to 13.5 percent at end-2011, with expenses associated with provisions for credit risk showing a relatively uniform distribution. The solvency ratio remained significantly higher than the minimum regulated level of 8 percent, the 10 percent level imposed in the supervisory process respectively.

However, the scenario had a significant impact on loan portfolio quality. The worsening of the loan portfolio quality is attributable mainly to exposures to companies (in 2010) and households (in 2011). The larger expenses relative to the depreciation of financial assets (provisions) is estimated at roughly 38 percent for 2010 (52 percent for exposures to companies and 25 percent for exposures to households) and 21 percent for 2011 (11 percent for exposures to companies and 31 percent for exposures to households). Despite the fall in the interest rates considered in the test, the change in interest income has only a marginal effect on profit. In the conditions of the scenario, the cumulated financial result for the banking system at end-2010 is nil, with a rebound in 2011.

The results of the test also show that at the end of the period under review, Tier 1 ratio[15] would stand at about 10.5 percent, a value comparable to that reported by the leading European banks and considerably higher than the 6 percent threshold used in the exercise conducted at European level. It is noteworthy that the Romanian banks did not request public support, additional capitalisation, and where it was required, it was fully provided by the shareholders; the level of Tier 1 ratio, estimated based on the stress test exercise, stands generally above the average for the group to which the Romanian branch belongs.

The exercise conducted by the NBR used, as entry data, the level of own funds at end-2009; therefore, the results of the test mirrors this capitalisation level. In the subsequent period, several banks raised their capital, which contributed to the increase in the actual level of the solvency ratio of the respective banks.

3.2.4. Loans and credit risk

In 2009, the growth rate of non-government loans further witnessed a stalemate, which was manifest starting with the final quarter of 2008, in spite of the stimulative measures adopted by the central bank. The same trend is currently visible on the loan market, posing a serious challenge to both banks and authorities.

An increasing vulnerability of the Romanian banking system is the worsening quality of the loan portfolio, which was much sharper in 2009 and is still manifest, mainly on the back of economic downturn. The additional burden of debtors who took loans in foreign currency and who are not insured against currency risk adds to this unfavourable development. Although non-performing claims are at a manageable level, their growth rate raises concerns for financial stability. At present, banks' own resources are sufficient to cover potential unexpected losses from credit risk. In addition, the lack of "toxic assets" in the balance sheets of banks operating in Romania prevented the capitalisation with public funds. The delayed resumption of economic growth, the still high lending costs and the much more prudent stance of both banks and clients indicate that current trends will remain in place throughout 2010.

3.2.4.1. Main credit developments

The global financial and economic crisis had a strong impact on real and financial sector developments in Romania, which persisted in 2009 as well as in the following period. As a result, the growth pace of bank assets[16] (Chart 3.24) slowed down markedly (5 percent in 2009, in nominal

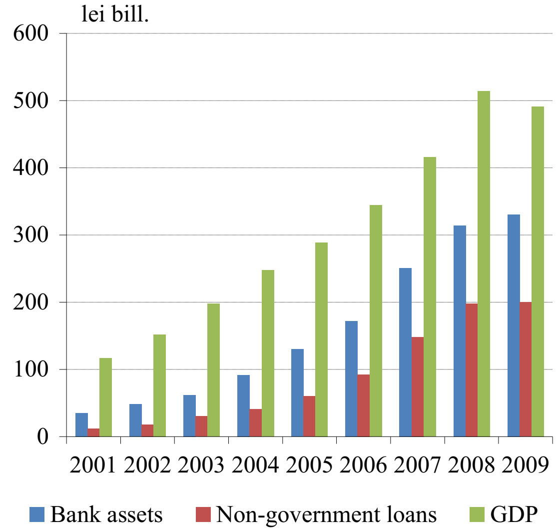
[15] The NBR did not regulate this indicator; for the purposes of this assessment, namely for international comparisons, the provisions of the EU Directive on capital adequacy were taken into consideration when calculating the respective ratio.

[16] Source: balance sheets submitted by credit institutions to the NBR.

terms, versus 26 percent in 2008). Unlike the previous period, when the business cycle saw an upturn, with the increase in bank assets relying on the growth of non-government loans, year 2009 brought to the fore the significant rise in exposure to the government sector. This new development occurred against the background of banks' risk aversion as well as of the widening budget deficit. Due to their adequate liquidity level, banks opted for purchasing low-risk government securities, thus improving the quality of their asset portfolios. Hence, as a result of the contraction in both supply and demand, the volume of non-government loans at end-2009 was similar to that recorded in the previous year.

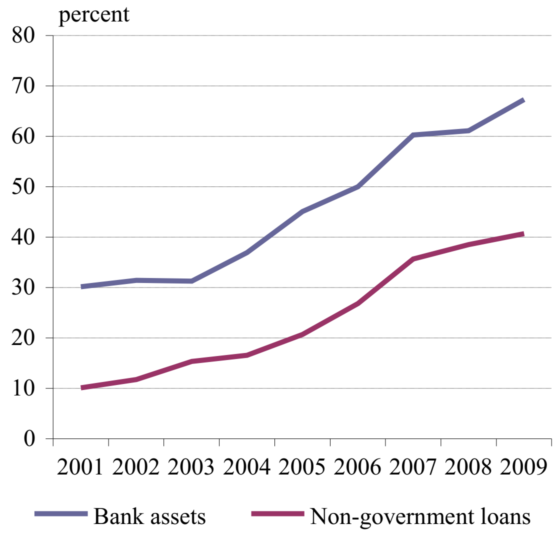
Financial intermediation (Chart 3.25), calculated as a share to GDP of non-government loans granted via banks, rose marginally to nearly 41 percent in December 2009, ranking among the lowest readings in Europe (the EU average standing at 150 percent).

Chart 3.24. Bank assets and non-government loans



Source: NBR

Chart 3.25. Bank assets and non-government loans as a share in GDP



Source: NIS, NBR

The decline in non-government loans in September 2009-May 2010 was due to the contraction of both credit supply and demand. The main cause for credit supply contraction is the persistent risk aversion of banks, despite the measures taken by the central bank in order to foster the sustainable resumption of lending (the decrease in minimum reserve requirement ratios on both leu-denominated[17] and foreign currency-denominated[18] liabilities of credit institutions, the policy rate[19] cut, the amendment of some provisions of prudential regulations[20]). In the context of these measures, to which adds the maintaining of exposure of major foreign banks to Romania, the

[17] The minimum reserve requirement ratio on leu-denominated liabilities was lowered to 15 percent from 18 percent starting July 2009.

[18] The minimum reserve requirement ratio on foreign currency-denominated liabilities was gradually lowered in 2009. At first, the minimum reserve requirement ratio on foreign currency-denominated liabilities with residual maturity longer than two years was cut from 40 percent to 0 percent starting May 2009. Subsequently, the minimum reserve requirement ratio on foreign currency-denominated liabilities with residual maturity of up to two years was gradually lowered in three stages, from 40 percent to 25 percent in July-November 2009.

[19] The policy rate was gradually lowered from 10.25 percent in December 2008 to 8 percent in December 2009. The policy rate was further cut in 2010 (in January, February, March and May) to 6.25 percent.

[20] Regulations on the calculation of own funds of banks allow, starting May 2009, the reincorporation into the calculation of Tier 1 capital of the interim and retained profit of the previous financial year. Moreover, starting with 2009 H2, regulations on loan classification allow the incorporation of debtor collateral with a maximum 0.25 coefficient (compared with the 0 coefficient stipulated in the previous regulation) in the case of loans classified under "Loss", with maturities longer than 90 days.

market benefited from adequate liquidity levels. The main causes for credit demand contraction were the following:

(i) unfavourable domestic macroeconomic developments, particularly those related to gross domestic product, unemployment and wages;

(ii) pressures associated with domestic currency depreciation in the first part of 2009 as well as with the rise in exchange rate volatility;

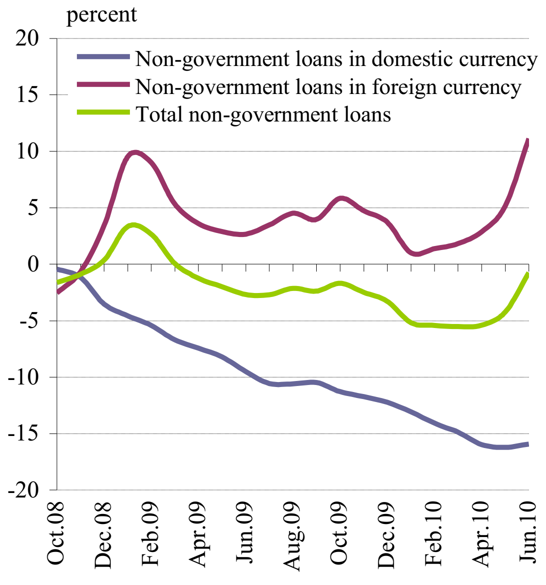
(iii) further high lending costs;

(iv) more prudent stance of households as illustrated by the higher propensity for saving.

The analysis of monthly developments in non-government loans in real terms (fixed base: 30 September 2008 – when the effects of the global economic crisis started to feed through into the Romanian banking system) shows the contraction of lending starting with April 2009 (Chart 3.26), on the back of developments in leu-denominated loans.

In 2009, non-government loans stayed on a downtrend, as illustrated by Chart 3.27. Non-government loans by currency saw similar developments, yet the size of movements was different. Hence, non-government loans in domestic currency saw a relative decline ever since May 2009, a trend which became gradually sharper. Non-government loans in foreign currency (expressed in lei) remained in the positive territory in 2009 (owing largely to exchange rate differences), yet they followed a pronounced downward trend. In the first months of 2010, non-government loans in foreign currency started to decrease and entered positive territory no sooner than May 2010. As a result, non-government loans resumed an upward path (2 percent in June 2010, in real terms, year on year) after nine months of contraction.

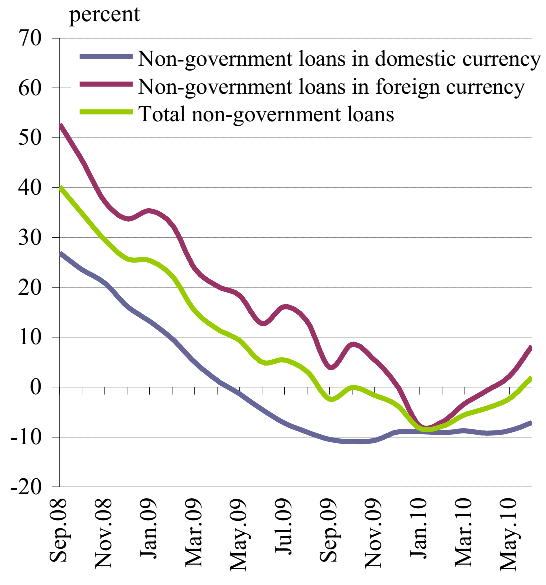
Chart 3.26. Real growth rate of non-government loans*



Source: NBR

*) fixed base 30 September 2008

Chart 3.27. Real annual growth rate of non-government loans

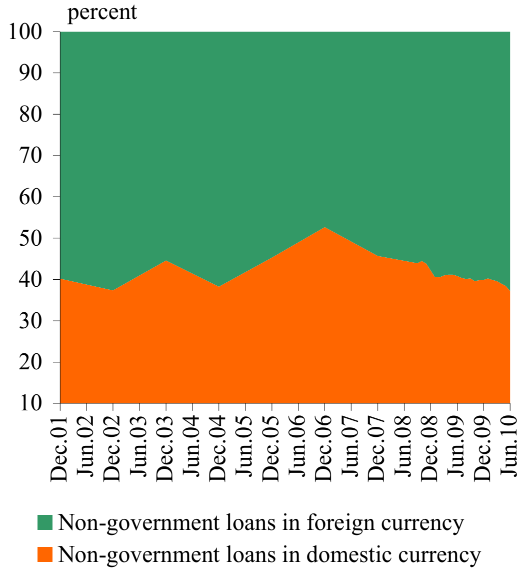


Source: NBR

Non-government loans in foreign currency accounted for nearly 60 percent of total non-government loan in January 2009-March 2010, yet their share saw a slight increase in the following months (Chart 3.28).

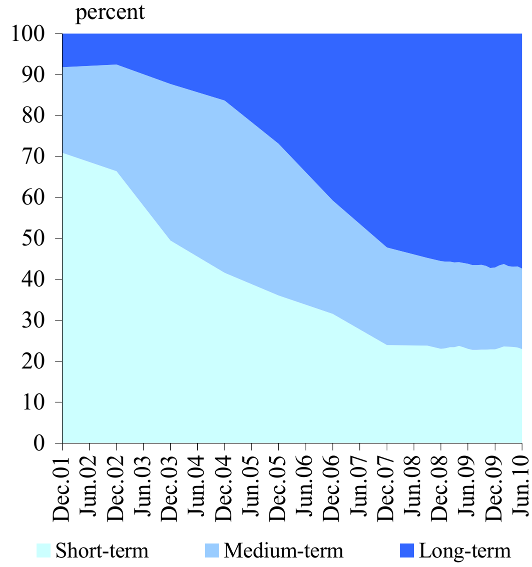
Non-government loans by maturity underwent no significant changes. Hence, long-term loans further held the prevailing share (57 percent of total non-government loans). In fact, the shares of the other two components were relatively stable in 2009 and in the first part of 2010, with medium-and short-term loans making up 20 percent and 23 percent respectively of total non-government loans (Chart 3.29).

Chart 3.28. Non-government loans by currency



Source: NBR

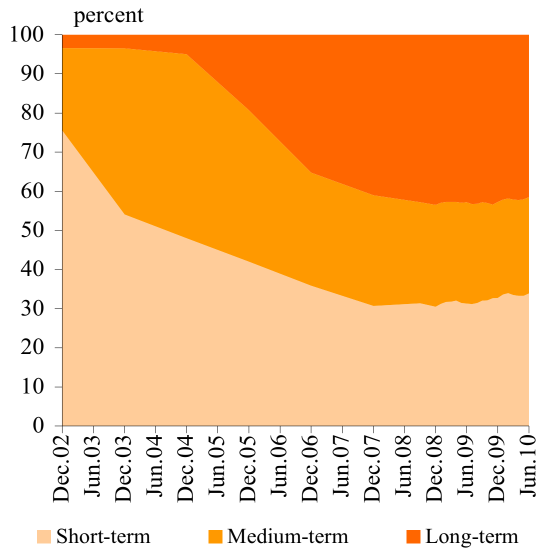
Chart 3.29. Non-government loans by maturity



Source: NBR

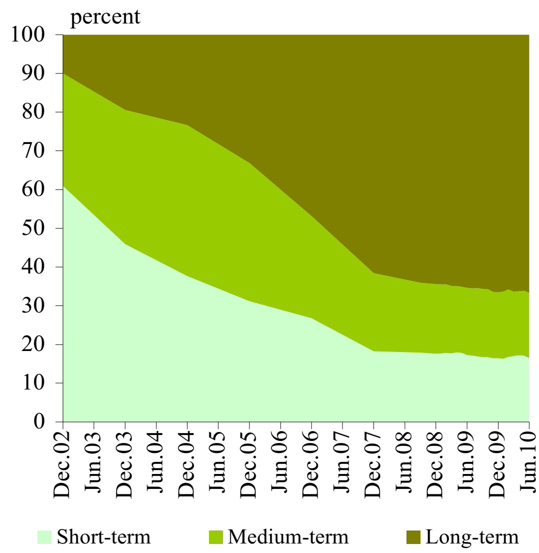
Overall, the maturity breakdown of the two components of non-government loans saw no major changes. The bulk of non-government loans in foreign currency (Chart 3.31) are accounted for by loans with maturities longer than 5 years (67 percent of non-government loans in June 2010). The maturity breakdown of non-government loans in domestic currency is further more balanced (Chart 3.30), with long-term loans accounting for about 42 percent of total non-government loans in domestic currency.

Chart 3.30. Non-government loans in domestic currency by maturity



Source: NBR

Chart 3.31. Non-government loans in foreign currency by maturity

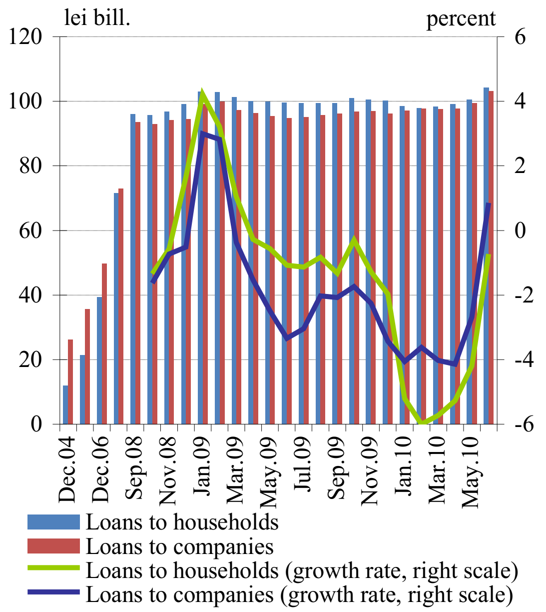


Source: NBR

The analysis of real developments in the loan portfolio by recipient, based on the balance as at 30 September 2008 (Chart 3.32) shows the contraction of non-government loans to households (correlated with a maximum rate of decline of about 6 percent in February-April 2010, but this trend became manifest starting April 2009). Non-government loans granted to non-financial corporations went down 4 percent over the reported period. In this case, mention should be made that the decline includes the effects of sold loans and subsequently those of sold loan recovery. In June 2010, the growth rate of non-government loans to non-financial corporations entered positive territory.

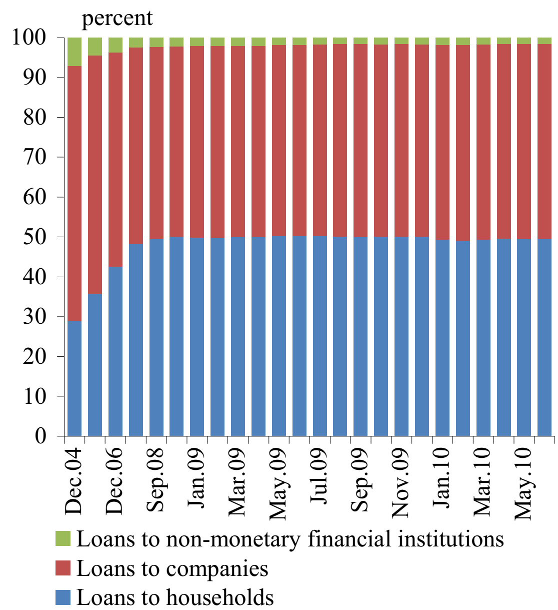
The two components of non-government loans hold relatively equal weights in total loan portfolio (Chart 3.33), with non-government loans to households accounting for a slightly higher share.

Chart 3.32. Non-government loans by component



Source: NBR

Chart 3.33. Non-government loans by recipient



Source: NBR

The analysis of developments in interest rates on loans and deposits (Chart 3.34) in the period lapsed since the previous Financial Stability Report reveals the following:

(i) the first quarter of 2009 saw the increase in both lending rates (on the back of the higher risk associated with companies and households) and deposit rates (as a result of keener competition on the banking market for the purpose of extending the local source database);

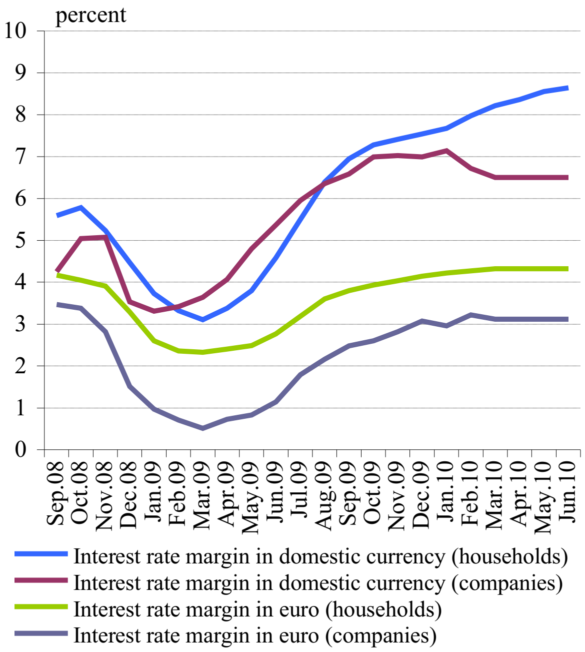
(ii) the downward adjustment in leu- and foreign currency-denominated loans and deposits for both categories of recipients was manifest starting with 2009 Q2. The adjustment pace was slower in the latter part of the year;

(iii) as a general feature, banks further charge interest rates on leu- and foreign currency-denominated loans to households about 1-2 percentage points higher than interest rates on loans to non-financial corporations. By contrast, households benefit from higher interest rates on time deposits (which hold a nearly 75 percent share in total time deposits of companies and households);

(iv) banks continue to charge interest rates on leu-denominated loans much higher than the policy rate of the central bank (at end-June 2010, the difference was of 10 percentage points for households and 6 percentage points for companies);

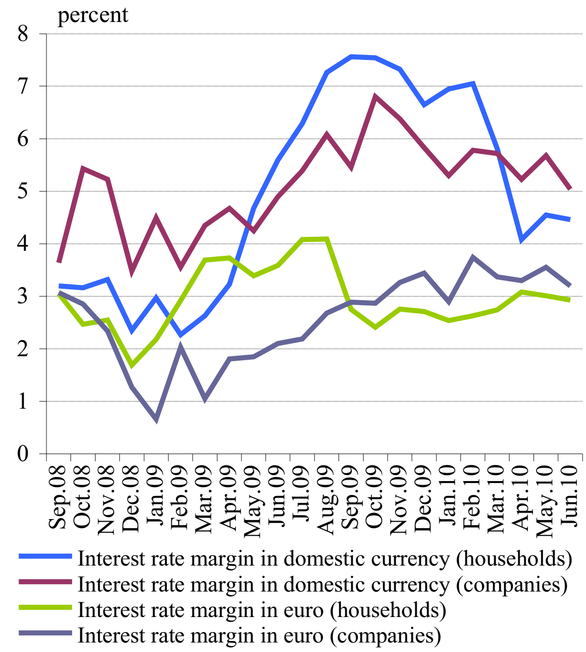
(v) starting with 2009 Q2, interest rate margin between loans and deposits followed an upward trend for both leu-denominated operations (rising to 8 percentage points for households, in June 2010, a twofold increase as compared with the same year ago period and to 6.5 percentage points for companies, a level close to the interest rate charged by banks in the prior year) and foreign currency-denominated operations (up to 4 percentage points for households and 3 percentage points for legal entities, with both levels exceeding by 2 percentage points the average interest rates charged in June 2009). The above-mentioned developments were due to the much stronger decline in deposit rates, as well as to the mounting pressures exerted by provision-related expenses.

Chart 3.34. Interest rate margins on outstanding loans and deposits



Source: NBR

Chart 3.35. Interest rate margins on new loans and deposits



Source: NBR

As regards the interest rates on new loans and deposits in 2009 and 2010 H1 (Chart 3.35), the following developments deserve mention:

(i) banks started the downward adjustment of lending rates during May-June 2009, subsequently to the successive adjustments of deposit rates initiated in January-March 2009. Thus, banks benefited from a wider interest rate margin, including for covering credit risk provision-related expenses;

(ii) starting with September 2009, average interest rates on new EUR-denominated loans to households (about 6 percent) stood 1 percentage point lower than the interest rate calculated based on the average balance, which may be a positive sign for lending;

(iii) interest rates on new leu-denominated loans posted mixed developments. Interest rates applied to households were higher than the level calculated based on the average loan balance for most of 2009, thus reflecting the persistence of high risk perception. No sooner than in December 2009, interest rates on new loans declined (the difference standing at about 4 percentage points in June 2010 as compared with the interest rate calculated based on the average balance), which is a delayed response to the policy rate cut. The interest rates on the new loans granted to companies were adjusted downwards as of July 2009. Nevertheless, interest rates on leu-denominated loans were further very high (nearly 12 percent in June 2010), which is not likely to foster credit demand.

3.2.4.2. Credit quality

The indicators defining the quality of banks' loan portfolio deteriorated markedly in the period lapsed from the previous Financial Stability Report, owing particularly to:

(i) economic downturn and higher unemployment rate;

(ii) domestic currency depreciation in the first part of 2009 (which is particularly relevant as foreign currency-denominated loans account for about 60 percent of total non-government loans);

(iii) financial disintermediation (considering that the worsening of loan portfolio is more visible in the context of lending stagnation or contraction, as a result of a base effect);

(iv) high lending rates on the back of increasing risks.

The analysis of banks' loan portfolio quality relies on indicators calculated on the basis of prudential, financial and accounting reports.

a) Developments in indicators defining credit quality, calculated based on prudential reports

The prudential definition of non-performing loans is based on the provisions of prudential regulations on loan classification[21]. The indicator used in financial stability analysis is represented by loans and interest classified under "Loss", when payments of principal and interest are past due by over 90 days and/or legal proceedings were initiated against the operation or the debtor ("Loss 2"). This definition of non-performing claims is virtually comparable to that recommended by the International Monetary Fund in the "Compilation Guide on Financial Soundness Indicators"[22], namely "loans (and other assets) should be classified as non-performing loans when payments of principal and interest are past due by three months (90 days) or more". The 90-day criterion is the time period that is most widely used by countries to determine whether a loan is non-performing. The loan (and other assets) amount recorded as non-performing should be the gross value of the loan as recorded in the balance sheet, not just the amount that is past due.

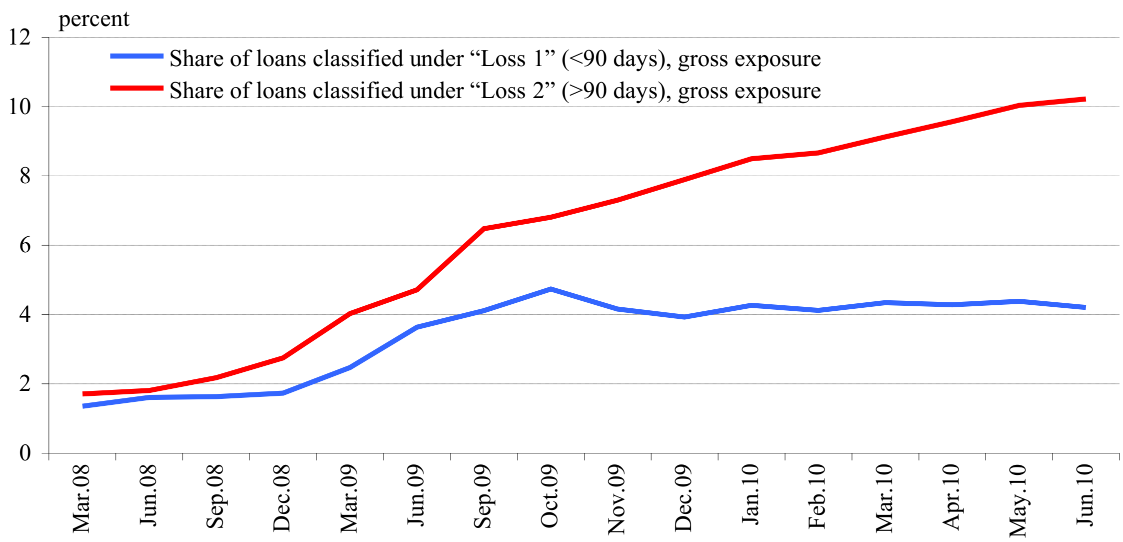
The prudential methodology used to determine non-performing claims is significantly different from the accounting approach[23] in terms of both classification criteria and loan amount.

[21] NBR Regulation No. 3/2009 on classification of loans and placements as well as on the setting-up, adjustment and use of specific credit risk provisions, as subsequently amended and supplemented, sets forth the classification of loans to non-bank clients into the following categories: "standard", "watch", "substandard", "doubtful", "loss". In the classification of loans to debtors outside credit institutions, banks apply simultaneously the following criteria: (i) debt service; (ii) financial performance; (iii) initiation of legal proceedings; (iv) declassification by contamination (taking into account the weakest individual classification categories). The debtors outside credit institutions are classified under financial performance categories, marked from A to E, in descending order in terms of quality.

[22] The Guide recommends the inclusion under non-performing loans of those loans whose payments of principal and interest are past due by less than 90 days, but which are deemed non-performing according to the national regulations, namely there are signs showing the debtor's payment default (for instance, the company is subject to bankruptcy proceedings). The IMF Guide recommends the application of the 90 day criterion to a non-performing loan as the maximum cut-off limit and does not deter the implementation of more strict regulations.

The indicators used to assess credit quality, calculated based on prudential regulations, show the persistence of unfavourable developments started in the latter part of 2008, in the period lapsed since the release of the previous Financial Stability Report. Gross exposure of loans and interest classified under "Loss 2" saw a threefold increase in December 2008-June 2010, being provisioned in compliance with prudential regulations in force. Starting April 2009, this indicator has been subject to the provisions of NBR Regulation No. 3/2009 on the classification of loans and placements as well as on the setting-up, adjustment and use of specific credit risk provisions, as subsequently amended, concerning the taking into account of debtor collateral (0.25 coefficient at most) in the case of loans overdue for more than 90 days and/or in which case legal proceedings were initiated against the operation or the debtor.

Chart 3.36. Loans classified under "Loss"



Source: NBR

The share of loans and interest classified under "Loss 2" (overdue by more than 90 days) in total classified loans and interest (calculated in terms of gross exposure) saw a swift increase (Chart 3.36), reaching 10.2 percent in June 2010.

Most of developed and emergent economies in the European Union (Chart 3.37) reported unfavourable credit quality developments, under the impact of global economic and financial downturn. The positive aspects in Romania's case are the absence of toxic assets from the balance sheets of credit institutions as well as the fact that no credit institution was faced with bankruptcy. As a result, no government intervention was required and no public funds were used to support credit institutions. By contrast, shareholders provided credit institutions with additional reserves for absorbing losses arising from non-performing loans.

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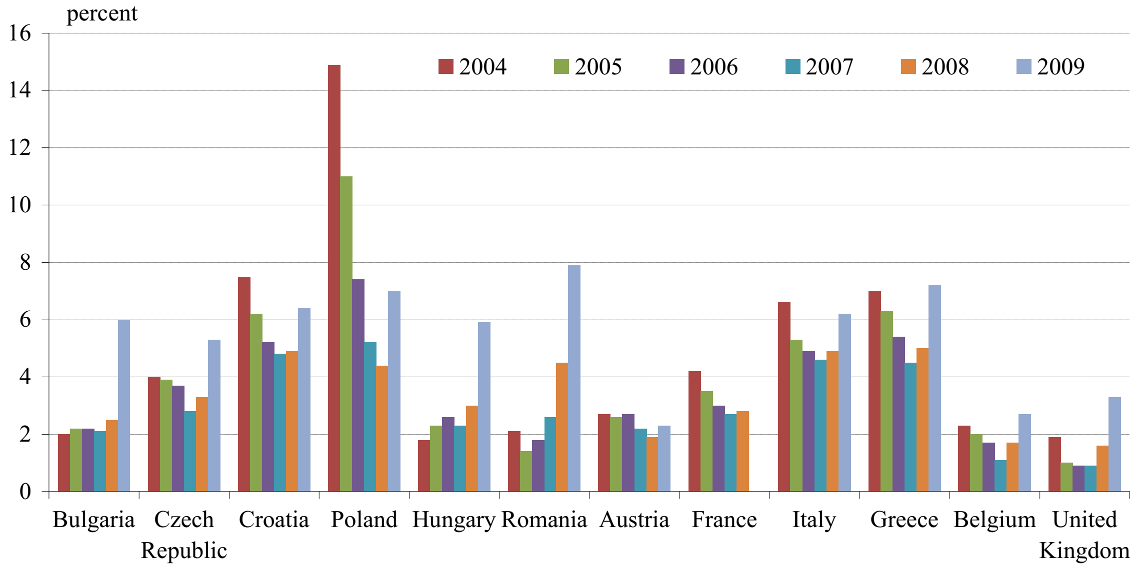
[23] There are two major differences between accounting and prudential methodology in terms of determining overdue claims, namely:

1) classification criteria: the accounting methodology is based on two criteria: (i) debt service; (ii) initiation of legal proceedings against debtor or loan, whereas the prudential methodology is based on four criteria: (i) debt service; (ii) initiation of legal proceedings against debtor or loan; (iii) debtor's financial performance; (iv) debtor's declassification by contamination;

2) overdue loan amount: the accounting methodology takes into account only actual overdue instalments (that were not paid at due date) – the instalments that are maturing in the period ahead are deemed current – whereas the prudential methodology takes account of the entire loan balance and interest, irrespective of the number of overdue instalments.

Chart 3.37. Loans portfolio quality in EU countries (Share of non-performing loans in total loans)



Source: IMF – Global Financial Stability Report (April 2010), NBR calculations

The selected comparative indicator for Romania is the share of loans and interest classified under "Loss 2" (loans and interest past due for over 90 days and/or in which case legal proceedings were initiated against the operation or the debtor, calculated in compliance with prudential regulations). Most countries use the 90-day criterion in order to determine whether a loan is non-performing.

Complying with the IMF definition, non-performing loans can also be determined based only on loans that are past due for over 90 days. This indicator reveals only credit contamination, not debtor contamination, and comprises neither the loans subject to legal proceedings nor the interest payable[24]. The analysis of companies and households included in this report relies on this definition.

For analysis purposes, the NBR also uses "credit risk ratio"[25], which is calculated based on reports on loan classification (gross value, by applying debtor contamination criterion). This indicator followed an upward course in 2009, reaching 15 percent at year-end, yet its growth pace is much slower in the current year. However, mention should be made that this indicator is much stricter than that recommended by the IMF, as it also incorporates the loans classified under "doubtful", namely the loans overdue for less than 90 days.

[24] This definition is used together with the definition used for analysing the loan portfolio of the banking system as a whole (namely "Loss 2") for the purpose of broadening the base of indicators used in the analysis of households and companies.

[25] Credit risk ratio is the ratio of unadjusted exposure relative to loans and interest classified under "doubtful" and "loss" to total classified loans and interest (excluding off-balance sheet items).

b) Developments in indicators defining credit quality, calculated based on accounting reports

On the basis of monthly accounting reports[26] submitted by credit institutions (balance sheet assets and liabilities), the central bank monitors the following indicators:

(i) overdue and doubtful loans to clients (gross value)[27], expressed as a share in total loans to clients (gross value);

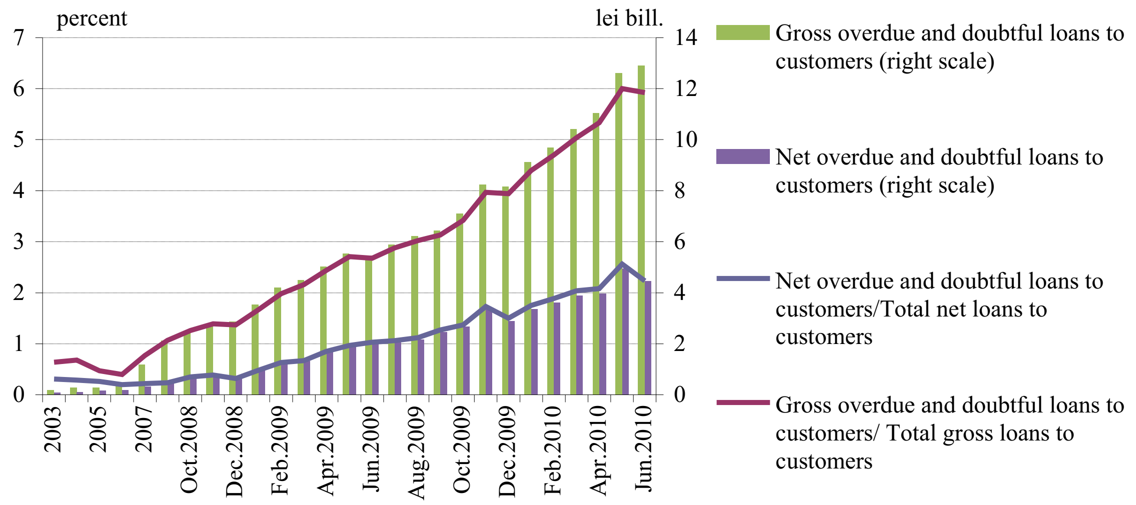
(ii) overdue and doubtful loans to clients (net value)[28], expressed as a share in total loans to clients (net value);

(iii) overdue and doubtful claims to clients (net value), expressed as a share in total bank assets;

(iv) overdue and doubtful claims to clients (net value), expressed as a share in Tier 1 capital.

The volume of overdue and doubtful loans (gross value) saw a threefold increase in 2009 versus 2008 (Chart 3.38). As a result, the share of overdue and doubtful loans in total loans to clients (gross value) also moved ahead, reaching 4 percent in December 2009 and 5.9 percent at the end of 2010 H1 (from 1.4 percent in December 2008). However, overdue and doubtful loans are estimated to hold a relatively low share in the loan portfolio of banks, yet their fast growth pace raises concerns.

Chart 3.38. Credit quality in the banking system



Source: NBR

Similarly, the share of *overdue and doubtful loans in total loans to clients* (net value) picked up swiftly in the period under consideration, from merely 0.3 percent in 2003-2008 to about 2 percent in June 2010 (Chart 3.38).

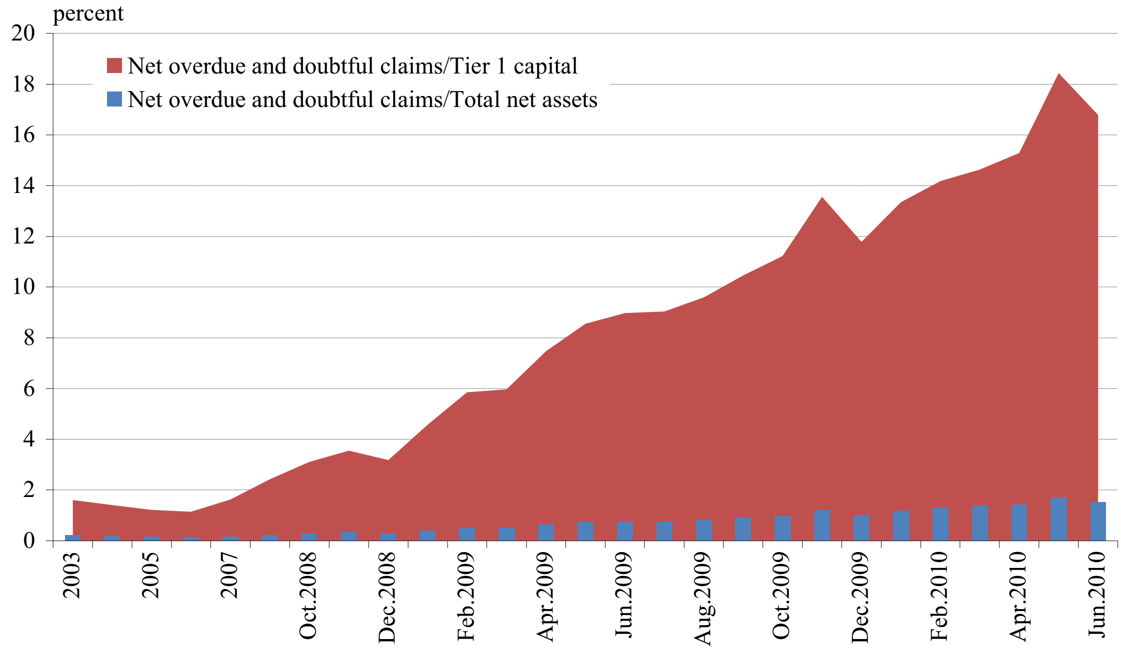
Overdue and doubtful claims, calculated as a ratio to bank assets or Tier 1 capital (Chart 3.39) also followed an upward course. Despite the persistence of credit quality worsening in the reviewed period, the level of overdue and doubtful claims is further manageable.

[26] Accounting regulation of 19 December 2008 compliant with EU Directives, applicable to credit institutions, non-bank financial institutions and the Deposit Guarantee Fund in the Banking System, as subsequently amended and supplemented, provides the definition of overdue and doubtful claims. Overdue claims consist of all past-due loans and interest, including overdue payments of at least one day. Doubtful claims comprise loans and interest in the case of which banks initiated legal proceedings against the debtor in order to recover them.

[27] Gross value is the carrying amount.

[28] The net value of overdue and doubtful loans to clients is calculated as the difference between overdue and doubtful loans to clients (gross value) and specific credit risk provisions.

Chart 3.39. Credit quality in the banking system



Source: NBR

3.2.4.3. Adequacy of credit risk provisions established by banks

Prudential regulations require the unitary approach to the setting-up, adjustment and use of provisions. The applied principles consist in: the volume of provisions is determined based on the net exposure[29]; the volume of provisions is higher for weaker classification categories. For instance, net exposure from loans and interest classified under "Loss" is 100 percent provisioned.

In 2009, banks recorded significant provision-related expenses (two times higher in year-on-year comparison), which entailed the increase in reserves designated to cover future credit risk losses[30].

[29] Net exposure is calculated as the differential between gross exposure and the debtors' collateral.

[30] By classification category, the provision coverage of net exposure is in line with prudential requirements: "watch" – 5 percent, "substandard" – 20 percent, "doubtful" – 50 percent, "loss" – 100 percent.

Box 2. Prudential regulations on the setting-up, adjustment and use of provisions applicable in Romania

NBR Regulation No. 3/2009 on the classification of loans and placements as well as on the setting-up, adjustment and use of specific credit risk provisions, as subsequently amended and supplemented, sets forth the provisioning coefficients for each classification categories, by making a distinction in the case of foreign currency loans or exchange rate-indexed loans granted to debtors, natural entities, exposed to currency risk, on which a higher coefficient is imposed.

Table 3.6. Provisioning coefficient of classification categories

Provisioning coefficients / Classification categories of loans and placements	Loans in foreign currency or exchange rate-indexed loans granted to debtors, natural entities, exposed to currency risk	Loans/placements other than those in the previous column
Standard	0.07	0
Watch	0.08	0.05
Substandard	0.23	0.2
Doubtful	0.53	0.5
Loss	1	1

The *setting-up* of specific provisions for credit risk means the creation of such provisions and is made by including in expenses the amount representing the necessary specific provisions for credit risk.

The *adjustment* of specific provisions for credit risk refers to the change in the current level of provisions in order to restore balance between the existing and necessary levels and is made by including in expenses or the write-back of the amount representing the difference between the current outstanding specific provisions for credit risk and their necessary level.

The *use* of specific provisions for credit risk refers to the cancelation of specific provisions for credit risk and is made by the write-back of the amount representing the current outstanding specific provisions for credit risk related to loans/placements in which case one of the following conditions is fulfilled:

- legal recovery solutions were exhausted or the prescription term was due;
- the contractual rights on the respective loan/placement were transferred.

Lenders set up and/or adjust, on a monthly basis, specific provisions for credit risk related to loans/placements recognised in the balance sheet at the end of the respective month, by including in expenses and/or the write-back, irrespective of the financial year result.

Lenders set up, adjust and use specific provisions for credit risk, by using the denomination currency of the loans/placements they adjust.

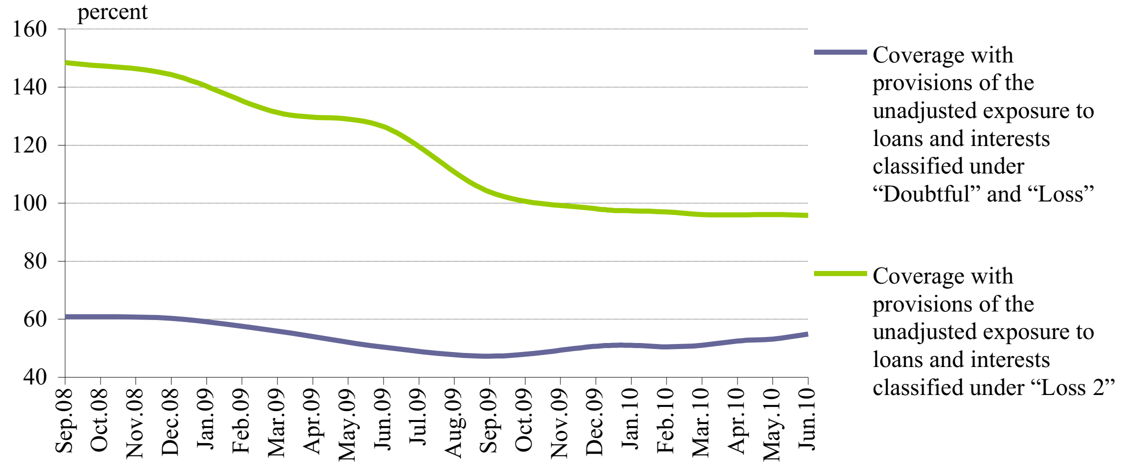
The regulation sets forth the 100 percent provisioning of loans and interest classified under "Loss" (net exposure), irrespective of the default period. In addition, the regulation imposes a strict approach to collateral related to claims classified under "Loss 2":

i) for exposure from loans classified under "Loss 2" banks can take into account 25 percent at most of the collateral;

ii) collateral related to exposures representing current/overdue interest on loans classified under "Loss 2" shall not be taken into account (as a result, such claims are 100 percent provisioned, at gross value).

The indicators assessing the adequacy of provisions, used in the financial stability reviews, are shown in Chart 3.40. The coverage with provisions of the unadjusted exposure related to loans and interest classified under "Loss 2" stayed close to 100 percent in September 2009-June 2010.

Chart 3.40. Coverage with provisions of classified loans and interests

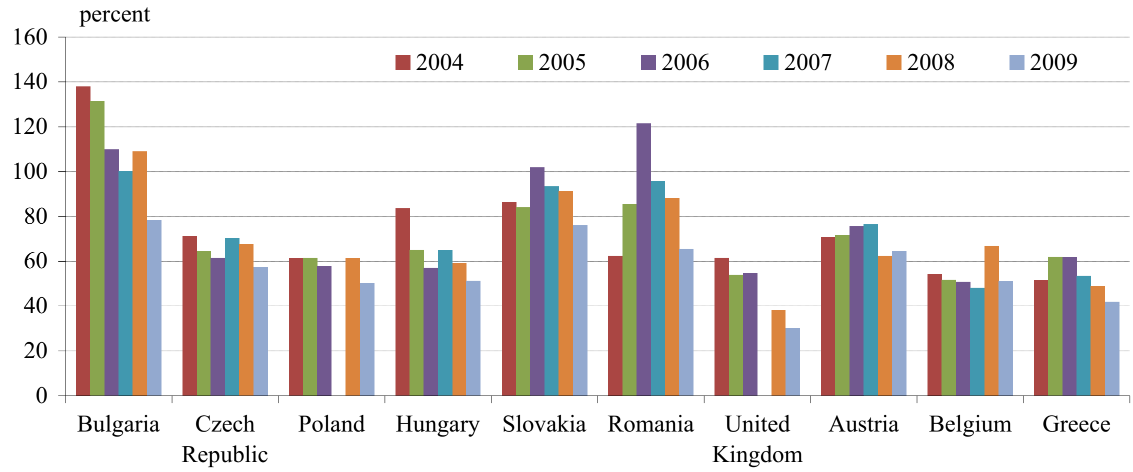


Source: NBR

A very restrictive methodology is applied to indicators calculated based on the unadjusted exposure, considering that debtors' collateral is an important source of recovering non-performing claims, which was not taken into account. In the period ahead, the level of the above-mentioned indicators will be subject to the new provisions of the regulations on risk management[31], stipulating the permission granted to banks to classify rescheduled claims into a more favourable category.

The coverage with provisions of non-performing loans is not homogenous in EU Member States due to various accounting methodologies and prudential regulations on the setting-up of provisions (Chart 3.41). Mention should be made that the coverage with provisions of non-performing loans in Romania[32] is higher than the EU average.

Chart 3.41. Coverage of non-performing loans in the European Union



Source: IMF – Global Financial Stability Report (April 2010), NBR calculations

[31] NBR Regulation No. 18/2009 on the management framework of the activity of credit institutions, the internal process of assessing the adequacy of capital to risks and the outsourcing conditions, published in *Monitorul Oficial al României* No. 630 of 23 September 2009.

[32] In order to make a comparison, the indicator calculated as a ratio of total provisions to the unadjusted exposure relative to loans and interest classified under "Loss" was used in Romania.

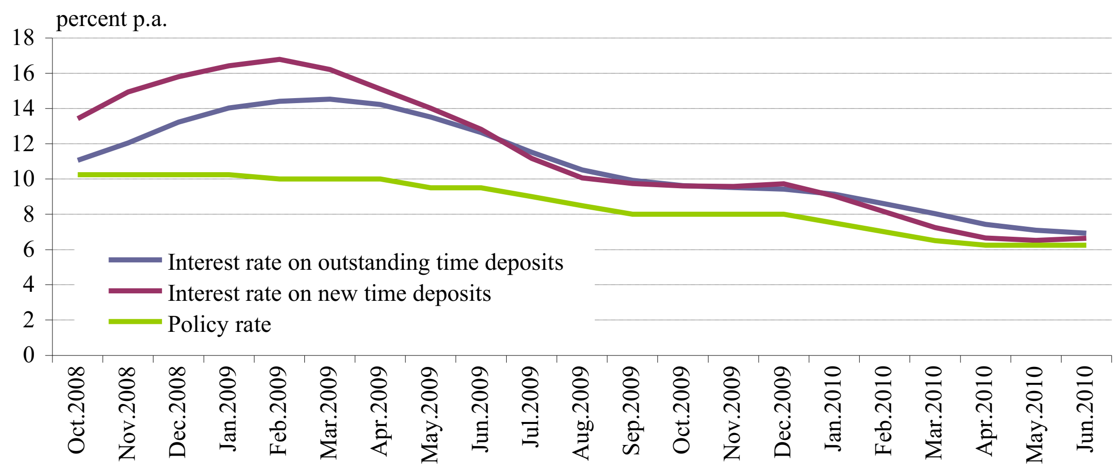
3.2.5. Liquidity risk

Liquidity risk was lower than in the same year-ago period, given the commitments assumed by the parent banks of the nine largest foreign credit institutions to maintain their exposure to Romania[33], the external financing arrangement[34], the NBR liquidity supply via monetary policy operations and banks' efforts to preserve and increase domestic sources. Stable resources posted favourable developments under the impact of increased saving and lower minimum reserve requirement ratios.

The maturities of up to one year prevailing in the case of deposits taken from households and non-financial corporations, as well as the external short-term debt of banks[35] are further potential vulnerabilities to the possible global liquidity shortages and to those specific to parent banks.

In the context of the financial crisis, the maturity imbalance between loans and financing resources and, implicitly, of the reliance on external sources, providing liquidity to the banking system in Romania depended broadly on the confidence of domestic depositors and foreign investors in banks as well as on their bias towards renewing the maturing loans. Loan/deposit ratio in the non-government sector improved, declining from a record high of 137.3 percent (November 2008) to 119 percent (March 2010) and subsequently following an upward path, partly attributed to the contraction in company saving on the back of liquidity crunch.

Chart 3.42. Interest rate on deposits in domestic currency and the policy rate



Source: NBR

Deposits taken from companies and households were further the main source of asset financing (46 percent of total liabilities, increasing slightly from the same year-ago period). This favourable development was underpinned by banks' concerns for renewing the maturing loans and taking additional deposits, including in the context of financial disintermediation (Chart 3.42), the competition among banks as concerns limited saving resources being reflected by the increase in

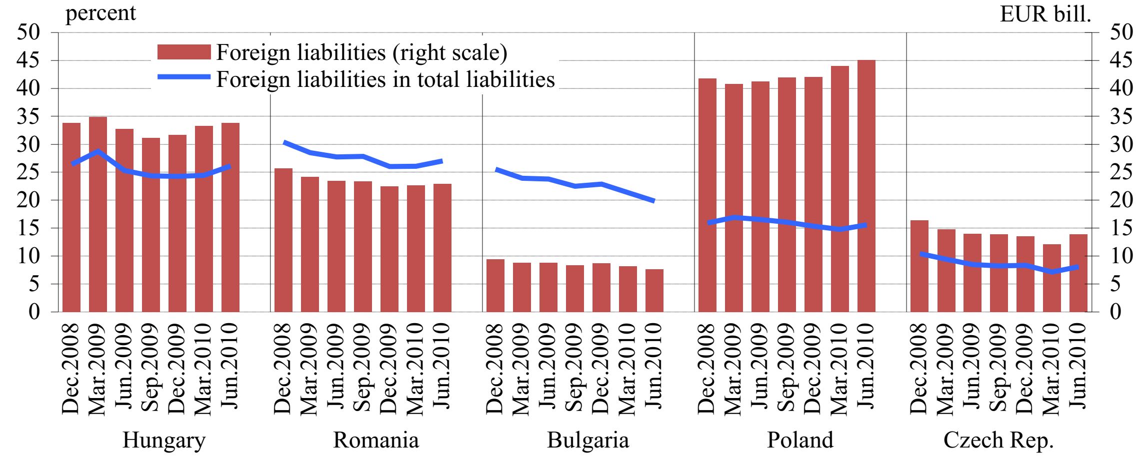
[33] The statement of banks participating in the meeting held in Vienna on 26 March 2009, which was reconfirmed at the Brussels meetings on 19 May 2009 and 18 November 2009.

[34] According to the financing arrangement concluded with international financial institutions, Romania took loans amounting to EUR 12.95 billion from the IMF, EUR 5 billion from the EC, EUR 1 billion from the World Bank and EUR 1 billion from the EBRD. Funds can be drawn in two years' time.

[35] EUR 6.3 billion as at 30 June 2010.

interest rates on new leu-denominated deposits, which were about 7 percentage points higher than the policy rate in February 2009, then followed a slight downward trend. However, the bulk of deposits taken from residents were further short-term deposits.

Chart 3.43. Foreign liabilities



Source: ECB

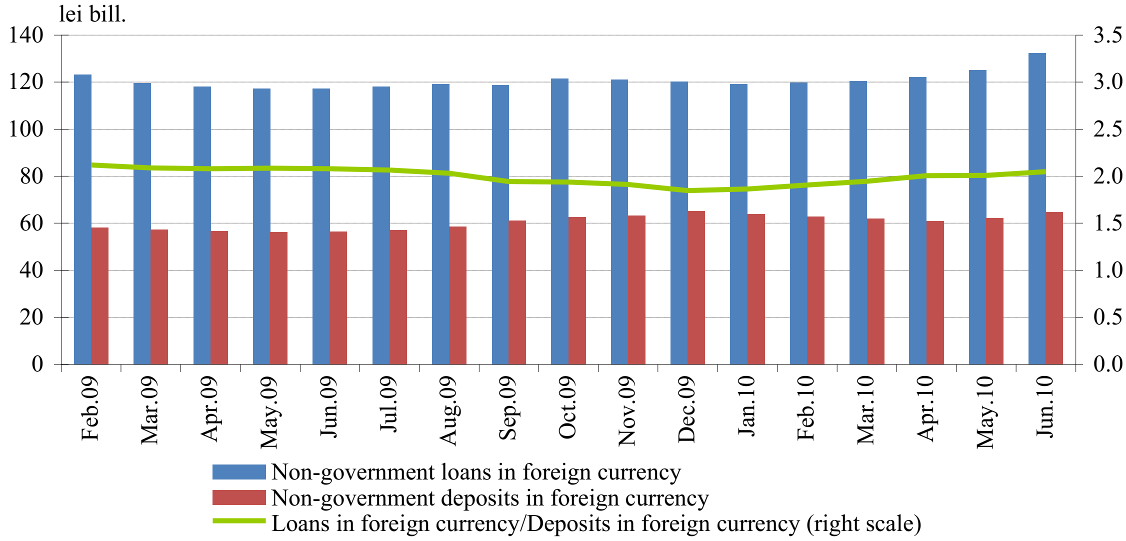
The second source used by credit institutions for asset financing was foreign liabilities (27 percent of total liabilities), comprising demand and time deposits as well as loans of non-residents. Although the share of foreign liabilities in total liabilities of the banking system exceeded further those recorded in Hungary, Bulgaria, Poland and the Czech Republic, the reliance on external financing was lower than in the same year-ago period, in line with the regional developments (Chart 3.43). The share of financing from parent banks and the related maturities were reviewed in order to assess the stability of foreign liabilities.

The foreign currency-denominated loan/deposit ratio stood at 205 percent as at 30 June 2010 as versus 208 percent in the same period a year earlier (Chart 3.44). The high level of this indicator, namely the significant contribution of external resources to loan financing is one of the key vulnerabilities of the Romanian banking system, representing the major channel whereby the possible halt in external financing could have as a result exchange rate pressures and worsened credit quality. However, this vulnerability is offset by the prevailing medium- and long-term financing[36] from parent banks[37], in the context of the cut to 0 percent of the minimum reserve requirement ratio on foreign currency-denominated liabilities with residual maturity longer than two years.

[36] The share of non-residents' medium- and long-term deposits in total deposits moved ahead 4.5 percentage points in June 2010 to 72 percent year on year.

[37] In June 2010, parent banks provided credit institutions in Romania with 85 percent of total deposits of non-residents.

Chart 3.44. Loans and deposits in foreign currency



Source: NBR

The probability that parent banks limit the support to their subsidiaries is further low in the context of the strategic importance these banking groups have in East European countries, substantiated by their commitment to maintain their exposure to Romania during the validity period of the arrangement concluded with the EC and the IMF.

The share of capital and other reserves in total liabilities raised by 2.8 percentage points to 13.7 percent as of end-June 2010.

Domestic interbank deposits further held a small share in total liabilities, i.e. 2.4 percent, the transmission of the contamination risk in the banking system via this channel being contained. The results of interbank contamination test reveal a low systemic risk, with interbank bilateral exposure being generally small as compared to own funds and liquid assets of creditor banks.

The immediate liquidity[38] of the banking system rose by 2.2 percentage points to 35.9 percent at end-June 2010, liquid assets/short-term liability ratio stood at 146.7 percent, whereas the liquidity indicator calculated in compliance with regulations in force[39] was of 1.35, exceeding the minimum regulated level of 1.

According to regulations in force[40], the NBR required credit institutions to draw up in-depth strategies on liquidity risk management in the context of crisis, by observing the requirements established by the legal framework in the field. The NBR ensured the appropriate management of liquidity in the banking system by the active use of money market operations. In 2010 H1, liquidity conditions on the money market improved considerably. At present, the central bank reassesses the regulation framework for liquidity risk management.

[38] Holdings and deposits with banks + unpledged securities / Total liabilities.

[39] As a ratio of effective liquidity to required liquidity, by each maturity band, in compliance with NBR Norms No. 1/2001 on banks' liquidity, as subsequently amended and supplemented, and NBR Regulation No. 24/2009.

[40] NBR Norms No. 1/2001 on banks' liquidity, as subsequently amended and supplemented and NBR Regulation No. 24/2009.

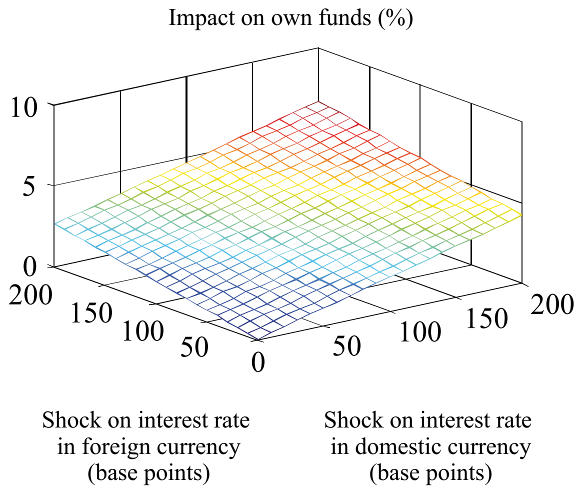
3.2.6. Market risk

Changes in interest rates (quantified by reviewing the economic value of capital), the direct effect of exchange rate movements as well as the change in the market value of shares had a marginal impact on the equity of credit institutions, an appropriate interest rate risk management as well as the regulations on the net foreign currency position contributing to lowering the exposure to adverse market developments. However, at individual level, there are significant differences between expectations on short-term interest rate developments, as reflected by the different magnitude of the impact exerted by an interest rate shock on equity. The rise in the share of government securities in total assets of the banking system is a short-term viable alternative, given that loans to the private sector took a plunge, investment in low credit risk and highly liquid items contributing to the softening of the impact of this decline on the balance sheet size.

a) Interest rate risk

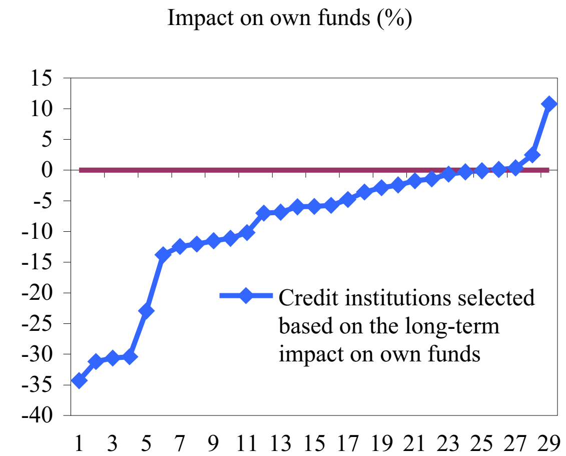
The analysis of sensitivity to interest rate risk shows the low impact on the equity of credit institutions (roughly 5 percent at most, in the case of a simultaneous shock of 200 basis points applicable to interest rates expressed in lei and foreign currency, considering a parallel shift in the yield curve). Chart 3.45 illustrates the long-term impact, expressed as a share of equity, of some interest rate shocks on the two components, namely interest rates expressed in lei and foreign currency. At individual level, the effect of the shock on credit institutions, Romanian legal entities, classified in the ascending order of the impact, is shown in Chart 3.46 (a parallel shift of 200 basis points of the yield curve for both lei and foreign currency, the long-term impact expressed as a share in equity fluctuates between 9.7 percent and 34.9 percent).

Chart 3.45. Impact of different shocks on interest rate on own funds across the system



Source: NBR

Chart 3.46. Maximum impact of the simultaneous shock on own funds on an individual basis

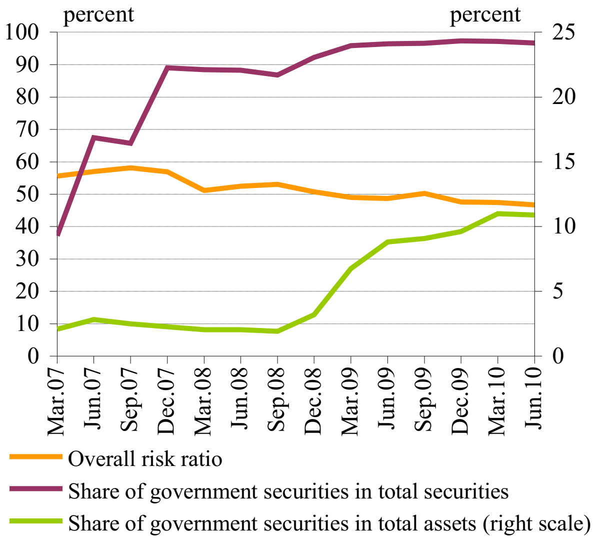


Source: NBR

The share of government securities in total bank assets gradually increased, amid lower risk appetite of credit institutions, as reflected by the significant reverse correlation of this share and the overall risk ratio[41]. This is also revealed by the prevailing share of government securities in total negotiable securities held by credit institutions, eligible securities as collateral in the case of money market operations (Chart 3.47).

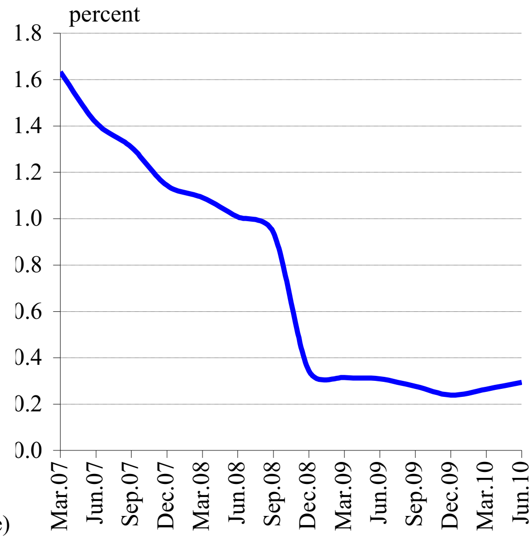
The high risk premiums implied by financing via security issues contributed to the sharp decline in their share in total liabilities of credit institutions (Chart 3.48).

Chart 3.47. Government securities in total securities and aggregate assets of credit institutions



Source: NBR

Chart 3.48. Securities issued by credit institutions in total liabilities



Source: NBR

The analysis of sensitivity to the risk associated with the interest rate on securities (estimated by changing the market value of government securities, as the main component of trading portfolio) reveals the moderate impact on equity generated by the loss arising from the rise in the interest rate expressed in lei (a parallel shift in the yield curve by 100 basis points would generate losses with a share of about 2.3 percent in total equity, assuming that all securities are included in the trading portfolio). The risk associated with the change in the market value of shares and commodities in the trading portfolio is small, given the low volume of shares and commodities. Financial derivatives account for a small share, with forward exchange transactions and foreign exchange swaps being the most common operations.

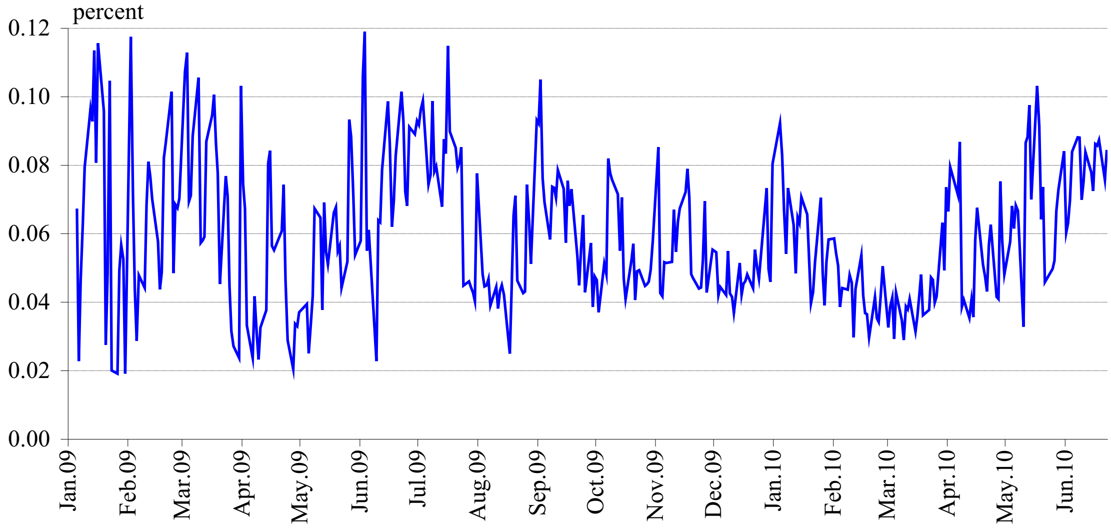
b) Exchange rate risk

Exchange rate risk, estimated by the potential loss following a shock, calculated based on the net foreign currency positions of credit institutions, has a marginal effect on any given credit institution's capital. The daily VaR[42] for the exchange rate, calculated based on the net foreign currency position, is modest (even assuming that the VaR for 10 trading days is taken into account, the maximum loss for the banking system stood at 0.12 percent of equity in 2009 – Chart 3.49).

[41] Indicator calculated as a ratio of risk-weighted assets to average carrying amount of assets.

[42] The daily VaR (Value at Risk) is estimated at the 99th percentile, by historical simulations, considering the net foreign currency position of credit institutions and the exchange rate movements for 13 currencies for a 13-year period.

Chart 3.49. Daily value at risk of exchange rate, calculated based on the net foreign currency position of credit institutions



Source: NBR

Considering the high share of foreign currency-denominated bank assets as well as the foreign currency exposure to the private sector at end-June 2010 which held 62.8 percent of total loans to the private sector (as lending to the private sector translates implicitly into an increase in risk-weighted assets), in the case of domestic currency depreciation, the change in capital requirements as a result of the risk-weighted assets in foreign currency could have a significant direct impact on the solvency ratio of credit institutions. The exposure in euro of banks to the real sector is prevailing, with assets denominated in other currencies with a high exchange rate volatility playing a marginal role. The impact of exchange rate movements is partially offset by subordinated loans, denominated mostly in euro.

The indirect impact of the potential domestic currency depreciation is significant, its quantification via the dynamics of non-performing loans being however subject to the interaction with other determinants of credit risk. On the other hand, the strong appreciation of the domestic currency versus the euro may be a risk factor, considering the high volume of long-term foreign currency-denominated loans, financed via short-term deposits. The possible difficulties related to the renewal of foreign currency-denominated liabilities could lead to significant losses following the contraction of net interest income.

3.2.7. Profitability and efficiency

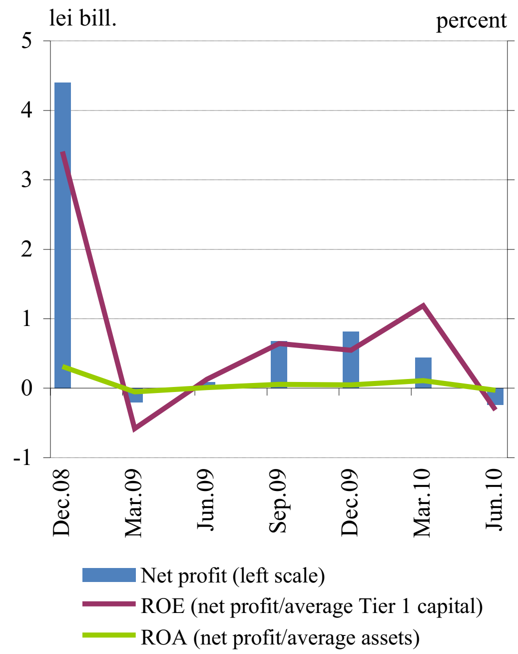
The financial results of the banking system were positive, yet modest in 2009 as a whole. In the first months of the year, the rise in expenses related to specific provisions for credit risk had a significant impact on the profitability of credit institutions, most of them managing to recover in 2009 H2, yet reporting lower financial performance in year on year comparison. In 2010 H1, profitability entered negative territory, owing particularly to higher expenses related to provisions. Banks took cost control measures, both by downsizing the number of units and by cancelling or delaying investment plans. The rise in interest margins both for lei and foreign currency, the sale of fixed assets and the purchase of government securities ranked among the most frequent strategies applied by banks in order to ensure the short-term improvement in their financial performance.

The profitability of the banking system is expected to be further hit by pressures in 2010, owing particularly to the increasing need for provisioning, possibly on the back of the further worsening of asset quality, given the low risk appetite of banks and the ongoing economic adjustment amid the persistent downturn.

The operating profit of the Romanian banking system rose at a slower pace in 2009 H1 and entered negative territory in the second half of the year, on the back of the growth rate of income lagging behind that of expenditures[43]. In June 2010, operating profit stood 20.6 percent above the figure recorded in the same period last year, with operating income decreasing at a slower pace than operating costs.

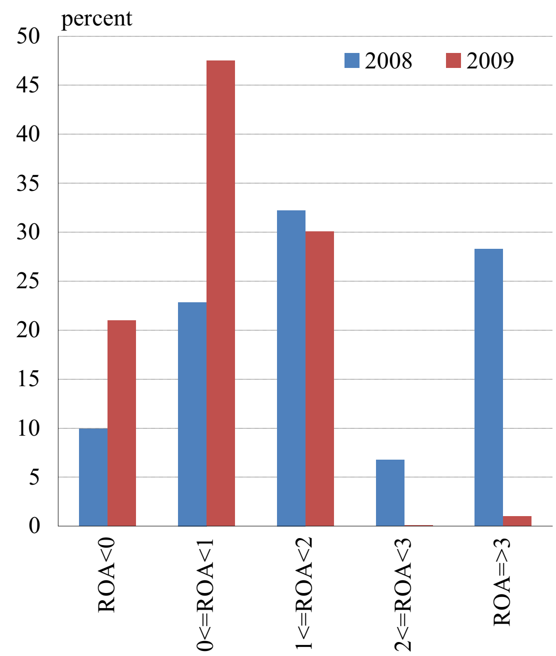
The net financial aggregate result of 2009 of lei 815.9 million (EUR 192.6 million) stood 82.3 percent lower than in 2008[44] under the impact of high provisioning costs, in the context of the substantially higher impact of the global crisis on the national economy materialising *inter alia* into higher payment default risk of non-bank clients. On the other hand, provision-related expenses were influenced by the substantial change in the regulation framework[45]. At the end of 2010 H1, the banking system reported losses of lei 234.8 million (Chart 3.50).

Chart 3.50. Net profit, ROE and ROA



Source: NBR

Chart 3.51. Breakdown of credit institutions' market share based on ROA as at 31 December 2008 and 2009



Source: NBR

The level of profit in the banking sector was heterogeneous in 2009, the highest values being recorded by large banks in particular, the same as in the previous year. The market share of banks

[43] The operating profit of lei 8,862 million at end-December 2009 stood 10.8 percent below the 2008 figure, which also included the sales of participating interests of some credit institutions in companies operating in the insurance field, estimated at about lei 1,665 million.

[44] In the case of the Polish banking system, the net aggregate result in September 2009 stood 44.6 percent lower than in the same year-ago period (National Bank of Poland, Financial Stability Report, December 2009, p. 25).

[45] The more flexible provision regime related to overdue loans for over 90 days or in which case legal proceedings were initiated (April 2009).

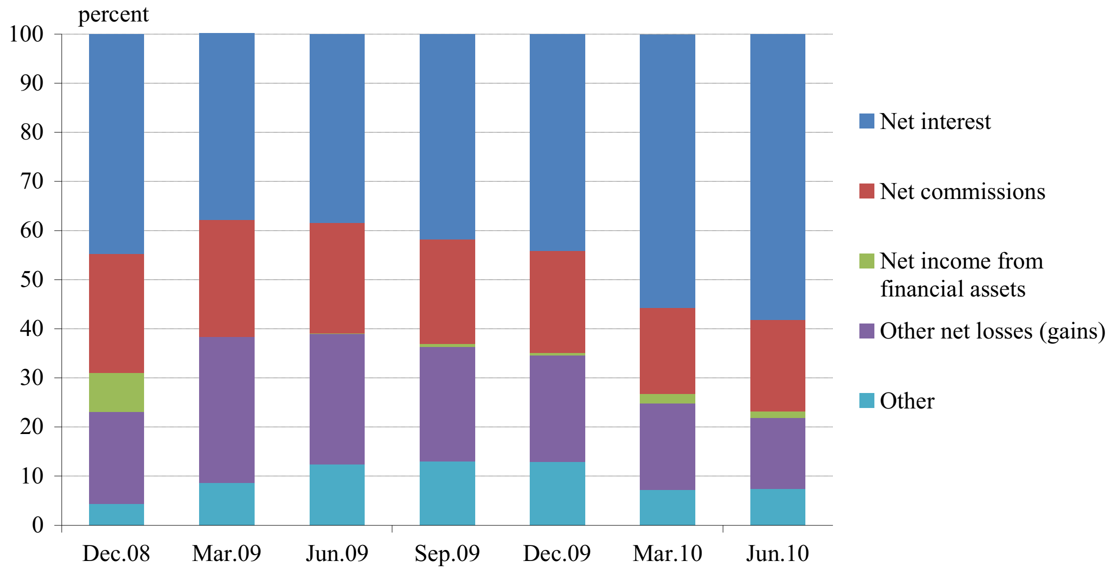
incurring losses stayed on an uptrend; they cumulated 21 percent of total bank assets in 2009 (Chart 3.51). In June 2010, the market share of banks incurring losses stood at 22.7 percent of total bank assets.

The main sources of operating income that rose by 9.4 percent in 2009[46] were interest, foreign exchange transactions and commissions (Chart 3.52).

The share of net interest income in operating income narrowed by 12 percentage points in March 2009, as against the same year-ago period, in the context of slower pace of lending to the private sector and stiffer competition for deposits. However, the share of net interest income resumed an uptrend[47], under the impact of the slower pace of decline in interest income than in interest costs, as well as of mixed developments displayed by some of their components. Interest rates on loans further held a prevailing share in total interest income at end-2009, the same as in the preceding year.

On the other hand, interest rates on operations in securities were the component holding the second largest share in interest income, owing to their robust growth pace, unlike 2008, when interest on deposits with central banks[48] held this position. The liabilities of clients and credit institutions were further the main components of interest expenses. The spread between their shares in total interest expenses widened owing to the faster growth rate of interest paid to non-bank clients, under the impact of heightened competition among banks in order to take deposits.

Chart 3.52. The share of main sources in total operating income



Source: NBR

Net gains from operations, other than those from interest, held the second largest share of operating income[49], particularly as a result of net exchange rate differences from foreign currency transactions

[46] The growth pace was of -3.1 percent in June 2010 as against the same year-ago period.

[47] Accounting for 44.1 percent of operating income in December 2009, merely 0.7 percentage points below the figure recorded in the same year-ago period and 58.2 percent of operating income in June 2010, 19.8 percentage points above the share recorded in June 2009.

[48] Interest rates on deposits with the central banks declined following the cut in minimum reserve requirement ratios. Their higher volume in 2008 was due to the sterilisation operations performed by the NBR.

[49] 21.6 percent in December 2009.

and net gains (losses) from hedge accounting. The increased volatility on the foreign exchange market since the beginning of 2009 Q1 pushed the share of net gains from operations, other than those from interest, higher by 13.2 percentage points than in March 2008. Subsequently, their share narrowed by 12.2 percentage points in June 2010 versus June 2009. The decline in lending was also reflected by the lower share of net income from commissions in total operating income[50].

The share of other operating income in total operating income moved ahead from 3.9 percent to 12.3 percent[51] in December 2008 - December 2009, particularly on the back of claims retrieval, including those related to externalised portfolios.

Banks reacted to the deterioration in operating income by tightening cost control measures. The 5 percent decline in the number of employees led to the decrease by 10.1 percentage points in December 2009 as against the previous year in the share of staff costs in total operating costs.

The costs of materials, works and services provided by third parties, as well as the depreciation costs also followed a downward course, dropping 10.9 percentage points and 0.8 percentage points respectively. As at 30 June 2010, the further decline bank expenses was highlighted by the negative growth rates of these expenditure headings as against the same period a year earlier.

The share of other operating costs in total operating costs rose to 36.6 percent in December 2009 as compared with 14.9 percent in the same year-ago period, in the context of losses arising from some non-performing loans[52].

Cost/income ratio dropped 8.2 percentage points in December 2008-December 2009 (from 55.7 percent to 63.9 percent), with operating costs rising at a swifter pace than operating income. However, at 30 June 2010, the cost/income ratio improved by 8 percentage points as against the same year-ago period, the pace of decline of operating costs being faster than that of operating income.

Net provision-related expenses of loans to non-bank clients increased at a rapid pace in 2009 Q1[53], amid worsening credit quality, their growth pace slowing down in the following period[54], however posting a trend reversal at 30 June 2010. Profitability entered negative territory owing particularly to higher provision-related expenses, as a result of the marked deterioration of asset quality. As at 30 June 2010, 83.6 percent of total provisions were accounted for by provisions related to loans and interest classified under “Loss 2”, which were overdue by more than 90 days and/or in which case legal proceedings were initiated.

ROE and ROA posted a pronounced downward trend in 2009 versus 2008 (2.7 percent[55] and 0.2 percent[56] as compared with 17 percent and 1.6 percent respectively), due to the slow dynamics of net profit as compared with the rise in average aggregate assets and equity.

[50] Down 3.4 percentage points to 20.8 percent by end-2009 versus the prior year and 4 percentage points to 18.6 percent in June 2010 against June 2009.

[51] 7.2 percent in June 2010.

[52] As at 31 December 2009, 66 percent of other operating costs were accounted for by losses from unrecoverable claims covered and not covered by depreciation adjustments recorded by five banks (61 percent in March 2010).

[53] By 241.5 percent in March 2009 versus the same period a year earlier.

[54] As at 30 June 2009, the real growth rate of net provision-related expenses was of 152.5 percent, as at 30 September 2009 of 101.6 percent (in the case of the Polish banking system, net provisions as at 30 September 2009 stood 216.1 percent higher than in the preceding year, National Bank of Poland, Financial Stability Report, December 2009), as at 31 December 2009 of 76.2 percent, as at 31 March 2010 of -23.2 percent and as at 30 June 2010 of 32.3 percent.

3.3. Non-bank financial sector

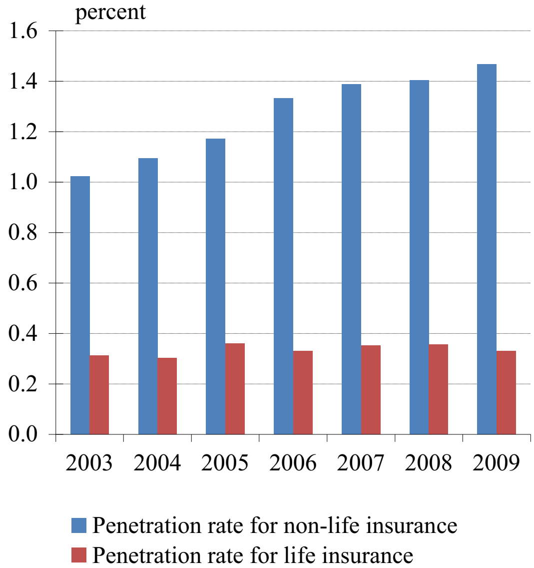
3.3.1. Insurance market

In 2009, the insurance market grappled with worsening economic activity and the financial market turmoil, which led to a slower growth rate for non-life insurance and a decline in life insurance. Insurance undertakings were hit by the economic recession, the drop in share prices in the first part of 2009 and the weaker domestic currency, but benefited by considerable yields from investment in government securities and bank deposits. The major risks to the insurance market consist of the fragile economic environment and the high costs associated with auto insurance.

Gross subscribed premiums for non-life insurance went up 2 percent in 2009, while those for life insurance diminished by 13 percent. In the former case, guarantee insurance was the best performer (up 158.6 percent), while in the latter case the fastest growing components were accident insurance (14.4 percent), unit-linked policies (8.6 percent) and health insurance (7.5 percent).

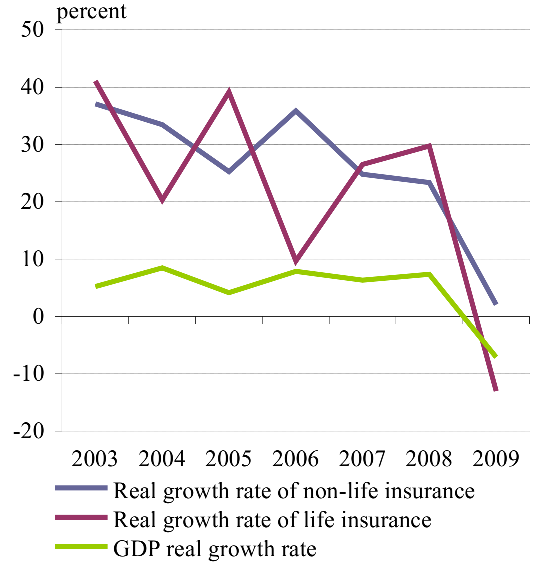
The development level of the insurance market, as a ratio to the actual size of the economy, also witnessed a divergent evolution in 2009 when analysing the two components. Thus, non-life insurance saw a faster intermediation in the economy, particularly on account of GDP contraction, whereas life insurance – which bore the brunt of adverse macroeconomic and financial conditions – witnessed slower development (Chart 3.53).

Chart 3.53. Insurance market – share of gross subscribed premiums in GDP



Source: ISC

Chart 3.54. Insurance market and GDP dynamics



Source: ISC, NIS, NBR

Upon reviewing both insurance sector dynamics and economic growth during 2003-2009, the strong impact of the 2009 recession is readily noticeable, since it was the first year when the insurance market posted a negative pace of increase in real terms (Chart 3.54). Demand for

[55] ROE: 10.1 percent for Alpha Bank Greece (Press release, Full Year 2009 Results), 5.7 percent for Raiffeisen International (Raiffeisen International: Key figures 2009), 7.9 percent for Piraeus Bank Greece (Full Year 2009 Results), and 0.9 percent for Société Générale (Communiqué de presse: activités et résultats 2009, 18 février 2010).

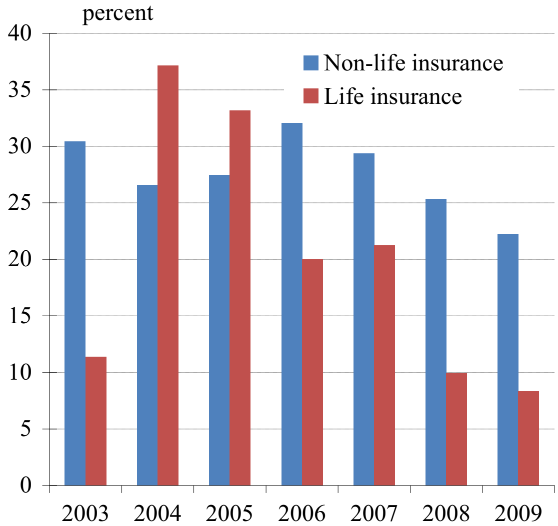
[56] ROA: 0.4 percent for Piraeus Bank Greece (Full Year 2009 Results).

insurance products was stymied by lower income, job insecurity, decreasing consumption and financial market contraction.

The correlation between the non-life insurance sector and economic growth during 2003-2009 stood at 91.4 percent, whereas that between life insurance and economic activity came in at 69.4 percent. The lower reading in the latter case may be ascribed to the subdued weight in the total insurance sector, triggering higher volatility, but also to the heavier impact from financial market developments. Unlike non-life insurance, life insurance products rely more heavily on the investment component, while the financial market behaviour is a forward-looking one, as its evolution is decoupled from the real economy over certain periods.

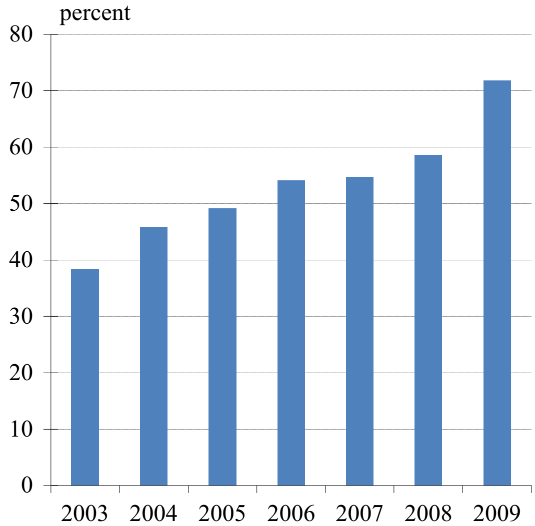
Over the last years, non-life insurance companies have earmarked a smaller share of gross subscribed premiums for reinsurance purposes, but have been exposed to higher risks. The contraction was more severe for life insurance companies, which also had to cope with policy redemptions brought about by adverse conditions across the economy and the financial markets (Chart 3.55).

Chart 3.55. Share of gross premiums earmarked for reinsurance in total gross subscribed premiums



Source: ISC

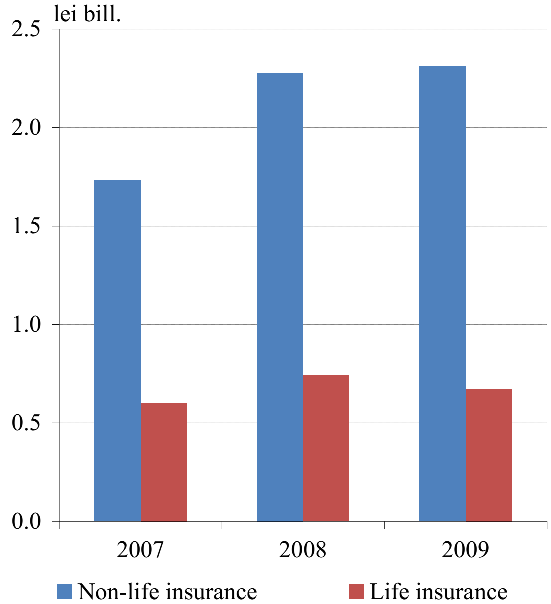
Chart 3.56. Share of gross claims paid in total gross subscribed premiums for non-life insurance



Source: ISC

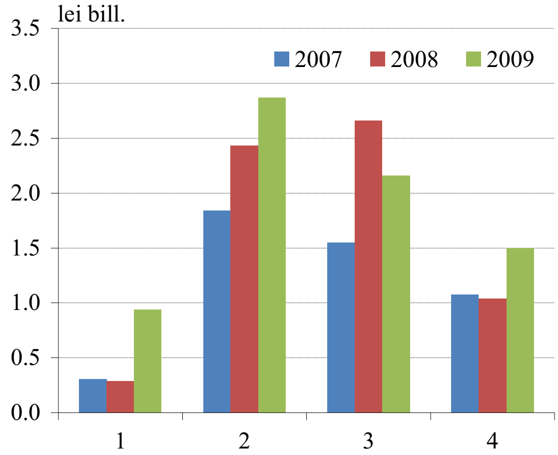
The share of gross claims paid in total gross subscribed premiums for non-life insurance grew in 2009 as a result of the faster dynamics of gross claims paid compared to that of gross subscribed premiums (Chart 3.56). The below-par value of the indicator points to a sustainable level in the activity of non-life insurance companies, yet the significant advance puts pressure in terms of higher premiums on insurance policies over the upcoming years, especially for auto insurance. As regards life insurance, the annual ratio between gross claims paid and gross subscribed premiums is less relevant because insurance contracts are usually concluded for more than one year.

Chart 3.57. Developments in operating and purchase expenditures



Source: ISC

Chart 3.58. Key investments of insurance companies



Note: 1. Shares and other variable-income securities
2. Bonds and other fixed-income securities
3. Deposits with credit institutions
4. Investments related to life insurance for which investment risk is transferred to clients

Source: ISC, MFP

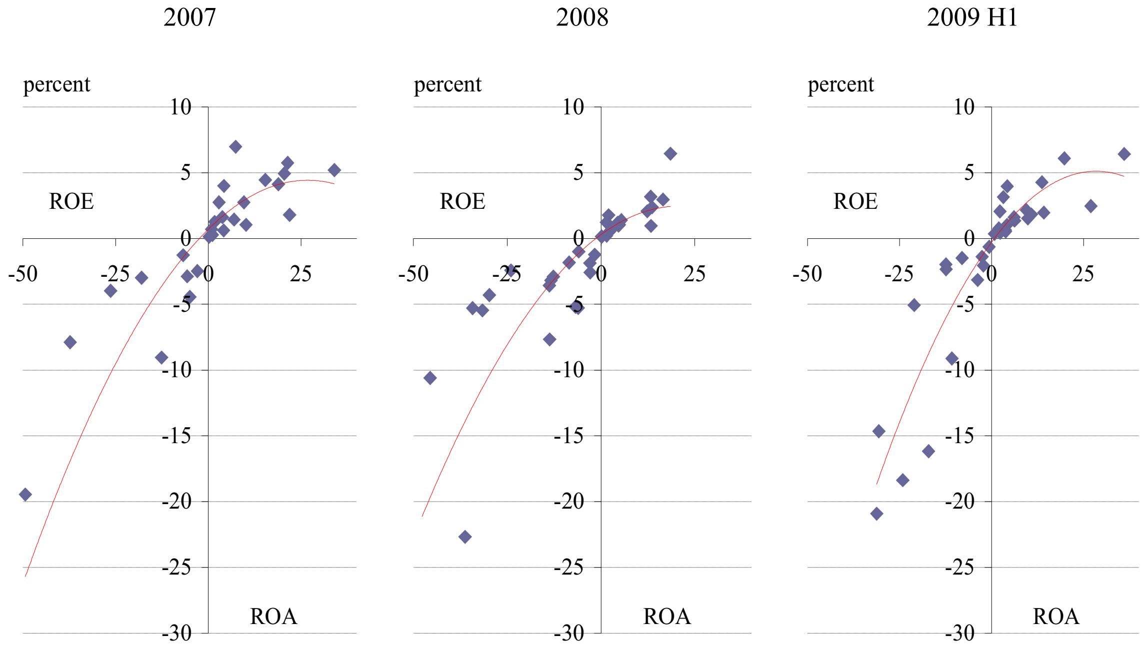
Insurance companies have adjusted their operating and acquisition expenditures to market dynamics, as the year under review saw a considerable slowdown in the pace of increase of expenditures in the non-life insurance sector and even a contraction in life insurance (Chart 3.57). Insurance companies' resilience to economic conditions is beneficial in terms of the sector's financial stability, since it cushions the pressure on efficiency indicators and prevents a pass-through of costs to insurance policies.

Insurance undertakings have focused on investment in fixed-income financial instruments, government securities in particular, implying minimum risks, but have also invested in bank deposits thanks to their attractive yields and the entities' strong preference for liquidity (Chart 3.58). Investments related to life insurance for which investment risk is transferred to clients have grown further in 2009 amid higher gross subscribed premiums on this insurance segment, while equity investment – albeit on the rise – remained subdued, on account of insurance companies' risk aversion.

Following the significant worsening of 2008, profitability ratios posted slightly positive values in 2009 H1 due to capital increases, adjusting the operating and acquisition expenditures to adverse market conditions, pursuing adequate risk management as well as the attractive yields of government securities and bank deposits (Chart 3.59). Individual positive results were on the rise, whereas negative ones saw a lower degree of dispersion. However, profitability ratios are still below the 2007 levels, yet the trend reversal might be indicative of a higher stability of insurance undertakings over the period ahead.

Some insurance companies have seen their prudential indicators deteriorate amid current business losses or dwindling prices of financial assets, requiring capital contribution so as to maintain solvency and liquidity ratios above the minimum regulated level. Some 19 insurance undertakings have resorted to capital increases in excess of lei 550 million in 2009, most of them at the ISC request.

Chart 3.59. Profitability of insurance companies



Note: Profitability ratios have been calculated for a homogenous sample consisting of 43 insurance companies for each period. Extreme values have been excluded from the sample.

Source: MPF

The insurance market had to cope with adverse macroeconomic and financial conditions in 2009, especially over the first part of the year under review. The economic downturn, the liquidity crunch and higher financial market volatility, the weaker domestic currency and worsening investors' sentiment on emerging European countries have all contributed to exposing insurance companies to heightened risks. The stabilisation of the economy and of financial markets, manifest starting in the latter part of 2009, is likely to appease tensions on the insurance market. Nevertheless, the fragile economic environment renders more difficult the task of attaining, over the period ahead, a fast and sustained pace of increase on the insurance market.

3.3.2. Private pension funds

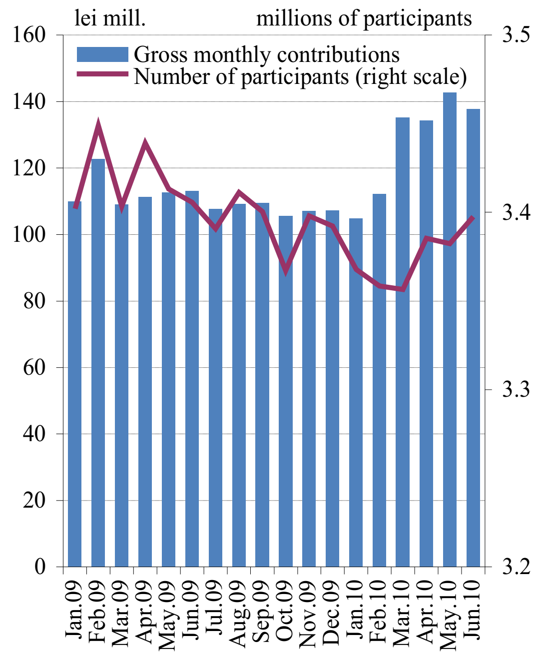
Private pension funds were launched in 2007 and they are now in the stage of collecting contributions, without any notable disbursements. Hence, the assets managed by such funds have continued to grow January 2009 through June 2010, albeit at a slower pace during 2009, on the back of adverse economic developments. The investment portfolio is oriented towards low-risk fixed-income securities, while the exposure is primarily to the domestic financial system.

The economic downturn of 2009 fed through to private pension funds (Pillar II) via a slight decrease in the number of contributors and lower amounts collected (Chart 3.60). The volume of contributions collected in 2009 and in January-February 2010 was influenced, *inter alia*, by changes to the calendar of annual increase in contributions, which were maintained at the 2008 level, i.e. 2 percent. Income from contributions entered an upward path at the end of 2010 Q1 following the increase in contributions to 2.5 percent and a relative stabilisation of the economy. At the end of 2010 H1, total net assets managed under Pillar II amounted to lei 3,379.4 million, while voluntary private pension funds (Pillar III) managed total net assets worth lei 264.4 million, accounting for 7.3 percent of the total sector. The bearing of Pillar III pension funds on the development of the overall sector is subdued precisely due to this low weight, yet their dynamics may be deemed as a robust indicator of households' propensity for financial market placements and medium- and long-term savings. However, voluntary pension funds (Pillar III) need to go beyond the development stage in their first years in operation in order to get a better glimpse of the prevailing trends.

Private pension funds play a major role in cushioning supply and demand imbalances likely to become manifest on financial markets. Nevertheless, as far as Romania is concerned, the still subdued volume of managed assets as a ratio to GDP (0.5 percent at end-2009) diminishes the beneficial role of private pension funds over such periods.

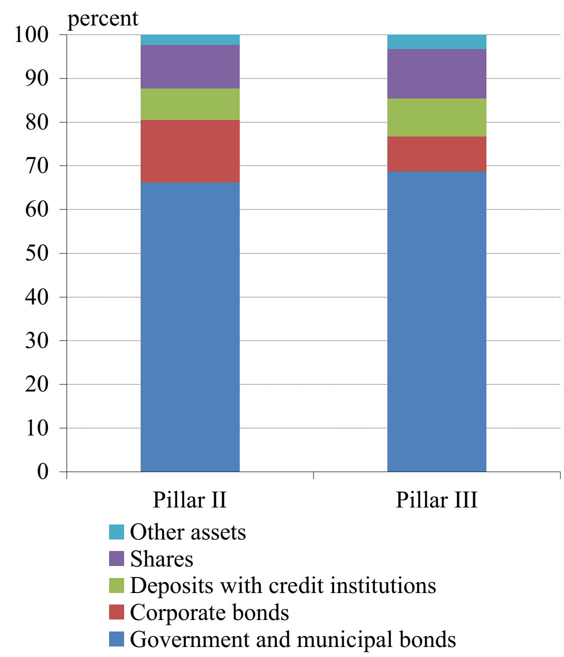
The breakdown of the investment portfolio held by pension funds (Chart 3.61) reveals that fixed-income securities account for more than 60 percent in Pillars II and III, with government securities prevailing. The share of municipal bonds is of merely 0.95 percent of total assets in Pillar II and 2.55 percent in Pillar III, primarily due to the low number of securities issues.

Chart 3.60. Developments in contributions for Pillar II



Source: PPSSC

Chart 3.61. Breakdown of investment portfolios at the end of 2010 H1



Source: PPSSC

Private pension funds invested on external markets (14.9 percent of their total assets) in order to diversify credit and market risks related to their portfolios, but also due to the less liquid private debt securities market in Romania. Moreover, private pension funds diversified their asset portfolios via investments in lei-denominated corporate bonds issued by non-resident financial institutions. At the end of 2010 H1, foreign currency-denominated securities held a small share in total assets of private pension funds.

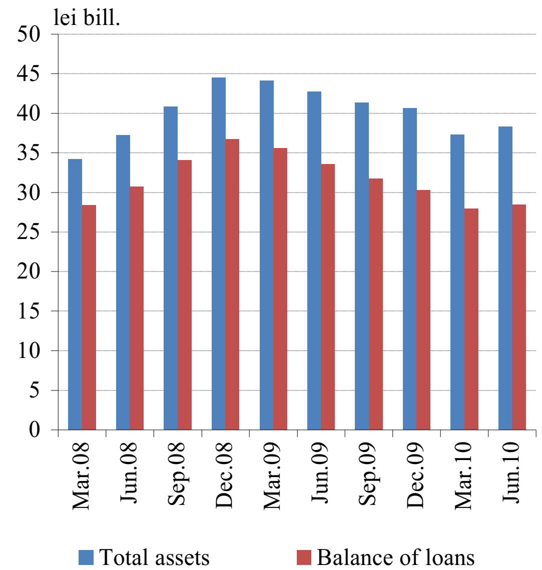
In the period under review, the yields reported by voluntary pension funds (Pillar III) were positive in real terms. Profitability of private pension funds (Pillar II) was calculated for the first time in 2010 Q2, recording positive yields in real terms as well. Voluntary pension funds (Pillar III) invest a larger weight of assets in shares and their yields tend to be more volatile, given that the voluntary nature of these pension funds favours a higher risk appetite in relative terms. Both categories of pension funds are supervised and not allowed to assume risks beyond the regulatory framework.

3.3.3. Non-bank financial institutions

Non-bank financial institutions reduced their activity following the loan portfolio deterioration, against the backdrop of the economic recession, the diminished access to financing and the decline in loan demand. The increase in credit risk led to higher provisioning costs, thus depressing profitability. Significant capital injections helped maintain the level of own funds. The growth rate of non-performing loans moderated since 2009 H2, while the fragile economic environment remained the main risk to non-bank financial institutions. The external contagion risk is currently limited, given that the main countries providing financing to non-bank financial institutions are not facing serious challenges to financial stability.

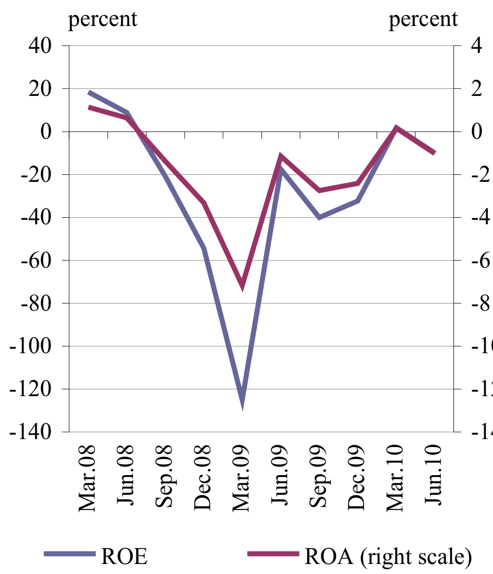
The fragile economic and financial environment had a strong impact on non-bank financial institutions (NBFI), leading to a contraction in their asset holdings (Chart 3.62). The decrease in activity of this sector was driven by the diminished access to financing, the NBFIs' aversion to financing an economy in recession and the contraction in loan demand.

Chart 3.62. Evolution of the NBFI sector



Source: NBR

Chart 3.63. Profitability of the NBFI sector (annualised data)



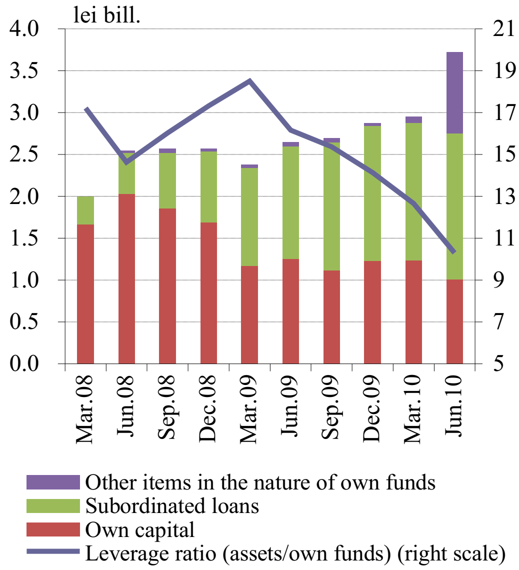
Source: NBR

The rapid switch of the economy from robust growth to a significant recession adversely affected the NBFI sector which has exposures chiefly to car leasing and consumer credit covered by fast-depreciating collateral during an economic decline. In 2009 H2, profitability stabilised, amid the alleviation of economic tensions. This performance persisted into 2010 H1. The peak in the deterioration of loan portfolios appears to have been overcome (Chart 3.63).

Loan losses led to a decapitalisation of NBFIs, which resorted to subordinated borrowings in order to maintain or even increase own funds to the level recorded prior to the economic contraction.

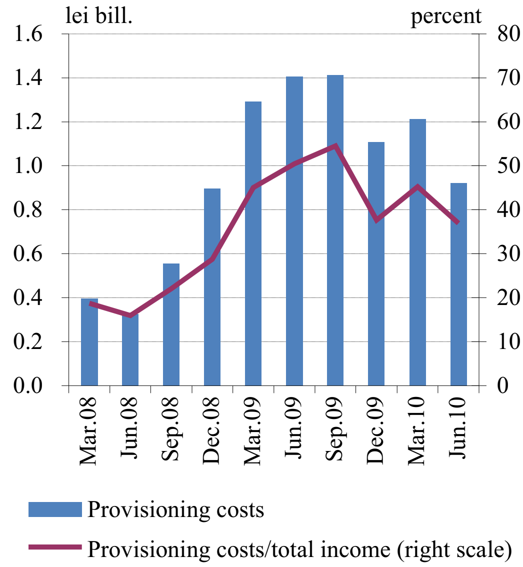
The mixed developments in own funds and asset holdings were reflected in the deleveraging, thus enhancing the NBFIs' capacity to withstand shocks (Chart 3.64). Own funds were increased especially via subordinated debt (tier 2 capital) rather than by contributed capital (tier 1 capital). The reason behind the shareholders' preference for this mechanism is a larger flexibility, a better rate of return on funds, i.e. lower capital costs. Losses are covered by subordinated debt only after the complete depletion of tier 1 capital, they have a maturity of over five years, but are subject to amortisation and new borrowings are needed to maintain a steady level of own funds.

Chart 3.64. Structure of own funds and the leverage ratio



Source: NBR

Chart 3.65. Provisioning costs related to loans



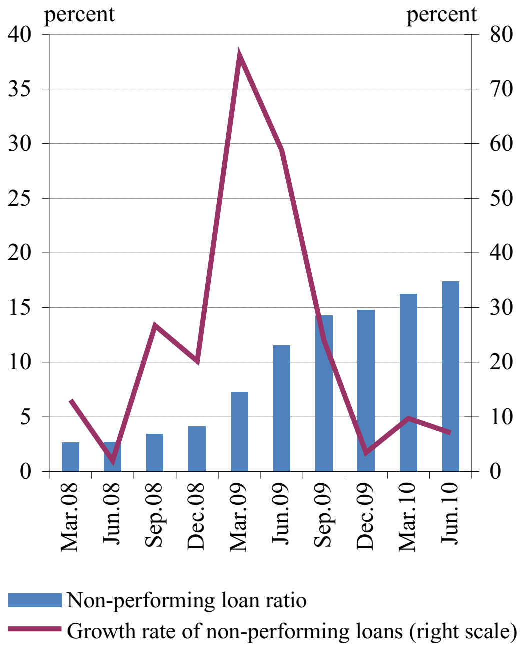
Source: NBR

Capital markets assess the risk level of a financial institution by taking into consideration not only the value of the capital but also its structure. A company with a large share of subordinated debt in total capital is considered as riskier, as potential losses assumed by shareholders are low. Shareholders may choose to make risky investments in their attempt at returning substantial profit at the risk of limited losses. Nevertheless, in the case of the NBFIs operating in Romania, financing is largely provided by shareholders and the risk of their withdrawal is not highly conditional on the structure of own funds.

The deterioration of loan portfolio resulted in higher provisioning costs (Chart 3.65), thus affecting the profitability indicators of the NBFI sector. The deterioration trend of the loan portfolio came to a halt in 2009 Q4. Data for 2010 H1 indicate a stabilisation of this trend, with a slowdown in the pace of deterioration of the loan portfolio (Chart 3.66).

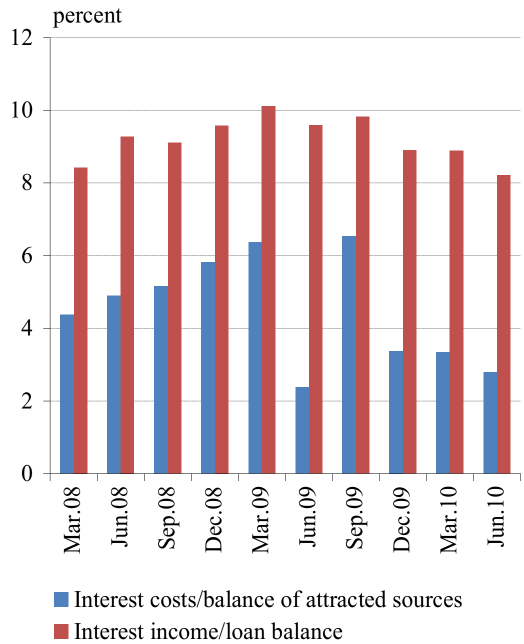
NBFIs have ensured financing and granted EUR-denominated loans to a proportion of more than 80 percent of total operations performed in December 2008-June 2010. Hence, interest costs and income have been conditional on interests in euro on international financial markets, the sovereign risk and the NBFI sector solvency ratio. NBFIs reported net interest income despite the increase in the non-performing loan ratio, which indicates the use of a wide interest spread (Chart 3.67). NBFIs' losses were attributed chiefly to provisioning costs, making possible an improvement in profitability over the period ahead, if the claims collection were to make progress.

Chart 3.66. Evolution of credit risk in the NBFI sector[57]



Source: NBR

Chart 3.67. Evolution of interest risk in the NBFI sector (annualised data)



Source: NBR

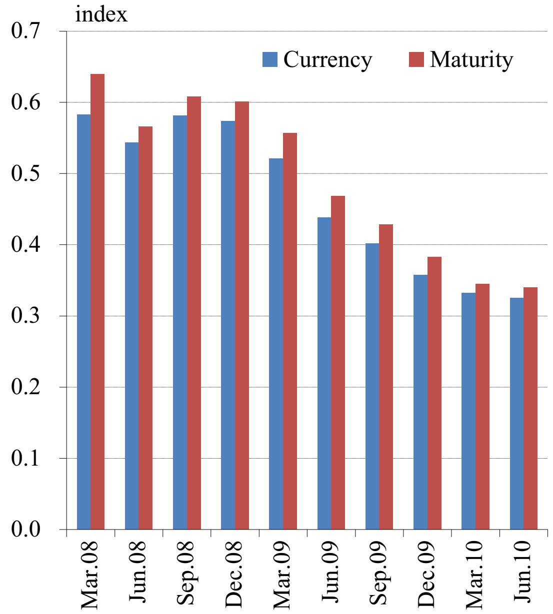
The structure of balance sheet assets and liabilities shows a slight currency mismatch, the NBFIs granting a larger volume of loans in lei compared with attracted sources in domestic currency. Moreover, the maturity of resources used by NBFIs shows a propensity for attracting sources with maturities longer than those of loans already in their portfolios. These mismatches diminished during 2009 and the trend continued in 2010 H1 (Chart 3.68).

Credit institutions transfer part of the risks to the credit guarantee funds included in the category of NBFIs. Credit guarantee funds operating in Romania issue guarantees whereby they take over of the default risk of credit institutions' debtors, thus fostering lending activity. Credit guarantee funds' have both private and public shareholders, are focused on specific sectors (agriculture, real estate, SMEs) and the government supports their development. The concentration of guarantees only in certain economic sectors entails the risk of a significant increase in the number of foreclosures on collateral, while the active role played by the state in this field makes the full non-observance of the assumed commitments less likely, but may be conducive to a looser assessment of credit risk by credit institutions.

The low share of guarantees pledged in non-government credit balance (3.5 percent in June 2010) and the low leverage ratio are indicative of the limited effect of the guarantee funds on spurring lending activity, but, at the same time, they have a significant growth potential (Chart 3.69). The marked increase in collateral pledged during 2009 H2 was attributed mainly to the "First Home" governmental programme for house building and purchase.

[57] Non-performing loan ratio = loan losses/granted loans balance

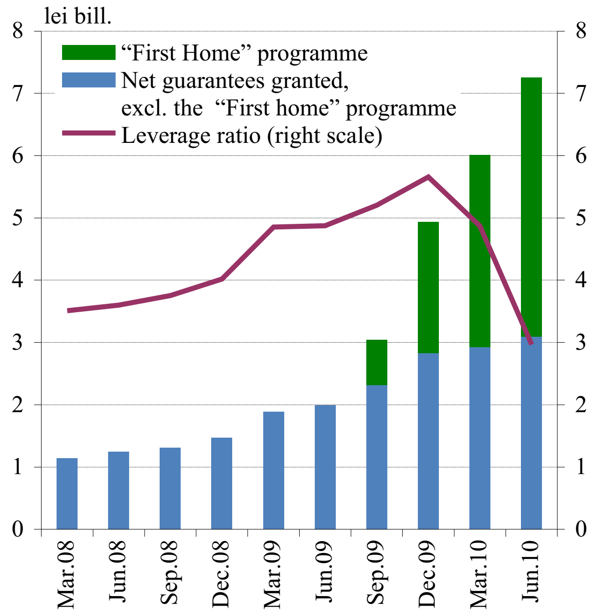
Chart 3.68. Breakdown of asset-liabilities mismatch by currency and maturity[58]



Note: A higher reading of the index is associated with a stronger mismatch.

Source: NBR

Chart 3.69. Breakdown of guarantees and of the leverage ratio for credit guarantee funds

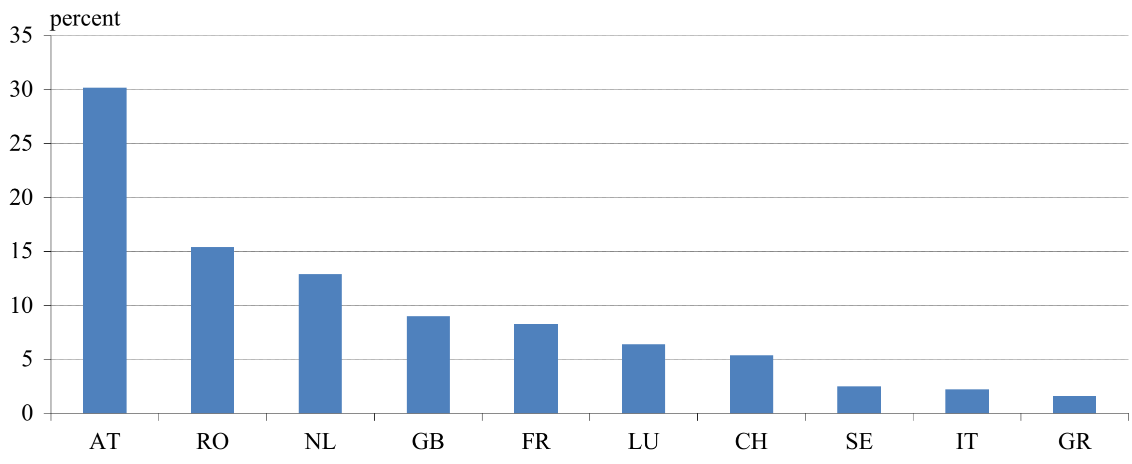


Note: leverage ratio = (assets + net guarantees granted, excluding "First Home")/own funds.

Source: NBR

The NBFI sector in Romania is largely held, directly or indirectly, by European financial institutions that ensure its financing. However, the external contagion risk via balance sheet exposures is currently low since the main countries of origin of parent undertakings are not facing challenges to financial stability that could entail a capital flight (Chart 3.70). Nonetheless, the risk of a leading financing institution encountering difficulties or of an external shock deteriorating lenders' perception of threats in the domestic NBFI sector should not be overlooked.

Chart 3.70. Breakdown of loans by country of origin on 30 June 2010



Source: NBR

[58] The indicators were calculated by using funds and loans granted by currency (euro, lei) and maturity (≤ 1, between 1 and 5 years, >5 years. The closer to zero the indicators, the smaller the mismatches.

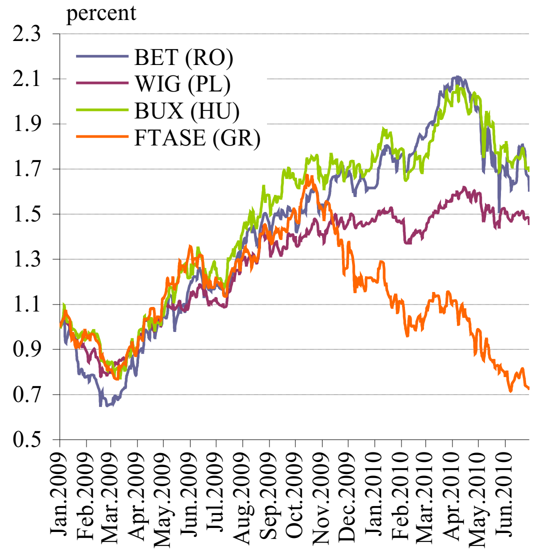
3.4. Capital market

During 2009, investors' perception of the risk attached to capital market investments improved, but worsened again in 2010 Q2 against the backdrop of global concerns regarding sovereign debt. The favourable performance of 2009 occurred amid low liquidity, signalling more the stabilisation of risks rather than a resumption of the upward path. The local capital market, part of the European financial market, is sensitive to economic and financial developments around the world.

3.4.1. General developments

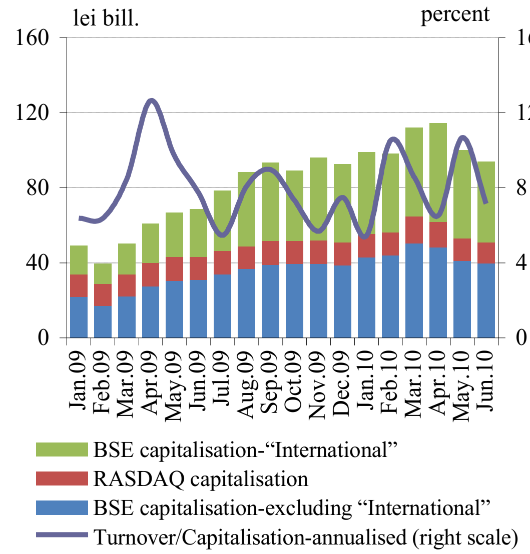
In 2009, BET index was highly volatile, dropping 34.5 percent in January and February, but then reverting to the upward trend to close 61.7 percent higher than a year earlier (Chart 3.71). The first half of 2010 saw uncertain developments, as the index rose 27 percent January through March but fell 20 percent over the following three months. Market capitalisation reached lei 93.7 billion at end-June 2010, up 37 percent from the same year-earlier period. At the same time, market liquidity[59] was characterised by high volatility and there were periods when the value of trades fell to very low levels (Chart 3.72).

Chart 3.71. Regional stock market index dynamics (reference period: Jan. 2009=1)



Source: Bloomberg

Chart 3.72. Domestic market capitalisation annualised liquidity



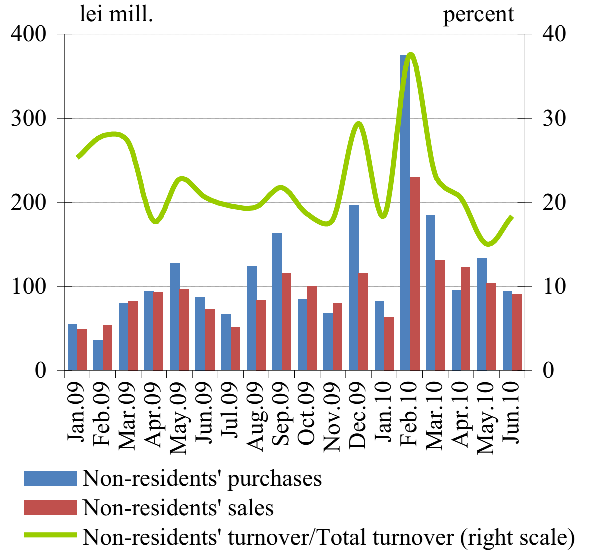
Source: BSE

Over the period under review, monthly trades performed by non-resident investors on the BSE[60] were generally balanced, with the value of stock purchases being almost equal to that of sales (Chart 3.73). Nevertheless, in December 2009 and February 2010 non-residents were mostly engaged in purchases. The two months when non-residents' net purchases reached significant levels overlapped with strong rallies on global financial markets.

[59] Monthly transactions * 12 / Market capitalisation at the end of the month.

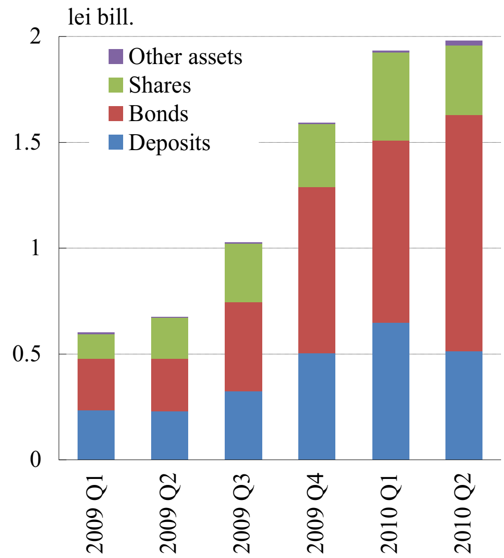
[60] Bucharest Stock Exchange, BSE (excluding Rasdaq and the financial derivatives market in Sibiu).

Chart 3.73. Non-resident investors' trades on the BSE (excluding trades under "International")[61]



Source: BSE

Chart 3.74. Net assets of open-end investment funds



Source: NBR

At the end of 2010 Q2, net assets of open-end investment funds amounted to about lei 2 billion (Chart 3.74). The figure was almost twice as high as that recorded in investment funds' balance sheets in the same period of 2009. The vigorous expansion in net assets was underpinned not only by capital inflows into investment funds, but also by a higher portfolio value. Prices of financial instruments increased against the background of lower yields on government securities and stronger investor interest in stock market investments.

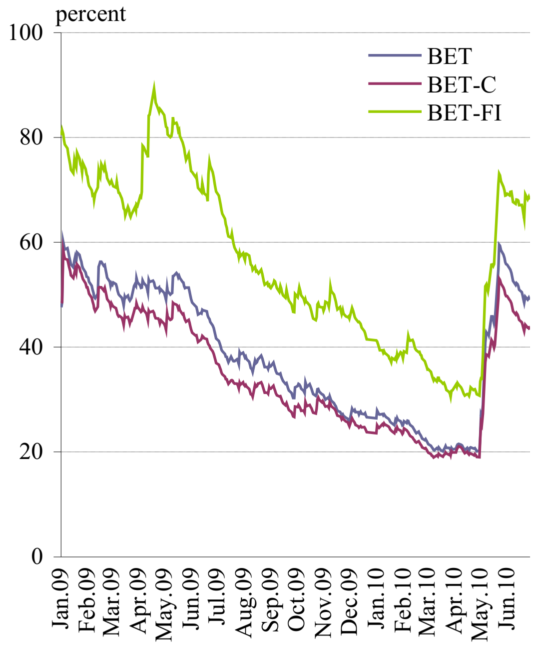
3.4.2. Risk aversion

The Romanian capital market has the same features as any other emerging market: a small number of issuers, low liquidity, few investors, high vulnerability to external shocks and pronounced segmentation. However, the implementation of European legislation led to increased investor protection and a broader understanding of capital market functioning in the current globalisation context. Under the circumstances, risk aversion on the capital market can be a useful indicator for revealing the developments in investors' risk perception regarding the larger segments of the Romanian economy.

In 2009, global stock market indices recovered from the very strong corrections seen in 2008 and early 2009. This phenomenon also echoed on the domestic capital market, while the reduction in investors' risk aversion to the stock exchange investments brought about a declining trend in volatility (Chart 3.75). Nevertheless, tensions increased in 2010 Q2 following global concerns regarding some countries' capacity to manage their sovereign debts. The compression in volatility in 2009 and 2010 Q1 was also manifest on the financial derivatives market, with the swings in volatility being augmented by the lower liquidity (Chart 3.76).

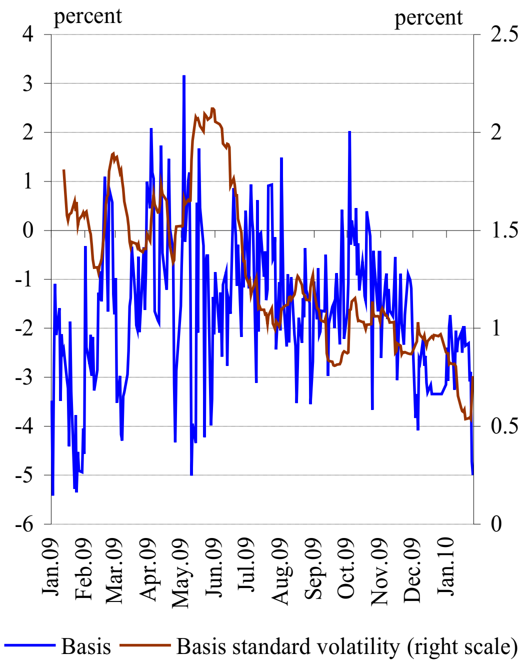
[61] Due caution should be employed when interpreting data, due to difficulties in precisely identifying the origin of these funds. A case in point is the classification under non-residents of the amounts invested by residents via foreign investment funds.

Chart 3.75. Volatility of BSE indices



Source: BSE, NBR calculations

Chart 3.76. Spot-futures spread (basis)[62]



Source: NSC, NBR calculations

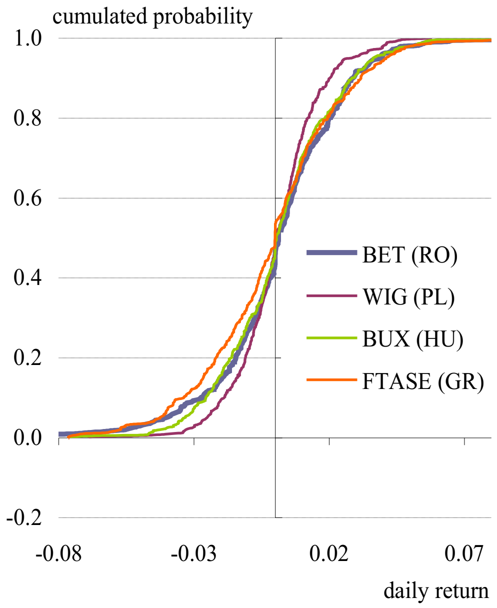
As shown by the cumulated distribution of returns[63] (Chart 3.77), the BET index plunged markedly in early 2009 and 2010 Q2, as investors displayed a stronger aversion to investments in the Romanian stock market during those periods. BET index held an average position across the region in terms of its resilience to losses incurred over the period and the investors' risk aversion. On the regional capital market, an inverse relation between investors' risk aversion and stock exchange indices' resilience was manifest.

The capital market features an average integration level compared with its regional peers. This correlation varied substantially due to the low liquidity that sometimes makes the domestic stock market decoupled from its peers in the region. The correlation coefficient stood, on average, at 0.37. A contagion effect from the Greek stock exchange was not detected. Investors in Romania further showed an almost equal interest in the developments on regional markets and no increase in the impact from the Greek stock exchange was manifest, regardless of the other markets in the region (Chart 3.78). The explanation for the lack of contagion could lie with the increased credibility arising from the agreement signed by Romania with international financial institutions whereby an important amount of assistance is made available and the necessary prerequisites are set for a consistent implementation of the macroeconomic policy mix and for furthering structural reforms, as well as with the breakdown of capital owned by non-resident investors in the domestic financial system. Greece is a significant investor, but not the most important one.

[62] The spread is the difference between spot and 3-month futures prices, computed as weighted averages of trades for the most liquid shares on the futures market in Sibiu.

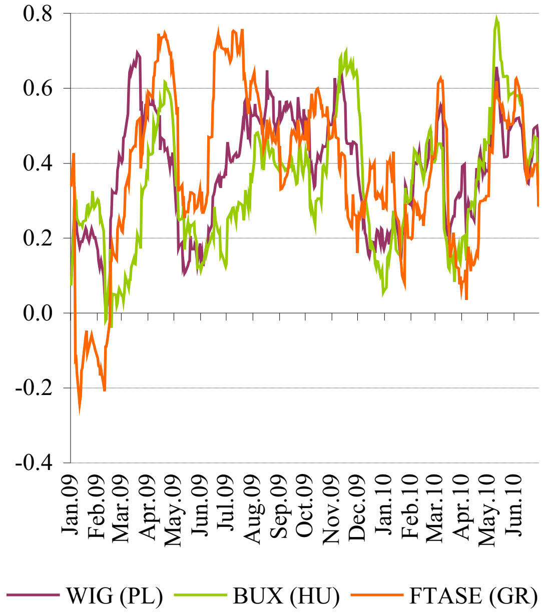
[63] Cumulated probability distribution of returns in respect of the four stock exchange indices in Chart 3.77 was calculated using a Kaplan-Meier estimation function. Oy axis shows figures in the [0.1] range of probability levels for which the function was estimated. Ox axis shows various figures of index returns related to probability levels.

Chart 3.77. Cumulated distribution of returns in January 2009-June 2010



Source: Bloomberg, NBR calculations

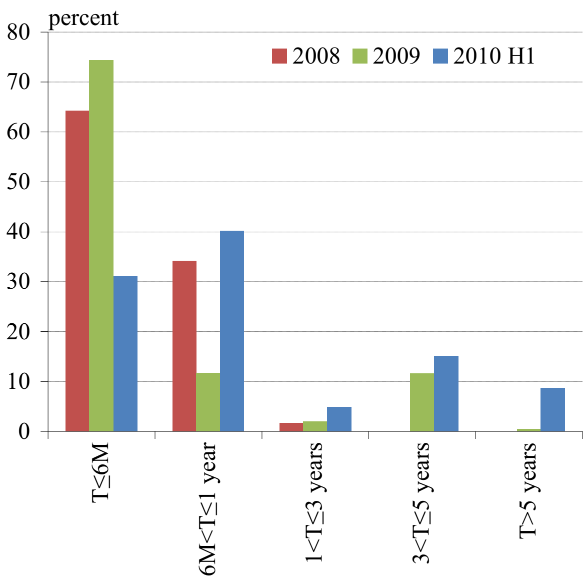
Chart 3.78. Correlations between BET index and European capital market indices



Source: Bloomberg, NBR calculations

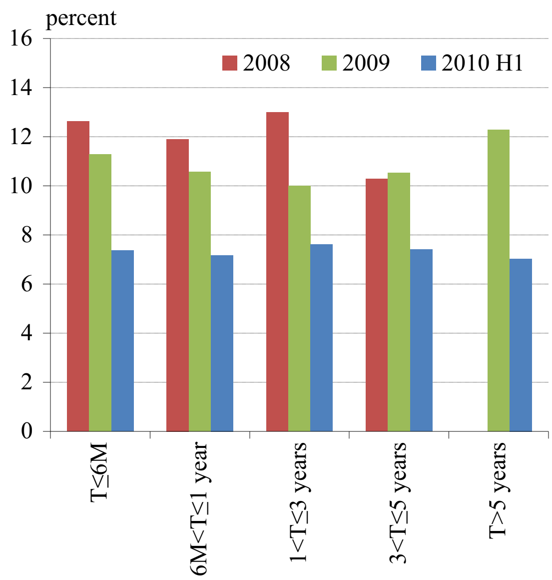
Demand for government securities focused primarily on short-term paper, due to increasing budget deficit financing pressures and to investors' lack of propensity for blocking liquid funds in the medium and long term (Chart 3.79). This breakdown of government securities issues poses certain refinancing-related risks, especially if fiscal consolidation were to be postponed. Romania's low public debt level mitigates the refinancing risk, but this benefit may be diminished significantly during highly uncertain periods on the financial markets.

Chart 3.79. Term structure of lei-denominated government securities issues (T)



Source: NBR

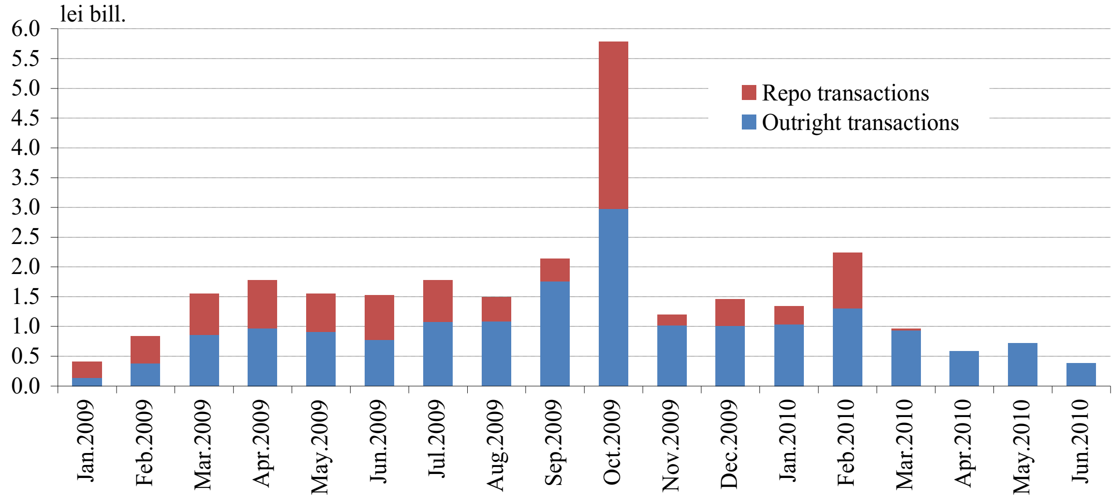
Chart 3.80. Average yields on lei-denominated government securities on the primary market-term structure (T)



Source: NBR

In 2009 and 2010 H2, average yields on government securities launched on the primary market declined in the context of macroeconomic stabilisation, the signing of the financing agreement with the international financial institutions that took some pressure off from domestic resources, as well as the policy rate cuts (Chart 3.80). Although the yields on the primary market of government securities went down markedly in 2010 H1, a certain investor aversion to accepting the yields offered by the Ministry of Public Finance can be noticed.

Chart 3.81. Daily average of transactions in government securities on the interbank secondary market



Source: NBR

The daily average of transactions in government paper rose sharply in October 2009 to reach lei 5.8 billion (Chart 3.81). Over the same month, interest rates on the money market advanced significantly and government securities were either sold in order to obtain liquid funds or purchased and used as collateral for taking loans. In the remaining period, the value of trades was relatively steady, but a significant reduction occurred in 2001 H1 amid the rising liquidity on the interbank market. Dealings in government securities are also conducted on the BSE, but so far the trading turnover on this market has been low, i.e. below 1 percent of total turnover.

EUR-denominated government securities issued domestically during January 2009-July 2010 amounted to EUR 3.88 billion, their average yield was 4.77 percent and their original maturity stood, on average, at 1.75 years. These securities were launched in correlation with the increase in foreign-currency holdings of credit institutions following the cut in minimum reserves. The traded volume was low, but may grow substantially after these securities were accepted by the National Bank of Romania as eligible collateral for operations with credit institutions starting April 2010. The government stock launched on external capital markets that has not reached maturity by the end of July 2010 amounts to EUR 2.45 billion, is totally EUR-denominated and bears an average coupon of 6.46 percent, being quoted both below par and above par.

CHAPTER 4. RISKS RELATED TO DOMESTIC MACROECONOMIC DEVELOPMENTS

The quarterly dynamics of real GDP has been in the negative territory since 2008 Q3. The prerequisites for a substantial recovery in the short term are feeble, although projections are indicative of a return to positive growth rates of the economy in 2011. The factors boosting private investment and consumption remain subdued, although labour productivity saw a noticeable pick-up. The developments in exports and industrial output are supportive elements, but foreign trade companies may face constraints related to economic growth resilience in main trade partner economies. Competitiveness of Romanian goods and services improved markedly compared to the pre-crisis period and the vulnerabilities arising from the magnitude of the external imbalance and the share of short-term debt in total private foreign debt were subject to a considerable correction. Domestic lending contracted in real terms, as both demand-side and supply-side factors acted in the same direction.

4.1. Domestic macroeconomic developments

The Romanian economy evolved in the same direction as its peers in Central and Eastern Europe, except Poland. The economic contraction was sharp, while the fiscal deficit widened significantly. For 2010, projections show the persistence of GDP dynamics in negative territory and the adjustment of fiscal deficit.

4.1.1. Real sector

In 2009, the Romanian economy contracted markedly (7.1 percent). The developments were in line with the trends in the region[64] (except Poland), at different rates however. In the first half of 2010, the decline of the Romanian economy persisted (down 1.5 percent year on year). The risk mentioned in the previous *Report* has materialised: the countries having registered a fast catching-up rate with the euro zone in the pre-crisis period, along with economy overheating and widening macroeconomic imbalances, tended to undergo strong corrections and to post a weaker performance in the recessionary climate (Chart 4.1). Real convergence gains from the prior periods diminished, which calls for the resumption of a sustainable growth pattern, in conjunction with the adjustment of economic structures in those countries.

For Romania, projections show the persistence of GDP dynamics in negative territory[65] in 2010, both as a result of subdued domestic demand (in terms of investment and private consumption alike) and the high import content of Romania's exports, causing the contribution of net exports to GDP dynamics[66] to retreat in relative terms.

The investment ratio dropped by approximately 30 percent in 2009 and continued to diminish at the same pace in 2010 Q1. The trend of returning to the previous level is foreseen to be modest (Chart 4.2). The explanation for the depressed picture in investment lies with the strong decline in corporate profitability and the less readily accessible financing in the long term, along with weaker

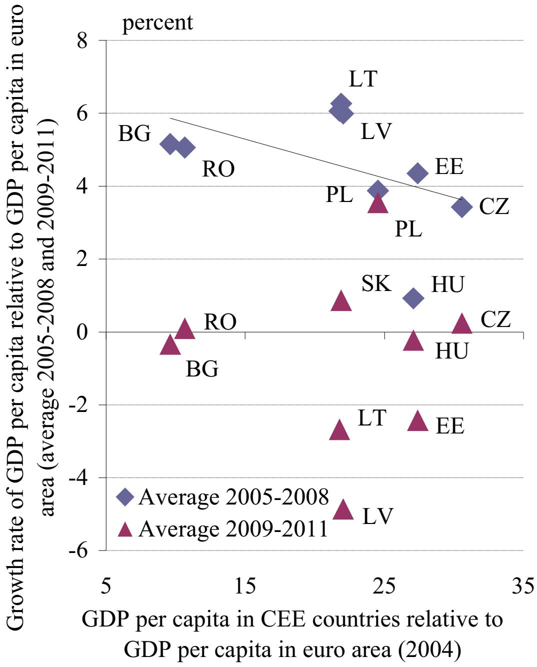
[64] The analysis covered Romania, Bulgaria, the Czech Republic, Hungary, Poland, Lithuania, Latvia, Estonia and Slovakia.

[65] According to the EU-IMF-WB press release at the end of the joint assessment mission for Romania's economic programme (August 2010), projections point to a 2 percent economic decline in 2010.

[66] According to the European Commission spring forecasts, the contribution of net exports to GDP formation in 2010 will narrow to 0.3 percentage points from 7.3 percentage points a year earlier.

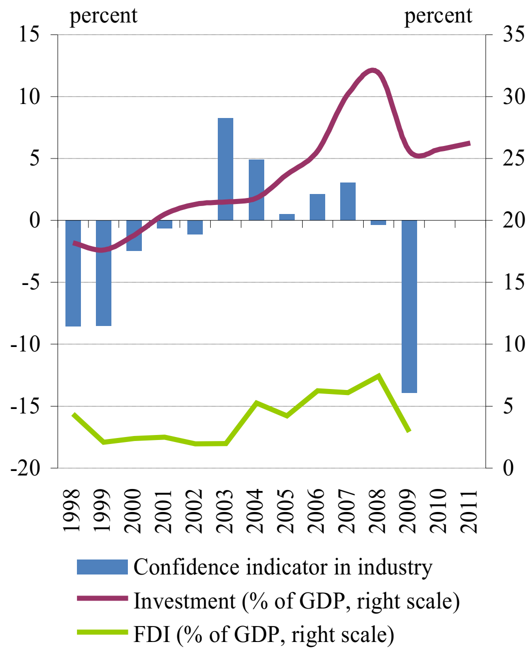
demand. The largest cut in investment costs was reported by SMEs, but their expectations for 2010 are not bright[67]. Balance sheet adjustments of the real sector will affect companies' investment capacity in 2010 as well. In 2009 H1, the volume of the firms' capital decreased by merely 2 percent. Over the period ahead, the drop in real estate asset prices will play a role in balance sheet adjustment and the sharper reduction in capital (see also Section *5.3 Risks generated by real estate sector and real estate assets*). This will also affect companies' risk profile and, implicitly, will compress their financing capacity.

Chart 4.1. Average annual convergence rate versus the euro area in CEE



Source: Eurostat, NBR calculations

Chart 4.2. Investment in Romania – developments and outlook



Note: Data for 2010 and 2011 are projections.

Source: Eurostat, EC

The companies manufacturing high tech products succeeded in weathering the crisis better than the rest of the economy. They consolidated their foreign market shares (reporting exports up by roughly 40 percent year on year, March 2009-March 2010) and their return on equity improved somewhat (from 10 percent to 11 percent, June 2008-June 2009), while decreasing economy-wide in the reviewed period. However, these companies have a small contribution to generating value added in the economy and it is possible that the critical mass of companies producing medium-high tech and high tech goods so as to foster sustainable economic growth has not been reached.

Moreover, Romania incurred the lowest research and development costs (as a share in GDP) compared with CEE countries[68]. Franchises, patents, licences, trade marks, rights and similar assets, as well as of other immovable assets, account for about 10 percent of the companies' total assets (reporting by IFRS), but more than 75 percent belong to only two state-owned companies. The private sector holds less than 10 percent of the total value of those assets that can generate high value activities.

[67] European Commission, Business and Consumer Surveys (March-April 2010).

[68] 0.5 percent of GDP (on average, 2005-2008) compared with 0.7 percent of GDP (CEE) and 1.8 percent (EU average).

The fiscal deficit widened considerably in 2009 (to 7.4 percent of GDP, or 8.3 percent consistent with ESA95), but the projections for 2010 foresee an adjustment. There was no need for public funds to support the banking sector, as the noticeable increase in capitalisation of credit institutions in Romania was fully achieved through the efforts undertaken by shareholders, including in response to the NBR's demands. The need for adjusting public expenditures in terms of both volume and structure will put indirect pressure on the financial system in the near run. However, fiscal consolidation is essential given the intolerance of international financial markets to substantial budget deficits and swift rises in public debt stock.

4.1.2. Labour market developments

In 2009, labour market conditions worsened further. Unemployment rate[69] increased (from 4.4 percent in December 2008 to 7.4 percent in June 2010) and the number of vacancies decreased. The evolution is in line with the regional trends and unemployment rate looks set to go up, albeit at a relatively slower pace, in 2010 as well.

The worsening prospects on job security led to (i) a reduction in households' marginal propensity to consume and their shift towards precautionary saving, also with a view to ensuring the resources needed for servicing their bank debt, and (ii) the contraction in households' loan demand. Along with the cut in households' disposable income, pressures of bank portfolio worsening have become manifest[70].

The job supply diminished also as a result of the decrease in the rate of vacancies[71]. The sectors subject to adjustment were manufacturing and construction. The hardest hit in terms of headcounts (with unemployment rate standing at 9.3 percent in 2010 Q1) was the category of employees with secondary education[72], accounting for 60 percent of total labour force. Insofar as banks hold in their portfolios a large share of such debtors, the above-mentioned unfavourable developments will put pressure on bank assets quality as well.

4.2. Lending strategies of credit institutions

Banks' lending strategies featured a pro-cyclical nature, as lending standards and terms were significantly tightened from end-2008 onwards, given the fast dynamics of non-performing loans, along with a marked reduction in households' and companies' demand for new borrowings. The high foreign-currency indebtedness is an ongoing concern for the authorities in terms of both prudential management of the existing loan stock and prevention, via an adequate and coordinated regulation at EU level, of resuming a fast growth of foreign currency-denominated loans to the detriment of leu-denominated loans, especially regarding the unhedged borrowers. The loan-to-deposit ratio at aggregate level has improved since the crisis broke out, including amid the decreasing bank intermediation.

[69] According to data supplied by the National Employment Agency (June 2010).

[70] See Chapter 5, Section *5.2.1 Crisis impact on households*.

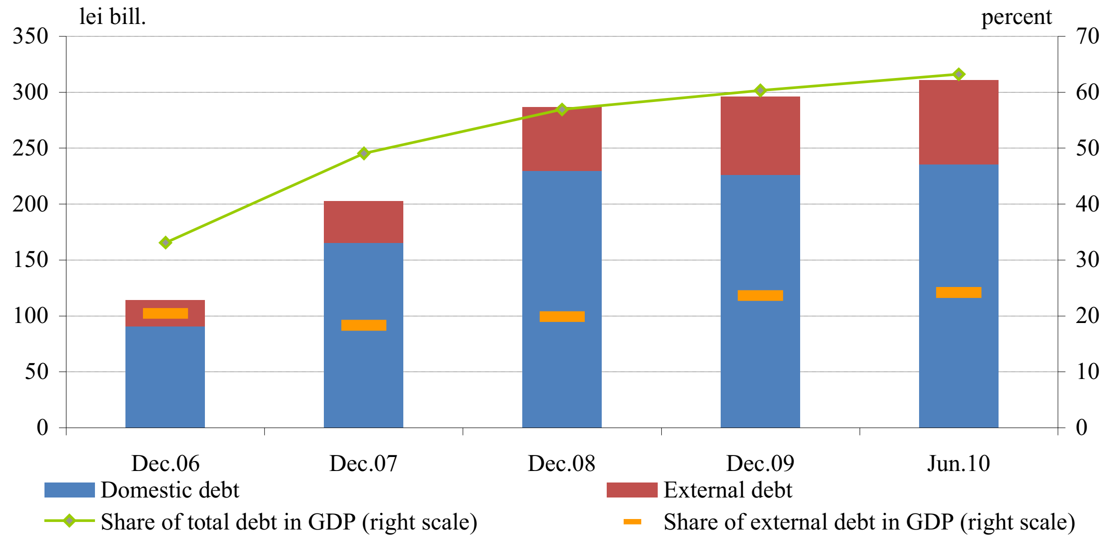
[71] The sharpest annual declines were recorded in the Czech Republic (0.8 percentage points), Romania (0.6 percentage points) and Slovakia (0.4 percentage points). Data refer to the change in the rate of vacancies in industry, construction and services in 2010 Q1 versus 2009 Q1. Vacancies in industry, construction and services account for 98 percent of total available jobs in Romania (Eurostat).

[72] By international standards, these categories refer to workers with medium qualifications (secondary and post-secondary education). At regional level, these categories recorded an average unemployment rate slightly above the total level, i.e. 12 percent compared to 11.3 percent (Eurostat).

4.2.1. Lending strategies of banks and households' and companies' access to financing

Total indebtedness of households and companies to financial institutions (banks and NBFIs, domestic and external) rose slightly in real terms (below 1 percent, December 2008-June 2010). As a share in GDP, the debt stock reached about 63 percent, also as a result of the base effect caused by the economic contraction (Chart 4.3). In June 2010, financial indebtedness of households and companies amounted to around lei 310 billion, with two thirds being accounted for by domestic banks, 9 percent by local NBFIs and 24 percent by external creditors).

Chart 4.3. Households' and companies' indebtedness



Note: For the share of total debt in GDP in June 2010, the 2009 GDP was used.
Source: NBR, NIS, NBR calculations

Access to financing for households and companies during the period December 2008-June 2010 saw mixed developments: while external creditors further provided additional financial resources (up approximately 20 percent), domestic financial institutions either maintained their exposure (in case of banks) or reduced them markedly (by 28 percent in case of NBFIs). The compression in financing supply by domestic creditors was pro-cyclical, considering that in the two pre-crisis years (2007-2008) bank credit to companies and households doubled. When externalised loans are taken into account (see Box 3) shows that the slowdown in lending is even more pronounced. On the other hand, households' and companies' demand for financing declined significantly in the crisis-ridden environment (Chart 4.4). Demand of households was subject to a far more pronounced adjustment than that of companies, mainly due to expectations of cuts in disposable income and to the macroeconomic uncertainties.

Box 3. Loan externalisation by banks in Romania

Loan externalisation has gathered momentum since 2006 to become a widespread practice across the Romanian banking sector (half of the total number of banks conducted such operations). Loans were externalised via: (a) transfer (sale, assignment, etc.) of loans on banks' balance sheet (transferred loans) and (b) loan intermediation for a non-resident entity (intermediated loans). The main reasons behind the start of externalisation operations were: (a) the circumvention of prudential requirements (for example, capping foreign currency lending) or monetary policy requirements (following the high minimum reserve ratios on banks' foreign currency liabilities in Romania) and (b) the possibility to provide more attractive financing conditions to their clients.

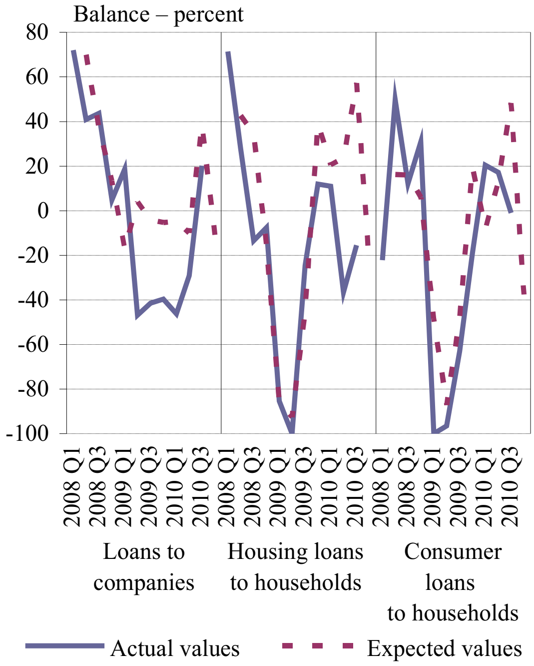
The balance of externalised loans was significant, being estimated at EUR 10 billion in September 2009. Roughly 70 percent of total externalised loans are accounted for by transferred loans, with intermediated loans making up the rest. Corporate loans held the largest share in total externalised loans, i.e. about 70 percent. More than 90 percent of the intermediated loans were granted to companies. Intermediation was resorted to in the case of large-value loans and was substantiated by: (a) lower capability of local banks to extend a large-value loan and (b) the solution to provide financing conditions in line with the client's privileged negotiation position (most frequently corporations with majority foreign-owned capital, many of them reflecting the track record of business relations of proprietary firms with the parent banks of the subsidiaries operating in Romania).

Credit risk was transferred to a large extent, but given the good quality of the portfolio selected on the sale date, the balance-sheet risk mitigation was not significant on aggregate. Banks retained, on average, around 25 percent of the credit risk relating to the externalised portfolio, but the figure was substantially higher in the case of intermediated loans (56 percent).

Banking groups' exposure to Romania remained unchanged after the externalisation, as almost in each case the loan went to a counterparty within the same group. Domestic banks continued to provide administration services for 96 percent of total externalised loans, their repayment being made via the same bank that had granted the original loan.

Externalisation lost substantial momentum in 2009, as the volume of loans redeemed by the subsidiaries was on the rise, in line with the concentration trend of exposures to Central and East European economies at group level in entities other than the parent bank. Moreover, it is possible that banks resort to externalisation of loans whose quality might deteriorate.

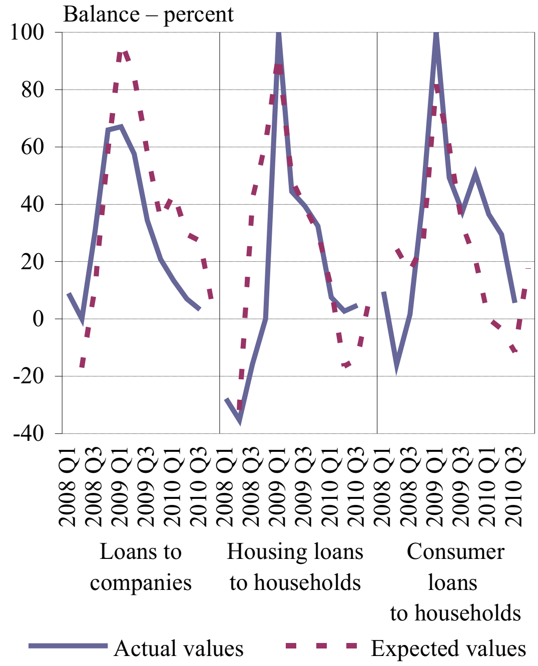
Chart 4.4. Developments in loan demand



Note: Positive readings in the balances show an increase in loan demand.

Source: NBR, Bank Lending Survey, August 2010

Chart 4.5. Developments in lending standards



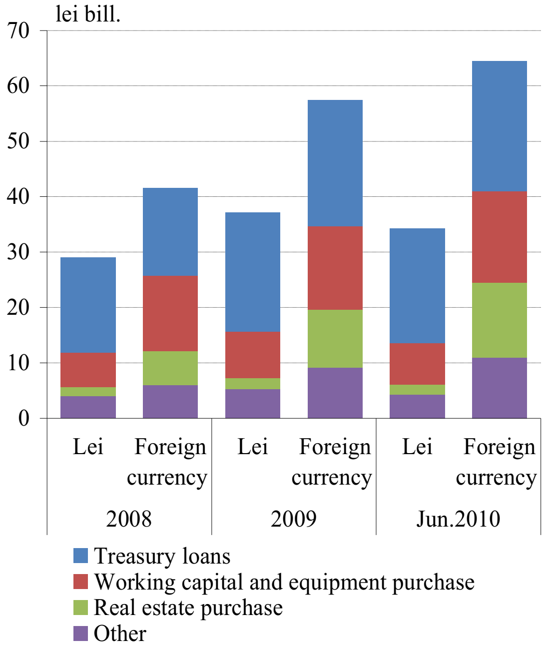
Note: Positive readings in the balances show a tightening of lending standards.

The outbreak of the financial crisis caused a shift in banks' objectives, from mainly quantitative targets (to expand market share or to make higher profits in the short term) to approaches in line with the decline in financial intermediation at global level, which accommodates to a greater extent risk and qualitative analyses associated with lending. The reduction in domestic banks' loan supply translated into a tightening of lending standards and terms for both companies and households (Chart 4.5). The tightening was far more pronounced than in the euro zone (both in terms of magnitude and speed of implementation). The credit institutions in Romania substantiated these measures by: (i) unfavourable expectations regarding the general economic situation, (ii) strong risk associated with the price adjustments and the time span needed for the foreclosure on the required collateral/guarantee, (iii) the heightening risk related to the sectors in which some companies operate and (iv) anticipations on the deterioration of households' financial standing. In 2009, banks tightened mostly the following lending terms: the average lending rate margin over 1M ROBOR (for loans extended both to companies and households), collateral requirements (for the loans to companies) and the maximum share of debt service in the monthly income (for the loans to households). However, even in the context of pressures on financial intermediation, there were market segments that fared better in terms of financing: (a) loans granted primarily to corporations and (b) housing loans granted to households (up 22 percent, December 2008-June 2010).

Banks have offset the decline of the role they play in household and corporate financing by boosting lending to the government sector. Such behaviour was partially justified by the increase in borrowing requirements of public authorities and the uncertainties surrounding the economic outlook in the private sector, along with the commitments assumed under the European Banking Co-ordination Initiative to maintain exposures to Romania at group level. The share of credit to the government sector in total domestic credit expanded to 20 percent (June 2010) against 8 percent (December 2008).

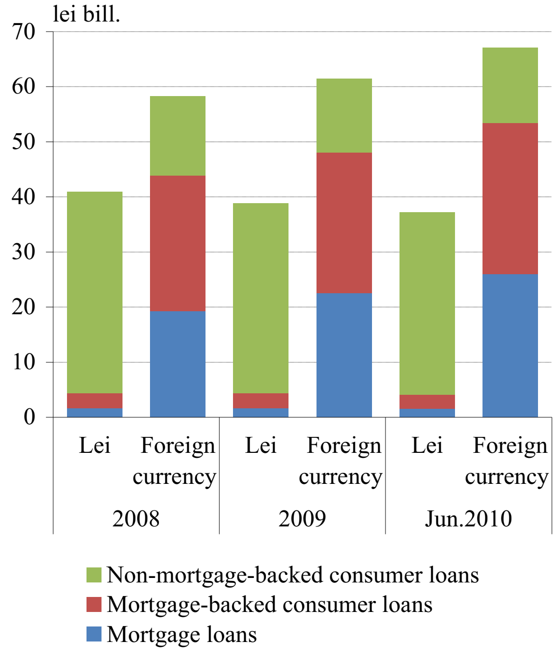
Companies' demand for resources from domestic banks targeted especially treasury needs (about 45 percent of total loans granted to companies, June 2010), of which half were foreign denominated (Chart 4.6). The companies that applied for treasury loans in foreign currency are largely engaged in foreign trade and are less exposed to currency risk.

Chart 4.6. Loans granted to companies by destination



Source: NBR

Chart 4.7. Loans granted to households by destination



Source: CCR, NBR, NBR calculations

The number of companies that had taken loans from (domestic or foreign) financial institutions fell by around 10 percent in the December 2008-June 2010 period to reach 14 percent of total companies operating in Romania. By company size, micro-enterprises were the hardest hit, accounting for more than 80 percent of the above-mentioned fall. The still small number of companies taking (domestic or foreign) borrowings and the significant role they play in the economy[73] illustrate that a decrease in financing could have significant dampening effects. The recovery of loan demand from local credit institutions as a result of foreign trade partners' returning to positive economic growth might be delayed (for details, see Section *4.3 External balance*).

The companies manufacturing medium-high tech and high tech goods resort to a lower extent to domestic financing (compared to the value added economy-wide). Borrowing needs are covered by external financing, over the short run in particular. Companies hinge strongly on this type of financing, as: (i) 16 percent of total short-term foreign debt (STFD) of the non-financial sector was accounted for by these companies (June 2010) and (ii) their STFD accounted for over 45 percent of total domestic and external financing (versus about 20 percent on average economy-wide, June 2010). So far, these companies have proved they are capable of better honouring their domestic debt service (the non-performing loan ratio[74] stood at approximately 4 percent, whereas the average economy-wide is 8 percent, June 2010), so that the risk of less readily accessible bank credit lines is lower.

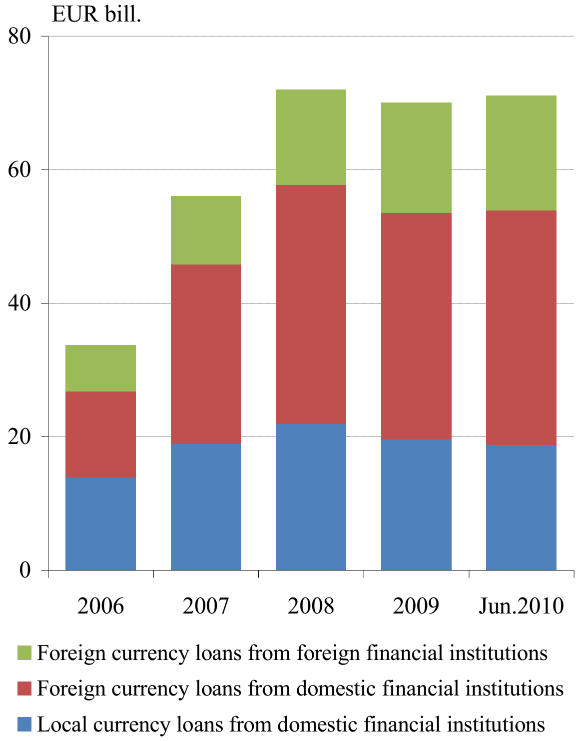
[73] These companies account for about 60 percent of gross value added generated by non-financial companies (June 2010).

[74] The non-performing loan ratio was calculated in *Chapter 4. Domestic macroeconomic risks* as the share of loans overdue for more than 90 days in total loans.

Household lending in 2009 and the first half of 2010 was subdued (over the period, new loans accounted for less than 50 percent of total new loans granted in 2008). The explanation for this evolution lies with the decline in both supply of and demand for loans. The number of individuals who borrowed from banks or NBFIs neared 4.5 million, i.e. almost half of the active labour force in Romania (of which more than 0.5 million took loans from both banks and NBFIs, June 2010). On average, a debtor has to repay about 1.75 loans (June 2010). The significant and fast household indebtedness process seen over the past few years calls for close monitoring, bearing in mind that there is no track record at household level in managing substantial bank debt stocks during an entire business cycle, especially during a downturn, and the current developments are a cause for concern (for details, see Section *5.2 Risks generated by households*).

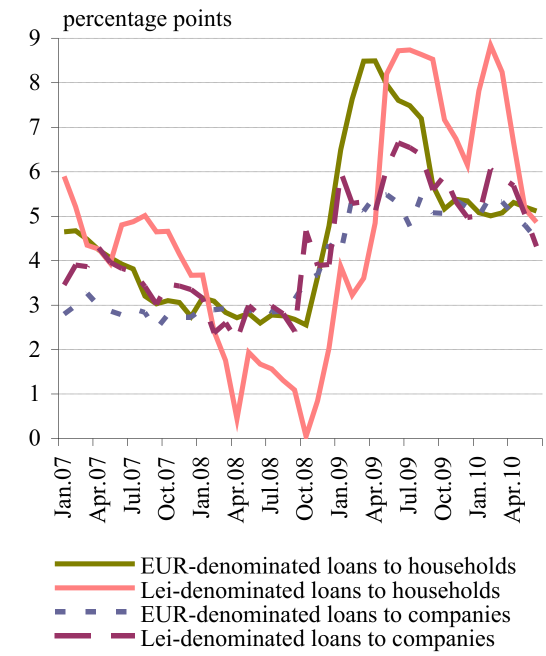
Households apply mostly for foreign-currency loans (more than 60 percent) from the domestic credit institutions, with EUR-denominated loans holding an overwhelming share of both loan stock and new business. Mortgage-backed loans (real estate loans and mortgage-backed consumer loans) make up roughly 80 percent of foreign-currency loans to households (Chart 4.7). The term structure of such loans covers long and very long maturities, so that the residual maturity risk generated by the borrowers earning incomes in currencies other than the loan currency will dissipate once Romania has adopted the euro. Nevertheless, there is a risk regarding the unhedged borrowers over the medium term, which calls for close monitoring of the existing loan stock, along with concerted solutions at EU level for both home and host countries in order to deter foreign currency lending expansion. These solutions should be applicable to parent banks and to their local subsidiaries alike, as well as to debtors.

Chart 4.8. Breakdown of household and corporate indebtedness by currency



Source: NBR

Chart 4.9. Spread on new loans to companies and households

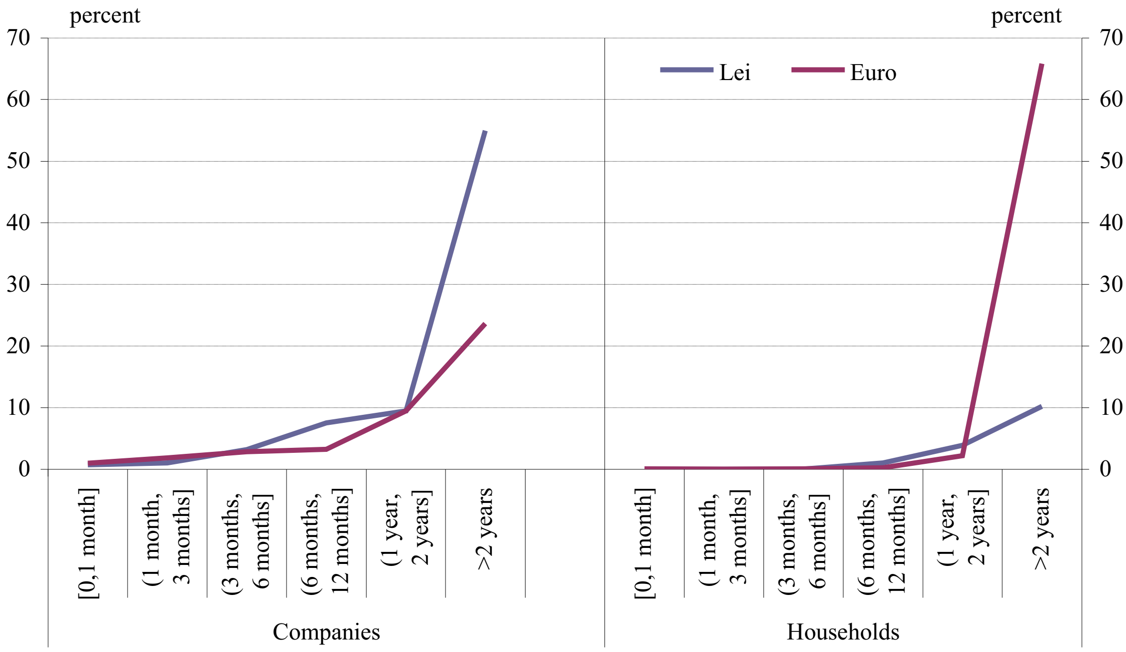


Note: The spread was calculated as the difference between the interest rate on new loans and 3M ROBOR and 3M EURIBOR respectively.

Source: NBR

Credit cost surged sharply in 2009. New loans in domestic currency were most affected, even though the policy rate followed a steady downtrend. The cost of new loans in lei, although being subject to certain adjustments implemented with a lag, was, on average, 4 and 2 percentage points higher than the levels seen in 2008 (in case of households and companies respectively). Interest rate spreads widened, irrespective of the loan currency or the type of debtor, but the highest cost increase saw the new loans in lei granted to households (Chart 4.9).

Chart 4.10. Developments in the structure of the loan-to-deposit ratio for banks in Romania (June 2010)



Note: Loans were calculated based on residual maturity

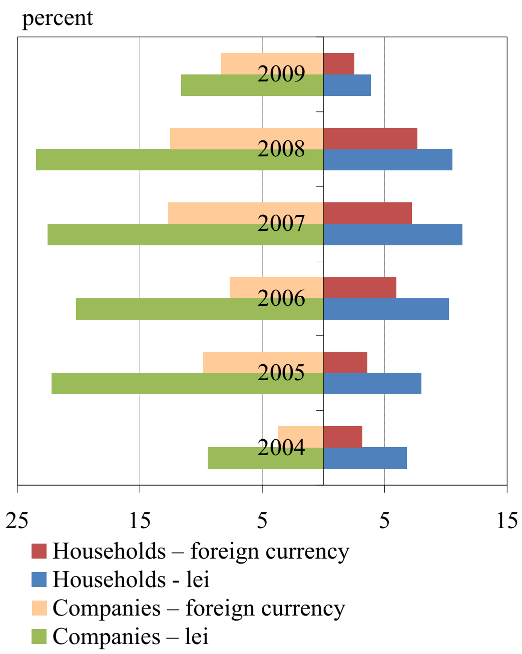
Source: NBR, NBR calculations

The risk of affecting the loan supply, if foreign liabilities were withdrawn, has diminished. The domestic loan-to-deposit ratio improved in 2009 and 2010 H1 (from a high of 137.3 percent to 124 percent, November 2008-June 2010). Structural analysis of the loan-to-deposit ratio for the banks operating in Romania shows the persistence of some asymmetries that may have a negative influence on the sustainable revival of loans to companies and households (Chart 4.10). By maturity, the ratio is adequate for the short term (three months in case of companies and one year in case of households). For the exposures with longer maturities, there is no coverage for similar maturities of deposits taken, as banks must convert maturities by steadily renewing the deposit base. By currency, EUR-denominated financing poses more difficulties in terms of the coverage via deposits in the same currency attracted from domestic saving.

It is possible that credit cost and exchange rate developments are not the only determinants of the worsening of banks' portfolio quality. The loans granted during the period of leu appreciation (for example, during 2004-2007) have not seen so far a very different performance than that of loans extended when the domestic currency weakened (Chart 4.11). Similarly, the default rate for the loans taken when interest rates were on the rise is not significantly different from the one recorded when conditions were quite the opposite. These findings hold true for lending to both households and companies.

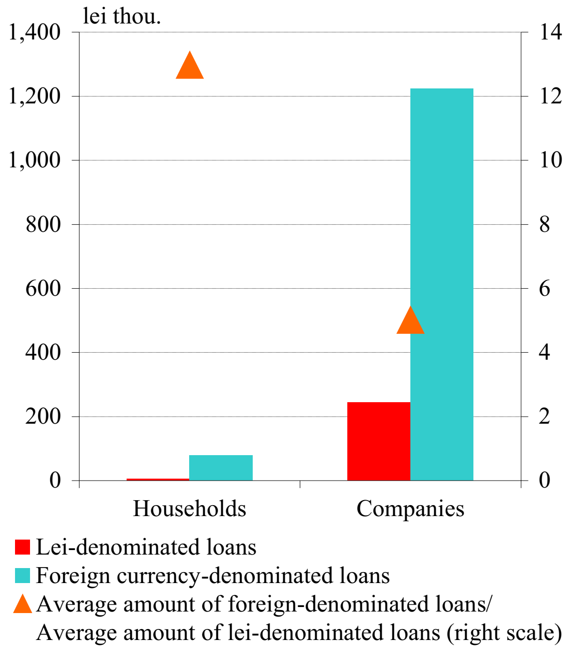
The high degree of indebtedness of the debtors who had taken foreign-currency loans and the long maturity of such indebtedness could better explain the default rate dynamics. Most likely, banks estimated, in the pre-crisis period, that the borrowers who had taken foreign-currency loans enjoyed a sounder financial standing than that of borrowers who had taken domestic-currency loans[75]. This allowed the former a higher degree of indebtedness (the average size of a loan in foreign currency is 5 times and 13 times respectively higher than the average size of a loan in domestic currency granted to companies and households respectively, June 2010, Chart 4.12).

Chart 4.11. Non-performing loan ratio for new business in the specified year, June 2010



Source: CCR, Credit Bureau, NBR calculations

Chart 4.12. Average loan amount (lei or lei equivalent), June 2010



Source: CCR, Credit Bureau, NBR calculations

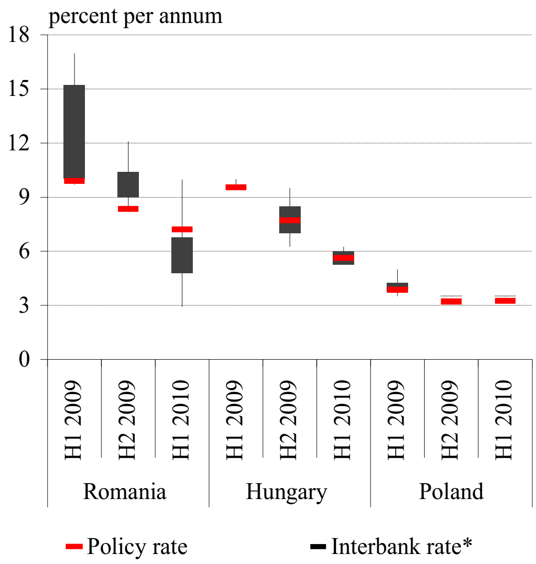
Furthermore, the high degree of indebtedness was associated with longer maturities for both companies and households. The non-performing loan ratio of housing loans remained at low levels, due mostly to the stronger motivation for debt servicing in case of the borrowers that purchased their first home. Average maturity of a household loan in foreign currency exceeds 19 years, whereas a lei-denominated loan is granted on a 2.5-times shorter time horizon (June 2010). The same is valid for corporate loans (the average maturity of foreign-currency loans was 3.3 years in June 2010). Given the crisis-ridden context, the high indebtedness degree for a longer period contributed however to the reduction in the foreign-currency borrowers' capacity to cope with unfavourable developments. The growth rate of the non-performing loan ratio for foreign currency financing has outpaced since the beginning of 2010 that of lei-denominated borrowings (for details, see *Chapter 5. Companies and households*).

[75] The probability of default for the companies that took only foreign-currency loans was smaller than for the entities with loans in lei alone (June 2009).

4.2.2. Exchange rate and monetary policy and its implications on financial stability

Money market liquidity improved during 2009 and 2010 H1. The factors underlying these developments were (i) the decrease in risk aversion (including as a result of signing the multilateral financing agreement by the Romanian authorities with the European Commission, the IMF and other international financial institutions, along with the commitments assumed by the nine largest foreign banks operating in Romania to maintain their exposure to the country) and (ii) the NBR's measures aimed at further ensuring adequate liquidity management (including by lowering the minimum reserve ratio[76]). Furthermore, the substantial fall of 3.75 percentage points during February 2009-May 2010 in the policy rate[77] reflected a prudent approach to the need to counteract the persistent inflation and avoid fuelling excessive exchange rate volatility, on the one hand, and the need to foster deposit and lending rates resuming normal levels amid the protracted economic contraction, on the other hand. The daily average of money market operations dropped by about 9 percent compared with the pre-crisis levels (from lei 2.3 billion in September 2008 to lei 2 billion in the period from January 2009 to June 2010). Average interbank rates fell with a lag to levels below the policy rate (Chart 4.13). The expansion of the repo market (fuelled by the increase in government securities issues[78]) helped improve money market activity. During uncertainty-ridden periods, banks shifted to this market segment so that the rise in holdings of government securities eligible for being set up as collateral for refinancing operations will be an additional buffer against renewed tensions.

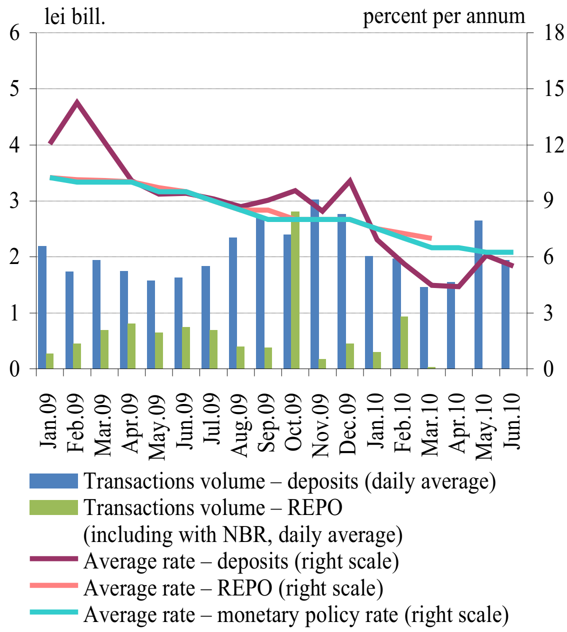
Chart 4.13. Distribution of 1W interbank rates and policy rate



* The ends of the line are the lows and the highs.
The ends of the bar are quartiles 25 and 75.

Source: Bloomberg, NBR

Chart 4.14. Volume of money market transactions and average interest rate



Source: NBR

At an individual level, the market remains concentrated, albeit a relative reduction in the asymmetries of liquidity holdings[79] is manifest. The top-five banks accounted for approximately 60 percent of interbank deposits in June 2010, down from 70 percent in October 2008.

[76] The minimum reserve requirements were lowered successively from 40 percent to 25 percent (for foreign currency-denominated liabilities) and from 18 percent to 15 percent (for domestic currency-denominated liabilities). Moreover, foreign currency-denominated liabilities with residual maturity of over 2 years were removed from the reserve base.

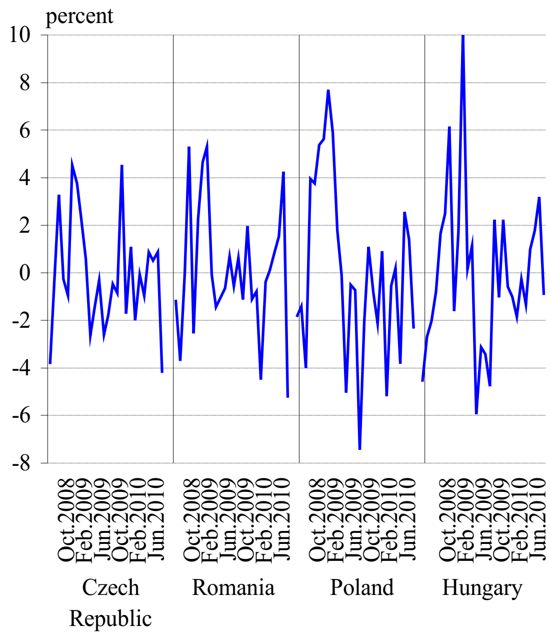
[77] The policy rate dropped from 10.25 percent in January 2009 to 6.25 percent in June 2010. Interest rates on the lending and deposit facilities were lowered accordingly and stood at 2.25 percent and 10.25 percent, respectively, at end-June 2010.

[78] Government securities holdings with commercial banks climbed from lei 7 billion in October 2008 to lei 40.4 billion in June 2010.

Despite the improvement in liquidity, interest rates were still highly volatile (Chart 4.14). Banks transferred part of the uncertainties on the money market to both companies and households and increased the credit risk premium. The interest rate spread (against 3M ROBOR) for lei-denominated financing extended to the above-mentioned two sectors was on the rise, even though the policy rate followed a steady downtrend.

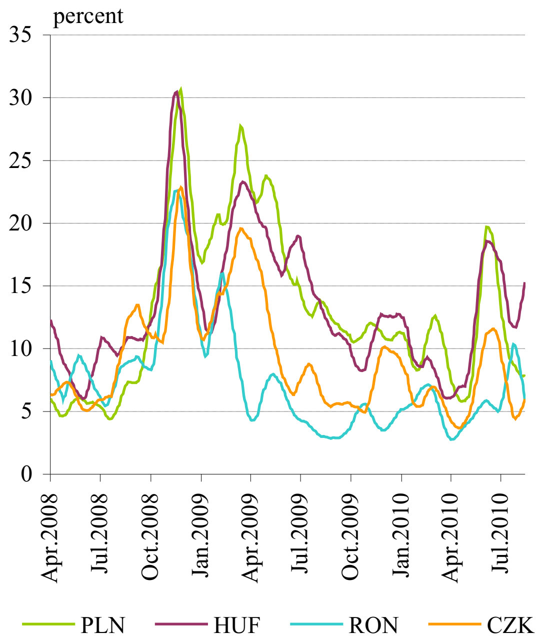
The financial crisis also translated into a stronger pressure on the foreign exchange market in most CEE countries (Chart 4.15). However, the RON/EUR exchange rate volatility was among the lowest in the region (Chart 4.16). In the case of Romania, the highs for the period under review were reached in October 2008 and February 2009. The decrease in foreign players' risk aversion (after signing the financing agreement with the EU, IMF and other international financial institutions and following the positive signals from the developed countries) helped diminish foreign exchange market pressure. The emerging fears concerning potential difficulties in sovereign debt management in Greece put renewed pressure on foreign exchange markets across the region in May-June 2010.

Chart 4.15. Foreign currency pressure indicator for CEE countries



Source: Bloomberg, NBR calculations

Chart 4.16. Volatility of major CEE currencies versus euro (20-day moving average)



Source: Bloomberg, NBR calculations

Despite the significant balance of foreign currency-denominated indebtedness, Romanian companies' resort to hedging instruments has remained weak. Thus, only 0.7 percent of the companies that conducted transactions on the foreign exchange market performed dealings in foreign exchange rate derivatives (and their volume accounted for merely 1 percent of total operations in this category). These companies had a small contribution to the trade balance (6 percent of total exports and 8 percent of total imports).

[79] The number of institutions that attracted resources from the interbank market rose from 19 to 28, with the Herfindahl-Hirschman index (measuring the degree of concentration) decreasing from about 1,800 to 1,400 (monthly averages, October 2008-June 2010).

4.3. External balance

The current account deficit adjustment contributed to the substantial reduction in one of the vulnerabilities the Romanian economy was facing at the time when the crisis broke out. Concurrently with the adjustment, external deficit financing was achieved almost entirely via foreign direct investment (FDI). Medium-term forecasts point to an increase in the degree of FDI coverage for the current account deficit. At the same time, a substantial part of private foreign debt was rolled over for increased maturities, to higher-than-initially-forecasted levels, despite the decline in financial intermediation at global level. The stock of short-term foreign debt, along with its share in total foreign debt, narrowed considerably, thus contributing to a reduction the Romanian economy's second vulnerability since the crisis broke out. The largest contribution to the narrowing of the external deficit came from systemically-important non-financial institutions in the real sector.

4.3.1. Current account deficit and its financing

In 2009, Romania's current account deficit declined markedly (from 11.6 percent of GDP at end-2008 to 4.5 percent at end-2009 and stayed close to this level in 2010 H1). This development was similar to that seen in the region (Chart 4.17). External deficits are expected to remain at similar levels to those recorded in 2009[80].

The decline in the current account deficit was due mostly to the substantial contraction in the trade deficit (from EUR -18.5 billion in 2008 to EUR -7.1 billion at end-2009), as in 2009 imports decreased twice as fast as exports (32 percent and 14 percent, respectively). In 2010 H1, exports saw faster positive dynamics (26 percent against 19 percent in the case of imports) and reverted to pre-crisis levels, thus fuelling industrial production growth. Moreover, the current account deficit is also influenced by developments in income and current transfer balances (it is worth noting that the Romanians' remittances dropped by 50 percent in 2010 H1 against the same year-ago period).

In Romania, the degree of FDI coverage of the current account deficit stood at 85 percent in 2009 and is projected[81] to fall slightly in 2010 (to about 80 percent) and increase to as much as 90 percent by 2015, creating favourable conditions for the sustainability of moderate external deficits.

The Romanian companies that benefited from FDI weathered the crisis better than the rest of the economy. Their performance indicators deteriorated at a slower pace. Their financial profitability dropped from 8 percent to 6 percent (June 2008-June 2009), while the non-performing loan ratio reached 4.7 percent (against 8 percent for total loans granted to companies, June 2010). The companies that benefited from FDI can contribute to a more sustainable convergence to the euro zone, as: (i) they proved their structure allows them to withstand shocks more efficiently, (ii) they play key role in generating value added in the economy (approximately 40 percent of the value added of non-financial companies) and (iii) account for more than 75 percent of Romania's exports. Nevertheless, these companies might have a smaller contribution to the short-term revival of domestic lending, given that in 2009 and 2010 H1 they showed a propensity for external financing (up by over 25 percent, December 2008-June 2010), while their resort to domestic bank

[80] The IMF (WEO, April 2010) foresees a slight deterioration in the CEE countries' deficit from -2.3 percent to -3.5 percent. As for Romania, the IMF estimates a 1.1 percentage point increase in the current account deficit in 2010. For 2010 too, the NBR expects a slight increase in the current account deficit, before stabilising at a more sustainable level (NBR, Inflation Report, August 2010).

[81] IMF Country Report No. 10/227, July 2010.

loans declined by almost 2 percent (in the same period). The companies that benefited from FDI account for 20 percent of the domestic corporate loans (June 2010) and over 65 percent of Romania's medium- and long-term private external borrowings (June 2010).

Systemically-important non-financial institutions in the real sector[82] had the largest contribution to the narrowing of the external imbalance. After registering a trade deficit of more than EUR 6 billion in 2008, this corporate segment recorded a small surplus (EUR 0.1 billion) in 2009. The other companies performing foreign trade activities have halved their external imbalance in 2009 (equivalent to almost EUR 9 billion).

In 2009, the financial standing of foreign trade companies deteriorated. The significant contraction in domestic consumption and investment affected importing companies in particular. These companies are important to the Romanian banking sector as they account for 29 percent of domestic lending, of which around one third consists of short-term loans (June 2010). Domestic demand remained, in 2010, at the same level as in 2009, which could translate in a more pronounced deterioration of bank portfolio and an increase in arrears to suppliers (about 45 percent of the trade-related debt was accounted for by the companies with import-only activities, December 2008).

The companies performing mainly export activities are highly dependent on imports (over 77 percent of exports are accounted for by companies with material import activities). The depreciation of the domestic currency brings to these companies competitiveness gains up to a certain threshold, beyond which adverse effects become manifest. These effects are triggered by the increases in raw materials and imports costs, wealth and balance sheet effect, as well as by wage pressures which may occur after the return to economic growth. This is the reason why medium- and long-term sustainability of the trade deficit entails a shift towards exports of medium-high tech and high tech products. The contribution from exports of high tech companies is lower (about 8 percent of total exports of Romania's manufacturing sector, March 2010), although its growth rate accelerated during March 2009-March 2010 (around 35 percent, annual change, Chart 4.18). High tech exports are very concentrated at economy level, with a single company accounting for more than 50 percent of such exports. Exports of the medium-high tech sector registered similar dynamics to those of the manufacturing sector and stood flat at approximately 37 percent of total exports (March 2010).

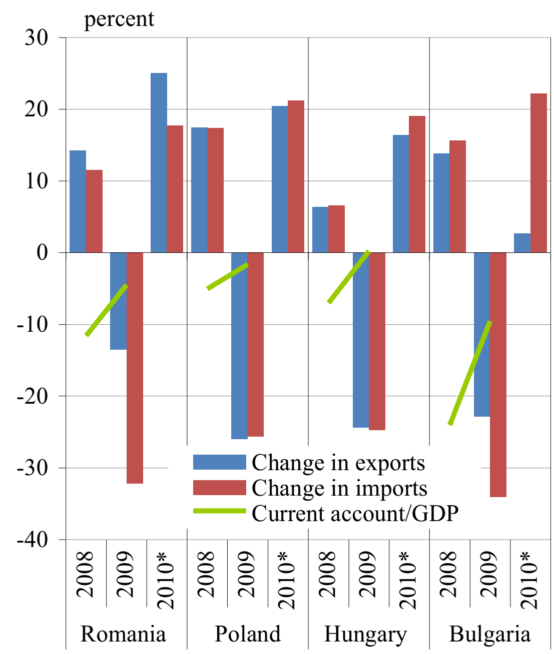
Some features of the companies performing export activities show a higher degree of risk, which has been partially mitigated by the fast rebound in external demand over the recent months. First, the financing of these companies has mainly a short-term maturity (about 43 percent of the attracted financial sources), being exposed to a potential liquidity shock. External financing holds a significant share (29 percent of total long-term foreign debt and 36 percent of short-term foreign debt in June 2010). Moreover, in early 2009, these companies were the most affected by the withdrawal of short-term external financing. Repayments of short-term foreign debt accounted for more than 70 percent of short-term capital outflows economy-wide. A potential external liquidity shock might have an impact at domestic level too, as the trade companies performing export activities hold a share of over 40 percent[83] of Romania's short-term commercial debt. Exporting companies are also relevant to the domestic banking sector (with around 20 percent of domestic

[82] Non-financial companies were selected according the following criteria: turnover, assets, staff number, share in foreign trade, domestic and external indebtedness.

[83] For the companies reporting by the IFRS; as of December 2008.

credit) and, up to now (June 2010), have performed better than the other bank debtors. The non-performing loan ratio has remained subdued, below the whole-economy average (about 2 percent in June 2010, with similar levels for foreign currency and short-term loans). Second, a large number of exporting companies are involved in outward processing (accounting for 55 percent of export value). Financing of these companies by the domestic banking sector is subdued, making up 7 percent of total corporate loans (June 2010) and their non-performing loan ratio is low (4 percent of the volume of non-performing bank loans granted to companies in June 2010).

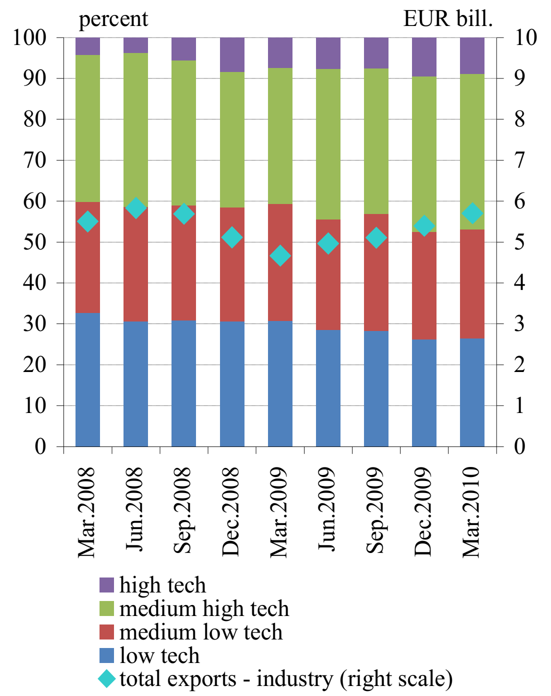
Chart 4.17. Export and import adjustments in CEE countries



* January-May 2010

Source: Eurostat, NBR calculations

Chart 4.18. Exports by added value

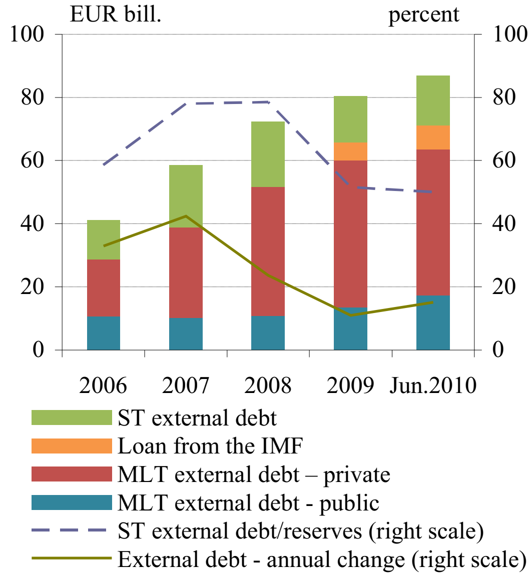


Source: NIS, MPF, NBR calculations

4.3.2. Foreign debt

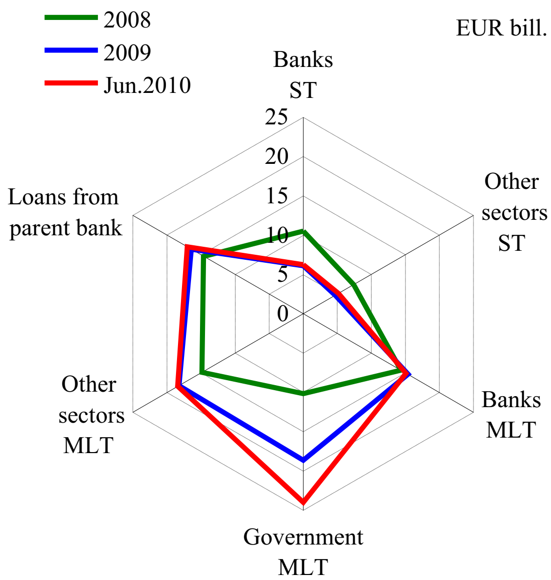
In 2009, both private and public sectors had a larger access to external financing and the term structure of foreign debt improved. The foreign debt stock expanded from EUR 72.4 billion in December 2008 to EUR 87 billion in June 2010. This increase is largely attributable to the financing agreement concluded by the Romanian authorities with the EU, IMF and other international financial institutions. The rise in medium- and long-term debt was higher than the contraction in short-term debt (Chart 4.19). The public sector benefited most from the external financing flows (mostly medium- and long-term inflows), although private foreign debt was rolled over for increasing maturities and the refinancing volumes exceeded those expected by the markets (Chart 4.20). From the end of 2008 to June 2010, the share of short-term private foreign debt in total foreign debt shrank by 11 percentage points (from almost 28 percent to about 17 percent). In absolute terms, the short-term component of foreign debt (owed mainly by the private sector) declined by EUR 5 billion (December 2008-June 2010).

Chart 4.19. Structure and dynamics of external debt and external debt servicing



Source: NBR

Chart 4.20. External debt by economic sector



Source: NBR

The banking sector continued to attract medium- and long-term external resources. Banks' foreign liabilities accounted for 26 percent of total assets at end-June 2010 (of which about 70 percent with maturities of over 1 year). Concentration at sectoral level is noteworthy, as the top-five institutions (holding 55 percent of the domestic banking sector's assets) account for 64 percent of external sources.

In 2009, non-financial companies and NBFI faced a reduction in short-term foreign debt, which materialised, in a first stage, in a significant decline in trade financing, followed by a less sizeable decrease in financial financing (more than 50 percent and about 30 percent respectively, December 2008-December 2009). The first half of 2010 saw a rebound in short-term financing, especially trade financing, owing also to the pick-up in foreign trade (up by 30 percent, December 2009-June 2010).

External exposure of non-financial companies is concentrated: the first 100 companies with foreign debts account for over 40 percent of total foreign debt (June 2010). The companies with external exposure have a strong impact on the economy and the banking sector in Romania, as they account for around 30 percent of the value added by firms and a similar percentage of domestic loans (June 2010).

CHAPTER 5. COMPANIES AND HOUSEHOLDS

5.1. Risks generated by companies

Companies have faced even more unfavourable developments than those anticipated in the previous Report. Non-financial companies' capacity to smoothly carry on their activity is impaired by the protracted and deepening economic contraction, as well as by the liquidity shortages arising from the functioning of these firms in the context of supply chains that are additionally affected by unfavourable sectoral developments. There is a risk that such constraints could be passed through from one business partner to another and even be magnified.

5.1.1. The impact of the crisis on companies' economic and financial performance[84]

Non-financial companies reported unfavourable developments in 2009, with the main financial soundness indicators posting a worsening. In the first half of 2010, positive developments in exports laid the groundwork for relaunching manufacturing, with multiplying implications across the economy.

A. Interest coverage ratio deteriorated in the first part of 2009, but subsequently it may have witnessed an improvement. Net earnings before interest and taxes (EBIT[85]) in relation to interest costs went down from 3.96 in June 2008 to 1.07 in June 2009. This performance is attributable to the adverse impact of both explanatory factors: (i) profits declined markedly (by 64 percent in June 2008-June 2009), whereas (ii) interest costs continued to rise (by 31 percent during the same period). Almost 45 percent of banks' corporate portfolios are accounted for by companies that, in June 2009, reported EBIT lower than interest costs (compared to almost 30 percent in June 2008, Chart 5.1). These companies are almost entirely SMEs[86]. It is possible that the companies may have initiated ever since 2009 some measures for adjusting costs using the reserve fund etc. in order to adequately service debt, which may have alleviated the transmission of shock to other partners.

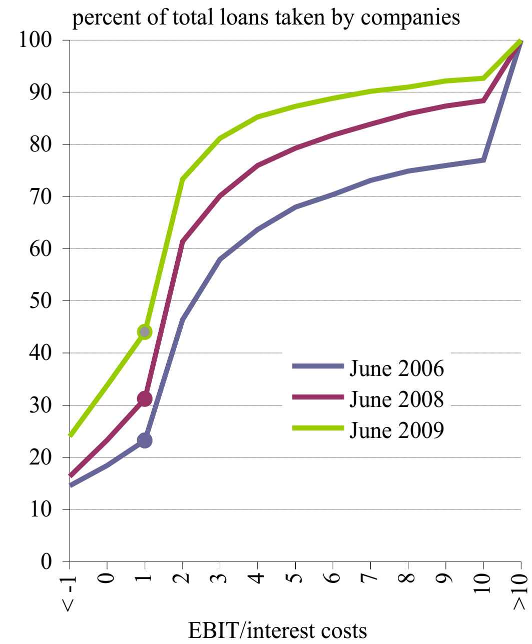
B. Total indebtedness (measured by the leverage ratio-debt to equity ratio) picked up. The reason is the faster increase in total debt than in equity (15 percent in June 2008 compared to 6 percent in June 2009). The leverage ratio reached a six-year peak (surpassing the threshold of 2, Chart 5.2).

[84] Unless otherwise indicated, the balance sheet and profit and loss account information relative to companies refer to June 2009.

[85] EBIT = (total operating incomes + total financial incomes + total non-recurrent incomes-total operating expenses-total financial expenses-total non-recurrent expenses) + interest costs.

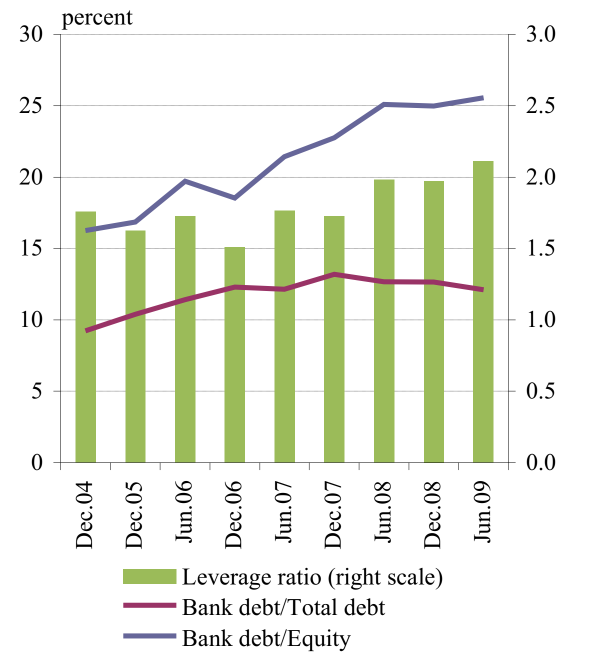
[86] SMEs are defined as those companies with less than 250 employees and with a net annual turnover of no more than EUR 50 million or holding total assets worth less than EUR 43 million (Government Ordinance No. 27/2006, amending and supplementing Law No. 346/2004 on stimulating SMEs creation and development).

Chart 5.1. Distribution of domestic bank loans by interest coverage ratio



Source: MPF, NBR calculations

Chart 5.2. Indebtedness of non-financial companies



Source: MPF, NBR calculations

Debt to non-bank undertakings accounts for 85 percent of companies' domestic accounting debt[87]. The further unfavourable evolution of arrears may put considerable pressure on some companies' capacity to service financial debt. Debt to banks takes almost 15 percent of the domestic debt[88], so that the resumption of bank lending will have a moderate bearing on the dynamics of the leverage ratio.

C. Companies' capacity to maintain their cash flows[89] decreased markedly. The year 2009 saw net cash outflow of almost lei 9 billion, in annualised terms, across the economy (Chart 5.3). The main drivers of this unfavourable evolution were the less readily available bank credit lines and the lower profitability (as most Romanian companies posted net losses in 2009).

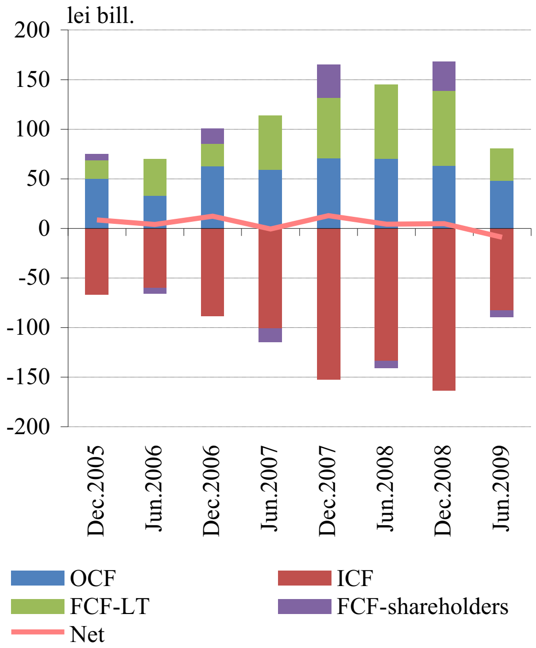
Companies' lower capacity to maintain their cash flows within appropriate limits has an impact on: (i) the overdue payment ratio (the debt servicing is affected), (ii) arrears (financial obligations towards trading partners and authorities are more difficult to meet) and (iii) investment (investment plans are delayed or even cancelled).

[87] The domestic accounting debt is the total balance sheet debt incurred by non-financial companies and it was calculated based on their financial reporting.

[88] Compared to other countries where the resort to bank loans is significantly larger (for example, in the Czech Republic or in Croatia, the share of bank debt makes up roughly 50 percent of companies' total debt).

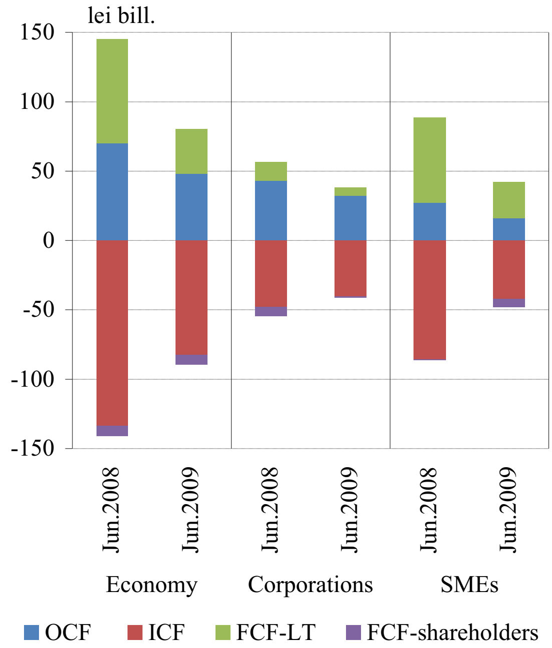
[89] Cash flows fall into several categories: the operational cash flow (OCF, the liquidity volume arising from the core activity), the investment cash flow (ICF, the cash spent on investment in fixed assets) and the financing cash flow (including the cash flow related to shareholding and the cash flow from bank sources, namely FCF-shareholding and FCF-LT) from raising stable financing funds.

Chart 5.3. Companies' cash flows evolution



Source: MPF, NBR

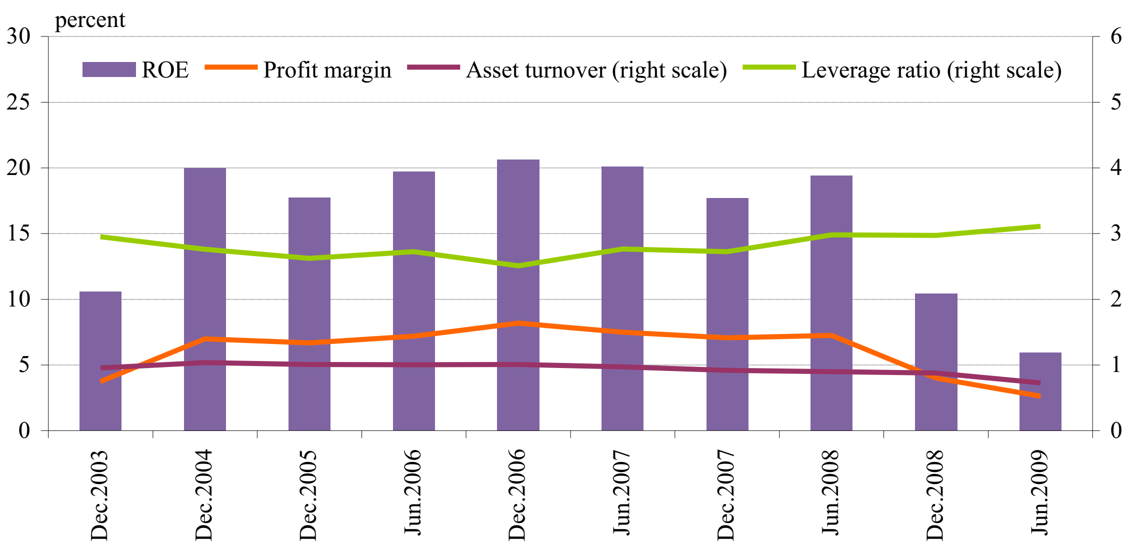
Chart 5.4. Cash flows structure by company size



Source: MPF, NBR

Cash flows are highly concentrated, with approximately 40 percent of the cumulative operational flows[90] stemming from systemically important non-financial institutions[91] and more than 20 percent of the cumulative cash outflows channelled to investment[92] being generated by the same companies.

Chart 5.5. Drivers of ROE evolution



Source: MPF, NBR calculations

[90] The cumulative operational cash flow across the economy (amounting to lei 48 billion, in annualised terms, in 2009 H1) is calculated as the sum of positive flows (lei 135 billion, in annualised terms) and the negative flows (lei -87 billion, in annualised terms).

[91] Non-financial companies selected according to the following criteria: turnover, assets, number of employees, share in foreign trade, domestic and external indebtedness.

[92] The cumulative investment cash flow (lei -82 billion, in annualised terms, in 2009 H1) is calculated as the sum of positive flows (lei 16 billion, in annualised terms) and the negative flows (lei -98 billion, in annualised terms).

Large and very large companies saw the least deterioration of their capacity of maintaining operational cash flows (Chart 5.4). SMEs diminished their cash flows earmarked for investment (in 2009 H1 such flows almost halved from 2008 H1), mainly against the background of less readily available long-term loans and lower profits (in this context, operational cash flows declined by nearly 50 percent).

D. Return on equity (ROE) followed a steeply downward path (from almost 20 percent to 6 percent in June 2008-June 2009)[93]. The explanation for this evolution lies with the drop in the profit margin (EBIT/turnover)[94], Chart 5.5.

E. Gross foreign currency exposure[95] of companies that took foreign currency-denominated loans is large (around 75 percent of the equity) and still increasing (Chart 5.6). The high exposure across the economy is attributable particularly to SMEs whose indebtedness in foreign currency is significant and which have a lower degree of capitalisation. Forex exposure is due especially to the loans taken from abroad, as companies preferred external indebtedness to the detriment of domestic indebtedness in foreign currency (external debt accounts for 67 percent of the debt in foreign currency). By sector[96], companies in the real estate and manufacturing sectors have the highest exposure.

Foreign currency exposure is highly concentrated in Romanian companies. By size and considering all types of exposure (short-, medium- and long-term external debt and forex-denominated domestic loans), the first 2,000 companies (out of almost 650,000 active companies[97]) hold nearly 90 percent of short-term external debt, 98 percent of medium- and long-term external debt and 75 percent of domestic loans in foreign currency (June 2010).

Companies with large foreign currency exposure (more than 50 percent of own funds) have managed better than the rest of the economy, on average, to service their debt with banks (the non-performing loan ratio stood at 6.6 percent compared to the average non-performing loan ratio reported by non-financial companies, which came in at 8 percent in June 2010). The explanation lies with such companies enjoying a better financial standing than the rest of the economy, which allowed them to resort to external financing as well.

F. The number of companies undergoing insolvency proceedings in 2009 was similar to that seen in 2008 (nearing 18,000, Chart 5.7). In 2010 Q1, the number of companies against which insolvency proceedings had been opened saw an increase of almost 38 percent compared to the same year-ago period.

[93] ROE was calculated based on EBIT.

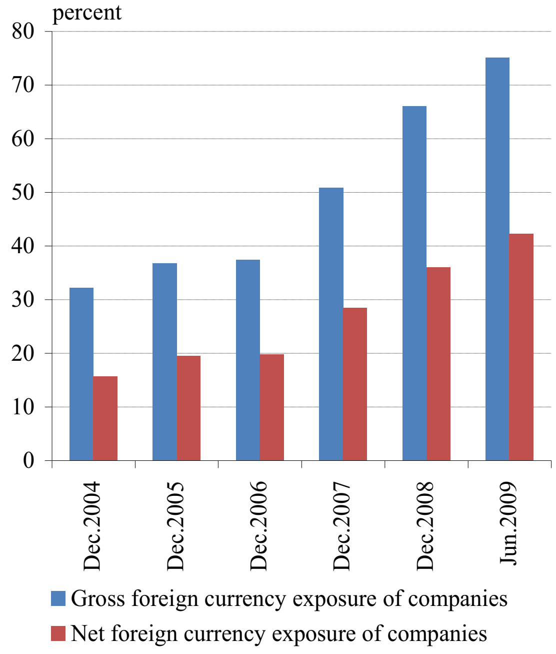
[94] The other two explanatory factors of the ROE variation (the leverage ratio = total assets/equity and the asset turnover ratio = turnover/total assets) saw no deterioration.

[95] Gross foreign currency exposure was calculated as follows: (foreign loan + domestic loan in foreign currency)/equity, while net foreign currency exposure was calculated by subtracting deposits in foreign currency from the volume of loans in foreign currency.

[96] In the absence of data on deposits in foreign currency at sectoral level, foreign currency exposure by sector was calculated on a gross basis (without subtracting deposits in foreign currency).

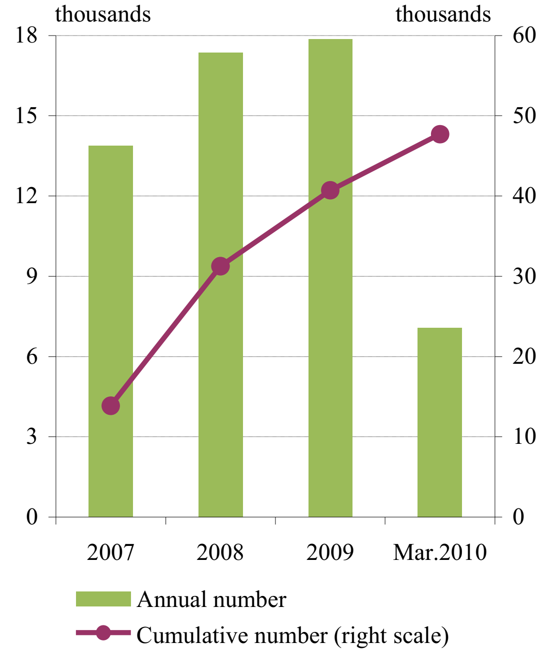
[97] Companies which submitted financial statements to the MPF for June 2009.

Chart 5.6. Foreign currency exposure



Source: MPF, NBR calculations

Chart 5.7. Number of new companies undergoing insolvency proceedings



Source: NTRO, NBR calculations

5.1.2. Spillover effects of the crisis via non-financial companies

Part of the unfavourable developments faced by companies spilled over to their business partners (financial system, employees, suppliers, authorities) that responded by similar measures, which aggravated the constraints on market players. The most significant risk in the short run could be posed, in the assumption of a modest and relatively late economic recovery, alongside persistent budgetary arrears, by liquidity shortages becoming even more pronounced due to the functioning of these entities in the context of supply chains additionally affected by unfavourable sectoral developments. There is a risk that such constraints could be passed through from one business partner to another and even be magnified.

A. Companies have transferred to the financial system part of the shock they experienced. The non-performing bank loan ratio[98] picked up (from 0.9 percent to 8 percent, December 2008-June 2010). Part of this unfavourable outcome is also due to banks' decision to tighten up, in a pro-cyclical manner, the lending conditions, including by making loans less readily available for companies (via both price and amount), in parallel with a marked decrease in the demand for loans. NBFIs were more severely impacted by the shock exerted by companies. The non-performing NBFI loan ratio is higher than the non-performing bank loan ratio (12.1 percent, June 2010). The companies that took loans from both banks and NBFIs preferred to service first their debt with banks (their non-performing bank loan ratio came in at 6.6 percent, whereas the non-performing NBFI loan ratio ran at 12.1 percent, June 2010).

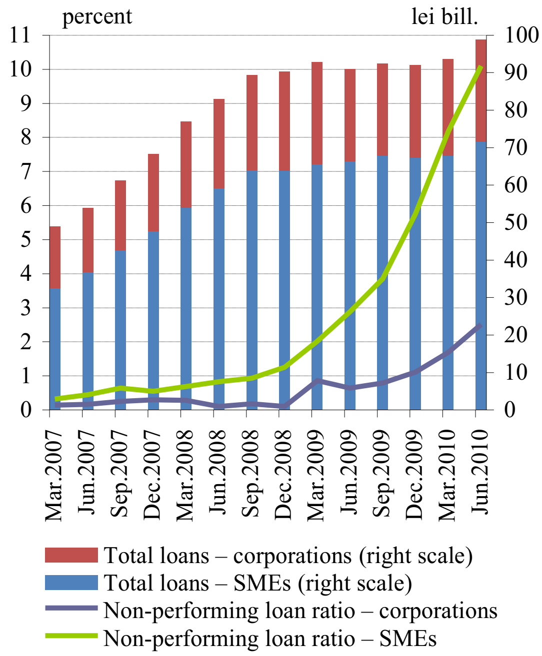
Companies in the construction sector seem to be the riskiest ones (with a non-performing loan ratio of 11 percent, June 2010). At the opposite side are utilities and the mining sector (owing to loan concentration in large-sized companies in these two sectors). The sectors that include a large number of companies and take considerable loan volumes (services, trade and manufacturing) had equal overdue payment ratios at the start of the crisis (1 percent in September 2008), but have

[98] In this chapter the non-performing loan ratio was defined as a ratio of the volume of loans overdue for more than 90 days to the total volume of loans granted.

posted different developments thereafter, with manufacturing being the best performer (with a 7 percent overdue payment ratio in June 2010). The real-estate sector has experienced the fastest deterioration, reporting an 8 percent overdue payment ratio in June 2010 after a 0.2 percent non-performing loan ratio in January 2009.

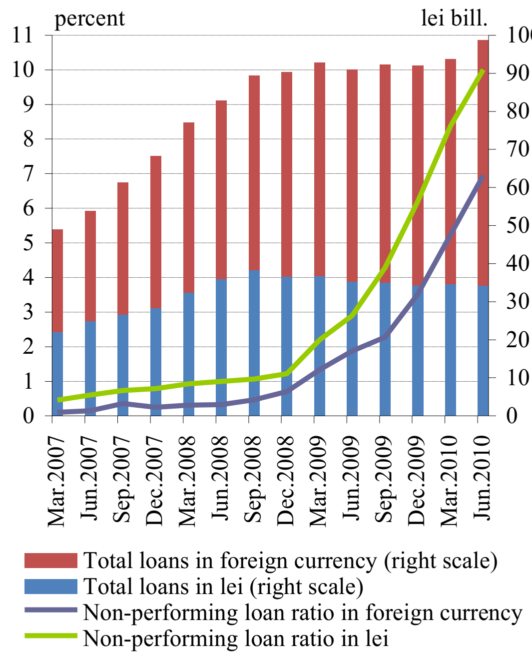
SMEs, particularly micro-enterprises, have been the hardest hit by the less readily available loans, as banks considered them to be riskier than large-sized companies. SMEs have generated the largest number of non-performing loans, their non-performing loan ratio exceeding 10 percent (Chart 5.8). In fact, the main financial soundness indicators relative to SMEs are weaker than those relative to the corporate sector (June 2009): (i) the EBIT interest coverage ratio is lower (77 percent compared to 173 percent); (ii) the leverage ratio is more pronounced (3.1 percent compared to 1.4 percent); (iii) new cash flow deficit is double relative to the deficit of the corporate sector (lei 6 billion compared to lei 3 billion, in annualised terms, for 2009); (iv) albeit higher, ROE is attributable particularly to a lower capitalisation.

Chart 5.8. Lending to non-financial companies by debtor company's size



Source: MPF, NBR calculations

Chart 5.9. Lending to non-financial companies by currency



Source: MPF, NBR calculations

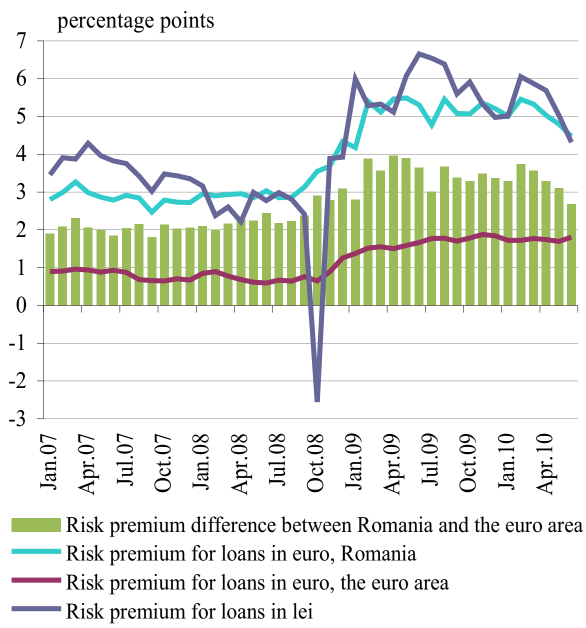
Loans in lei reported a higher non-performing loan ratio than loans in foreign currency (Chart 5.9). However, loans in foreign currency posted a faster increase in the overdue payment ratio in 2009 and the first half of 2010 than loans in domestic currency. The monetary policy tightening in the euro area could make this trend even more manifest.

The prospects for the evolution of non-performing loans are a reason for concern. The increase in companies' difficulties to service their debt with the banks is assumed to lead further to a build-up of non-performing loans. The monthly number of new companies reporting their first overdue payment or having taken loans which fall for the first time into a category lower or equal to "substandard" has recently stabilised. In order to diminish their losses, banks proceeded to the restructuring of the corporate portfolio (Box 4). Furthermore, the NBR adopted measures aimed at reclassifying loans, by avoiding moral hazard.

The probability of default in the case of companies[99] has become more pronounced, from an average of 4.3 percent at mid-2008 to 12.5 percent for 2010. Debt to risk is generated to a larger extent by SMEs (which hold approximately 70 percent of loans, accounting for 80 percent of the debt to risk). Due to the increasing number of non-performing loans, provisioning efforts must be further made, in spite of banks' profitability being thus dampened in the short run.

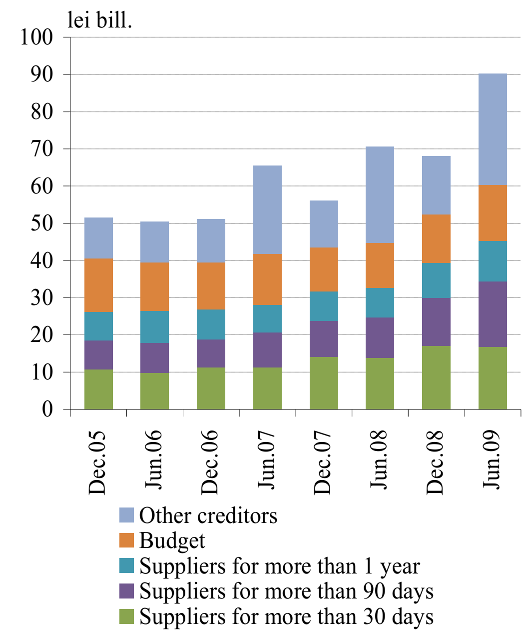
Banks have responded to the increase in the number of non-performing loans also by raising the risk premium (Chart 5.10). The difference between Romanian banks' perception of the local companies' risk and the perception by banks in the euro area of European companies' risk remained relatively constant in 2009 and the first half of 2010 (at about 3 percentage points), after reporting a risk spread of roughly 2 percentage points during 2007-2008.

Chart 5.10. Evolution of risk premium[100]



Source: MPF, Eurostat, NBR calculations

Chart 5.11. Structure of arrears across the economy



Source: MPF, NBR calculations

B. Companies have mutually transferred the shocks induced by the crisis: arrears and payment incidents posted an increase. Companies' default rate on their debt to suppliers[101] deteriorated in the first half of 2009 (Chart 5.11): from below 4 percent to almost 6 percent (June 2008-June 2009). Most likely, the unfavourable evolution has continued into 2010 as well, with the government's arrears making a marked contribution to this dynamics. In terms of payment, there is a marginal difference between corporations and SMEs, although the former's economic and financial standing, as well as their easier access to liquidity should advocate better performances than those actually reported. The evolution of companies with majority state-owned capital is the most worrisome. These companies' default rate on non-bank debt exceeded 20 percent (June 2009). Approximately 15 percent of arrears to suppliers are accounted for by these companies, which hold, however, only 5 percent of supplier-related expenses incurred by non-financial companies. Adding to these is the

[99] The probability of default is defined for a 1-year horizon and for a default event under Basel II (an overdue payment for more than 90 days).

[100] Calculated as the difference between the interest rate on new loans to companies and the 3-month money market interest rate. The risk premium difference between Romania and the euro area was calculated for loans in euro only.

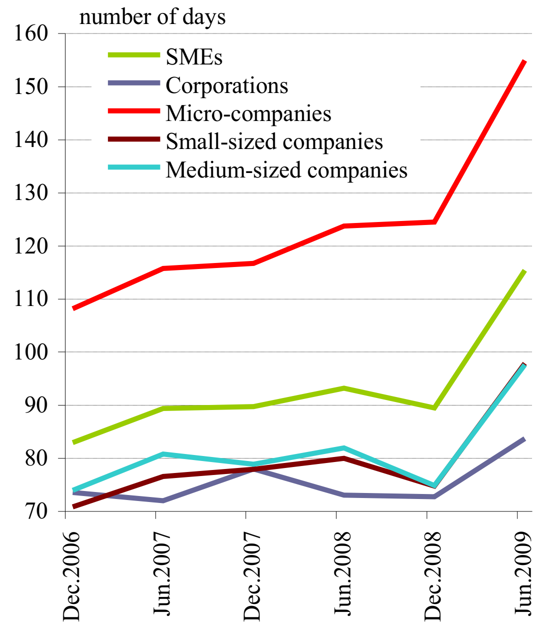
[101] Calculated as a ratio of arrears to suppliers to supplier-related expenses.

persistence of budgetary arrears which could enhance the restrictiveness of financial and liquidity constraints facing non-financial companies.

The results of stress scenarios relative to non-financial companies show that, in the assumption of the turnover deteriorating further, companies in the manufacturing sector remain the most vulnerable, calling for a 6 percent pick-up in the turnover in order to be able to avoid gross losses. Trade and services might witness a modest deterioration of the turnover in order not to incur losses. Utilities and mining are further the least vulnerable. Mention should be made that the scenario was built on data available in 2009 H1, which do not capture the effects of the promising performances of exports and industrial production in 2010. Therefore, the results of stress scenarios might indicate more moderate negative effects at present.

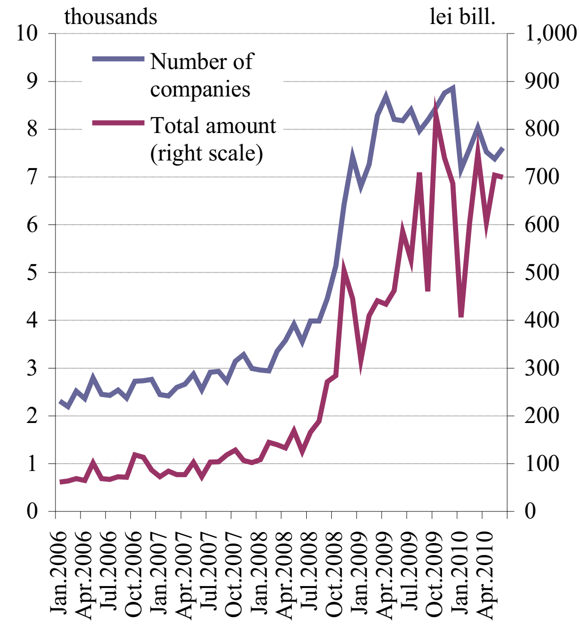
Non-financial companies' arrears to the budget continue to post a significant level (approximately 3 percent of GDP), with 55 percent thereof being accounted for by companies with majority state-owned capital[102]. At sectoral level, the largest part of arrears to the budget is accounted for by mining (30 percent, with 80 percent thereof being generated by a single state-owned company). Mutually, the arrears stock[103] of the consolidated general budget has expanded significantly since end-2008: from lei 1.06 billion to lei 1.76 billion (December 2008-March 2010) and the trend has persisted into 2010 Q2 as well.

Chart 5.12. Claim collection period



Source: MPF, NBR calculations

Chart 5.13. Evolution of newly-reported major payment incidents



Source: MPF, NBR calculations

The corporations (larger-sized companies) may have taken advantage of their position with a view to benefiting better conditions upon receiving claims. The costs induced by such behaviour were incurred particularly by small and very small-sized companies. The corporations managed during the economic boom in 2007-2008 to shorten slightly the duration for collecting claims from customers. During the same period, the smallest-sized companies (micro-enterprises) experienced a deterioration in the period of collecting claims of almost 15 percent. In 2009 H1, against the

[102] For comparison, the share of these companies' turnover in total is of merely 14 percent.

[103] Arrears are defined as payment delays longer than 90 days.

background of increased difficulties, the average duration for collecting a claim extended across the Romanian economy, with SMEs experiencing the strongest shock (a 30 percent extension of the respective period) whereas corporations saw an extension of this period by 15 percent only (Chart 5.12).

After following a strongly upward path in 2008 (Chart 5.13), the number of payment incidents stabilised at end-2009 (albeit reporting further a very high reading). The stagnation may be partly the result of companies' rejecting risky payment instruments in business relationships and instead preferring particularly cash payments or account transfers.

In terms of structure, almost 90 percent of total amounts are generated by SMEs. At sectoral level, construction and real-estate sectors appear to be the riskiest, accounting for a number of payment incidents that exceeds their significance economy-wide (calculated in terms of their turnover).

The companies having generated at least one major payment incident during 2009 and in the first half of 2010 have a moderate importance for the economy and the banking sector (holding around 4.5 percent of non-financial companies' value added, 15 percent of the number of employees, 20 percent of bank loans and almost 70 percent of balance sheet overdue payments in the bank portfolio). There is a strong connection between major payment incidents and overdue payments with banks, as both of them are generated, in most cases, by the same companies.

5.2. Risks generated by households

The risks generated by households to financial stability have become more pronounced than in the previous Report, with loans in foreign currency reporting the highest increase in the non-performing ratio on this segment of bank debtors. The short-term prospects on the banks' loan portfolio on the households segment remain a concern.

5.2.1. Crisis impact on households

Households have felt the crisis effects particularly from the following perspectives: (A) net wealth deteriorated, (B) disposable incomes have come under the adjustment pressure, and (C) confidence in the economy has declined.

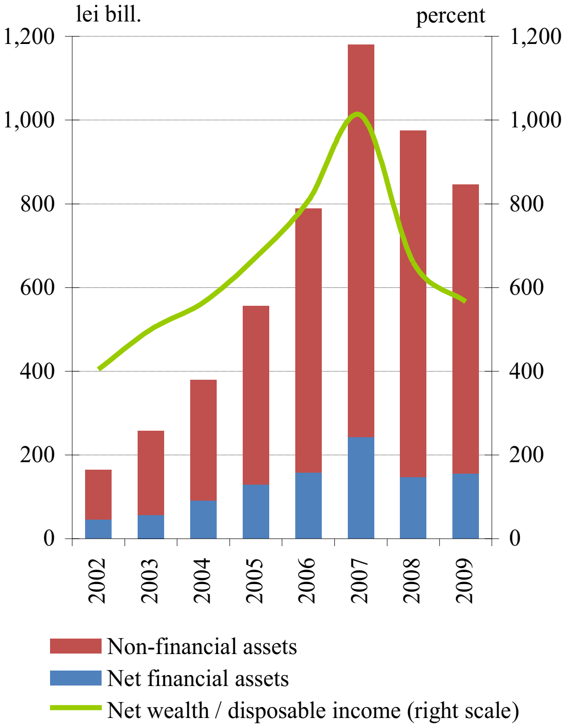
(A) Households' net wealth continued to decrease in 2009 as well (the downward trend started in 2008, Chart 5.14). The main driver of this evolution was the price effect related to non-financial assets (fixed assets). Net financial assets rose slightly, particularly due to the expansion of bank saving.

Net wealth was also dampened by the faster depreciation of the value of assets purchased through loans (consumer goods and buildings) than the depreciation of the related liabilities (debt with creditors for purchasing those assets). This risk was pointed out in the previous two Financial Stability Reports and, since the outbreak of the crisis, it has become increasingly manifest. Consumer loans backed by guarantees other than mortgages or consumer loans without collateral granted during 2005-2008 have reported the highest rate of default[104] (Chart 5.15). This is also due to banks' policies to grant consumer loans for increasingly longer maturities in order to allow a larger number of households to have access to loans, including with a view to avoiding the

[104] In this chapter, the non-performing loan ratio is defined as a ratio of the volume of loans overdue for more than 90 days to the total volume of loans granted.

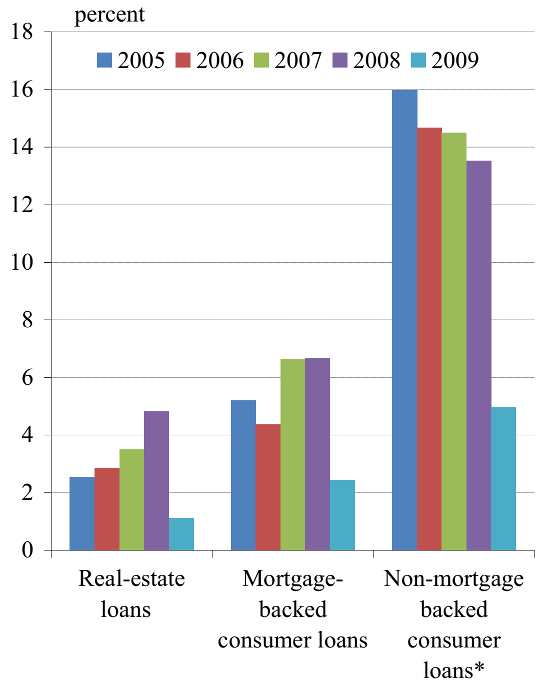
restrictions imposed by the NBR for containing indebtedness on consumer loans to 30 percent of households' monthly incomes. Real-estate or mortgage-backed consumer loans granted during the real-estate boom when prices had reached a peak and lending policies had been eased (2007-2008) report at present (June 2010) higher default rates than loans granted during other periods (Chart 5.15).

Chart 5.14. Households' net wealth



Source: NBR, NIS, NSC, ISC, PPSSC, NBR calculations

Chart 5.15. Non-performing loan ratio by assets and by the year of loan granting (June 2010)



* Consumer loans backed by other guarantees than mortgages and non-guaranteed loans worth more than lei 20,000

Source: NBR calculations, CCR

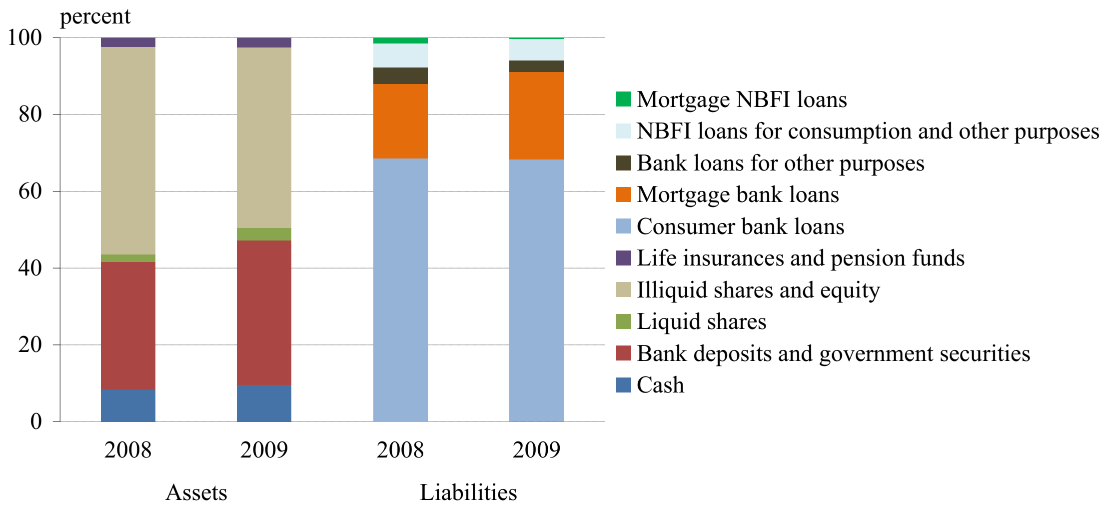
The evolution of financial assets had a positive impact on net wealth dynamics, with bank deposits (up 17 percent in 2009) having the most significant contribution. The structure of financial assets saw an improvement, as liquid assets[105] registered a 20 percent increase in 2009, the ratio of illiquid assets to liquid assets reaching a par reading. Liquid assets include particularly riskless assets (94 percent), illustrating the trend emphasised in the previous Report on households' cautious behaviour against the background of higher risk aversion (Chart 5.16).

(B) Households' disposable income came under adjustment pressure in 2009 and the first half of 2010. The outlook for the remainder of the year remains similar. The unemployment rate went up (from 4.4 percent to 7.4 percent, December 2008-June 2010) and the trend may persist. The adjustment of labour costs in the public sector will put pressure on the bank portfolio, as loans granted to public sector employees account for almost 20 percent of household loans

[105] Liquid financial assets include: (i) riskless assets (cash, bank deposits and government securities) and (ii) liquid shares (shares and securities listed and actually traded and shares/fund units owned by closed-end and open-end investment funds).

(December 2009)[106]. This portfolio did not cause any significant problems in 2009, banks considering necessary to proceed to the restructuring of a modest part (2 percent) of loans to public sector employees.

Chart 5.16. Structure of households' financial assets and liabilities



Source: NBR, NIS, NSC, ISC, PPSSC, NBR calculations

The uncertainty surrounding the evolution of future incomes gave a boost to saving, particularly precautionary saving. Households regained in 2010 Q1 their position of net creditor to banks, in the context of sustained saving dynamics (Chart 5.17).

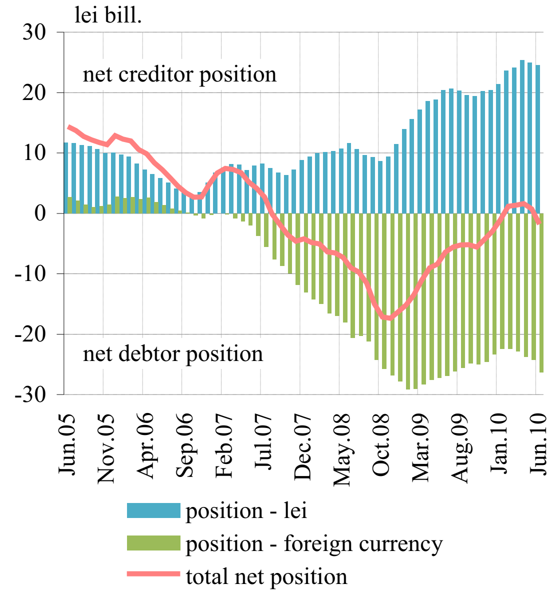
The evolution of saving poses two challenges. First, the majority of 2009 households' savings is concentrated on maturities up to two years, precautionary saving hinting at a potential drop in savings should risks, that they must offset, materialise. The reversal of the consolidation trend of households' net creditor position that occurred in May 2010 seems to support this assumption. Second, the share of large and very large-value deposits (over the equivalent of EUR 50,000) remained important (27 percent of households' deposits, June 2010). Moreover, the number of individuals having deposited amounts higher than the equivalent of EUR 50,000 rose by 23 percent in December 2008-June 2010, whereas the number of small depositors fell by around 9 percent, but there were periods when large-value deposits recorded significant volatility.

(C) The restoration of confidence is the key element for coming out of the crisis. In the case of households, the resumption of both consumption and demand for loans would actually indicate the revival of confidence. It is very likely that this crisis may bring about a change in households' behaviour as well, i.e. a stronger adjustment of consumption to disposable incomes. Thus, the future demand for consumer loans is likely to be substantially below pre-crisis levels. The perception of an increase in unemployment continued to persist in 2009 and in the first half of 2010 (Chart 5.18), being strongly associated with negative expectations regarding the future financial situation.

[106] Estimate based on a questionnaire (December 2009) for which 17 banks (accounting for almost 60 percent of the market share of loans to households) provided information including on lending and restructuring of loans to public sector employees. The other banks brought forward the arguments of unavailability of data or existence of the information available only on paper.

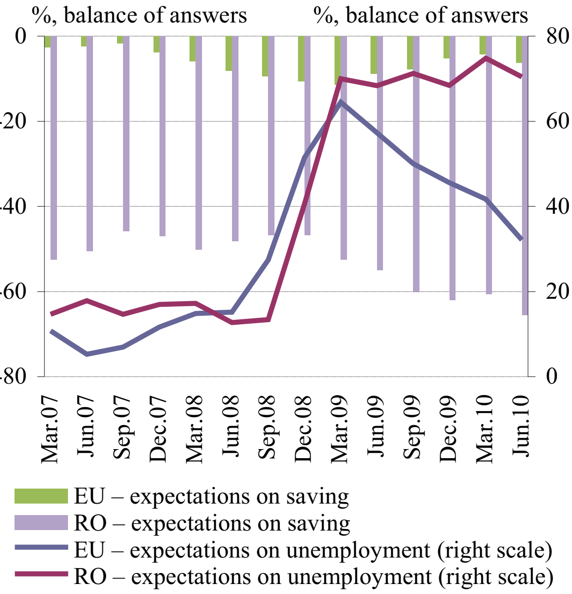
The deterioration of expectations on the saving capacity may be another argument in favour of fading out of current households' savings as these resources will be used to offset the decrease in disposable income, although this is reflected only to a certain extent by the deceleration in the growth rate of bank deposits.

Chart 5.17. Households' net position to banks



Source: NBR

Chart 5.18. Households' expectations on the evolution of unemployment and saving for the 12 months ahead



Source: European Commission

5.2.2. Spillover effects of the crisis via households

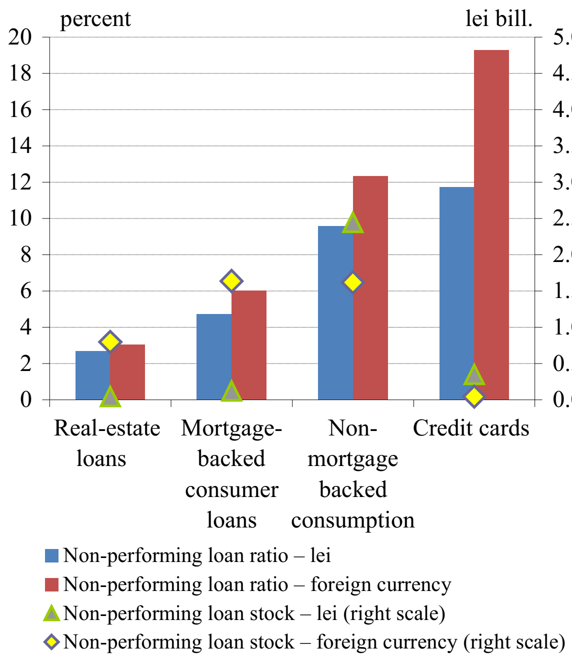
Households have transferred part of the problems entailed by the crisis to the financial system. Banks' loan portfolio on the households segment saw a relative deterioration, while signals in the short run are not encouraging (A). Households' indebtedness is high relative to the disposable income so that (B) households' capacity to accommodate new unfavourable developments without amplifying them in their relationship with creditors has somewhat diminished.

(A) The non-performing loan ratio expanded markedly in 2009 and the first half of 2010 (from 2.4 percent to 6.9 percent, December 2008-June 2010). Challenges persist in the short run as: (i) there is a several month-delay in the negative shocks transmission from labour market to overdue payments, (ii) households' negative expectations on their future financial standing, and (iii) the risks accumulated during the years when lending conditions were looser will persist in the long run in banks' portfolio, as the maturity of loans saw an increase in the years before the onset of the crisis.

NBFIs were harder hit than banks by households' problems in servicing their debt. The ratio of non-performing medium- and large-value loans (over lei 20,000) reached 12.4 percent in the case of NBFIs (June 2010). The more pronounced deterioration of the quality of NBFIs' portfolio as a result of granting loans to households has a moderate impact on financial stability as: (i) the volume of loans granted by NBFIs to households is relatively small (around lei 6 billion versus lei 104 billion worth of loans granted by banks, in June 2010) and (ii) NBFIs' loan portfolio on the households segment accounts for approximately 20 percent of total loans (compared to 50 percent in the case of banks, in June 2010).

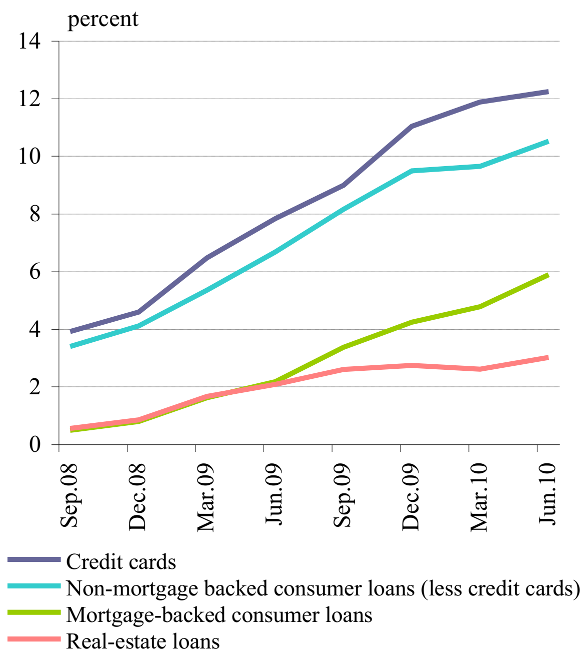
The volume of non-performing loans in foreign currency posted a faster growth rate than that of non-performing loans in lei (up 300 percent, compared to 125 percent, December 2008-June 2010). The ratio of non-performing foreign currency loans reached 6.1 percent (compared to the ratio of non-performing loans in lei which came in at 8.5 percent, June 2010). Structural analysis shows that loans in foreign currency reported a higher non-performing ratio than loans in lei, on all categories of loans granted to households[107] (Chart 5.19). The exchange rate evolution weighs on the dynamics of non-performing loans, but it may not be the latter's driver (see details also in Section *4.2.1 – Lending strategies of banks and companies' and households' access to financing*).

Chart 5.19. Structure of non-performing loans granted by banks to households by currency (June 2010)



Source: NBR calculations, CCR, Credit Bureau

Chart 5.20. Dynamics of non-performing loan ratio by type of loans



Source: NBR calculations, CCR, Credit Bureau

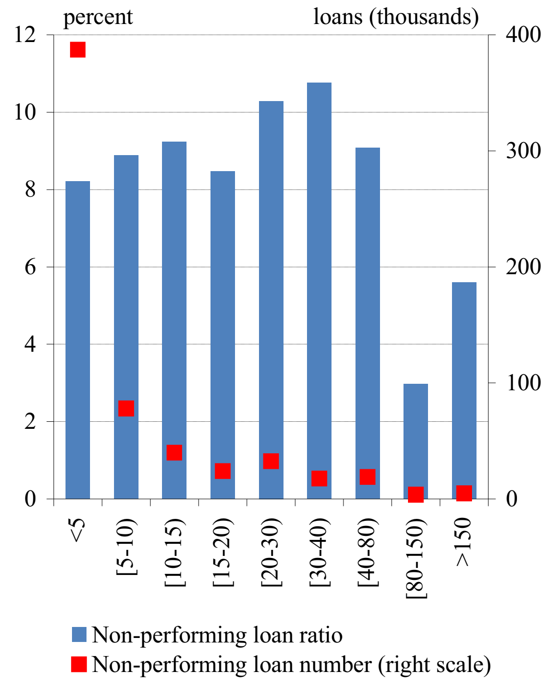
Credit cards and non-mortgage backed consumer loans have reported the weakest performance (with the ratios of non-performing loans amounting to 12.3 percent and 10.5 percent respectively, June 2010, Chart 5.20). Mortgage-backed consumer loans have posted an increasing overdue payment ratio that remains, however, below that of non-mortgage backed consumer loans. The non-performing ratio of real-estate loans has remained at subdued levels since the beginning of the crisis (3 percent, June 2010), one explanation being that first home buyers are more strongly motivated to service their debt. Under the circumstances, the decoupling between real-estate loan paying behaviour and mortgage-backed consumer loan paying behaviour calls for attention (see details also in Section *5.3 – Risks generated by the real estate sector and real estate assets*).

[107] The overall higher non-performing ratio of loans in lei than that of loans in foreign currency is attributable to non-mortgage backed consumer loans being significantly granted in domestic currency (Chart 5.19), which causes non-performing loans in lei to households to prevail overall.

Debtors to both banks and NBFIs are the riskiest category of debtor households (more than 0.5 million individuals, accounting for a total debt of lei 13.8 billion, June 2010). These debtors usually have three outstanding loans (two loans taken from banks and one from NBFIs) and report a similar non-performing loan ratio on both categories of creditors (13.4 percent, June 2010).

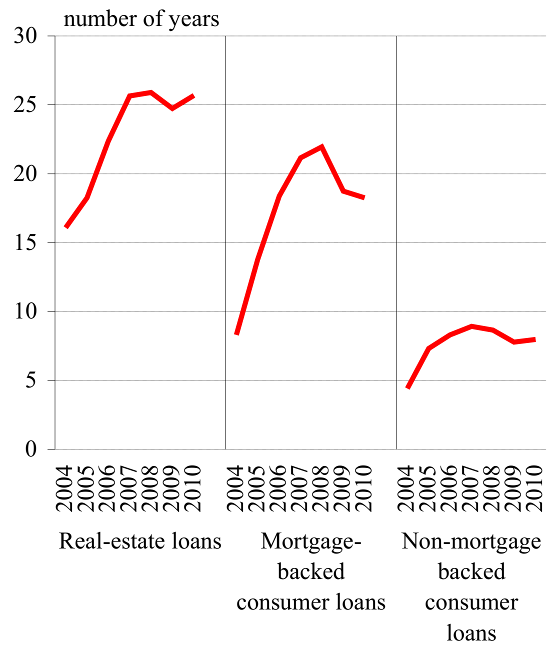
Small-value loans (below lei 5,000, Chart 5.21) are the most numerous non-performing loans. By the non-performing loan ratio, these loans range among moderate risk-generating loans (following suit very large-value loans). Consequently, applying a high penalty rate to small-value loans would not be justified by the higher default rate.

Chart 5.21. Distribution of non-performing ratio by loan balance, lei thousands (June 2010)



Source: NBR calculations, CCR, Credit Bureau

Chart 5.22. Average maturity of new loans granted in the specified year (over lei 20,000) by asset class



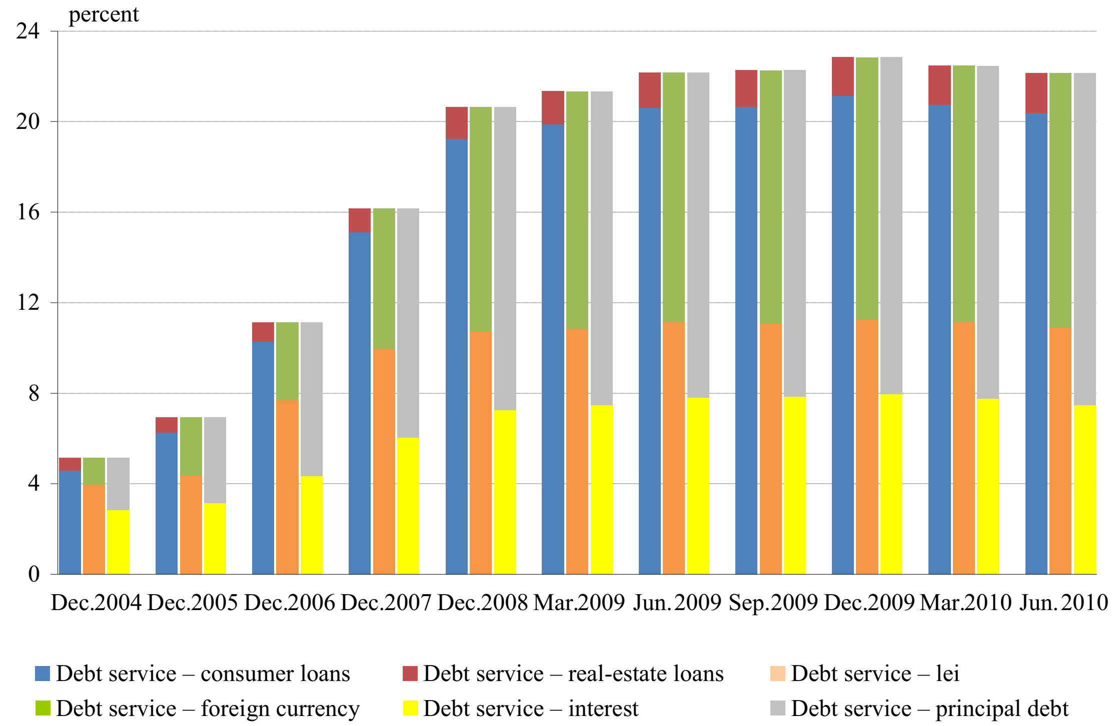
Note: Calculations for 2010 refer to H1

Source: NBR calculations, CCR

Banks have granted loans on increasingly longer maturities (Chart 5.22). The average maturity of a real-estate loan is of about 25 years and non-mortgage backed consumer loans must be repaid in 8 years, on average. In the latter case, there is a significant risk that the consumer good purchased by credit may come to be worth less than the debt that needs to be repaid. Loan maturity saw an extension at the time when lending standards and terms were lax, including with a view to avoiding the restrictions imposed by the NBR in order to contain indebtedness on consumer loans to 30 percent of households' monthly incomes, and more recently as a result of loan restructuring (see Box 4). As highlighted in the previous Report, the extension of maturities results in (i) higher sensitivity of monthly debt service to changes in the interest rate or the exchange rate and (ii) households paying more over the following years in order to cover the interest rate concurrently with a lower reduction in the actual principal debt to banks. The deterioration of disposable income flows while finding that the debt to banks diminished only marginally (because payments covered particularly the interest) might also lead to a higher default rate.

(B) The share of debt service in disposable incomes rose in 2009 (Chart 5.23), albeit at a much slower rate than in the previous years, amid the decrease in the resort to loans, along with an increase in saving. In the first half of 2010, the share of debt service in total household disposable income saw a positive evolution to reach 22 percent (June 2010). Nevertheless, the level is still double the average across the euro area[108]. 92 percent of the amount to be repaid to banks (June 2010) must cover consumer loans, which brings forward for discussion the medium- and long-term viability of households' indebtedness structure.

Chart 5.23. Evolution of bank debt service relative to the annual disposable income



Source: NBR, NBR calculations

The number of debtors with non-performing loans rose by 80 percent in December 2008-June 2010. One in ten debtors, natural entities, has overdue bank loans and accounts for 1.4 loans overdue for more than 90 days, on average.

The debt service capacity is likely to be further constrained in the period ahead as (i) the household disposable income is likely to stagnate or even decrease somewhat, although this trend will be partly offset by the resort to precautionary saving and (ii) the debt service is not expected to decline significantly. This may be explained by (a) most loans to households having a medium- and long-term maturity, generating payment obligations in the future as well, (b) part of these loans being in foreign currency at variable interest rates, and thus subject to potential increases in interest rates on international markets sparked by the tightening of monetary policies in the euro area, the USA and other economies, and (c) the grace period of promotional interest rates attached to numerous real-estate loans granted in the previous years starting to expire.

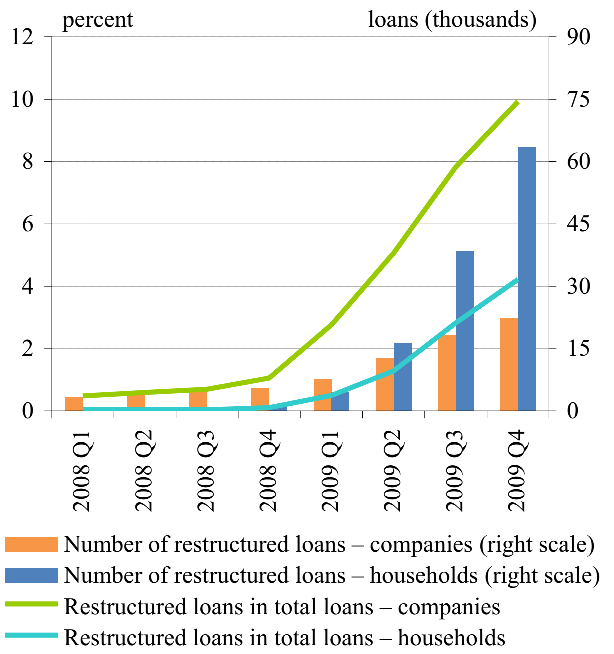
[108] Subject to data comparability.

Box 4. Restructuring of loans to households and non-financial companies[109]

Restructuring of loans granted to households and non-financial companies has become a practice increasingly more frequently resorted to by credit institutions starting 2009 Q1. The restructuring process was initiated both at debtors' request, as a result of undergoing financial difficulties and at the banks' initiative. The restructuring methods are multiple and allow the adjustment to each customer's profile: (i) rescheduling; (ii) rescheduling of the principal debt and interest rates respectively; (iii) other types of restructuring, of which (a) changes in the applied interest rate, (b) reclassification under other loan category with/without requesting additional guarantees, (c) refinancing of overdue amounts etc.

A. *Households posted a faster dynamics of loan restructuring*, as an increasing number of debtors resorted to this solution. However, the share of restructured loans in total loans to households came in at only 4 percent, in terms of volume and 1 percent, in terms of number (December 2009, Chart). Consumer loans hold the largest share of restructured loans (60 percent, in terms of volume and 91 percent in terms of number, December 2009). Real-estate loans report a faster dynamics and a higher average value per restructured loan.

Balance of restructured loans across companies and households



B. By contrast, *the deterioration of non-financial companies' financial standing* has transferred to a series of loans granted to them; on average, the number of restructured loans per debtor was of 1.5. The volume of restructured loans as a share of total loans granted to non-financial companies reached 10 percent as of 31 December 2009 (Chart). The structural analysis shows that SMEs have resorted to a large extent to loan-restructuring (accounting for around 85 percent of the total volume of restructured loans). The construction and real-estate sectors carried 30 percent of the total volume of restructured loans, followed by tourism and trade (approximately 25 percent). In terms of the average value of a restructured loan, restructured real-estate loans report the largest values.

During 2009, concerns emerged as a result of the worsening of the restructured portfolio. The share of restructured loans zero days overdue decreased in favour of restructured loans overdue for more than 90 days[110]. Many restructured loans originate in high-risk loan categories (about 17 percent are accounted for by loans overdue for more than 90 days to companies and households respectively, December 2009). Against the background of negative expectations on the macroeconomic environment (higher unemployment rate, lower activity across certain industries, exchange rate fluctuations) and low liquidity on the real-estate market, banks anticipated the intensification of the restructuring process in the first part of 2010.

[109] The information in Box 4 is based on the results yielded by a questionnaire circulated by the NBR at end-2009 to all credit institutions.

[110] In terms of volume, the share of loans to households is 30 percentage points lower (to 63 percent) while that of loans to companies is 10 percentage points lower (to 53 percent). The picture is similar in terms of restructured loan number. Loans overdue for more than 90 days to households and companies accounted for almost 20 percent.

5.3. Risks generated by the real estate sector and real estate assets

The risks to financial stability generated by the poor performance of the real estate sector and real estate assets have increased since the previous *Report*. The main reasons are the following: (A) the quality of mortgage-backed loans granted to companies and households worsened and (B) the large share of real estate assets in corporate and household balance sheets triggers concerns regarding the consequences of lower prices on the real estate market.

(A) In the crisis-ridden environment, banks sought to ensure additional protection and required borrowers an increasing volume of mortgage securities. This (i) put pressure especially on companies (which had to identify new eligible assets in order to secure financing) and (ii) increased sharply banks' exposure to this type of collateral. Mortgage-backed loans accounted for more than 75 percent of corporate credit, while real estate and mortgage-backed consumer loans made up more than 50 percent of total loans granted to households (June 2010).

Banks tightened lending standard for companies, particularly by requiring additional collateral in the form of mortgages. This policy failed to live up to expectations. The non-performing loan ratio[111] for mortgage-backed exposures exceeded also in case of SMEs, starting June 2010, the non-performing loan ratio for non-mortgage-backed exposures[112] (Chart 5.24). As for SMEs (accounting for 80 percent of mortgage-backed loans), the non-performing loan ratio took 10.2 percent of mortgage-backed loans and 9.5 percent of non-mortgage-backed loans (June 2010). Corporations displayed a better debt servicing behaviour, their non-performing loan ratio remaining much below the average economy-wide, i.e. 3.3 percent of mortgage-backed loans and 1.5 percent of non-mortgage-backed loans (June 2010). In this case, the efficiency of the collateralisation policy employed by banks calls for improved monitoring.

Portfolio quality in terms of mortgage-backed loans granted to households (real estate credit and mortgage-backed consumer credit) worsened in 2009 and 2010 H1. Risk is at a manageable level, but its dynamics require close monitoring, as the non-performing loan ratio reached 4.5 percent in June 2010 against 0.8 percent in December 2009. The level of risk varies by type of loans, being more pronounced for (i) mortgage-backed consumer loans and (ii) mortgage-backed loans granted in currencies other than the leu or the euro[113] (Chart 5.25). These developments call for a different prudential treatment to be applied to the foreign-currency-denominated loan stock. Real estate loans registered a lower non-performing loan ratio, possibly due to stronger financial discipline related to the loans for purchasing a house that the debtor will use as a permanent residence.

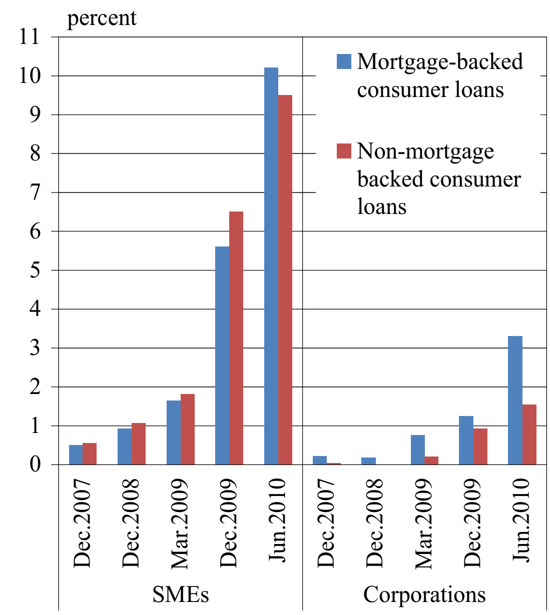
The share of promotional new loans in total real estate loans remained high, but trending downwards (from 55 percent in December 2008 to 20 percent in June 2010). Most of the promotional conditions granted in 2009 are valid only until 2010.

[111] The non-performing loan ratio is defined as the share of loans overdue for more than 90 days in total loans.

[112] This owes particularly to some real estate firms (with large residential projects in progress) which generated rising bank debts in early 2010. By excluding these companies from the calculation of the bank debt indicator, the non-performing loan ratio for mortgage-backed loans is lower than that for non-mortgage-backed loans.

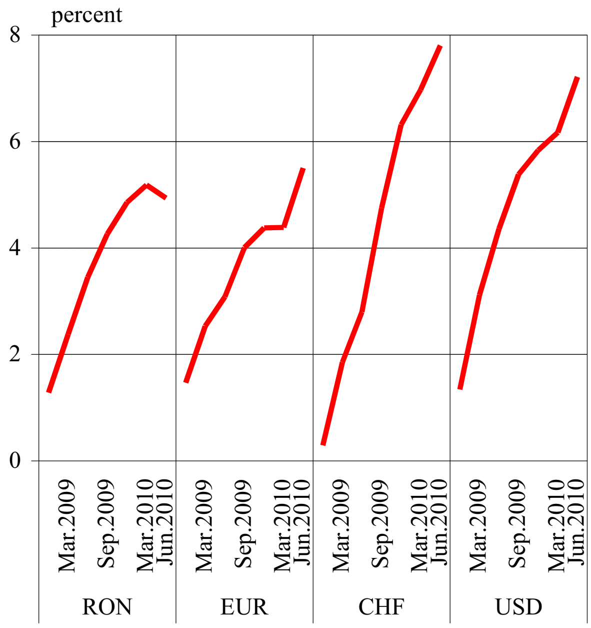
[113] Mortgage-backed loans are largely denominated in euro (70.6 percent), followed by Swiss francs (21.5 percent) and US dollars (0.6 percent), June 2010.

Chart 5.24. Companies' non-performing loan ratio by collateral type



Source: CCR, NBR, NBR calculations

Chart 5.25. Households' non-performing mortgage-backed loan ratio by currency



Source: CCR, Credit Bureau, NBR, NBR calculations

Risk information on real estate loans is worrying: (i) although the non-performing loan ratio is still low (3 percent, June 2010), the portfolio worsens at a fast rate, also as a result of a base effect consisting in the small number of defaults in the pre-crisis period, (ii) debtors migrate towards higher delay classes (a process that started at the end of 2008) and (iii) the volume of loans overdue for more than 90 days is rising (upwards of lei 0.8 billion in June 2010 from approximately lei 0.2 billion in December 2008).

Mortgage-backed consumer loans are relevant to the bank portfolio, as they accounted for 43 percent of total consumer credit in June 2010, from 37 percent in December 2008. The non-performing loan ratio related to mortgage-backed consumer loans is higher than that of real estate loans (5.9 percent in June 2010 against 0.8 percent in December 2008). In 2009 Q3, the debtors' behaviour of differently servicing their debt for real estate loans-compared to mortgage-backed consumer loans-came to the fore. If this trend persists or even becomes sharper, the need will arise to reassess the current regulatory framework, according to which the two types of loans display a similar repayment behaviour.

The companies operating in the construction and real estate sectors were hit hard by the crisis: from fast increases in value added, which brought about substantial volumes of financial resources, thereby contributing to the economy's overheating, these sectors saw steep declines in activity[114] and lending became by far less readily accessible.

The construction sector witnessed a pro-cyclical evolution, falling at a quicker pace than the economy overall. The sector's contribution to value added formation in the economy shrank from 11.9 percent in 2008 to 10.9 percent in 2009. The decline in the construction companies' activity

[114] The construction output dropped by 16 percent (seasonally adjusted) in 2010 H1 versus the same year-ago period. Residential buildings sector was the hardest hit (down 37 percent), followed by non-residential buildings (down 23.6 percent NIS data).

persisted into 2010 H1. Personnel cuts in this sector (down 20 percent in 2009) account for more than 25 percent of the advance in the number of the unemployed last year. Lay-offs were further made in 2010 Q1, but 2010 Q2 witnessed a paltry expansion in workforce in this sector[115]. Moreover, the outlook for investment is not bright. External creditors maintained their exposure to construction firms, so that external debt remained unchanged from December 2008 (5 percent of total private foreign debt of non-financial companies[116]). Domestic banks' exposure was relatively significant (more than 10 percent of total lending to companies) given that the construction sector reported the highest non-performing loan ratio of all economic sectors: 11 percent against an average of 8 percent (June 2010).

The real estate sector had a relatively small contribution to the value added generated by companies (3 percent in June 2009), but held 13 percent of total assets (June 2009). A high risk poses foreign debt, which made up more than 35 percent of Romania's private foreign debt (June 2010). Furthermore, almost one third of short-term foreign debt was accounted for by this sector (June 2010). Even though risks are growing, non-residents' exposure to this sector increased since the crisis broke out (up from EUR 8.4 billion in December 2008 to EUR 11 billion in June 2010). Domestic banks' exposure to this sector was relatively high at over 14 percent of company loans (lei 14 billion in June 2010, up from lei 9.7 billion in December 2008)[117].

The importance of the companies operating in the construction and real estate sectors to the banking sector and the economy overall could be modest in the period ahead, in the absence of major infrastructure projects.

The major reasons are the following:

1. Demand for new (commercial and residential) real estate assets could remain subdued in 2010 due to the slow economic recovery and the cut in household income. Demand for commercial buildings and offices could be the hardest hit[118]. As for residential buildings, the intention to buy or build a house during the next 12 months has been falling to a 7-year low in June 2010 (Chart 5.26).

2. The supply of loans for building new real estate assets is low and relatively costly. Banks deem construction and real estate businesses as the most risky in the economy and this perception has lasted for ten consecutive quarters (2008 Q1-2010 Q2). The role played by bank credit in starting real estate transactions is not a major one, as less than 10 percent of sale-purchase operations are conducted based on such financing. The entities operating in the construction and real estate sectors have been supported financially by their parent companies, the volume of short-term net inflows rising in both sectors in 2010 H1 (from the same year-ago period).

3. Construction costs for new buildings remained higher in Romania than in many EU Member States (almost unchanged versus 2008, Chart 5.27), but declined in 2010 Q1. This can result in:

[115] NBR, Business Surveys, 2010.

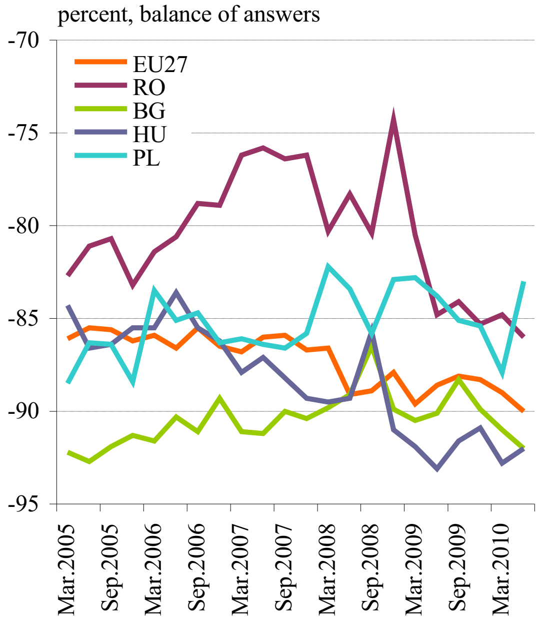
[116] Foreign debt of construction firms stood at EUR 1.4 billion in June 2010 compared with EUR 1.18 billion in December 2008.

[117] The dynamics owed not necessarily to the lending growth of real estate companies in that period, but to banks' redemption of some loans granted previously that had been sold to foreign entities (for details on loan outsourcing, see Section *4.2. Lending strategies of credit institutions*).

[118] In 2009, the vacancy rate for office spaces followed an upward path (the same as in the euro zone) that was still manifest in 2010 Q1. Moreover, the high volume of office spaces finalised over the recent period and the declining trend in companies' operational costs also put pressure on rents, which makes investment in new commercial real estate assets even less attractive.

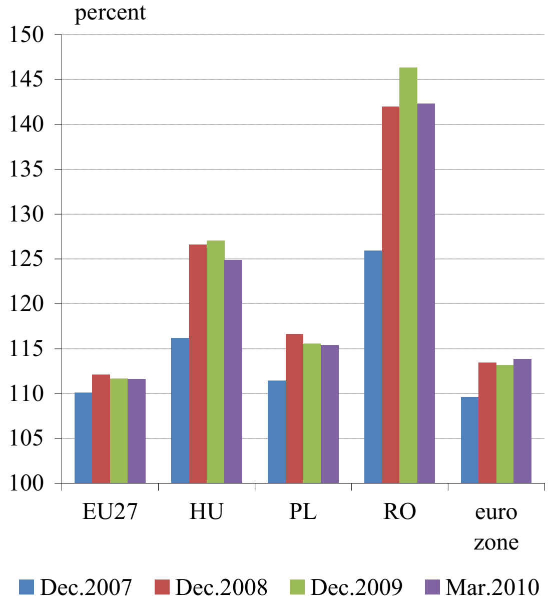
(i) domestic construction firms having a certain room for manoeuvre in cost cutting so as to overcome the crisis and (ii) lowering production costs in the euro area show that the groundwork is set for capital flows to find higher yields in other regions than Central and Eastern Europe, especially compared to the pre-crisis period.

Chart 5.26. The intention to buy or build a house during the next 12 months



Source: European Commission

Chart 5.27. Construction costs compared to the average in Europe and other countries in the region (year 2005=100)



Source: Eurostat

(B) Real estate assets hold a significant share in corporate balance sheets and household wealth. Their declining value has a detrimental impact on companies in particular.

The share of real estate assets in companies' balance sheets reporting by IFRS[119] had been very large when the crisis broke out (about 30 percent in December 2008). According to IFRS requirements, mandatory auditing of these firms' financial reports will imply, for future accounting reports, the market-based reassessment of buildings and land on their balance sheets. The decline in value of such real estate assets could weigh on the value of total assets, equity capital and ROA. The worsening of these indicators contains the access to financing and the decision to make new investment.

Households' non-financial assets still account for the largest share, i.e. more than 70 percent, of their wealth. The downward adjustment in real estate prices might diminish consumption via the wealth effect channel.

[119] Value added in economy and bank loans taken by these companies stood at about 60 percent and 45 percent respectively (June 2009).

CHAPTER 6. FINANCIAL SYSTEM INFRASTRUCTURE

6.1. Developments in the financial market regulation framework

The ongoing financial crisis revealed serious deficiencies in the supervision and regulation of the international financial system, which led to an intensification of concerns related to the restructuring and consolidation of its architecture.

The development of the international financial system, from the standpoint of size, structure, complexity and interconnection, posed difficulties for the authorities in charge of maintaining financial stability. The difficult assessment of vulnerabilities and risks to the system called into question the efficiency of the financial supervision and regulation framework itself, while its restructuring became a priority, with a view to consolidating financial stability.

Across individual economies, the competent authorities focused, within their scope of activity, on the micro-prudential supervision, as in the first stage of the crisis they were less prepared to identify and reduce macro-prudential risks[120]. The central banks' financial stability analyses focused rather on domestic characteristics, without insisting on the global dimension of the financial system, confirmed by the crisis (for instance, the influence exerted by large banking groups carrying out wide cross-border activity on national financial systems).

Moreover, in the context of the European arrangements on the management of financial crises, the NBR continued to develop, in 2009 as well, the specific procedures and sought to harmonise further its procedures and instruments with the European provisions. The NBR, in cooperation with the MPF, drafted the strategic Plan of action in the banking sector, which pursues the implementation of a specific set of measures available with the Romanian authorities when signs of a potential banking crisis emerge, by taking into account the principle of primary financial responsibility of shareholders and credit institution managers. Public intervention instruments are resorted to in order to settle a crisis whenever private market solutions are not feasible or have been exhausted.

6.1.1. Restructuring of the financial stability framework

The international context fuelled the decision by the European structures to proceed to the restructuring and consolidation of the European financial system architecture.

The EU's new legislative framework is aimed at harmonising the supervision rules and practices of financial institutions across the EU and at creating a new standard in the field that would take into account the market developments[121] and boost confidence in both the relationship between national authorities and the EU's financial supervision framework.

The European regulations on financial stability in the EU[122] are aimed at strengthening both micro- and macro-prudential supervision[123]. The introduction for the first time of the macro-prudential

[120] Macro-prudential supervision.

[121] For instance, the domination of groups carrying out intense cross-border activity, the domination of foreign banks on new EU Member States' banking markets etc.

[122] Still in a project stage.

[123] The recommendations included in the report submitted by the group led by J. de Larosière (February 2009).

supervision concept alters fundamentally the approach of credit institution supervision and has as a goal the identification and prevention of systemic risks. The assessment of vulnerabilities can be carried out by means of qualitative instruments and macro-prudential indicators, among which: balance sheet indicators, prices, financial crisis analysis econometric models, macro-prudential *stress test* and early warning indicators[124]. The measures for consolidating macro-prudential supervision, both nationally and internationally, assume the international cooperation and the exchange of information between competent authorities for the supervision of systemically important institutions that perform cross-border activity. Concurrently with the introduction of the macro-prudential supervision concept, the micro-prudential regime is also redefined (the supervision of financial institutions and markets).

The European regulatory framework for the prevention of the systemic risk will undergo a series of significant changes[125], such as: (i) reconsideration of capital requirements for banks, by raising, both qualitatively and quantitatively, the capital holdings in line with Basel II, with a view to diminishing pro-cyclical effects (*capital buffer*); (ii) reduction of the liquidity risk by imposing quantitative restrictions on banks' liquid assets and financing sources, in order to foster financial institutions' anti-cyclical behaviour (LCR-the liquidity coverage ratio and NSFR-the net stable funding ratio); (iii) harmonisation of regulations on financial reporting (IFRS[126]); (iv) application of a special treatment to systemically important financial institutions[127]; (v) legislative harmonisation on supervision, by ensuring a similar implementation manner across each member State; (vi) regulation and supervision of rating agencies. On the other hand, in order to have in place an efficient legislative framework for managing crises (national and/or cross-border crises) it is necessary to proceed to the reformation of early intervention measures, of bank resolution measures, as well as of the insolvency proceedings of financial institutions.

From a structural and institutional point of view, the proposed supervision architecture relies on two pillars: the European System of Financial Supervisors (ESFS)[128] and the European Systemic Risk Board (ESRB)[129]. The two pillars ensure a progressional process for rendering the European supervision system more efficient, integrated and sustainable.

ESFS, which plays a role in supervising individual financial institutions, is made up of national financial supervisors and the three new European Supervisory Authorities[130] (a European Banking Authority[131], a European Insurance and Occupational Pensions Authority[132] and a European Securities Authority[133]). The new European network will be assigned an extended mandate, with the responsibilities related to the national supervision of financial institutions entwining with new

[124] Selected from those financial indicators collected by the IMF which predicted most accurately the previous banking crisis.

[125] The CRD IV legislative proposal is currently under a consultative process at the European Commission, following to be completed towards end-2010.

[126] Issued by the International Accounting Standard Boards (IASB).

[127] Very large banks or smaller groups of banks, which are strongly interconnected and carry out the same activities.

[128] The European System of Financial Supervisors (ESFS).

[129] The European Systemic Risk Board (ESRB).

[130] The new authorities arise from the transformation of the three level 3 committees included under the current EU structure, according to the recommendations of the Larosière Group Report, namely the Committee of European Banking Supervisory (CEBS), the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) and the Committee of European Securities Regulators(CESR).

[131] The European Banking Authority (EBA).

[132] The European Insurance and Occupational Pension Authority (EIOPA).

[133] The European Securities and Markets Authority (ESMA).

EU-related tasks (specific to the cross-border risk approach). ESFS seeks to apply EU harmonised and consistent practices.

ESRB, which plays a part in monitoring and assessing risks to the stability of the entire financial system, shall issue early warnings on the systemic risks and recommendations for preventing such risks. ESRB was established in order to settle the vulnerabilities confirmed by the crisis, such as the financial system's exposure to systemic sectoral and inter-sectoral interconnection, complexity systemic risks. The ECB will provide analytical, statistical, administrative and logistic assistance.

The dynamics of changes in the European financial system, as well as the need of an increasingly more active cooperation between competent authorities and international organisations have a bearing on the evolution of the regulation framework of the Romanian financial market on all its components. The reform of the supervision framework across the EU will be reflected by the financial sector in Romania as well.[134] The macro-prudential approach will enrich financial analyses conducted by the authorities to include assessments of risks arising from the global financial system and the connections with real economy, whereas the access to detailed information will facilitate the early identification of systemic risks, which might also threaten the stability of the Romanian financial system. On the other hand, by cooperating with the ESRB and the other supervision authorities, as set forth by ESFS, the authorities will be able to develop new instruments for fulfilling the supervision function and conducting analyses, while having new channels for communicating the risks identified and the potential recommendations for action. As a matter of fact, the measures for revising the legislative framework are aimed at alleviating the pro-cyclical behaviour of financial market participants and at preventing the risk of concentration in the EU Member States, including in Romania, from emerging. Therefore, the concurrent adoption across the EU of the measures aimed at dampening lending in foreign currency, applicable to both parent-banks and local subsidiaries, could lead to the adjustment of macro-economic imbalances and to the reduction of risks in the financial system. Reconsideration of the European legislation on insolvency/liquidation envisages the decrease in the structural difference between bank subsidiaries and bank branches, by the enforcement of a joint set of principles. At present, the provisions of the EU Directive are applicable to banks' branches, while banks' subsidiaries are governed by the national legislation. The new approach envisages a level playing field for banks from the viewpoint of reorganisation measures.

The propositions for reforming financial supervision, formulated by the European Commission, based on the recommendations in the de Larosière Group Report, were submitted also to the attention of the National Committee for Financial Stability (NCFS). The NCFS members and representatives of both Romanian financial supervision authorities and MPF discussed on the issues related to the need to strengthen macro-prudential supervision in the EU, with a view to identifying and preventing systemic risks, simultaneously with improving micro-prudential supervision. Furthermore, the NCFS created a forum for debating tangible manners of inter-institutional cooperation and adequate measures for maintaining financial stability.

[134] The amendments made so far to the national legislation in point refer to (i) the transposition of Directive 2009/111 amending Directives 2006/48/EC, 2006/49/EC and 2007/64/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements, and crisis management and (ii) the consolidation of the NBR tasks by revising the special administration procedure.

6.1.2. Safety and efficiency of deposit guarantee schemes

The financial crisis revealed the deficiencies in the field of deposit guarantee scheme regulation, as well as their consequences on depositors' confidence in the financial system.

Safety of bank deposits becomes depositors' primary concern at times of crisis. Recent studies and analyses underlined the fact that no bank, regardless of its prestige on the international financial market, holds at any time enough liquid funds to redeem forthwith all its customers' deposits. Moreover, the lack of confidence in an institution, illustrated by the massive, simultaneous withdrawal of deposits, can entail a bankruptcy risk. From the financial stability perspective, the protection of depositors has become a priority on the EU's agenda, especially after the events in 2007 and 2008. Thus, although the European Union *acquis*[135] has tried to address these problems ever since 1994, by imposing the participation of credit institutions in the EU Member States in deposit-guarantee schemes (DGS)[136] that would operate based on a set of rules, the present financial crisis proved the inefficiency of some of the measures in place. DGS, established pursuant to the Directive, were thus conceived to provide payouts to banks' customers in the event of deposits becoming unavailable, to the limit of a minimum coverage level of EUR 20,000 within at most 9 months. Depositors' hasty behaviour during the crisis, fuelled also by uncoordinated initial reactions of the Member States, prompted the authorities to assess, without delay, the effects of the regulations in force and the possibility of improving them, in search of providing new legislative solutions to the challenges posed by the crisis. Therefore, the new European directive[137] on DGS sets forth, *inter alia*, (i) the increase in the minimum coverage level[138], (ii) the reduction of the time limit for paying out depositors[139] and (iii) the removal of the co-insurance concept.

Subsequent analyses revealed, however, a series of problems arising from the significant differences in the practice and legislation of EU Member States, the acute need for the institutional and operational harmonisation of DGS being illustrated and propelled by the European Commission in its actions[140]. In this context, the revision of the Directive on DGS, undergoing an advanced analysis stage, envisages: (i) the simplification of procedures for speeding up the repayments to depositors and (ii) the full harmonisation, with a view to creating a level playing field single market for all participants[141].

The main amendments proposed[142] refer to: (i) the application of a single coverage level in amount of EUR 100,000; (ii) the harmonisation of eligibility criteria for all categories of depositors; (iii) the reduction of the payout deadline to 7 calendar days; (iv) the ending of the practice of setting off depositors' liabilities against their claims; (v) the harmonisation of the approach and minimum level of financing DGS: *ex-ante* contributions (75 percent) and *ex-post* contributions

[135] Directive 94/19/EC on deposit-guarantee schemes.

[136] Component of the safety net.

[137] Directive 2009/14/EC on deposit-guarantee systems, published in March 2009.

[138] The minimum coverage level laid down by the directive is of EUR 50,000 (in force until end-June 2009) and, starting end-2010, it will go up to EUR 100,000, if the Commission's Report shows that this hike (for harmonisation reasons) is financially adequate and viable for all Member States.

[139] The maximum payout period is of at most 3 months, and, starting 31 December 2010, it will be shortened to 20 business days (plus 10 days for exceptional circumstances), 4-6 weeks respectively.

[140] Own analyses, the public Consultation of July 2009, the *Joint Research Centre Report*, the impact Assessment, the Report on the amendment of the directive on guarantee schemes (including legislative propositions) submitted to the European Council and the European Parliament in December 2009.

[141] Level playing field.

[142] Under negotiations with the EU Member States.

(25 percent) with a target level of 2 percent; (vi) the harmonisation of the calculation base of contributions (the contribution quota applied to the guaranteed part of eligible deposits, to EUR 100,000 at most). The DGS mandate is subject to neither harmonisation, nor extension by the imposition of new competences during bank resolution. Relative to the branches of credit institutions, DGS in the host country shall act as the single point of contact, for informing depositors, while DGS in the country of origin shall be in charge of repaying the unavailable deposits; these procedures imply a stronger cross-border cooperation between national DGS. The issue referring to the creation of a pan-EU scheme remains open for the future.

According to the NBR analyses[143], the optimum value of the coverage level of DGS in Romania, likely to provide confidence to depositors, while dampening moral hazard (banks' assuming disproportionate risks) is of EUR 50,000. This ensures the guarantee of most deposits held by natural entities (99.64 percent of depositors and 61.92 percent of the value of deposits). A new and probable increase in the coverage level to EUR 100,000 does not spark significant changes in the number of depositors guaranteed by law, but it triggers a rise in the coverage of the volume of deposits guaranteed (approximately 6 percent). However, in the event of a mixed financing[144] of the national DGS, the two-fold increase in the coverage level will put higher pressure on credit institutions, which will be compelled to make a much larger *ex-ante* contribution, without it necessarily turning into a justified profit/additional protection for depositors. Although it is aimed at rendering DGS more efficient, the measure relative to the additional shortening of the payout period to 7 days may be difficult to become effective, given that no exact solutions are being offered for its implementation. Moreover, the process of revising the framework for regulating guarantee schemes should be also in line with the objective of consolidating the cooperation in the supervision field recently considered for the restructuring of the European financial supervision architecture.

Globally, the concerns on rendering DGS more efficient strengthened the idea that such schemes must become an integral part of a safety net, along with prudential supervision and regulation, the lender of last resort facility and early intervention mechanisms. To this end, in 2009, the following were brought up for consideration: *the underlying Principles (18) for efficient deposit guarantee schemes*[145], as defining features for ensuring the international financial system stability, as well as the *Guide for the establishment of efficient guarantee schemes*[146]. The adoption of these principles is to be decided upon by national guarantee schemes.

[143] The analysis on the impact of the decision to raise the coverage level from EUR 20,000 to EUR 50,000 and EUR 100,000 respectively, the NBR (the Financial Stability Department), February 2009.

[144] The financing resources of the Deposit Guarantee Fund in the Banking System include: *ex-ante* contributions, stand-by credit lines (withdrawals may be performed only when the supplementation of own financial resources of the Fund is substantiated by the bankruptcy of a credit institution), other financial sources.

[145] Drafted by the Basel Committee on Banking Supervision (BCBS) and the International Association of Deposit Insurers (IADI), with the support of the Bank for International Settlements (BIS), the Financial Stability Institute (FSI), published in June 2009.

[146] IADI, BRI 2009.

6.2. Financial market infrastructure - ReGIS payment system stability

ReGIS payment system was further stable during 2009 and in the first part of 2010, being capable of absorbing medium-sized liquidity shocks. The contraction of financial resources entailed by the financial crisis did not affect its functioning.

In a modern society, the smooth functioning of the financial system infrastructure is a *sine qua non* prerequisite for the financial system stability. The present crisis can be overcome under the joint impact of: (i) a stable financial system, capable of performing its main functions, (ii) the participants' capacity to take risks, and (iii) public confidence in financial institutions and infrastructure.

The NBR's tasks *to promote and oversee the smooth operation of the payment systems with a view to ensuring financial stability*[147] were enhanced during 2009, particularly with a view to identifying potential risks and inefficiencies arising from the operation of payment systems, amid the financial crisis. Therefore, analyses were conducted on the monitoring of systemically important components of the national payment system, with a focus on the behaviour of participants[148] in ReGIS[149] against the background of the decline in financial resources in the aftermath of the present crisis.

ReGIS is considered to be critically important for financial stability, given that it ensures the settlement of (i) the central bank's monetary policy operations, (ii) payments related to interbank market operations, (iii) net positions calculated by all clearing systems[150], as well as of (iv) funds transfers related to transactions in securities carried out among all securities settlement systems[151].

The analyses for monitoring the settlement process and the activity of participants in ReGIS indicate that the value of transactions performed in ReGIS remained relatively steady in the period under review. No gridlock events were reported owing to the lack of funds in the settlement accounts of one or more participants, thanks to the high level of minimum reserve requirements and also to the operations conducted by the NBR with a view to accommodating the demand for liquidity on the interbank market. The amounts resorted to by the ReGIS participants via the intraday credit facility reported an increase.

At the same time, the analyses were also aimed at: (i) assessing the liquidity risk in ReGIS in case of severe operational incidents; (ii) monitoring the behaviour of the participants in the payment system: credit institutions, the NBR, the State Treasury; (iii) assessing the concentration and the possible negative effects of the contagion under stress conditions; (iv) identifying the changes in participants' credit risk perception during liquidity crunch episodes.

In order to obtain results as conclusive as possible, the analyses were carried out by using the simulator for payment and settlement systems BoF PSS2[152], built by the Bank of Finland, which

[147] NBR task set forth by Law No. 312/2004 – the Statute of the National Bank of Romania (Articles 21, 22, 23).

[148] ReGIS participants are credit institutions, the State Treasury, the NBR.

[149] The RTGS system is intended for the real-time gross settlement and processing of large-value (above lei 50,000) or urgent payment instructions.

[150] The SENT system.

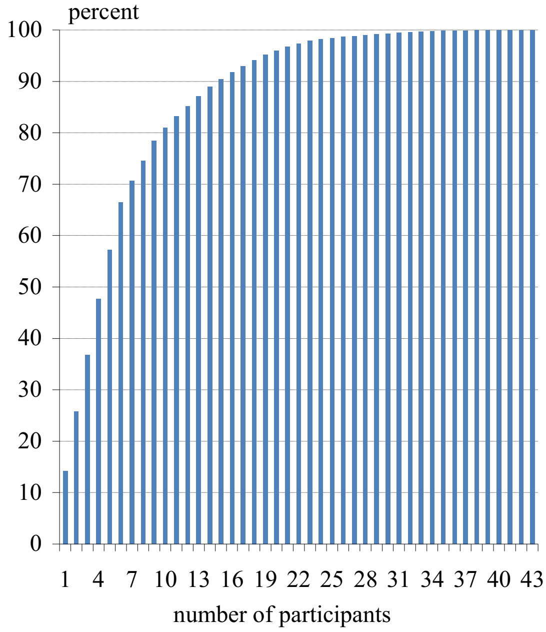
[151] SaFIR and RoClear systems.

[152] At present, the BoF PSS2 simulator is the most sought-after instrument on the international market, in the field of payment system analysis, from the perspective of risks – particularly liquidity and contagion risks – and of the resilience of systemically important payment systems to certain shocks. Central banks and research institutes in more than 60 countries resort to this simulator for analyses.

provides the possibility of "replicating" the real operating environment, ensuring the testing and examination of the scenarios proposed with a view to assessing the shock-absorbing capacity.

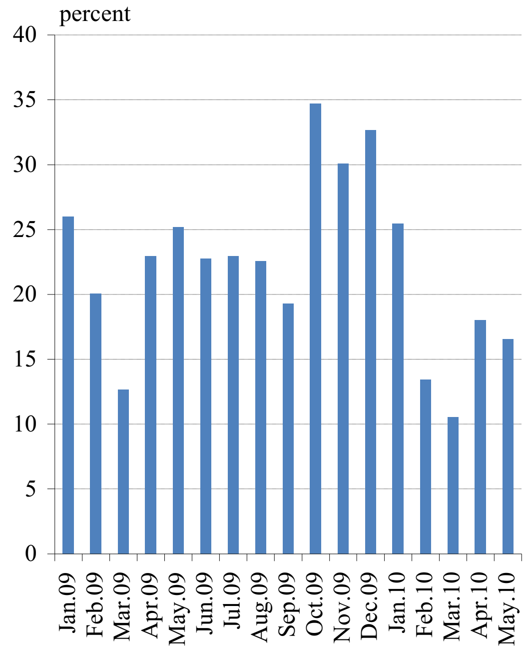
Concentration in the payment system is relatively high, given that the first four participants account for almost half the volume of transactions (47.7 percent) (Chart 6.1). However, the classification is different in terms of asset holdings. Credit institutions, which are highly active in the payment system, provide current operations for customers and ensure the processing of transactions on own behalf, in order to manage liquidity or obtain profit, without any direct relationship between the volume of managed assets and that of the transactions carried out.

Chart 6.1. Cumulative share of credit institutions participating in ReGIS January 2009-May 2010



Source: NBR

Chart 6.2. Liquidity utilisation via ReGIS January 2009-May 2010



Source: NBR

The liquidity used stands for the need for resources for the whole settlement of payment orders in the system. This liquidity need is lower than the total value of payments, as liquidity circulates in the system among the participants (recycled liquidity) and the resource utilisation[153] is directly proportional to the synchronisation of payment orders. In Romania, utilisation is low (Chart 6.2), but it is expected to expand, should the downward trend in the minimum reserve requirements continue.

The participants' behavioural pattern during an operating day shows a linear distribution of payment orders, in terms of number, whereas, in terms of value, payments are however concentrated in the last part of the day, when the uncertainty on the participants' liquidity needs diminish markedly. They pursue to cut costs related to the operations of raising liquidity on the money market and show a tendency to wait for resources to accumulate in the NBR's account, before initiating payments. The postponement of payments is likely to alter the resilience of the payment system in the event of a major dysfunction in the second half of the operating day.

[153] Liquidity utilisation is calculated as a ratio of the maximum intra-day used liquidity to the liquidity available at the start of the day.

In the period under review, ReGIS did not face any significant risks; however the soundness of a payment system derives not only from its functioning within normal parameters, but also from its resilience, namely its shock-absorption capacity at costs as low as possible. Thus, the stress test analyses developed were aimed at examining ReGIS under pronounced instability conditions, which albeit little likely to emerge, are unpredictable and call for a close monitoring intended to identify certain latent risks that may subsequently occur.

The scenarios proposed are aimed at both assessing ReGIS capacity to absorb liquidity shocks exerted either on flows or on the volume of financial resources held. These scenarios are built on assumptions relative to some participants facing payment default, the level of liquidity in the payment system and the manners of addressing the level of liquidity. The large interconnections between the participants in ReGIS can trigger a contagion effect, causing disruptions in the financial flows across the entire system.

With a view to monitoring more intensely the systemically important participants in ReGIS and preventing a potential systemic risk generated by them, a regular analysis was initiated for identifying systemically important participants, credit institutions and for assessing the risks posed by them. A systemically important participant, according to the analysis, is a credit institution that meets simultaneously the following conditions: (i) it carries out a large volume of transactions in ReGIS, (ii) it is strongly interconnected with other important participants in ReGIS, (iii) it cannot be replaced by other system participants. The conclusions of the analysis highlighted the systemic importance of some credit institutions[154]. The potential insolvency of any of them might affect seriously the level of liquidity in ReGIS, with a negative impact on real economy as well (the drop in the volume of payments and the increase in interest rates). Although, in general, systemically important participants can put strain on ReGIS, their optimum functioning, confirmed so far, ensures the system stability and allows medium-sized liquidity shocks to be absorbed.

[154] Credit institutions were selected based on the data for August-December 2009.