



NATIONAL BANK OF ROMANIA

FINANCIAL STABILITY REPORT

2014





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Note

The Financial Stability Report was prepared by the Financial Stability Department and coordinated by Mr. Cristian Popa, Deputy Governor of the National Bank of Romania.

The Report was examined by the National Bank of Romania Board which approved the main assessments in its meeting on 8 September 2014.

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National Bank of Romania

25 Lipscani Street, postal code 030031, Bucharest

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Abbreviations

BSE	Bucharest Stock Exchange
CCR	Central Credit Register
CDS	credit default swaps
CRR	Capital Requirements Regulation
DTI	debt-to-income
EBA	European Banking Authority
EBIT	Earnings Before Interest and Taxes
EC	European Commission
ECB	European Central Bank
ESRB	European Systemic Risk Board
EU	European Union
Eurostat	Statistical Office of the European Union
FSA	Financial Supervisory Authority
GDP	gross domestic product
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LTD	loan-to-deposit
LTI	loan-to-income
LTV	loan-to-value
MPF	Ministry of Public Finance
NBFIs	non-bank financial institutions
NBR	National Bank of Romania
NIS	National Institute of Statistics
NPLs	non-performing loans
NTRO	National Trade Register Office
PIR	Payment Incidents Register
ReGIS	Romanian electronic Gross Interbank Settlement
ROA	return on assets
ROBOR	Romanian Bid Offered Interest Rate
ROE	return on equity
SENT	Electronic Net Settlement System
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism

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1 OVERVIEW

Financial stability has remained robust since the release of the previous Report in September 2013, amid the improvement in domestic macroeconomic environment and the abatement of tensions on the international financial markets. Prudential indicators of the banking sector on solvency, liquidity and provisioning further posted adequate levels, staying within regulatory limits even assuming the materialisation of severe macroeconomic scenarios. The main challenges to Romania's banking sector over the period ahead are: ensuring a sustainable recovery of lending, preventing excessive balance sheet adjustments in the context of cross-border deleveraging, and improving bank asset quality indicators via clean-up measures aimed at removing non-performing loans from balance sheets, with a positive impact on banks' operational efficiency and intermediation capacity.

The banking sector in Romania has prudential capital and liquidity reserves that could accommodate strong shocks triggered by domestic and external adverse macroeconomic developments. Firstly, the total capital ratio (the former solvency indicator) rose to 17 percent in June 2014 (against 14.9 percent in December 2012), remaining considerably above the 8 percent threshold set pursuant to the European regulatory framework introduced by the CRD IV/CRR. Secondly, the coverage ratio of non-performing loans with IFRS provisions stayed at a comfortable level, i.e. 66.2 percent, in July 2014. The stress testing of banking sector solvency shows a good capacity to cover potential losses owing to possibly very severe macroeconomic developments, despite the sharp drop in the total capital ratio. Thirdly, liquidity continued to post good levels against the background of a rebalancing trend in the currency breakdown of bank assets and liabilities. Stress tests of banking sector liquidity from a macroprudential perspective are indicative of a good capacity to withstand a moderately-strong shock triggered by financing withdrawal. Fourthly, after three years in which the banking sector registered losses, it reported a net profit in 2013, thanks to a slowdown in non-performing loan build-up and a positive growth rate of operating profitability, despite the dynamics of loans to non-financial corporations. Credit institutions' aggregate profitability remained at positive, yet moderate, levels January through July 2014, with return on assets and return on equity standing at 0.2 percent and 2.3 percent respectively. Further territorial network rescaling and staff cuts resulted in lower operating costs, with a positive impact on operating profitability.

The Romanian banking sector is to undergo an extensive assessment following the Romanian authorities' decision to join the Banking Union, a EU-wide project resting on three pillars: a Single Supervisory Mechanism, a Single Resolution Mechanism, and a Single Deposit Guarantee Scheme. Romania's entering into a close cooperation agreement with the ECB regarding prudential oversight involves a comprehensive assessment exercise covering all significant credit institutions. The exercise is comprised of three stages, as follows: (i) a risk assessment; (ii) a bank asset quality review, and (iii) a stress test based on macroeconomic scenarios. In the case of credit institutions in Romania, this exercise is planned for 2015.

Parent undertakings continued to scale back the financing lines extended to their subsidiaries in Romania; the deleveraging process, albeit gathering steam since the release of the previous Report, retained its orderly nature. The Romanian banking sector's vulnerability to the overly high dependence on external financial resources has decreased noticeably. Exposure of parent undertakings to their

subsidiaries in Romania has declined (by 28 percent in the period December 2012 – August 2014), while the loan-to-deposit ratio for the non-government sector in Romania has substantially adjusted to 99.2 percent (a level that no longer puts any pressure from a macroprudential perspective), the dynamics being supported both by an increase in deposits and a reduction in foreign currency lending (the loan-to-deposit ratio for foreign exchange has fallen to 161.6 percent and that for lei has remained sub-par at 65.5 percent in August 2014). The downtrend in external financing lines might also have unfavourable consequences given the contained dynamics of domestic saving in the short term and its capacity to rise over time, whereas the eligible demand for loans, albeit low at present, similarly to European developments, has a significant unharnessed potential. Deleveraging is expected to continue in the forthcoming period, given that European credit institutions are currently undergoing their own balance-sheet adjustments with a view to ensuring compliance with Basel III Accord requirements. This process is unfolding against the background of persistent uncertainties surrounding the impact of the comprehensive assessment exercise on capital adequacy indicators (the exercise takes place amid these credit institutions' home countries joining the Single Supervisory Mechanism). As a matter of fact, deleveraging has been affecting all Central and European countries, the hardest hit in 2013 Q1 – 2014 Q1 being Slovenia, Latvia and Croatia¹.

The credit market was marked by balance sheet adjustments in terms of both supply of and demand for loans in 2013 and 2014 H1. The NBR's decisions to extend the monetary policy rate cutting cycle and to lower the minimum reserve requirement ratios, in conjunction with the initiation of a clean-up of banks' balance sheets, are likely to lay the groundwork for a sustainable resumption of lending to non-financial corporations in prudential conditions, given that banks hold the necessary resources. Insofar as domestic creditors pass declining costs through to borrowers to the largest extent possible, bank lending, in lei especially, may carry on at a faster pace². Lending conditions might improve in the latter half of 2014, with banks sending signals on the cycle of lending standard tightening coming to an end³. In the period from December 2012 to June 2014, demand for corporate loans and housing loans fluctuated within a narrow band, without showing a clear trend, with the former impacted by capital constraints and the credit channel affecting SMEs in particular. On the other hand, demand for consumer loans recovered somewhat, but household indebtedness is still high both at aggregate level and by debtor group and deleveraging is expected to continue, so that the sustainability of the lending resumption in the short term via this channel is debatable. Lending dynamics remained in negative territory, given that leu-denominated loans posted a positive growth rate, while foreign currency-denominated loans saw a sizeable compression, which helps mitigate currency risks.

The economy has an important and viable, albeit unharnessed, potential for lending to non-financial corporations. The share of companies with bank loans⁴ has always been relatively low when compared to the total number of companies in the sector, irrespective of the stage of the business cycle (less than 15 percent of the companies operating in Romania⁵ had a loan, whereas 43 percent of the

¹ Vienna Initiative, CESEE Deleveraging and credit monitor, August 2014 (http://vienna-initiative.com/wp-content/uploads/2014/08/DCM_note_August_2014.pdf).

² Respondents pointed out that overly high lending rates and commissions were the main hindrance to accessing funds from banks and/or NBFIs, according to the June 2014 *Survey on the access to finance of the non-financial companies in Romania and their capacity to cope with adverse financial conditions*.

³ According to the May 2014 *Bank Lending Survey*, which the NBR sends to the major credit institutions in Romania on a quarterly basis, <http://www.bnro.ro/PublicationDocuments.aspx?icid=11324>.

⁴ It refers to companies included in the Central Credit Register database. The sample of these entities does not have an exhaustive nature, as this report covers the firms whose exposure to a credit institution exceeds lei 20,000.

⁵ Companies that submitted their financial statements to the Ministry of Public Finance in 2013.

economically-active population had bank loans in December 2013). While in previous years the sectors playing a role in ensuring lasting economic growth⁶ were granted more substantial loans, this favourable shift in the business model of banks and non-bank financial institutions (NBFIs) was no longer manifest, as these sectors reported weaker flows from both domestic and foreign financial institutions. From December 2012 to June 2014 funding from local banks and NBFIs, as well as external creditors, to companies in the tradables sector contracted by 0.3 percent, to medium high-tech and high-tech companies by 6.6 percent, and to knowledge-intensive services suppliers by 19.6 percent. With a view to capitalising on the significant potential of eligible corporate demand, banks should improve the quality and expertise of the staff engaged in lending activity, risk analysis and corporate advisory work, and look for avenues to enhance customisation of their products and services.

The financial system continued to decrease in size during 2013 as well, at a faster pace than a year earlier. The banking sector witnessed the largest adjustment, as bank assets as a share in GDP shed 4 percentage points in 2013, whilst the NBFIs saw their assets declining by 0.5 percentage points as a share in GDP. The stock of loans of the latter entities has stayed broadly unchanged since the release of the previous Report, but the breakdown by currency, debtor and bank product reveals substantial changes. Moreover, the financing source breakdown is indicative of a larger share of domestic sources in total funding.

A slight adjustment was also manifest in the insurance sector, with the insurance companies' assets as a share in GDP narrowing by 0.3 percentage points in 2013. The insurance market remained concentrated, especially as regards general insurance. Insurers' profitability contracted in 2013 as a result of the worsening financial results of the general insurance segment, in spite of the ratio of gross claims paid and gross premiums written on this segment falling to a five-year low.

The private pension funds sector and the investment funds sector posted contained growth, with their assets as a share in GDP rising each by 0.6 percentage points in 2013. The favourable performance of the former sector is ascribable to the increase in the volume of contributions and the number of participants, while payments to pension recipients are insignificant. Investments made by private pension funds further focus chiefly on government securities, but their weight in the total narrowed in favour of shares.

In 2013, the direct contagion risk (from the banking sector to the non-bank financial system and vice versa) remained relatively low, with declining shares of bank exposure in the balance sheets of the other financial system components (except interbank exposure and private pension funds' exposure).

Developments on international financial markets since the release of the previous Report have been characterised by a decline in European capital market volatility and risk premiums on sovereign debt. Heavy Western capital flight from the Russian markets after the outbreak of the Ukraine crisis had a favourable impact on Romania's bonds. The improvements in bond yields resulted from: (i) the good performance of the Romanian economy; (ii) the upgrade of Romania's sovereign rating by Standard & Poor's (in May 2014), the country thus regaining the investment grade (with stable outlook); and (iii) the inclusion of Romanian bonds into JP Morgan's GBI-EM Global Diversified index starting in July 2014. The temporary volatility spikes manifest on the international financial markets since

⁶ The sectors encompassing tradable goods producers, high-tech firms, tradable services (tourism, transport, telecommunications) and more productive sectors with export potential.

the release of the previous Report, namely Turkey (in December 2013 – January 2014), Bulgaria⁷ (in June 2014) and Ukraine⁸ (starting in March 2014), entailed no significant effects on the financial system in Romania. Key prudential indicators of the banking sector improved and the dynamics of deposits of households and non-financial corporations followed a normal course.

Risks stemming from domestic macroeconomic developments followed a downward trend, amid economic growth remaining in positive territory and the further prudent fiscal policy stance (in 2013, the general government deficit stood at 2.3 percent of GDP, based on the ESA95 methodology, while the structural deficit came in at 1.8 percent of GDP). The positive performance of the domestic economy in 2013 (3.5 percent advance, among the fastest growth rates in the EU) needs to be strengthened by a consistent policy mix, in line with the economic reform path assumed under the financing arrangements with international institutions (the EU, the IMF and the World Bank). This would pave the way for properly coping with any unfavourable developments in the event of heightened risk aversion resurfacing on global financial markets.

The NBR is closely monitoring domestic and external economic and financial developments, as well as the possible risks to the financial sector, taking the necessary steps to maintain the sector's prudential indicators at an adequate level. The new European macroprudential framework, whose implementation is currently work in progress, based on the recommendations of the European Systemic Risk Board, will strengthen financial system capacity to address potential systemic risks. The NBR boasts an almost decade-long expertise in using macroprudential tools in relation to borrowers, particularly as regards instruments such as the debt service-to-income (DTI) ratio and the loan-to-value (LTV) ratio. These instruments proved relatively effective, especially over the longer term, in containing excessive credit growth and enhancing the resilience of debtors and creditors alike in case of unfavourable financial developments, which pleads for preserving a prudent level of the aforementioned indicators. The central bank is monitoring the extent to which the activation or recalibration of its macroprudential instruments, especially in relation to creditors, is warranted. A recommendation issued at end-2013 by the National Committee for Financial Stability (NCFS) called upon the NBR and the Financial Supervisory Authority (FSA) not to enforce the accelerated implementation of the capital conservation buffer and of the counter-cyclical capital buffer on credit institutions and financial investment services companies. At the same time, the NCFS recommended that the systemic risk buffer be set at zero, given that banks' balance sheets comprise significant capital reserves, following the use by the NBR of national regulatory instruments in the context of the flexibility allowed by the CRD IV/CRR legislative package, by keeping in place prudential filters when calculating own funds and bank prudential indicators. The establishment of the National Committee for Macroprudential Oversight aims to strengthen coordination in the field of macroprudential supervision of the domestic financial system. It will reunite all national authorities with macroprudential tasks, such as the financial sector regulatory authorities (the NBR, the FSA) and the Government, with a view to adequately managing systemic risk and safeguarding financial system stability. The Committee will define the macroprudential policy and determine the adequate tools for its implementation.

⁷ Only one bank with Bulgarian capital (holding 0.1 percent of total bank assets in August 2014) operates in Romania and no bank with Turkish capital.

⁸ The breakdown of the Romanian banking sector shows no credit institution with either Russian or Ukrainian shareholders. Holdings of Russian or Ukrainian assets by the Romanian banking sector are immaterial.

External imbalances, which stood out as major vulnerabilities at the onset of the financial crisis in Romania (October 2008), improved further (the current account deficit narrowed to 1.1 percent of GDP in 2013 and the country's external debt stock diminished to EUR 93 billion in June 2014, keeping with the downward adjustment trend), thereby generating manageable constraints on financial stability. From a microeconomic perspective, a challenge ahead is for foreign trade companies and the entities generating the country's private external debt to increase their share in domestic banks' loan portfolio and preserve their economic and financial performance. The ratio of loans taken from foreign banks to loans extended by domestic banks in the case of companies reporting both types of funding has witnessed a steady rise in recent years, from 202 percent at end-2012 to 288 percent in June 2014, which also shows that there is room for local banks to improve their ability to meet the demand which proves viable.

Companies' financial soundness at aggregate level has improved since the release of the previous Report. The return on equity edged up from 8.4 percent to 11 percent December 2012 through December 2013, while the degree of indebtedness improved slightly; nevertheless, the developments are further heterogeneous at microeconomic level, with a still large number of firms reporting net losses (58.2 percent of total companies, December 2013). Firms' payment discipline had mixed influences on financial stability. In particular, companies' overdue payments to suppliers and to the government budget diminished, as did the volume of major payment incidents, thus marking an improvement in payment discipline. On the other hand, the non-performing loan ratio remained high, also due to deleveraging, putting pressure on banks' financial standing, and insolvency reaccelerated in 2013, with a considerable detrimental impact on credit institutions' portfolios. The ratio of non-performing loans, whose build-up has slowed, may decline in the period ahead, amid banks' stepped-up efforts to clean their balance sheets and the improvement in the macrofinancial framework, alongside firms' enhanced debt servicing capacity. The coverage ratio of corporate non-performing loans with IFRS provisions in the banking sector is good (66.8 percent in August 2014). The probability of default in the non-financial corporations sector is expected to stick to a downward path, with an estimated average value of 5.6 percent at end-2014 from 6.9 percent in December 2013, according to the baseline macroeconomic scenario.

The balance of risks arising from households' balance sheets has improved slightly since the release of the previous Report. Household indebtedness declined (despite the persistence of uneven developments among the different categories of income earners), the sector's net creditor position towards the financial system strengthened, and net wealth rose. In addition, the improvement in household expectations on their financial standing and the higher income level, along with the stronger propensity towards domestic currency loans, can have a positive effect on household indebtedness breakdown. On the other hand, households' payment discipline continued to worsen, albeit at a slower pace than in the previous period. The macroprudential measures taken by the National Bank of Romania helped enhance borrowers' resilience to negative financial developments. Monitoring the risks associated with lending to households – which aims, inter alia, to steadily improve the macroprudential measures – further ranks among the central bank's objectives.

The banking sector's direct and indirect exposure concentration in connection with housing market dynamics is high and rising, with a 71 percent share of these exposures in total credit to households and non-financial corporations in August 2014, while the risks associated with these exposures have remained high (the non-performing ratio of mortgage-backed commercial loans to companies stood at 24.1 percent against 16.7 percent in the case of non-mortgage-backed commercial loans in

August 2014). A further significant adjustment of the residential property market is unlikely, given the major decline seen in recent years. Considerable lingering risks to the real-estate sector could call for additional macroprudential measures, in line with the recommendations of the European Systemic Risk Board.

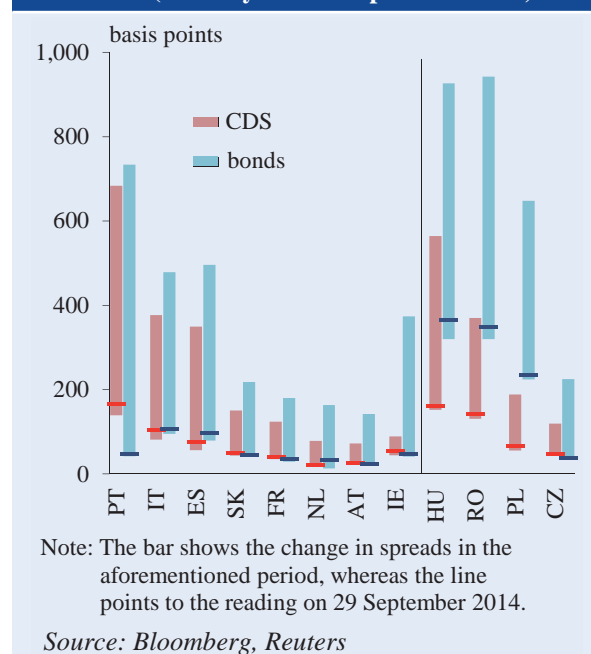
The ReGIS payment system continued to run smoothly, with no significant disruptions recorded from July 2013 to June 2014, amid an increase in both the number of processed transfer orders and the settlement rate. The participants' aggregate available liquidity was adequate and has improved. The SENT net settlement payment system functioned normally, without any major incidents, witnessing a slight increase in its availability rate and in the value of cleared transfer orders.

2 INTERNATIONAL ECONOMIC AND FINANCIAL ENVIRONMENT

International economic and financial developments could pose risks to the local financial stability especially via the following channels: (A) a shift in market sentiment mirrored by a decline in investors' preference for riskier and higher-yield assets and (B) a delay in Romania's trade partners resuming economic growth, together with the further partial rollover of financing lines granted by parent banks to their subsidiaries in Romania.

(A) Since the release of the previous Report, international financial market developments have been characterised by a reduction in both European capital market volatility¹ and the risk premium on government bonds (Chart 2.1.). A possible shift in market sentiment mirrored by a decline in investors' preference for riskier and higher-yield assets may be triggered by: (A1) a feeble economic recovery at global and European level, re-emergence of sovereign debt issues in euro area countries and/or financial system weaknesses, amid the switch to the new prudential framework across the EU, and (A2) an escalation of geopolitical tensions.

Chart 2.1. Developments in the spreads of credit default swaps (CDS) and sovereign bonds for EU Member States (January 2013 – September 2014)²

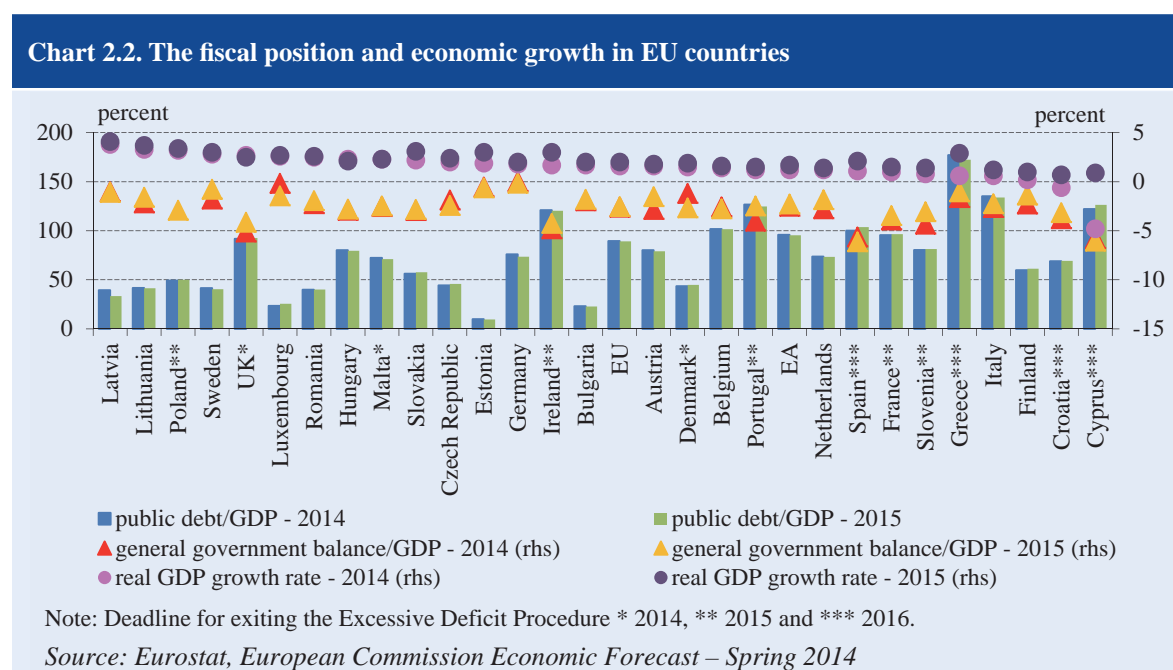


(A1) The outlook for global economic activity reveals an improvement in global macroeconomic conditions, yet unevenly distributed across regions. Global economic growth is forecasted at 3.4 percent in 2014 and 4 percent in 2015 (IMF forecasts, July 2014). At European level, a tepid consolidation of economic growth is expected: 1.6 percent and 2 percent in 2014 and 2015 respectively (the European Commission's Economic Forecast, Spring 2014). European authorities' top priority for 2014 is to sustain economic growth. The main lines of action envisaged under the European Semester economic policy coordination exercise, are as follows: (i) to pursue growth-friendly fiscal consolidation; (ii) to restore bank lending to the economy; (iii) to promote lasting economic growth and competitiveness; (iv) to tackle labour market issues and curb unemployment, and (v) to implement public administration reform.

¹ VSTOXX, the volatility index of the European capital market, dropped for a short time below 20 percent, for the first time since 2007. VSTOXX is based on the EURO STOXX 50 Index options traded on Eurex. It measures implied volatility on options with a rolling 30-day expiry.

² Spreads on sovereign bonds and CDSs refer to 5Y securities. For non-euro-area members (Hungary, Poland, Romania and the Czech Republic), local currency-denominated bonds are considered.

Against this background, the EU Member States initiated in 2014 a number of programmes aimed at supporting economic growth and raising employment, along with keeping fiscal adjustment in focus, pursuant to the requirements set forth in the Stability and Growth Pact and the EU-IMF financing agreements³. One of the measures envisaged herein is to shift the fiscal burden from the labour market onto other areas such as real estate and environment protection, particularly in the Netherlands, France and Italy⁴. Fiscal consolidation efforts across the EU materialised in the excessive deficit procedure being abrogated in 2014 for six countries: Belgium, the Czech Republic, Denmark, the Netherlands, Austria and Slovakia. There are currently 11 countries subject to the excessive deficit procedure (Chart 2.2.).



The European Central Bank also joined in the efforts to support economic growth by: (i) cutting its main refinancing rate (to 0.05 percent in September 2014); (ii) introducing a negative interest rate on the deposit facility and banks' holdings on ECB accounts that exceed the required reserves (currently at -0.2 percent), and (iii) adopting the targeted longer-term refinancing operations (TLTROs) that started on 18 September 2014 to support bank lending to the real economy⁵. The ECB allotted EUR 82.6 billion to 255 counterparties in the first of eight targeted TLTROs.

Further efforts were made to strengthen the prudential supervision framework at European level. Material progress was reported in terms of finalising the Banking Union architecture. The Supervisory

³ Five EU Member States have in place IMF-supported financing agreements: (i) Cyprus, Greece and Portugal have in place extended fund facilities; (ii) Poland is a signatory party of a flexible credit line, and (iii) Romania has signed a precautionary Stand-By Arrangement in September 2013. Ireland completed in December 2013 the financing agreement concluded with international institutions and is currently subject to post-programme surveillance until it repays at least 75 percent of the EUR 85 billion package.

⁴ European Semester: Country-specific recommendations, 2014.

⁵ During the first stage of the TLTROs spanning September to December 2014, participating credit institutions may borrow as much as 7 percent of the total amount of their loans to the euro area economy, excluding loans to households for house purchases, outstanding as of 30 April 2014. The second stage covers the period March 2015 – June 2016 and encompasses quarterly operations conducted by eligible counterparties that may access financing depending on lending developments. The maturity of these operations will be in September 2018 (Decision of the European Central Bank of 29 July 2014, ECB/2014/34).

Board of the Single Supervisory Mechanism (SSM), planned to become operational in November 2014, has largely completed the list of euro area credit institutions deemed as significant and which are to be subject to the ECB's direct supervision⁶. The ECB is currently conducting a comprehensive assessment of banks' balance sheets in the countries participating in the SSM and the results will be published in October 2014. In addition, legislation on the recovery and resolution of credit institutions⁷ was adopted and the Directive on deposit guarantee schemes⁸ was amended, as these legislative acts lay at the basis of the other two components of the Banking Union, namely the Single Resolution Mechanism and deposit guarantee schemes.

(A2) The escalation of geopolitical tensions in the region might entail a renewed increase in risk aversion on the international financial markets (for further details, see Box 1: Possible short-term consequences of the Russo-Ukrainian conflict on financial stability in Romania).

The temporary bouts of volatility that weighed on the international financial markets since the release of the previous Report, namely those in Turkey (December 2013 –January 2014), Bulgaria (June 2014)⁹, and Ukraine (from March 2014 onwards), did not have significant effects on the financial system in Romania. Only one bank with Bulgarian capital (holding 0.1 percent of total bank assets in August 2014) operates in Romania and there is no bank with Turkish capital. Key prudential indicators of the banking sector did not worsen and the developments in deposits of households and non-financial corporations followed a normal course. The sizeable capital outflows from Russian markets after the outbreak of the Ukraine conflict had a favourable impact on Romania's bonds. The improvements in bond yields (Chart 2.1.)¹⁰ resulted from: (i) the good performance of the Romanian economy; (ii) the upgrade of Romania's sovereign rating by Standard & Poor's (in May 2014), the country thus regaining the investment grade (with stable outlook); the ratings agency thus joined Moody's and Fitch that had already assessed Romanian government paper as moderate-risk assets, and (iii) the inclusion of Romanian bonds into JP Morgan's GBI-EM Global Diversified index starting in July 2014.

For the domestic macrofinancial framework to consolidate, the Romanian authorities should continue implementing the economic reforms they have committed to under the financing agreements signed with the EU, the IMF and the World Bank. This will create favourable prerequisites for adequately managing possible adverse developments that might arise should the international financial markets face a renewed heightening of risk aversion. The Romanian economy's positive performance in 2013 (for details, see Section 4.1. Domestic macroeconomic developments) needs to be strengthened by a consistent policy mix. The NBR has been closely monitoring the external financial and economic developments as well as the potential risks to the financial sector, taking steps so as to preserve adequate levels of the prudential indicators across the banking sector.

⁶ SSM Quarterly Report, 2014/3.

⁷ Directive 2014/59/EU and Regulation No. 806/2014 of the European Parliament and of the Council.

⁸ Directive 2014/49/EU.

⁹ The bank crisis in Bulgaria erupted in late June 2014 and translated into: (i) the closure of Corporate Commercial Bank AD (the fourth largest bank in Bulgaria) after a month-long bank run equivalent to 11.2 percent of total corporate and household deposits, and (ii) the Bulgarian central bank's application for a financing line of BGN 3.3 billion in order to provide liquidity to First Investment Bank (the third largest bank in the system).

¹⁰ CDS spreads narrowed from 215.3 basis points to 141.8 basis points December 2012 through 29 September 2014 and spreads on government securities posted the same trend, dropping from 622.8 basis points to 348.2 basis points in the reference period.

Box 1. Possible short-term consequences of the Russo-Ukrainian conflict on financial stability in Romania

The crisis in Ukraine broke out after the Russian Federation announced the annexation of Crimea based on the Decision issued by the State Duma on 18 March 2014, against the backdrop of tensions with neighbouring Ukraine that had been manifest since November 2013. Diplomatic efforts were undertaken to ease tensions in the region and the main topic of discussions between Ukraine and Russia was looking for a solution to the former's debt incurred for Russian gas imports. The EU offered its support to Ukraine, which was granted financial assistance in amount of EUR 15 billion, whereas the EIB and the EBRD announced a contribution of EUR 8 billion, and the IMF made available USD 17 billion (approximately EUR 12.4 billion¹). On 27 June 2014, Ukraine signed the Ukraine-EU Association Agreement and on 31 July 2014 the European Council decided² to impose sanctions on Russia in the following four areas: (i) containing access to Europe's primary and secondary capital markets for financial institutions established in Russia with over 50 percent public ownership or control³; (ii) banning any trade in arms; (iii) applying restrictions on exports of certain dual-use goods and technology related to arms and military equipment, and (iv) applying restrictions on Russia's access to advanced technologies for the oil industry. In a retaliatory move, Russia resorted to sanctions against the countries enforcing those measures, namely the USA, the EU Member States, Canada, Australia and Norway, and discontinued its imports of certain agricultural produce, raw materials and foodstuffs. On 8 September 2014, the European Council decided⁴ to amend its decision of 31 July 2014 by extending the scope of the sanctions applied.

Romania does not have significant trade ties with either Ukraine or Russia (about 4 percent of total export and import value in June 2014) and the energy intensity of the Romanian economy has declined, as also shown by the lower share of natural gas imports (Romania reported imports of only 15.3 percent of total gas required for domestic consumption in 2013, compared with 24.3 percent in 2012⁵). The economic and financial standing of natural gas industrial users is, generally, above the economy-wide average and the banking sector's exposure to these companies is low.

Possible unfavourable developments of the conflict in Ukraine, via the direct exposure channel, will most likely have no significant impact in the short term. The breakdown of the Romanian banking sector by ownership shows no credit institutions with Russian or Ukrainian shareholders. Holdings of Russian or Ukrainian assets by the Romanian banking sector are immaterial. The real sector has few direct ties to Ukraine and Romania-incorporated businesses with Ukrainian shareholding do not have systemic sizes. The real sector's ties with Russia are more important than those with Ukraine, but potential unfavourable developments of Romanian companies with Russian capital will most likely not cause systemic threats.

Romania may experience significant consequences as a result of a possible escalation of the Ukraine conflict via the indirect channel in terms of foreign trade flows, in case the demand of euro area economies for Romanian exports were affected, as well as in terms of financial standing,

¹ Under the Stand-By Arrangement signed by Ukraine with the IMF on 30 April 2014.

² Council Regulation (EU) No. 833/2014 of 31 July 2014.

³ The credit institutions referred to are as follows: Sberbank, VTB Bank, Gazprombank, Vnesheconombank (VEB) and Rosselkhozbank.

⁴ Council Decision 2014/659/CFSP of 8 September 2014.

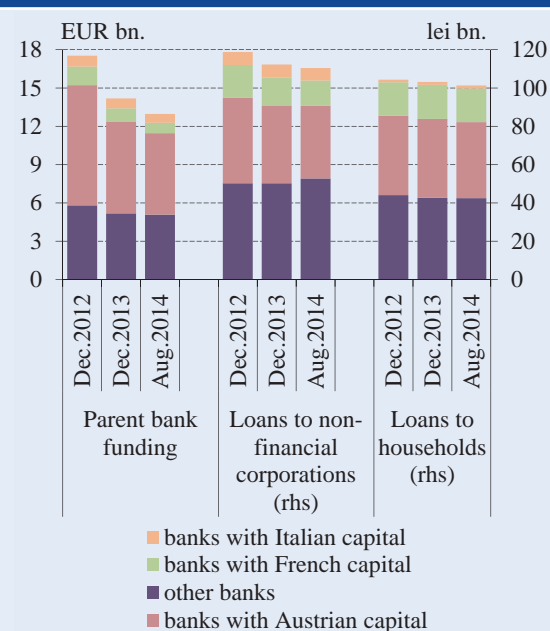
⁵ According to the *2013 Annual Monitoring Report for the Domestic Natural Gas Market* prepared by the Regulatory Authority for Energy.

via the common lender channel, as most foreign financial claims on Ukraine and Russia are held by Austria, Italy, and France, which take substantial shares of the banking and real sectors in Romania. The Romanian banking sector includes seven credit institutions with Austrian shareholders, three with French shareholders and two with Italian shareholders, making up 55 percent of loans to the private sector (in August 2014).

According to the results of the macroprudential liquidity stress-testing exercise, the banking sector is in a good position to withstand a moderate-to-high shock from withdrawal of financing, the major challenge being banks' capacity to raise additional funds via asset sales, amid the improvement in liquidity across the local banking sector. Moreover, the banking sector in Romania has adequate resources to withstand any potential shock, as reflected by the rise in the total capital ratio (17 percent in June 2014 against 14.9 percent in December 2012) and the improvement in the prudential liquidity indicator (1.6 in July 2014 from 1.4 in December 2012).

(B) The delay in the sustained recovery of economic activity in Romania's main trading partners may negatively affect the developments in the country's exports, given that the euro zone remains the largest market for Romanian-made products (51.1 percent of total exports in 2013). In the recent period, Romania has diversified its export markets and foreign trade companies have further reported a financial standing that allows them to withstand potential external shocks (for further details, see Section 4.3.1. Current account deficit).

Chart 2.3. Developments in external exposure and the impact on corporate and household lending



Source: NBR, NBR calculations

Parent banks further rolled over only partially the financing lines opened to their subsidiaries in Romania, but this deleveraging, albeit gathering pace, retained its orderly nature (Chart 2.3.). Parent banks' exposure to their subsidiaries in Romania declined by 28 percent December 2012 through August 2014 (reaching EUR 12.6 billion), but this had only a small influence on corporate and household lending (down 7.7 percent, adjusted by exchange rate changes, in the period December 2012 – August 2014, particularly via the contracting demand channel – for further details, see Section 4.2. Corporate and household lending). Ensuring that local banks gain access to finance in euro in a similar manner to parent banks would contribute to a slowdown in cross-border deleveraging. Local banks counterbalanced the contraction in external financing sources by attracting a larger amount of domestic funds. The NBR was further supportive of a sustainable recovery of lending, in domestic

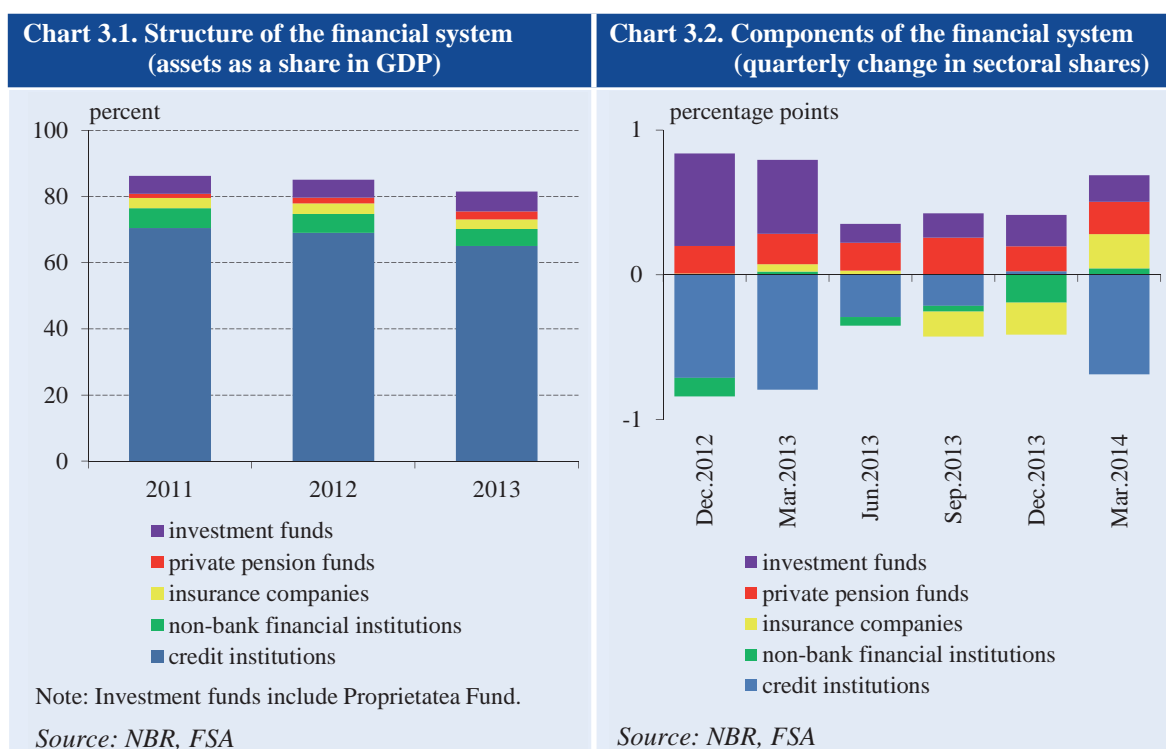
currency in particular, also via monetary policy measures: (i) the policy rate was cut in successive steps down to 3.25 percent starting in 5 August 2014, and (ii) the minimum reserve requirement ratio on leu-denominated liabilities of credit institutions was lowered to 10 percent in September 2014 and that on foreign currency-denominated deposits to 16 percent in July 2014.

3 FINANCIAL SYSTEM AND ITS RELATED RISKS

3.1. Structure of the financial system

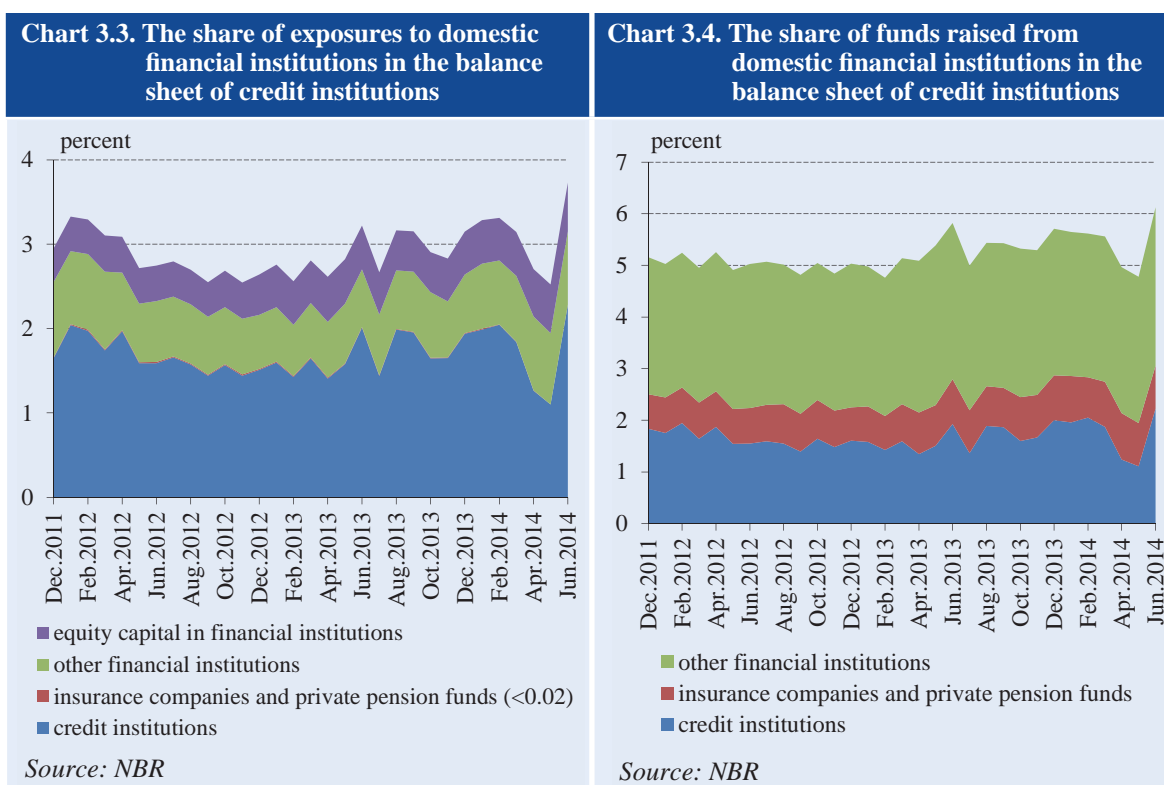
The financial intermediation, assessed in terms of the financial system's assets as a share in GDP, declined at a faster pace in 2013 than in 2012, in the context of the swifter economic growth. The main structural changes in the Romanian financial system are ascribable to the substantial increases recorded by private pension funds and investment funds, as well as to the modest performance of the other financial sectors. The direct contagion risk of the banking sector remained relatively low as regards both balance sheet exposure and the funds raised from local financial institutions. Looking at the exposures to the banking sector, their shares in the balance sheets of the financial system components narrowed in 2013, except for interbank and private pension fund exposures.

The share of the financial system's assets in GDP shrank further in 2013, standing at 81.5 percent at year-end (Chart 3.1.). Financial intermediation declined at a faster pace than a year earlier. In 2013, the most significant structural changes in the financial system were the drop in the share of the banking sector and the rise in the shares of private pension funds and investment funds.



The quarterly developments of the financial system components confirm the uptrend in the shares of both private pension funds and investment funds in the financial system (Chart 3.2.). These developments were accompanied by the decline in the shares of the banking sector and non-bank financial institutions, a trend that was manifest throughout the period under review.

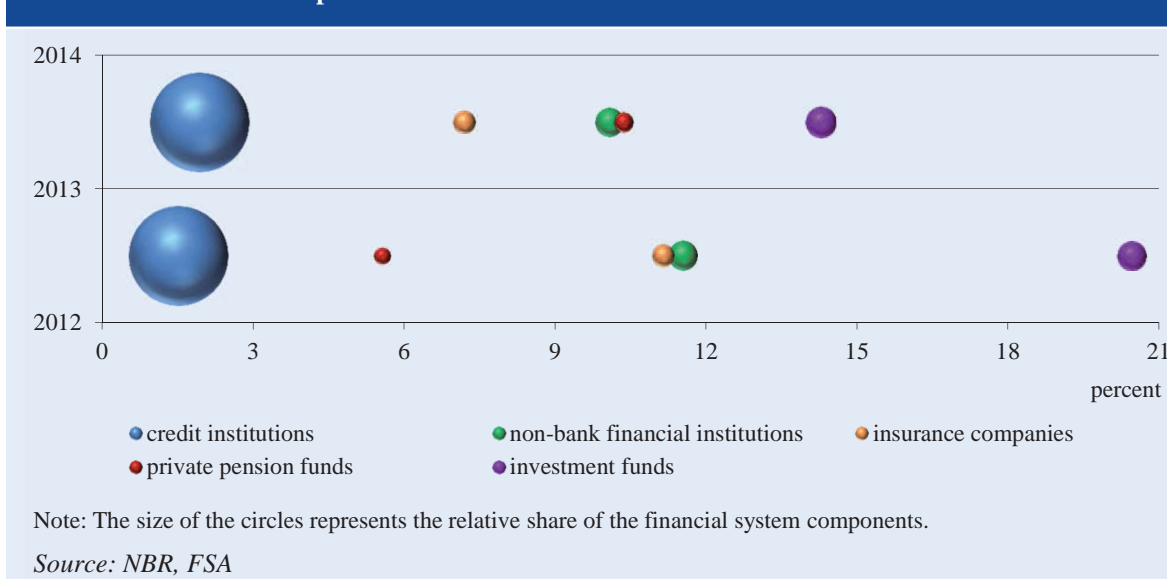
The exposure of the banking sector to the financial institutions in Romania rose slightly in 2013, accounting for 3.15 percent of total assets of credit institutions at year-end (Chart 3.3.). The low level of this indicator and the significant share of interbank exposures in this sector point to the further relatively limited direct contagion risk of the Romanian banking sector stemming from the non-bank financial sectors.



The share of funds raised from financial institutions in Romania in the balance sheets of credit institutions rose slightly, albeit remaining below the 6 percent threshold throughout 2013 (Chart 3.4.). The main changes were seen by interbank exposures, whereas the funds raised from non-bank financial sectors were stable, recording relatively low levels.

The banking sector further plays an essential role in the Romanian financial system. Although the exposures of the other financial institutions to credit institutions have limited shares in the balance sheet of the banking sector, they can lead to a significant concentration for the non-bank financial sectors. Compared to the previous year, at end-2013, the share of balance sheet exposures to the Romanian banking sector increased for private pension funds and decreased for investment funds, insurance companies and non-bank financial institutions (Chart 3.5.). The values recorded at end-2013 by non-bank financial sectors ranged from 7.2 percent to 14.3 percent.

Chart 3.5. The share of exposures to credit institutions in the balance sheet



3.2. Banking sector

3.2.1. Recent developments in the European framework in which credit institutions in Romania operate

The European financial system is faced with a series of cross-sectoral risks. In addition to the vulnerabilities associated with weak economic growth, the stability of the European financial system is faced with new challenges generated particularly by the persistence of low-interest rate environment and uncertainties from emerging economies. The short-term risks stemming from the sovereign debt crisis improved. Nevertheless, the prospects for economic recovery are further fragile owing to the weaknesses identified in the balance sheets of both public and private entities. The bank asset quality is further surrounded by uncertainty, particularly in the case of exposures to the real-estate sector. Despite the significant progress in the improvement of the regulatory framework, the main risks mentioned above continue to raise uncertainties on the financial markets about the stability of the European financial system.

The economic recovery at EU level is slow and uneven. Many EU countries deal with the high indebtedness of non-financial corporations, sluggish lending to the private sector and high unemployment rates, whereas the risks stemming from low inflation are on a rise. However, there are signs leading to confidence restoration due mainly to the strengthening of domestic demand supported by low interest rates, to fiscal consolidation and the enforcement of structural reforms at national level. Despite the weak economic recovery, capital markets recorded all-time highs due to the loose monetary policy stances adopted by most central banks, which urged market participants to look for higher yields by investing in higher-risk assets. The profitability of the European banking system remained at low levels, the improvement expected in 2014 being little likely owing to the joint action of several factors, such as: (i) the flat yield curve and the low interest rates; (ii) the measures to clean up the balance sheets implemented ahead of the comprehensive assessment exercise, prior to the ECB taking on supervisory tasks for credit institutions deemed as significant in the countries participating

in the Single Supervisory Mechanism; (iii) the deterioration of asset quality which is still ongoing in the case of certain banks.

The persistence of low interest rates corroborated with the reallocation of exposures to emerging economies led to the shift in investors' strategy to ensure higher yields by: (i) investing in less liquid assets; (ii) extending the duration of the portfolio, or (iii) assuming the risk of investing in off-balance sheet financial vehicles. This generalised behaviour leads to very low volatility in asset prices, fostering the speculative behaviour. Thus, the risk of a trend reversal on financial markets is on a rise and may have negative effects on financial stability. In Romania, the risks associated with such developments are limited, due to the small value of financial assets held by non-residents and to favourable investor sentiment, reflected by the lower financing costs as a result of the decline in default premiums.

The links between the European financial groups and the emerging markets represent a significant risk contagion channel to the EU. The profit of subsidiaries in emerging countries supported the consolidated profit, yet the risk of a trend reversal is high. The concerns over profitability as well as the new regulations on the leverage ratio at group level led to the gradual withdrawal of financing to subsidiaries in emerging countries, which is a relevant matter for Romania as well. The modest growth prospects induce the risk of faster withdrawal of financing in emerging countries.

The EU regulatory framework was subject to major reforms. The main features of the operational framework of the Banking Union were agreed through the approval of the Single Supervisory Mechanism and the Single Resolution Fund and fast progress is made in their implementation. While the comprehensive assessment exercises unfolding in the European banking system are contributing to diminishing concerns over asset quality, several challenges persist, thus making the continued efforts aimed at cleaning up the balance sheets and debt rescheduling to rank further among the medium-term priorities.

3.2.2. Structural developments

In 2013 and 2014 H1, the structure of the Romanian banking system posted no significant changes in terms of the shareholding of credit institutions. As regards the market share, the group of banks with domestic capital saw their share growing considerably after the reclassification of some banks based on the country of origin of the main shareholder; at the end of 2014 H1, the banks with Austrian, Romanian and French capital came in first in terms of market share. In 2013, financial intermediation¹ stayed on the slight downtrend seen also in 2012, amid the further weak lending activity. The concentration of assets in the Romanian banking system remained moderate as compared to other countries in the region.

The structure of the Romanian banking system remained relatively unchanged in 2013 and 2014 H1. The number of credit institutions was the same, the only structural change occurring when the RBS Bank turned from a subsidiary into a foreign bank branch. There are 40 credit institutions operating in Romania, out of which 24 have majority foreign private capital, 4 have majority domestic private capital, 2 have fully or majority state-owned capital and 9 are foreign bank branches, to which adds a cooperative credit institution (Table 3.1.). In 2013, 18 EU credit institutions notified the NBR about their intention to directly conduct financial services in Romania based on their European passport.

¹ Financial intermediation was calculated based on the monetary balance sheet data as a ratio of gross assets, gross loans to the private sector and corporate and household deposits, respectively, to GDP.

Table 3.1. Structural indicators of the Romanian banking system

	<i>end of period</i>							
	2007	2008	2009	2010	2011	2012	2013	2014 Jul.
Number of credit institutions	42	43	42	42	41	40	40	40
Number of credit institutions with majority private capital ²	40	41	40	40	39	38	38	38
Number of banks with majority foreign capital, <i>of which:</i>	36	37	35	35	34	34	34	33
– foreign bank branches	10	10	10	9	8	8	9	9
Assets of banks with majority private capital/Total assets (%)	94.7	94.6	92.5	92.4	91.6	91.6	91.5	91.7
Assets of banks with foreign capital/Total assets (%)	88	88.2	85.3	85.0	83	89.8	90	81
Assets of top five banks/Total assets (%)	56.3	54.3	52.4	52.7	54.6	54.7	54.4	53.9
Herfindahl-Hirschman index (points)	1,046	926	857	871	878	852	821	806

Source: NBR

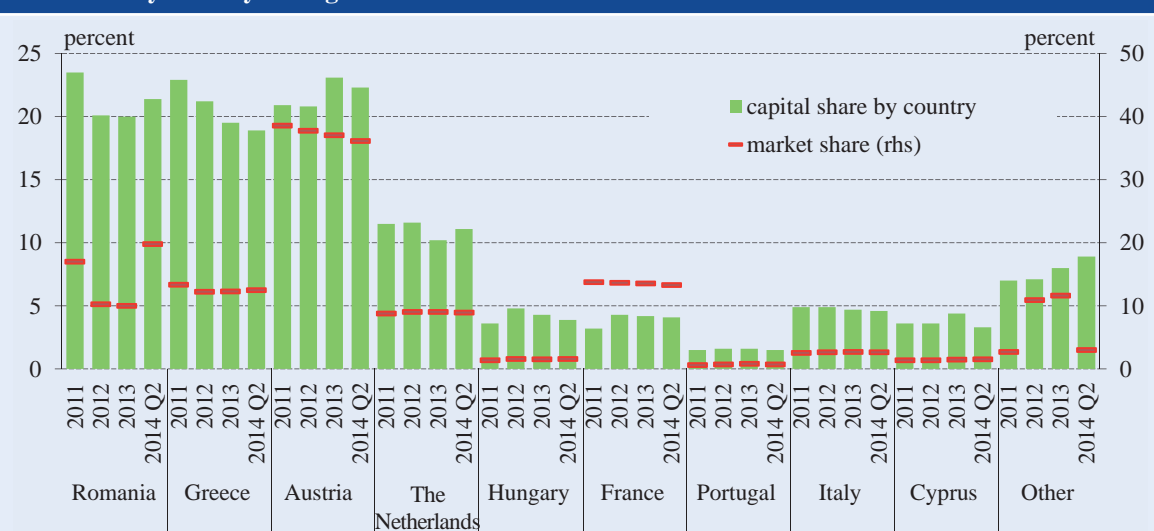
The changes in the ownership of credit institutions in Romania led to a contraction in the market share of banks with majority foreign capital in total banking system assets. The lower market share is almost entirely attributable to the reclassification of some banks with majority foreign capital under the category of banks with majority domestic capital³. Following these changes, the market share of banks with majority domestic capital saw a twofold increase (19.8 percent in June 2014 against 9.4 percent in June 2013), exceeding the share of banks with majority French and Greek capital (13.3 percent and 12.5 percent respectively in June 2014). Banks with majority Austrian capital further held the largest market share in the Romanian banking system, albeit on a slight decline (36.1 percent in June 2014 versus 37.8 percent in June 2013).

During June 2013 – June 2014, the share capital of the Romanian banking sector stood nearly 5 percent higher due to the capital increases made by the private sector. The Austrian capital came in first (23 percent) in the domestic banking system, ahead of the Romanian capital (20 percent) and the Greek capital (19.5 percent), the latter remaining on the downtrend it had embarked upon in 2010 (Chart 3.6.). Compared to 2012, the shares of Austrian and Cypriot capital posted increases, whereas the share of domestic capital remained relatively unchanged.

² Including the Central Cooperatist Bank Creditcoop.

³ As of December 2013, ATE Bank shifted from the group of banks with majority Greek capital to that of banks with majority domestic capital, changing its name to Banca Română pentru Credit și Investiții, while in April 2014, Banca Transilvania reverted to the group of banks with majority domestic capital following the transactions concluded on the Bucharest Stock Exchange, whereby significant blocks of the bank's shares were purchased by resident institutional investors.

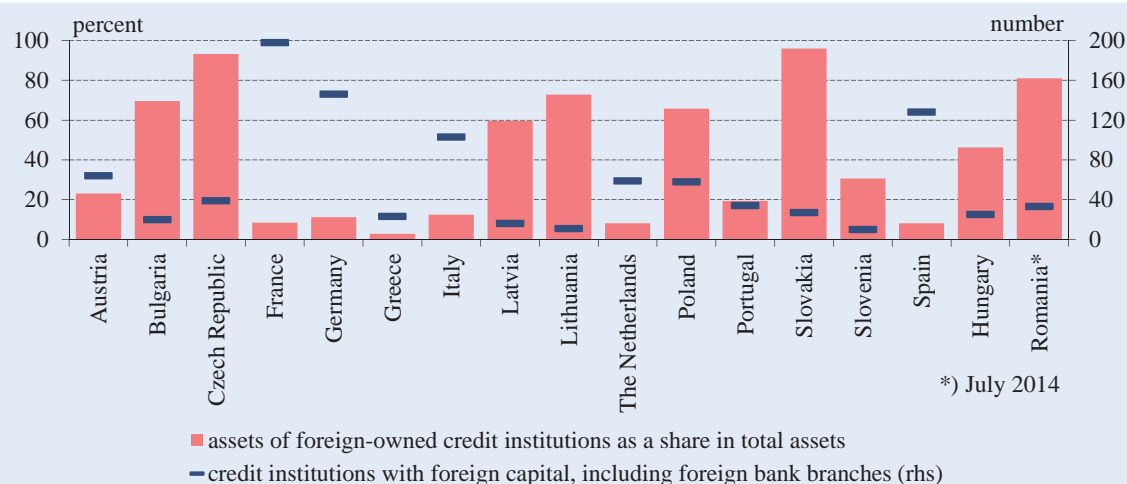
Chart 3.6. Credit institutions' share capital as a percentage of total capital and their market share by country of origin



Source: NBR

The Romanian banking system has further had a high degree of connectivity to the European banking system (Chart 3.7.), with foreign capital holding a significant share (81 percent of the banking system assets in July 2014), similarly to other Central and Eastern European countries.

Chart 3.7. Market share and number of credit institutions with foreign capital (international comparison)

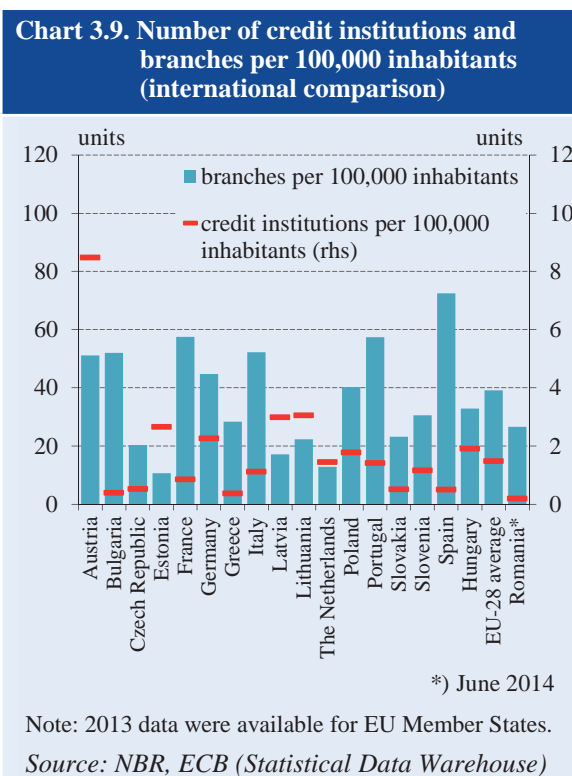
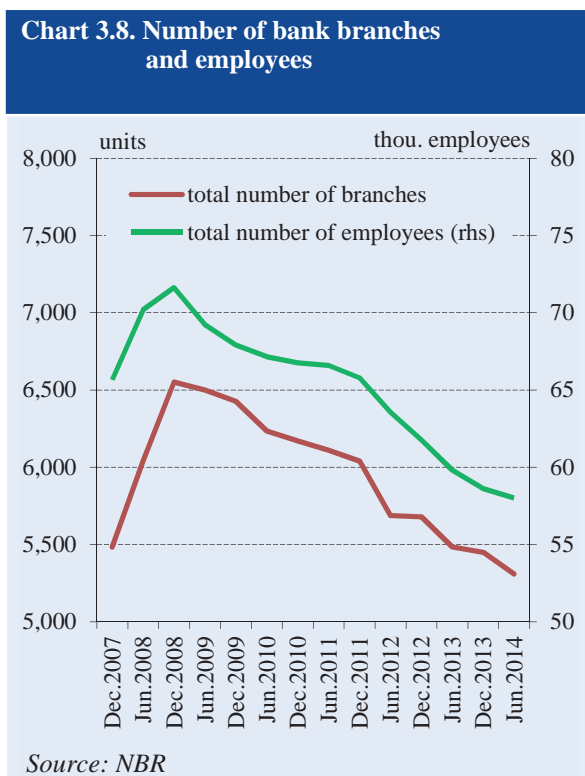


*) July 2014

Note: 2013 data were available for EU Member States.

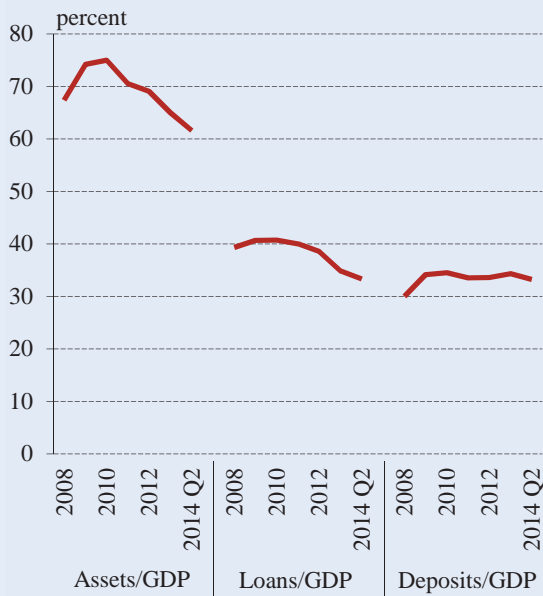
Source: NBR, ECB (Statistical Data Warehouse)

Credit institutions continued the restructuring process by lowering the number of bank units and staff in an attempt to optimise operating costs. The slow pace of lending and the increasing focus on digital financial services influenced the decisions on the development of the territorial networks of bank units. Thus, the number of bank branches dropped by 229 in 2013 and by another 142 in 2014 H1. In addition, the number of payrolls in the banking system fell by 3,157 in 2013 and by 603 in 2014 H1 (Chart 3.8.). With regard to the number of branches and credit institutions per 100,000 inhabitants, the Romanian banking system further stands below the EU average (Chart 3.9.).



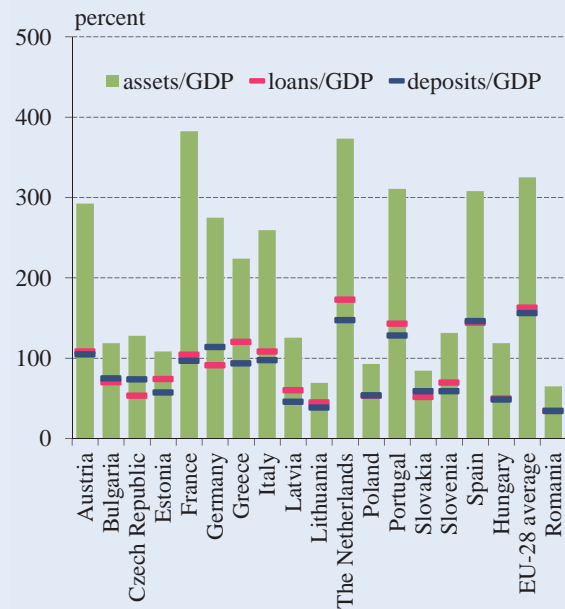
The weak lending activity continued to have a negative bearing on financial intermediation in nominal terms, calculated as the ratio of loans to the private sector to GDP, which stood at 33.3 percent at the end of 2014 H1, down from 34.8 percent in December 2013. The share of gross bank assets in GDP stayed on the downtrend it had embarked on in 2011, to reach 61.6 percent in June 2014, given that gross assets declined slightly, failing to keep up the pace with the fast increase in nominal GDP (Chart 3.10.). As regards the share of corporate and household deposits in GDP (33.2 percent in June 2014), this measure of financial intermediation remained at a level similar to that recorded in the previous years. In comparison with other Member States, in 2013, financial intermediation in Romania was still far below the EU-28 average (Chart 3.11.).

Chart 3.10. Financial intermediation in Romania



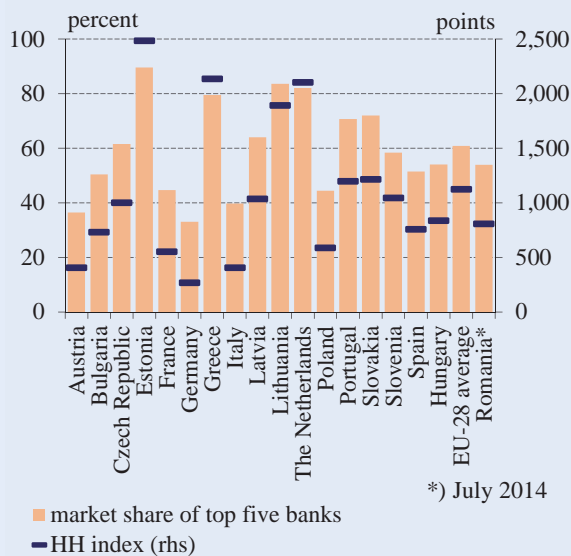
Source: NBR – monetary statistics, NIS

Chart 3.11. Financial intermediation, December 2013 (international comparison)



Source: NBR, ECB (Statistical Data Warehouse)

Chart 3.12. Asset concentration (international comparison)



Note: 2013 data were available for EU Member States.
Source: NBR, ECB (Statistical Data Warehouse)

The concentration of the Romanian banking system is moderate, as reflected by the share of the top five banks in total bank assets (53.9 percent in July 2014) and the Herfindahl-Hirschman index for assets (806 points in July 2014). The Herfindahl-Hirschman index calculated for banks' market share in terms of loans and deposits recorded similar levels (819 points and 802 points respectively). The evolution of the Herfindahl-Hirschman index over time shows the continued decline in the concentration of the banking system in line with the system developments and the enhanced competition among credit institutions. In comparison with other Member States, the concentration of the Romanian banking system as reflected by the share of bank assets stood below the EU average (Chart 3.12.).

3.2.3. Aggregate balance sheet of credit institutions

Since the release of the previous Financial Stability Report, the banks' aggregate balance sheet remained under the pressure of sweeping changes affecting the countries of origin of large banking groups which hold a significant share of the domestic market. In this context, the banking sector experienced four major developments: (i) the persistent reluctance to the resumption of lending; (ii) the substantial increase in domestic saving; (iii) the higher importance of investments in foreign assets and (iv) the ongoing cross-border deleveraging with positive effects on the financing costs. The potential sources of vulnerability identified in previous reports persisted, namely (i) excessive maturity mismatches, with long-term assets being further financed from short-term funds and the average maturity of financing sources having declined as a result of the lower volume of external financing, and (ii) the large stock of foreign currency-denominated loans, despite the significant contraction reported by this component. In addition, the consolidation of the downward trend in lending rates amid weak demand, as well as the uncertainty surrounding the quality of assets held by significant banks in Romania, given the decision to initiate the close cooperation with the ECB within the Single Supervisory Mechanism (SSM), are factors that might put pressure on banks' balance sheets.

3.2.3.1. Dynamics of bank assets

The aggregate balance sheet of the banking sector⁴ remained relatively unchanged throughout the period under review (0.9 percent in December 2013 and -0.3 percent in July 2014, annual nominal changes), amid the weak lending activity and ongoing cross-border deleveraging. This development was under the influence of at least three factors: (i) the prevalence on the banking market in Romania of credit institutions that are subsidiaries and branches of some euro area banking groups undergoing complex changes in terms of strategies and organisation entailed by the implementation of the new European regulatory framework and the completion of the process to establish the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (MUR) respectively; (ii) the negative output gap, amid the modest growth rate of households' real disposable income and the weak domestic demand for investment financing (gross fixed capital formation is expected to support the resumption of lending in 2015 amid the further drop in lending costs; (iii) the build-up of a large volume of non-performing loans (although the risks associated with their high level are mitigated by the substantial coverage with provisions, a result of a prudent approach of credit institutions, fostered by the proactive prudential actions of the central bank).

These factors had visible effects on a small number of credit institutions with foreign capital, yet holding a significant share of the domestic bank assets; in terms of the impact on the banking sector overall, the adjustment measures applied by those banks on their own balance sheets more than offset the increases reported by several banks that adopted an operational strategy focused on lending.

Looking at the breakdown by asset, the banking sector saw four major developments since the previous report until the end of July 2014, namely:

- (i) the continued nominal decrease in the stock of loans to the private sector which started in March 2013 (-3.4 percent in July 2014, annual change) in the context of the faster rate of decline of foreign currency-denominated loans for both main categories of debtors; the contraction in foreign currency lending is in line with the developments in most EU Member States;

⁴ The data source for the entire section is the monetary balance sheet of credit institutions.

- (ii) the slowdown in the rate of decline of domestic sovereign debt exposure⁵ in 2013 H2 and the reversal of this downward trend as of December 2013 (2.0 percent in December 2013 and 8.8 percent in July 2013, annual nominal changes), on the back of a slight increase in the share of residents' holdings of government securities and the higher public debt. The share of claims on the government sector in the aggregate balance sheet (Table 3.2.) hovered around 20 percent in the past two and a half years (20.2 percent in July 2014). Despite the high share of this type of exposure, credit institutions in Romania are not subject to a significant credit risk, as a result of the moderate public debt-to-GDP ratio and the low average duration of domestic debt. Moreover, due to the low level of security holdings, credit institutions in Romania are not exposed to the sovereign risk associated with the securities issued by certain euro area countries;
- (iii) the decrease in credit institutions' holdings with the central bank in terms of volume⁶ and as a share in total bank assets (to 9.6 percent in July 2014, from almost 12 percent in December 2012 and 13 percent in December 2013), following the contraction in the volume of non-residents' deposits with the banks and the NBR lowering the minimum reserve requirement ratios on both components⁷ as of January 2014. The liquidity released via the monetary policy measures adopted in the current macroeconomic context contributed to the increase in available sources for lending to the real economy and to the decline in the reliance on external financing;
- (iv) the higher importance of foreign assets in the first seven months of 2014, the share of this balance sheet item in bank assets reaching an all-time high in May 2014 (5.1 percent) after a relative stabilisation at around 3 percent in the past six years.

Table 3.2. Asset structure of credit institutions operating in Romania

	<i>percent of total assets</i>							
	2008	2009	2010	2011	2012	2013	2013	2014
	Dec.	Dec.	Dec.	Dec.	Dec.	Jul.	Dec.	Jul.
Domestic assets, <i>of which:</i>	98.0	96.6	96.8	97.7	97.2	97.0	97.0	95.3
Claims on the NBR and credit institutions, <i>of which:</i>	23.8	18.6	16.5	15.3	13.4	13.1	14.9	11.0
– claims on the NBR	21.8	15.8	14.2	13.7	11.9	11.7	12.9	9.6
Claims on the domestic non-bank sector, <i>of which:</i>	63.4	67.6	70.1	74.5	75.2	74.9	73.2	74.9
– claims on the government sector	5.0	12.7	15.7	17.7	19.5	18.5	19.7	20.2
– claims on companies	29.2	27.4	27.9	30.3	30.0	30.1	28.2	28.9
– claims on households	29.2	27.5	26.5	26.5	25.8	26.3	25.3	25.8
Other assets	10.8	10.3	10.3	7.9	8.6	8.9	9.0	9.4
Foreign assets	2.0	3.4	3.2	2.3	2.8	3.0	3.0	4.7

Note: Due to rounding, totals may not correspond to the sum of components.

Source: NBR – Aggregate monetary balance sheet of credit institutions

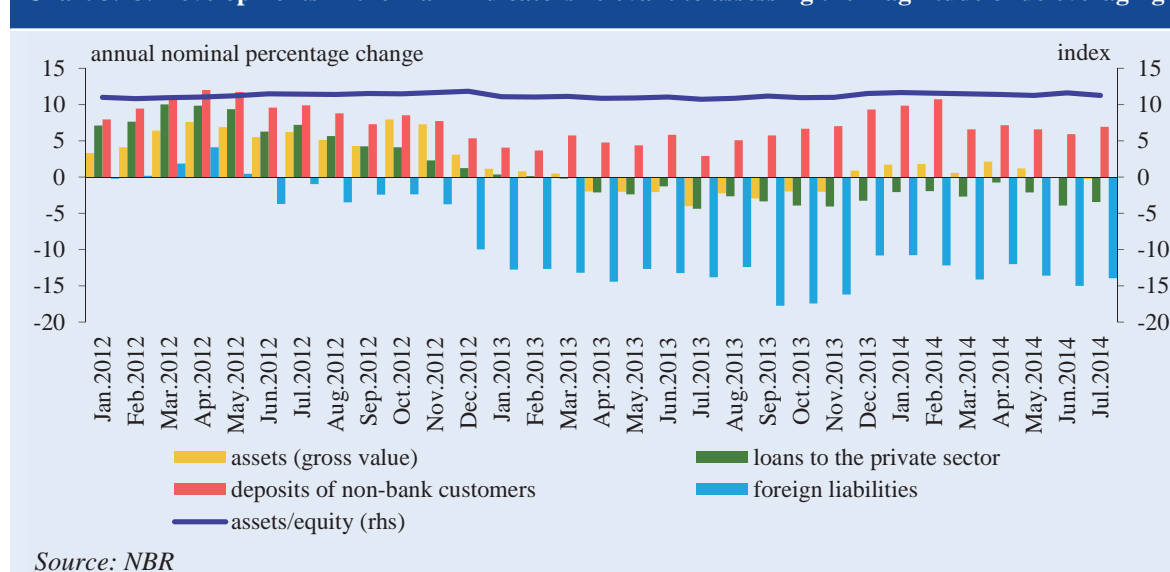
⁵ The annual dynamics of claims on the government sector, in nominal terms, entered negative territory as of February 2013 for the first time since the global financial crisis fallout was manifest in Romania.

⁶ At end-July 2014, claims on the central bank amounted to lei 37.7 billion, which is half of the figure recorded in early 2009.

⁷ From 15 percent in July 2009 to 12 percent for liabilities in lei and from 20 percent in April 2011 to 18 percent for foreign currency-denominated liabilities.

The cross-border deleveraging at EU level continued to affect the banking sector in Romania, yet it further unfolded in an orderly manner, as shown by the performance of the main indicators relevant for the assessment of this phenomenon (Chart 3.13.). The risks associated with the decline in external financing are an important concern in the context of: (i) the partial risk transfer from shareholders to other creditors; (ii) the importance of financing sources other than those ensured by domestic saving, which proved insufficient for supporting medium- and long-term lending; (iii) the enhanced maturity mismatch of assets and liabilities, caused by the shortening of the average maturity of financing sources, which could raise liquidity issues; (iv) the persistence of tensions generated by capital reallocation between various emerging economies, as a result of the search for higher yields in an environment marked by low interest rates.

Chart 3.13. Developments in the main indicators relevant to assessing the magnitude of deleveraging



3.2.3.2. Developments in own, raised and borrowed funds

The volume of domestic deposits rose substantially (6.9 percent in July 2014, annual nominal change), despite the decline in the average interest rate. Both leu- and foreign currency-denominated deposits had a positive contribution, which was stronger in the case of the leu-denominated component (9.0 percent in July 2014, annual nominal change, while the foreign currency component grew by 3.3 percent when expressed in lei and by 3.0 percent when expressed in euro, annual changes). This development was visible for deposits made by both households and non-financial corporations, with the latter recording higher positive dynamics (15.4 percent versus 6.3 percent in the case of households for leu-denominated deposits and 3.4 percent versus 2.5 percent for foreign currency-denominated deposits expressed in lei). The main determinants of this development were: (i) the slight pick-up in the net wage earnings⁸; (ii) the higher amounts earmarked for agriculture allocated mainly from EU funds; (iii) the rise in the amounts from the government budget representing VAT refunds in the case of companies⁹ and (iv) the statistical effects of the lower inflation rate and the change in the EUR/RON exchange rate.

⁸ According to the NIS press releases on average net wage earnings.

⁹ According to the press releases of the National Agency for Fiscal Administration and the Ministry of European Funds.

The share of local deposits moved ahead, reaching nearly 55 percent of total bank liabilities at end-July 2014 (Table 3.3.). Looking at the breakdown by maturity, the significant shares of deposits with maturities of up to one year (62.7 percent) and overnight deposits (30.6 percent) were further a potential vulnerability. However, this vulnerability was largely mitigated by the high granularity stemming from the fact that two thirds of total domestic deposits were taken from households.

The favourable developments of deposits raised from residents corroborated with the contraction in loans to the private sector contributed to the significant improvement of the loan-to-deposit ratio, which stood below par at end-July 2014 (99.8 percent) for the first time since the outbreak of the financial crisis. In the case of foreign currency-denominated component, the loan-to-deposit ratio remained high, yet it followed a downtrend (189.5 percent in July 2013; 180.8 percent in December 2013; 163.7 percent in July 2014), as the rate of decline of foreign currency loans reached an all-time two-digit low (-10.8 percent in July 2014, annual change) for the second month in a row, while the dynamics of domestic deposits in foreign currency remained positive (3.3 percent). The loan-to-deposit ratio for the leu-denominated component stood at 65.4 percent in July 2014 and was further supported by the net creditor position that households have had relative to banks ever since 2010.

Table 3.3. Liability structure of credit institutions operating in Romania

	<i>percent of total liabilities</i>							
	2008 Dec.	2009 Dec.	2010 Dec.	2011 Dec.	2012 Dec.	2013 Jul.	2013 Dec.	2014 Jul.
Domestic liabilities, <i>of which:</i>	69.3	73.6	73.2	73.2	76.8	78.1	79.5	81.1
– interbank deposits	2.1	5.4	3.4	2.5	4.6	1.6	2.3	1.3
– government sector deposits	3.1	2.1	1.7	1.7	1.3	1.4	1.3	1.4
– corporate deposits	20.2	19.3	19.0	18.0	18.5	19.1	21.0	21.2
– household deposits	24.4	26.7	27.0	28.1	30.2	32.0	31.7	33.6
– capital and reserves	10.6	12.0	14.2	15.1	18.0	19.8	19.4	19.2
– other liabilities	8.9	8.1	7.9	7.8	4.2	4.3	3.8	4.4
Foreign liabilities	30.7	26.4	26.9	26.8	23.2	21.9	20.5	18.9

Note: Due to rounding, totals may not correspond to the sum of components.

Source: NBR – Aggregate monetary balance sheet of credit institutions

External financing was further an aggregate balance sheet adjustment factor, the annual dynamics of foreign liabilities staying in negative territory (-10.0 percent in December 2012, -10.8 percent in December 2013, -14.0 percent in July 2014). The further decline in the credit lines extended by parent banks to their subsidiaries in Romania led to foreign liabilities ranking lower in the financing structure of the banking sector, as starting with 2014 they came in third for the first time, after capital and reserves. Specifically, the share of foreign liabilities in the balance sheet narrowed from 23.2 percent in December 2012 to 20.5 percent in December 2013 and to 18.9 percent in July 2014. The reduction of foreign flows had positive effects on the financing cost.

Given the significant volume of foreign currency-denominated loans and the need to ensure a reasonable balance in the maturity structure of credit institutions' balance sheets, the support from

parent banks will remain important. A possible sustainable increase in the demand for loans amid favourable macroeconomic developments would lead to only a partial coverage of the foreign financing deficit through local deposits, taking into account the insufficient size of other medium- and long-term financing sources (i.e. the issuance of unsecured bonds).

The total volume of capital and reserves remained robust, ensuring over 19 percent of asset financing (19.2 percent in July 2014). Most banks in Romania – similarly to the trend manifest at European level – chose to respond to the current needs of increasing capital holdings by optimising risk-weighted assets. This entailed changes in the portfolio structure or a reduction in their own balance sheets, given that their capacity to raise capital from private investors, including from parent banks, remained significantly lower than in the pre-crisis period.

3.2.4. Capital adequacy

The own funds of credit institutions further ensured comfortable capital adequacy indicators reported by individual banks and in the Romanian banking system as a whole. The quality of own funds remained high, as they mainly consist of items with large loss-absorption capacity. The NBR continued to use the regulatory instruments, taking account of the flexibility provided to the national authorities by the CRD IV/CRR framework during the transitory period up to the full implementation, in order to enhance the capacity of credit institutions to withstand endogenous and exogenous shocks via the further application of prudential filters. In 2014 H1, all credit institutions complied with the minimum own funds requirements set forth by the CRD IV/CRR regulatory package.

3.2.4.1. Developments in own funds of banks, Romanian legal entities

The own funds of banks, Romanian legal entities (Chart 3.14.) posted favourable developments since the release of the previous Report (in real terms, the volume of total own funds¹⁰ rose by about 13 percent in June 2014 compared with the same year-ago period) as a result of the following factors: (i) the 20 percent decline in 2014 in the total volume of prudential filters regulated at national level¹¹ (a process which will continue in the period ahead at a pace of 20 percent per year, in the context of the gradual implementation of the CRD IV/CRR regulatory framework¹² until 1 January 2018); (ii) the capital increases made by shareholders in 2013 and in 2014 H1¹³; (iii) the improvement in the financial performance of banks during 2014¹⁴.

The volume of own funds of banks, Romanian legal entities, stood further at a comfortable level, hence ensuring high capital adequacy indicators that exceeded by far the minimum required level

¹⁰ The volume of total own funds reported by banks, Romanian legal entities, totalled lei 31.8 billion in June 2014 (versus lei 28 billion in June 2013).

¹¹ The most significant prudential filter regulated at national level refers to the positive difference between prudential valuation adjustments (prudential provisions) and adjustments for impairment (IFRS provisions) related to loans to non-bank clients for which banks establish minimum capital requirements for credit risk, at individual level, according to the standard approach.

¹² Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms and Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms.

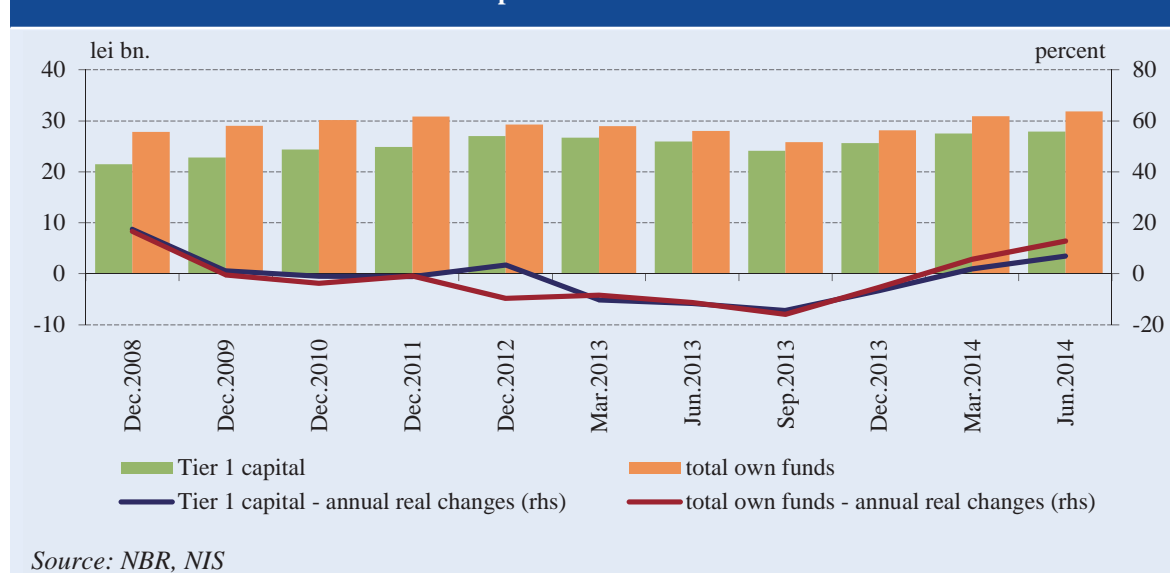
¹³ In 2013, the capital contributions of shareholders amounted to EUR 190 million compared with EUR 111 million a year earlier. In 2014 H1, new capital contributions equalled the equivalent of EUR 67 million.

¹⁴ The net profit of the banking system totalled lei 209.5 million in June 2014 versus lei 48.6 million in December 2013.

set forth by the CRD IV/CRR framework (the aggregate total capital ratio exceeded 16 percent in 2014 Q1 and Q2 as compared with the 8 percent minimum requirement).

In addition, the quality of own funds specific to the Romanian credit institutions was further high, these funds consisting mostly of Tier 1 capital (including primary capital sources, among which paid-up capital instruments, share premiums, financial results, reserves, the fund for general banking risks). The capacity of own funds to absorb the potential banking losses has been higher than the current levels shown by capital adequacy indicators, due to the regulatory instruments used by the NBR after resorting to the options allowed by the CRD IV, which provide certain flexibility to the national authorities during the period of enacting the Directive's provisions into the national legislation. Thus, credit institutions are required to determine own funds and capital adequacy indicators by taking into consideration the national prudential filters¹⁵, a policy which contributes to keeping additional¹⁶ capital reserves in the balance sheet.

Chart 3.14. Total own funds and Tier 1 capital



Tier 1 capital continued to support to a large extent (Table 3.4.) the own funds of credit institutions, having a large absorption capacity of the potential losses arising from the materialisation of specific banking risks (the contribution of paid up capital instruments and the related share premiums, gross value, rose to 99.4 percent of total Tier 1 capital in June 2014 as compared with 95 percent in June 2013).

¹⁵ In line with national regulations in force, own funds are diminished by 80 percent of total prudential filters throughout 2014.

¹⁶ The total capital ratio that would be recorded if prudential filters were not applied is 3 percentage points higher than that currently reported by credit institutions, according to the prudential regulations applicable at national level.

Table 3.4. Own funds and capital adequacy indicators

	<i>percent</i>								
	2008 Dec.	2009 Dec.	2010 Dec.	2011 Dec.	2012 Dec.	2013 Jun.	2013 Dec.	2014 Mar.	2014 Jun.
Percent of total own funds:	100	100	100	100	100	100	100	100	100
Tier 1 capital	77.3	78.6	80.8	80.7	92.3	92.5	91.1	88.9	87.7
Tier 2 capital	22.7	21.4	19.2	19.3	7.7	7.5	8.9	11.1	12.3
Total capital ratio (> 8 percent)	13.8	14.7	15.0	14.9	14.9	14.7	15.5	16.3	17.0
Tier 1 capital ratio (> 6 percent)	-	-	12.1	12.0	13.8	13.6	14.1	14.5	14.9

Source: NBR

The volume of Tier 2 capital was further lower (12.3 percent of total own funds in June 2014), comprising mainly eligible subordinated loans.

3.2.4.2. Analysis of capital adequacy indicators

Starting with 2014, capital requirements fall under the provisions of the CRD IV/CRR regulatory package, which is applicable to all EU Member States and which establishes uniform and standardised rules for covering the risks associated with banking activities. Thus, credit institutions must comply at any time and concomitantly with the following own funds requirements: (a) a Tier 1 capital ratio of 6 percent; (b) a total capital ratio of 8 percent.

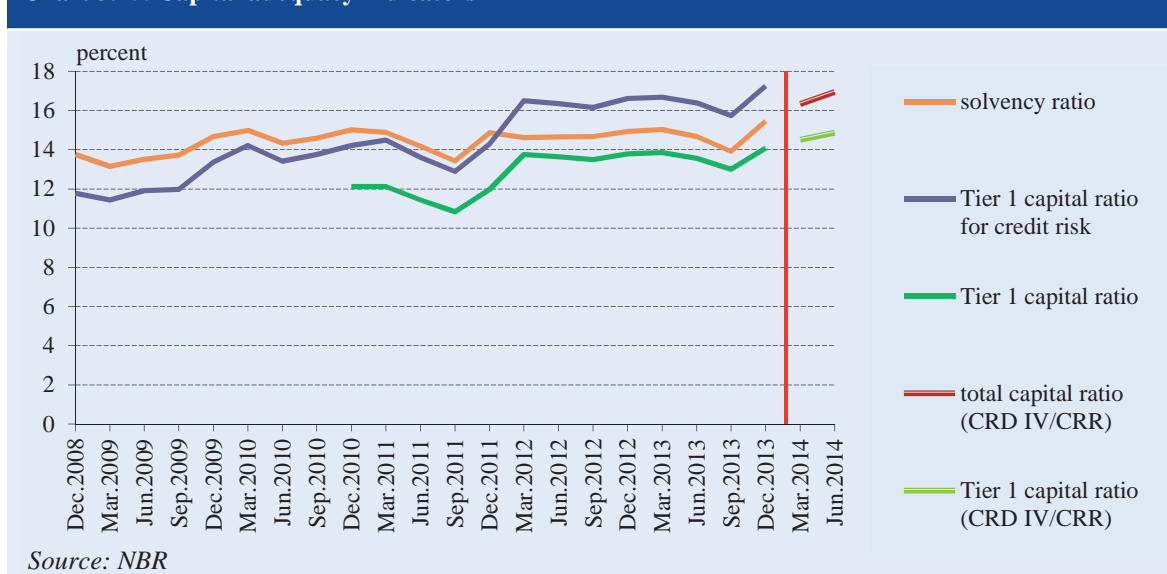
The capital adequacy indicators in the Romanian banking system remained at high levels, which followed an upward course (Chart 3.15.):

- (a) total capital ratio¹⁷ stood at 17 percent in June 2014 (up from 14.7 percent in June 2013 and 15.5 percent in December 2013, due largely to the 20 percent reduction in the volume of the deductible prudential filter, according to the calendar set by national legislation in order to gradually implement the new capital requirements applicable to credit institutions via the European regulatory framework);
- (b) Tier 1 capital ratio¹⁸ recorded a high level, similar to that of total capital ratio, i.e. 14.9 percent in June 2014 compared with 13.6 percent in June 2013 and 14.1 percent at end-2013, reflecting the prevalence of these capital sources.

¹⁷ Total capital ratio represents the own funds of the institution calculated as a percentage of total risk exposure amount. Total risk exposure amount is calculated as the sum of exposure amounts weighted by credit risk and dilution risk associated with all the economic activities of an institution, as well as of the amounts equivalent to risk-weighted assets generated by own funds requirements for position risk, foreign exchange risk, settlement risk, commodity risk, operational risk, counterparty credit risk, for large exposures exceeding the maximum regulated limit and for the risk associated with credit adjustments for OTC derivatives. "Total capital ratio" regulated by the CRD IV/CRR regulatory package is the equivalent of the "solvency ratio" regulated by the Basel II framework, which was applicable to EU Member States (Romania included) by the end of 2013.

¹⁸ Tier 1 capital ratio is calculated as a ratio of Tier 1 capital of the institution to total risk exposure value.

Chart 3.15. Capital adequacy indicators



All capital adequacy indicators for the Romanian banking system therefore comply with the minimum own funds requirements imposed by the CRD IV/CRR regulatory framework. In addition, when recalculating the total capital ratio assuming the full removal of the effect of prudential filters¹⁹, this indicator stands at about 20 percent in March and June 2014, a level significantly higher than that reported by many countries in the region, as well as by the countries of origin of credit institutions having subsidiaries in Romania.

In addition to the above-mentioned minimum own funds requirements, the CRD IV/CRR regulatory package allows for the possibility that credit institutions should hold several capital buffers, such as:

- (i) capital conservation buffer of 2.5 percent of total risk exposure amount, built up during periods of economic growth to ensure a capital base sufficient for absorbing crisis-induced losses, which will be applicable to all banks as of 2019 or will be phased in during 2016-2019 or will be implemented in a shorter transition period in line with the timeframe imposed by the competent authorities at national level;
- (ii) countercyclical capital buffer of 0 to 2.5 percent of total risk exposure amount during periods of aggregate growth in credit and other asset classes with a significant impact on the risk profile of credit institutions, which is judged to be associated with a build-up of systemic risk, and drawn down during stressed periods;
- (iii) buffer for global systemically important institutions (G-SII buffer) of 1 to 3.5 percent of total risk exposure amount, established on a consolidated level by institutions identified based on a single methodology as being global systemically important, which will be phased in during 2016-2018; the size of the buffer depends on the expected impact of the institution's straits on the global financial market;

¹⁹ In line with the calendar set by prudential regulations applicable in Romania, national prudential filters are to be phased out by 1 January 2018.

- (iv) buffer relating to other systemically important institutions (O-SII buffer) of up to 2 percent of total risk exposure amount, which is established on a consolidated, individual or sub-consolidated level by the institutions identified as systemic at national or European level based on a methodology comprising a mandatory set of indicators set up by EBA, as well as an optional set of indicators, chosen by the competent authorities, which capture the characteristics of the national financial system; the requirements for the build-up of this buffer are applicable as of 1 January 2016;
- (v) systemic risk buffer, applicable at individual level or to one subset of institutions or to all institutions starting with 2014 when identifying long-term non-cyclical systemic or macroprudential risks, other than those generated by the size of institutions and excess lending; the minimum systemic risk buffer rate is 1 percent of total risk exposure amount, while the maximum rate may exceed 5 percent, the national authority having the obligation to notify the Commission, the ESRB, EBA and the competent and designated authorities of the Member States concerned and justify the adopted measure.

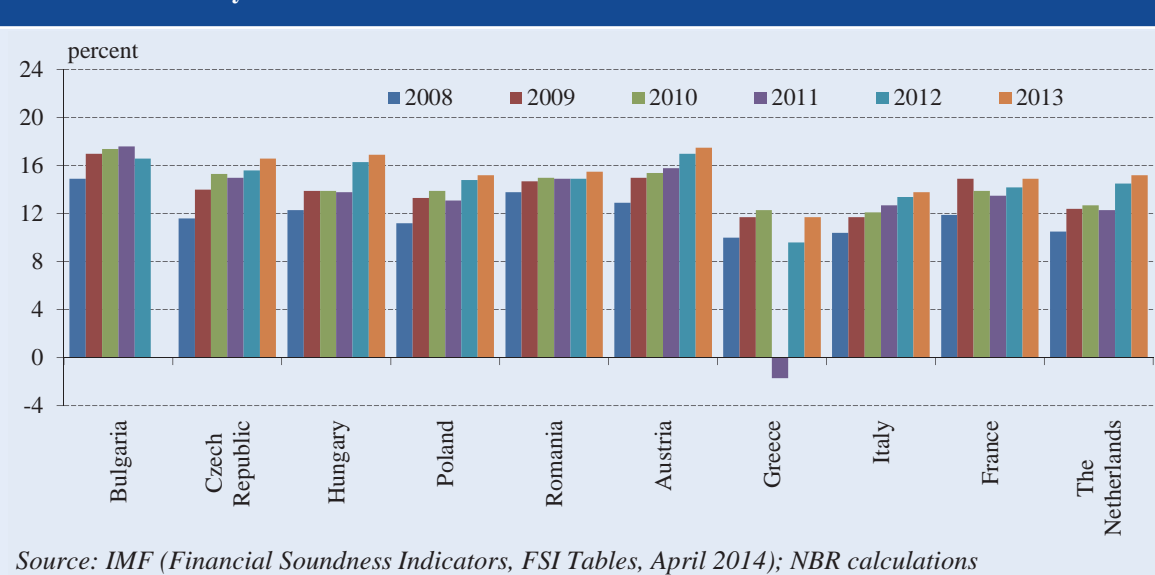
All capital buffers shall consist of Common Equity Tier 1 capital (capital, reserves and retained earnings). Generally, the systemic risk buffer, the G-SII buffer and the O-SII buffer are not cumulative, the highest buffer being applied to a credit institution.

In December 2013, a recommendation issued by the National Committee for Financial Stability (NCFS) called for the National Bank of Romania and the National Supervisory Authority not to impose the accelerated implementation of the capital conservation buffer and of the countercyclical capital buffer on credit institutions and financial investment services companies and to impose a 0 level for the systemic risk buffer as of 1 January 2014. The NCFS recommendation took account of (i) the substantial capital reserves in banks' balance sheets, as a result of the NBR's use of national regulatory instruments in the context of the flexibility allowed by the CRD IV/CRR regulatory package, by keeping in place prudential filters when determining own funds and prudential indicators; (ii) the weak lending activity.

At EU level, the post-crisis period was marked by the rising concerns over improving bank capitalisation (Chart 3.16.²⁰), a trend which became more visible in 2013, in the context of the close implementation of the CRD IV/CRR regulatory framework. Among the countries of origin of the parent banks with subsidiaries in Romania, Austria has the highest level of capitalisation (17 percent during 2012-2013). In contrast, Greek banks recorded a solvency ratio of 11.7 percent at end-2013 Q3, which however sees an improvement as compared with the period when the banking system was hit by the sovereign debt crisis.

²⁰ For Romania, the chart shows the solvency ratio was that reported to the IMF during 2008-2013. As of 2012, banks in Romania have been applying the IFRS standards as an accounting basis and at the same time the use of prudential filters for calculating own funds and prudential indicators was also regulated. As a result, the aggregate solvency ratio for the financial years 2012 and 2013 was determined by taking into account prudential filters, in line with national regulations in force at the reporting date.

Chart 3.16. Solvency ratio in selected EU Member States



Bank distribution by total capital ratio (Chart 3.17.) improved in the period under review: in June 2014, a single bank reported a level of this indicator in the 8 percent-12 percent range, as compared with six banks in June 2013. A significant number of credit institutions recorded total capital ratios in the 12 percent – 16 percent range (13 banks in June 2014), whereas for most institutions (16 banks versus 11 banks in June 2013) the level of this indicator exceeded 16 percent.

Chart 3.17. Bank distribution by total capital ratio

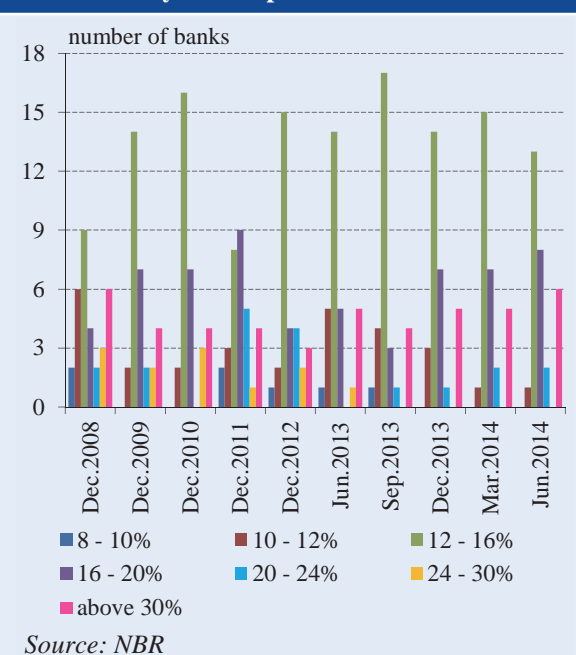
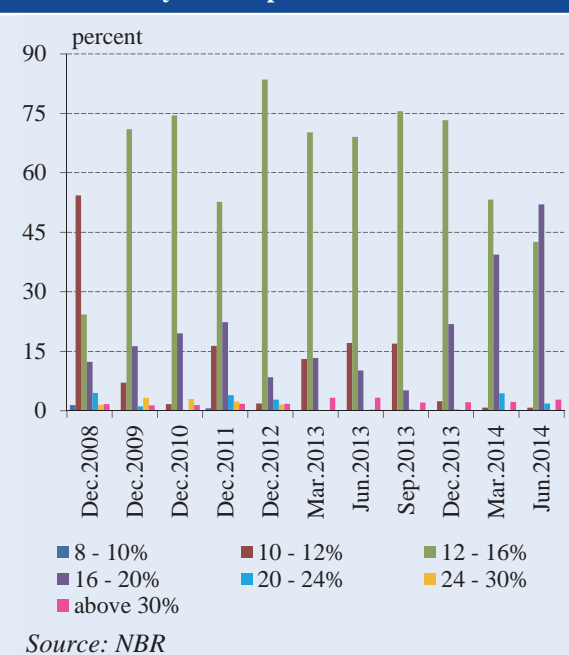


Chart 3.18. Bank asset distribution by total capital ratio



The above-mentioned improving trend is also visible in terms of bank asset distribution by total capital ratio (Chart 3.18.). Thus, in 2014 H1, a share of merely 0.8 percent of bank assets was held by an entity with a total capital ratio in the 8 percent-12 percent range (versus 17 percent of total assets in June 2013). In June 2014, 95 percent of bank assets were held by banks with a total capital ratio between 12 percent and 20 percent.

The new CRD IV/CRR regulatory package supplements the set of capital adequacy indicators calculated based on the total risk exposure amount via the introduction of the leverage ratio²¹. The calculation methodology of the indicator²² relies on the experience of the latest international financial crisis, which was preceded by the excessive build-up of risks compared to the volume of institutions' own funds, the amount of which could not be correctly established using the indicators based on risk-weighted assets. Although capital requirements based on the risk exposure amount are necessary for the appropriate sizing of own funds in relation to unexpected losses, they are not sufficient for ensuring a prudent stance of institutions, as institutions could be tempted to assume excessive and unsustainable risks associated with excessive indebtedness for profit maximization purposes. In this context, the leverage ratio is a new regulatory and supervisory instrument for EU Member States, introduced via the CRD IV/CRR regulatory package in addition to the capital adequacy indicators set forth by Basel II framework. In line with international agreements²³, the indicator is initially introduced as an additional feature the implementation of which is flexibly decided by supervisory authorities and is expected to become a mandatory measure starting with 2018.

The leverage ratio calculated for the Romanian banking system stood at 8 percent at end-2013²⁴ and at 7.9 percent in June 2014, reflecting the high capitalisation of bank assets at the accounting value, which is a common feature of the countries in the region (Chart 3.19.). Among the countries of origin of the parent banks with Romanian subsidiaries, the highest leverage ratios were recorded by Austria and Greece (about 8 percent at end-2013), whereas the level of this indicator in France, Italy and the Netherlands stood at roughly 5 percent.

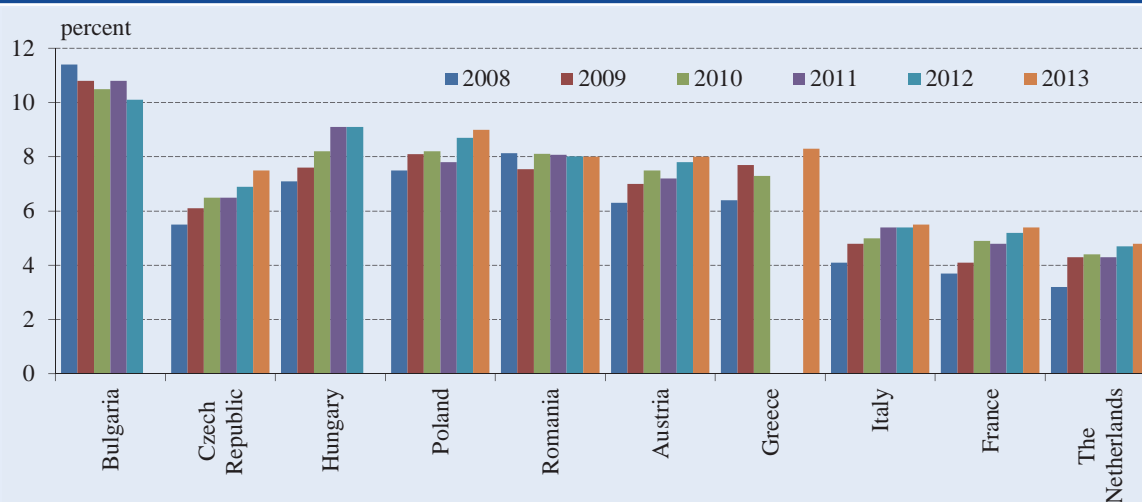
²¹ According to Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms, leverage means the relative size of an institution's assets, off-balance sheet obligations and contingent obligations to pay or to deliver or to provide collateral, including obligations from received funding, made commitments, derivatives or repurchase agreements, but excluding obligations which can only be enforced during the liquidation of an institution, compared to that institution's own funds.

²² The leverage ratio is expressed as a percentage, being calculated as an institution's capital measure (Tier 1 capital) divided by that institution's total exposure measure (the sum of the exposure values of all assets and off-balance sheet items not deducted when determining the capital measure indicator). The exposure value of an asset is its accounting value remaining after specific credit risk adjustments, additional regulated value adjustments and other own funds reductions related to the asset item have been applied. The exposure value of an off-balance sheet item is calculated as a percentage of its nominal value, after the deduction of specific credit risk adjustments: (a) 100 percent if it is a full-risk item; (b) 50 percent if it is a medium-risk item; (c) 20 percent if it is a medium/low-risk item; (d) 0 percent if it is a low-risk item. The institutions shall calculate the indicator as a simple arithmetic mean of the monthly indicators recorded during a quarter.

²³ In December 2010, the Basel Committee on Banking Supervision (BCBS) published guidelines defining the calculation methodology of the leverage ratio. Those rules set forth a parallel run period (1 January 2013 – 1 January 2017), during which the leverage ratio and its components are being reported and tracked, including its behaviour relative to the risk-based capital requirement. Based on the results of the parallel run period, the BCBS intends to make final adjustments to the definition and calibration of the leverage ratio in 2017 H1 in order to set a minimum requirement for the leverage ratio on 1 January 2018 based on appropriate review and calibration. According to the BCBS guidelines, the indicator will be published as of 1 January 2015. Based on the data received and the conclusions drawn from the supervision process during the parallel run period, EBA in cooperation with competent authorities will make an assessment of the appropriate levels of the leverage ratio depending on the different business models of the institutions and will publish a statistical review of the indicator with regard to the identified categories of institutions.

²⁴ For Romania, the Chart 3.19. shows a leverage ratio calculated based on a methodology established by the NBR as a ratio of Tier 1 capital to average bank assets at accounting value. The new leverage ratio will be implemented in the national regulatory framework in line with the calendar set by the CRD IV/CRR package.

Chart 3.19. Leverage ratio in selected EU Member States



Source: IMF (Financial Soundness Indicators, FSI Tables, April 2014); NBR calculations

3.2.5. Loans and credit risk

The lag between the economic and financial cycles was further manifest since the release of the previous Report, on the back of the persistence of factors that have been dampening both loan supply and demand – a picture similar to that recorded at European level. The NBR continued to support the sustainable resumption of lending to the private sector by resorting to monetary policy instruments. Banks adjusted their operational strategies to the new coordinates of the domestic macroeconomic framework, increasing considerably the supply of leu-denominated loans, whereas the stock of foreign currency-denominated loans stayed on a downtrend.

Loan portfolio quality indicators pointed further to a vulnerability of the Romanian banking system, which is however seen to diminish in the period ahead, amid the improvement in economic fundamentals, the ongoing downtrend in loan costs and the swifter progress in the removal from the balance sheet of uncollectible loans that are fully or in an overwhelming proportion covered by adjustments for impairment. The provisions set up by banks in Romania cover the expected losses arising from credit risk; unexpected losses generated by the potential occurrence of adverse macroeconomic developments can be absorbed by credit institutions' substantial capital reserves in excess of the minimum capital requirements.

3.2.5.1. Main credit developments

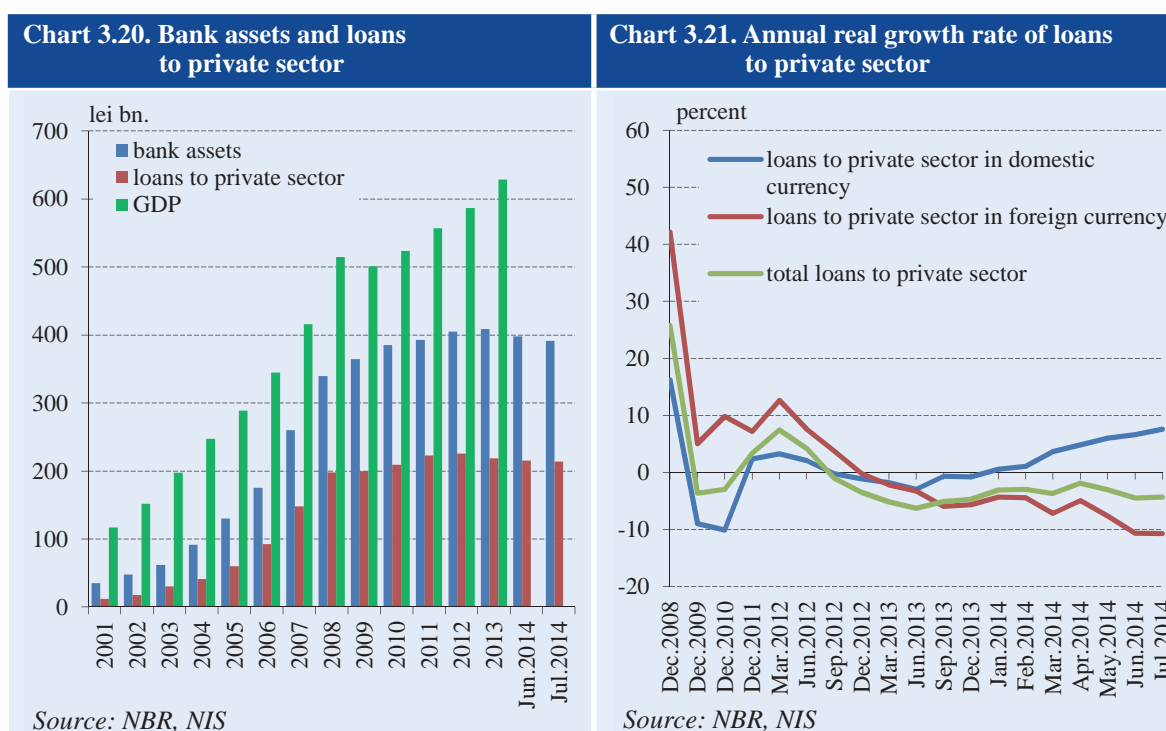
In the first part of 2014, the volume of loans granted by the Romanian banking system to the private sector stayed on the downward trend that started in 2012 Q4²⁵ (Chart 3.20.), despite the improvement in the domestic macroeconomic framework, largely as a result of structural limitations to the credit supply, namely: (i) the lower volume of funds from parent banks, amid the ongoing deleveraging and balance sheet adjustment at European level, in the context of the comprehensive assessment exercise preceding the taking on by the ECB of new supervision tasks related to significant credit institutions, as well as of the entry into force of the new prudential requirements imposed by the CRD IV/CRR

²⁵ At end-July 2014, loans to the private sector amounted to lei 213.8 billion, on a decline from the end of 2013 (lei 218.5 billion), July 2013 (lei 221.4 billion) and the end of 2012 (lei 225.8 billion).

regulatory framework; (ii) the persistence of a significant non-performing loan stock in banks' balance sheets, which called for the allocation of significant operational resources to manage them, along with keeping in place highly restrictive and prudent lending standards; (iii) the prevalence of domestic short-term financing in banks' balance sheets, which could mitigate banks' availability to extend the maturity of corporate loans, in a context of low financing volumes on the capital market. Lending was also contained by the persistence of the negative output gap, resulting from the ongoing balance sheet adjustment in the non-financial sector, a phenomenon that is usually manifest in a post-crisis period and that is common to the single European market²⁶.

The sluggish bank lending dynamics were a characteristic of most EU Member States²⁷, on the back of both cyclical and structural factors. Thus, the main determinants on the supply side were capital constraints and the persistent financial market fragmentation. On the demand side, the factors with an impact on households were the weak economic activity, the real-estate market prospects and the need to lower indebtedness, whereas the factors with an impact on non-financial corporations were mainly the time lag from the business cycle, the credit risk and the ongoing balance sheet adjustment of non-financial corporations.

The negative lending performance had a significant impact on the volume of bank assets²⁸ (Chart 3.20.), which entered a downward course in 2014.



Since the release of the previous Report, the central bank continued to support the sustainable resumption of lending to the real sector by resorting to monetary policy instruments. Thus,

²⁶ European Central Bank, Financial Stability Review, May 2014.

²⁷ European Central Bank, Annual Report 2013.

²⁸ The volume of bank assets (gross value) totalled lei 398 billion in June 2014 and lei 391.3 billion in July 2014 versus lei 408.7 billion in December 2013. The data source is the monetary balance sheet.

a) the monetary policy rate was gradually cut in five stages²⁹, consistently sending banks signals aimed at prompting a downturn in costs of leu-denominated loans (in the latter half of 2013 and January-August 2014, the NBR lowered the monetary policy rate by 125 basis points, namely from 4.5 percent to 3.25 percent, at a pace adapted to the improvement in economic fundamentals, and also in view of the external macroeconomic developments and the very low interest rates in the euro area; b) starting January 2014, the minimum reserve requirements ratio on leu-denominated liabilities of credit institutions was cut to 12 percent from 15 percent, while the minimum reserve ratio on foreign-currency denominated liabilities of credit institutions was lowered to 18 percent from 20 percent and to 16 percent as of July 2014; this measure had positive effects on the increase in the volume of available sources for granting new loans in the economy. As a result of the measures adopted by the central bank and against the background of the negative output gap, in July 2013–July 2014, banks' interest rates on new leu-denominated loans granted to the main categories of debtors fell sharply (i.e. by 3.3 percentage points, from 11.4 percent to 8.2 percent for households and by 2.2 percentage points, from 8.6 percent to 6.4 percent for non-financial corporations).

The decline in loans to the private sector was manifest throughout the period lapsed since the release of the previous Report (Chart 3.21.), yet it slowed down from -8.4 percent in July 2013 to -4.3 percent in July 2014 (annual change, real terms). The two loan components made a different contribution to this development. Specifically, the contraction in foreign currency-denominated loans³⁰ grew sharper (the real negative dynamics reaching -10.8 percent in July 2014 from -7.2 percent in July 2013), whereas leu-denominated loans fell at a slower pace in 2013 H2 (-0.8 percent in December 2013) and resumed growth in 2014³¹, after losing steam for five quarters in a row (the annual growth rate of leu-denominated loans accelerated from 0.5 percent in January 2014 to 7.6 percent in July 2014, real terms), due mainly to the larger volume of medium-term loans.

The contraction in foreign currency-denominated loans was manifest across the whole maturity spectrum (long-term loans in particular) and affected both major debtor categories, being sharper in the case of non-financial corporations. This development was attributable to the change in the business model of credit institutions, in the context of the nationwide implementation³² of the requirements set forth by Recommendation ESRB/2011/1, which imposes on EU Member States the stricter regulation of conditions for lending in foreign currencies applicable to unhedged borrowers³³, both households and non-financial corporations. The Recommendation has the following main objectives: (i) to limit

²⁹ The NBR Board decided to lower the monetary policy rate as follows: to 4.25 percent per annum from 4.5 percent (starting with 1 October 2013); to 4.0 percent per annum from 4.25 percent (starting with 6 November 2013); to 3.75 percent per annum from 4.0 percent (starting with 9 January 2014); to 3.50 percent per annum from 3.75 percent (starting with 5 February 2014); and to 3.25 percent from 3.50 percent (starting with 5 August 2014).

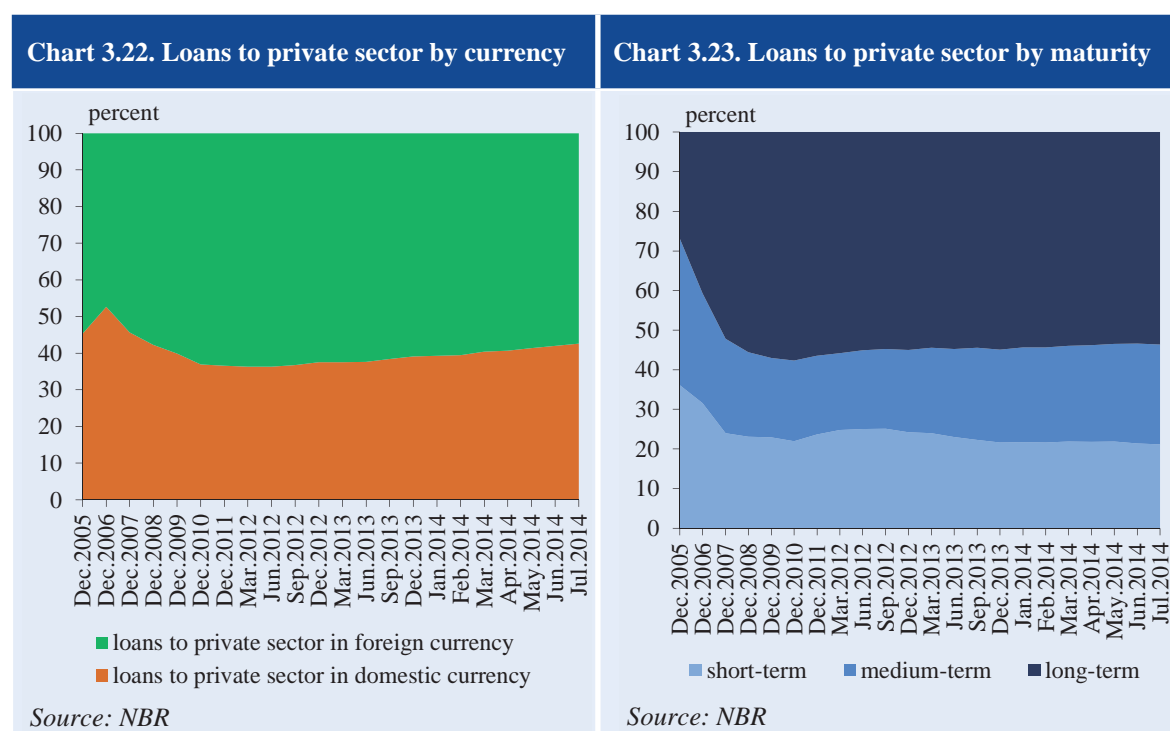
³⁰ The volume of foreign currency-denominated loans contracted to lei 122.8 billion in July 2014 as compared with lei 133.1 billion in December 2013 and lei 137.6 billion in July 2013.

³¹ The volume of leu-denominated loans to the real sector increased to lei 91.1 billion in July 2014 versus lei 85.3 billion in December 2013 and lei 83.9 billion in July 2013.

³² NBR Regulation No. 17/2012 on certain lending conditions, published in *Monitorul Oficial al României*, Part One, No. 855 of 18 December 2012, applicable to foreign currency-denominated loans to unhedged borrowers, i.e. borrowers without a natural or a financial hedge (households and non-financial corporations). The most important provisions of the new regulations are: the mandatory notification of customers about the impact of a potentially severe depreciation of the domestic currency on instalments; the calculation methodology for the maximum overall indebtedness levels based on a standard level of shocks applied to the exchange rate, interest rate and income, taking into account eligible income only, namely income earned on an ongoing basis; a 133 percent minimum level of guarantees for consumer loans; a maximum maturity of five years for consumer loans; the limitation of real-estate loans based on the value of mortgage collateral.

³³ The regulation defines the unhedged borrower, i.e. the borrower without a natural or a financial hedge, as the natural or the non-financial entity lacking loan repayment funds denominated in or indexed to the currency in which the loan is requested/taken.

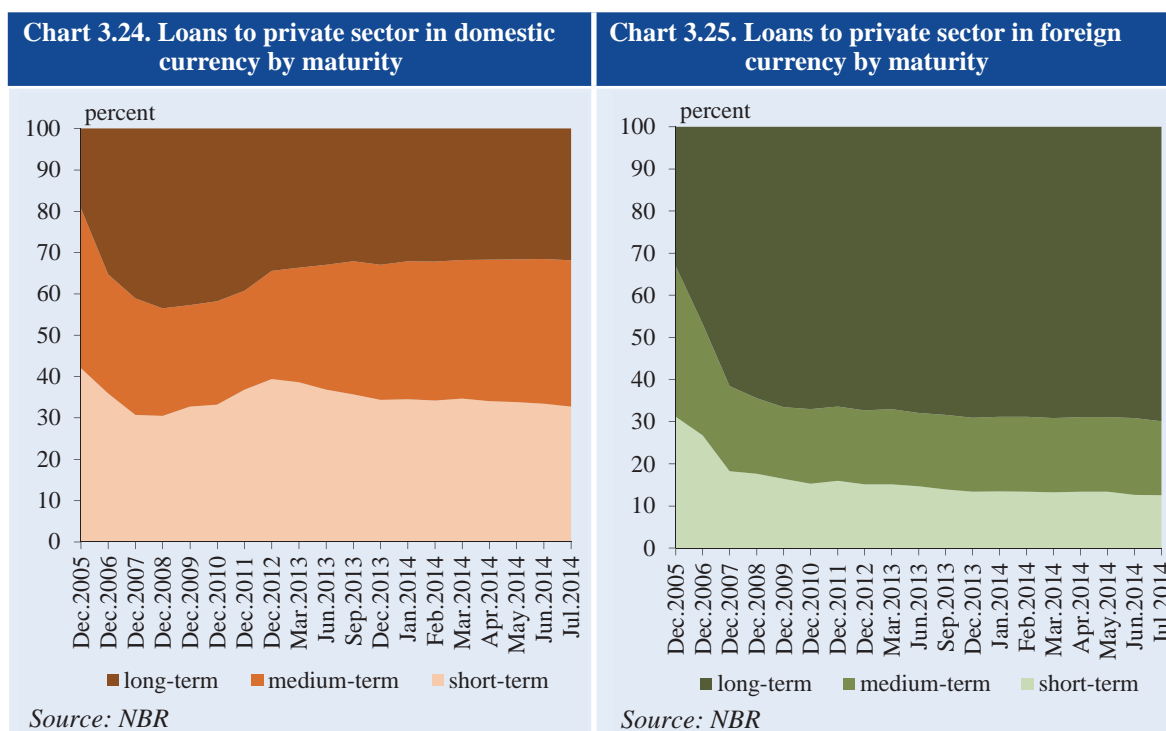
exposures to credit and market risks, thus increasing the resilience of the financial system; (ii) to control the excessive (foreign currency) credit growth and avoid asset price bubbles; (iii) to limit funding and liquidity risks, thus minimising this channel of contagion; (iv) to create incentives for better risk pricing associated with foreign currency lending, and (v) to prevent the circumvention of national measures through regulatory arbitrage. These measures resulted into a significant structural change in loans to the private sector (Chart 3.22.), as the share of foreign currency-denominated loans dropped 4.7 percentage points (from 62.1 percent in July 2013 to 57.4 percent in July 2014). Conversely, the share of leu-denominated loans went up to 42.6 percent in July 2014, a level similar to that recorded in December 2008.



The maturity breakdown of private sector loans shows that medium-term loans stayed on the uptrend they had embarked in the previous period (Chart 3.23.), their share in total loans to the private sector reaching 25.2 percent in July 2014 (up 2.3 percentage points from the same year-ago period), as a result of the increase in the volume of leu-denominated loans to both households and non-financial corporations. In parallel, short-term loans declined further (their share going down 1.2 percentage points to 21.1 percent of total private sector loans in July 2014). Long-term loans further held a prevailing share in banks' balance sheets (53.7 percent of total loans to the private sector at end-July 2014). Thus, given that (i) the maturities of an increasingly high share of the loan stock (78.9 percent in July 2014 versus 77.7 percent in July 2013) were longer than one year, and (ii) the loans from parent banks came under the deleveraging pressure exerted at European level, credit institutions in Romania will more often resort to medium- and long-term funding sources from the local financial markets, including by issuing covered bonds (backed by real-estate claims, additional assets or other liquid assets with low credit risk) in order to prevent potential liquidity shortages.

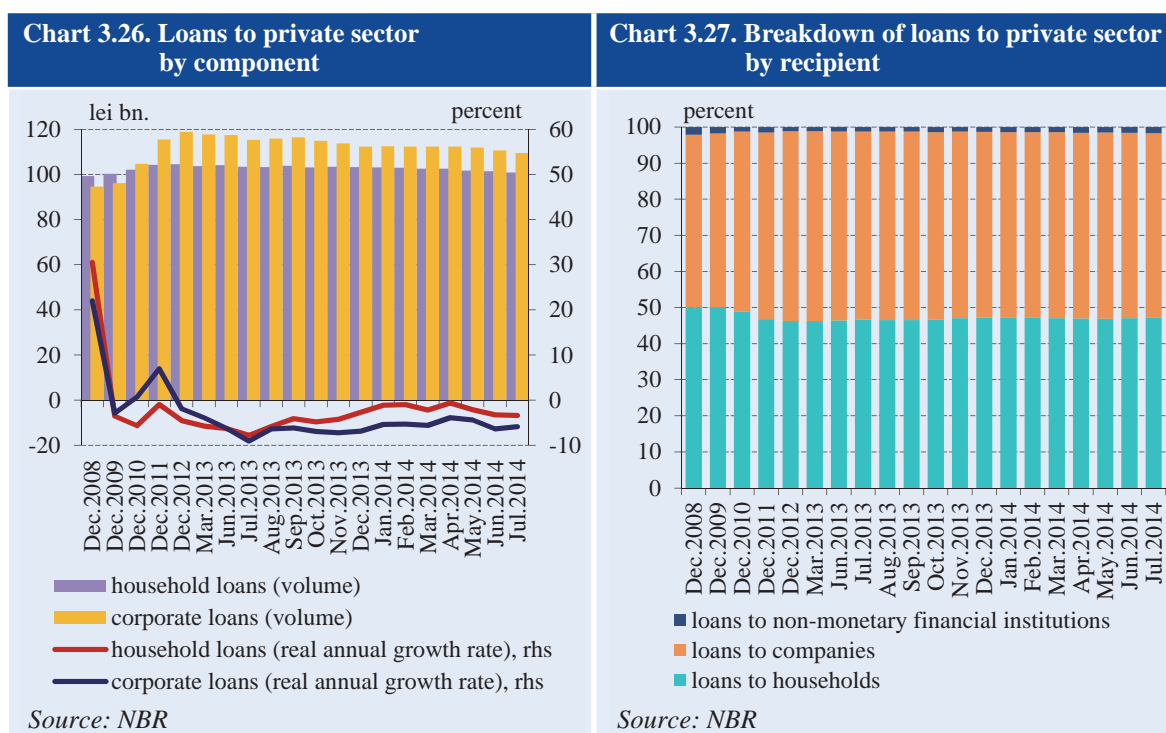
Looking at the maturity breakdown of private sector loans by currency, the position of long-term loans in the foreign currency-denominated loan portfolio (Chart 3.25.) consolidated further, reaching 69.9 percent in July 2014 due to the significant contraction in lending in foreign currency.

The leu-denominated loan portfolios further saw a balancing in terms of maturity (Chart 3.24.), on the back of the decline in the share of short-term loans (down 2.8 percentage points in July 2014 versus the same year-ago period) and the substantial increase in that of medium-term loans (up 4.0 percentage points in July 2014 as against July 2013 to reach 35.4 percent).



During July 2013 – July 2014, the flow of loans to the economy declined further in real terms. This trend was the result of the drop in foreign currency-denominated loans, which could not be offset by the flow of new loans in domestic currency. Although it affected both main categories of debtors³⁴ (Chart 3.26.), the contraction was stronger in the case of the volume of loans to non-financial corporations (the real rate of change of loans to non-financial corporations was -5.9 percent in July 2014, while that of loans to households stood at -3.4 percent). The decline in loans to households was particularly visible on the segment of the stock of long-term foreign currency loans, mainly as a result of legislative amendments consisting in granting domestic currency loans solely under the “First Home” government programme. Against this background, the share of loans to non-financial corporations in total private sector loans (Chart 3.27.) narrowed by about one percentage point to reach 51.2 percent in July 2014.

³⁴ The volume of bank loans to households decreased to lei 100.8 billion in July 2014 (from lei 103.2 billion in December 2013 and lei 103.3 billion in July 2013). Loans to non-financial corporations went down to lei 109.5 billion in July 2014 (from lei 112.3 billion in December 2013 and lei 115.3 billion in July 2013).

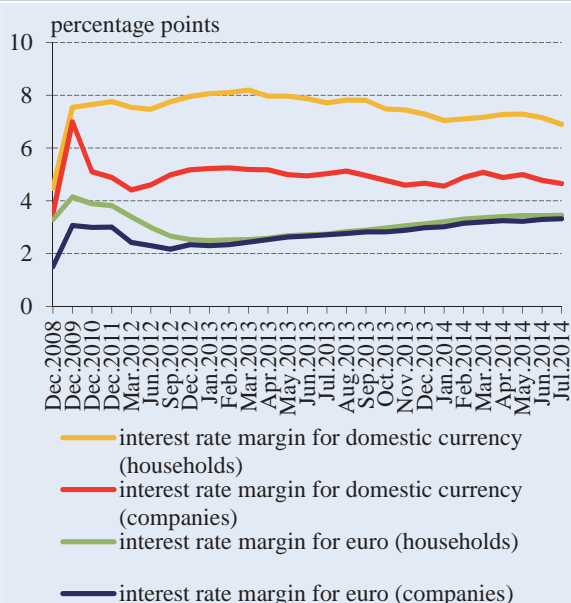


Since the release of the previous Report, the average interest rates on outstanding loans and deposits (Chart 3.28.) saw the following developments:

- (i) the interest rate on leu-denominated household loans fell sharply in the period under review (down 2.3 percentage points, namely from 12.5 percent in July 2013 to 10.1 percent in July 2014), reflecting the improvement in the domestic macroeconomic coordinates, under the influence of the measures adopted by the central bank. The interest rate on leu-denominated loans to non-financial corporations followed a similar trend, reaching 6.7 percent in July 2014, down 2.3 percentage points versus the same year-ago period;
- (ii) the interest rates on foreign currency loans further recorded low levels, which were relatively unchanged during July 2013 – July 2014 for both categories of customers (5.3 percent for households and 4.7 percent for companies). This may be attributed to the low cost of foreign currency-denominated funds given the historical lows of benchmark indices and the prevalence of mortgage-backed loans in the case of household loans;
- (iii) the average interest rate on leu-denominated time deposits stayed on the downtrend seen also in the previous period (dropping by 1.5 percentage points to 3.2 percent in July 2014 in the case of households and by 1.9 percentage points to 2.1 percent in July 2014 in the case of non-financial corporations) amid the improvement in domestic macroeconomic fundamentals;
- (iv) similarly, banks started to cut the interest rates on foreign currency-denominated deposits for both categories of customers (down 0.8 percentage points to 1.9 percent in July 2014 for households and 0.7 percentage points to 1.3 percent for non-financial corporations) amid the persistently low levels of euro area interest rates;
- (v) the interest rate margins between leu-denominated loans and deposits narrowed for both categories of customers, yet the decline was sharper for households (down 0.8 percentage points to 6.9 percentage points in July 2014). The interest rate margin between leu-denominated loans

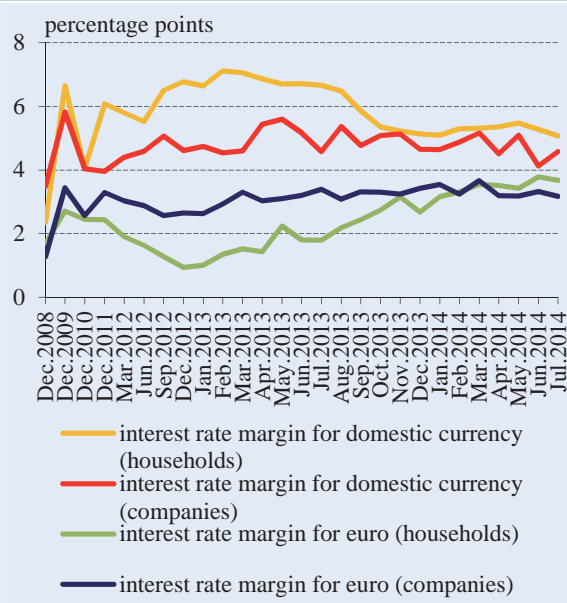
and deposits of non-financial corporations remained lower (4.7 percentage points in July 2014). On the other hand, the spread between the interest rates on loans and deposits in foreign currency widened for both categories of customers (up by roughly 0.7 percentage points versus the same year-ago period to 3.4 percentage points in July 2014), due solely to the decline in deposit rates.

Chart 3.28. Interest rate margins on outstanding loans and deposits



Source: NBR

Chart 3.29. Interest rate margins on new loans and deposits



Source: NBR

The average lending and deposit rates on new business to non-bank customers (Chart 3.29.) saw significant adjustments in July 2013 – July 2014:

- (i) the average interest rate on new leu-denominated loans to households dropped significantly in the reviewed period (down 3.3 percentage points, from 11.4 percent in July 2013 to 8.2 percent in July 2014), in response to the signals for cutting loan costs that the central bank sent by the gradual lowering of monetary policy rate, as well as amid the heightened competition between credit institutions on the market. This indicator hit an all-time low, standing 2 percentage points lower than the corresponding average interest rate calculated for outstanding loans (10.1 percent). In addition, the interest rates on new loans to non-financial corporations fell significantly (down 2.2 percentage points, from 8.6 percent in July 2013 to 6.4 percent in July 2014), the lower level being attributed to the much shorter maturities than those of household loans;
- (ii) average interest rates on new foreign currency-denominated loans to households saw a trend reversal compared with the previous period, going up 0.9 percentage points, from 4.6 percent in July 2013 to 5.5 percent in July 2014, and reaching a level close to that of the loan stock, mainly as a result of certain structural changes such as the decline in housing loans in favour of other types of loans and the increase in associated risk. The interest rates on new foreign currency-denominated loans to non-financial corporations fluctuated by the end of 2014 Q1, when they followed a downward course (down to 4.3 percent in July 2014, a reading similar to that calculated based on the average outstanding loans);

- (iii) the average interest rates on new deposits in domestic currency for both categories of customers remained on the downtrend started in the previous period under review, yet it decreased at a faster pace (down 1.7 percentage points to 3.1 percent for retail customers and 2.2 percentage points to 1.8 percent for non-financial corporations in July 2014); the average deposit rates on new business are lower than those calculated based on outstanding deposits, which will lead to a decline in financing costs in 2014;
- (iv) the average interest rates on new foreign currency deposits also stayed on a downward path (the interest rates paid by banks to households and non-financial corporations fell by one percentage point and 0.8 percentage points to 1.8 percent and 1.1 percent respectively in July 2014) amid the prevailing low interest rates on the international markets, the pace of decline being similar to that recorded in the previous period;
- (v) the interest rate margin between new loans and deposits in domestic currency saw its upward trend reversing in the period under review (the spread narrowed by 1.6 percentage points to 5.1 percentage points in July 2014 in the case of households and it fluctuated in the case of companies to reach 4.6 percentage points in July 2014); this indicator is lower than that calculated based on outstanding loans and deposits, which will call for higher efforts from banks to ensure a better management of credit risk and the related provisions. In contrast, the interest rate margin between new household loans and deposits in foreign currency widened by 1.9 percentage points to 3.7 percentage points in July 2014 on the back of higher interest rates on new household loans in foreign currency (up one percentage point) and the lower deposit rates on new business in foreign currency (down one percentage point). The aforementioned level is higher than that calculated based on outstanding loans and deposits, an improvement in profitability being expected for business in foreign currency in 2014.

The differential between interest rate margins on leu- and EUR-denominated housing loans narrowed in 2013 and the first part of 2014. At present, the interest rate margins related to new business in domestic currency are lower than those related to new EUR-denominated loans, mainly as a result of the significant volume of leu-denominated loans granted under the “First Home” government programme, in which case credit risk incurred by credit institutions is considerably mitigated by government guarantees.

As for consumer loans, the differential between average interest rates on loans in lei and those in euro remained significant. This may be partly attributed to the benchmark index differential, as well as to the expected costs of medium- and short term loans in lei and euro, given the excess liquidity in the euro area. However, high interest rates in the context of subdued inflation show credit institutions’ lack of interest in this type of loans and a low level of competition.

Reflecting the short average maturity of new corporate loans, as well as the undifferentiated credit risk in terms of currency, the interest rate differential between loans to companies (about 180 basis points in July 2014) is virtually the differential between interbank rates in Romania and the euro area.

3.2.5.2. Loan quality

Loan portfolio quality remains a vulnerability of the Romanian banking system, the persistence of a large stock of non-performing loans in banks' balance sheets resulting in the allocation of additional operational resources for their recovery and in an enhanced prudence in granting new loans. Since the release of the previous Report, a lag between the economic cycle and the financial cycle was manifest, given that the resumption of economic growth was not accompanied by the recovery of lending to the real sector. The fast-paced build-up of non-performing loans was seen in numerous EU Member States against the background of sluggish economic growth or the recession that followed the international financial crisis, the additional efforts to cover loan losses putting pressure on banks' profitability. The developments in the quality of banks' balance sheets are a matter of concern for national supervisory authorities and European bodies owing to their potential to slow down the resumption of lending and economic growth.

In the period ahead, this vulnerability of the Romanian banking system is expected to diminish amid: (i) the improvement trend in the variables defining the domestic macroeconomic framework (gross domestic product, inflation, wage earnings, unemployment rate, etc.); (ii) the need to adjust banks' balance sheets by increasing the volume of interest-bearing assets to support their operational efficiency, given the adequate credit risk management; (iii) the declining costs of loans in the context of incorporating the monetary policy impulses sent via the instruments used by the NBR; (iv) the swifter clean-up of banks' balance sheets by removing unrecoverable claims fully or partially covered by adjustments for impairment³⁵.

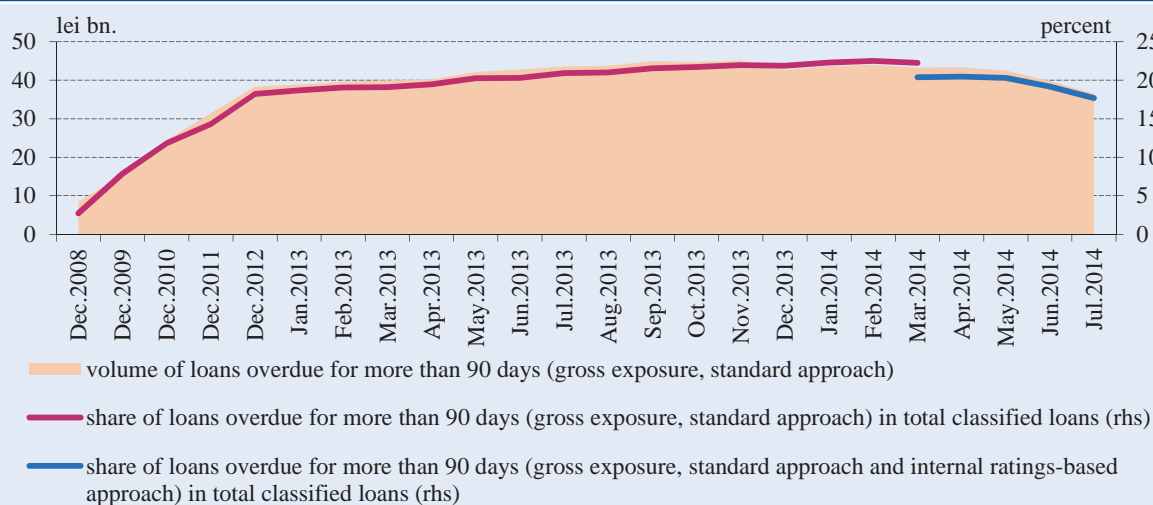
The non-performing loan ratio³⁶ (Chart 3.30.) increased in the period under review (from 20.3 percent in June 2013 to 21.9 percent in December 2013 and 22.3 percent in March 2014), owing mainly to a base effect (the total volume of loans for which capital requirements for credit risk are established according to the standard approach dropped from lei 210.5 billion in June 2013 to lei 195.1 billion in December 2013 and lei 194.2 billion in March 2014), the volume of non-performing loans rising only marginally in 2014³⁷.

³⁵ In line with NBR's recommendations, banks have to design their own accounting policies related to the removal from the balance sheet of the carrying amount of unrecoverable loans fully or partially covered by adjustments for impairment, which should comply with the generally-accepted banking practices, the International Financial Reporting Standards (IFRS) and the professional judgement. In addition, the NBR requires these policies should be agreed with external auditors.

³⁶ Non-performing loan ratio is calculated as a ratio of loans overdue for more than 90 days and/or in which case legal proceedings were initiated to total classified loans and interest (the following financial asset components are considered: principal, related claims and amortisation) in the portfolio of credit institutions for which capital requirements for credit risk are established according to the standard approach. Data were taken over from the reports sent by banks based on the provisions of NBR Order No. 15/2012 on the reporting of statements related to the enforcement of NBR Regulation No. 16/12 December 2012 on the classification of loans and investments, as well as on the establishment and use of prudential valuation adjustments, as subsequently amended and supplemented. Art. 2 letter k of the Regulation defines the initiation of legal proceedings as being at least one of the following measures taken to recover claims: (a) the court's decision to initiate the insolvency procedure, and (b) the initiation of the forced sale procedure against individuals and/or legal entities. Non-performing loans are recorded at gross value, i.e. book value, without taking into account the existence of any collateral or adjustments for impairment. The calculation methodology is compliant with the provisions of the Compilation Guide on Financial Soundness Indicators prepared by the International Monetary Fund and is the most used at international level.

³⁷ The volume of loans and interest overdue for more than 90 days and/or in which case legal proceedings were initiated totalled lei 42.7 billion in June 2013 and December 2013, reaching lei 43.3 billion in March 2014.

Chart 3.30. Non-performing loans at aggregate level



Source: NBR

As of March 2014, the NBR changed the calculation methodology of the non-performing loan ratio by including the portfolios for which capital requirements for credit risk are determined according to the internal ratings-based approach. Starting with 2014 Q2, the indicator followed a downward course, standing at 20.4 percent in March 2014 and at 17.7 percent in July 2014 (Chart 3.30.), as a result of some banks removing from their balance sheets the uncollectible loans that are fully or in an overwhelming proportion covered by adjustments for impairment.

Chart 3.31. Loan portfolio quality in selected EU Member States (share of non-performing loans in total loans)



Source: IMF (Financial Soundness Indicators, FSI Tables, April 2014); NBR calculations

The deterioration of bank asset quality (Chart 3.31.) continued in many countries in the region (Hungary, Slovenia, Croatia), as well as in several euro area countries having subsidiaries in Romania (Greece, Italy). The main macroeconomic factors³⁸ that influenced the non-performing loan ratio³⁹ developments are: gross domestic product, share prices (used as a proxy for real-estate prices), exchange rate, lending rate.

In the period ahead, a new indicator for assessing the non-performing financial assets, called non-performing exposures, will be used. This indicator is determined according to the methodology set forth in EBA Implementing Technical Standards under article 99(4) of Regulation (EU) No. 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation – CRR) which will be uniformly applied at EU level. The reporting on non-performing exposures will be added to the FINREP reporting framework on an individual and a consolidated basis, the reference date of the first reporting being set on 30 September 2014.

EBA's uniform definition of non-performing exposures builds on the impairment and default criteria according to the International Financial Reporting Standards (IFRS) and CRR (which rely on professional judgement), as well as on the common identification criterion (namely the number of days past due). Thus, non-performing exposures that must be reported for supervisory purposes are those exposures fulfilling one or both of the following criteria: a) material exposures overdue for more than 90 days and b) the exposures incurring the risk of not being paid in full without realisation of collateral, regardless of the existence of any past-due amount or of the number of days past due. Implementing Technical Standards set forth several methodological issues related to the definition of non-performing exposures, among which:

- (i) the exposures are categorised for their entire amount and without taking into account the existence of any collateral;
- (ii) exposures include all debt instruments (loans and advances and debt securities) and off-balance sheet exposures (loan commitments given, financial guarantees given, and other commitments given, either revocable or irrevocable), except held for trading exposures;
- (iii) all on- and off-balance sheet exposures to a debtor are considered as non-performing when the debtor has on-balance sheet exposures that are overdue for more than 90 days accounting for at least 20 percent of its total exposures; when a debtor belongs to a group, the need to also consider exposures to other entities of the group as non-performing shall also be assessed;
- (iv) exposures may be considered to have ceased being non-performing when all of the following conditions are met simultaneously: 1) the exposures meet the exit criteria applied by the reporting institution for the discontinuation of the impairment and default classification; 2) the debtor's situation has improved so that the debtor is likely to pay all the amounts due in line with the

³⁸ ECB Working Paper Series No. 1515/2013 – “*Non-performing loans. What matters in addition to the economic cycle?*”. The study was conducted in 75 developed and developing countries (Romania included). The ECB paper shows that, in the case of exchange rates, the effect depends on the extent of foreign exchange lending to unhedged borrowers, whereas in the case of share prices, the impact is significant in countries which have a large stock market relative to GDP.

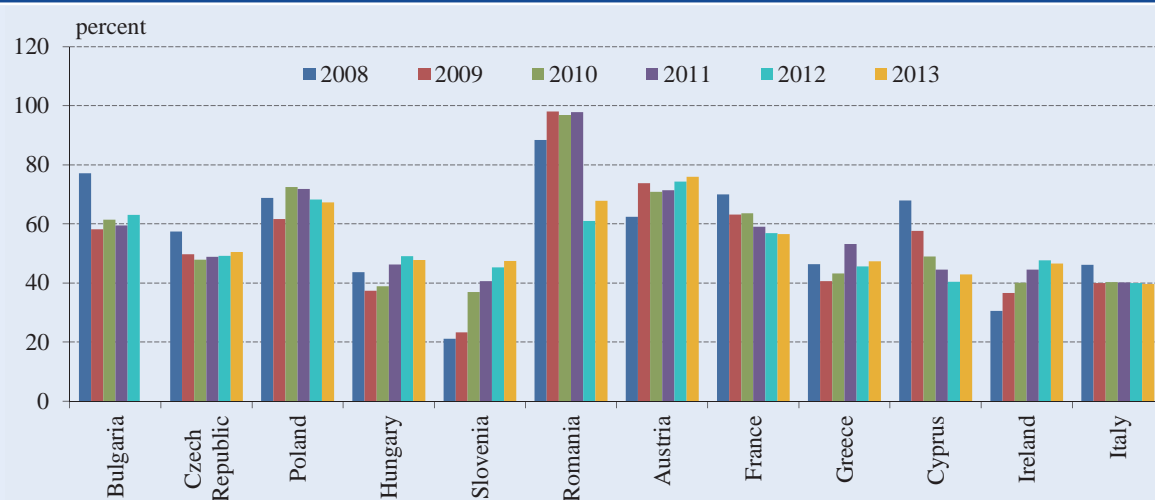
³⁹ Data on non-performing loans were reported in compliance with the accounting standards and the prudential regulations applicable at national level, which can influence the level of the non-performing ratio, thus limiting the comparability between different countries.

initial maturities or the renegotiated conditions and 3) the debtor no longer has amounts past-due by more than 90 days.

The implementation of EBA's new definition of non-performing exposures in the Romanian banking system will have as a result the decline in the non-performing ratio amid: a) the existence of a considerable stock of Romanian government securities in banks' assets, a category which is not affected by impairment; and b) the relatively low level of off-balance sheet commitments of banks to non-bank customers (18 percent in total bank assets in December 2013).

The credit risk is mitigated by the high provisioning of non-performing exposures, which is a characteristic of the Romanian banking system⁴⁰ (Chart 3.32.). The NPL coverage ratio with IFRS provisions rose from 61 percent in December 2012 to 67.8 percent in December 2013 and 66.2 percent in July 2014. The above-mentioned levels are higher than those reported by other countries in the region (Hungary, the Czech Republic, Slovenia), as well as by certain euro area countries having subsidiaries in Romania⁴¹ (Greece, France, Italy, Ireland, Cyprus). Among the countries of origin, only Austria reported an NPL coverage ratio (75.9 percent in September 2013) higher than that calculated for the Romanian banking system as a whole.

Chart 3.32. Coverage ratio of non-performing loans in selected EU Member States



Source: IMF (*Financial Soundness Indicators, FSI Tables, April 2014*); NBR calculations

⁴⁰ In 2008-2011, Romania used the indicator calculated as a ratio of total provisions for prudential purposes to the gross exposure of loans and interest overdue for over 90 days and/or in which case legal proceedings were initiated (in line with prudential and accounting regulations in force in the aforementioned period, banks had to recognise provisions for prudential purposes in the accounting records). Starting with 2012, banks in Romania apply the IFRS standards as an accounting basis. As a result, the NPL coverage ratio with IFRS provisions has been used starting with the same date.

⁴¹ There is no harmonised definition of the NPL coverage ratio at EU level. Therefore, the level of this indicator is influenced by the accounting and prudential regulations applicable at national level.

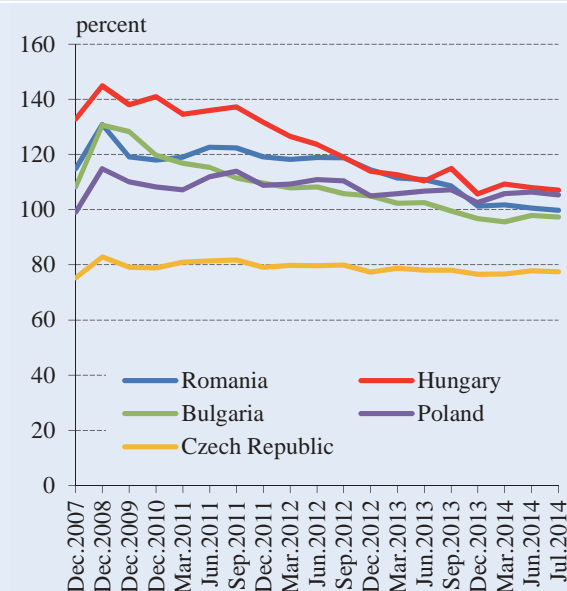
The provisions set up by banks cover the expected losses generated by credit risk; unexpected losses generated by the potential occurrence of adverse macroeconomic developments can be absorbed by the consistent capital reserves of credit institutions in Romania which are higher than the minimum required level for the capital adequacy indicators.

3.2.6. Liquidity risk

The liquidity of banks remained at a comfortable level since the release of the previous Report. Systemic risk was further small, bilateral interbank exposures in Romania being low in relation to own funds and liquid assets of creditor banks. The adjustment in credit institutions' balance sheet assets as a result of the contraction in lending, particularly in foreign currency, and the strengthening of the local deposit base led to the improvement in the total loan-to-deposit ratio to a close-to-balance level and contributed to a decline in the currency mismatch. The adequate liquidity management remained an important feature of the NBR policy, the central bank's liquidity-providing operations being limited in the context of a liquidity surplus in the banking system.

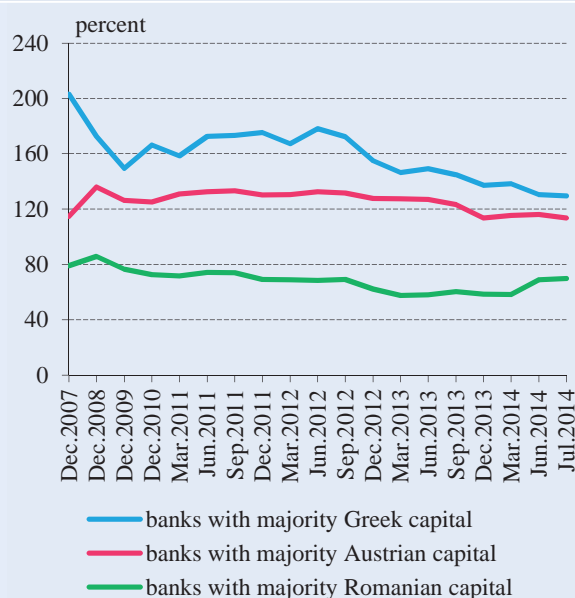
The increase in funding from local sources and the drop in loans to the private sector entailed a swift decline in loan-to-deposit ratio to 101.3 percent at end-2013 as compared with 114.5 percent at end-2012. Starting with 2014, deposit dynamics slowed down amid the low interest rates on the market, whereas lending remained on a downtrend, which caused the indicator to further go down moderately to 99.8 percent in July 2014, slightly below the equilibrium level. The loan-to-deposit ratio posted similar developments across the region (Chart 3.33.).

Chart 3.33. Loan-to-deposit ratio (regional comparison)



Source: ECB

Chart 3.34. Loan-to-deposit ratio for banks with majority Greek, Austrian and Romanian capital

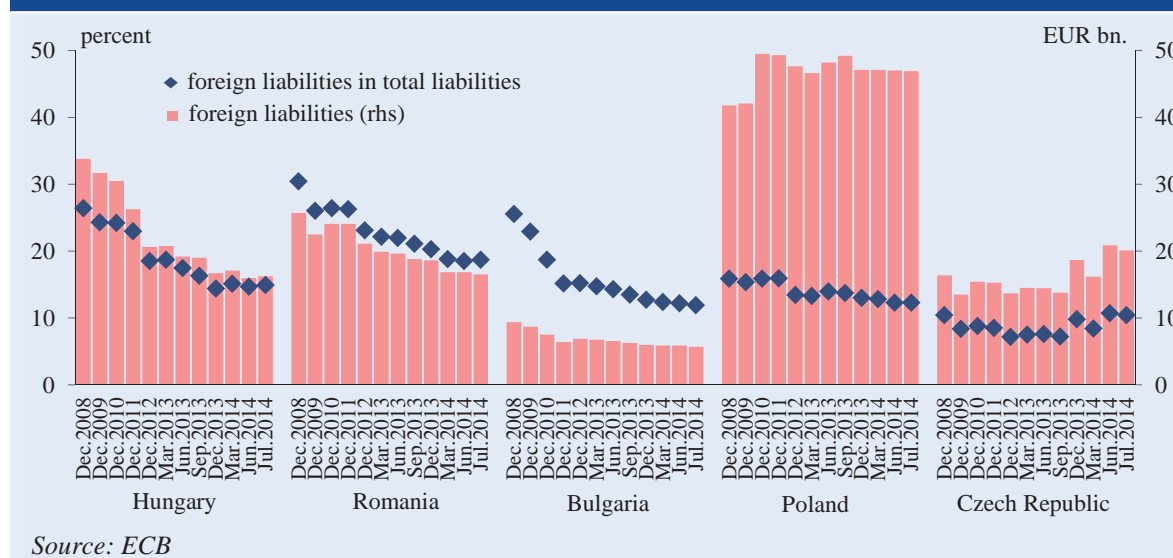


Source: NBR

Looking at banks with Greek capital, the loan-to-deposit ratio shows a slower adjustment of their balance sheets, as well as structural changes in this group (the latest being recorded in December 2013, when ATE Bank became a bank with majority domestic capital). In the case of banks with majority domestic capital, the loan-to-deposit ratio followed a downward course as a result of the slightly negative lending performance, the strengthening of the local deposit base, as well as the structural changes in this group, namely Banca Transilvania's exit from (in 2012) and re-entering (in April 2014) the group of banks with domestic capital.

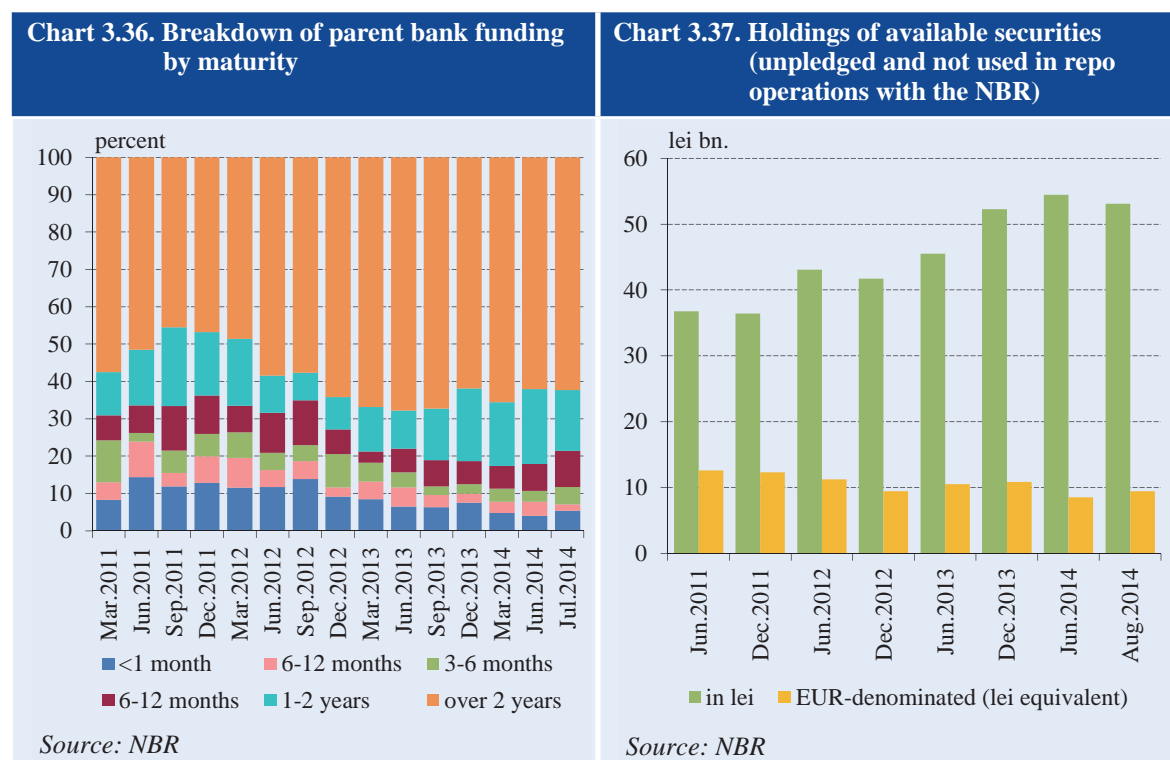
As regards the funding sources of banks, it is worth noting the further decline in foreign financing, offset by the increase in domestic financing. Local deposits remained the main funding source of banks (54.8 percent of total liabilities in July 2014, on a rise from 51.1 percent in the same year-ago period). On the other hand, the share of foreign financing in total liabilities narrowed by 3.1 percentage points in the same period to reach 18.7 percent, yet remaining much higher than the average for the countries in the region (Chart 3.35.). Foreign financing was largely ensured by financial institutions (87.5 percent of total foreign liabilities) and particularly by intercompany lending (75.8 percent of total foreign liabilities). The reduction in foreign financing was due to a low eligible demand for loans and to the need to meet the stricter liquidity requirements set forth by the new EU regulatory framework.

Chart 3.35. Foreign liabilities



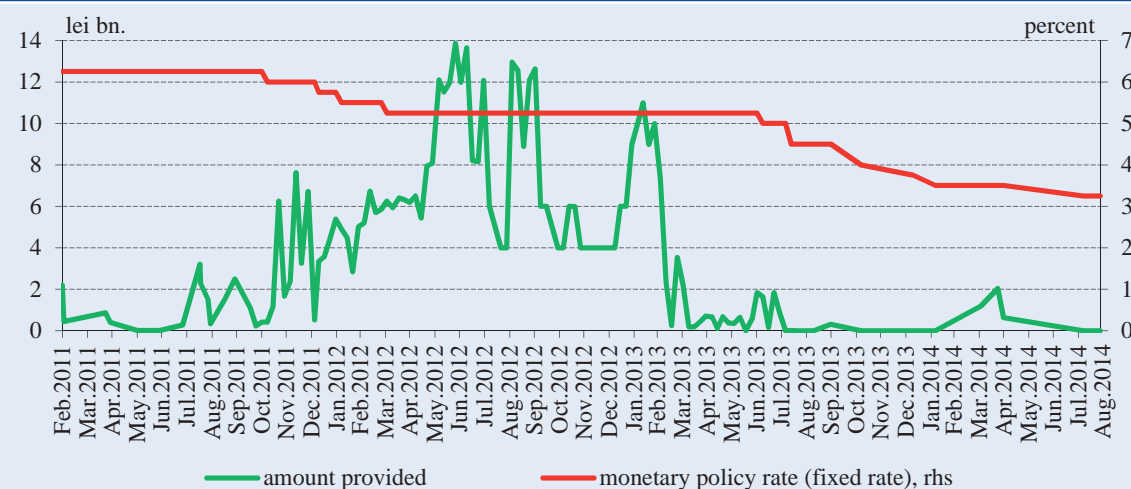
Foreign financing from parent banks went down at a faster pace up to end-2013, as a result of balance sheet adjustment of European banking groups on the back of the preparations made to join the Single Supervisory Mechanism. Starting with 2014, financing declined at a slower pace, and medium- and long-term financing prevailed (standing at 78.6 percent of intercompany lending in July 2014, slightly down versus 81.65 percent in the same period a year earlier). In terms of currency breakdown, the financing in euro held 76 percent of total parent bank funding in July 2014, the leu-denominated component accounting for 14 percent, while the financing in US dollars and other currencies continued to be modest.

The share of capital and other reserves in total liabilities remained elevated and relatively unchanged, i.e. 19.2 percent in July 2014. The share of domestic interbank deposits in total liabilities was further low, reaching 1.2 percent in July 2014 versus 1.25 percent in the same year-ago period, the contamination risk in the domestic banking system via this channel being further contained.



Banks' holdings of unpledged government securities not used in repo operations with the NBR rose markedly in 2013 and 2014 H1 (Chart 3.37.), accounting for a significant share of assets (more than 16 percent in August 2014), which had a positive influence on the liquidity position of the banking sector. The NBR provides liquidity to credit institutions via weekly repo operations conducted as fixed-rate auctions (the monetary policy rate – 3.25 percent per annum in August 2014), with government securities representing instruments that can be used as eligible collateral in these operations. The reduction in banks' liquidity needs, on the back of the contraction in lending, contributed to the build-up of a liquidity surplus in the banking system, which materialised in bank deposits placed with the central bank via the standing deposit facility. Excess liquidity caused the sharp decline in the amounts raised via repo operations (Chart 3.38.), with banks resorting only occasionally to this facility in 2013 H2 and 2014 H1. Despite the further high liquidity levels in the banking system, at an individual level, there are credit institutions which can face temporary liquidity shortages, as it happened in the first months of 2014 when a small number of banks resorted to the NBR's marginal lending facility for eligible participants.

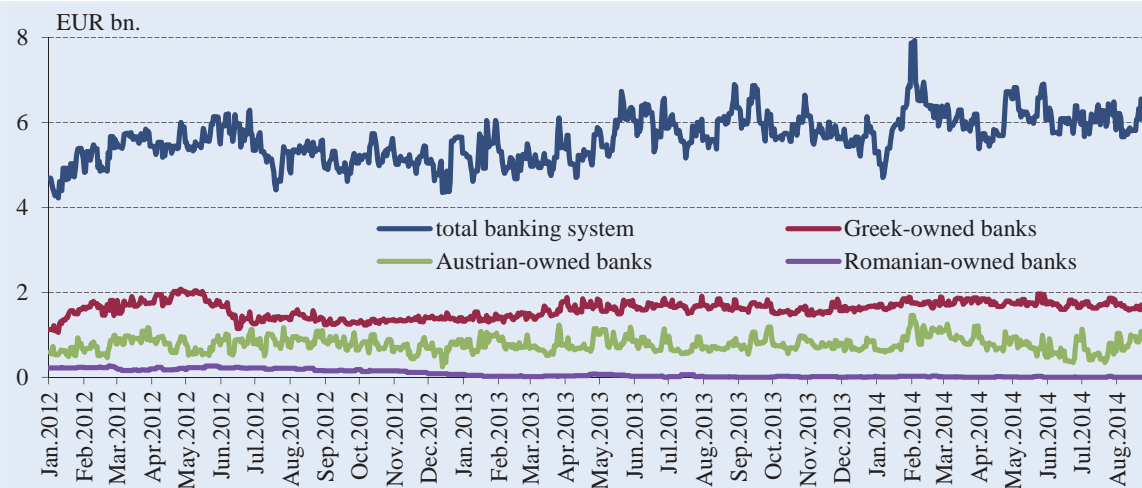
Chart 3.38. Liquidity provided through repo operations



Source: NBR

The lower currency mismatches between assets and liabilities, as reflected by the lower loan-to-deposit ratio in the case of funds denominated in both euro and other currencies, caused the contraction in the foreign currency financing needs of credit institutions. Nevertheless, FX swaps remained particularly important for covering mismatches given the still high loan-to-deposit ratio and the reduction in foreign financing sources. Credit institutions use these instruments in order to cover their foreign currency needs via leu-denominated funds raised from domestic sources. The net daily balance of funds raised via RON currency swaps totalled about EUR 6 billion in 2013 and 2014 H1 (Chart 3.39.), with RON-EUR currency swaps holding an overwhelming share (more than 90 percent). Most operations were made with counterparties representing non-resident financial institutions. The upside of these instruments is the low cost in cases of high liquidity. The daily traded volume on the local market stood, on average, at around EUR 1 billion, although most transactions had maturities of up to one week. The short maturity of these operations poses a risk to credit institutions, given the need of frequent refinancing and the reliance on this market's liquidity.

Chart 3.39. Net daily balance of foreign currency-denominated funds raised via currency swaps (EUR equivalent)



Source: NBR

Stress tests highlighted a comfortable liquidity position of the Romanian banking system. The isolated occurrence of vulnerabilities was due to the short-term financing strategy or the insufficient share of liquid assets. The further high share of government securities in total assets, as well as the broadening of the domestic financing base, contributed to the improvement in the liquidity position. Despite the significant corrections in the currency mismatches between assets and liabilities, the sharper decline in foreign financing, mainly as a result of lower intercompany lending, could generate certain liquidity shortages in the case of foreign-currency denominated funds, particularly in the assumption that credit institutions' access to the currency swap market was contained.

3.2.7. Market risk

At end-June 2014, the interest rate risk was on the rise against the similar year-ago period, in the context of the larger share of fixed interest-bearing assets in total assets of credit institutions, the shorter duration of liabilities (mainly as a result of the partial substitution of short-term funds raised from the domestic market for medium-term loans taken from parent banks), the lower interest rates and the smaller volume of government securities held to maturity. The adverse scenario of a permanent shock, consisting in a 200 basis point increase in interest rates and implying a parallel shift of the yield curve, would have a negative impact of around 10.2 percent on own funds, 2.6 percentage points stronger than that assessed based on the same scenario in June 2013.

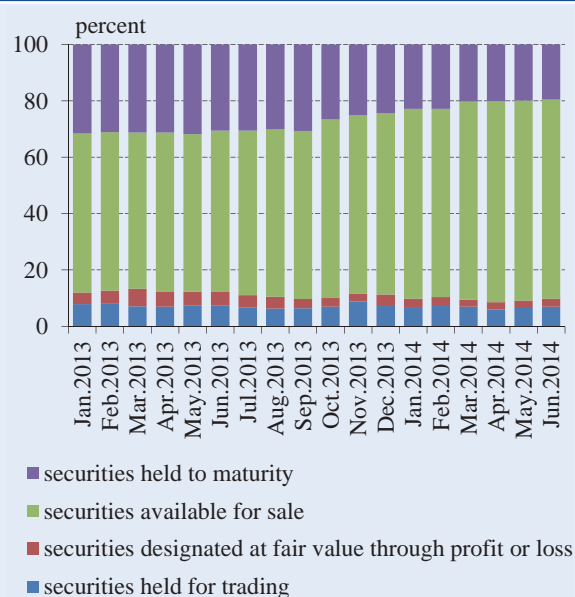
Interest rate risk

Compared with the previous periods, in 2013 H2 and 2014 H1, the share of government securities holdings in banks' aggregate assets expanded, reaching 23.4 percent in June 2014.

In the reviewed period, foreign investors showed a keener interest in government securities, as shown by the larger share of government securities held by non-residents (20.4 percent in April 2014), and this trend is expected to carry on, amid the sharp drop in yields on the euro area market.

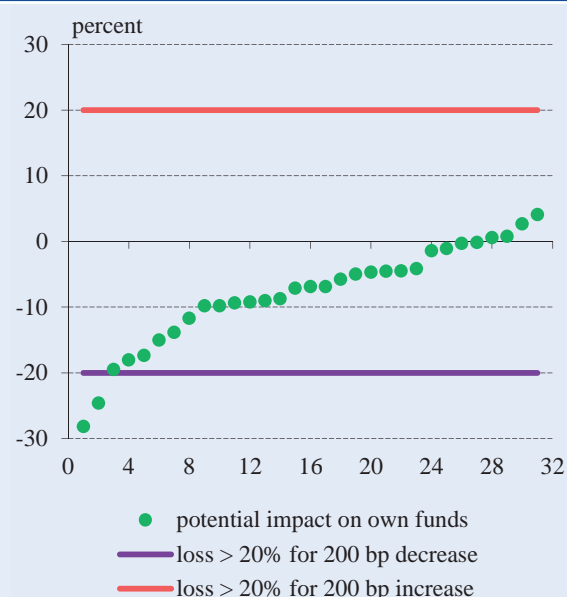
The simulations under the assumption of an adverse scenario implying a 200 basis point parallel shift of the yield curve point to a potential loss of around 10.2 percent of banks' own funds. The loss generated by the maturity mismatch of interest rate risk-sensitive assets and liabilities is larger compared with that in June 2013, when the impact was estimated at 7.4 percent, as a result of both the wider share of fixed interest-bearing assets in total assets of credit institutions and the shorter duration of the liabilities of credit institutions, especially on account of the substitution of domestic short-term funding for part of foreign financing. The shock would have an unevenly distributed impact across credit institutions, the effects ranging from a 28 percent loss to a 4 percent gain, depending on the breakdown by maturity of the assets and liabilities of each credit institution. Judging by the direction of interest rate movements that could generate losses, noteworthy is that the effects would be similar, as most credit institutions would be affected by an increase in interest rates; the extremely low level of short-term interest rates, stemming from subdued inflationary pressures and the measures taken by other central banks with a view to stimulating resumption of lending, led to a wider spread between the applied short-term interest rates (up to 3 months) and the expected long-term interest rates, which prompted domestic credit institutions to focus on profit-maximising strategies by widening the duration gap of bank assets and liabilities.

Chart 3.40. Balance sheet recognition of security holdings



Source: NBR

Chart 3.41. Credit institutions ranked by the impact of a 200 bp shock on own funds



Source: NBR

The potential losses generated by the sensitivity of fixed interest-bearing assets, other than loans (expressed as a change in the market value of government securities following a 200 basis point parallel shift of the yield curve) account for around 6.5 percent of own funds in the banking system, up 3.1 percentage points from the same year-earlier period⁴². The stronger impact was due to the lower interest rates specific to the term structure on which the shocks were applied, as well as to the declining share of government securities held to maturity by credit institutions corroborated with the larger volume of government securities holdings in the banking system.

The use of hedging derivatives is low; the share of their accounting value in total assets (0.02 percent) and total liabilities (0.37 percent, value comparable with that seen in June 2013) is immaterial. Transactions in derivatives are carried out especially on OTC markets, while the organised markets and the instruments usually traded on these markets (options, futures, etc.) are only occasionally resorted to. The development of the long-term bond market, as well as of the derivatives market, which would ensure the better management of liquidity risk and interest rate risk (via covered bonds, longer-term interest rate swaps, swap options, securitisations), is a precondition for covering potential risks associated with certain long-term lending products.

Currency risk

The currency risk across the banking system, estimated based on the direct impact of exchange rate shocks on credit institutions' net foreign currency positions, was further low at end-June 2014

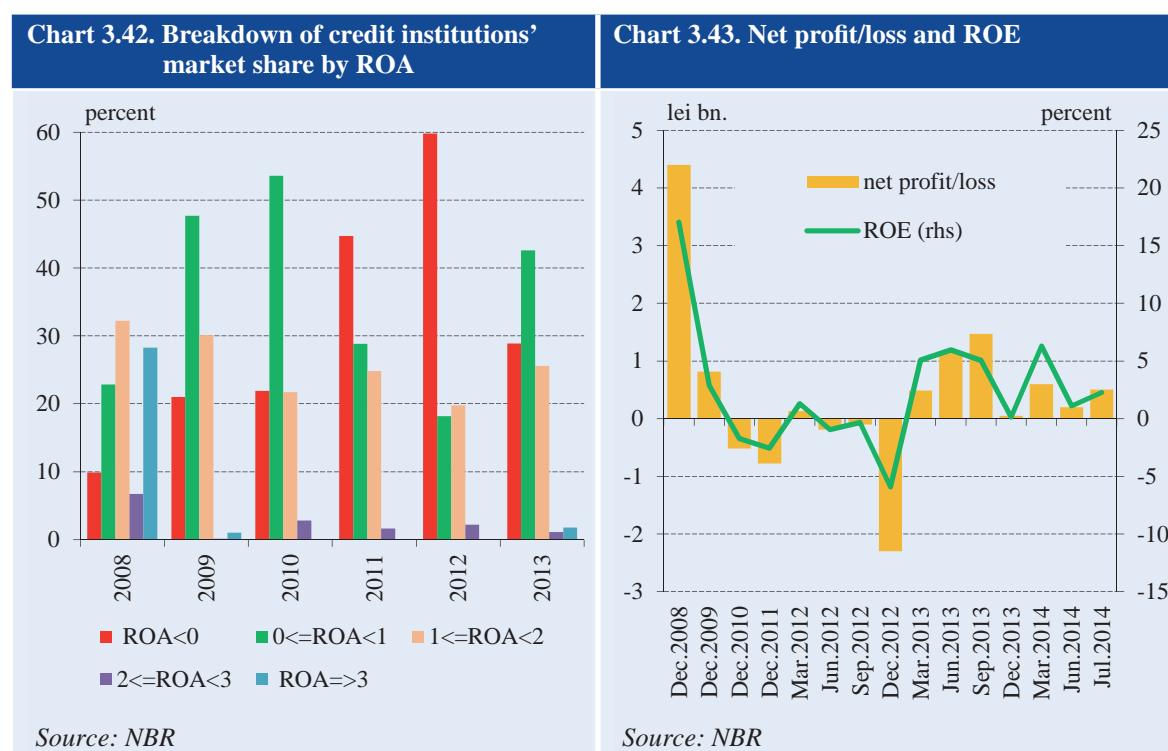
⁴² The assessment of the impact did not take into account the government securities held to maturity (around 20 percent of total holdings of government securities), given their specific accounting treatment, which does not require their mark-to-market pricing and does not imply immediate changes in the profit and loss account or the capital adjustment based on the unrealised loss.

(0.1 percent of own funds), similarly to the previous year (the reported values stood below 0.1 percent throughout 2013)⁴³.

3.2.8. Profitability and efficiency

At end-2013, the Romanian banking system reported a slight net profit on account of the lower net expenses for IFRS provisions⁴⁴, amid the slower build-up of non-performing loans and the rise in operating profitability. January through July 2014, the aggregate financial result remained positive, due to the persistent downward trend of provisioning. Thus, at end-July 2014, the main profitability indicators, i.e. return on assets – ROA and return on equity – ROE, stood at 0.2 percent and 2.3 percent respectively. Net interest income contracted on account of the negative dynamics of lending, despite the stimulus given by the fall in funding costs in domestic currency and the persistence of low reference rates on the euro area interbank market, causing operating income to witness marginally negative rates of change during 2013 H2. Net income from commissions resumed growth at end-2013. Further territorial network rescaling and staff cuts resulted in lower operating expenses, with a positive impact on operating profitability.

At end-December 2013, the banking sector recorded a lei 0.05 billion profit⁴⁵ after three years of losses. ROA and ROE ran at 0.01 percent and 0.1 percent respectively.



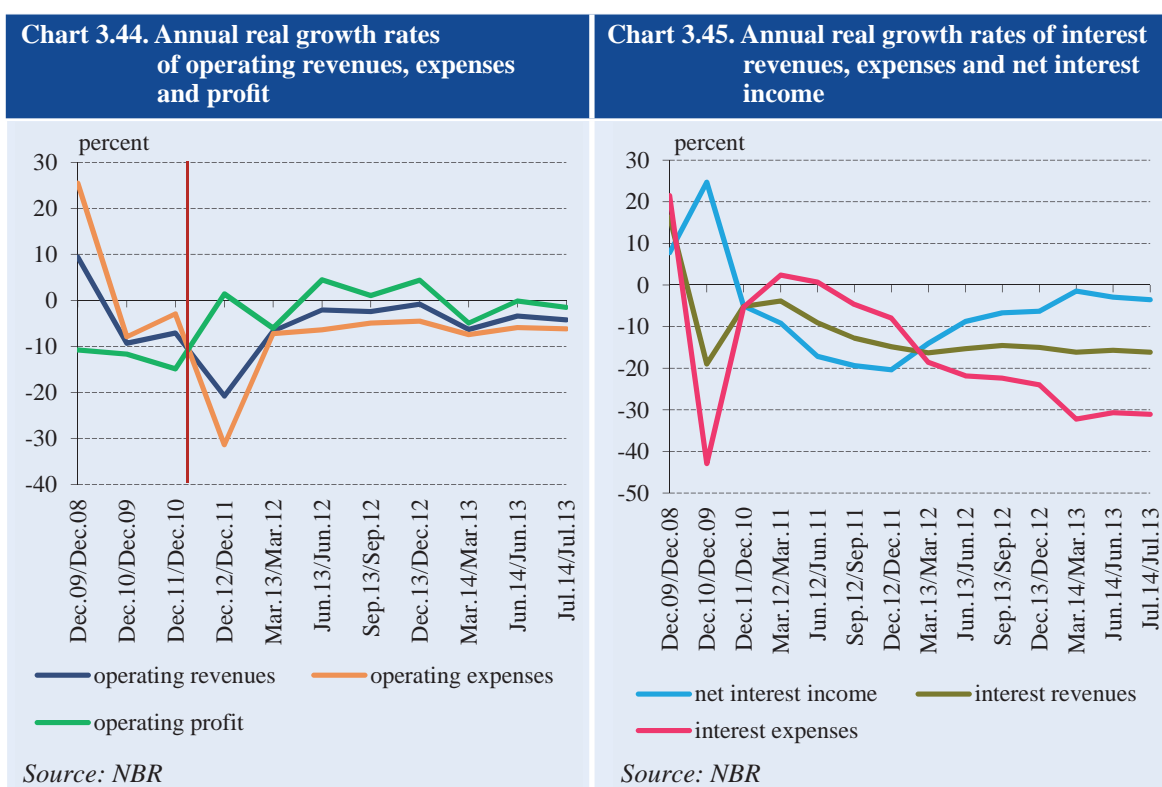
⁴³ VaR (value at risk) is calculated with 99 percent confidence considering the daily movements in the exchange rate of the leu for a 3-year period against a representative basket of currency holdings in each credit institution's portfolio, assuming that the position will be cleared within 10 working days.

⁴⁴ The phrase "net expenses for IFRS provisions", used in Section 3.2.8. "Profitability and efficiency", corresponds to impairment expenses net of revenues used in the International Financial Reporting Standards (IFRS).

⁴⁵ Banks' financial results were impacted by the positive dynamics of real GDP, mainly as a result of the revival of industry, fuelled by external demand, as well as of the larger-than-expected agricultural production, given the favourable weather conditions in the period under review.

The market share of loss-making banks narrowed by around 31 percentage points compared with 2012, to 28.9 percent⁴⁶, especially following the drop in net expenses for IFRS provisions (Chart 3.42.).

The banking sector reported a profit throughout 2013, given the negative dynamics⁴⁷ of net expenses for IFRS provisions (amid the slower build-up of non-performing loans) and the preservation and even improvement (in the last eight months of 2013) of operating profitability, as a result of the faster reduction in operating expenses than that in operating income (Chart 3.43.). In 2013 Q4, the magnitude of the profit was affected, on the one hand, by the additional IFRS provisions set up by banks due to the more cautious treatment of restructured loans. On the other hand, the financial result improved as banks (mainly three large banks) recognised again the deferred tax liabilities as income, following the treatment of the positive difference between provisions calculated based on prudential valuation adjustments and the IFRS-based impairment adjustments as a permanent difference. This income, although significantly lower than the expenses for IFRS provisions, contributed to maintaining the profitability of the banking sector in positive territory. January through July 2014, the aggregate financial result stayed positive, supported by the further negative dynamics of IFRS provisions, even though the growth of operating profitability came to a halt (Chart 3.44.).



Net interest income, the main item under net operating result, witnessed a slower contraction during the final part of 2013 and the first seven months of 2014, on the back of the faster negative dynamics of interest expenses – given the lower funding costs in domestic currency and the persistently low

⁴⁶ In Hungary, the market share of loss-making banks took around 35 percent at end-2013, down from 40 percent in the previous year (Magyar Nemzeti Bank, Financial Stability Report, May 2014). In Poland, the market share of loss-making banks remained low: 7.3 percent at end-September 2013 from 7.1 percent at end-March 2013 (Narodowy Bank Polski, Financial Stability Report, December 2013).

⁴⁷ The rates of change are calculated in real terms, compared with the same period a year earlier.

reference rates on the euro area interbank market –, which more than offset the unfavourable impact of interest income developments. The latter dynamics were influenced by the sharp drop in interest rates on outstanding loans and the contraction in the volume of loans (Chart 3.45.).

The annual change in net income from commissions returned to positive territory at end-2013. Conversely, the dynamics of gains from trading, which were on the upward path throughout 2013, turned negative starting in February 2014 in the context of the slower downward trend of market yields, thereby adjusting the size of operating income.

Banks' concern to cut down operating expenses translated into the negative dynamics of staff costs (-3.2 percent in December 2013 and -6.4 percent in July 2014) and depreciation expenses (-6.4 percent in December 2013 and -10.1 percent in July 2014).

An adverse impact on profitability will exert the additional provisioning anticipated by the banks that revised downwards both the assumptions made, based on the received bids, on the recovery of NPL pools to be sold in the final part of 2014 and the estimated realisable cash flows from debtors' repayments or foreclosure on collateral for non-performing loans.

3.2.9. Results of the solvency stress test of the banking sector

The National Bank of Romania conducts stress tests of credit institutions' capital adequacy on a regular basis, consistent with a methodology developed in cooperation with the IMF. In 2014, a significant change in the manifestation of the impact of certain macroeconomic shocks on the capital of credit institutions derives from credit institutions' obligation to maintain minimum levels of Common Equity Tier 1 capital ratio, Tier 1 capital ratio and total capital ratio of 4.5 percent, 6 percent and 8 percent respectively on an ongoing basis. The stress tests imply both estimates of credit institutions' operating results and charges related to valuation adjustments for impairment according to the analysed scenarios; concurrently, the unrealised gains and losses generated by the assets available for sale, which have an impact on own funds and, implicitly, on solvency indicators, are estimated. The scenarios envisage changes in risk parameters (probability of default, loss in case of default, increase in the uncollateralised part of exposures) following adverse macroeconomic developments, as well as highly severe assumptions regarding the evolution of market risk determinants (exchange rate depreciation, upward shifts of the yield curve with an impact on fixed-income assets, the sharp rise of funding costs owing to investors' worsening perception of sovereign risk, a fall in real-estate market prices, the impossibility of transferring additional costs into the margins on new loans).

The latest solvency stress test covers a three year horizon (2014 Q1 – 2016 Q4) and it is based on the macroeconomic and macrofinancial scenarios applied by the European Banking Authority. The adverse scenario foresees renewed persistent recession (economic growth of -1.4 percent in 2014, -1.8 percent in 2015 and -0.7 percent in 2016, the cumulative deviation from the baseline scenario standing at 10 percentage points at the end of the three year period), a strong depreciation of the domestic currency versus the euro (15 percent), a rise in long-term yields requested by investors on the government securities market (initial shock of 160 basis points, with a slight gradual fading of the shock to 120 basis points at the end of the third year), a decline in the market value of shares (around 15 percent compared with the baseline scenario), a 10 percent drop in the market value of houses versus the baseline scenario, an increase in unemployment rate by roughly 2 percentage points. The scenario is based on the assumption of a static balance sheet, an approach deemed conservative

from the standpoint of the credit institutions undergoing restructuring (particularly the capital requirement determined based on the risk-weighted assets of the institution cannot be reduced during the period under review).

Despite the severity of the scenario that leads to the strong erosion of the credit institutions' own funds, the banking system has further witnessed overall a comfortable solvency level above the minimum requirements. At the end of the period under review, total capital ratio would shed around 5 percentage points, to 14.65 percent⁴⁸ and Common Equity Tier 1 capital ratio would stand at about 12 percent. The total volume of valuation adjustments for impairment of financial assets would go up for exposures to households and companies by around 68 percent and 53 percent respectively. A small number of small-sized credit institutions would face problems, requiring additional capital contributions to maintain the capital adequacy indicators at the minimum required levels, especially as a result of the insufficient share of high-yielding financial assets in total assets (loans, shares, corporate bonds). Moreover, the stress tests have shown that the stronger impact repeatedly seen in the case of these particular credit institutions derives from their incapacity to generate economies of scale, as well as from their excessive concentration on certain types of products and/or currencies, in the context of an insufficiently adapted funding strategy (difficulties in containing the loss associated with some financing shocks by way of transferring the associated costs onto lending rates).

3.3. Non-bank financial sector

3.3.1. Insurance sector

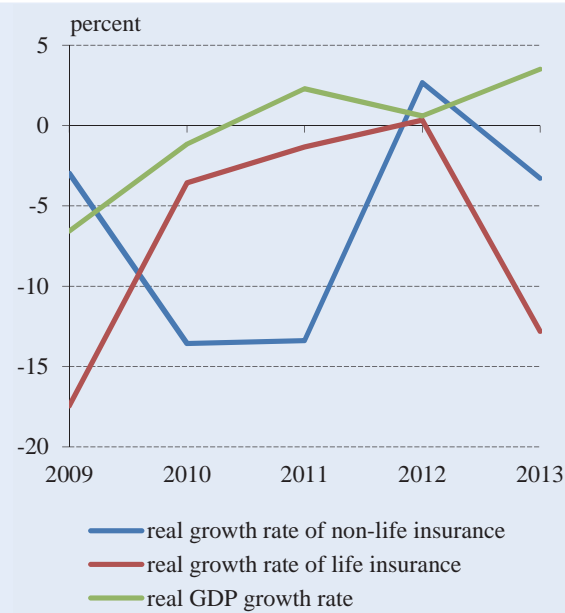
The contraction of the insurance sector in 2013, corroborated with the faster economic growth, prompted the resumption of the downward trend of the financial intermediation ratio calculated as gross premiums written as a share in GDP. The insurance market has further posted a high concentration degree, more pronounced on the non-life insurance segment. The profitability of insurance companies declined in 2013 following the weaker financial results of the non-life insurance sector, despite the drop in the ratio of gross claims paid to gross premiums written for this segment to the lowest level seen in the past five years.

Gross premiums written in the insurance sector fell by a nominal 1.6 percent in 2013, on account of the real declines recorded both on non-life insurance market and life insurance market (Chart 3.46.). The faster economic growth notwithstanding, activity on the non-life insurance market resumed its fall in real terms, while the life insurance market witnessed the sharpest decline in the past four years.

The real contraction of the insurance sector led to the resumption of the downward trend in gross premiums written as a share in GDP (Chart 3.47.). The slight widening of this share in 2012 was followed by new record lows for both segments of the insurance sector in 2013, the financial intermediation ratio in the insurance sector moving down to 1.29 percent.

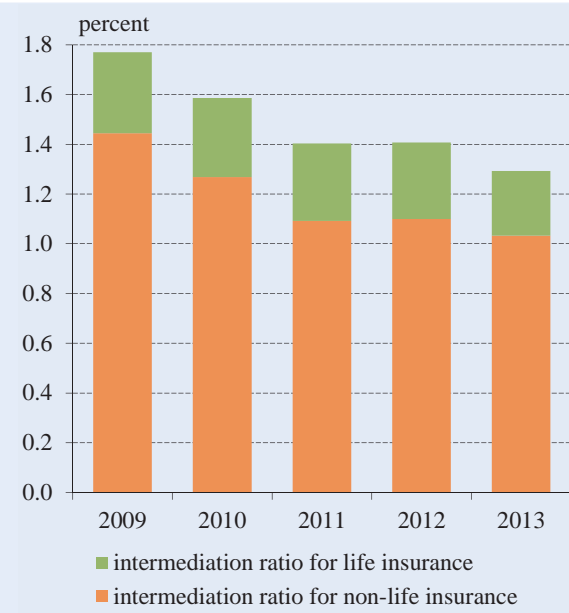
⁴⁸ The comparison between the solvency indicators cannot be made directly, as in December 2013, the denominator of the aggregate solvency ratio of the banking system was reduced by the national prudential filters, which had been fully deducted; at end-2016, following the gradual removal of national prudential filters in compliance with CRD IV, the own funds considered when determining prudential indicators are expected to increase, *ceteris paribus*.

Chart 3.46. Insurance sector and GDP dynamics



Source: FSA, NBR, NIS

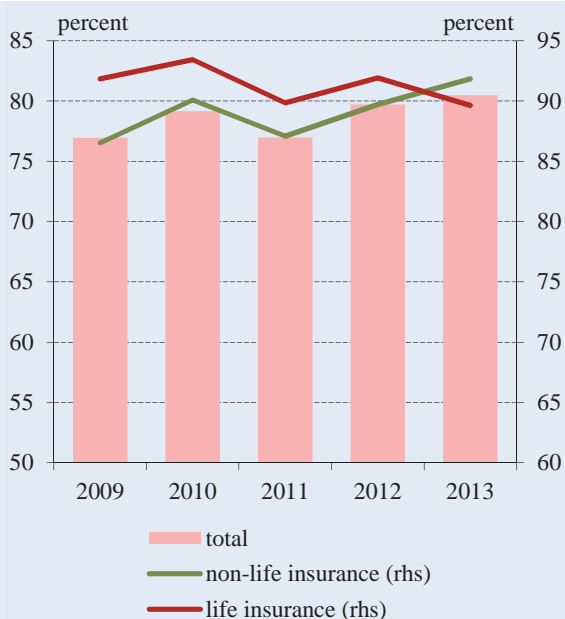
Chart 3.47. Insurance sector – share of gross premiums written in GDP



Source: FSA, NBR, NIS

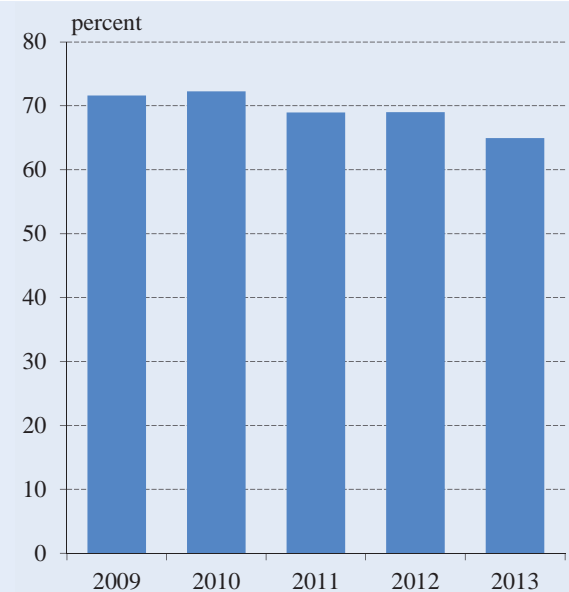
The concentration of the insurance market remained high, with the top ten insurance companies exceeding 80 percent for the first time since the onset of the financial crisis (Chart 3.48.). Moreover, 2013 was the first year when the concentration of the non-life insurance market outran concentration of the life insurance market.

Chart 3.48. Market share of the top ten insurance companies in terms of total gross premiums written

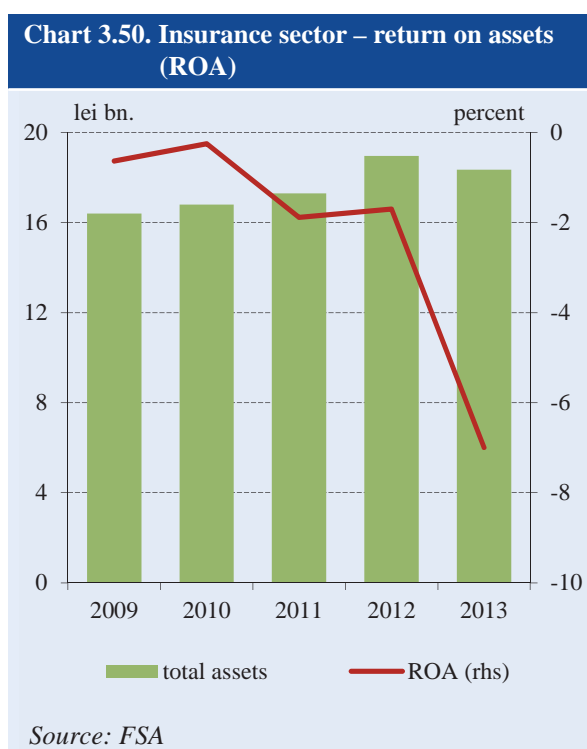


Source: FSA

Chart 3.49. Share of gross claims paid in total gross premiums written for non-life insurance



Source: FSA



The ratio of gross claims paid to gross premiums written for non-life insurance posted the lowest level in the past five years, going down below 65 percent (Chart 3.49.). In this context, the profitability of the non-life insurance market remaining in negative territory corroborates the importance of a better management of direct and indirect distribution costs, as well as the need to identify new methods to stimulate growth on this segment.

The further loss of the non-life insurance sector had a negative impact on the sector's return on assets (Chart 3.50.). Total assets of insurance companies fell by 3.2 percent, while the return on assets stood at -7 percent, the lowest level in the period under review. The lei 962.2 million drop in the net result of the insurance sector in the 2013 financial year, from lei -321.6 million to lei -1,283.8 million may be largely accounted for by the lei 820.3 million negative change in

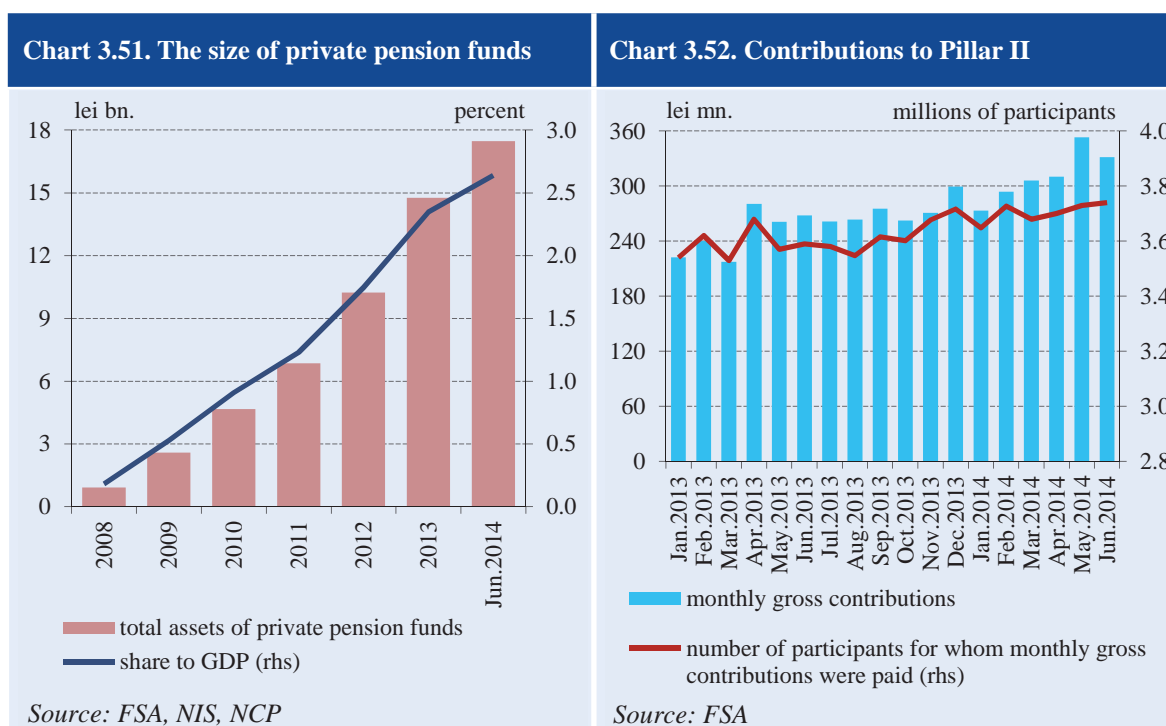
the financial results reported by Astra S.A. insurance company.

3.3.2. Private pension funds

The activity of the private pension system has followed an upward path, due to the larger volume of contributions and number of participants, while payments to the pension recipients are insignificant. Government securities further stayed high in the investment portfolio of the pension funds, yet their weight shrank in favour of shares, given their higher yields.

Total assets of private pension funds have been on a sustainable upward path ever since their establishment, due mainly to the collection of new contributions and the larger number of participants to both Pillar II (privately-managed pension funds) and Pillar III (optional pension funds). Over the past three years, the average annual dynamics equalled 46.8 percent. The share of the private pension sector in GDP reached 2.64 percent in June 2014 (Chart 3.51.). Maintaining a fast growth rate in the years ahead will lead to structural changes in the financial system, i.e. to the expansion of the share of the private pension system.

In the context of faster economic growth, larger contribution quota (up to 4 percent in 2013 and 4.5 percent in 2014) and the larger number of participants (Chart 3.52.), the volume of monthly gross contributions transferred to Pillar II increased in 2013 and 2014 H1, whereas the ratio of payment obligations to net assets was insignificant.

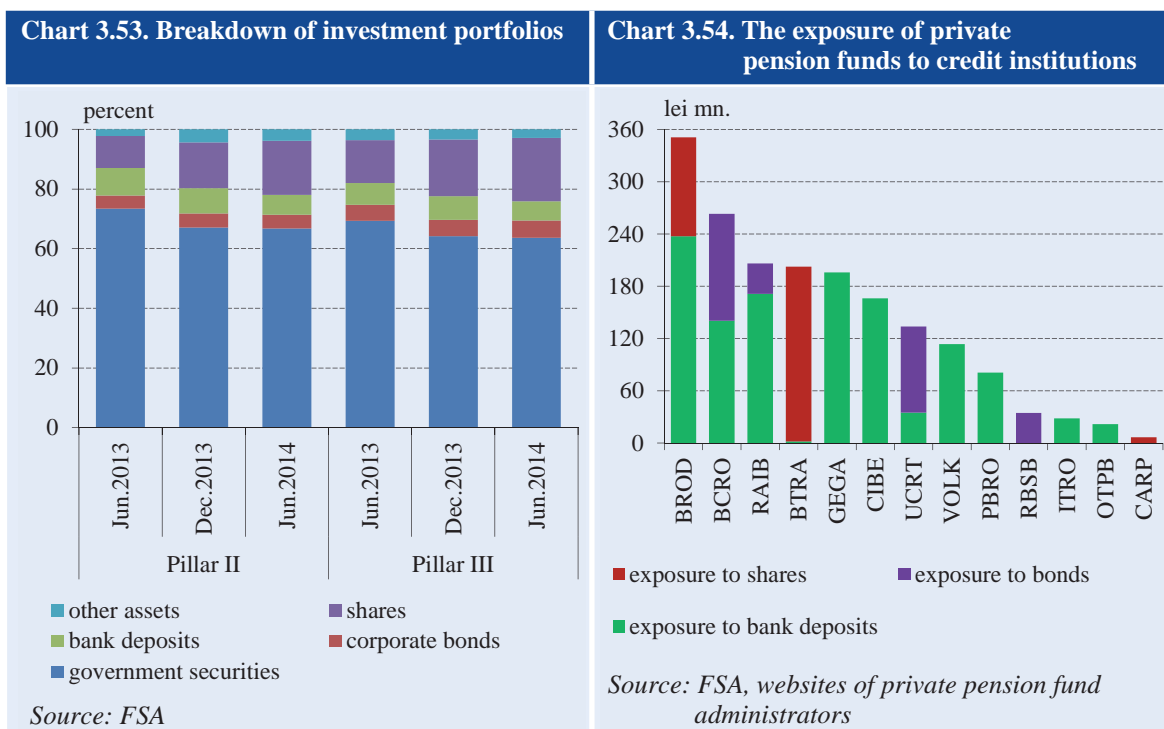


Administrators continued to show preference for government securities, whose share in the investment portfolio narrowed however noticeably June 2013 through June 2014, by 6.6 percentage points, to 66.7 percent for Pillar II and by 5.7 percentage points, to 63.6 percent for Pillar III. In the period under review, the private pension funds showed increased interest in equity investments, due to the attractive yields on the capital market and the opportunities to invest in shares issued by new entrants on the BSE, such as Nuclearelectrica and Romgaz (Chart 3.53). The structural change in the portfolios of the private pension funds may show a wider diversification of investments and, at the same time, their tendency to invest, in compliance with the applicable legislation, in higher-risk assets, in search for higher yields, with a view to benefitting from the expected long-term risk premium. The average maturity of fixed-income securities was 5.8 years at end-2013, slightly down from the previous year, while the average maturity of bank deposits rose to 53 days, from 32 days in 2012.

The average yield of assets of private pension funds in 2013 was relatively similar to that in 2012, with Pillar II and Pillar III recording yields of 11.5 percent and 9.11 percent respectively. Equity investments reported the highest returns, followed by investments in undertakings for collective investment in transferable securities (UCITS), in the context of favourable developments on the capital market.

The investments of privately-managed pension funds in the banking sector account for about 12 percent of the total portfolio and consist mainly in bank deposits, as well as stocks and bonds traded on the BSE (Chart 3.54.). The share of the top five banks in total funds raised by banks from pension funds equalled 67 percent at end-2013. Moreover, the Herfindahl-Hirschman index points to a moderate degree of concentration in terms of exposures to credit institutions (1,172 points). A potential vulnerability might be induced by the more than 70 percent concentration of deposit-placing and custody with only one bank. From the banking sector's perspective, pension

funds represent a funding source cumulating 0.44 percent of total bank liabilities. The relatively low importance of these resources indicates a low probability of banking sector contagion as a result of the balance sheet links with the pension funds.

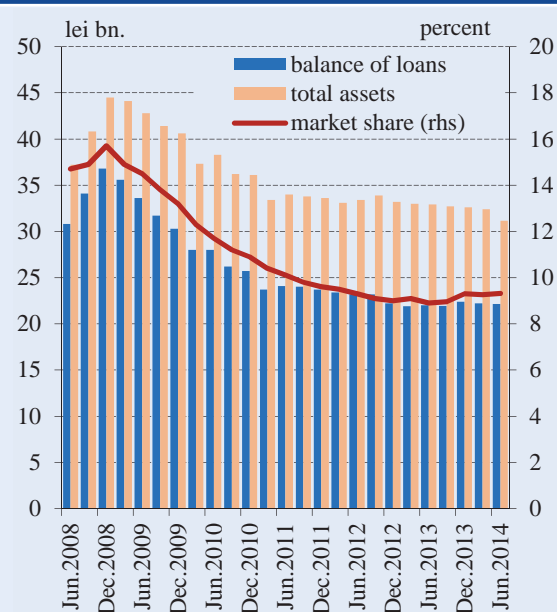


3.3.3. Non-bank financial institutions

The stock of loans granted by non-bank financial institutions (NBFIs) remained relatively unchanged since the release of the previous Report, in the context of the positive macroeconomic developments in Romania. Lending by the NBFIs has been undergoing structural changes in terms of currencies, debtors and products. Moreover, the distribution of funding sources shows a rise in funds raised on the domestic market.

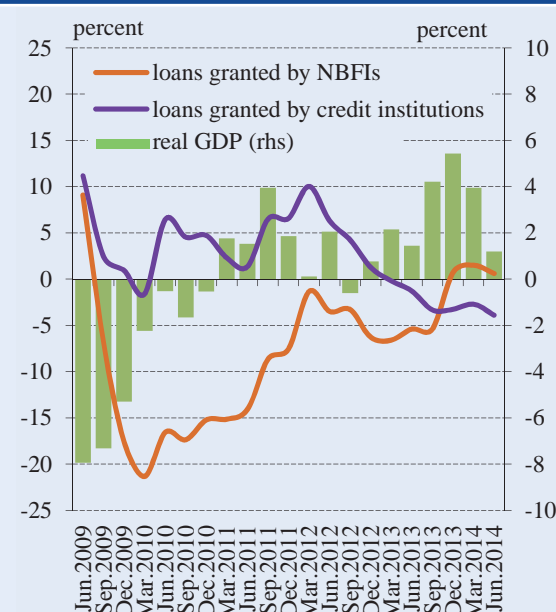
At the end of 2014 H1, the stock of loans granted by the NBFIs was similar to that recorded in the previous year. In terms of the private loans granted by credit institutions and the NBFIs, the market share of the entities in this sector expanded by 0.4 percentage points, to 9.3 percent (Chart 3.55.). The loans granted by the NBFIs and those granted by credit institutions witnessed divergent developments in the period under review, the portfolio of the NBFIs showing higher sensitivity to the improvement of the domestic macroeconomic environment (Char 3.56.). It is worth noting that these loans are concentrated at the NBFIs in the Special Register (around 95 percent), and hence they are subject to more restrictive prudential regulations by the NBR.

Chart 3.55. Developments in the NBFIs sector



Source: NBR

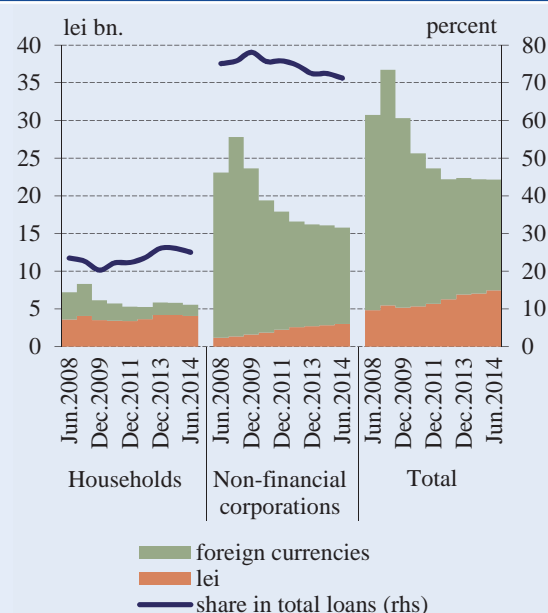
Chart 3.56. Lending and GDP dynamics (annual changes)



Source: NBR, NIS

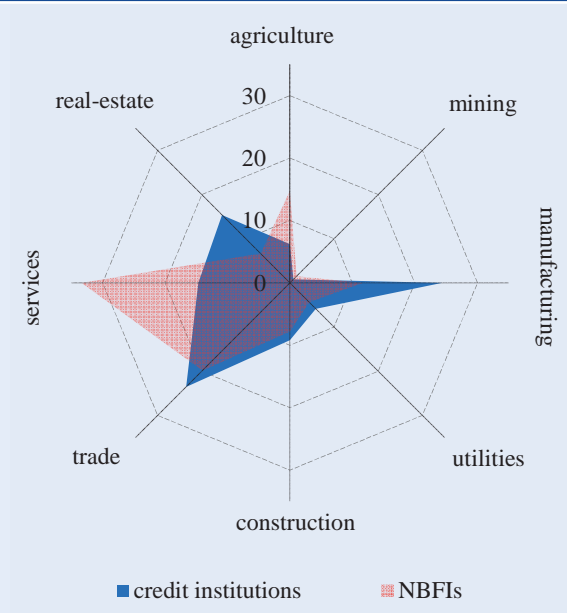
Lending by the NBFIs saw several structural changes in term of currencies, products, types of debtors and sectors financed. The significant narrowing of the differential between interest rates on leu-denominated loans and EUR-denominated loans, corroborated with the measures taken by the central bank during the previous years with a view to protecting unhedged borrowers, contributed to portfolio adjustment through the rise in the stock of leu-denominated loans (Chart 3.57.). The weight of financial leasing – the main product offered by the entities in this sector – in the total loan portfolio contracted in the period under review. By debtor, June 2013 through June 2014, the NBFIs sector posted a slight decline (around 3 percent, nominal change), while households witnessed a 2.6 percent nominal increase. The rebound in consumer demand also reflected in the dynamics of the NBFIs' portfolio, leading to a 2 percentage point increase in share of loans to households (mainly in the form of consumer loans) in total portfolio, to 25 percent. Moreover, the financing of non-financial corporations by type of activity illustrates the keener interest of the NBFIs in lending to agriculture, exposures to this sector going up 19 percent in the period under review. The comparative analysis of the breakdown of loans granted to non-financial corporations shows the focus of the NBFIs on agriculture and services, while real estate and manufacturing are better represented in the credit institutions' portfolio (Chart 3.58.).

Chart 3.57. Loans granted by NBFIs by borrower and currency



Source: NBR

Chart 3.58. Breakdown of loans to non-financial corporations by sector (June 2014)

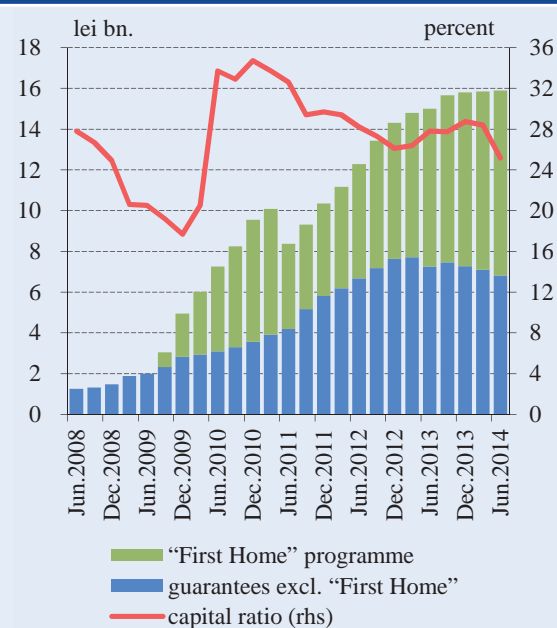


Source: NBR

The volume of collateral granted by the loan guarantee funds (Chart 3.59.), mainly under the government programmes intended to support economic activity and lending, rose by 6 percent since the release of the previous Report, the coverage ratio equalling 7.4 percent of the loans to the private sector. The continuation of the “First Home” programme and the changes it was subject to in August 2013 (lending in domestic currency only) had a key role in bolstering mortgage loans and narrowing the currency mismatch in the balance sheet of credit institutions. Furthermore, the implementation of the “Loan Guarantee Programme for Small- and Medium-sized Enterprises”, approved by Government Emergency Ordinance No. 92/2013, is expected to boost lending in the non-financial corporation sector in the period ahead.

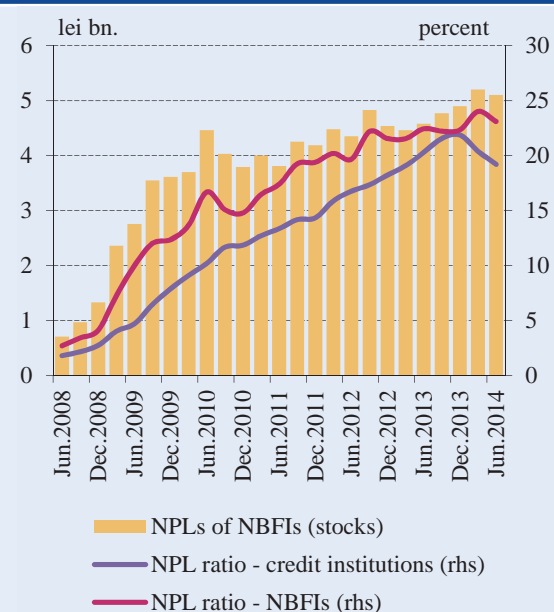
The accumulation of non-performing loans followed an upward path in the period under review (NPL stock went up 11.3 percent). The NPL ratio reached 23.1 percent in 2014 H1 and a slight widening of the difference from the indicator calculated for the banking system could be noticed, in contrast with the narrowing tendency seen starting with 2014 H2. Credit risk is contained due to the comfortable provision coverage of expected loan losses.

Chart 3.59. Provision of guarantees



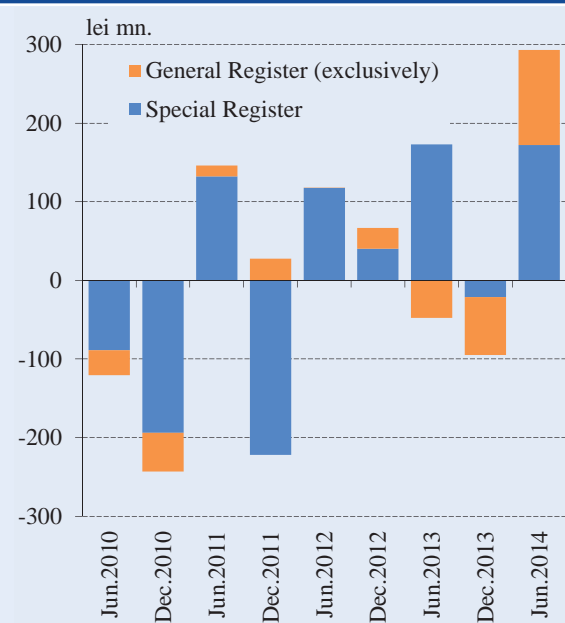
Source: NBR

Chart 3.60. Non-performing loans



Source: NBR

Chart 3.61. Profitability of the NBFIs sector

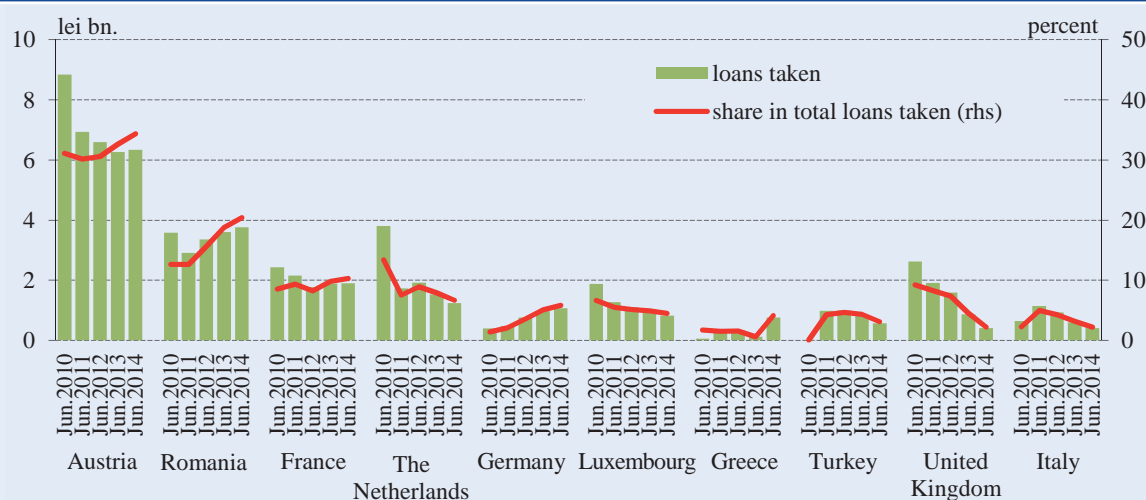


Source: NBR

The profitability indicators fluctuated in the period under review (Chart 3.61.). The net result in the 2013 financial year was in negative territory. Losses were concentrated mainly in small-sized NBFIs in the General Register, owing to higher expenses for provisions. Provisional data for 2014 H1 show that the NBFIs sector recorded a profit.

Since the release of the previous Report, the breakdown of loans taken by the NBFIs by country of origin indicates the consolidation of domestic loans (the share of which went up from 18.8 percent to 20.4 percent), in the context of a 4.3 advance in funds from credit institutions or shareholders in Romania. Nevertheless, the European market further represents the main financing source for the NBFIs, with the volume of loans from the key external creditors, i.e. Austria and France, remaining unchanged, while data on funds from other countries show, overall, ongoing deleveraging (Chart 3.62.).

Chart 3.62. Breakdown of borrowings by NBFIs by country of origin



Source: NBR

Box 2. NBFIs – component of the shadow banking system

The efforts to redefine the regulatory framework by strengthening the prudential requirements applicable to credit institutions were supplemented at both international and European levels by a series of initiatives to identify the main risks and to formulate recommendations for the shadow banking system¹ aimed at reducing systemic risks and regulatory arbitrage. Finance companies, which are entities regulated and supervised in Romania by the NBR, represent one of the main components of this sector.

Particular attention is attached to the probability that risks associated with the shadow banking sector may pass on to the regular banking sector. The interconnections between the two sectors can be both direct, as a result of capital and financing links, and indirect – exposure to the same debtors, lending to the same economic sectors or the existence of common funding sources. In Romania, the main balance sheet links between the two components of the financial system rely on two channels: financing of credit institutions – the NBFIs and shareholding. Specifically, from the perspective of the NBFIs, direct funds raised from credit institutions, in the form of capital and loans, account for around 10 percent of the liabilities of these entities, while from the banks' perspective, the balance sheet exposure to this sector is moderate (roughly 1 percent of total assets), pointing, overall, to a low interdependence between the two sectors.

However, the contagion risk may be more manifest between the entities in the same financial groups, as the NBFIs affiliated with credit institutions generally have domestic financing links with the credit institutions in the same group only. Moreover, within these groups, the funding risk may have a significant impact due to the common foreign creditor.

The relatively small share of loans from the NBFIs in total private credit granted by the Romanian financial sector and the magnitude of direct intersectoral links do not pose systemic threats to the business of these institutions for the time being.

Besides the potential risks to financial stability, the shadow banking sector also plays an important role and brings certain benefits, mainly as an alternative funding source of the real sector.

¹ According to the Financial Stability Board, the shadow banking system can be described as “credit intermediation involving entities and activities from outside the regular banking system”.

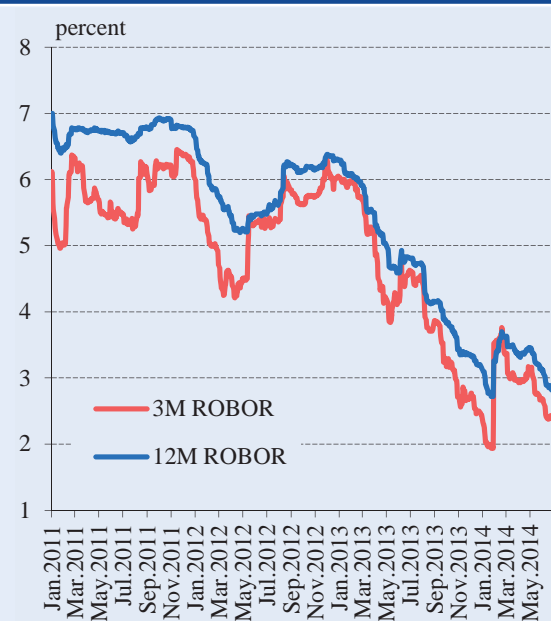
3.4. Financial markets

Financial market volatility showed an overall downward trend throughout 2013 and 2014 H1. The favourable developments in investors' risk aversion were due mainly to the improved domestic macroeconomic environment, even though, at times, volatility rose on account of tensions associated with the Ukraine crisis. The impact of the regional turmoil on the local financial markets was moderate and short-lived, amid sensitivity to external developments and the strong resilience of local markets to medium shocks in the medium and long run.

3.4.1. Money market

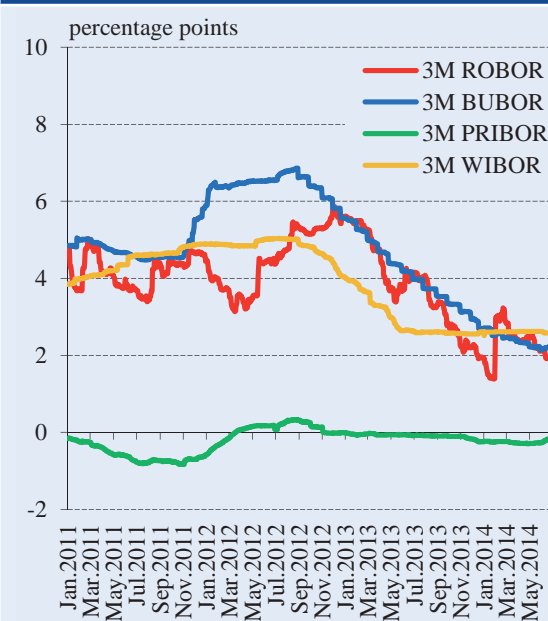
The 3M and the 12M ROBOR rates on the interbank money market further followed a downward path during July 2013 – June 2014 (Chart 3.63.). Exceptions from the overall downward path of interest rates across the whole maturity spectrum were noticed during July and part of August 2013, as well as in January-February 2014. By comparing the spreads between the other reference rates in the region and 3M EURIBOR with that of 3M ROBOR rate (Chart 3.64.), it can be inferred that the main determinants of the 3M and the 12M ROBOR rates have an important local component. Thus, the gradual cut in the monetary policy rate by the NBR, the change in the liquidity conditions and the expectations of credit institutions have been the main causes of the decline by around 2.2 percentage points in the 3M ROBOR rate and by roughly 2 percentage points in the 12M ROBOR rate during July 2013 – June 2014. However, on the other hand, the uncertainty surrounding the continuation of the asset purchase programme by the Federal Reserve System (Fed) and the tensions associated with the Ukraine crisis – the most notable external events in the period under review – prompted a sudden rise in interest rates on the interbank money market.

Chart 3.63. Average interbank money market rates



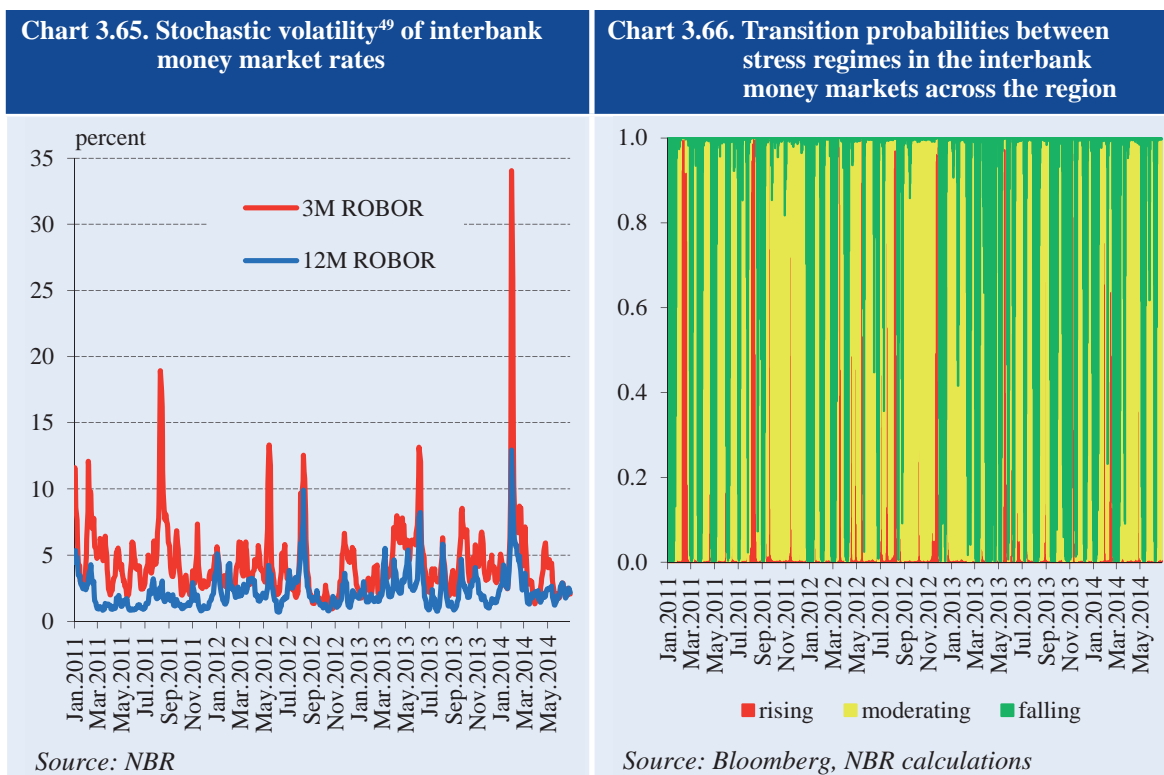
Source: NBR

Chart 3.64. Spread between 3M money market rates in the region and those in the euro area



Source: Bloomberg, NBR calculations

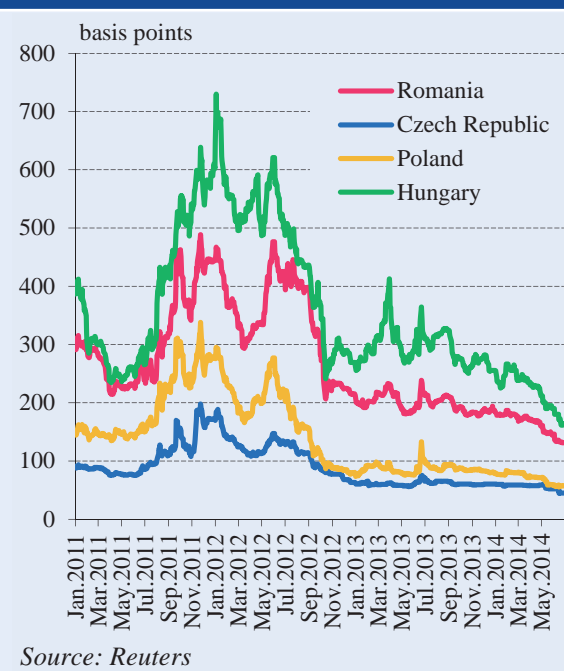
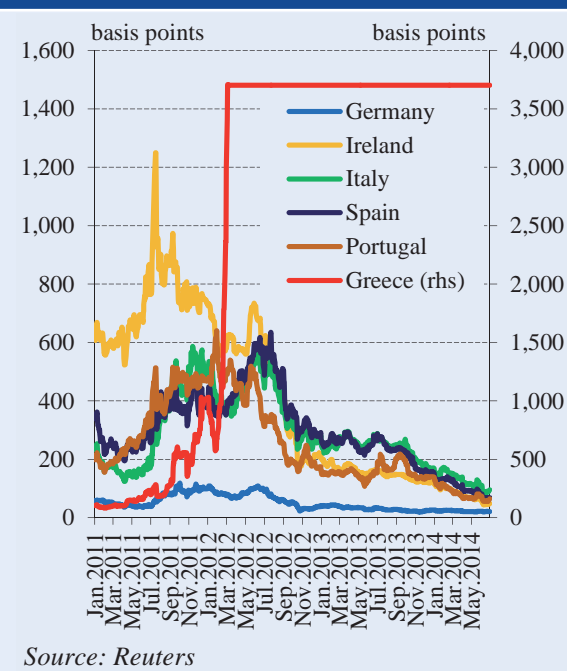
The differential between the volatilities of the 3M and the 12M ROBOR rates narrowed compared with the first years after the onset of the crisis (Chart 3.65.). This shows that the determinants of the dynamics of money market rates were generally the same, regardless of maturity, no market segregation by maturity being manifest. The more pronounced response of 3M ROBOR indicates that changes in investors' risk sentiment may generate excess volatility on the short term.



In 2013 H2, stress conditions⁵⁰ on the interbank money market were very low (Chart 3.66.). There were also few periods during which favourable and tighter funding conditions alternated. The tendency was further manifest in 2014 H1 as well. This development in the funding conditions on the Romanian interbank money market, determined by endogenous factors, overlaps the July 2013 – June 2014 period, when the ECB cut the monetary policy interest rate in two successive stages, from 0.5 percent to 0.15 percent. The more frequent alternation of the favourable financing conditions with tighter ones starting with January 2014 may be attributed to the cumulative effect induced by the higher volatility of liquidity on the interbank money market and of the non-residents' demand for lei.

⁴⁹ In order to calculate stochastic volatility, a data generating process based on the first order autoregressive model for the mean equation and on a geometric Brownian move for variance dynamics was considered. With a view to estimating the considered model, Bayesian techniques based on Markov Chain Monte-Carlo (MCMC) simulations were resorted to. Unlike the conditioned volatility, which actually is a linear dependency function relative to the previous temporal evidence, stochastic volatility is characterised by sensitivity not as high as the considered mean equation and, implicitly, the used data sample.

⁵⁰ In order to analyse stress conditions related to money market financing, the spread between 3M ROBOR (Romania) and 3M EURIBOR rates was considered. This methodology is based on a Markov model allowing the interest rate spread dynamics to shift between the different regimes. Considering that a high probability of a shift to a growing interest rate spread regime is indicative of heightening stress conditions in the interbank money market, applying a Markov model provides an overview of the developments in short-term bank financing pressures.

Chart 3.67. Developments in 5Y CDS quotes for some countries in the region**Chart 3.68. Developments in 5Y CDS quotes for some euro area countries**

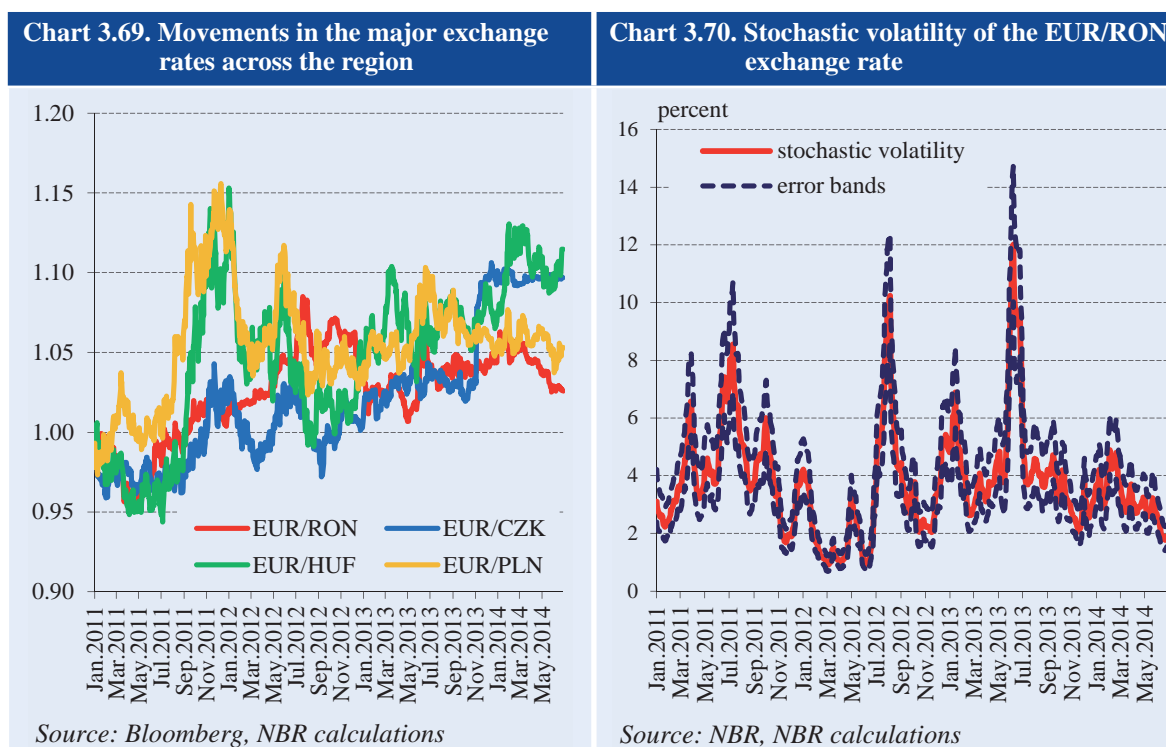
The optimistic market expectations on the future developments in the European real sector led to the decline in investors' risk aversion. This translated in the further downward trend in CDS quotes for both Western European countries and Central and East European countries (Chart 3.67. and Chart 3.68.). Moreover, starting with 2013 Q4, the volatility of sovereign CDS prices has declined. Foreign investors' sentiment regarding Romania's economic fundamentals improved gradually and this was accompanied by the reduction in the CDS quotes to 131 basis points at end-June 2014, compared with 184 basis points in the first trading day of the year.

3.4.2. Foreign exchange market

The uncertainty surrounding the continuation of the Federal Reserve's asset purchase programme, combined with the partial government shutdown in the USA, sent the EUR/RON exchange rate higher in the final months of 2013 (Chart 3.69.). The depreciation of the leu versus the euro was smoother than that of the Hungarian forint and the Czech koruna. By contrast, the Polish zloty proved more robust than its peers in the region. The US Federal Reserve's announcement on a tapering-off of its quantitative easing and tensions in Ukraine caused the depreciation trend of the leu against the euro to carry on.

The improvement in the economic outlook for Romania over the period 2014-2015, according to the European Commission forecasts, caused foreign investors' risk aversion to decline and the Romanian currency to resume the appreciation trend against the single European currency starting March. In 2014 Q2, the leu followed a trend opposite to those of its peers in the region. The leu saw a quicker appreciation to the euro after Standard&Poor's ratings agency decided in May to upgrade Romania's sovereign rating to investment grade (from BB+ to BBB-). As from 2013 H2, the EUR/RON exchange rate volatility posted considerably lower fluctuations than in previous years (Chart 3.70.). By comparing the developments in exchange rate volatility and interbank money market rate volatility,

an asymmetry is manifest in the response to the shock triggered by the events in Ukraine, in spite of the strong connection between the foreign exchange market and the money market.



3.4.3. Government securities market

The term structure of the newly-issued government securities improved further during 2013 and in 2014 H1, with very short-term paper losing ground in favour of longer-term (over five years) bonds (Chart 3.71.). Public debt management policy thus helped strengthen financial stability, considering also the drop in the total value of securities issues, amid the general government deficit remaining below the 3 percent-of-GDP threshold in 2012 and 2013. The sharp fall in the volume of Treasury bills with maturity of up to one year pushes refinancing risk lower, whilst medium- and long-term bonds prompt institutional investors into government securities trading.

Value of government stock dealings in the interbank secondary market increased markedly in 2013, with this trend persisting into 2014 H1 (Chart 3.72.). In 2013, government securities market liquidity improved amid the hefty rise in government paper holdings by non-residents, from 14.2 percent to 21 percent of total leu-denominated government securities issued on the local market. Non-resident investor interest was also kindled by the decisions taken by Barclays and JP Morgan in November 2012 and January 2013 respectively, to include, as of March 2013, Romanian bonds into the EM Local Currency Government Index and the GBI-EM global index of sovereign bonds in local currency issued on emerging markets respectively.

Chart 3.71. Breakdown of government securities issuance by maturity (M)

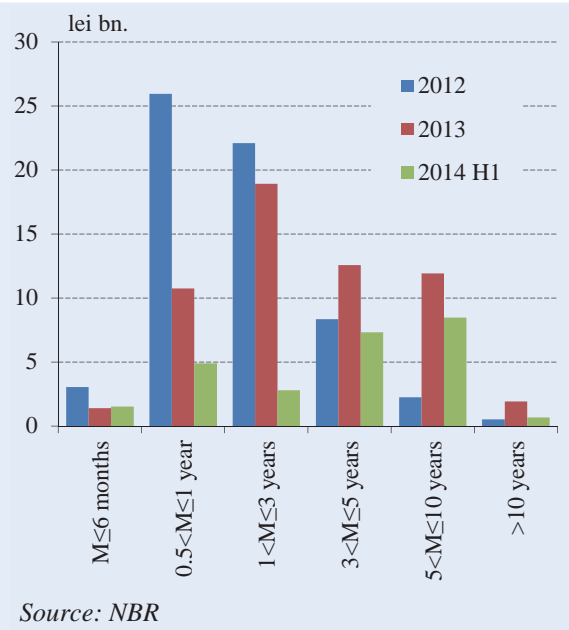
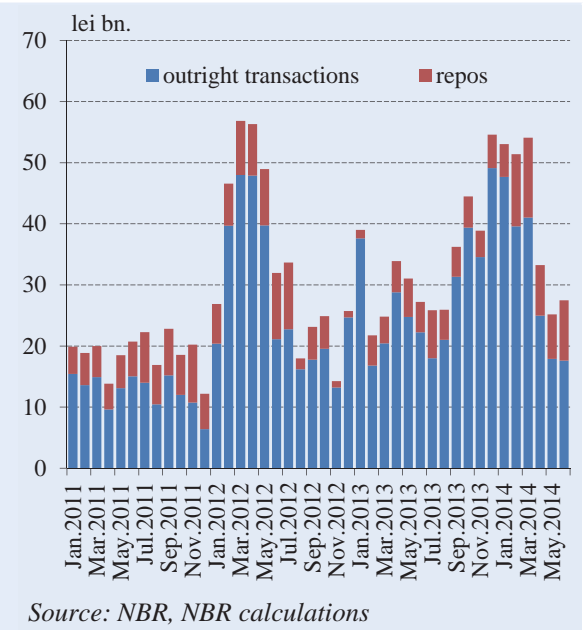


Chart 3.72. Transactions in government securities on the interbank secondary market



The US Federal Reserve announcing a tapering-off of its quantitative easing and the tensions in Ukraine at end-2013 and in early 2014 sent yields on government paper higher, but the impact was only short-lived and could not reverse the downward trend in yields over the last few years (Chart 3.73.). Moreover, volatility of yields on government securities surged in November 2013, and again in 2014 Q2, amid the above-mentioned tensions in the region (Chart 3.74.). Foreign contagion on the market for government securities is indicative of both sensitivity to regional developments and high resilience of the local market to medium-size shocks over the medium and long term.

Chart 3.73. Annual yield on government securities with residual maturity of one year

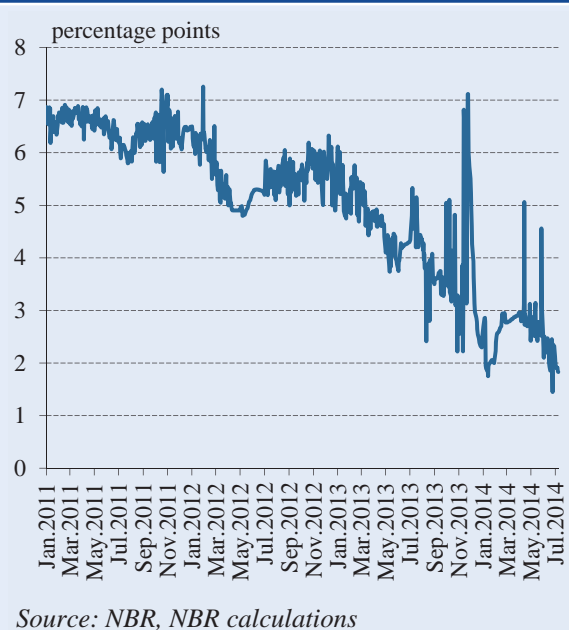
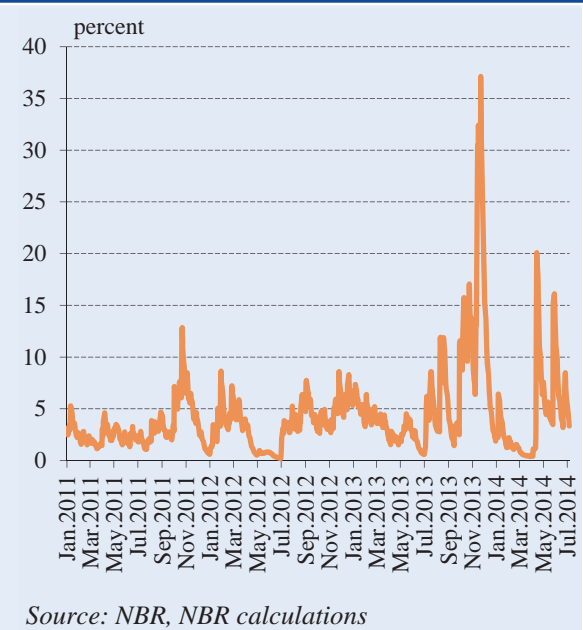
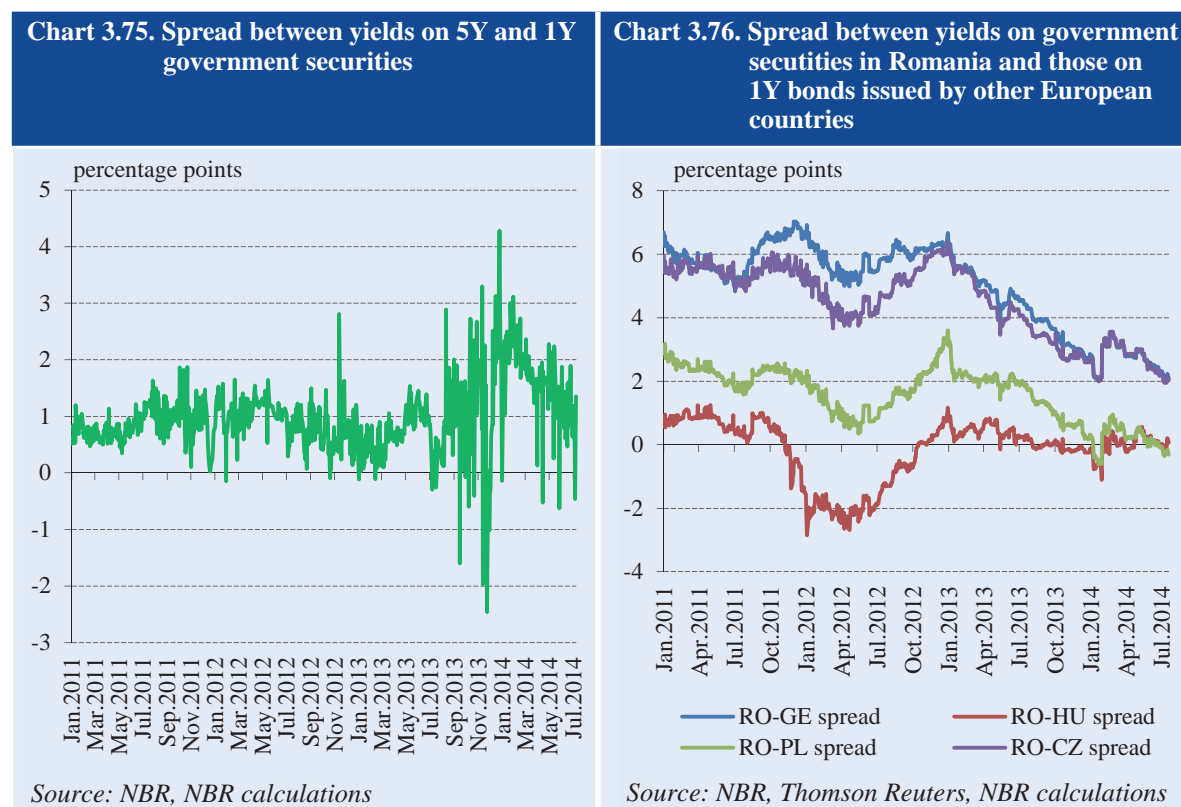


Chart 3.74. Volatility of yields on government securities with residual maturity of one year



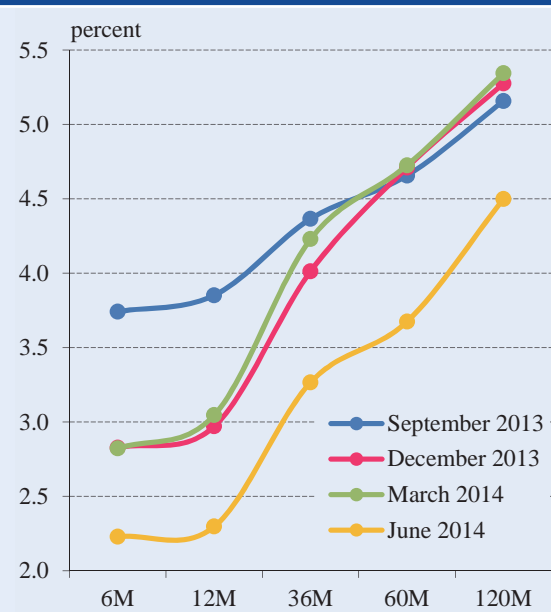
The regional turmoil brought about investor expectations of higher risks over the medium term on the government securities market in Romania, but this was only short-lived. Thus, the 5Y and 1Y bond yield spread is on the wane and tends to reach the level seen prior to the outburst of tensions in the region (Chart 3.75.).



Yields on local government securities kept converging towards regional and European yields during the past year, so that the yield on Romania's 1Y government securities is similar to those launched by other countries in the region and approximately 2 percentage points above that of the German Bunds with the same maturity. In early 2014, investors foresaw slightly stronger risks for the Romanian market than for other markets in the region, given the Ukraine crisis, but the spread between yields on government securities in Romania and those issued by other European countries fell back close to end-2013 levels (Chart 3.76.).

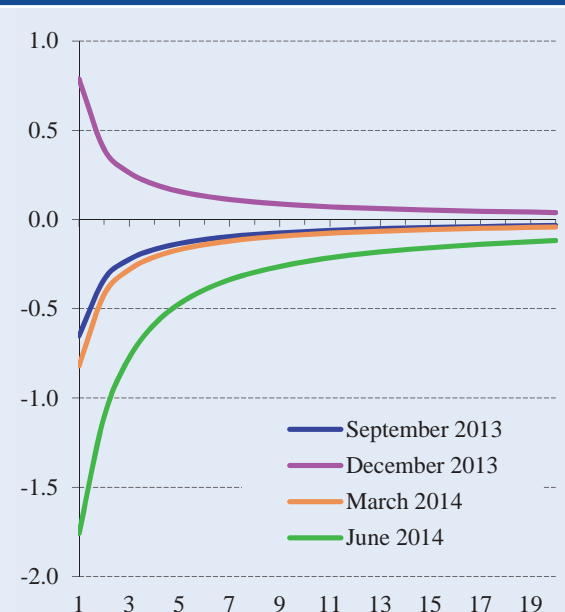
The yield curve of government securities traded on the secondary market showed downward changes for the entire maturity spectrum in the period July 2013 – June 2014 (Chart 3.77.). However, the change in yields featured a number of nonlinearities across the term structure (Chart 3.78.) The nonlinearities were driven by a variety of factors, which had a bearing on bond prices in the secondary market. Hence, the final quarter of 2013 exhibited a hefty reduction in short-term yields, compared with a same-direction, albeit far lower, movement in yields on 3Y bonds. At the same time, yields on 5Y securities remained virtually unchanged, whereas those on 10Y bonds were headed slightly upwards.

Chart 3.77. Yield curve⁵¹ in the secondary market in 2013 Q3 and Q4, and 2014 Q1 and Q2 respectively



Source: NBR

Chart 3.78. Slope of the yield curve⁵² in the secondary market in 2013 Q3 and Q4, and 2014 Q1 and Q2 respectively



Source: NBR, NBR calculations

The dynamics of the yield curve at end-December 2013 against end-September 2013 may be ascribed to the fact that banks' liquidity surplus had a strong impact on the short end of the maturity spectrum in particular. On the other hand, the 24-year low of CPI inflation seen in December may have generated an upward revision in investor expectations on future price developments, benefitting long-term yields as well. In March, the change in 3Y bond yields alone can be attributed to the effect of the 0.5 percentage point policy rate cut implemented in two successive stages. The slope of the yield curve at end-March is quite close to that recorded at end-September, considering the two policy rate cuts decided in July and August 2013. The ECB's easing of monetary conditions in June, when for the first time ever a negative deposit facility rate was implemented, had a positive impact on the yield of Romanian government paper. Against this background, the yield curve posted a downward shift throughout the maturity spectrum in June 2014, with long-term maturities being more sensitive to these dynamics.

3.4.4. Capital market

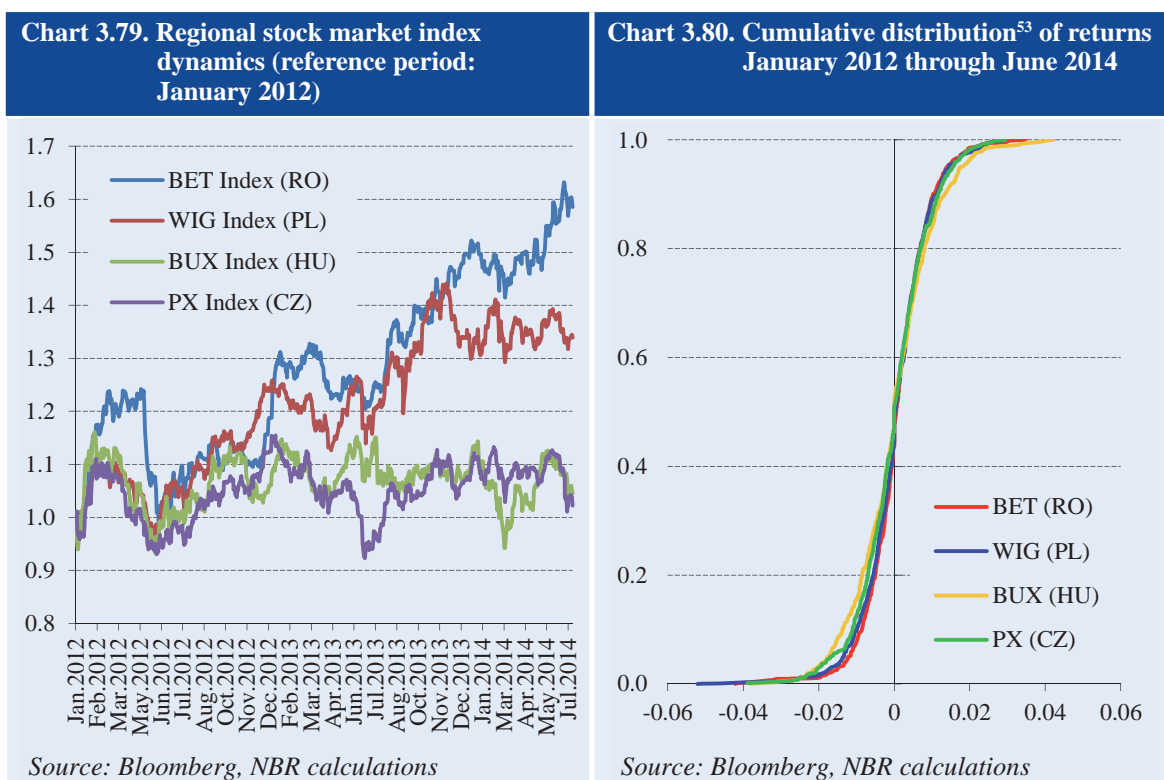
The Bucharest Stock Exchange stayed on an uptrend in the period under review, even though its major indices were still below the pre-crisis peaks. The BET index, which reflects the developments in the ten most liquid equities listed on the BSE, was in positive territory from January 2012 to June 2014 (Chart 3.79.), exhibiting a higher return than the other indices across the region. During the first half of 2012, the key stock market indices of Romania, Hungary, the Czech Republic and Poland moved in tandem, showing a steep plunge attributed to the intensification of the sovereign debt crisis

⁵¹ This curve was constructed based on fixing rates provided by the NBR.

⁵² The slope of the yield curve is shaped after calibrating the Nelson-Siegel model. It is the second common factor weighing on yields across the term structure and shows the difference between changes in long- and short-term yields.

and heightened fears over a possible exit of Greece from the euro area. By contrast, starting 2013, the Romanian capital market embarked on a sustained upward path, similarly to its Polish peer, whereas the stock exchange indices in Budapest and Prague posted mixed developments and low fluctuations over the period from January 2013 to June 2014.

Among the main contributors to the good performance of the Romanian capital market were higher-than-expected economic growth, furthering of fiscal consolidation, and keener foreign investor interest in the emerging market economies in Central and Eastern Europe. Encouraging signals on the development of the Bucharest Stock Exchange came from the public offerings for stocks and bonds, which became more frequent starting 2013 H2, whereby liquidity increased and investors' risk perception improved. In this favourable context, the BET index displayed elevated resilience to the negative shocks on global capital markets, as reflected in the cumulated distribution of returns (Chart 3.80.).



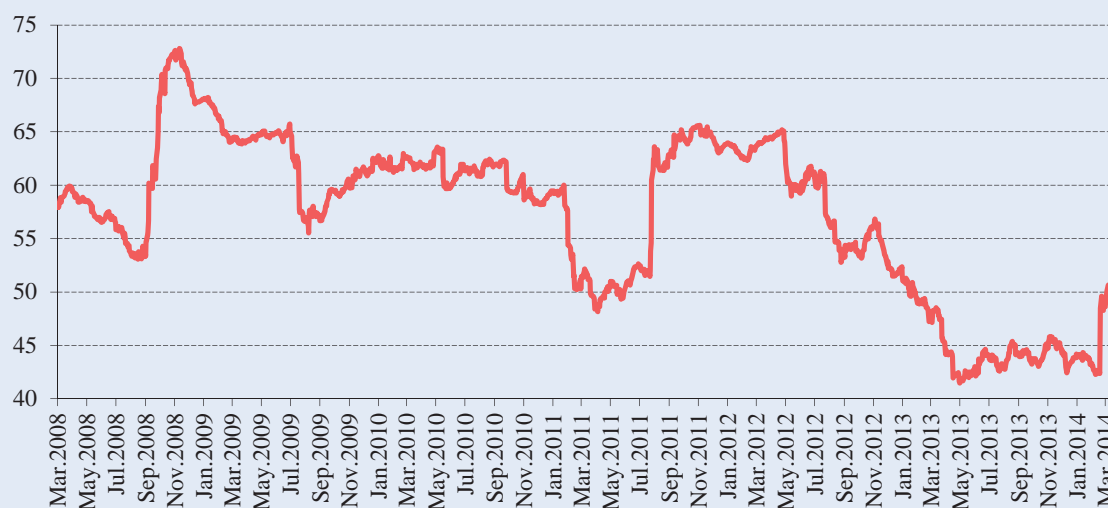
⁵³ Cumulated probability distribution of returns in respect of four stock exchange indexes (see Chart 3.80.) was calculated using a Kaplan-Meier estimation function. Oy axis shows figures in the [0,1] range of probability levels for which the function was estimated. Ox axis shows various readings of index returns related to probability levels.

Box 3. Analysis of contagion on financial markets

The intensification of political and military tensions associated with the conflict in Ukraine caused financial market turmoil all over the world. The crisis in Ukraine broke out at a time when European economies were recovering from the losses incurred during the recent recession. Hence, this early-2014 episode sparked debates over the economic and financial impact of the conflict in Ukraine. On the one hand, the hike in energy prices entails corrections across the economy, whereas the portfolio rebalancing decisions may bring about contagion on financial markets in Central and Eastern Europe. Against this background, an analysis was called for to assess whether contagion materialised across the region and to identify the effects of such a phenomenon on financial markets in Romania¹.

The first step of the analysis was to introduce an aggregate indicator for measuring contagion on international capital markets². The methodology is based on vector autoregressions (VAR) congruent with traditional approaches³, which allow for calculating the variance decomposition underlying the quantification of contagion effects on capital markets. In order to provide an overall picture of the transmission mechanisms of shocks on the international capital market, the analysis encompasses 12 stock market indices in the United States and Western Europe (the United Kingdom, France, Germany) and Central and Eastern Europe (the Russian Federation, Poland, the Czech Republic, Hungary, Romania and the Baltic countries) in the period June 2007 – April 2014.

Chart A. Contagion index of the 12 stock market indices for the period March 2008 – March 2014



After the index was built, it may be concluded that the first episode, namely the global financial crisis, had the heaviest impact in the transmission of contagion effects, followed by the sovereign debt crisis and the recent conflict in Ukraine. Although in early 2014 the index reported a far lower

¹ Similar analyses were also made within the ESCB Macroeprudential Research (MaRs) by Hartmann, Hubrich, Kremer and Tetlow (2012), as well as in the BIS by Sugihara (2010).

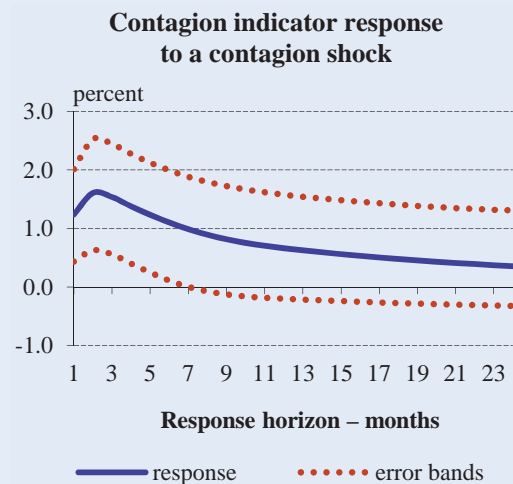
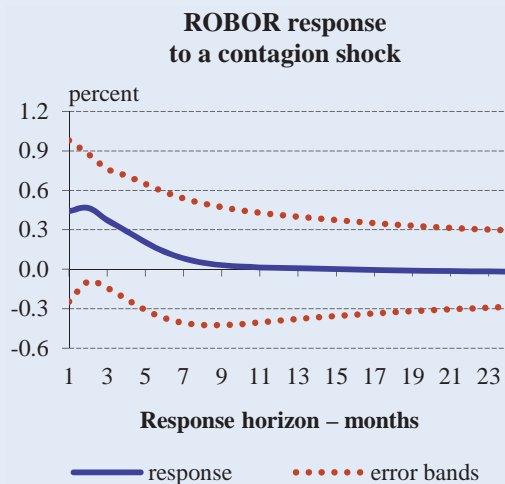
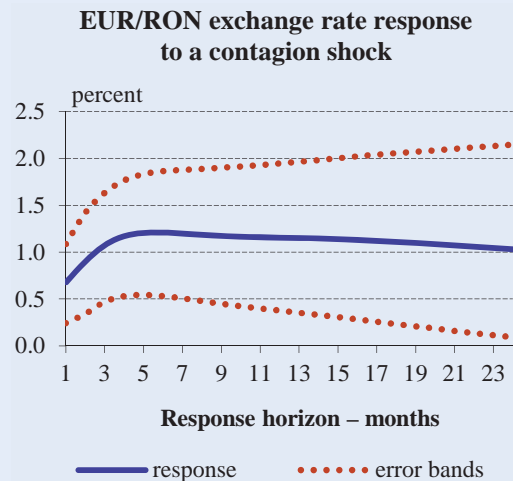
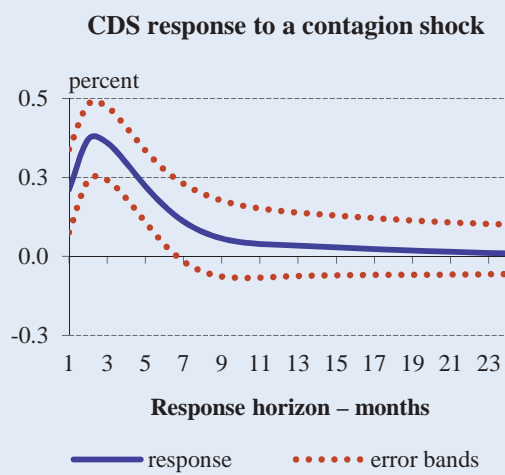
² Diebold and Yilmaz (2012).

³ Engle, Ito and Lin (1990).

level than those observed in the past crises, the sizeable leap in March illustrates the swift spillover of tensions via the major contagion channels at global level.

The second stage was to investigate how regional contagion affects the financial markets in Romania. To this end, vector autoregressive models with sign restrictions were employed. Specifically, the study sought to quantify the negative effects stemming from the intensification of contagion on the money market, sovereign credit market and foreign exchange market in Romania. With a view to summarising the activity on the three financial markets, the following time series were used: 3M ROBOR rate for the money market, 5Y CDSs for the sovereign credit market and the EUR/RON exchange rate for the foreign exchange market. The model actually simulates an increase in contagion for the purpose of examining financial market behaviour in Romania over a two-year horizon.

Chart B. Impulse response functions of Romania’s financial markets in case of a contagion shock



The ensuing results show that contagion following an unpredictable event, such as the political tensions in Ukraine, may cause CDS quotes to increase by 0.37 percentage points. The shock is transitory, fading away in approximately one year (Chart B). The same holds true for the response of the 3M ROBOR rate to a contagion shock, but in this case the spillover effects fade out far quicker. The results show that the emergence of an unforeseen contagion shock may push interbank market rates up by as much as 0.5 percentage points. Last, but not least, contagion causes the exchange rate to depreciate by about 1.2 percent. The spillover effects fade much more slowly than in the other two cases, but it should be pointed out that error bands widen significantly, exhibiting an explosive behaviour beyond the five-month horizon. In order to check the validity of final results, a recursive scheme was used for identifying the contagion shock. The only significant difference was the exchange rate reaction, i.e. an increase of approximately 0.9 percent when contagion occurs. Moreover, it is noteworthy that the error bands were much narrower and that contagion effects declined after about one year.

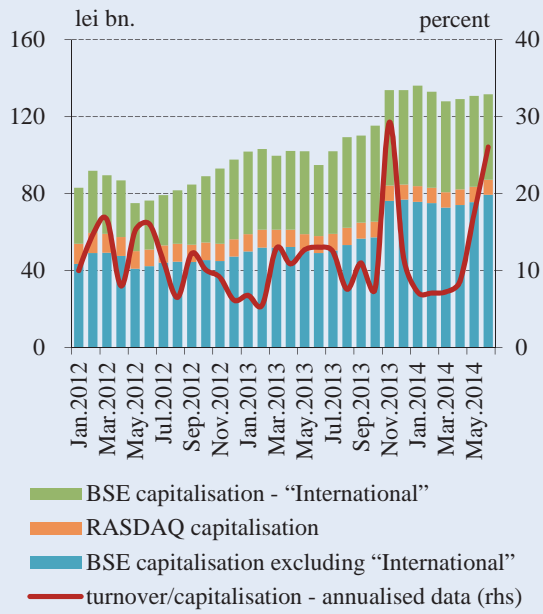
To sum up, the results indicate that the intensification of contagion would have temporary effects on financial markets in Romania.

Bucharest Stock Exchange capitalisation trended upwards from May 2012 to June 2014, after a relatively short-lived episode of negative performance in the first part of 2012, when the already battered international environment was threatened by an uncertain future for the euro area (Chart 3.81.). Stock market capitalisation of local companies rose year on year by 14.74 percent in 2013 and 51.69 percent in 2014, making a decisive contribution to the development of this financial market segment in Romania, whereas RASDAQ market capitalisation declined moderately over the reported period. The international sector of the BSE followed a sharply upward trend starting in 2012 H2 until end-2013, but thereafter this trend flattened out, and the sector's weight in total BSE capitalisation remained, on average, at around 38 percent.

Annualised liquidity⁵⁴ posted mixed developments in 2012 and 2013 H1, before embarking on a steep uptrend in the run-up to the end of the year, reaching a peak in November. By contrast, in 2014 Q1, annualised liquidity reverted to levels close to the average of the period under review, before witnessing again positive performance in 2014 Q2. Volatility of the major BSE indices shows relatively stable dynamics from March 2012 to June 2014 (Chart 3.82.), interrupted by two episodes of heightening tensions on the local financial market. While the first episode overlapped with a period when Europe grappled with the sovereign debt crisis, the second was manifest amid the uncertainty surrounding the political and social crisis in Ukraine that entailed considerable capital reallocations, as investors decided to rebalance their risky asset portfolios.

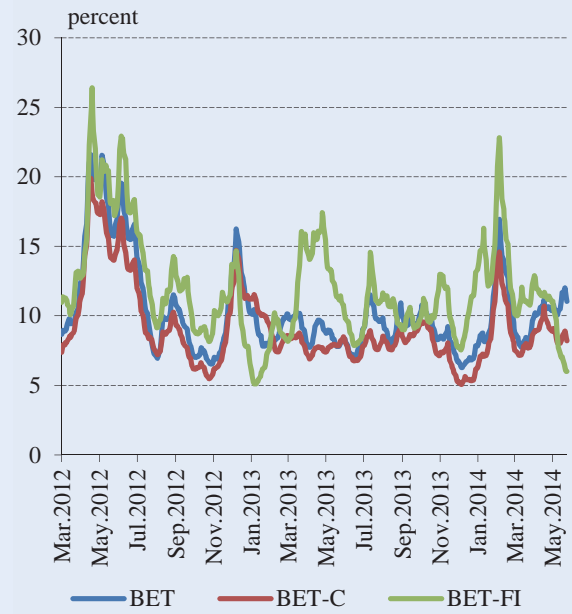
⁵⁴ Monthly transactions * 12 / Market capitalisation at the end of the month.

Chart 3.81. Domestic market capitalisation and annualised liquidity



Source: BSE, NBR calculations

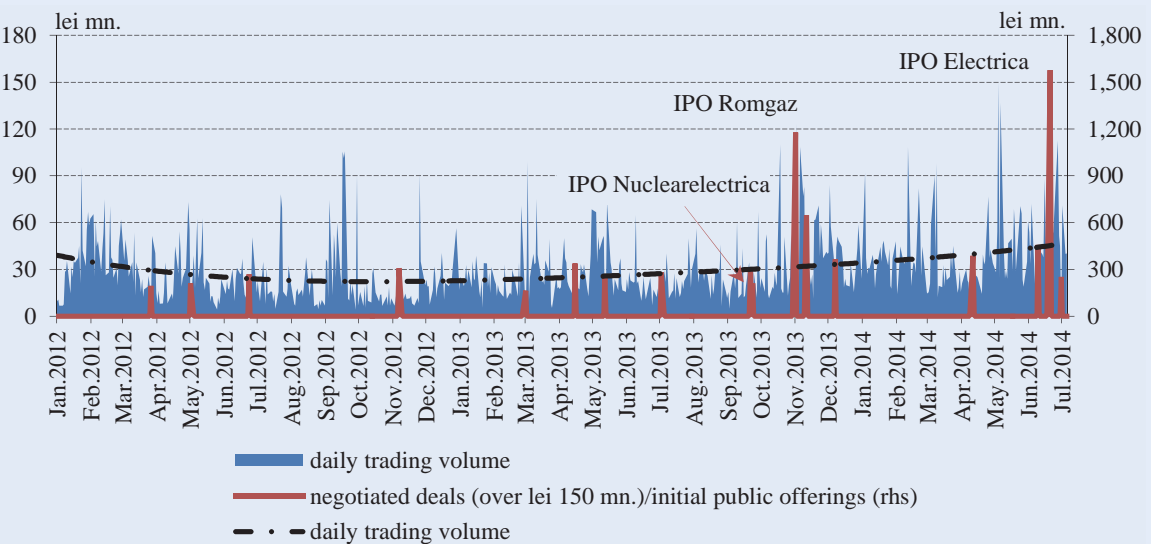
Chart 3.82. Volatility of BSE indices



Source: Bloomberg, NBR calculations

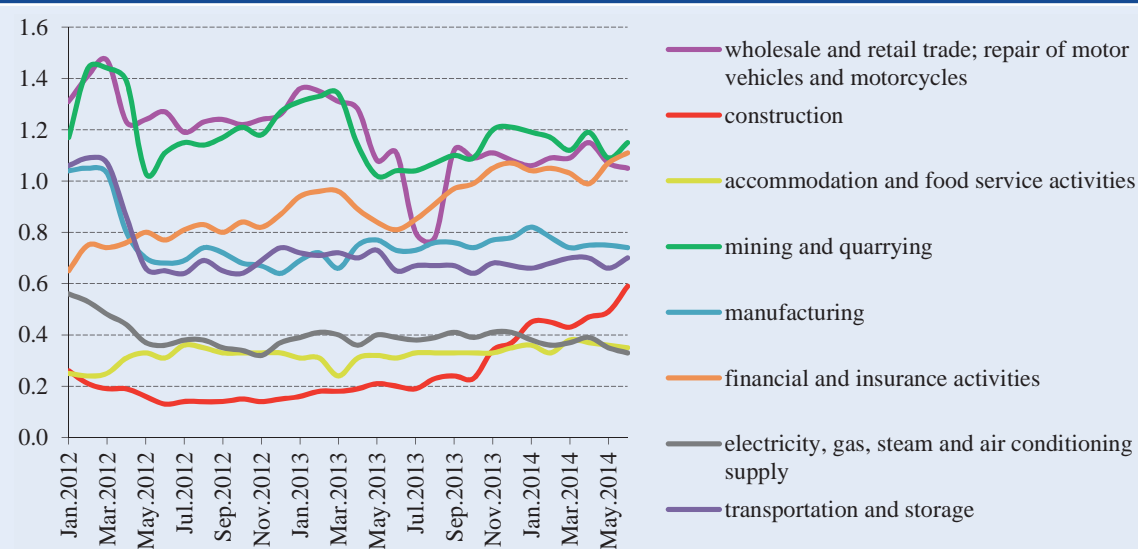
Daily traded volume on the BSE exhibited fluctuations throughout 2013, but entered an upward path in the closing months of 2013 and 2014 H1 (Chart 3.83.). Against this background, the daily traded volume rose, on average, from lei 20 million at end-2012 to more than lei 40 million in 2014 Q1.

Chart 3.83. Daily trading volume and significant deals on the BSE



Source: BSE, NBR calculations

Chart 3.84. PBV ratio by sector



Source: BSE, NBR calculations

The price-to-book value ratio⁵⁵ for the business sectors of the listed companies on the BSE recorded substantial differences by sector and in terms of the performance in the period under review (Chart 3.84.). The PBV ratio for financial and insurance activities, as well as that for construction, followed a rising trend that started in 2013 Q4. While the former ratio climbed from 0.6 in January 2012 to 1.1 towards the end of 2014 Q1, the latter trebled against the figure recorded at the beginning of the reported period. The sub-par levels of the PBV ratio may be an indication of some business sectors being undervalued, as is the case of construction, electricity, gas, steam and air conditioning supply or manufacturing, whereas wholesale and retail trade, mining, financial and insurance activities registered above-par levels, i.e. their market value was higher than the book value.

⁵⁵ The PBV ratio is calculated as the ratio of a listed company's market capitalisation and its total book value (total assets less total liabilities).

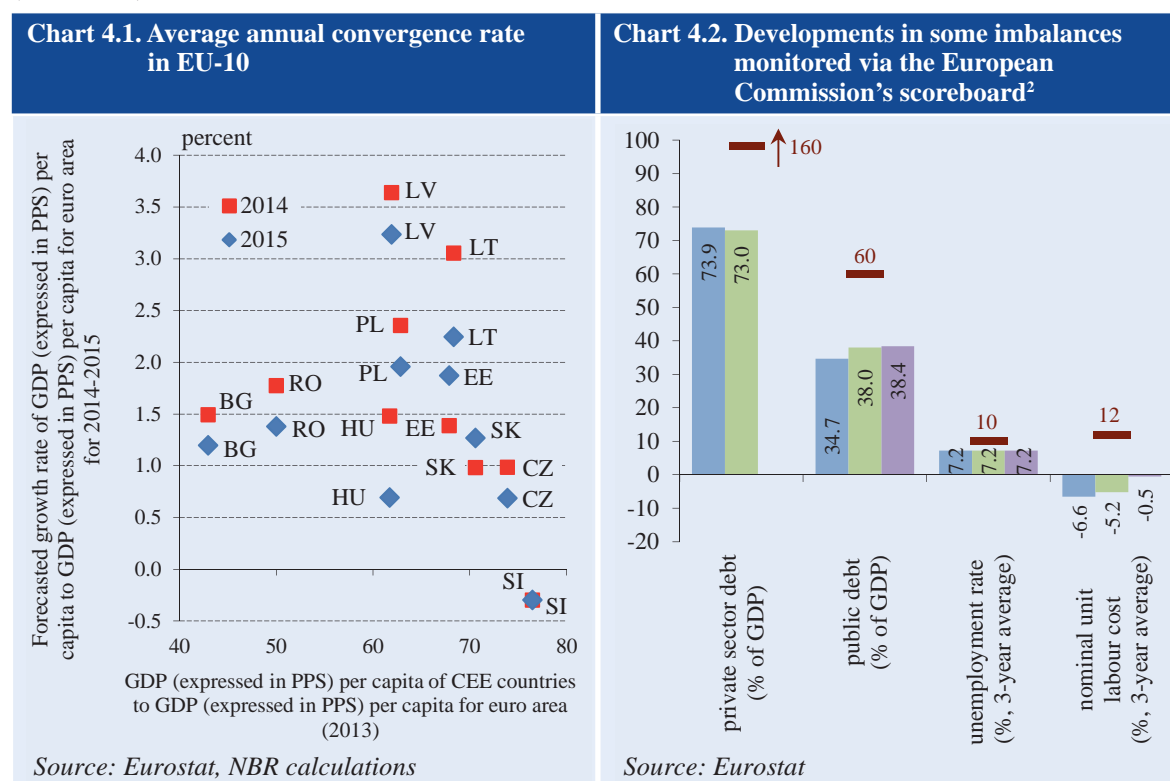
4 RISKS RELATED TO DOMESTIC ECONOMIC AND FINANCIAL DEVELOPMENTS

4.1. Domestic macroeconomic developments

The risks stemming from domestic macroeconomic developments have remained on a downward trend since the release of the previous Report, on the back of strengthened positive economic growth and the further prudent fiscal policy stance. The major part played by domestic macrostability in ensuring financial stability requires the implementation of additional measures with a view to boosting sustainable economic activity and carrying on fiscal consolidation.

4.1.1. Real sector

In 2013, Romania's economy posted one of the fastest growth rates in the EU, i.e. 3.5 percent, above that reported in 2012 (+0.7 percent). The positive dynamics of economic activity were mainly bolstered by industry (which benefitted from auspicious conditions in terms of external demand) and agricultural production (due to favourable weather conditions). The projections for 2014 and 2015 point to moderate GDP dynamics¹, the convergence of income per capita in Romania towards the euro area average being expected to continue at a pace similar to the average of the countries in the region (Chart 4.1.).



¹ The European Commission expects Romania's economy to grow by 2.5 percent in 2014 and by 2.6 percent in 2015, while the EU average growth is projected to stand at 1.6 percent and 2 percent respectively (European Commission's spring 2014 economic forecast released in May 2014).

² The scoreboard is the tool underlying the reviews of the Alert Mechanism Report, a component of the new framework for monitoring macroeconomic imbalances at European level.

The macroeconomic environment is further sustainable, with the main indicators monitored by the European Commission in this respect showing relatively low risks of imbalances in the near future (Chart 4.2.). The major vulnerabilities in terms of financial stability are: slower-paced strengthening of economic recovery and slacker tempo of reforms aimed at ensuring sustainable growth. In 2013, Romania signed a new precautionary Stand-by Arrangement with the international institutions (the EU, the IMF and the World Bank) with a view to carrying on structural reforms, particularly those designed to improve market functionality, increase resilience to external shocks and consolidate the long-term growth potential.

The resumption of economic growth is still frail, as the slower advance in Romania's trade partners may affect domestic economic rebound. Moreover, investment, which is a key driver of long-term sustainable development, contracted in 2013, and the trend persisted in 2014 H1 as well. Developments were mixed across sectors, with construction and industry being hit (the shares of sectoral net investment in total net investment economy-wide fell from 19.5 percent and 42 percent respectively in 2012 to 16.6 percent and 38.9 percent respectively in 2014 H1), whereas investment in agriculture grew stronger (6.2 percent in 2014 H1).

With a view to boosting investment, the Romanian government has taken a series of measures such as tax exemption for earnings reinvested in equipment, the implementation of new schemes aimed at ensuring SMEs' larger access to funding and the cut in employers' social security contribution rate by 5 percentage points. The government also seeks to spur investment by achieving a higher EU fund absorption rate³. Although the absorption rate of funds available for 2007-2013 increased (from 21.2 percent in September 2013 to 37.9 percent in September 2014⁴), Romania still posts one of the lowest fund absorption rates in the EU.

Innovation-based growth is an important objective for Romania, in line with the Europe 2020 Strategy, yet it remains largely an unrealised goal. Romania's R&D expenditure is further low (0.5 percent of GDP in 2012), markedly below the EU average (2 percent of GDP in 2012) and the R&D intensity target set in the Europe 2020 Strategy (2 percent of GDP by 2020, of which 1 percent from public funding and 1 percent from private funding). The latest measures taken to stimulate research and development were the creation of innovation clusters made of public institutions, large companies and SMEs and, in 2013, the increase in the share of R&D expenditure that is deductible for tax purposes from 20 percent to 50 percent.

4.1.2. Public sector

Financial stability was also underpinned by fiscal consolidation carrying on in 2013 and in the first months of 2014. The general government deficit narrowed to 2.3 percent of GDP (according to ESA95 methodology) in 2013 from 3 percent of GDP a year earlier. In the first eight months of 2014, the public deficit stood lower than in the same year-ago period, i.e. 0.2 percent of GDP versus 1.3 percent of GDP (national methodology). For 2014, the government set a deficit target of 2.2 percent of GDP (ESA95 methodology and national methodology), up 0.2 percentage points from that set initially, following the inclusion of higher expenditure for EU-funded project co-financing.

³ Romania and the European Commission concluded the Partnership Agreement on using EU Structural and Investment Funds for growth and jobs in 2014-2020 worth EUR 30.6 billion.

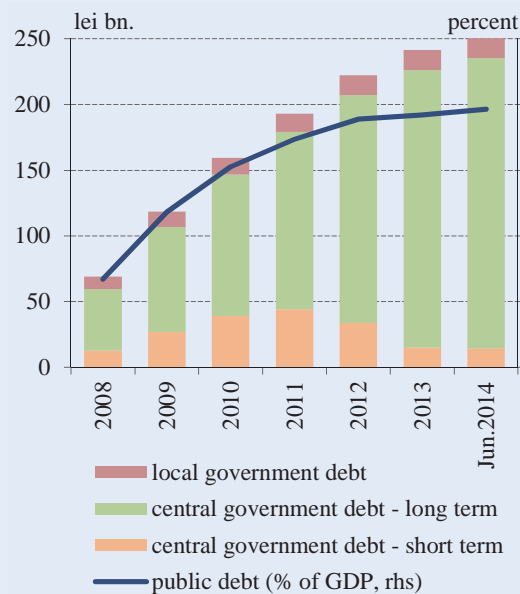
⁴ Regulation (EU) No. 1297/2013 of the European Parliament and of the Council allowed Romania to further draw EU funds from the 2007-2013 budget.

The structural budget deficit fell to 1.7 percent of GDP in 2013 from 2.5 percent of GDP in the previous year.

In order to secure sustainable fiscal policy and meet the fiscal targets, the authorities undertook to (i) streamline public expenditure via laying down principles and criteria for prioritising public investment projects; (ii) consolidate budget revenues by cutting tax evasion and improving voluntary compliance and (iii) carry on the reform of state-owned enterprises and the reduction in public sector arrears. In 2013, central and local government arrears and state-owned enterprises' arrears fell markedly, with local government arrears declining by around 77 percent in December 2013 versus the same year-earlier period. Romania committed itself to maintaining a structural deficit of 1 percent of GDP starting 2015, for which purpose it amended the legislation by including specific quantitative targets relative to long-term fiscal policy.

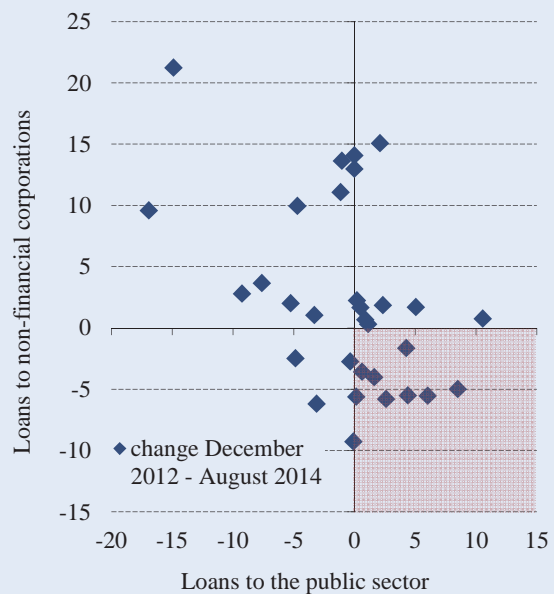
Public debt-to-GDP ratio further increased (to 39.3 percent in June 2014 from 38.4 percent of GDP in 2013 and 38 percent of GDP in 2012, ESA95 methodology), remaining however below the 60 percent of GDP reference value in the Treaty on the Functioning of the European Union. The composition of public debt mirrors a relatively low financing risk, given that (i) medium- and long-term public debt rose significantly (to 94 percent of total public debt in June 2014 from 85 percent in 2012, Chart 4.3.), and (ii) the share of leu-denominated public debt is further elevated, standing at 43 percent of total public debt in June 2014.

Chart 4.3. Public debt and its components



Source: MPF, NIS, NBR calculations

Chart 4.4. Change in the share of loans to the public sector/real sector in total bank assets per bank in December 2012 – August 2014



Source: NBR, NBR calculations

The increased presence of non-resident investors on the domestic market of leu- and EUR-denominated government securities may represent a vulnerability if market sentiment changed towards higher risk aversion. In June 2014, these investors accounted for 21.1 percent of the government securities issued on the domestic market versus 14.2 percent in December 2012. Issues of government bonds on the external markets increased, taking 34 percent of total government securities issues in July 2014 against 25 percent in the same year-ago period. Another vulnerability is the government's lower ability to meet any additional funding needs, given the persistently low budget revenues (as a share of GDP). With a view to improving this unfavourable position and managing potential budget holes, the government established a foreign currency fiscal buffer to help meet budget financing requirements for around six months.

The banking sector is a major finance provider to the government sector, as domestic banks hold 32 percent of public debt (June 2014), most of which is made up of leu-denominated loans (approximately 76.4 percent in June 2014). Central government loans account for the largest share of public debt financed by banks, whereas local government loans merely take 2 percent of total bank assets. However, 86 percent of the latter loans are concentrated in the top five banks in Romania (August 2014). Bank exposure to the public sector entails a potential risk of crowding out the real sector assuming a rebound in loan demand from non-financial corporations. In August 2014, exposure to the general government held a relatively significant share of total bank assets, i.e. 21 percent. Changes in banks' balance sheets do not indicate the occurrence of such a crowding out risk (lower bank exposure to the corporate sector was not accompanied by a substantially higher exposure to the public sector, Chart 4.4.), yet vulnerability remains given the persistence of subdued loan demand from the real sector and the further tight bank lending policies⁵.

4.2. Corporate and household lending

The sustainable recovery of lending to the real economy, including by extending the lending scope to cover viable companies that have not taken bank loans so far, is one of the major challenges facing the domestic banking sector.

Total corporate and household loans from financial institutions⁶ fell by 4 percent⁷ December 2012 through June 2014, amounting to around EUR 71 billion (Chart 4.5.), on the back of faster deleveraging across both the domestic financial sector and the real economy in Romania. Resident banks and foreign creditors reduced their exposures to the private sector by similar percentages (down 4.5 percent and 3.7 percent respectively in the period December 2012 – June 2014), while resident NBFIs slightly increased their exposure (up 0.8 percent). The ranking of financial creditors of companies and households remained broadly unchanged since the release of the previous Report. Thus, at 30 June 2014, out of the total loans to real economy, resident banks accounted for two thirds (67.8 percent), foreign creditors held one quarter (25.4 percent) and resident NBFIs took 6.8 percent.

Leu-denominated loans followed an uptrend (Chart 4.6.), ascribable to: (i) the significant cut in their costs as a result of monetary policy measures (December 2012 through August 2014, the monetary policy rate was lowered by 2.00 percentage points to 3.25 percent); (ii) the adoption by the NBR

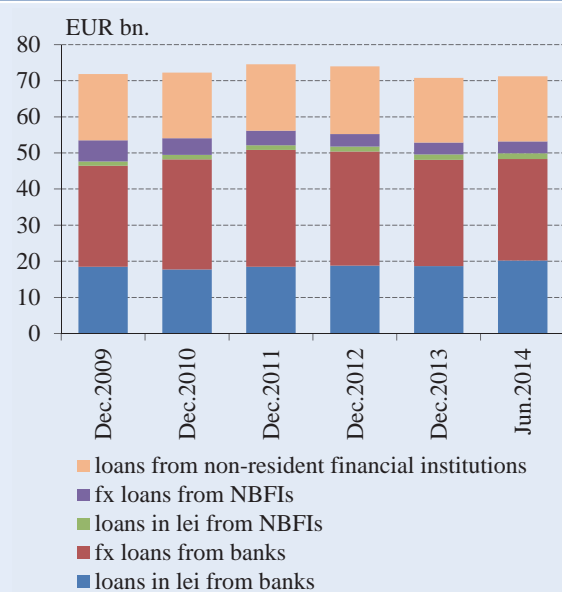
⁵ NBR's *Bank Lending Survey*, May 2014.

⁶ Resident and non-resident banks and NBFIs.

⁷ In this section, the dynamics of lending are calculated by adjusting the nominal balance of foreign currency-denominated loans for exchange rate changes, unless otherwise specified.

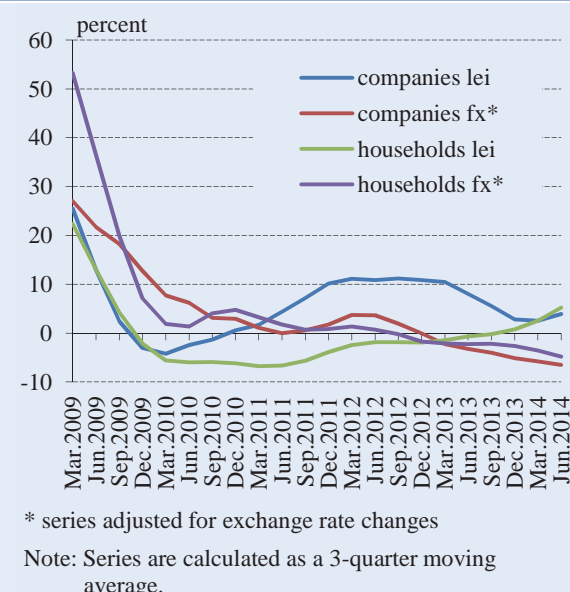
of some regulations aimed at covering unhedged borrowers⁸, as well as (iii) the change in the “First Home” government programme, under which solely leu-denominated mortgage loans were granted starting August 2013. Insofar as domestic creditors pass declining costs through to borrowers to the largest extent possible, leu-denominated lending may carry on at a faster pace. As a matter of fact, companies pointed out that overly high lending rates and commissions were the main hindrance to accessing funds from banks and/or NBFIs⁹.

Chart 4.5. Total loans to companies and households by creditor and currency



Source: NBR, NBR calculations

Chart 4.6. Growth rate of total loans granted to companies and households by domestic and foreign financial institutions (annual change)



* series adjusted for exchange rate changes

Note: Series are calculated as a 3-quarter moving average.

Source: NBR, NBR calculations

The elevated stock of foreign currency loans to companies and households, which is one of the vulnerabilities of the Romanian banking sector, further contracted (by 5.6 percentage points December 2012 through August 2014, to 57.2 percent as a share of total loans to the private sector). This trend is likely to persist throughout the following years, as old loans are repaid and most of new loans are leu-denominated. In fact, in recent years, the share of new EUR-denominated loans in total new loans to companies and households has embarked on a steeply downward trend, standing at 25.8 percent¹⁰ in the first eight months of 2014 versus 53.4 percent in 2010.

The credit market was marked by balance sheet adjustments in terms of both supply of and demand for loans. Lending conditions may improve in the latter half of 2014, with banks sending signals on the cycle of lending standard tightening coming to an end¹¹. In the period December 2012 – June 2014,

⁸ NBR Regulation No. 24 of 28 October 2011 on lending to natural entities and NBR Regulation No. 17 of 12 December 2012 on foreign currency lending to unhedged non-financial corporations.

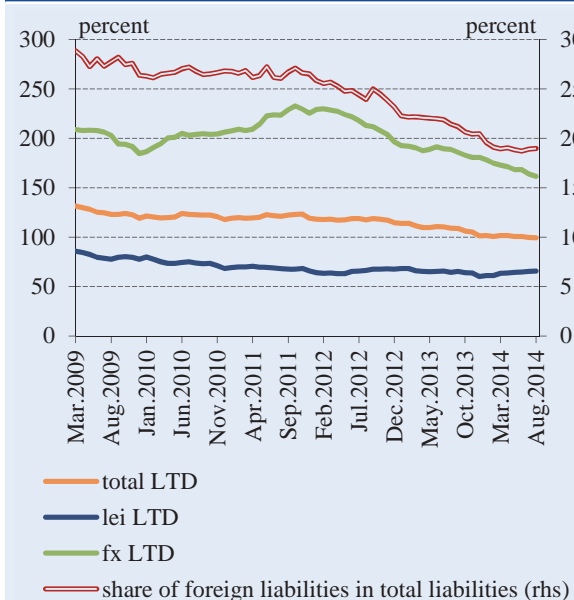
⁹ According to the June 2014 *Survey on the access to finance of the non-financial companies in Romania and their capacity to cope with adverse financial conditions*, which is sent by the NBR to around 10,000 firms in Romania on a half-year basis; see <http://www.bnr.ro/PublicationDocuments.aspx?icid=16645>

¹⁰ The reports on new loan flows only refer to leu- and EUR-denominated loans. Therefore, the calculations with respect to new loans shown in this section do not include the flows of loans denominated in other currencies.

¹¹ According to the August 2014 *Bank Lending Survey*, which the NBR sends to the major credit institutions in Romania on a quarterly basis; see <http://www.bnr.ro/PublicationDocuments.aspx?icid=11324>

the demand for real-estate loans from non-financial corporations and households fluctuated in a narrow band, without showing a clear trend, whereas that for consumer loans saw a certain growth.

Chart 4.7. Loan-to-deposit ratio by currency

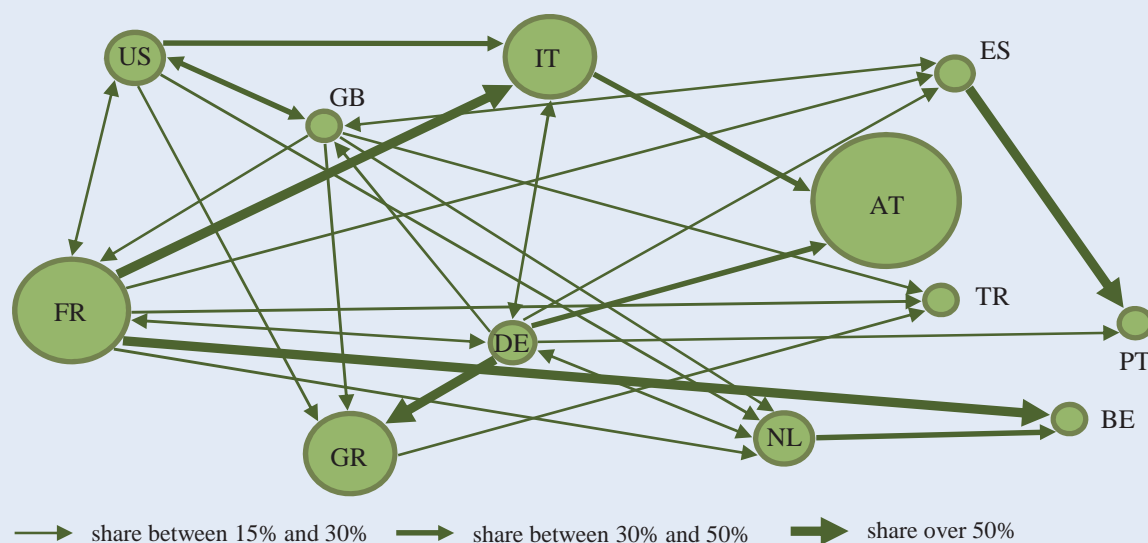


Source: NBR, NBR calculations

As far as the supply of loans is concerned, the Romanian banking sector's vulnerability to the overly high dependence on foreign financial sources decreased noticeably and the continuation of deleveraging could become counterproductive. The loan-to-deposit ratio for the private sector in Romania adjusted substantially (down 15.2 percentage points December 2012 through August 2014, to 99.2 percent, which is satisfactory from a macroprudential perspective – Chart 4.7.). Behind this fall stood the increased domestic saving, as well as a contraction in lending (9.1 percent and -5.4 percent respectively in the same period). The LTD ratio is lower than both the EU average (99.8 percent in July 2014 against 103.4 percent) and the corresponding indicator in some CEE countries. LTD ratio by currency shows that the foreign currency component remained high (161.6 percent in August 2014), shrinking however significantly

from the end-2012 level (by 34.8 percentage points). The LTD ratio for lei is further below par (65.6 percent in August 2014, down 2 percentage points from December 2012).

Chart 4.8. Foreign bank exposures to Romania (BIS data) and the interconnections between the major banking systems in Europe



Note: The size of the circles is given by the shares of foreign bank exposures in total capital of the Romanian banking system. The thickness of the arrows depends on the shares of exposures of credit institutions in country A to debtors in country B in the total exposures of European banks to country B.

Source: BIS, NBR calculations

The aforementioned assumption that further deleveraging could be counterproductive is also supported by the developments in the leverage ratio of the Romanian banking sector. In June 2014, domestic banks reported a prudent leverage ratio¹² of 7.9 percent, the highest reading in the EU. As a matter of fact, the leverage ratio has not been a vulnerability of the domestic banking sector over the last decade, remaining, with some exceptions, above 7 percent. Total capital ratio (which is a measure of the leverage ratio as well, taking however into account the risks associated with assets) is also indicative of the prudent stance taken by the Romanian banking sector towards indebtedness (17 percent in June 2014, significantly higher than the minimum required level of 8 percent).

Nevertheless, deleveraging may carry on. European credit institutions are currently undergoing balance sheet adjustments with a view to ensuring compliance with the Basel III Accord requirements, as well as to coping with the outcomes of asset quality reviews (AQR) and stress tests (conducted by the European Banking Authority and the European Central Bank respectively). It is highly likely that these balance sheet adjustments also impact the domestic banking sector, given the strong interdependencies between the European banking sectors with significant exposures to Romania (Chart 4.8.) In fact, deleveraging has been affecting all Central and European countries, the hardest hit in 2013 Q1 – 2014 Q1 being Slovenia, Latvia and Croatia¹³.

The sustainable recovery of lending to the real economy may be the main challenge facing the Romanian banking sector in the coming period. As far as the supply of loans is concerned, banks have the necessary resources in terms of solvency and liquidity to resume lending¹⁴. As regards the demand for loans, developments are mixed. Thus, household demand for loans recovered somewhat, yet indebtedness is still high both at aggregate level and by income earner group (for further details, see Section 5.2. “Households’ role in maintaining financial stability”), so that it is debatable to what extent the resumption of lending via this channel is sustainable.

Corporate loan demand is rather nuanced. On the one hand, many companies intend to reduce their debt and avoid taking out new bank loans. Thus, companies made relatively low recourse to bank lending, as in 2013 and the first half of 2014 most of them drew on internal financing sources. The most significant barriers companies face when accessing funds from banks and/or NBFIs¹⁵ rank as follows: the overly high lending rates and commissions, the requirements on collateral type and value, the contractual clauses and bureaucracy.

On the other hand, the economy has an important and viable, albeit unharnessed, potential for lending. The share of companies with bank loans¹⁶ has always been relatively low (less than 15 percent of the companies operating in Romania¹⁷), irrespective of the stage of the business cycle, whereas

¹² According to the *European Financial Stability and Integration Report* released by the European Commission. The leverage ratio is computed as a ratio of Tier 1 capital to total assets (monthly average, accounting values). Comparisons refer to December 2013.

¹³ Vienna Initiative, CESEE Deleveraging and credit monitor, August 2014 (http://vienna-initiative.com/wpcontent/uploads/2014/08/DCM_note_August_2014.pdf).

¹⁴ The National Bank of Romania has also launched a survey to investigate whether banks have adequately-trained staff for the sustainable recovery of lending to the real economy.

¹⁵ According to the June 2014 *Survey on the access to finance of the non-financial companies in Romania and their capacity to cope with adverse financial conditions*.

¹⁶ It refers to companies included in the Central Credit Register database. The sample of these entities is not exhaustive, as this report covers the firms whose exposure to a credit institution exceeds lei 20,000.

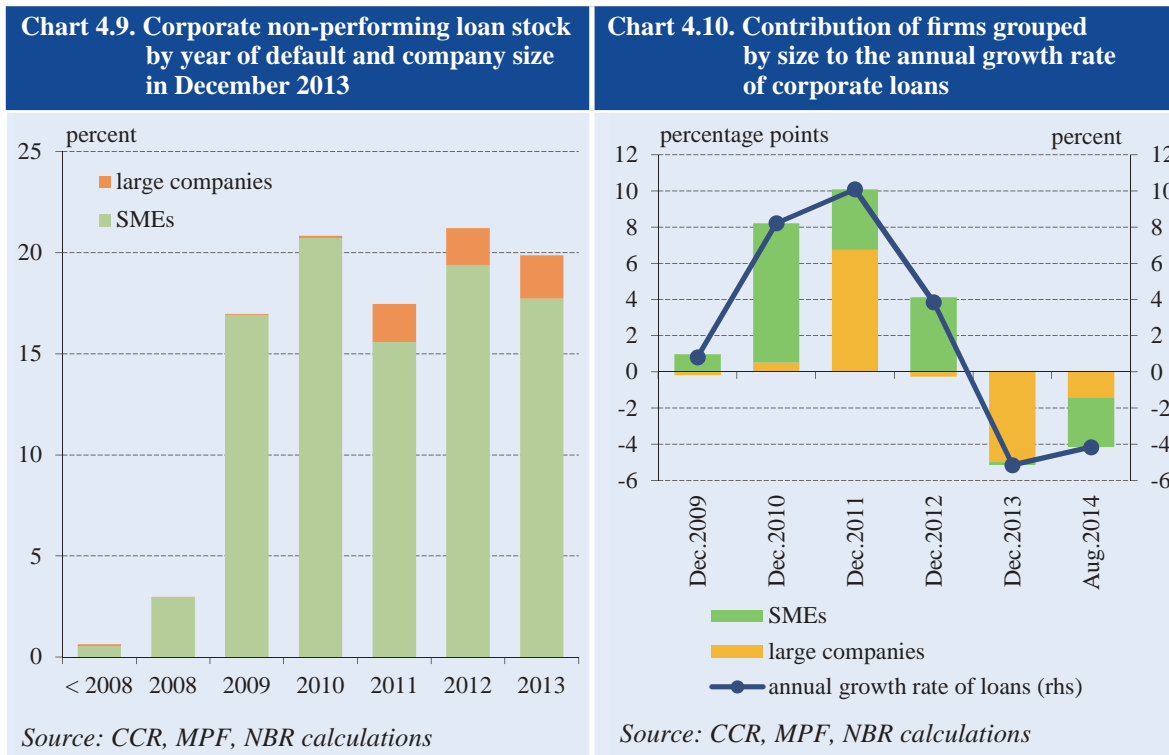
¹⁷ Companies that submitted their financial statements to the Ministry of Public Finance in 2013.

43 percent of the economically-active population benefitted from such loans (December 2013). The companies that took loans solely from domestic banks and NBFIs do not make the largest contribution to gross value added of the non-financial corporate sector (for further details, see the 2013 Financial Stability Report). Moreover, companies whose level of indebtedness is lower than the alert threshold (debt-to-equity ratio is below 2) account for the largest share of gross value added economy-wide¹⁸. Under the circumstances, credit institutions face a significant challenge, namely to persuade the said companies, which have a sustainable potential for lending, that entering into partnership with a bank may have benign consequences on their future activity. This undertaking will be relatively lengthy, requiring banks to make efforts with a view to improving the quality and expertise of the staff engaged in lending activity, risk analysis and corporate advisory work, as well as to looking for avenues to enhance customisation of their products and services. For lack of such efforts, the substantial potential on the market will remain largely unexplored. Nevertheless, banks have reported some favourable results with respect to enlarging their customer base by including companies that had never taken loans before. Thus, January 2013 through August 2014 approximately 13,800 new companies benefitted from domestic bank lending¹⁹, accounting for 6.6 percent of the total stock of loans extended to the corporate sector in August 2014. These firms held 4.9 percent of the value added of non-financial corporations and employed around 4.5 percent of the staff in this sector (as at 31 December 2013). However, the said companies could not make up for the decline in the loan stock of banks' existing customers. Therefore, corporate loans granted by resident and non-resident banks and NBFIs fell by 4.9 percent in the period December 2012 – June 2014, lower than household lending, which shrank by 2.3 percent. The stock of corporate loans declined for all types of creditors, namely resident banks (down 6.4 percent), foreign creditors (down 3.2 percent) and domestic NBFIs (down 1.2 percent in the same period).

The NBR's decisions to extend the monetary policy rate cutting cycle and to lower the minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions, in conjunction with the initiation of a clean-up of banks' balance sheets, are likely to lay the groundwork for a sustainable resumption of lending to non-financial corporations. Cleaning up balance sheets is also warranted by the fact that loans in default for more than three years accounted for over 40 percent of the stock of corporate non-performing loans in banks' portfolios as at 31 December 2013 (Chart 4.9.). This clean-up (which is performed by either selling non-performing loans to third parties or removing exposures from the balance sheet) will lead to a reduction in the stock of loans in banks' portfolios and may give a false signal of faster deleveraging.

¹⁸ Neagu, F., Croitoru, L. and Chiriacescu, B., 2014. *Deleveraging in Romania: returning to equilibrium or paving the way for new disequilibria?* Mimeo NBR.

¹⁹ These companies did not take any bank loans for two years (January 2011 – December 2012) before resorting to bank lending.

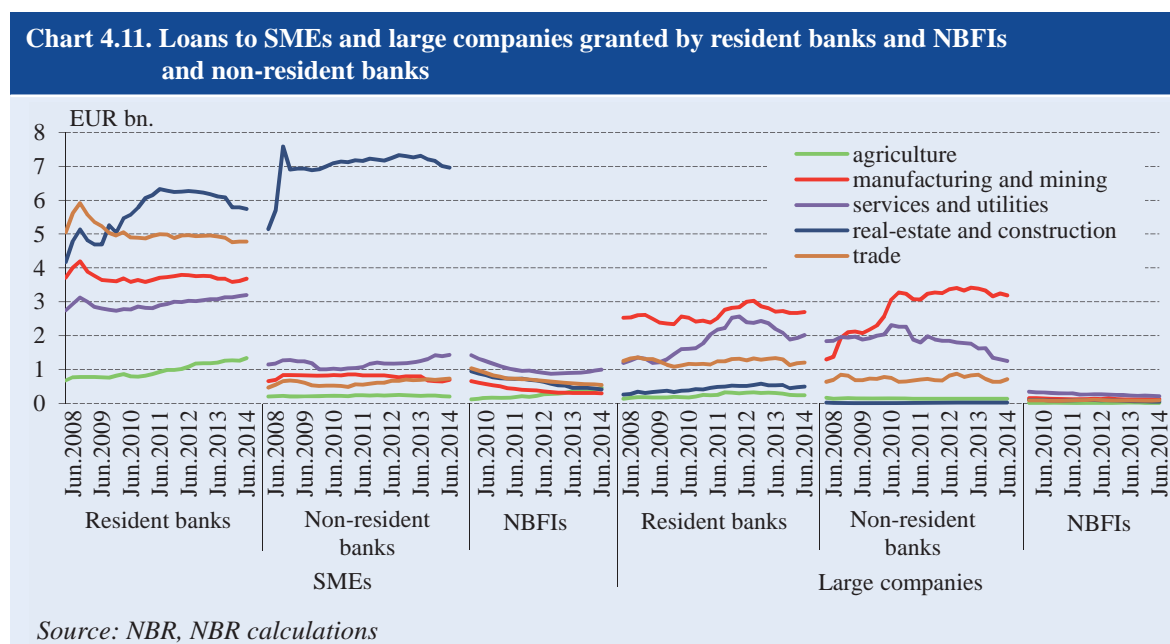


Moreover, in the coming period the credit channel (through which banks favour lending to large companies with substantial cash flows and high volumes of assets) may see atypical functioning, as large firms made a weaker contribution to loan dynamics than SMEs in periods of growth, whereas in periods of decline it was the other way around (Chart 4.10.). Thus, the nominal annual rate of change of loans granted by domestic banks stood at -5.2 percent in the case of large companies and at -3.8 percent in that of SMEs (August 2014).

The number of SMEs that make recourse to domestic bank loans is low and on the decrease, as they account for less than 15 percent of operating companies and make a relatively moderate contribution to economic activity, holding 21.5 percent of the value added of non-financial corporations and employing 24.7 percent of the staff in the corporate sector (December 2013). In addition, lending is concentrated not only amongst a low number of SMEs economy-wide but also within these SMEs that resort to domestic bank funding (the first 10 percent SMEs by bank debt take approximately 79.3 percent of total financing). The SMEs that did not benefit from domestic bank loans make a larger contribution to economic activity, accounting for around 32.3 percent of gross value added of non-financial corporations and employing 41.3 percent of the staff in the corporate sector (December 2013).

While in previous years the sectors encompassing tradable goods producers, high-tech firms and tradable services (travel, transportation, telecommunications) and more productive sectors with export potential were granted more substantial loans, this favourable shift in the business model of banks and NBFIs was no longer manifest in the period December 2012 – June 2014. Thus, (i) loans to the tradables sector fell by 0.3 percent, yet less than loans to the non-tradables sector, which shrank by 7.4 percent; (ii) loans to medium high-tech and high-tech companies lost 6.6 percent, dropping at a faster pace than those to low-tech and medium low-tech companies, which reported a 1.7 percent contraction, and (iii) knowledge-intensive service companies saw a significantly larger reduction

in funding than less knowledge-intensive service companies, i.e. -19.6 percent versus -4.9 percent (Chart 4.11.).

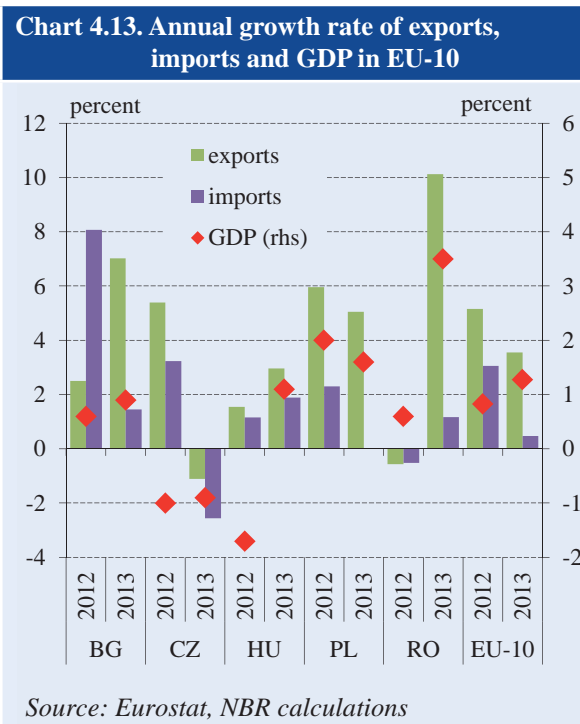
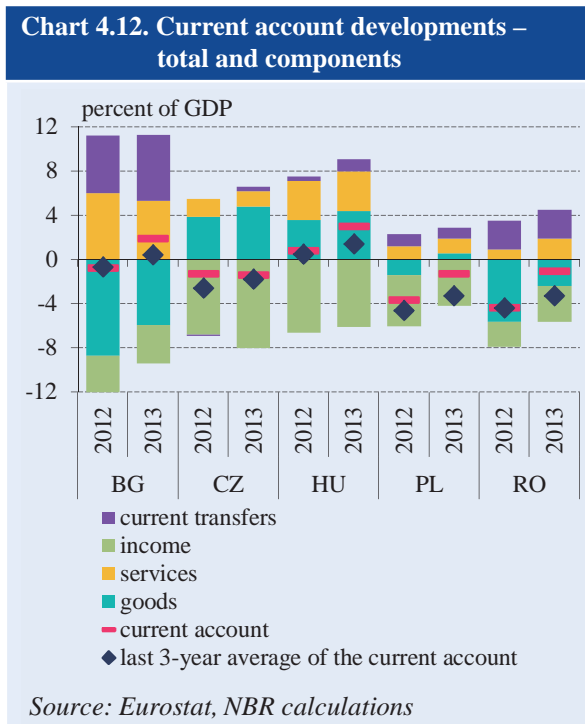


4.3. External balance

External imbalances, which stood out as major vulnerabilities at the onset of the financial crisis in Romania (October 2008), improved further, generating manageable constraints on financial stability. From a microeconomic perspective, a challenge ahead facing foreign trade companies and the entities generating the country's external private debt is to increase their share in domestic banks' loan portfolio and preserve their economic and financial performance.

4.3.1. Current account deficit

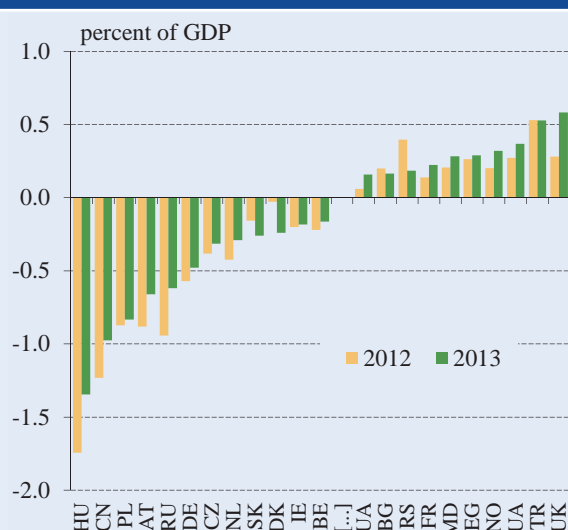
In 2013, the current account deficit narrowed significantly to stand at 1.1 percent of GDP (from 4.4 percent of GDP in 2012). The last three-year moving average of the current account balance (the scoreboard indicator monitored by the European Commission in the Alert Mechanism Report for the prevention and correction of macroeconomic imbalances in the EU) fell below the indicative threshold (4 percent of GDP) for the first time, accounting for 3.3 percent of GDP (Chart 4.12.). The drivers of the lower current account deficit were the substantial reduction in the trade deficit (to EUR 3.4 billion from EUR 7.4 billion in 2012) and the rise in the services balance, whose surplus went 2.4 times higher to reach EUR 2.7 billion in 2013. Current transfers also made a positive, albeit low, contribution, as they posted a slightly higher surplus than in the previous year, i.e. EUR 3.7 billion, following better EU funds absorption. By contrast, the income balance made a larger negative contribution, as the deficit amounted to EUR 4.6 billion in 2013, up 51 percent from 2012. The current account deficit will most likely report low readings in the coming period as well. The European Commission's spring 2014 economic forecast indicates a deficit of 1.2 percent of GDP in 2014 and of 1.6 percent of GDP in 2015.



The improvement in the goods trade balance owed largely to the substantial advance in Romania’s exports (up 10 percent in 2013, i.e. an almost three times faster growth rate than the EU-10 average²⁰, Chart 4.13.), in conjunction with a modest rise in imports (up 1 percent). Under the circumstances, Romania’s export market shares both worldwide and on the EU market resumed their upward path, increasing to 0.35 percent in 2013 from 0.32 percent a year earlier and to 3.16 percent from 2.83 percent in the same period respectively.

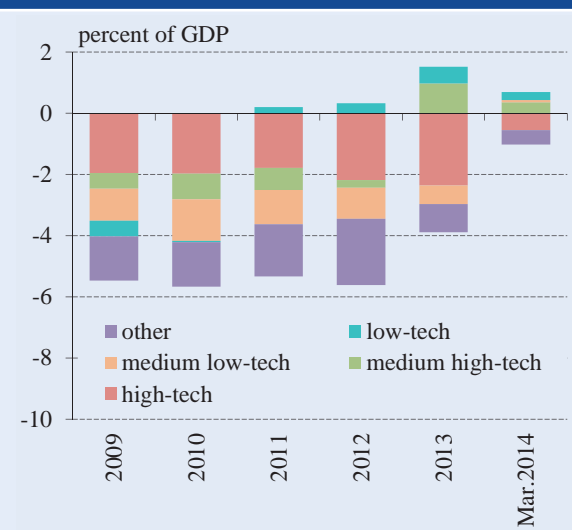
Export performance by main destination market in 2013 points to the diversification started in the previous years gaining momentum. Thus, exports to non-EU markets saw a swifter growth than those to EU countries, i.e. 12.8 percent versus 8.8 percent. As a matter of fact, favourable export dynamics seem to have been broad-based, as Romania’s trade balance with most countries improved, irrespective of whether it was positive or negative (Chart 4.14.). Non-EU trading partners play an important part in the sustainability of the current account, as the trade balance with these countries was positive in 2013, i.e. 1.8 percent of GDP against -0.2 percent in 2012. Romania reported ongoing, albeit declining, trade deficit with the EU (4.2 percent of GDP in 2013 as compared with 5.4 percent a year earlier).

²⁰ Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Poland, Romania, Slovenia, Slovakia and Hungary.

Chart 4.14. Goods trade balance with Romania's major trading partners

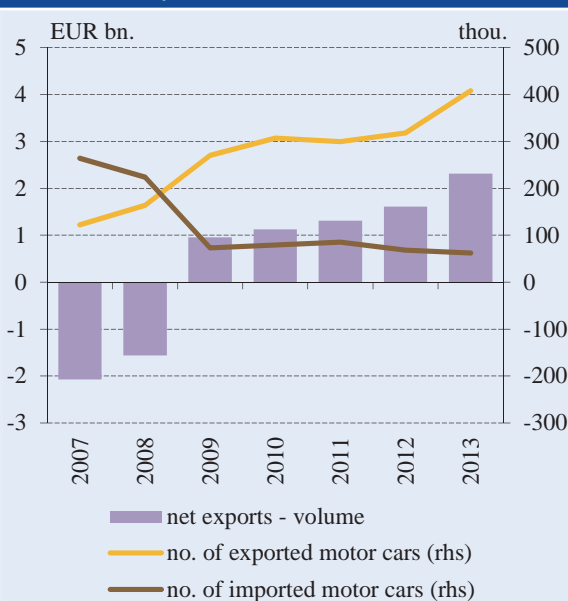
Note: Calculations took into account the average USD/EUR exchange rate.

Source: NIS, NBR calculations

Chart 4.15. Goods trade balance by technological intensity²¹

Note: The microeconomic database for foreign trade has an approximately 96 percent coverage in macroeconomic data in 2013.

Source: NIS, NBR calculations

Chart 4.16. Foreign trade in motor cars by volume and number

Source: NIS, NBR calculations

The euro area was further the main destination market for Romania's exports, accounting for 51.1 percent of the country's exports in 2013. Foreign trade with non-euro area Member States and regions also saw significant dynamics, causing Romania's export market share to these destinations to widen as follows: by 0.8 percentage points in the case of the BRICS²² (to 5.1 percent), by 0.5 percentage points in that of the UK (to 4.1 percent) and by 0.3 percentage points in those of Norway (to 1.2 percent) and countries in Northern Africa²³ (to 3.2 percent).

Export concentration at firm level is high and on the rise, this being frequently the case at EU level²⁴. In 2013, the top one percent Romanian companies by export volume jointly accounted for approximately 57 percent of total exports (versus 55 percent in 2012 and

²¹ "Other" includes goods that are not classified in divisions 10-33 under manufacturing based on NACE Rev. 2.

²² Brazil, Russia, India, China and South Africa.

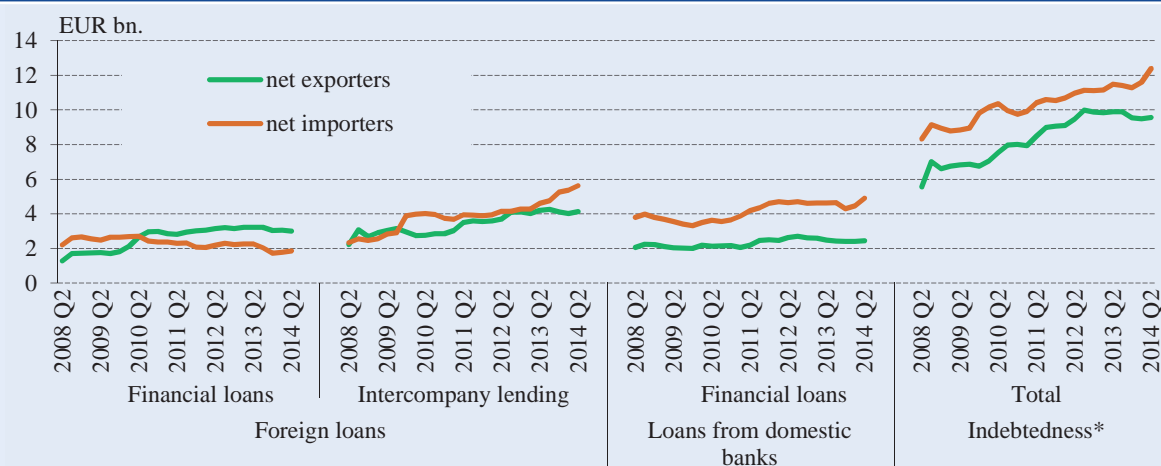
²³ Egypt, Libya, Morocco, Tunisia and Algeria.

²⁴ For instance, the study by Mayer, T. and Ottaviano, G. (2008), "The Happy Few: The Internationalisation of European Firms", *Intereconomics: Review of European Economic Policy*, Vol. 43(3), pp. 135-148, shows that the top one percent exporters in 2003 were as follows: Germany (59 percent), France (68 percent), the United Kingdom (42 percent), Italy (32 percent), Hungary (77 percent), Belgium (48 percent) and Norway (53 percent).

51 percent in 2007) and the top five percent exporters held about 80 percent (similarly to 2012, yet above 75 percent in 2007).

The gain in Romania's economy external competitiveness via a wider share of exports with high value added and innovative technology was the result of mixed developments. Thus, high-tech goods²⁵ further reported the largest trade deficit among the goods classified by technological intensity, i.e. -2.4 percent of GDP in 2013 (Chart 4.15.). Over the last two years, high-tech goods trade deficit has become wider, owing both to the decline in exports of these goods (down 23.8 percent in 2012 and 5.3 percent in 2013 respectively) and to the ongoing overhaul at firm level via imports of such capital goods, which took 39.5 percent of imports of high-tech goods in 2013, down from 42.2 percent in 2012. Medium high-tech goods²⁶ trade balance saw the most significant change, posting a substantial trade surplus (1 percent of GDP) in 2013, after having recorded trade deficits for several years. As a matter of fact, these goods gained a larger share of Romania's exports (42.5 percent in 2013), with motor car trade making a significant contribution, as it posted an EUR 2.3 billion surplus in the same period (1.6 percent of GDP, Chart 4.16.)²⁷, following a substantial increase in the number of units sold (over 400,000 in 2013). The two major companies in the automotive industry made a decisive contribution to the improvement in the current account balance in 2013, net exports accounting for 1.54 percent of GDP against 0.69 percent of GDP in 2012.

Chart 4.17. Funding of foreign trade companies



* Does not include loans from domestic NBFIs.

Source: NIS, NBR calculations

Foreign trade companies²⁸ play a significant part in the economy, which does not translate however into a corresponding share in domestic banks' loan portfolio. The contribution made by these firms

²⁵ Goods breakdown by technological intensity used the Eurostat classification based on NACE Rev. 2.

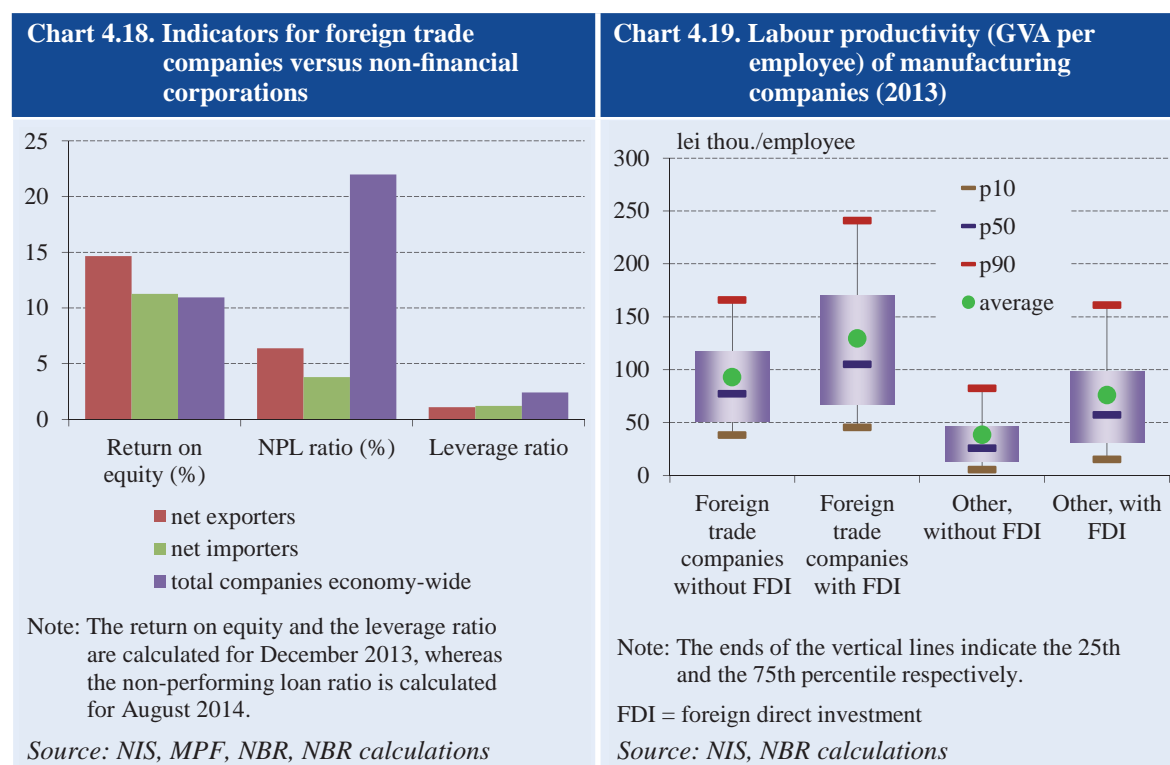
²⁶ The most important goods in this category are: (i) transport means; (ii) mechanical apparatus and devices, and (iii) electrical machinery and equipment.

²⁷ Heading 8703 of the Combined Nomenclature – Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 8702), including station wagons and racing cars.

²⁸ In order to capture the importance of foreign trade companies to the economy and the banking sector, they were divided into net exporters and net importers. Net exporters are foreign trade companies with net exports (trade surplus), whereas net importers are those with net imports (they generate trade deficit). Only the companies that are engaged in significant exports or imports – worth more than EUR 100,000 in each quarter over a year – on an ongoing basis were taken into account. The above-mentioned businesses accounted for 85.3 percent of the exports of non-financial corporations and 80.5 percent of their imports, respectively, in 2013.

to the gross value added of non-financial corporations remained virtually unchanged (41.4 percent in 2013 as compared with 41.3 percent in 2012), whereas their share of employees of the total staff in the non-financial corporate sector added 0.5 percentage points, to 26.7 percent in 2013. Exporting companies act as an engine for the economy, being at the top-end of domestic production chains and whose performance on external markets is pivotal for the activity of many other companies.

Nevertheless, foreign trade companies have far less importance to the domestic banking sector than to the economy. Thus, in August 2014 the weight of net exporters' loans in total loans to non-financial corporations was 10.1 percent, although their debt servicing capacity was above the economy-wide average (the non-performing loan ratio²⁹ stood at 6.4 percent versus 22 percent across non-financial corporations as a whole in August 2014). Loans to net importers accounted for 19.9 percent of total loans to non-financial corporations in August 2014, a slightly higher share than in December 2012 (up 2.4 percentage points). The non-performing loan ratio of these companies was substantially lower than the economy-wide average, i.e. 3.8 percent in August 2014, highlighting their very good capacity to service bank debt.



Foreign trade companies in Romania make lower recourse to domestic bank funding, as they take, to a large extent, loans from non-resident creditors. Thus, the sustainable recovery of lending also entails domestic banks finding solutions to provide more competitive financing products, tailored to these companies' needs. In June 2014, loans from non-resident financial institutions and intercompany lending accounted for 74.5 percent of total loans to net exporters and for 60.4 percent of those to net importers, respectively, standing slightly higher than at end-2012 (Chart 4.17.). The dynamics of domestic bank loans to foreign trade companies have remained modest as of 2013, although the latter

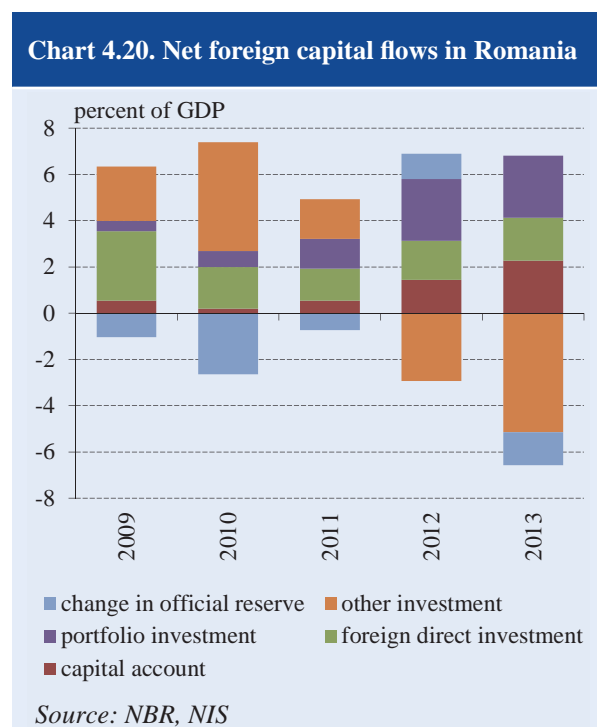
²⁹ The non-performing loan ratio is the share of corporate loans past due by more than 90 days and/or for which legal proceedings have been initiated (with firm-level contamination) in total corporate loans.

are more eligible than the remainder of the economy when taking into account their financial results and debt servicing capacity.

Moreover, foreign trade companies have higher productivity than the other manufacturing companies, as their GVA per employee amounts to lei 93,000 per employee as compared with lei 29,000 per employee, median values³⁰, and the 10th percentile of foreign trade companies (lei 42,000 per employee) is higher than the median of the companies that are not engaged in such trade (lei 29,000 per employee). Foreign direct investment (FDI) contributes to improved productivity in the manufacturing sub-sector. Thus, direct investment companies³¹ are more productive than those that did not benefit from FDI in the case of both foreign trade companies and companies that do not carry out such activities (36 percent more in the former's case and 120 percent in the latter's case respectively in 2013, median values, Chart 4.19.). At aggregate level, the financial soundness of foreign trade companies and of direct investment companies was further high, yet certain signs of weariness have emerged, requiring therefore close monitoring to identify any vulnerabilities as early as possible.

4.3.2. Capital flows

Romania continued to benefit from net capital inflows, particularly foreign direct investment (FDI) and capital transfers (Chart 4.20.). Financial account adjustment was the result of the significant reduction in debt-creating flows due to cross-border deleveraging in the banking sector and to the repayments of the loan taken from the IMF under the Stand-By Arrangement signed by Romania in 2009.



In 2013, foreign direct investment amounted to EUR 2.6 billion, marking thus a four-year record high. In the first months of 2014, FDI flows rose slightly (to EUR 1.3 billion in the first seven months of 2014), fully covering the current account deficit. The prospects for foreign direct investment in the coming period point to further positive developments, as investor sentiment towards Romania has improved³². The potential risks to the dynamics of such capital flows are related to the macroeconomic and financial standing of direct investors' countries of origin and to the developments in the conflict in Ukraine.

Solving the problems that have arisen in managing EU structural fund absorption may also contribute to enhanced capital flows. Inflows of EU funds have increased over the

³⁰ Calculated by weighing with gross value added generated by a NACE 2-digit level division after removing extreme values (higher than the 99th percentile and lower than the 1st percentile).

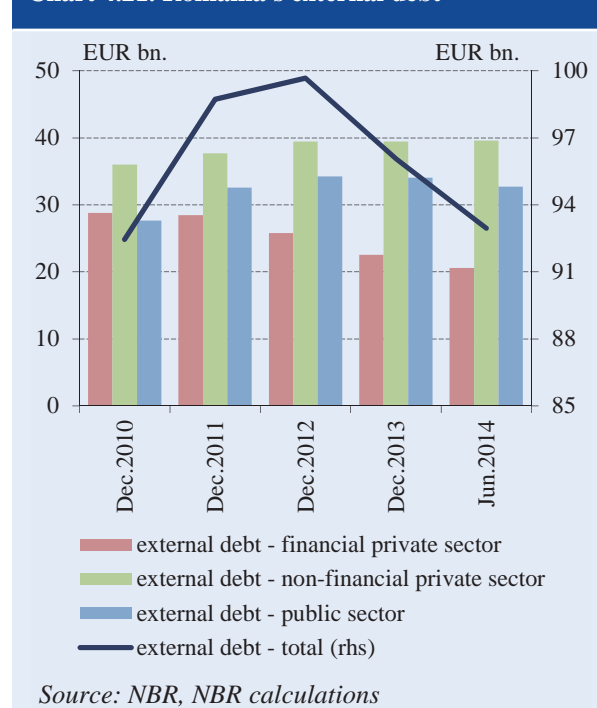
³¹ Direct investment enterprises were identified based on NTRO data relative to ownership of non-financial corporations. The former are those companies in which a non-resident investor holds at least 10 percent of the subscribed share capital.

³² According to *European Attractiveness Survey, 2014* (Ernst & Young).

last years, equalling EUR 4 billion in 2013, twice the amount seen in 2012, and EUR 2.1 billion in 2014 Q1. Romania has posted a higher absorption rate, but further ranks among the countries reporting the lowest structural and cohesion fund absorption rates.

In 2013, portfolio investment amounted to EUR 3.8 billion, the highest reading since 1990, targeting chiefly securities issued by the Romanian government. Such capital flows recorded slower dynamics in the first seven months of 2014, totalling EUR 1.6 billion (as compared with EUR 3.6 billion in the same year-ago period). The substantial portfolio investment flows seen starting in 2012 may result in the domestic economy's increased vulnerability to sudden changes in investor risk appetite for assets of emerging economies. The main triggers of this risk in the period ahead are heightening geopolitical tensions or shocks spilling over from the financial or the public sector in euro area countries (for further details, see Chapter 2. "International economic and financial environment"). The Romanian authorities have taken several measures to limit the possible risks that might occur following higher exposure to funding from international financial markets (for further details, see Section 4.1.2. "The public sector").

Chart 4.21. Romania's external debt



Romania's external debt stock diminished to EUR 93 billion in June 2014, down 3 percent from December 2012. The breakdown by debtor shows mixed developments (Chart 4.21.). Thus, public sector debt (including that of monetary authorities) fell by 4.4 percent December 2012 through June 2014 (to EUR 32.7 billion), on the back of the repayments of the loans taken from international institutions³³. External private debt saw a steeper decline, shrinking by 8 percent, following the adjustments in the financial sector (due to the change in banks' business model, with a stronger focus on domestic funding to the detriment of financing provided by parent banks). Non-financial corporations' external debt witnessed a slight rise, i.e. up 0.5 percent in the period December 2012 – June 2014, reaching EUR 39.6 billion.

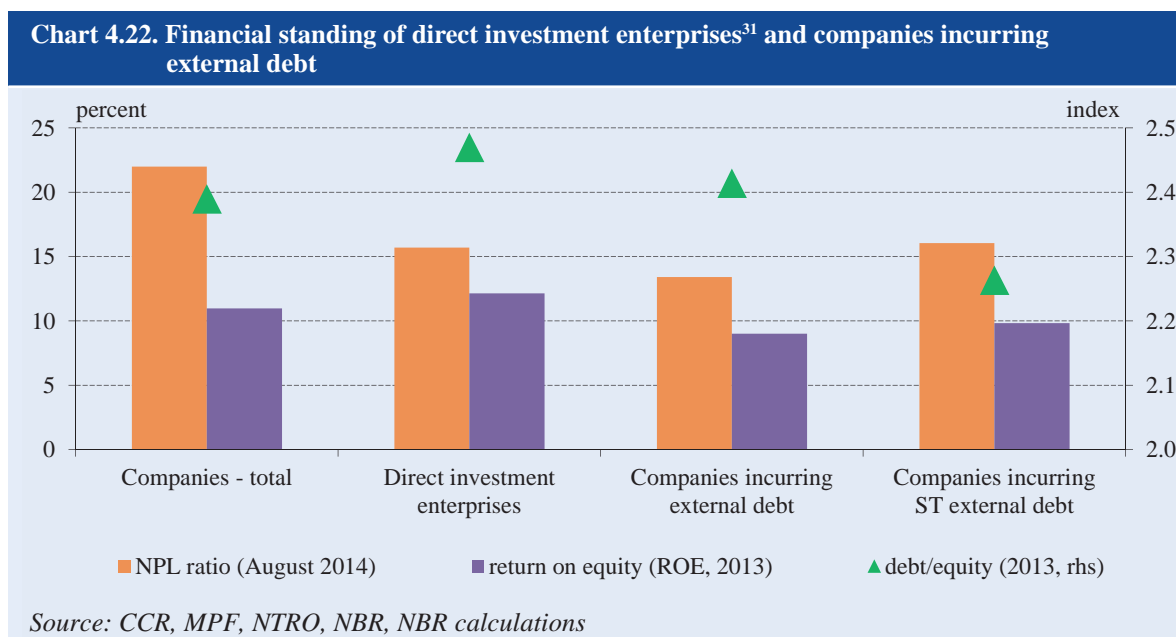
The shift of foreign debt flows towards business sectors that support sustainable growth witnessed a slower tempo. December 2012 through June 2014, the external debt stock of companies in the tradables sector added 3.3 percent versus 3.2 percent in the case of companies in the non-tradables sector, further accounting for 42 percent of the external debt stock of non-financial corporations. Companies in medium high-tech and high-tech industries were granted external funds worth EUR 0.3 billion in the period December 2012 – June 2014, causing their external debt to rise by 8.7 percent against the 1.5 percent increase in the external debt of companies in low-tech and medium low-tech industries.

The shift of foreign debt flows towards business sectors that support sustainable growth

³³ External public debt excluding that of monetary authorities added 9 percent in the same period, totalling EUR 28.7 billion, as a result of the Romanian government issuing bonds on the international financial markets.

Non-financial external private debt was further concentrated in vulnerable sectors. Thus, real-estate companies continued to account for a significant share of the external debt of non-financial corporations, i.e. 31 percent in June 2014, which was slightly higher than that held by manufacturing companies (30 percent). The former companies took external loans mainly from financial institutions, with intercompany lending representing merely 36.4 percent of their total external debt in June 2014 against 64.4 percent in the case of manufacturing companies.

The performance gap between companies having taken external loans and the other companies narrowed (Chart 4.22.). The weaker capacity of some of the former to cope with potentially unfavourable developments may impact the rest of companies in the real sector particularly via the trade channel. The value of the trade credits taken by companies benefitting from external loans is high, amounting to lei 66 billion and accounting for 26.4 percent of total claims economy-wide in December 2013. The total overdue payments of such companies to their trading partners equal lei 23.6 billion, holding approximately 22 percent of total overdue payments economy-wide. The number of companies with external debt undergoing insolvency or bankruptcy proceedings is relatively high, i.e. 7.7 percent of total companies incurring such debt in June 2014.



The companies having taken external loans also benefitted from significant domestic funding, i.e. lei 25.4 billion, accounting for 23.2 percent of total bank loans to non-financial corporations in June 2014. Looking at the non-performing loan ratio for such loans, these companies evince better loan repayment capacity, as the NPL ratio stood at 13.4 percent versus 22.0 percent, the system-wide average, in August 2014. The concentration of lending to companies with external debt across credit institutions is relatively high, as five banks account for 56 percent of these loans and a third of the latter were extended to real-estate companies. The NBR closely monitors the developments in the real-estate sector and the possible risks it could pose to the banking sector (for further details, see Section 5.3. “Risks generated by the real-estate sector and mortgage-backed lending”).

The risks to financial stability arising from non-financial corporations’ external debt dynamics have remained manageable: (i) the largest component of such debt is the medium- and long-term external

debt (66 percent of total debt in June 2014); (ii) the rollover ratio of short-term external debt is high (80 percent in June 2014), and (iii) non-resident parent undertakings continue to support their Romanian subsidiaries (as of 2012 Q4, the funding provided by parent undertakings outweighed financial loans, taking 54.6 percent of the total external debt of non-financial corporations in June 2014).

The high and rising reliance on funding in foreign currencies from foreign sources may expose the real sector to the currency risk (the case of unhedged companies) and to the risk of a decline in funding (in the event of a drop in non-resident creditors' risk appetite). The ratio of loans taken from foreign banks to loans extended by domestic banks in the case of companies reporting both types of funding has witnessed a steady rise in recent years, from 202 percent at end-2012 to 288 percent in June 2014, which also shows that local banks have lower ability than non-resident banks to meet demand.

5 NON-FINANCIAL CORPORATIONS AND HOUSEHOLDS

5.1. Non-financial corporations' role in maintaining financial stability

Companies' financial soundness has improved at aggregate level since the release of the previous Report, reflecting the effects of the macroeconomic consolidation, but (A) developments have further been heterogeneous at microeconomic level and (B) the sustainable changes in the economic growth pattern, albeit carrying on, have occurred at a slow pace. Companies' payment discipline had a mixed impact on financial stability: (C) the non-performing loan ratio continued to increase, putting pressure on banks' financial standing, (D) firms' overdue payments to suppliers and the state diminished and the volume of major payment incidents lowered, leading to an improved payment compliance across the economy, but (E) insolvency reaccelerated in 2013, significantly affecting banks' portfolio. Credit institutions hold adequate resources to manage the risks from exposures to the non-financial corporation sector and the implementation of the recent measures for addressing the high non-performing loan ratio will lay additional groundwork for resuming lending.

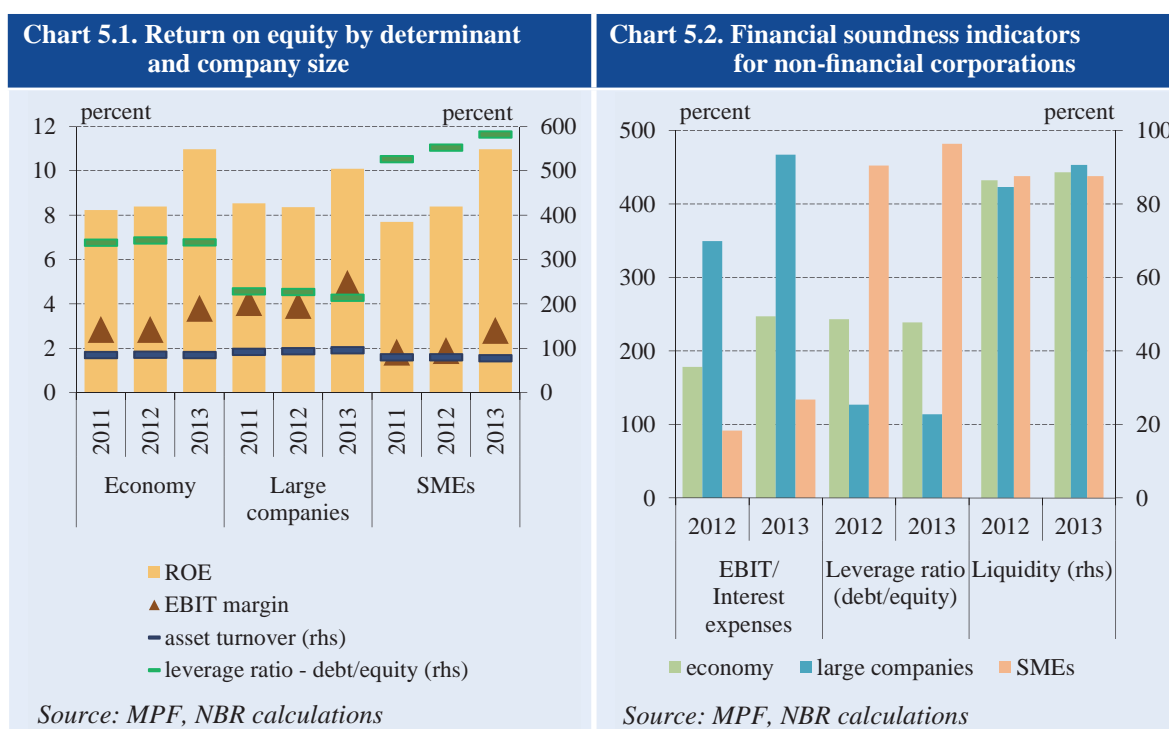
5.1.1. Non-financial corporations' economic and financial performance

(A) Companies' aggregate financial results saw a positive evolution in 2013. The return on equity rose overall from 8.4 percent to 11 percent in December 2012 – December 2013, even though there were a high number of firms having recorded a negative net performance (58.2 percent of the number of companies). The interest coverage ratio went up from 1.79 to 2.47 during the same period and indebtedness saw a slight improvement (the leverage ratio calculated as a ratio of debt to equity edged down to 2.39 in December 2013 from 2.44 in December 2012) against the background of the increase by 1.5 percent in owners' equity in 2013. Well-performing companies enjoy further higher capitalisation, having a below-par leverage ratio (0.7 percent in December 2013). The most pressing problems companies faced in 2003 and 2014 Q1 refer, in their view, to the heavy tax burden, strong competition and the lack of demand¹.

Similarly to the previous years, companies posted heterogeneous developments in financial results, irrespective of the assessment criterion: company size, business sector, ownership, etc. By size, both corporations and SMEs saw an improvement in their financial soundness (Chart 5.1.), but the latter posted further stronger asymmetries within their group: (i) small-sized enterprises continued to record the highest return on equity (ROE) among SMEs (12.6 percent in December 2013), with micro-enterprises being at the opposite pole as their ROE, albeit on the increase, remained in negative territory (-4.2 percent in December 2013, compared with -16.8 percent in the same period of the previous year); (ii) micro-enterprises continued to report a negative capacity to cover interest expenses from their earnings, unlike SMEs overall which reported a positive increasing level (from 0.91 to 1.34 in December 2013, Chart 5.2.); (iii) the micro-enterprises' contribution to gross value added

¹ According to the June 2014 *Survey on the access to finance of the non-financial companies in Romania and their capacity to cope with adverse financial conditions*. The Survey is half-yearly sent by the NBR to approximately 10,000 firms in Romania (a sample which is representative at national level); see <http://www.bnr.ro/PublicationDocuments.aspx?icid=16645>.

was further the lowest across non-financial corporations (13.6 percent in December 2013), although micro-enterprises are the most numerous companies across the economy.



SMEs have been increasingly incurring liabilities to third parties to finance their activities. The share of funding from shareholders in total SMEs' liabilities and owners' equity contracted over the last years (from 23 percent in December 2009 to 16.6 percent in December 2013), but the decrease was offset by the larger share of liabilities (to the state, trade partners, own employees, etc.). The share of these liabilities rose from 51 percent to 58.1 percent over the same period. An increase in the shareholders' contribution to the firm's activity through its recapitalisation would lead to a more balanced structure of financing sources, also enhancing companies' eligibility for bank financing. At end-2013, the equity of over half of the SMEs was lower or equal to 50 percent of the subscribed and paid-up share capital, which calls for immediate measures to address the issue of insufficient equity capital, according to the regulations in force².

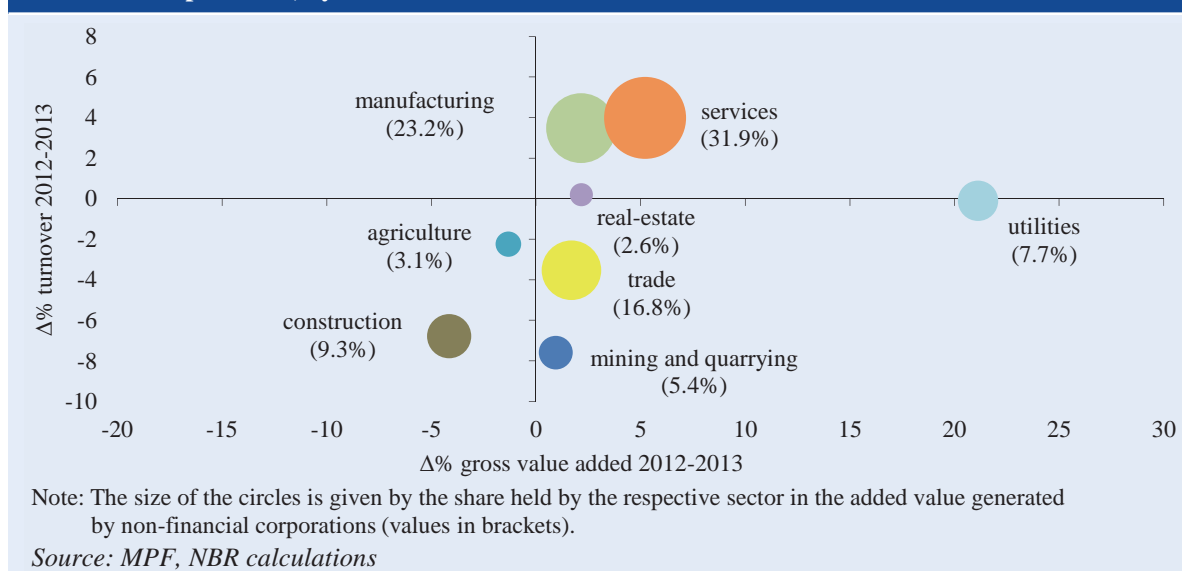
Looking at the ownership type, companies with majority state-owned capital continued to post a mixed financial performance in 2013: (i) the return on equity went up to 4 percent (from 0.4 percent in December 2012), but (ii) the turnover continued to decline (by 3.6 percent), and (iii) the contribution made by these firms to the gross value added generated by non-financial corporations fell by 0.3 percentage points (to 8.2 percent, in December 2013). The return on equity of firms with majority private capital stayed on the upward trend it followed over the last four years, reaching 12.8 percent in December 2013, up 2 percentage points from the previous year's level. This increase was recorded amid larger indebtedness, as well as an asset turnover higher than that seen by state-owned companies. On the other hand, the lower indebtedness of state-owned firms (posting a leverage ratio of 2.1 compared to 2.7 in the case of privately-owned companies, in December 2013) led to a higher capacity to service bank debt (the non-performing loan ratio reported by firms

² Law No. 31/1990 on trading companies.

with majority state-owned capital stood at 5.4 percent, whereas privately-owned companies posted a 22.9 percent non-performing loan ratio, in August 2014).

By business sector, non-financial corporations saw further uneven developments. In industry, ROE went up 1.8 percentage points (to 10.3 percent), amid increasing EBIT³ margins and faster asset turnovers, while the leverage ratio posted a marginal decrease. The industrial firms made a 28.7 percent contribution to total GVA generated by non-financial corporations in December 2013, down 0.4 percentage points from 2012, but the sector turnover was on an upward path (+2.4 percent, Chart 5.3.) and total expenses were cut by 0.6 percent. The construction sector continued to pose the highest credit risk, with the related non-performing loan ratio coming in at 40.4 percent in August 2014. On the other hand, construction firms' return on equity posted a positive evolution in 2013, reaching 10.9 percent, and their interest coverage ratio advanced to 1.7 in December 2013 (from 1.4 in December 2012). In agriculture, the firms' performance was above the economy-wide average, with the return on equity recording 12 percent in December 2013, albeit on a decrease (in December 2012, ROE stood at 17.9 percent). The real-estate sector was the only main industry to incur further losses, with its return on equity coming in at -4 percent in December 2013 (witnessing, however, a significant improvement from the -7.6 percent reading in 2012). Across the real-estate sector indebtedness stayed high, albeit on the decrease, with companies also adjusting their foreign exchange exposure. Overall, these firms' liquidity continued to be low (48.3 percent, compared with an economy-wide average of 88.7 percent, in December 2013). The low liquidity level may be viewed as a vulnerability of the real-estate sector, given the significant share (15.5 percent, in August 2014) held by these firms in the domestic banks' corporate portfolio.

Chart 5.3. Growth rate of the turnover and gross value added generated by non-financial corporations, by business sector



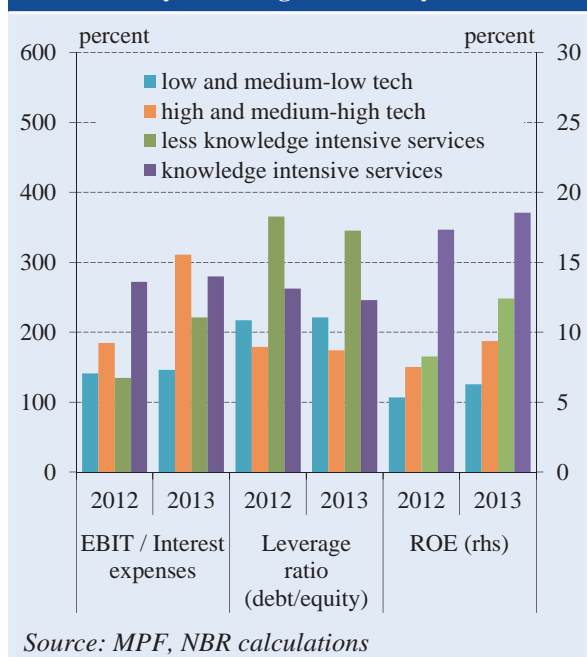
(B) Firms that can contribute to improving the sustainability of the economic growth pattern posted favourable financial results, but weariness signs have emerged. Companies in the tradables sector saw further a positive evolution overall, in line with the expectations in the previous Report, but some economic performance and financial soundness indicators improved at a slow pace: (i) these firms' contribution to total gross value added generated by non-financial corporations went up marginally

³ Earnings Before Interest and Taxes.

in 2013 (from 37.9 percent to 38.5 percent); (ii) the return on equity was higher than at end-2012 (9.5 percent in December 2013, but below the 11 percent economy-wide average); (iii) total cash flows in December 2013 were positive and on the increase; and (iv) the interest coverage ratio rose to 3.6 (in the case of non-tradables companies, this indicator stood at 1.8 in December 2013).

Net exporting companies⁴ continued to post financial performances above the economy-wide average, with the return on equity coming in at 13.1 percent, albeit on a decrease (by 0.3 percentage points) compared to 2012. These firms enhanced only marginally their contribution to economic activity (their share in the gross value added generated by non-financial corporations advanced by 0.2 percentage points in 2013, to reach 18 percent), even though their turnover rose significantly (up 5 percent from December 2012). Net exporting companies' liquidity position was higher than the average across non-financial corporations (107 percent compared with 88.7 percent, in December 2013) and their indebtedness was lower (the leverage ratio stood at 1.05 compared with 2.39, in December 2013). These outcomes translated into an improved capacity to service bank debt (the non-performing loan ratio was 6.4 percent compared with an average of 22 percent across the economy, in August 2014), which advocates an increase in banks' exposures to these firms with a view to sustainably resuming lending.

Chart 5.4. Financial soundness indicators for non-financial corporations, by technological intensity



Firms operating in sectors producing goods and services with high value added and innovative technology⁵ witnessed a better performance in 2013. The return on equity reported by high-tech and medium high-tech companies picked up to reach 9.4 percent in December 2013 (1.9 percentage points above the previous year's reading) and knowledge-intensive service companies posted a similar evolution (18.5 percent versus 17.3 percent, Chart 5.4.). The contribution made by the three categories of firms to non-financial corporations' gross value added in 2013 was 26.6 percent, up 0.5 percentage points from 2012, amid a faster turnover growth rate (7.6 percent in December 2012–December 2013). Furthermore, high-tech and medium high-tech companies saw a significantly improved interest coverage ratio, i.e. 3.1 in December 2013 from 1.8 at end-2012, which translated also into a higher capacity to service bank debt (the non-performing loan

ratio was 17.5 percent compared with 22.2 percent in the case of low-tech and medium low-tech companies, in August 2014).

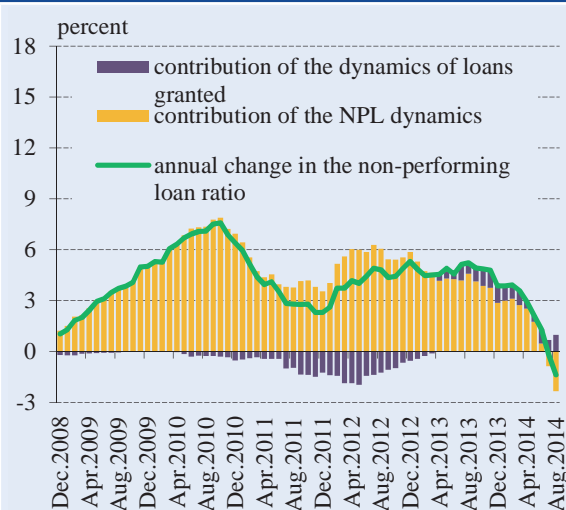
⁴ Only firms having recorded exports or imports worth more than EUR 100,000 in each quarter of 2013 were taken into consideration.

⁵ High-tech, medium high-tech and knowledge-intensive service companies (classification according to Eurostat).

5.1.2. Payment discipline of non-financial corporations

(C) Non-financial corporations' ability to service bank debt continued to deteriorate in 2013 and the first months of 2014, but at a slower pace than in the previous years. The non-performing loan ratio rose by 2.5 percentage points during December 2012 – August 2014, to reach 22 percent (compared with a 9 percentage point increase during December 2011 – August 2013). Starting July 2014, the non-performing loan ratio went down mainly due to the contraction in the volume on non-performing loans (which offset the annual decline in bank loans to firms, Chart 5.5.). Banks' non-performing loan ratio will most likely fall in the period to come against the background of: (i) the removal of non-performing loans from their balance sheets; (ii) the sale of non-performing assets to asset recovery companies, and (iii) Romanian companies' default rate remaining on a downtrend according to the baseline macroeconomic scenario (with an average 5.6 percent level in December 2014, compared with 6.9 percent in December 2013, Chart 5.6.).

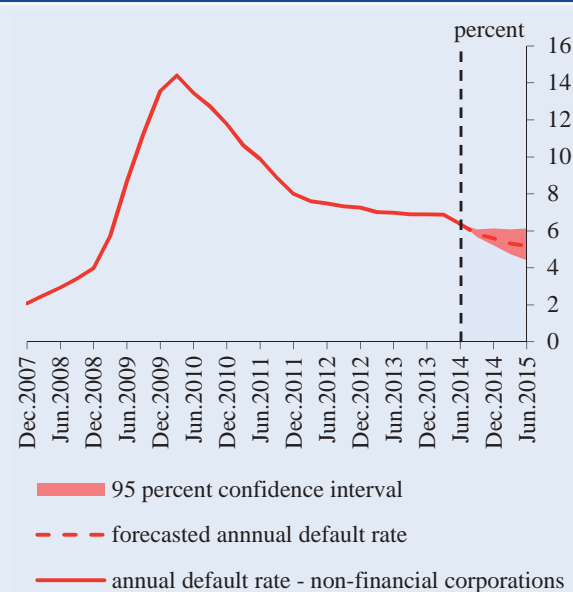
Chart 5.5. Decomposition of the annual change in the non-performing loan ratio of non-financial corporations



Note: The decomposition of the annual change in the non-performing loan ratio is obtained by using partial derivatives.

Source: MPF, CCR, NBR calculations

Chart 5.6. Annual default rate across the non-financial corporation sector, according to the macroeconomic baseline scenario⁶



Source: MPF, CCR, NBR calculations

The borrower migration matrix by number of overdue payment days illustrates that a large share of the firms with payments overdue for more than 90 days stay in this category (more than 90 percent, Table 5.1.). As already shown in the previous Reports, this is yet another reason for banks to clean their exposures overdue for more than 90 days from the balance sheets. Almost half of the companies falling within B, C and D overdue buckets witnessed a risk profile worsening, while roughly 30 percent started to better service their debt.

Foreign exchange lending remained riskier than lending in lei. The stock of non-performing loans in foreign currency saw a faster deterioration over the last years than that of non-performing loans in domestic currency, which caused the ratio of non-performing loans in foreign currency to exceed that

⁶ Underlying the macroeconomic projection is the baseline scenario in the August 2014 Inflation Report.

of non-performing loans in lei starting with August 2013 (23 percent versus 20.7 percent, in August 2014, Chart 5.7.). This evolution was mainly ascribable to the SME sector, whose foreign exchange risk coverage is lower than that of large companies. Bank vulnerabilities to foreign exchange lending are particularly manifest in the case of micro-enterprises (the share of their loans in foreign currency stood at 59 percent in August 2014). Such developments advocate a more cautious approach to extending foreign currency loans to unhedged borrowers, as a prerequisite of a sustainable resumption of lending.

Table 5.1. Borrower migration matrix by number of overdue payment days (August 2013 – August 2014)

	→				
%	A	B	C	D	E
A	91.2	1.3	2.1	1.4	4.0
B	33.7	18.1	12.7	8.0	27.5
C	25.9	4.0	15.9	15.3	38.8
D	16.3	3.2	9.5	21.4	49.6
E	1.3	0.1	0.4	0.7	97.4

A – delay of maximum 15 days

B – delay from 16 days to 30 days

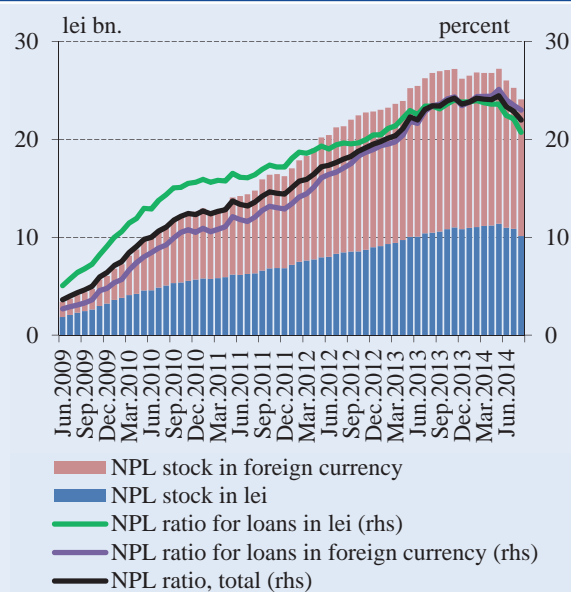
C – delay from 31 days to 60 days

D – delay from 61 days to 90 days

E – delay of more than 90 days

Source: MPF, CCR, NBR calculations

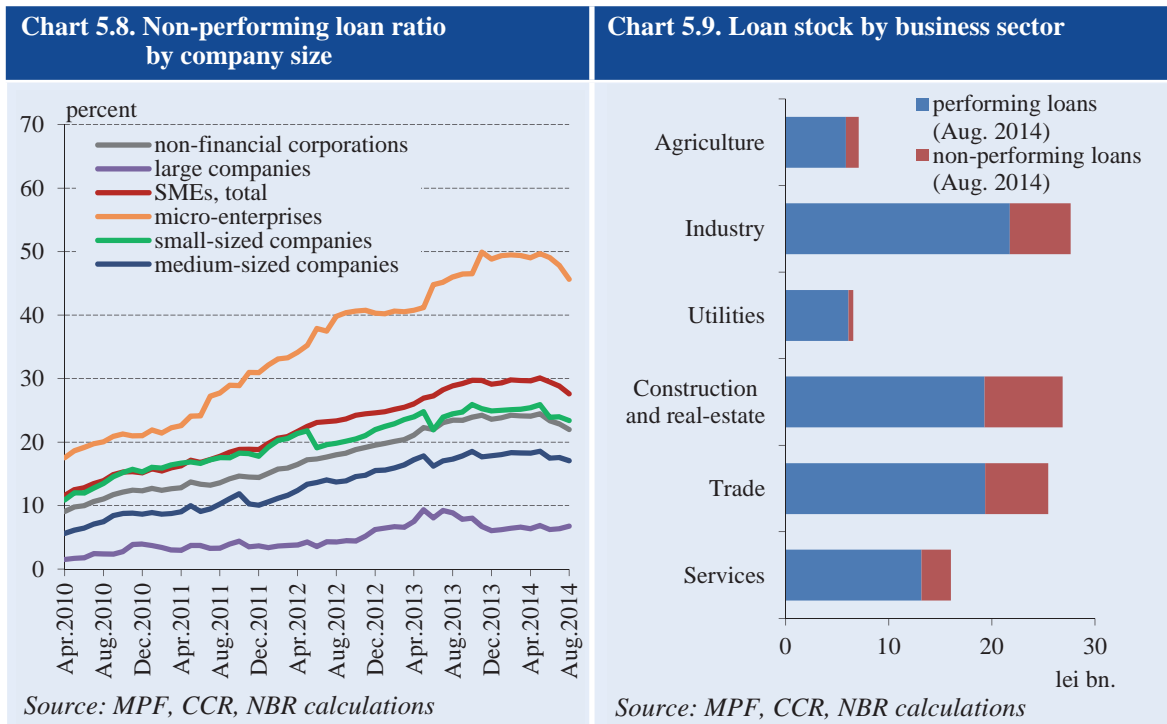
Chart 5.7. Non-performing loans by currency



Source: MPF, CCR, NBR calculations

The SME sector continued to face significant difficulties in servicing bank debt, with the non-performing loan ratio advancing 3 percentage points (whereas large companies saw their non-performing loan ratio inch up by 0.5 percentage points, during December 2012 – August 2014). The portfolio of loans to micro-enterprises and small-sized enterprises recorded the highest credit risk levels (the non-performing loan ratio was 45.7 percent and 23.4 percent respectively, in August 2014, Chart 5.8.).

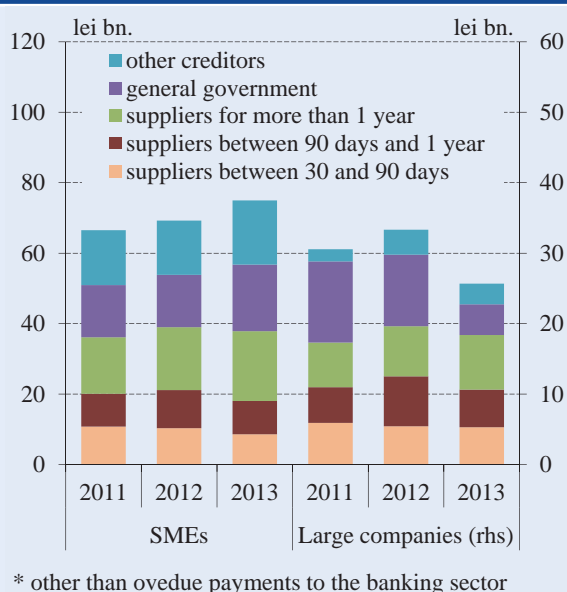
By business sector, firms in the construction and real-estate sectors, and those in the trade sector put considerable pressure on banks' balance sheets (posting a non-performing loan ratio of 28.2 percent and 24 percent respectively in August 2014). In fact, the banking sector has a large exposure to companies operating in business sectors with a lower capacity to withstand the crisis (Chart 5.9.). Firms in industry (which are expected to contribute to the sustainable change in the economic growth pattern) posted a high non-performing loan ratio (21.3 percent, in August 2014).



The dynamics of the risks posed by domestic firms may not differ from those posted by EU firms. The risk premium differential between Romanian companies and companies in the euro area has remained stable overall starting with 2013 (hovering around 200 basis points). The interest rate margin applied by domestic credit institutions (over 3M ROBOR rate) on new loans to non-financial corporations was relatively similar to that on loans in euro, although the risk posed by lending in domestic currency turned out to be smaller than that posed by lending in foreign currency. Moreover, the National Bank of Romania successively cut the monetary policy rate (by 175 basis points since July 2013 to 3.25 percent), thus paving the way for a gradual decline in the costs associated with lending in domestic currency.

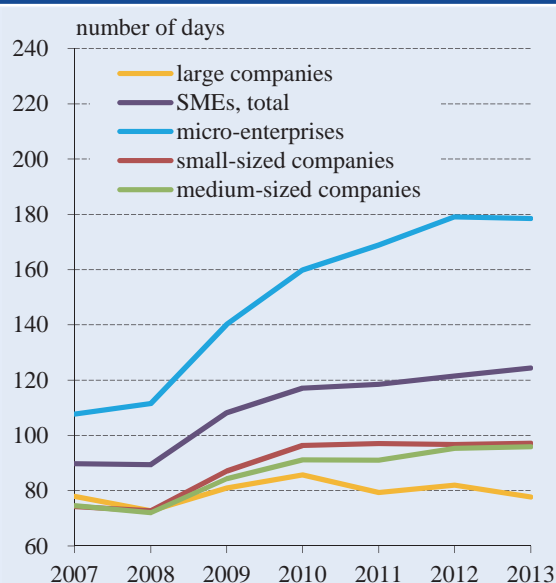
The Romanian banking sector was further robust, with solvency and provisions recording adequate levels for the lending activity. Total capital ratio stood at 17 percent (in June 2014), significantly above the minimum threshold imposed at the European level, and the coverage of corporate non-performing loans with IFRS provisions was further comfortable, i.e. 66.8 percent, in August 2014 (by taking into account prudential filters, alongside the IFRS provisions, the NPL coverage stood at 84.5 percent, in August 2014).

(D) Firms' payment discipline improved at aggregate level relative to both business partners and the state, posting, however, mixed developments by firm category. In 2013, the volume of overdue payments across the economy narrowed slightly from the previous year (by 2 percent, to reach lei 100.7 billion), amid the decrease in payments to suppliers overdue for less than a year and overdue payments to the state. By company size, there has been a mixed behaviour concerning the payment discipline (Chart 5.10.). Thus, total overdue payments generated by SMEs grew by 8.3 percent in 2013 from 2012, as this sector's capacity to service debts to the state deteriorated markedly (overdue payments to the state went up by 27 percent in 2013), concurrently with incurring increasing liabilities to other creditors (employees, shareholders, etc.).

Chart 5.10. Breakdown of overdue payments* across the economy

* other than overdue payments to the banking sector

Source: MPF, NBR calculations

Chart 5.11. Claim recovery period

Source: MPF, NBR calculations

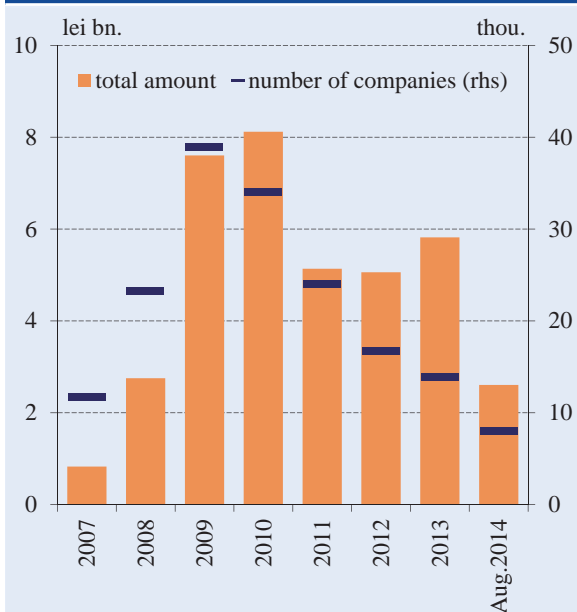
The SMEs' decreasing ability to service bank debt owes to both endogenous and exogenous factors. In the former case, an illustrative example is SMEs' capacity to cover interest expenses from their earnings. This indicator, albeit on the increase in 2013, is significantly lower than that related to large companies (the EBIT/interest expenses ratio for SMEs was 1.3 compared with 4.7 for large companies in December 2013). One of the most important exogenous factors is the persistence of the difficulties SMEs faced in collecting claims. Specifically, in the case of SMEs, the average claim collection period is long and on a slight increase (124 days in 2013, compared with 122 days in 2012), micro-enterprises recovering their claims after 178 days. For large companies, the claim collection period diminished in December 2013 to a level similar to that recorded in 2007 (78 days), Chart 5.11.

Large companies' payment discipline improved significantly, their total overdue payments falling by 23 percent in 2013 from 2012. The breakdown by creditor shows that overdue payments to the state fell from lei 10.2 billion in 2012 to lei 4.3 billion in 2013 and the overdue payments to the business partners shrank from lei 19.6 billion to lei 18.4 billion.

The concentration of firms producing arrears declined slightly in 2013, with the first 10 companies (most of them with majority state-owned capital) generating 16 percent of the arrears to suppliers in the economy, compared with 19 percent in 2012. At aggregate level, private firms service their liabilities to suppliers better than state-owned firms (the rate of default⁷ for commercial debt is 15 percent, compared with 44 percent for state-owned companies). At sectoral level, private firms in the construction, agriculture and real-estate sectors saw the highest rates of default (21 percent and 19 percent, respectively, in the last two cases).

⁷ Calculated as a ratio of companies' overdue payments to suppliers and total commercial debt of firms generating these overdue payments.

Chart 5.12. New major payment incidents



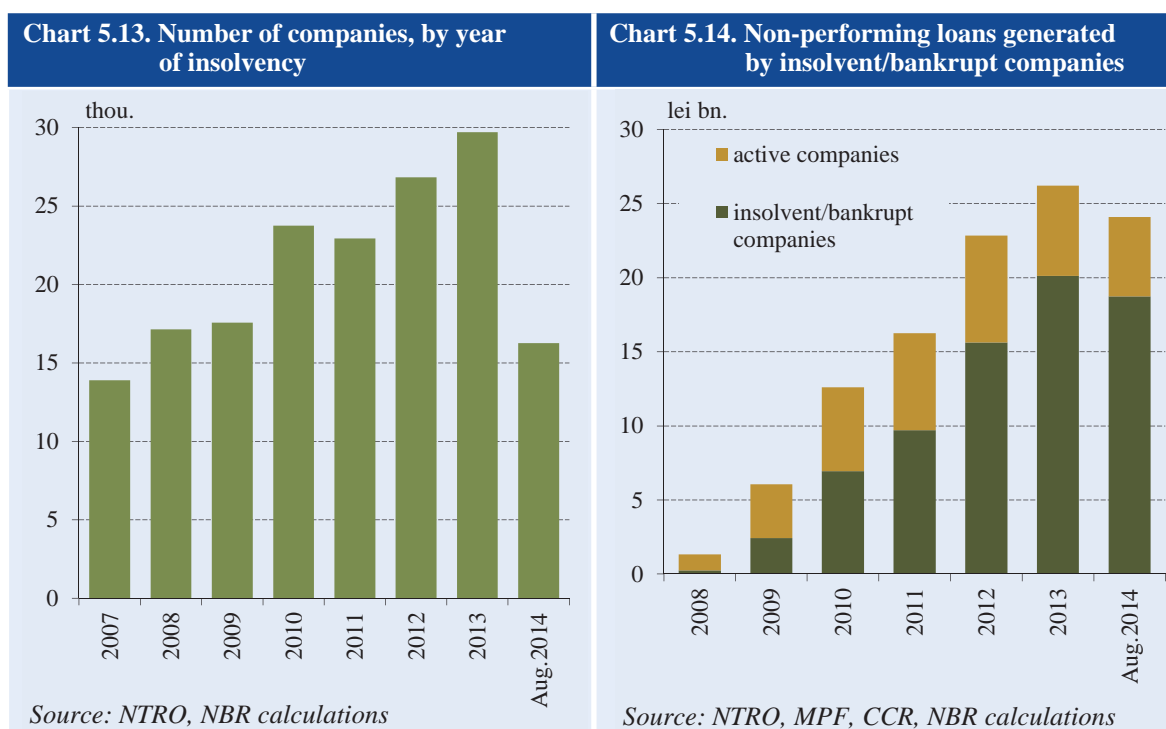
Source: MPF, PIR, NBR calculations

The volume of major payment incidents generated by companies in December 2012 – August 2014 dropped by 7.7 percent compared with that seen in December 2011 – August 2013, whereas the number of firms generating such incidents plunged (20.6 percent, Chart 5.12.). The concentration remains high (the top 100 companies accounted for 50.9 percent of the volume of major payment incidents, up by more than 4 percentage points from the previous period). Companies causing major payment incidents play a moderate part in the economy (generating about 3 percent of the added value of non-financial corporations and holding 5 percent of the number of employees in this sector), but they account further for an important share of the volume of non-performing loans (29 percent).

(E) The number of companies declared insolvent in 2013 expanded by 10.7 percent from the previous year, coming in at more than 29,500 (Chart 5.13.). Insolvency saw a slight improvement in the first 8 months of 2014, with the number of such cases declining by almost 12.6 percent from the same year-earlier period. The companies declared insolvent in 2013 play a less important part in the economy than those declared insolvent in 2012 (their turnover is 12 percent below that recorded by companies declared insolvent in 2012 and their added value and total assets are 47 percent and 45 percent, respectively, lower). The firms declared insolvent in 2013 accounted for 1.5 percent of the total number of employees of non-financial corporations.

Overall, firms undergoing insolvency proceedings cause serious disruptions in the payment mechanism in the economy, generating 26 percent (lei 14.6 billion) of the overdue payments to suppliers and 40 percent (lei 9.4 billion) of the overdue payments to the state recorded across the economy at end-2013. These firms play an important part in generating major payment incidents, accounting for roughly 55 percent (more than lei 3.1 billion) of the total volume of major payment incidents in 2013. Insolvent firms have negative effects on external creditors too, as their loans from foreign financial institutions are worth EUR 1.5 billion and their loans from parent undertakings amount to EUR 0.9 billion (June 2014).

Companies undergoing insolvency proceedings have some common traits, such as, for instance: (i) negative net worth; (ii) low ability to recover their claims (with a claim collection period of 285 days, compared with the economy-wide average of 103 days, and overdue commercial claims totalling about lei 1.1 billion, in December 2013), and (iii) a considerably lower asset turnover than the economy-wide average (39 percent, compared with 85 percent, in December 2013).



Firms in the services and trade sectors account for about 72 percent of the number of firms declared insolvent in 2013, followed by firms in manufacturing and construction (each holding a share of approximately 10 percent). By size, the firms declared insolvent saw the following developments: the number of small firms rose in 2013 (+9 percent in the case of micro-enterprises and +11 percent in the case of small-sized enterprises), while the number of medium-sized enterprises went down by about 13 percent. A cause for concern is the increasing number of large companies declared insolvent, as they play an important part in the total number of firms newly undergoing insolvency proceedings (accounting for 36 percent of the value added generated by these insolvent firms, 34 percent of their total assets and 34 percent of the number of employees).

Companies undergoing insolvency or bankruptcy proceedings have a strong negative impact on banks' and NBFIs' loan portfolio quality, their share in total non-performing loans going up from 68 percent to 78 percent in the case of banks (Chart 5.14.) and from 60 percent to 67 percent, respectively, in the case of NBFIs, in December 2012 – August 2014. This evolution plays an important part, given that only 37.5 percent of banks' non-performing exposures are backed mainly by real-estate collateral, while 11.9 percent thereof were granted with no collateral (August 2014).

5.2. Households' role in maintaining financial stability

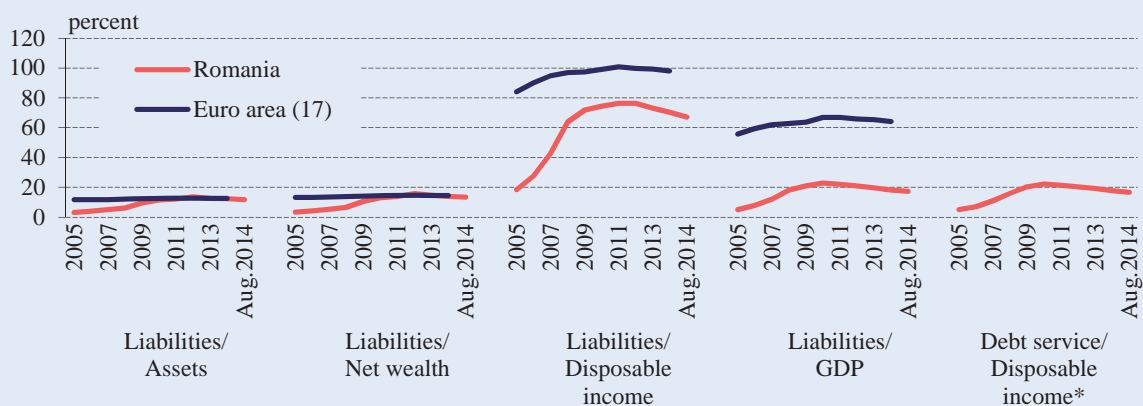
The risks associated with lending to households have seen mixed developments since the release of the previous Report. On the one hand, households' indebtedness decreased, the net creditor position towards the financial system consolidated, and net wealth grew. On the other hand, households' debt service capacity diminished further, albeit at a slower pace than previously. The prospects are for the non-performing loan ratio to go down, also as a result of banks implementing more firmly measures to clean their balance sheets.

5.2.1. Households' balance sheet and saving behaviour

The main financial risks facing households posted a mixed evolution in December 2012 – August 2014: (A) indebtedness (calculated as a share of debt service in total disposable income) narrowed by 2.73 percentage points, but the outcomes are mixed by income sub-group; (B) the short foreign exchange position continued to decrease, remaining however at a high level (lei 19.4 billion, in August 2014), while the net creditor position improved (to reach lei 19.5 billion, in August 2014), and (C) net wealth edged up (by 3.1 percent, in nominal terms, during the same period) against the background of larger bank saving. These developments owe to the rise in households' disposable income, in the context of a relatively steady employment rate (59 percent, in 2013) and of the structural change in new loans granted. The flow of loans in lei surged by 67 percent (in January 2013 – August 2014 compared to January 2012 – August 2013), amid the “First Home” programme shifting to lending in domestic currency alone, while the flow of loans in euro shrank by 50 percent (during the same period).

(A) Households' indebtedness continued to narrow (with all indebtedness indicators posting a similar evolution, Chart 5.15.), remaining, however, relatively elevated. Households' loans from banks and domestic NBFIs (asset sales included) ran high (lei 111.8 billion in August 2014), albeit on a decrease (from lei 115.9 billion, in December 2012). The number of households indebted to banks and NBFIs fell marginally (to 4.12 million in August 2014, from 4.31 million in June 2013), accounting for 43 percent of the labour force at end-2013.

Chart 5.15. Households' indebtedness – aggregate indicators

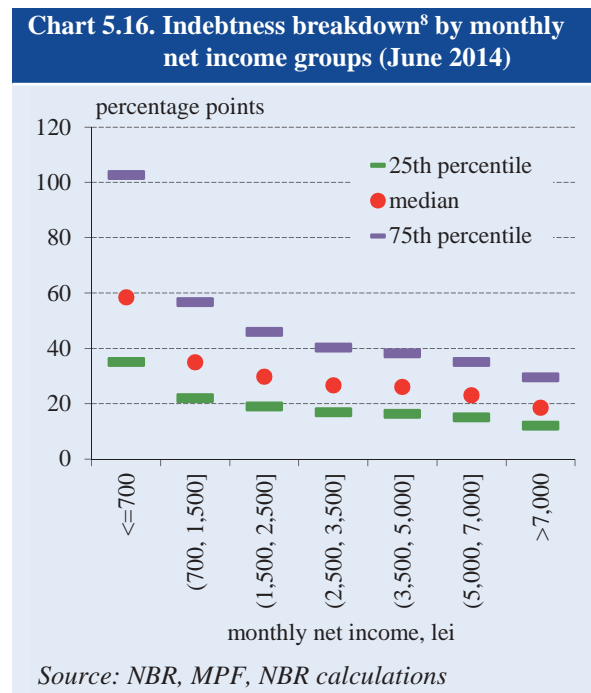


* Total household disposable income, net values. The debt service/disposable income is not available for the euro area.

Source: ECB, NBR, NIS, NBR calculations

The share of debt service in total disposable income fell (by 2.73 percentage points, in December 2012 – August 2014) due to the favourable action of both components of the indicator. Households' disposable income (denominator of the indicator) rose (by 5.2 percent in December 2012 – June 2014) and households' expectations on their financial standing for the next year saw a progressive improvement (from a balance of answers of -10.8 in December 2012 to -2.6 in August 2014). The volume of the monthly debt service (numerator of the indicator) declined by 10.5 percent in December 2012 – August 2014, as a result of the decrease in interest rates on loans outstanding (more pronounced in the case of loans extended in lei, from 1.6 percentage points for consumer loans,

to 3.5 percentage points for real-estate loans), as well as on the background of the decrease in the stock of loans in foreign currency (by 11 percent, in December 2012 – August 2014).



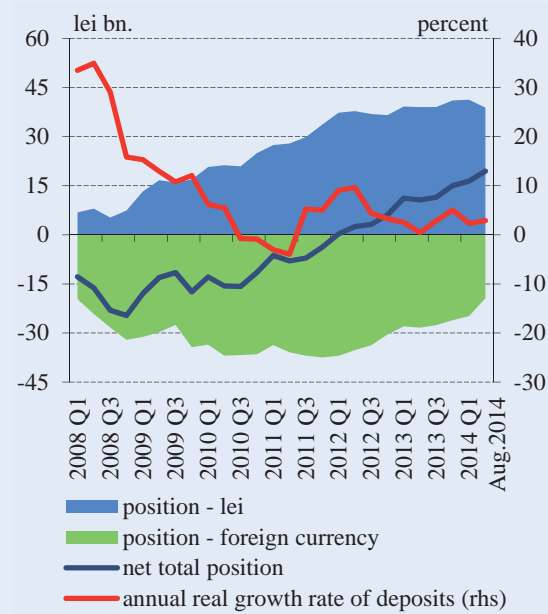
The structural characteristics of indebtedness, alongside the high level of consumer spending mainly on basic necessities⁹, add to the image shown by indebtedness indicators at aggregate level. The breakdown by income group of the debt service to the monthly net income remained relatively unchanged (Chart 5.16.), with a slight improvement recorded by households earning incomes below the economy-wide minimum wage. These debtors posted further the highest indebtedness asymmetry, a concerning issue especially considering that these borrowers pose the highest payment default risk (Chart 7.2. of Section 7.1. “Macprudential instruments implemented by the NBR in relation to debtors – a decade-long experience”), being the most vulnerable group to potential fluctuations in the interest rate and exchange rate. Moreover, the debtors with the lowest incomes post further

the highest indebtedness when contracting a new loan, with an indebtedness of almost 39 percent (median value) compared to 23 percent reported by the other debtors (in December 2012 – June 2014). Empirical evidence shows that an indebtedness level below 45 percent is desirable in terms of sustainable lending, as a share of debt service in the disposable income above this threshold leads to a considerably higher probability for lending to see unsustainable growth.

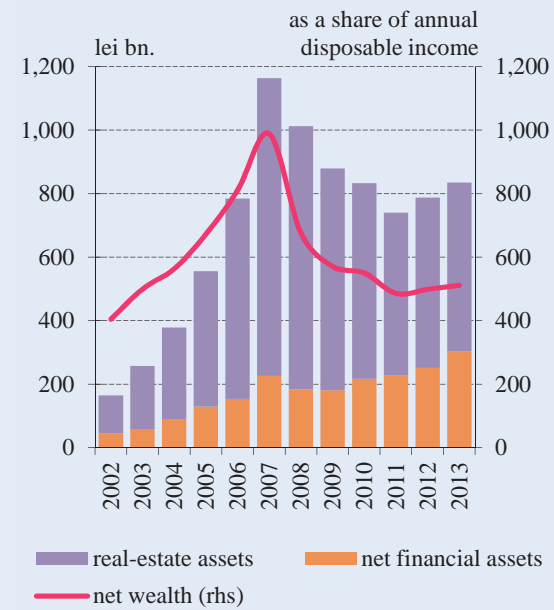
(B) Households’ net creditor position towards the national and international financial system continued to consolidate (Chart 5.17.). This occurred in the context of: (i) a decrease in households’ total indebtedness (by 3.6 percent in December 2012 – August 2014, in nominal terms) and (ii) an increase in bank saving by 7.4 percent during the same period (in nominal terms). Indebtedness breakdown shows a climb in real-estate loans (by 13.1 percent, in December 2012 – August 2014), offset by a decline in consumer loans (by 12.1 percent during the same period).

⁸ Indebtedness is calculated only for households with bank loans, by using constant annuities and without considering co-borrowers. The income used refers to December 2013 and the loans taken refer to June 2014. The coverage ratio is of around 65 percent in terms of total exposures and 64 percent in terms of the number of borrowers (in June 2014).

⁹ For further details on the structural characteristics of households’ indebtedness see Section 5.2.1. “Households’ balance sheet and saving behaviour” in the 2013 Financial Stability Report.

Chart 5.17. Households' position vis-à-vis banks (asset sales included) and NBFIs

Source: NBR, NBR calculations

Chart 5.18. Households' net wealth

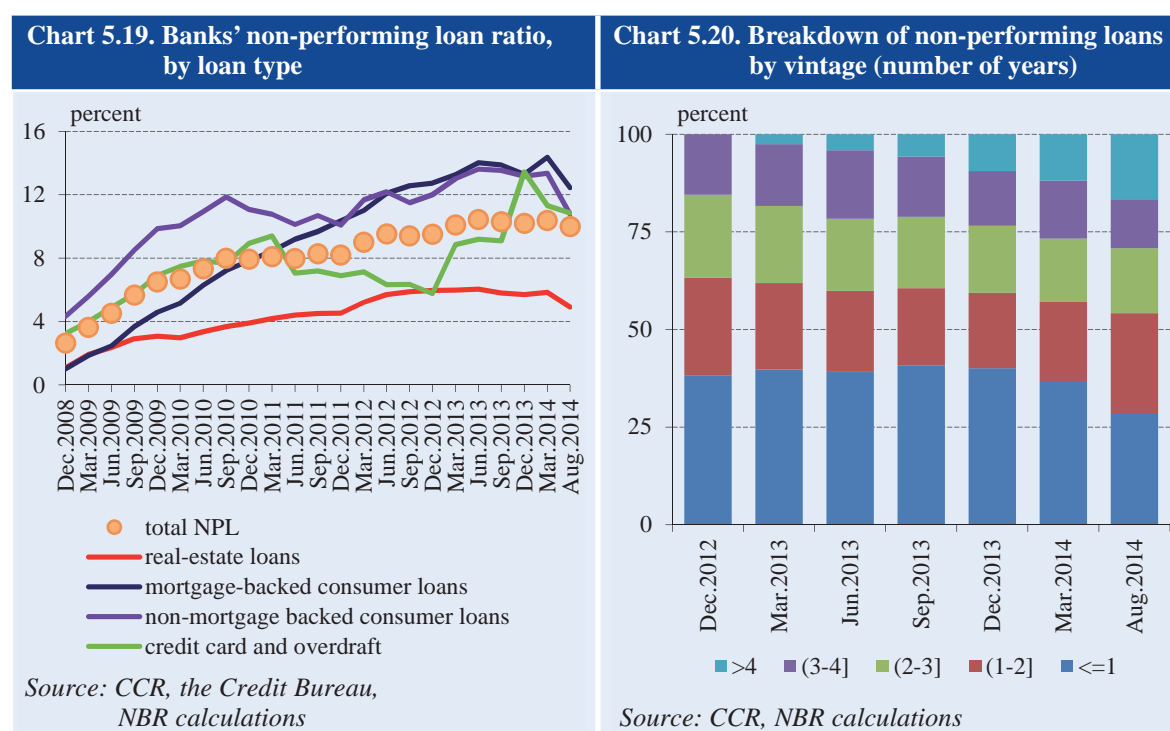
Source: NIS, FSA, NBR calculations

Households' short foreign exchange position towards the financial system constitutes a vulnerability facing lending to households, albeit on the mend, as pointed out by the previous Report. The adjustment in households' balance sheets triggered a 36 percent contraction in the short foreign exchange position (in December 2012 – August 2014), coming in at about lei 19.4 billion in August 2014 (Chart 5.17.). Indebtedness breakdown by currency shows a decrease in the share of loans in foreign currency by roughly 5 percentage points over December 2012 – August 2014 (to 62.1 percent), in favour of loans in domestic currency. This evolution was posted chiefly by bank loans for purchasing residential properties, which benefitted by both the cut in interest rates on loans in lei and the shift to loans in domestic currency extended through the “First Home” programme (for further details see Section 5.3. “Risks generated by the real-estate sector and mortgage-backed lending”). The volume of consumer loans in foreign currency also saw a contraction (by 21 percent, in December 2012 – August 2014).

(C) Households' net wealth rose slightly, although at a slower pace than in 2012 (3.1 percent in 2013 from 2012, compared with 9.1 percent in 2012 from 2011, Chart 5.18.), amid the pick-up in net financial assets and real-estate assets, as well as owing to the reduction of liabilities. Households' liquidity improved, in the context of riskless liquid assets in the portfolio remaining in 2013 at the level seen in 2012 (40 percent of total financial assets). Bank deposits increased (by 7.4 percent in December 2012 – August 2014) amid the advance in households' potential saving resources (10.1 percent in March 2014, compared with 7.9 percent in December 2012).

5.2.2. Households' capacity to service debt

Households' capacity to service debt deteriorated marginally in December 2012 – June 2014, albeit at a slower pace than previously. Banks' non-performing loan ratio peaked at 10 percent (in June 2014, up 0.5 percentage points from December 2012, Chart 5.19.), but, subsequently, entered a downward path to reach 8.7 percent in August 2014. The volume of non-performing loans diminished by 11.5 percent throughout this period, with the contraction seen in the latter part of 2014 (by 13.5 percent in August 2014 from June 2014) being ascribable to a stepped-up removal of non-performing loans from the banks' balance sheets, as well as to the loan sales.



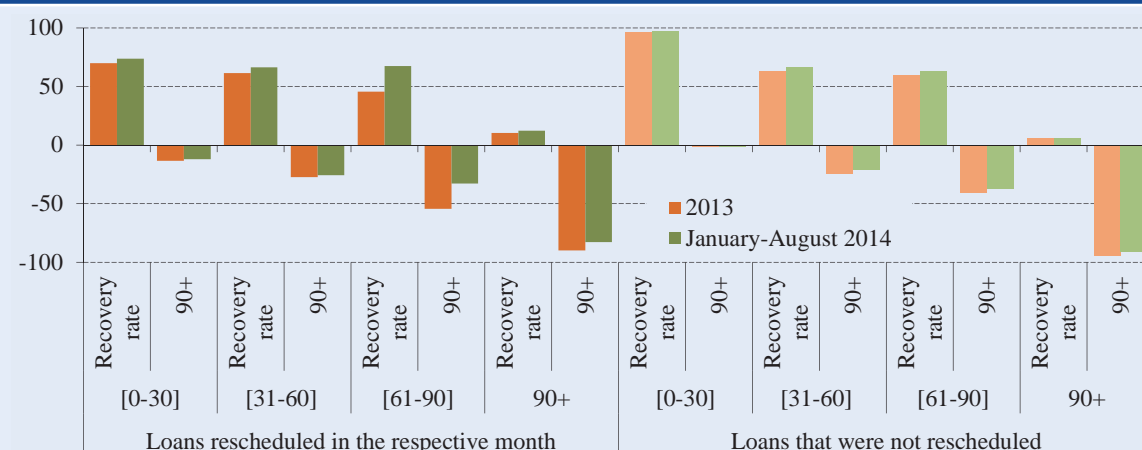
The prospects for the non-performing loan ratio are mixed, but there are clear signs indicating its further decrease, both following the improvement in households' payment capacity, and through banks' balance sheet clean-up. The main indicators pointing out households' improved payment capacity are: (i) the further improvement in the recovery rate of loans overdue for up to 90 days: for loans with payments overdue between 30 and 60 days it went up from 61 percent (the 2013 average) to 63.8 percent (the 2014 H1 average) and for loans with payments overdue between 61 and 90 days it rose from 58.5 percent to 61.2 percent; (ii) the plunge (by 29.1 percent compared to the same year-earlier period) in the number of debtors reporting for the first time payments overdue for more than 90 days in January 2013 – August 2014.

The balance sheet clean-up, by removing poor quality loans, is expected to accelerate. This will lead to a decline in banks' non-performing loan ratio without, however, causing a significant betterment in households' large indebtedness. The evidence on the loans which turned non-performing (with payments overdue for more than 90 days) advocates a faster balance sheet clean-up. The share of non-performing loans that are upgraded is low (5.97 percent, the average for January 2013 – August 2014; for mortgage-backed loans, the recovery rate stands at 13.8 percent) and an important share

(roughly 60 percent) of the debtors whose loans become non-performing stay in this category for at least two years (Chart 5.20.).

Credit institutions took measures to reduce the volume of non-performing loans granted to households, by usually initiating asset sales, loan rescheduling and removal from the balance sheet. Asset sales are worth roughly lei 3.6 billion¹⁰ (January 2013 – August 2014), of which 60 percent were loans overdue for more than 90 days. The breakdown of rescheduled loans underwent a change in January 2013 – August 2014, with the volume of loans overdue for more than 90 days posting a stronger rise (by about lei 0.57 billion, compared with lei 0.12 billion for performing loans, versus the same year-earlier period). The share of these loans in total loans rescheduled over 2013 – August 2014 stood at 32.5 percent, as compared with a 14.7 percent share in total loans rescheduled over 2012 – August 2013. Loan rescheduling became more efficient, with an improving performance of loans with payments overdue for more than 90 days which were rescheduled in 2012 and 2013 H1 (and assessed a year later). The rate of recovery of these loans into lower overdue buckets improved (from 10.25 in December 2013 to 12.3 percent in August 2014, Chart 5.21.). By contrast, for non-performing loans which were not rescheduled, the recovery rate hovered around 5.4 percent (over the same period)).

Chart 5.21. Migration matrix of rescheduled and non-rescheduled loans



Note: An assessment was carried out on the evolution posted over a year by the loans rescheduled at the start of the assessment period.

Source: CCR, NBR calculations

The solution to reduce the non-performing loan ratio by increasing the stock of new loans granted to households is less feasible owing to the high indebtedness of this sector. Households' demand for new loans remained subdued over 2013, posting, however, an upturn in early 2014, for both real-estate loans and consumer loans (especially non-mortgage consumer loans).

The Romanian banking sector continues to enjoy a satisfactory coverage – in terms of solvency and provisioning – against the risks arising from lending to households, which enables it to adequately manage potential adverse developments: (i) the total capital ratio was on the rise (17 percent, in June 2014), (ii) the IFRS provisioning coverage of household non-performing loans came in at 63.5 percent (in August 2014), with the coverage level reaching 97.2 percent (August 2014) when also taking into account prudential filters. On the other hand, the share of loans in the value of the collateral required

¹⁰ According to the data reported by CCR.

for real-estate loans (loan-to-value, LTV) saw an increase in December 2012 – June 2014¹¹ (from 81.6 percent to 85.9 percent) as a result of the impairment of the collateral in stock, as well as following the granting of new loans with a high LTV ratio.

Structural analysis shows that vulnerabilities associated with the households' sector have grown slightly since the release of the previous Report: (A) the challenges posed by the portfolio of mortgage-backed loans are further significant, (B) the loans in foreign currency continue to report the highest non-performing loan ratio, and (C) the debtors with low incomes – and high indebtedness – saw a more pronounced deterioration in their debt service.

(A) The risks arising from real estate-backed lending to households have remained high since the release of the previous Report (see Section 5.3. “Risks generated by the real-estate sector and mortgage-backed lending”). Mortgage-backed consumer loans were further the riskiest among the loans extended to households (recording a 12.4 percent non-performing loan ratio, in August 2014, Chart 5.19.), with the NPL ratio gap from non-mortgage backed consumer loans deepening (to 1.7 percentage points). However, this evolution does not reflect a higher payment discipline concerning non-mortgage consumer loans, given that: (i) credit institutions usually resorted to selling non-mortgage consumer loans (about 65 percent of asset sales in January 2013 – August 2014¹²), and (ii) a large volume of non-mortgage consumer loans was recognised as loss (removed from the balance sheet), accounting for about 18.1 percent of the volume of non-performing loans (August 2014) compared with only 1.4 percent in the case of mortgage-backed consumer loans. The indicators that show the rising value of the loss given default for mortgage-backed loans (for further details see Section 5.3. “Risks generated by the real-estate sector and mortgage-backed lending”) and the further decrease in real-estate prices advocate starting the loss recognition for this category of loans.

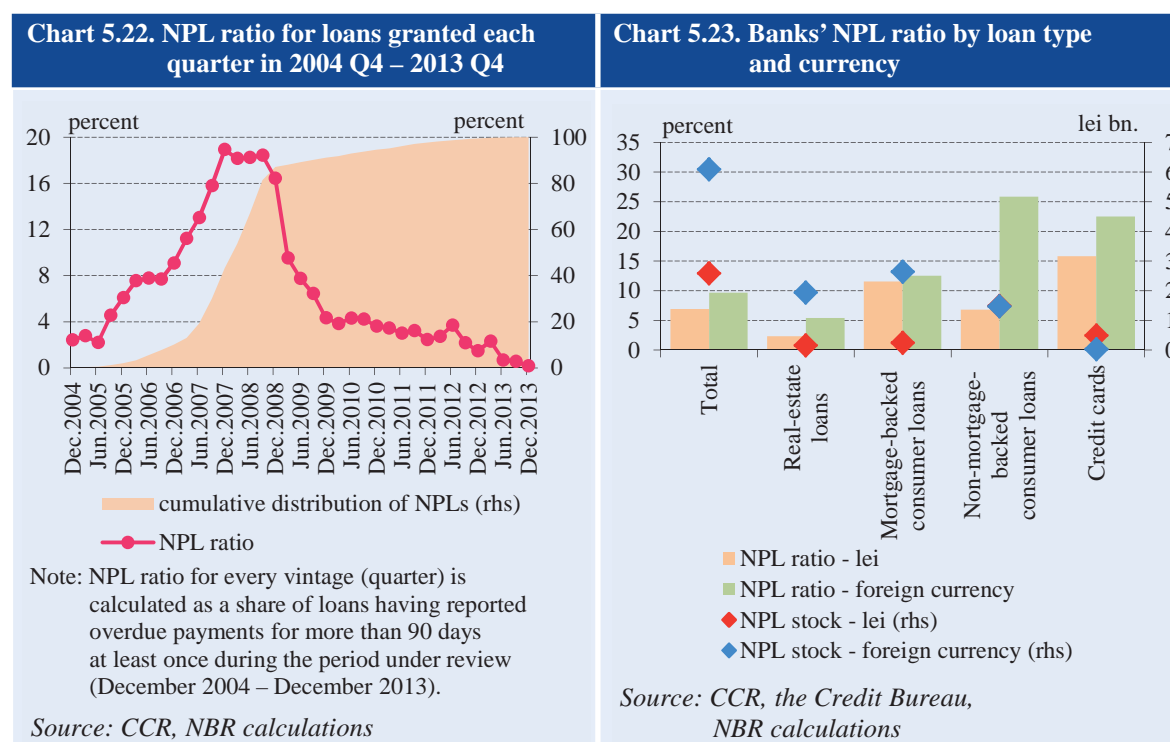
(B) The gap between the NPL ratios for loans in foreign currency and lei respectively grew deeper, peaking at 4.1 percentage points in June 2014, before shrinking to 2.8 percentage points (August 2014). The NPL ratio posted by loans in foreign currency came in at 9.7 percent, compared with 6.9 percent for loans in lei (August 2014, Chart 5.23.). Moreover, loans in foreign currency make a substantial contribution to the volume of non-performing loans (a 73 percent average in 2012, albeit on a decrease to 70.2 percent in August 2014 in the context of a large volume of loans in foreign currency being removed from the balance sheet). At aggregate level, debtors having taken loans in foreign currency report a higher indebtedness than those having taken loans in domestic currency (42 percent, compared with roughly 30 percent for loans in lei, median values for the stock of loans, in June 2014).

The behaviour of loans in lei differs from that of loans in foreign currency for all categories of loans (Chart 5.23.) being most visible in the case of non-mortgage consumer loans (19.1 percentage points). In the latter case, most of the loans in foreign currency (almost 55 percent of the loan stock) were extended in 2007-2008 (when looser lending standards were in place). The high NPL ratio for this category (25.9 percent, in August 2014) is a reason to maintain prudent lending standards throughout the business cycle.

¹¹ According to the NBR's *Bank Lending Survey*, August 2014.

¹² According to the data reported by CCR.

In fact, the assessment of the impact exerted by macroprudential measures (LTV and DTI) on bank lending and asset quality emphasises that the lack of such regulations contributed to an increase in the non-performing loan ratio. The loans extended in 2007 Q1 – 2008 Q3 report the highest non-performing loan ratio and take the largest part of non-performing loans (Chart 5.22.). During this “self-regulating” period that credit institutions went through, each bank adopted internal norms setting maximum indebtedness levels by credit type and the associated risk (see Section 7.1. “Macroprudential instruments implemented by the NBR in relation to debtors – a decade-long experience”). The analyses carried out showed that this type of regulation does not yield the most efficient results in terms of credit risk, with loans granted during the “self-regulating” period turning out to be the most vulnerable to unfavourable macroeconomic developments.



The implementation of new macroprudential measures starting 2008 and their adjustment to the macroeconomic conditions and the lending evolution (for instance, the more pronounced increase in credit risk posed by foreign currency lending) led to an improvement in the quality of new bank loans granted. The contribution of loans extended after 2009 to the volume of non-performing loans was marginal. Under the circumstances, it is necessary to maintain a satisfactory effectiveness of LTV and DTI macroprudential instruments. The removal from the scope of regulations of real estate-loans granted through the “First Home” programme (holding a significant share of real-estate loans to households) and the implementation of new such measures reduce the efficiency of macroprudential instruments.

(C) Debtors earning net incomes below the economy-wide average are further the riskiest group for the banking sector, accounting for about 65 percent of the volume of non-performing loans (both real-estate loans and consumer loans, Chart 7.2. of Section 7.1. “Macroprudential instruments implemented by the NBR in relation to debtors – a decade-long experience”). This group of debtors saw the strongest increase in the non-performing loan ratio in December 2012 – June 2014 (by 1.14 percentage points for real-estate loans and 1.45 percentage points for consumer loans) with

a slight improvement in August 2014. For these debtors, measures need to be identified allowing further adequate access to financing, concurrently with protecting both debtors and creditors against potential abuses.

5.3. Risks generated by the real-estate sector and mortgage-backed lending

The banking sector's concentration of direct and indirect exposures to the dynamics of real-estate market is high and increasing and the risks to these exposures remained significant. These developments could call for the implementation of new macroprudential measures with a view to better managing the mentioned risks, in line with the European Systemic Risk Board recommendations to limit the concentration of direct and indirect exposures of credit institutions.

The Romanian banking sector features a large volume of exposures associated with the dynamics of real-estate market¹³. The share of these exposures in total loans granted to households and non-financial corporations was of 71 percent in August 2014 (compared with 67.3 percent in December 2012). Banks' exposure to assets correlated with the real-estate market is larger for the corporate portfolio (75.8 percent of total loans granted to the non-financial corporation sector, in August 2014, up 2 percentage points versus December 2012). In the case of the portfolio of loans granted to households, the exposure to such assets is lower compared to the corporate sector 66 percent of total loans to households were mortgage-backed, in August 2014, up about 2 percentage points from December 2012).

The high exposure to assets associated with the dynamics of real-estate market is widely spread across the Romanian banking sector (with a low Herfindahl-Hirschman index¹⁴), which advocates the use of macroprudential tools in addition to microprudential instruments, with a view to managing such risks. This is a characteristic of both household and corporate loan portfolios (the Herfindahl-Hirschman index stood at 100 in the former case and at 80 in the latter case, in August 2014).

At European level there is an ongoing preoccupation to adequately manage banking risks posed by the high concentration reported by various sectors, especially the real-estate one¹⁵. The European Systemic Risk Board (ESRB) recommends the macroprudential authorities to have as a distinctive intermediate objective the containment of direct and indirect exposure concentrations¹⁶, with the macroprudential instruments indicated for attaining this objective considering both debtors and creditors¹⁷. The NBR acquired good expertise in using such macroprudential instruments (see Section 7.1. "Macroprudential instruments implemented by the NBR in relation to debtors –

¹³ The loans considered included real-estate and mortgage-backed consumer loans to households, the loans granted to companies in the construction and real-estate sectors, as well as mortgage-backed loans (other than those granted to the mentioned sectors) which are backed, *inter alia*, by real-estate collateral.

¹⁴ The Herfindahl-Hirschman index stood at 85 percent in August 2014. The index was calculated for the whole mortgage-backed (residential and commercial) exposure. The threshold indicating a concentration problem is of 180.

¹⁵ The ESRB Report on operationalising macroprudential instruments includes a whole chapter that is dedicated to the real-estate market (*The ESRB Handbook on Operationalising Macroprudential Policy in the Banking Sector*).

¹⁶ The ESRB Recommendation of 4 April 2013 on intermediate objectives and instruments of macroprudential policy (ESRB/2013/1).

¹⁷ The instruments for creditors refer to the sectoral capital requirements and the limits on LGD (loss given default), while those for debtors envisage the DTI ratio (debt-service-to-income), the LTI ratio (loan-to-income) and the LTV ratio (loan-to-value).

a decade-long experience”). These preoccupations with the adequate management of banks’ exposures to the assets associated with the dynamics of real-estate market are entailed by the extensive evidence showing that unfavourable developments on the real-estate market may also lead to financial crises, owing to the strong connections between this market, on the one hand, and the financial system and real economy, on the other¹⁸.

The recent developments on the real-estate market hint at a period of relative stagnation, after a few years of significant adjustments. The decline in the prices of residential property starting with 2009 came to a halt in 2013, being again visible in 2014 Q1, the number of residential building permits issued in January 2013 – August 2014 remained relatively flat at the level posted in January 2012 – August 2013, and the appetite for real-estate transactions saw a slight turnaround (the number of such transactions added 6.8 percent in January 2013 – June 2014 versus January 2012 – June 2013). The intention to buy a house over the following 12 months was further modest¹⁹, while investment in new construction works diminished in 2013 (by 12 percent from 2012, to reach the level reported in 2011; the trend was further manifest in 2014 H1, with investment in new construction works posting a 6 percent contraction versus the same year-earlier period).

Banks’ direct exposure to companies in the construction and real-estate sectors is significant (24.5 percent of total portfolio of loans to non-financial corporations and lei 26.8 billion respectively, in August 2014) and the credit risk from such exposure stands high (the non-performing loan ratio posted by companies in the construction sector stood at 40.4 percent, while that of firms in the real-estate sector came in at 21 percent, in August 2014). Companies in the real-estate developer sub-sector pose a considerable risk (the non-performing loan ratio stood at 33.7 percent, in August 2014). The firms in the construction and real-estate sectors also generate a large share of major payment incidents in the economy (41.4 percent of total major payment incidents in 2013, up from 37.8 percent in 2012). In 2014 H1, the volume of major payment incidents generated by firms in the construction and real-estate sectors saw a contraction, but their payment discipline is further loose (31 percent of the volume of major payment incidents across the economy).

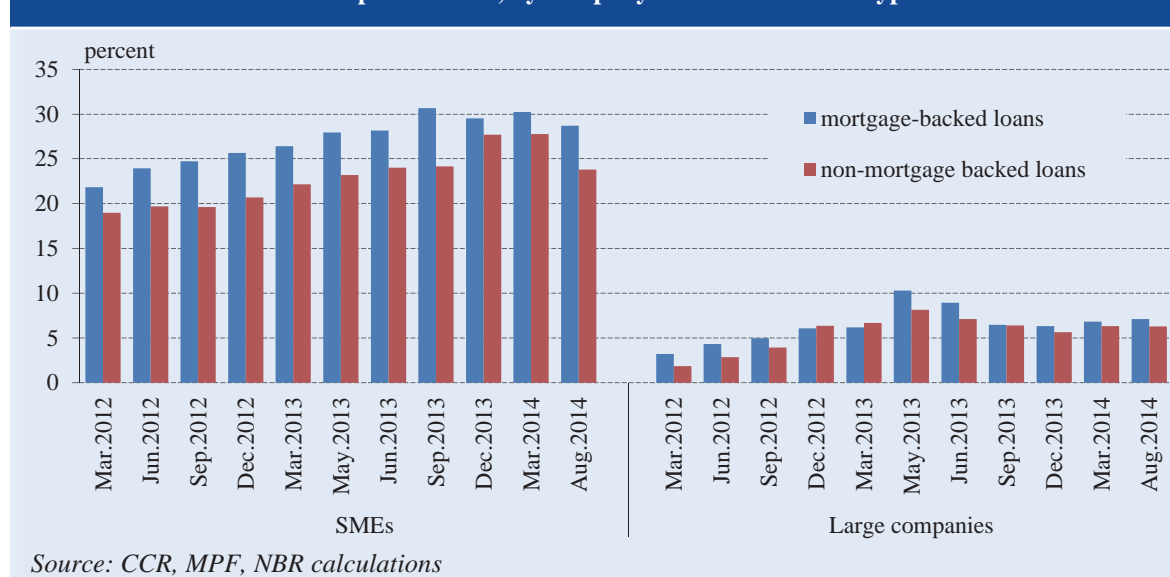
The risks generated by banks’ exposure to the assets associated with the dynamics of real-estate market are further manageable, calling, however, for a close monitoring and possibly new macroprudential measures, in line with the European Systemic Risk Board’s recommendations. The risks posed by real estate-backed loans to households remain high, while in the case of the portfolio of commercial loans which are backed, *inter alia*, by real-estate collateral, the view has become stronger over the last years that the request for such collateral does not guarantee a better payment discipline. The credit risk for this portfolio is further higher than that for the portfolio of loans which are not backed by such collateral, the non-performing loan ratio coming in at 24.1 percent for the exposures which are backed, *inter alia*, by real-estate collateral (compared with 16.7 percent for non-mortgage backed loans, in August 2014, Chart 5.24.). Banks must develop their ability to make a more in-depth analysis of the financing projects submitted by firms and of the company-specific risks by company size, as well as their ability to offer advisory services to firms in developing their activity. Such a step could guarantee the debt service better than the real-estate collateral.

¹⁸ Crowe, C., Dell’Ariccia, G., Igan, D., and Rabanal, P. (2013), “How to Deal with Real Estate Booms: Lessons from Country Experiences”, *Journal of Financial Stability*, Vol. 9, pp. 300-319.

¹⁹ The European Commission, *Business and consumer survey*, September 2014.

The NBR has been monitoring on a regular basis the risks arising from banks' exposure to assets associated with the dynamics of real-estate market and has recalibrated its instruments in order to adequately manage such risks. For instance, the NBR opted²⁰ for a more prudent treatment of the mortgage-backed commercial loan portfolio, setting shares at risk of 100 percent for this category, while for real-estate loans to households the share at risk was set at 35 percent. Keeping these exposures at the present level is warranted by the evolution of the risks generated by the mortgage-backed loan portfolio.

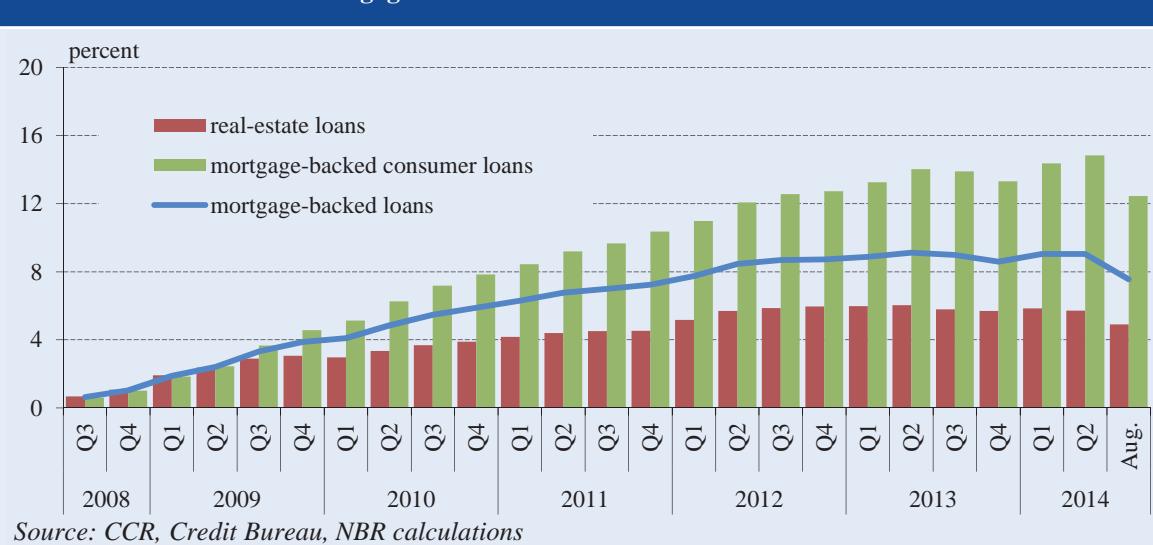
Chart 5.24. NPL ratio for corporate loans, by company size and collateral type



The risks stemming from mortgage-backed loans to households saw mixed developments. The non-performing loan ratio rose marginally in December 2012 – June 2014 (from 8.7 percent to 9 percent, Chart 5.25.), but thereafter it fell to 7.6 percent (in August 2014). These developments occurred following the slowdown in the growth rate recorded by the volume of non-performing loans (from 36.3 percent in December 2011 – June 2013 to 4.5 percent in December 2012 – June 2014) and the stepped-up removal of non-performing loans from the banks' balance sheets, as well as the sale of a substantial volume of loans (about lei 1.01 billion) in July – August 2014. Mortgage-backed consumer loans remain the riskiest loans (posting a non-performing loan ratio of 12.4 percent, compared with 4.9 percent reported by real-estate loans, in August 2014). The portfolio of loans granted through the “First Home” programme (accounting for 46 percent of the real-estate loan stock in June 2014 and 67 percent of new real-estate loans granted in December 2012 – June 2014) features a low non-performing loan ratio (0.03 percent, in June 2014).

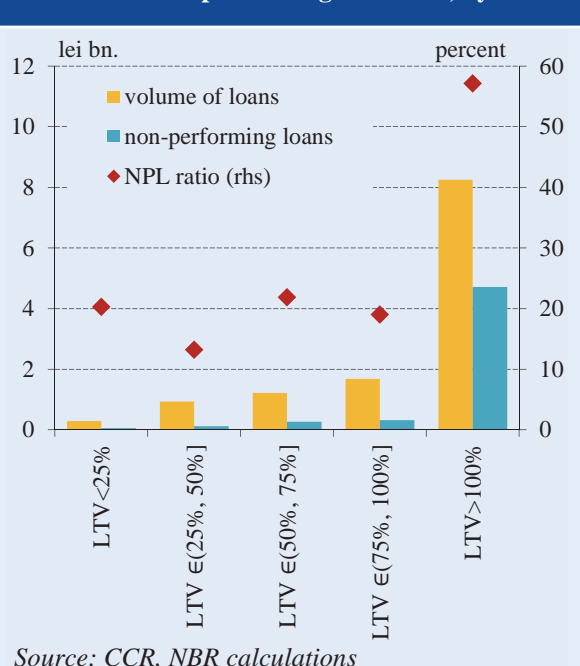
²⁰ In the context of implementing CRD I-III legislative packages into the national legislation and subsequently exercising national options according to Regulation (EU) No. 575/2013 (CRR).

Chart 5.25. NPL ratio for mortgage-backed loans to households



Two developments indicate the persistence of vulnerabilities in the portfolio of mortgage-backed loans to households. First, those who are no longer able to service their debts (having payments overdue for more than 90 days) usually stay in this situation. The recovery rate to less risky categories remained modest (9.7 percent for those having taken real-estate loans and 12.8 percent, respectively, for those having taken mortgage-backed consumer loans, values for December 2012 – August 2014). These readings advocate the intensification of bank balance sheet clean-up by removing exposures with payments overdue for more than

Chart 5.26. Non-performing loan ratio, by LTV



90 days. The effectiveness of mortgage-backed loan rescheduling was relatively moderate. Banks resorted to a low extent to this portfolio management technique (5.8 percent of the stock of real-estate loans were rescheduled in August 2014) and roughly 35 percent of the stock of rescheduled loans continued to report payments overdue for more than 90 days (in August 2014). The rescheduling was more resorted to for the portfolio of mortgage-backed consumer loans (17.4 percent of mortgage-backed consumer loans were rescheduled in August 2014, up from 12.9 percent at end-2012).

Second, the loss given default (LGD) saw an upward evolution. The LGD value for mortgage-backed consumer loans rose from about 34 percent in June 2013 to 46 percent in June 2014²¹. The losses linked to real-estate

²¹ According to the NBR's *Bank Lending Survey*, May 2014. The LGD value reported by the top 10 banks in the banking system is similar to the aggregate developments, according to the readings in CCR (average value of about 45 percent in 2014 H1).

loans range between 25 percent and 60 percent²². To these negative developments also contributed a relatively high loan-to-value ratio. The analyses performed on loans granted to companies indicate a tight connection between the NPL ratio and the LTV: the riskiest loans are those with an above-par LTV (with a 57.1 percent ratio of loans overdue for more than 90 days), while for loans with a below-par LTV, the ratio of loans overdue for more than 90 days stood at 18.6 percent (in August 2014, Chart 5.26.). The collateral revaluation through the incorporation of negative developments on the real-estate market is not the only factor which led to higher LTV values. Beside this factor are banks' lending policies: 69 percent of short-term loans (below one year) have an above-par LTV. In order to adequately reflect the value of real-estate collateral in banks' balance sheets, as well as to have a true and fair view of LTV levels, the NBR asked repeatedly the external auditors of credit institutions, starting with 2012, to independently assess the value of this collateral. The outcome was a relatively significant correction of the real-estate collateral value, which also brought about higher LTV levels.

²² According to the data released by the NBR's *Bank Lending Survey* and the Central Credit Register (CCR) for exposures higher than lei 20,000.

6 FINANCIAL SYSTEM INFRASTRUCTURE – STABILITY OF PAYMENT AND SECURITIES SETTLEMENT SYSTEMS

6.1. Stability of ReGIS payment system

ReGIS continued to operate smoothly, without significant disruptions during July 2013 – June 2014, amid a larger number of processed transfer orders and a higher settlement rate. The aggregate available liquidity of the participants in ReGIS was appropriate and it improved, while the financial resources of the system were distributed to a larger extent to the participants experiencing temporary shortage of liquidity.

The average monthly availability ratio of the services provided by ReGIS during this period went no lower than 99.99 percent and the technical incidents that occurred in ReGIS did not push the monthly availability ratio below the minimum availability ratio of the system set at 99.80 percent.

During July 2013 – June 2014, the number of transfer orders settled through ReGIS rose by 4.56 percent against the previous year (over 3,390,000 transfer orders) and the average daily settlement rate was slightly higher than that reported in the reference period, which stood at 99.97 percent.

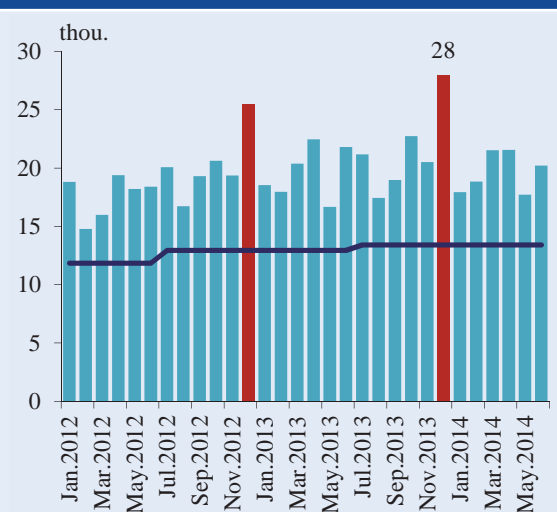
In the period under review, the average daily number of transfer orders settled in ReGIS witnessed a steady moderate rise, yet it remained below 15,000. The maximum volume (in December 2013) of more than 27,900 transfer orders settled through ReGIS per working day and the cyclical nature of the peaks of transfer order volumes settled in December 2012 and December 2013 are not a matter of concern, as the tested processing capacity of ReGIS allows for 10,000 transactions to be made in around eight minutes (Chart 6.1.).

Monitoring the activity of the participants in ReGIS and employing liquidity management instruments specific to this system prompted its efficient functioning based on the existing liquidity, preventing the occurrence of any gridlock, even in the context of occasional liquidity strains. The liquidity usage ratio in ReGIS signalled such pressures, yet they were counteracted via repo operations initiated by the participants in the system (Chart 6.2.).

The settlement of the largest net debit position calculated for July 2013 – June 2014 in the ancillary systems¹, which resort to the facilities provided by ReGIS to settle payment obligations that emerged from the participation in these systems, did not have a negative impact either on the system's liquidity or the participants' payments, the liquidity usage ratio on the respective settlement day standing slightly higher than the average for this period (Chart 6.2.). The settlement of this net debit position (whose value exceeded that of the largest net debit position settled during July 2012 – June 2013) was made as expected and in due time, and required the usage of 20.59 percent of the liquidity available in ReGIS, compared with 25.99 percent of the available liquidity in the system to settle the largest net debit position during July 2012 – June 2013.

¹ A payment system – SENT (operated by STFD TRANSFOND S.A.), two card payment schemes – VISA (operated by VISA Europe Services Inc.) and MasterCard (operated by MasterCard International), and three securities settlement systems DSClear (operated by Sibex Depository), RoClear (operated by Central Depository) and SaFIR (operated by the NBR).

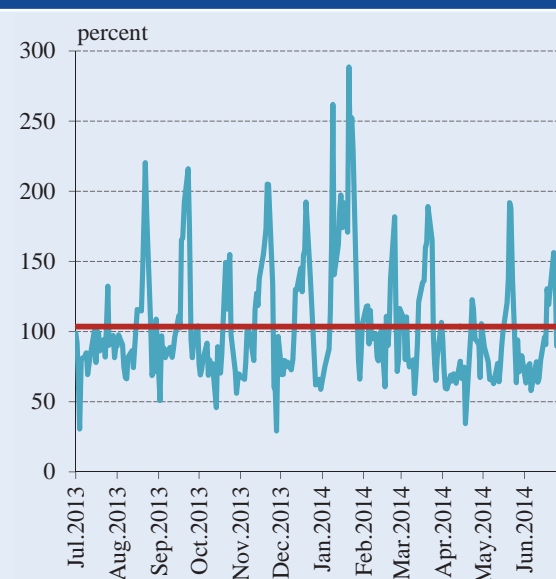
Chart 6.1. Maximum number of transfer orders settled in ReGIS on a monthly basis



Note: The flat line stands for the evolution of the average daily number of transfer orders settled during January 2012 – June 2012, July 2012 – June 2013 and July 2013 – June 2014.

Source: NBR

Chart 6.2. Daily usage ratio of funds available in ReGIS

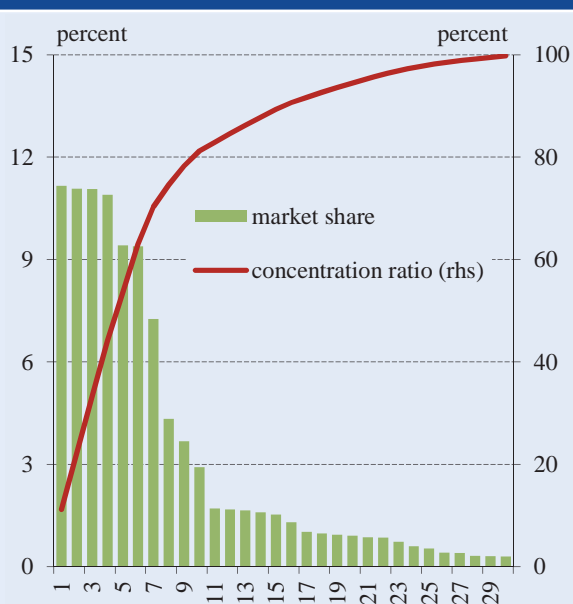


Note: The flat line stands for the average daily usage ratio of funds available in the system.

Source: NBR

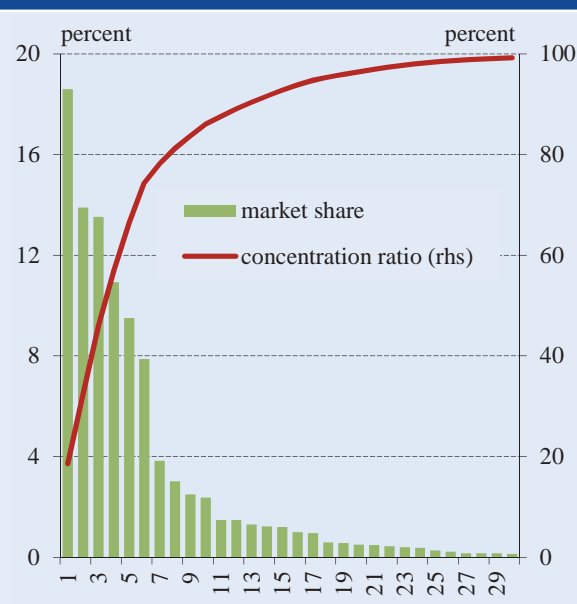
At present, ReGIS comprises 40 credit institutions from Romania and the EU, the NBR, the Ministry of Public Finance and six ancillary systems. During July 2013 – June 2014, the concentration ratio² of ReGIS declined slightly in terms of both the volume and the value of the settled transfer orders, but there is a group of three credit institutions that have participated in setting both concentration ratios (Chart 6.3. and Chart 6.4.).

Chart 6.3. The market share of participants (volume of settled transfer orders)



Source: NBR

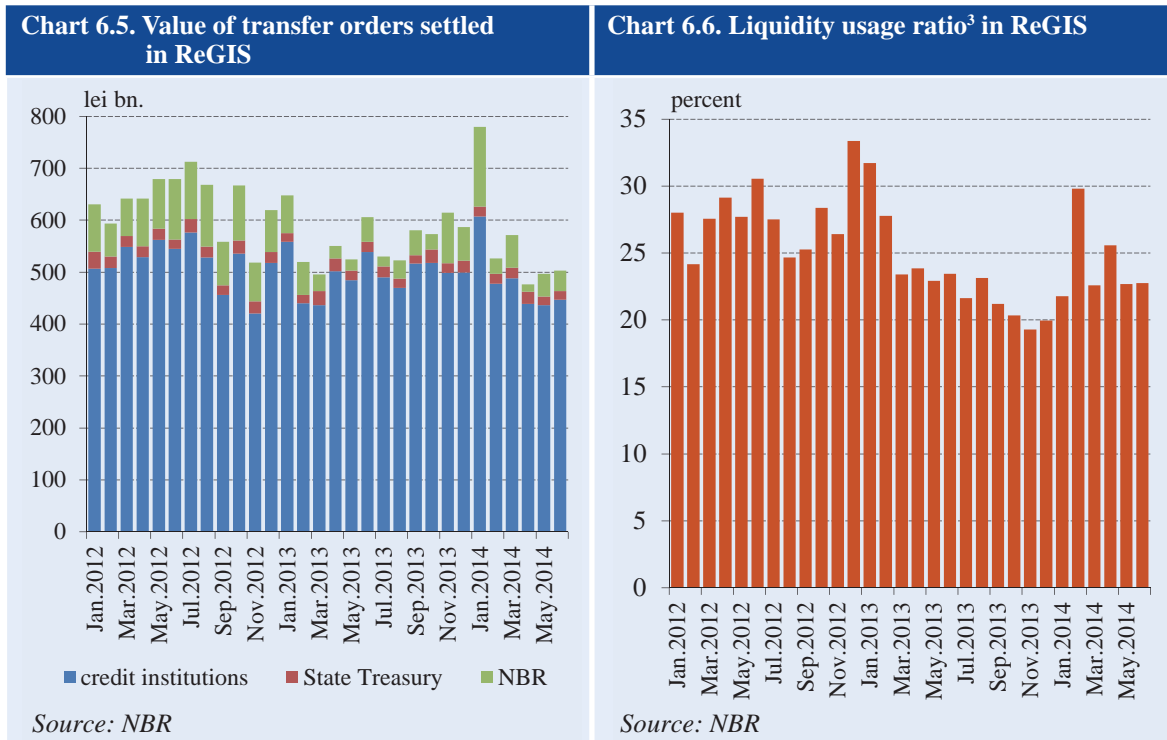
Chart 6.4. The market share of participants (value of settled transfer orders)



Source: NBR

² Calculated as the sum of the five largest participation rates.

The value of transfer orders settled in ReGIS fell moderately in 2013 and 2014 H1, amid the decrease in repo operations of the central bank. The value of transfers between credit institutions remained relatively unchanged in the period under review, except the marked seasonal rise in December, while the Treasury witnessed no significant fluctuations of the transfer orders placed in ReGIS (Chart 6.5.).

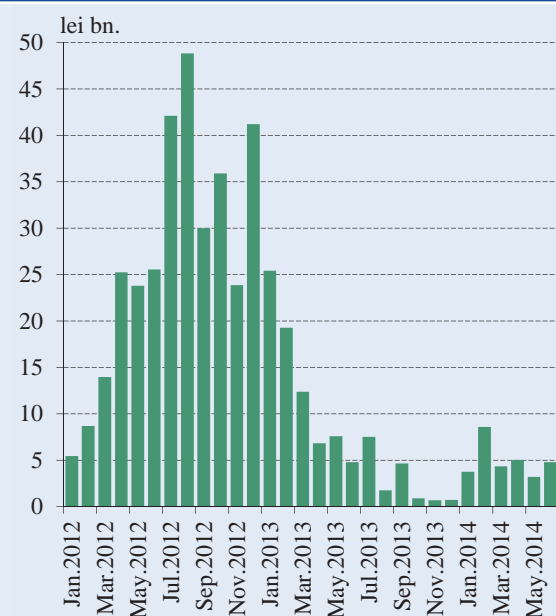


The improvement in liquidity conditions in the banking system, indicated by the decline in the repo operations of the central bank, is also mirrored by the liquidity usage ratio in ReGIS. Except for the large value of transactions in December, the pressure on the financial resources of the banking system was low, pointing to a liquidity surplus in this system compared with the liquidity needs of ReGIS (Chart 6.6.).

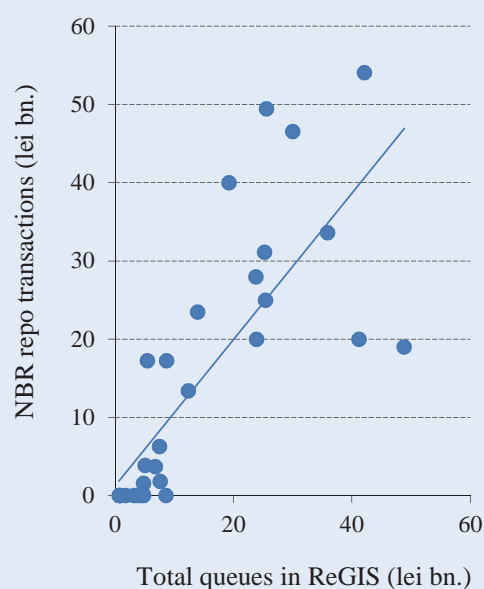
The more pronounced asymmetry of liquidity resources in the banking system, determined based on simulations, for 2012 and the first part of 2013, fell noticeably starting with 2013 Q2, in conjunction with the evolution of the liquidity usage ratio (Chart 6.7.). The distribution of liquidity to a larger extent to participants witnessing temporary liquidity shortage is favourable to financial stability of ReGIS. A high asymmetry of resource allocation in the banking system may generate tensions, even when, overall, there is sufficient or even excess available liquidity in the system.

There is a direct connection between the NBR's open market operations and the liquidity risk in ReGIS, determined based on the available financial resources in the banking system overall and the liquidity distribution in the system (Chart 6.8.). This is indicative of the high importance of the indicator on the maximum total value of queues for the liquidity risk in the banking system. This indicator measures the asymmetry of the liquidity distribution in the banking system and detects potential liquidity shortages that are not captured by aggregate liquidity indicators.

³ Liquidity usage ratio is calculated as a ratio of used intraday liquidity (opening balance at the beginning of the day less the minimum intraday balance) to available liquidity at the beginning of the day.

Chart 6.7. Maximum total value of queues in ReGIS (based on simulations)

Source: NBR

Chart 6.8. Relation between NBR repo transactions and maximum total value of queues in ReGIS (January 2012 – June 2014)

Source: NBR

6.2. Stability of SENT

SENT operated smoothly, with no major incidents being reported, in the context of the availability ratio of the system and the value of transfer orders settled during July 2013 – June 2014 posting slight increases.

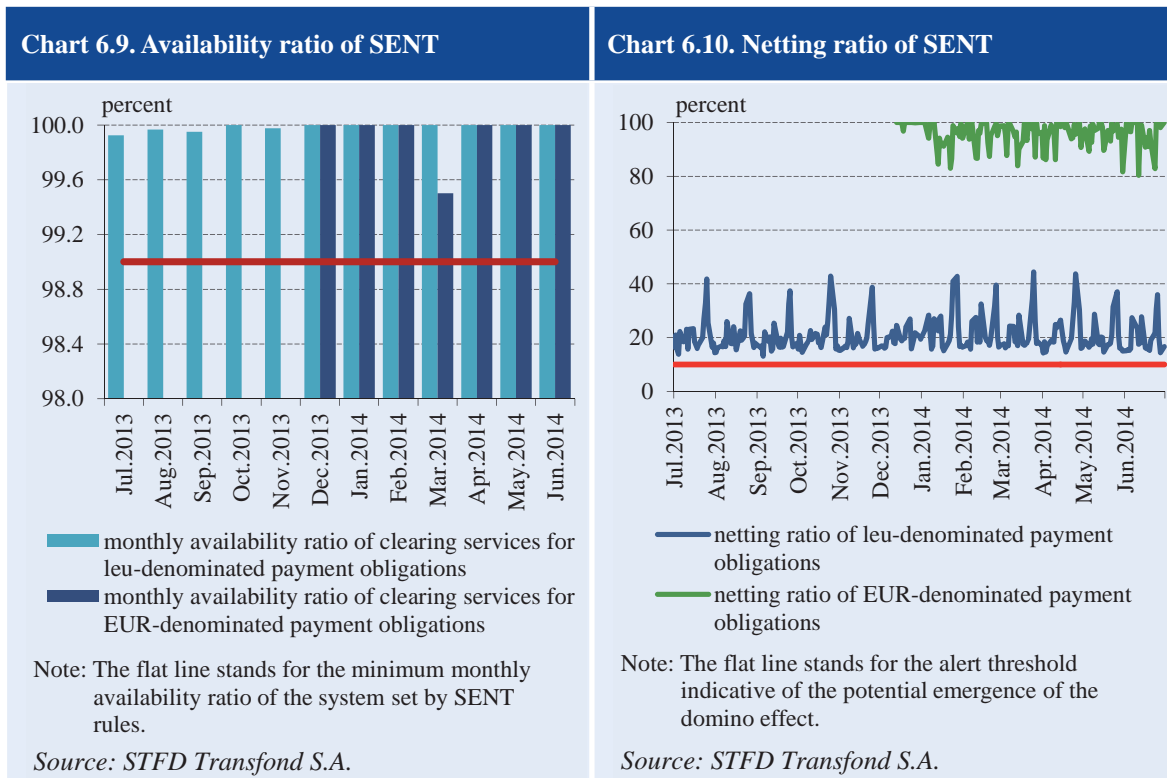
In 2013 Q3, the NBR approved the amendment to the SENT rules at the request of STFD TRANSFOND S.A. (the operator of this system). The amendments referred mainly to 1) changing the access criteria and the participation conditions, 2) changing the conditions for the suspension of a participant, 3) introducing the criteria for identifying the critical participants, 4) implementing the processing of domestic and cross-border euro payment instructions based on the SEPA Credit Transfer (SCT) standard⁴ to and from another clearing house (Clearing and Settlement Mechanism – CSM), 5) adjusting the settlement mechanism to allow the settlement of the net positions resulting from the netting of euro payment obligations in TARGET2 (using central bank money as a settlement asset, based on the latest standards for monitoring financial market infrastructures⁵), 6) introducing the possibility to set bilateral and multilateral exposure limits in relation to other participants, and 7) changing the operating schedule of the system by including two clearing sessions for euro SCT orders.

⁴ Including instructions on the treatment of the exceptions to the SCT scheme (SCT RETURN, SCT RECALL, Positive Answer to a Recall, Negative Answer to a Recall).

⁵ Based on Principle 9 of *Principles for Financial Market Infrastructures*, BIS, April 2012, <http://www.bis.org/publ/cpss101a.pdf> “A financial market infrastructure (FMI) should conduct its money settlements in central bank money where practical and available....”.

With a view to processing cross-border euro payment instructions under the SEPA credit transfer (SCT) scheme, STFD TRANSFOND S.A. concluded an interoperability agreement with *Equens*, a pan-European automated clearing house member of EACHA⁶. On 13 December 2013, STFD TRANSFOND S.A. (the operator of this system) started providing clearing services for euro payment obligations resulting from the processing of domestic and cross-border credit transfer orders.

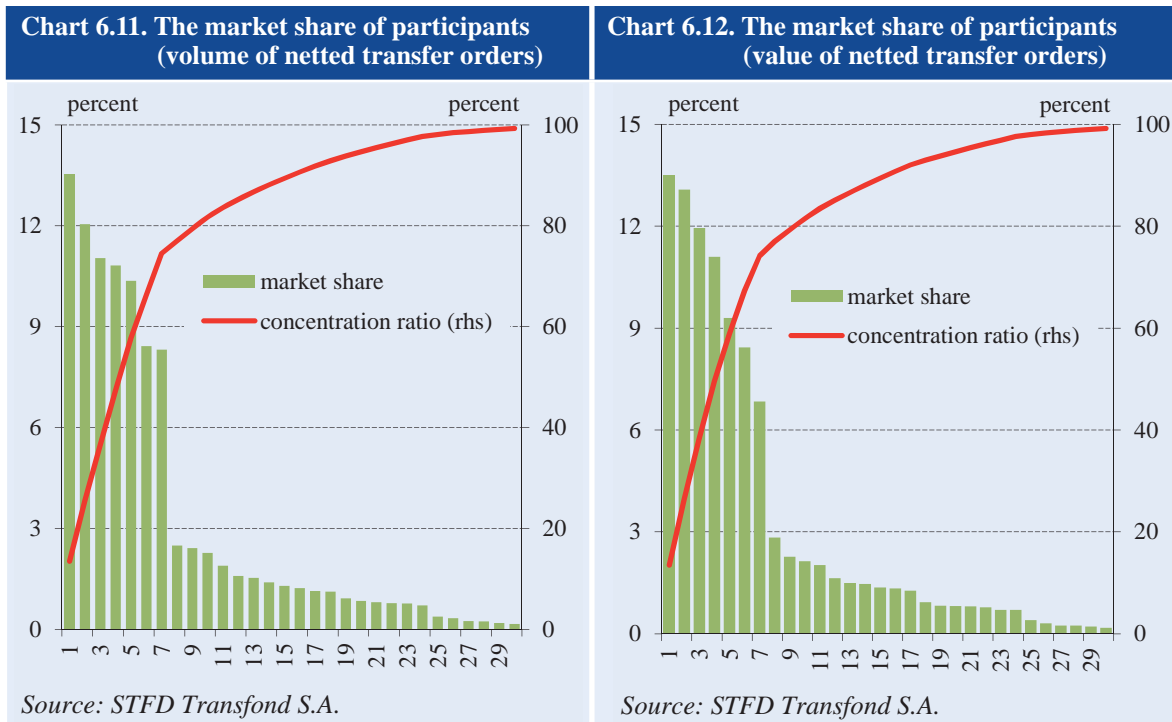
The average monthly availability ratio of clearing services for leu-denominated payment obligations provided during July 2013 – June 2014 improved slightly against July 2012 – June 2013, to 99.98 percent, amid the occurrence of some technical incidents. STFD TRANSFOND S.A. provided the participants in SENT with clearing services for EUR-denominated payment obligations during December 2013 – June 2014 at an average monthly availability ratio marginally lower than that for clearing leu-denominated payment obligations, yet well above the minimum availability limit set by SENT rules (Chart 6.9.).



The performance of SENT picked up moderately against July 2012 – June 2013 also in terms of the average daily settlement rate, which reached 98.74 percent, while the netting ratio of leu-denominated payment obligations fluctuated within the limits seen in the reference period (Chart 6.10.). The netting ratio of EUR-denominated payment obligations ranged between 80 percent and 100 percent, on account of the small number of participants resorting to the clearing facility and the implicitly reduced number of placed and netted transfer orders (Chart 6.10.).

⁶ EACHA – (European Automated Clearing House Association) is a non-profit organisation that provides the cooperation framework for the clearing houses operating in the EU and the support for the development and implementation of the European schemes and common policies in the field of processing payment instructions, including for interoperability based on open standards.

The concentration ratio⁷ of the system showed a highly monotonous evolution over the past five years. It stayed within a very narrow corridor, between 57 percent and 59 percent, in terms of both volume and value of the netted transfer orders, with the same four participants holding comparable individual market shares, which contribute to determining the concentration of the system (Chart 6.11. and Chart 6.12.), changing top positions.



6.3. Securities settlement systems

The three securities settlement systems operating in Romania provide post-trading services for the capital market – DSClear operated by Sibex Depository and RoClear operated by the Central Depository –, as well as for the securities market – SaFIR operated by the NBR. These systems continued to operate safely, the average technical availability ratio⁸ of the first two systems standing at 100 percent and that of the third system, at around 99.99 percent.

Changes to the functioning of DSClear and RoClear securities settlement systems

Since the release of the previous Report, the administrators of DSClear and RoClear made a number of adjustments to the architecture and operational rules of these systems.

The first category of measures focused on the continuation of efforts to comply with the relevant ESCB-CESR Recommendations for the securities settlement systems, following the assessment of DSClear and RoClear completed by the NBR in 2012. Thus, some progress was made as concerns increasing the effectiveness of replacement cost risk management, setting the deadline for

⁷ Calculated as the sum of the top five individual market shares

⁸ The average technical availability ratio is the ratio, expressed as a percentage, of the actual time to the projected operational duration of a system, during a certain period of time.

replenishing the financial resources under the net settlement guarantee arrangements, performing transactions intended to manage settlement risk, harmonising the provisions of the system rules with the applicable primary and secondary legislation, as well as shortening the time of net settlement, with a view to facilitating the reuse without delay of the funds resulting from the settlement of transactions.

In the period immediately ahead, the other deficiencies revealed by the assessment of DSClear and RoClear are to be solved, from among which stand out those relating to the restructuring of the framework for the management of financial risks specific to settlement on a net basis, by way of judiciously setting the participants' settlement limits in relation to the aggregate value of the financial collateral established with DSClear and RoClear, concurrently with: (i) ensuring efficient and flexible mechanisms for managing collateral (also as regards the gradual extension of the range of eligible assets and the manner of setting up collateral); (ii) creating the conditions for the gross settlement of large-value transactions on a bilateral basis, and (iii) introducing the capacity of indirect participant in these settlement systems. The implementation in the following period of the adjustments for an appropriate management of net settlement risks will contribute to the development of a solid domestic capital market, given the significant importance of the securities settlement systems for the orderly functioning of this market.

The second category of measures taken by the administrator of RoClear focused mainly on the turnaround transactions⁹, with a view to easing the conditions for carrying out such transactions, as well as on creating conditions for issuing certificates of deposit based on underlying shares¹⁰. Both initiatives were aimed at increasing the attractiveness of the domestic capital market and facilitating the access of non-resident investors. Furthermore, in order to raise the status of the domestic capital market from frontier market to emerging market, steps were taken regarding the technical and operational separation of the securities settlement and custody accounts opened with RoClear (operated by the Central Depository) from the trading accounts in the systems belonging to the BSE. This segregation is likely to reduce the custody risk, as well as to eliminate the possibility that the occurrence of a malfunction at one of the two technical platforms may have a direct negative impact on the other component, while supporting, at the same time, the increase in the overall efficiency of post-trading activity. A major change that will occur in the operation of DSClear and RoClear consists in the shortening of the settlement cycle starting 2015, based on the European regulation applicable to CSDs (CSDR¹¹), the exposure to counterparty risk and replacement cost risk being reduced from three to two working days.

⁹ OTC transactions that have as correspondent transactions concluded in the trading systems operated by the BSE.

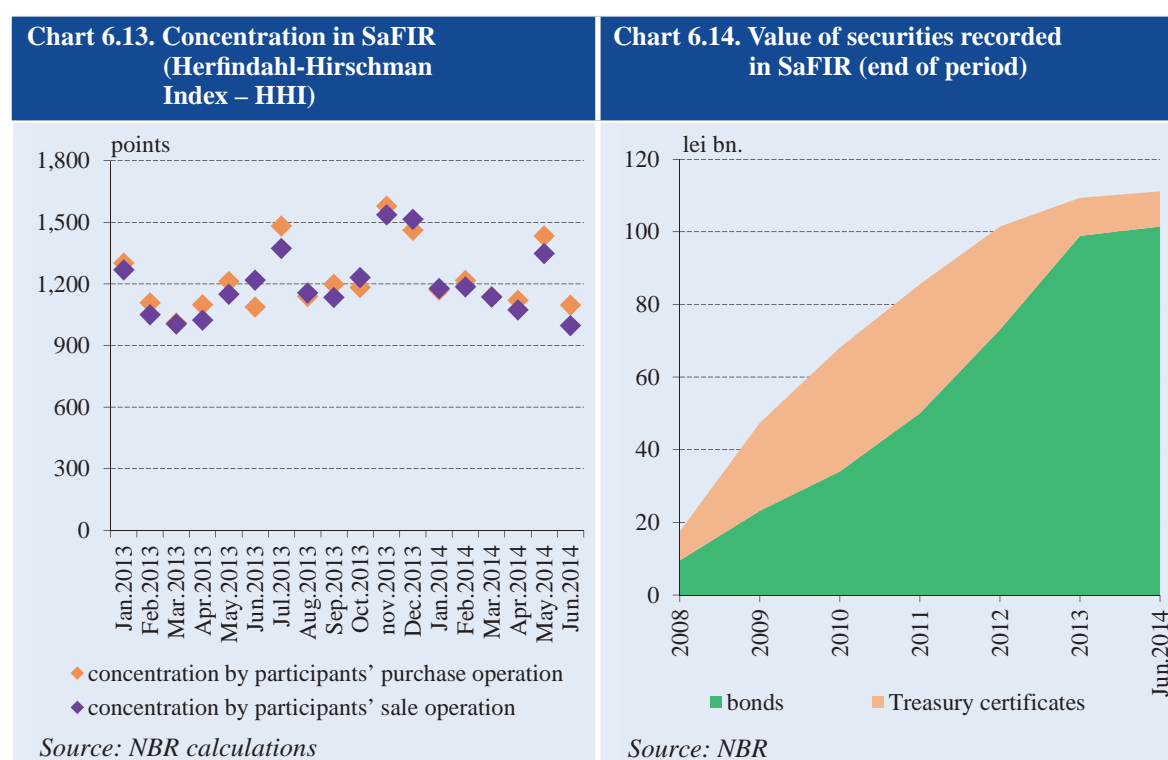
¹⁰ Securities that give the holder the rights and obligations associated with the shares based on which they were issued, including the right to obtain underlying shares by conversion of the respective certificates of deposit.

¹¹ Regulation (EU) No. 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No. 236/2012.

Activity of SaFIR settlement system

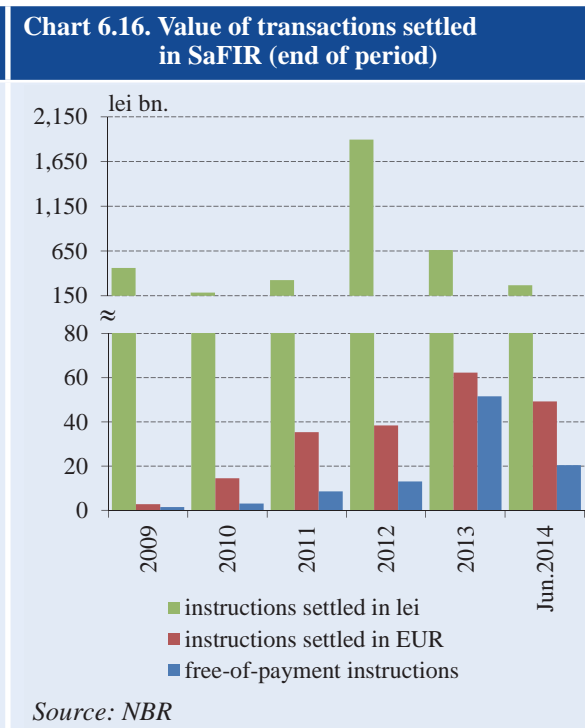
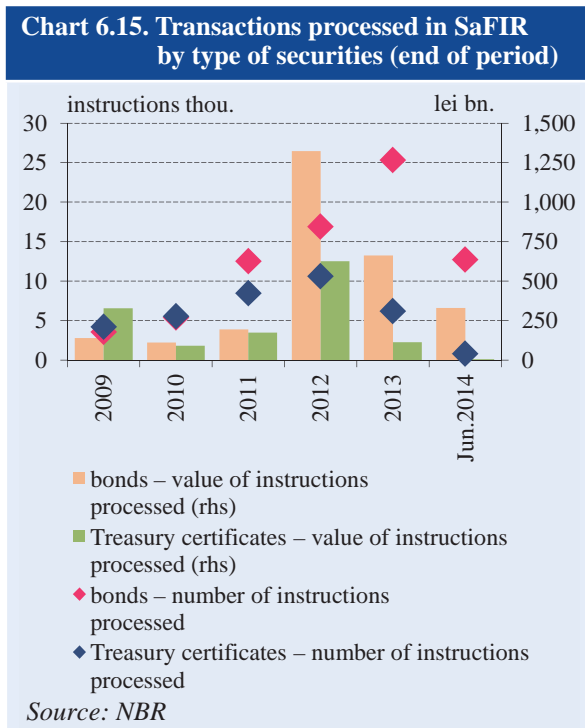
The average settlement ratio¹² of the transactions in SaFIR stood at 99.95 percent in 2013 H2 and 99.87 percent in 2014 H1, the readings being almost equal in terms of both number and value of transactions.

The concentration in SaFIR, in terms of the value of transactions performed by the participants (other than the NBR) remained moderate over the past 18 months, the Herfindahl-Hirschman index equalling, on average, 1,200 points (Chart 6.13.).



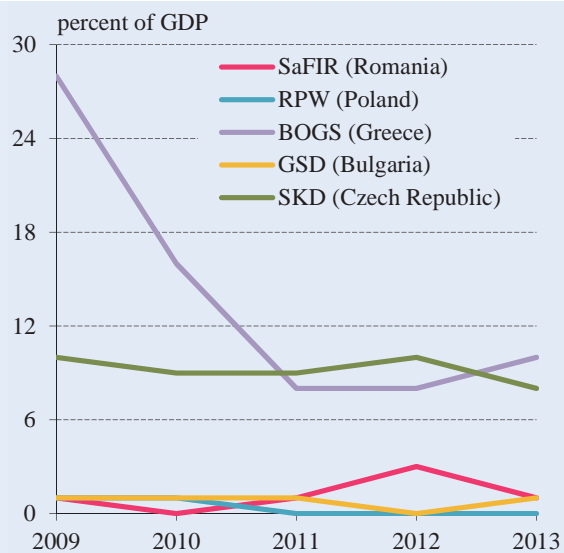
The aggregate value of the securities recorded in SaFIR rose further since the release of the previous Report, yet at a much slower pace compared with the previous years, due to the ongoing fiscal consolidation and the emergence of a base effect. At the end of 2014 H1, the value of securities recorded in SaFIR exceeded lei 111 billion (Chart 6.14.), up 1.7 percent from the end of the previous year, on account of a 2.5 percent increase in the value of bonds in SaFIR (lei 101 billion), which counterbalanced the further downward trend in the value of Treasury certificates (down 6.2 percent to around lei 9.8 billion).

¹² The settlement ratio represents the percentage ratio of transactions settled on the intended settlement date to total transactions recorded in the system during a period of time. The settlement ratio of SaFIR is extremely high where account is also taken of the fact that, unlike other similar systems, in SaFIR, the transactions unsettled by the end of the intended settlement date are automatically cancelled, no “recycling” of such transactions being made in the following days.



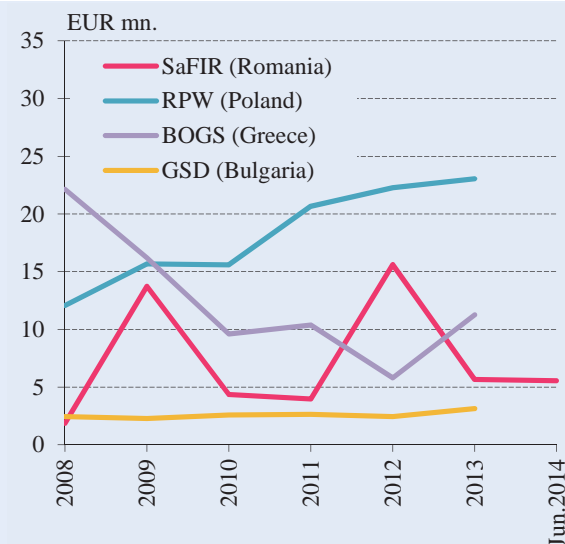
After having reported the largest number of transactions settled since its coming into operation in 2005 (roughly 32 thou. transactions), in 2014 H1 SaFIR witnessed a fall in the total number of transactions (about 14 thou. compared with 18 thou. in 2013 H1), with Treasury certificates posting a more pronounced decline (Chart 6.15.). A relatively similar trend was also seen in the aggregate value of transactions settled in SaFIR in 2014 H1 (lei 336 billion), which stuck to the downward path that started in 2013. In June 2014, the latest version of the SaFIR rules came into force, complementing the NBR’s decision to repeal Art. 9 para. 3 of Regulation No. 12/2005 on the secondary market for government securities administered by the NBR, thus creating the conditions for the repo transactions concluded between the participants to be settled in SaFIR in another currency than the currency the respective securities are denominated in. Therefore, taking into account the differential between the value of leu-denominated securities (lei 93.5 billion at end-May 2014) and that of foreign currency-denominated securities (the equivalent of lei 13.8 billion on the same date), issued on the domestic market by the Ministry of Public Finance, the accelerated upward trend in the value of transactions settled in euro, manifest in 2013 (62 percent year on year) and in 2014 H1, is expected to carry on in the period ahead (Chart 6.16.).

Chart 6.17. Share of total value of transactions settled in systems held by central banks in the GDP of selected EU countries (international comparison)



Source: ECB (Securities trading, clearing and settlement, July 2014)

Chart 6.18. Average value of transactions settled in systems held by central banks (international comparison)



Source: ECB (Securities trading, clearing and settlement, July 2014), NBR calculations

The rise in the total value of transactions settled in SaFIR in the past two and a half years led to a higher ratio of their value to the GDP of Romania. From this perspective, the activity of SaFIR recorded a higher level than that seen by its peers in Poland and Bulgaria, yet well below that of the settlement systems administered by the central banks of Greece and the Czech Republic (Chart 6.17.). The average value of the transactions settled in SaFIR showed ample fluctuations in recent years (Chart 6.18.), its drop compared with 2012 (to about EUR 5.5 million in the past 18 months, from over EUR 15.6 million) being attributed to the decrease in the magnitude of liquidity injection operations by the NBR.

7 RECENT DEVELOPMENTS AND OUTLOOK

7.1. Macroprudential instruments implemented by the NBR in relation to debtors – a decade-long experience

The recent global crisis has brought again to the fore the issue of excessive lending. Containing unsustainable credit growth has been listed as one of the intermediate objectives of macroprudential policy¹. In order to attain this objective, the authorities may resort to various macroprudential instruments targeting either creditors – via the countercyclical capital buffer, sectoral capital requirements or macroprudential leverage ratio – or debtors, by setting thresholds for the debt service-to-income (DTI) ratio, the loan-to-income (LTI) ratio and the loan-to-value (LTV) ratio. Moreover, the new European macroprudential framework² allows national authorities to also implement these instruments where there is evidence of heightened systemic risk with negative consequences to the financial system and real economy and where the measures available under Pillar II fail to properly address these challenges to financial stability.

The DTI ratio is a macroprudential instrument which aims to ensure higher resilience of debtors in case of unfavourable financial developments and to contain excessive credit growth. This ratio also acts as an accurate indicator signalling excessive debt, according to empirical results³. In turn, setting thresholds for the LTV ratio aims to strengthen the capacity of creditors and debtors alike to weather any adverse developments (particularly on the housing market), by reducing the loss-given-default (LGD) in the former case and diminishing debtors' indebtedness capacity (and hence their probability of default).

The use of these macroprudential instruments across European countries⁴ dates back to recent years. The National Bank of Romania (NBR) boasts an almost decade-long experience in using these instruments, with such measures being adopted at end-2003 and implemented in February 2004. Back then, the high level of “euroisation”, the capital account liberalisation and the massive foreign capital inflows dented the effectiveness of other types of measures meant to cap excessive credit growth (such as microprudential or monetary policy measures) and called for a macroprudential approach.

In the early stage, macroprudential regulations referred to household lending (foreign currency credit in particular), before extending their scope in 2012 to cover non-financial corporations as well. The measures consisted in setting limits in terms of DTI and LTV ratios. The NBR's approach was not a static one, as the regulations implementing these instruments have undergone several changes from the first use to date. The amendments involved both the way of using the instruments and the degree of institutional coverage.

¹ The recommendation of the European Systemic Risk Board on intermediate objectives and instruments of macroprudential policy (ESRB/2013/1) clearly states that one of the intermediate policy objectives the authorities should envisage is “to mitigate and prevent excessive credit growth and leverage”.

² Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No. 648/2012.

³ Drehmann, M. and Juselius, M. – *Do debt service costs affect macroeconomic and financial stability?*, BIS Quarterly Review, September 2012. The paper concludes that the DTI ratio provides rather accurate signals of impending financial crises and outperforms other indicators over shorter horizons.

⁴ Shim, I., Bogdanova, B., Shek, J. and Subelyte, A. list in their paper, *Database for policy actions on housing markets*, BIS Quarterly Review, September 2013 some stylised facts on the policy actions taken by authorities worldwide.

Box 4. NBR macroprudential measures on the DTI and the LTV ratios, by date of coming into force

1 February 2004	Setting a maximum indebtedness level of 30 percent for consumer loans, 35 percent for housing loans and a 25 percent down-payment for purchases via consumer credit or 100 percent collateral on consumer credit extended for other purposes. The LTV ratio for housing loans was 75 percent. The requirements applied to all loans, irrespective of their currency.
28 August 2005	Introducing a maximum indebtedness level for all debts in the form of loans (bank loans, leasing, NBFIs) of 40 percent of the disposable income of borrowers or their families, as applicable. The requirements applied to forex credit and domestic currency credit alike.
22 October 2006	Extending the scope of measures so as to cover non-bank financial institutions and including taxes and other costs in determining the indebtedness level. The requirements applied to both foreign currency-denominated loans and those in domestic currency.
14 March 2007	Moving from explicit ceilings on the DTI/LTV ratio to “self-regulation”, by requesting creditors (banks and NBFIs) to define through internal norms the maximum indebtedness level in line with their risk profile, according to debtor categories. No request was formulated on differentiating among degrees of indebtedness by currency of the credit.
22 August 2008	Regulation was amended by requesting banks to assess borrowers’ debt servicing capacity under a stress scenario, by incorporating currency and interest rate risks. Banks were requested to introduce distinct ceilings on the degree of indebtedness depending on the currency of the credit.
31 October 2011	Introducing explicit limits on the LTV ratio, by keeping in place the requirement for banks to determine the maximum indebtedness level under a stress scenario, taking into consideration the currency risk, the interest rate risk and the income risk. The shock values for these risk factors were explicitly set: (1) local currency depreciation of 35.5 percent against the EUR, 52.6 percent in relation to the CHF, and 40.9 percent versus the USD; (2) a 0.6 percentage point shock for the interest rate risk; and (3) a 6 percent shock for the income risk. As regards housing loans, the LTV ratio was capped as follows: (i) 85 percent for leu-denominated credit; (ii) 80 percent for foreign currency-denominated housing loans to hedged borrowers; (iii) 75 percent for EUR-denominated housing loans to unhedged borrowers, and (iv) 60 percent for housing loans in other currencies extended to unhedged borrowers. The value of goods purchased through consumer credit in foreign currency was capped at 133 percent of the credit amount. The maturity of consumer loans was restricted to five years at most. LTV limits have not been applicable to loans granted under the “First Home” government programme.
18 December 2012 ¹	Extending the scope of measures so as to cover unhedged non-financial corporations, by requesting creditors to tighten foreign currency lending standards.

¹ NBR Regulation No. 17/2012 on certain lending conditions, amending and supplementing Regulation No. 24/2011 on loans to households.

The implementation and calibration of instruments during the lending cycle were underpinned by a hybrid framework of analysis, based both on quantitative risk analyses and qualitative assessments of the costs and benefits implied. The key information under scrutiny in order to identify systemic risks and to subsequently implement the instruments referred primarily to the macroeconomic framework (external imbalances and the inflation level) and credit developments in the banking sector (foreign currency lending in particular). Hence, calibrating the instruments was a dynamic process, which addressed the challenges identified in the financial sector and fit in the macroprudential framework. The quantitative analyses conducted by the NBR are based on a set of indicators regarding: (1) risk across the banking sector (measured by the NPL ratio as per credit categories – by currency, maturity, destination, etc.), (2) credit growth rates and breakdown of exposures (by currency, type of credit, borrower, etc.), and (3) developments on the housing market. The need for constant oversight generated added value in terms of information, allowing for the available databases to be updated and improved on a permanent basis. The main systemic risks that prompted the use of these instruments have stemmed from: (i) borrowers' high indebtedness (or excessive credit growth – from the creditors' perspective); (ii) the sectoral concentration in real-estate assets; (iii) the fast dynamics of foreign currency lending, and (iv) macroeconomic imbalances.

Regarding the degree of institutional coverage, since they were first implemented, regulations referred to credit institutions (Romanian legal entities) and foreign bank branches operating in Romania⁵. Two material changes have been made so far, by extending the scope of the measures so as to cover (1) non-bank financial institutions since 2006, and (2) payment institutions and electronic money institutions with significant lending activity since 2011. Instituting a uniform regulatory framework arises from the need to ensure a level playing field in terms of lending, as well as to eliminate the regulatory arbitrage which would impair the transmission mechanism of the instruments. Moreover, the experience of using these measures has highlighted the need for active cooperation among macroprudential authorities at European level, so as to safeguard the abilities of these instruments to mitigate risks.

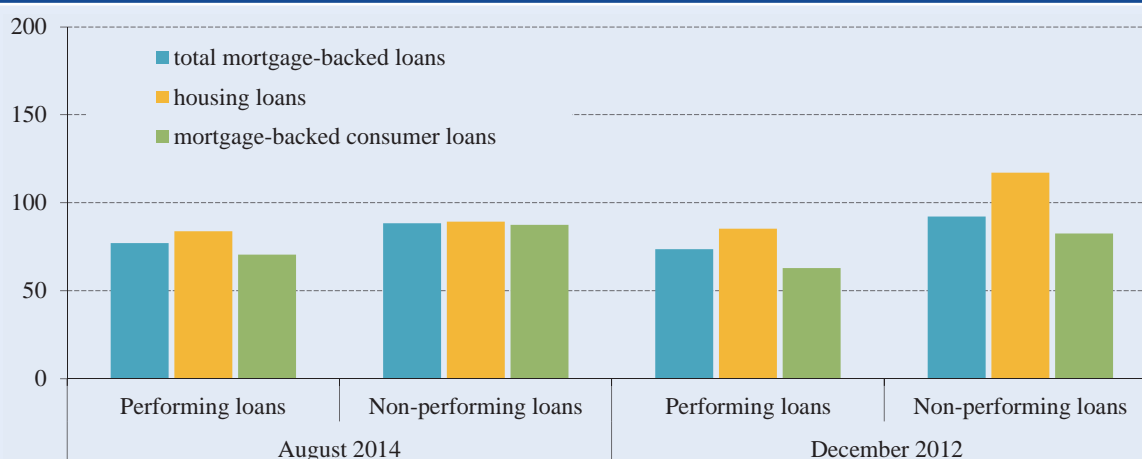
Upon implementing the measure regarding the maximum degree of indebtedness (DTI), the NBR initially defined explicit limits, according to the credit destination, namely 30 percent for consumer loans and 35 percent for housing loans. Later on, in 2005, the limits defined in terms of exposure were complemented by a requirement on the maximum indebtedness level of 40 percent of the disposable income of borrowers or their families, as applicable. The year 2007 saw the shift from these explicit limits set in relation to borrowers and credit type to a “self-regulation” approach. Under the new framework, credit institutions became accountable for determining the maximum degree of indebtedness depending on borrowers' risk class. Follow-up analyses on the effectiveness of this measure showed a significantly pro-cyclical behaviour of credit institutions in defining adequate prudential values for the DTI ratio. Consequently, the NBR amended the regulatory framework in 2008, when new requirements were introduced: (i) credit institutions are responsible for testing borrowers' resilience throughout the duration of the credit, and (ii) the maximum indebtedness level should be determined by taking into consideration the interest rate risk, the currency risk, and the possibility of higher credit cost as a result of commission fees and other administration costs. The latest amendment of the instrument (dating back to 2011) introduced an additional risk, i.e. the risk of a reduction in income, which needs to be incorporated in the calculation of the maximum degree of indebtedness for consumer credit.

⁵ During 2007-2011, branches were exempted from these measures as a result of implementing the European banking norms.

Back in 2004, the LTV ratio had been capped at 75 percent for both consumer credit and housing loans. The measure was abrogated at the beginning of 2007, when Romania joined the European Union, similarly to other measures meant to curb the fast pace of growth in lending, amid the prevailing vision across the EU at the time, which claimed that LTV-type measures were administrative in nature and could impair proper market functioning. In 2011, in response to the recommendation of the European Systemic Risk Board on lending in foreign currencies⁶ and to the systemic risks identified in the banking sector, the NBR proposed a distinct approach. LTV restrictions were set depending on the type of borrowers (hedged or unhedged) and on the currency of the credit (see Box 4 for details). The LTV ceiling was introduced on new business, except for loans taken via the “First Home” government programme.

Empirical evidence has pointed to a direct connection between borrowers’ degree of indebtedness (DTI), the level of collateralisation (LTV) and borrowers’ debt servicing capacity, which calls for credit institutions to maintain these indicators at prudent levels. Specifically, household loans (both mortgage-backed consumer credit and housing loans) overdue for more than 90 days post higher LTV ratios than performing loans (Chart 7.1.). Moreover, mortgage-backed credit extended during the years of loose lending standards (especially in 2007-2008⁷) currently record the highest NPL ratio (13 percent compared to 7.6 percent on an aggregate basis in August 2014) and hold a significant share in the total volume of non-performing loans, i.e. around 70 percent (August 2014). This is also the result of price adjustments on the housing market, namely a 29 percent decline seen 2009 Q1 through 2014 Q1. A high LTV ratio can lead to excessive credit growth⁸. The results are in line with similar analyses conducted within the EU⁹. The capacity of this instrument to influence the prices of real-estate assets posts mixed results, but the impact is usually relatively modest.

Chart 7.1. LTV ratio for mortgage-backed loans



Note: The LTV ratio is determined by estimating the market value.

Source: CCR, NBR calculations

⁶ ESRB Recommendation of 21 September 2011 on lending in foreign currencies.

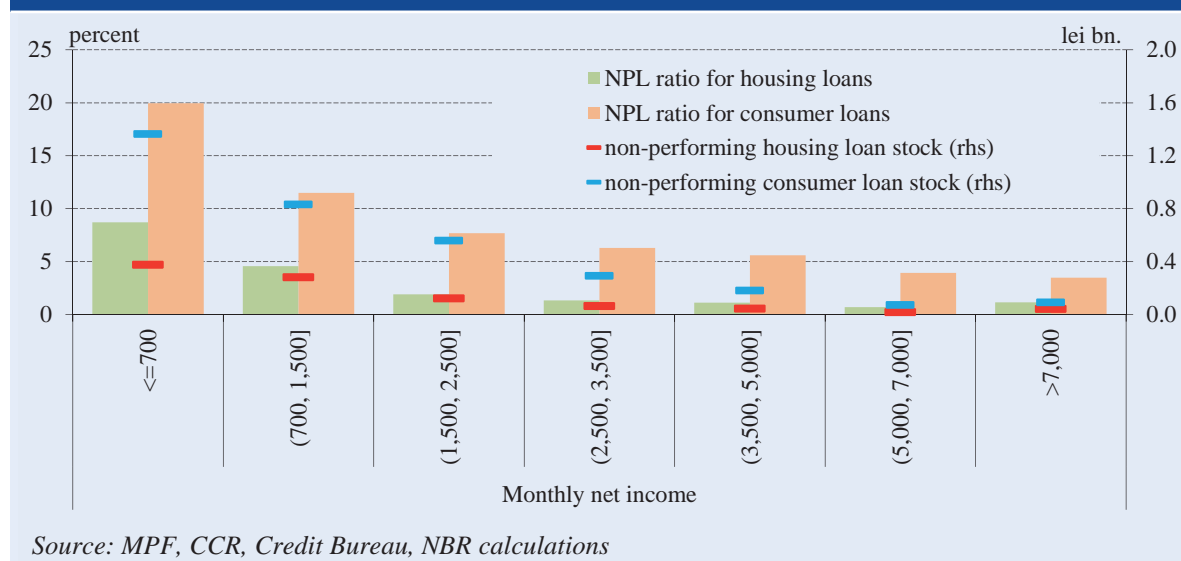
⁷ For further details, see Section 5.3. *Risks generated by the real-estate sector and mortgage-backed lending* in the 2013 Financial Stability Report.

⁸ Neagu, F., Mihai, I., Tatarici, L. – *Coping with an unsustainable lending: early warning indicators and the use of macroprudential instruments*, paper prepared within the Macroprudential Research Network (MaRS) coordinated by the European Central Bank, 2014.

⁹ *The ESRB Handbook on Operationalising Macroprudential Policy in the Banking Sector*, 2014.

Looking at the connection between households' degree of indebtedness (DTI) and their debt servicing capacity, borrowers with net incomes below the economy-wide average continue to be the riskiest category for the banking sector, accounting for around 65 percent of the volume of non-performing loans and usually reporting the highest degrees of indebtedness¹⁰ as well (for both housing and consumer loans, Chart 7.2.). Monitoring the DTI ratio raises the issue of sufficiently granular databases, since the distribution of this indicator across income classes is highly important. The NBR has developed and is continuously improving the existing databases with a view to ensuring proper monitoring.

Chart 7.2. NPL ratio by income category and credit type (August 2014)



Empirical studies show a somewhat satisfactory effectiveness of the measures regarding maximum DTI and LTV ratios in (i) containing excessive credit growth and (ii) enhancing borrowers' and creditors' capacity to weather any negative financial developments. The assessment of the role played by macroprudential measures (such as those related to LTV and DTI ratios) in bank lending and bank asset quality¹¹ highlights that:

- The impact of regulation on credit growth ranges between 3 and 11 percentage points in the first quarter after implementation, with the most visible influence on consumer loans. The effect gradually fades away and nears zero after five quarters since the implementation. The distinct effect of implementing each instrument (DTI and LTV respectively) could not be tested because the regulations overlapped most of the time.
- The episodes of easing regulation are associated with an increase in the NPL ratio (for both consumer and housing loans) and with higher sensitivity to macroeconomic developments (such as the unemployment rate). Given their contribution to improving borrowers' debt servicing capacity, these instruments should be used throughout the credit cycle, as a prerequisite for ensuring sustainable lending.

¹⁰ For further details regarding the impact of the reduction in borrowers' income on their debt servicing capacity, see Section 5.2. *Risks stemming from the households' sector* in the 2013 Financial Stability Report.

¹¹ Neagu, F., Tatarici, L., Mihai, I. – *Implementing loan-to-value and debt to income ratios: learning from country experiences*, International Monetary Fund, Monetary and Capital Markets Department project, forthcoming.

The NBR's experience with these macroprudential instruments (DTI and LTV) has revealed the following:

- The so-called “self-regulation” approach, meaning that credit institutions have full liberty of setting DTI and LTV caps through their own norms, delivered suboptimal results in terms of effectively implementing the macroprudential measures, as banks displayed a deeply pro-cyclical behaviour.
- Macroprudential measures need to be tailored during the financial cycle, because their impact might be weakened by regulatory arbitrage and loan portfolio shifts. As far as Romania is concerned, it has been found that the limits set on lending (in relation to disposable income or the value of collateral) may be circumvented by: (a) extending other types of credit (e.g. non-mortgage-backed consumer loans or special purpose loans), (b) lengthening the maturity of loans, (c) applying promotional interest rates only at the time of extending the loans, so that borrowers fulfil DTI requirements, (d) looser assessment of the collateral, or (e) transferring part of the lending business to institutions outside the regulatory scope.
- The perspective in DTI and LTV decision-making needs to be shifted from the lender side to the borrower. Monitoring domestic bank lending only may lead to suboptimal policy decisions if a major part of private debt is accounted for by other sources than resident banks (e.g. non-bank financial institutions, foreign funding). The new macroprudential policy framework allows for this perspective shift.
- Higher transparency from the authorities' side regarding their macroprudential intermediate objectives is warranted so that the key stakeholders on the financial market better understand the rationale behind the central bank activating or recalibrating its macroprudential instruments.
- In order for the measures to be more effective, the two instruments (DTI and LTV) should be implemented in tandem and possibly be complemented by microprudential or monetary policy measures.

The establishment of the National Committee for Macroprudential Oversight¹² aims to ensure coordination in the field of macroprudential supervision of the domestic financial system by defining the macroprudential policy and determining the adequate tools for its implementation. As an inter-institutional cooperation forum and non-legal entity chaired by the NBR Governor, the Committee will reunite the expertise of financial sector regulatory authorities (the NBR, the FSA) and of the Government, which will share responsibility for identifying, monitoring and assessing systemic risks, identifying the financial institutions and structures that are systemically relevant, as well as issuing recommendations and warnings with a view to preventing or mitigating systemic risks. In particular, the Committee will facilitate the strengthened coordination among sectoral supervisory authorities in order to adequately manage systemic risk and safeguard financial system stability.

¹² According to the Recommendation of the ESRB of 22 December 2011 on the macroprudential mandate of national authorities (ESRB/2011/3), each Member State shall designate in the national legislation an authority entrusted with the conduct of macroprudential policy across the domestic financial system. A draft Government Emergency Ordinance on the macroprudential oversight of the national financial system has been prepared in light of the ESRB Recommendation.

7.2. The tasks and instruments under the Single Supervisory Mechanism, implications on the domestic banking sector

The Banking Union project was developed following a thorough analysis of the underlying factors that triggered the recent economic and financial crisis, with the aim of strengthening the Economic and Monetary Union. The Banking Union rests on three pillars, namely the Single Supervisory Mechanism (SSM), the Single Resolution Mechanism (SRM) and a Single Deposit Guarantee Scheme. The Banking Union encompasses euro area countries, which automatically become members, but non-Eurozone EU countries may also volunteer to participate in the project. The EU-wide legal framework governing the SSM currently consists mainly of Council Regulation (EU) No. 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (SSM Regulation), Regulation (EU) No. 468/2014 of the European Central Bank establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities (SSM Framework Regulation), and the Decision of the European Central Bank of 31 January 2014 on the close cooperation with the national competent authorities of participating Member States whose currency is not the euro (ECB/2014/5).

Following the entry into force of the Single Supervisory Mechanism on 4 November 2014, the ECB will directly supervise those banks deemed as significant credit institutions in participating countries. The total assets of significant credit institutions identified so far cover over 85 percent of euro area bank assets. In each participating country, at least the three most significant credit institutions will be subject to direct supervision by the ECB, irrespective of their absolute size. The ECB has recently published the preliminary list containing the name of each significant credit institution and banking group. The list will be completed in 2014 and will be updated regularly.

Moreover, from the perspective of its macroprudential supervisory tasks, the ECB may apply, if deemed necessary, stricter requirements than those imposed by national competent authorities in relation to the capital buffers that need to be set up by credit institutions (including, under certain circumstances, setting higher countercyclical capital buffer rates) and may enforce stricter measures addressing systemic or macroprudential risks facing credit institutions, according to the procedures laid down in Regulation (EU) No. 575/2013 and Directive 2013/36/EU.

Member States whose currency is not the euro may participate in the SSM by entering into a “close cooperation” agreement between the ECB and the national competent authority, based on a decision of the ECB, provided several conditions laid down in the SSM Regulation and detailed in Decision ECB/2014/5 are met. Any request to enter into a close cooperation shall be notified to the ECB, the European Commission (EC), the European Banking Authority (EBA) and to the other participating countries and shall be made at least five months before the date on which the non-participating Member State intends to participate in the SSM. Pursuant to Article 4 of the draft EU Regulation on the Single Resolution Mechanism, Member States participating in the SSM shall be considered to be participating in the SRM as well. As regards non-euro area Member States that voluntarily participate in the SSM under a close cooperation arrangement, the ECB shall not have any direct supervisory powers over institutions established in the said Member States, but shall provide the national competent authorities with instructions regarding the supervised entities.

The ECB shall directly supervise the entities in participating countries that are deemed significant based on the following criteria: (i) size; (ii) importance for the economy of the Union or any participating Member State; (iii) significance of cross-border activities. In addition, the ECB may decide at any time to exercise directly all relevant prerogatives in relation to a less significant supervised entity or less significant supervised group. A supervised entity or a supervised group shall be classified as significant if any of the following conditions is met: (i) the total value of its assets exceeds EUR 30 billion; (ii) its total assets exceed 20 percent of the GDP of the participating Member State in which it is established, except for those cases in which the total value of its assets does not exceed EUR 5 billion; (iii) upon notification by the national competent authority that it considers a supervised entity to be significant with regard to its domestic economy, the ECB takes a decision acknowledging significance based on a comprehensive assessment of the said credit institution, its balance sheet included. Furthermore, the ECB may consider, on its own initiative, that a particular entity has significant relevance if it has subsidiaries established in more than one participating Member State and its cross-border assets or liabilities hold a significant share in its total assets or liabilities, by observing the established methodological provisions. The entities for which public financial assistance has been requested or which have received such assistance shall be deemed as significant.

In line with Article 4 and Article 5 of the SSM Regulation, subsequent to Romania's joining the Single Supervisory Mechanism (expected for 2016), after completion of the comprehensive assessment of the domestic banking system, the ECB shall exclusively carry out, for the purpose of fulfilling prudential supervisory responsibilities, several tasks currently performed by the NBR. The ECB shall not exercise direct powers over supervised entities established in Romania, but shall issue instructions, guidelines and requests to the NBR with regard to the supervised entities.

The SSM accession is preceded by a comprehensive assessment exercise covering all credit institutions deemed significant in line with ECB criteria, consisting of three stages: (i) a supervisory risk assessment; (ii) an asset quality review, for which the ECB released the methodology in February 2014, and (iii) a stress test based on macroeconomic scenarios, having as starting point the bank prudential indicators adjusted to the results of the previous stages. The outcome of this exercise may lead to higher capital requirements for credit institutions whose Common Equity Tier 1 falls short of the capital adequacy thresholds set according to the scenarios. Credit institutions in Romania are expected to undergo this exercise in 2015.

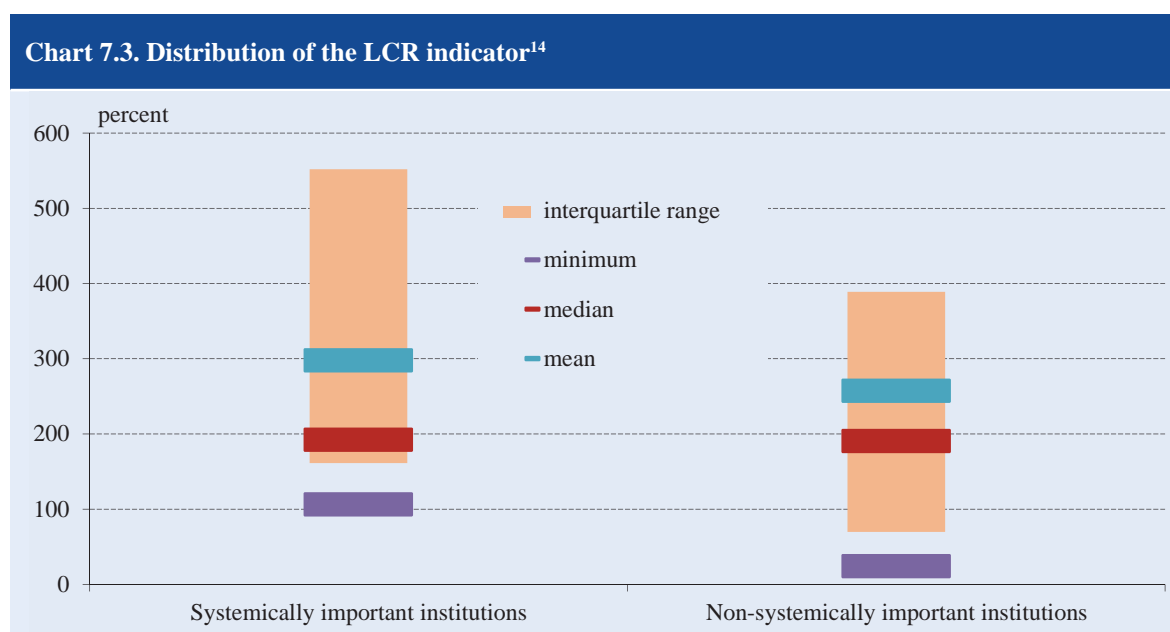
Once Romania enters into a close cooperation with the ECB, the entities to be supervised by the latter will pay supervisory fees covering the expenditure that the ECB incurs in relation to its supervisory tasks. The fees are set via an ECB Regulation. This Regulation includes the modalities and criteria for determining the annual supervisory fees to be levied, the amounts payable by the supervised entity, and the procedure for collecting the annual fees. For credit institutions in non-euro area Member States participating in the close cooperation, the ECB will issue instructions to the national competent authorities on collecting data regarding the indicators used in determining the level of the fee (i.e. total assets at book value and overall risk exposure) and the invoicing procedure.

7.3. Credit institutions' liquidity in the context of the CRD IV/CRR

Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No. 648/2012 (the Capital Requirements Regulation – CRR), applicable since 1 January 2014, standardises in Part Six the two liquidity risk indicators, i.e. the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR).

As regards the LCR, until this indicator is specified and implemented as a minimum binding standard via a delegated act to be adopted by the European Commission, the institutions report several elements regarding liquid assets and liquidity inflows and outflows. The NBR is currently collecting, for monitoring purposes, data on the LCR indicator based on the Commission Implementing Regulation (EU) No. 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No. 575/2013 of the European Parliament and of the Council.

According to the analyses conducted based on the first reporting of data (as of March 2014), the introduction of minimum requirements on the LCR indicator will not have a material impact on the Romanian banking sector, as most domestic credit institutions comply with the 100 percent threshold laid down in the Regulation¹³. Smaller, non-systemically important credit institutions have reported LCR values below the threshold (Chart 7.3.).



¹³ A caveat is warranted in relation to the outcome of the exercise, given the possibility of data quality flaws in the first reporting and the lack of an established methodology for calculating the indicator until the adoption of the delegated act by the European Commission.

¹⁴ The indicator distribution has been determined by removing outliers (the case of savings and loan banks) from the data series.

7.4. The new European framework for assessing domestic systemically important banks

The lessons from the global financial crisis warned the regulatory and supervisory authorities of the destructive effects exerted by the materialisation of the systemic risk stemming from the size of financial institutions on the financial system in its entirety, as well as on the real economy both domestically and at a cross-border level. The risks posed by systemically important institutions relate to their market-setter role on various financial markets and to the impact of their financial decisions taken with a view to maximising profits (e.g., excessive on- and off-balance-sheet risk-taking), which may turn out to be suboptimal across the financial system. Consequently, these institutions carry the potential to generate financial instability and market distortions, and are likely to create moral hazard through their sheer size – taking government support for granted in case of financial distress.

EU-wide concerns over harmonising the policies of addressing systemic risk stemming from the size of financial institutions have materialised into a custom-built macroprudential tool – the O-SII buffer – being introduced in the CRD IV/CRR package. The buffer is calibrated at up to 2 percent of the total risk exposure amount and consists of Common Equity Tier 1 capital, complementing the other capital requirements (total capital ratio of 8 percent and the capital conservation buffer of 2.5 percent).

Pursuant to Article 131(3) of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (CRD IV), the competent authorities shall identify systemically important institutions at European and/or national level (namely other institutions than globally significant ones, for which a distinct methodology has been prepared) on the basis of at least any of the following criteria: (a) size; (b) importance for the economy of the Union or of the relevant Member State; (c) significance of cross-border activities; (d) interconnectedness of the institution or group with the financial system.

According to the provisions of CRD IV, the European Banking Authority (EBA) was assigned the task of publishing, by 1 January 2015, guidelines on the methodology for identifying other systemically important institutions (O-SIIs), by taking into account both the international regulatory framework¹⁵ and national specificities in EU Member States. Hence, the EBA published in July 2014,

¹⁵ Basel Committee on Banking Supervision – *A framework for dealing with domestic systemically important banks* (October 2012). The paper includes a set of 12 principles on the assessment methodology for domestically important institutions and their additional loss absorbency requirements, as follows: 1) National authorities should establish a methodology for assessing the degree to which banks are systemically important in a domestic context; 2) The assessment methodology should reflect the potential impact of, or externality imposed by, a bank's failure; 3) The reference system for assessing the impact of failure should be the domestic economy; 4) Home authorities should assess banks for their degree of systemic importance at the consolidated group level, while host authorities should assess subsidiaries in their jurisdictions, consolidated to include any of their own downstream subsidiaries; 5) The impact of a domestic systemically important bank's failure on the domestic economy should, in principle, be assessed having regard to bank-specific factors, namely size, interconnectedness, substitutability/financial institution infrastructure, and complexity; 6) National authorities should undertake regular assessments of the systemic importance of banks in their jurisdictions; 7) National authorities should publicly disclose information that provides an outline of the methodology employed to assess the systemic importance of banks in their domestic economy; 8) National authorities should document the methodologies used to set higher loss absorbency (HLA) requirements for domestic systemically important banks (D-SIBs) in their jurisdiction; 9) The HLA requirement imposed on a bank should be commensurate with the degree of systemic importance; 10) National authorities should ensure that the application of the G-SIB (global systemically important banks) and D-SIB frameworks is compatible within their jurisdictions; 11) In cases where the subsidiary of a bank is considered to be a D-SIB by a host authority, home and host authorities should make arrangements to coordinate and cooperate on the appropriate HLA requirement; 12) The HLA requirement should be met fully by Common Equity Tier 1 (CET1), made up exclusively of ordinary shares.

for consultation purposes¹⁶, the Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs). The guidelines set forth a two-step assessment procedure for institutions under the supervisory scope of national jurisdictions:

- (a) assessment according to a set of mandatory indicators (Table 7.1.), a step meant to achieve an appropriate degree of convergence in terms of the methodology applied by Member States;
- (b) the competent authorities are encouraged to complement mandatory indicators with further optional criteria and indicators (selected from a list included in the guidelines) in order to reflect the specificities of each national banking sector.

Hence, the methodology for assessing systemically important institutions at European and domestic levels strikes a balance between convergence and comparability, on one hand, and flexibility, on the other. Transparency is ensured via competent authorities' obligation to publicly disclose on their websites an outline of the methodology applied to assess systemic importance, including the elements of flexibility domestically. Moreover, the guidelines state that the competent authorities should publish the scores obtained by relevant entities designated as systemically important in relation to both mandatory and optional indicators and notify the EBA accordingly.

Table 7.1. Criteria and mandatory indicators laid down in the EBA Guidelines on the assessment of O-SIIs

Criterion	Mandatory indicators	Weight (%)
Size	Total assets	25
Importance (including substitutability/financial system infrastructure)	Value of domestic payment transactions	8.33
	Private sector deposits from depositors in the EU	8.33
	Private sector loans to recipients in the EU	8.33
Complexity/cross-border activity	Value of OTC derivatives (notional)	8.33
	Cross-jurisdictional liabilities	8.33
	Cross-jurisdictional claims	8.33
Interconnectedness	Interbank liabilities	8.33
	Interbank assets	8.33
	Debt securities outstanding	8.33

All four criteria are weighted equally at a weight of 25 percent in determining the final score of each credit institution. Mandatory indicators have been selected depending on the relevant markets for financial system stability, which are negatively affected by ailing banks, thereby capturing the main sources of systemic risk. The guidelines set harmonised definitions of the mandatory indicators across Member States, using the EBA implementing technical standards on an EU-wide common supervisory reporting framework. The framework of mandatory indicators generates a ranking of

¹⁶ As part of the consultation process, Member States may submit comments to the EBA by October 2014.

credit institutions within a Member State in terms of degree of systemic importance. Institutions above a specified threshold are automatically designated as O-SIIs. This assessment step should be implemented by all Member States, thereby ensuring comparability of analyses across the EU. The EBA Guidelines state, as a general rule, that institutions with a score equal to or higher than 350 basis points should be automatically designated as O-SIIs. National authorities may raise this threshold up to 425 basis points or decrease it to 275 basis points to take into account the specificities of a Member State's banking sector and ensure the homogeneity of the selection. Institutions with a score not exceeding 4.5 basis points should not be designated as O-SIIs.

Complementing the methodology based on mandatory indicators, the competent authorities may use a set of optional indicators, selected from a list included in the EBA Guidelines¹⁷, as well as qualitative assessments with a view to capturing systemic risk generated by domestic specificities, an element of flexibility that takes into account the major differences in the financial systems across Member States. The outcome of this stage consists in identifying domestic systemically important banks that could not be captured by the common framework of mandatory indicators.

In line with the CRD IV, the EBA Guidelines state that banks may be assessed with respect to their degree of systemic importance on an annual basis. Home authorities should assess banks at the consolidated group level, while host authorities should assess subsidiaries in their jurisdictions (including all downstream entities) at individual or sub-consolidated level.

The competent authorities should notify the EBA as to whether they intend to comply with the guidelines by incorporating them in their supervisory procedures. Any authority that decides to comply in part or not comply with the guidelines shall notify the EBA of the underlying reasons. The EBA Guidelines on the assessment of domestic systemically important institutions shall apply as of 1 January 2015. During the first two years, the EBA shall assess the quality and consistency of data submitted by the competent authorities in order to determine if further refinements or changes are needed in relation to the mandatory and optional indicators used in the methodology.

With a view to completing the Guidelines on identifying other systemically important institutions, the EBA launched a simulation exercise which Member States were invited to join on a voluntary basis. The simulation included the reporting on mandatory indicators and discussing issues related to setting the optional indicators and calibrating the upper and lower thresholds of systemic importance. Romania was among the 17 countries to take part in this exercise and contributed to outlining the elements of flexibility allowed by the current assessment framework developed by the EBA with regard to the thresholds used by the competent authorities when designating banks as systemically important, depending on the specificities of the national financial system and the relevance of mandatory indicators vis-à-vis the degree of development of various sections of the domestic financial market.

¹⁷ The list of optional indicators includes, inter alia: risk-weighted assets; total assets/Member State's GDP; mortgage loans to retail customers; consumer credit; loans to non-financial corporations; deposits guaranteed under the deposit guarantee system; number of retail customers; share in clearing and settlement systems; bond/covered bond issuance; equity issuance; holdings of domestic bonds; geographical breakdown of bank's activity; number of branches and subsidiaries; foreign net revenue/total revenue; value of repos/reverse repos; assets held for trading; potential contagion through entities in a conglomerate; potential reputational contagion; connectivity to and from foreign banking system.

The results of the simulation conducted by the NBR in line with the EBA guidelines are comparable to those derived from regular reviews of the banking system according to the internally-developed procedure for identifying systemically important credit institutions, based on six major criteria: a) the credit institution's contribution to financing the real economy, calculated based on the volume of corporate loans and the degree of substitution of lending to non-financial corporations; b) the credit institution's contribution to financial intermediation, calculated via the volume of household and corporate deposits; c) the credit institution's activity on the interbank market and assessing the contagion effect by incorporating the feedback loops generated by the real sector; d) determining systemically important institutions within the ReGIS payment system; e) the credit institution's activity on the government securities market; f) vulnerability to contagion in the parent-subsidiary relationship via the common lender channel (home country of the capital). The internal methodology encompasses both quantitative analyses (based on two approaches – monocriterial and multicriterial respectively) and qualitative analyses. The latest multicriterial assessment revealed eight credit institutions of higher systemic importance (based on at least four criteria) in the domestic banking system.

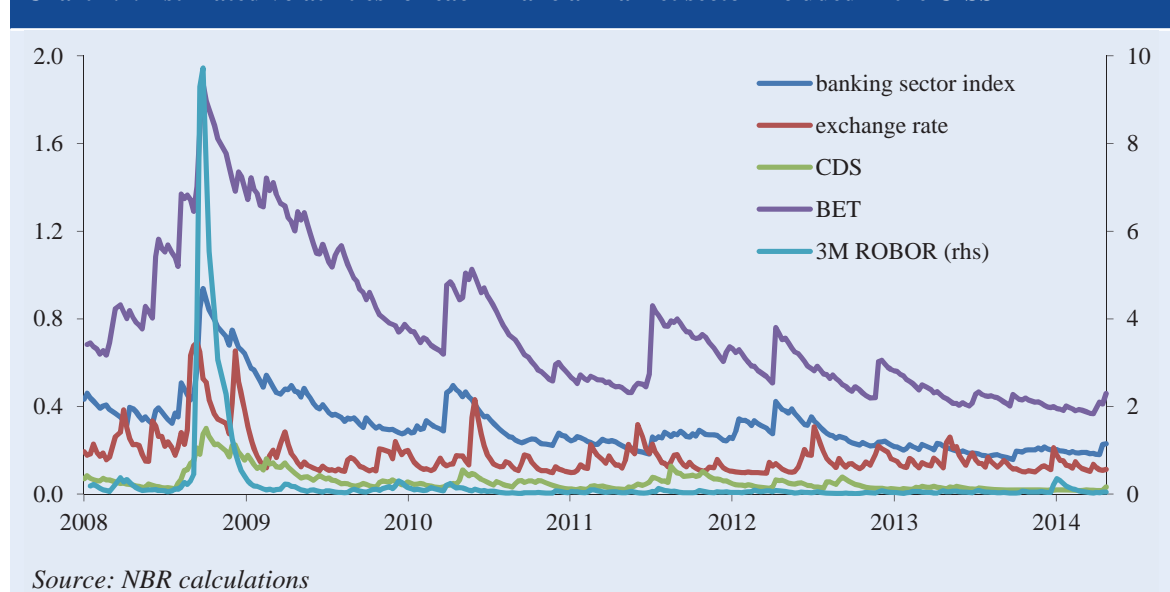
7.5. The Composite Indicator of Systemic Stress – an instrument for monitoring financial market stress

The National Bank of Romania is currently considering the possibility of introducing a measure to quantify financial market stress, given that isolated vulnerabilities in certain sectors may negatively affect, via contagion effects, the performance of the entire system. It is a flexible and robust instrument for systematically monitoring financial market risks – allowing for the early identification of episodes of crisis that may have a detrimental impact on financial stability and hence on the real economy – whose implementation may become necessary. As a matter of fact, this type of synthetic indicator is the main instrument used by the ESRB in monitoring risks across the European financial system, while other European institutions, such as the European Securities and Markets Authority (ESMA) or the European Insurance and Occupational Pensions Authority (EIOPA), include it in their risk monitoring and management strategies in the areas under their supervision.

In the context of defining the methodology for implementing a Composite Indicator of Systemic Stress (CISS) in the Romanian financial system, a similar approach to that formulated by Holló, Kremer and Lo Duca (2012)¹⁸ was used. The main innovation of this approach compared to alternative indicators consists in the aggregation of sub-indices, specific to each financial market, taking into account the time-varying cross-correlations between them. By assigning weights based on these dynamic correlations calculated for each pair of components, the CISS puts more weight on situations in which stress prevails in several market segments at the same time. Consequently, the economic intuition behind the methodological specification rests on the idea that financial stress is more systemic if it becomes manifest across the financial system on a wide scale, with a potentially detrimental impact on the real economy.

¹⁸ *CISS – A Composite Indicator of Systemic Stress in the Financial System*, ECB Working Paper No. 1426.

Chart 7.4. Estimated volatilities for each financial market sector included in the CISS



Source: NBR calculations

With a view to tailoring the procedure to the specifics of the domestic economy, the calibration of the defined methodology for constructing the index implied the selection of five sub-indices meant to capture the behaviour of the five major segments of the Romanian financial market. In particular, the BET index was used to capture developments on the capital market, for the interbank money market – the 3M ROBOR reference rate, for the forex market – the EUR/RON exchange rate, and for the sovereign credit market – five-year CDS prices. Finally, the banking sector sub-index was constructed based on a regression model between the market values of credit institutions listed on the Bucharest Stock Exchange and the aggregate market index¹⁹.

The analysis of the volatilities for each of the five variables through time points to major differences in the response to shocks of the markets under consideration. These differences relate both to asymmetries in the response to shocks and to the persistence of shocks. The results show that the persistence of shocks is much lower for the ROBOR interest rate and CDS prices, unlike the volatility of the BET index and of the banking sector index. Exchange rate volatility lies in between the two aforementioned categories.

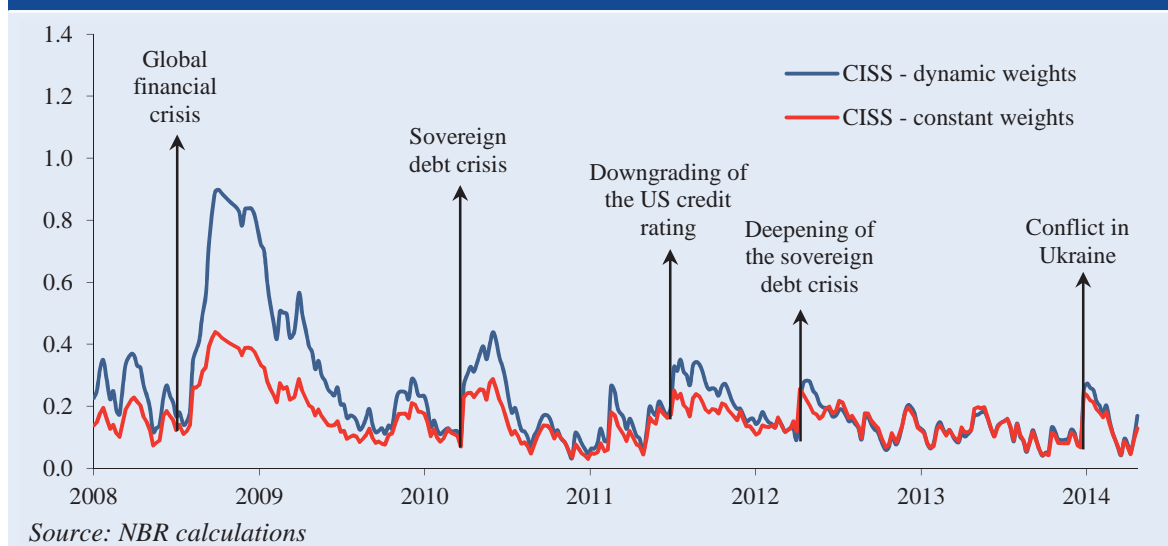
After estimating the volatilities for each sub-index, the resulting series are rescaled within the [0, 1] range, in order to ensure comparability during the stage of aggregating the final index. Sub-indices were transformed based on the empirical cumulative distribution function (CDF), as this approach has the major advantage of keeping the properties of the analysed data set unaltered through time. Hence, this does not imply a normal distribution of data, an assumption that is often invalidated in practice, particularly in the case of stress indices based on the estimation of volatility series. The final stage in the construction of the index implies the estimation of EWMA-type dynamic correlations for each pair of sub-indices, in order to determine the time-varying weight matrix that enables the index to identify episodes of systemic stress. After aggregating the weighted sectoral indices, the final series

¹⁹ The approach is similar to that of Louzis and Vouldis (2013) in *A Financial Systemic Stress Index for Greece*, ECB Working Paper No. 1563. The authors argue that, in order to capture the idiosyncratic risk of each financial market sector, the volatility for the five representative time series needs to be estimated. ARCH-type models were used in order to estimate this measure. The model parameters were set on a case by case basis, depending on market-specific features indicated in the literature.

for the CISS is obtained, with values on an ordinal scale within the $[0, 1]$ range, where 1 stands for the maximum level of financial stress and 0 defines a period of tranquillity on financial markets.

The key contribution of this analysis consists in obtaining a time series for monitoring systemic risk in Romania. In order to check the robustness of the results, the performance of the systemic risk indicator was analysed in relation to the main episodes of global market turmoil. It can be noticed how systemic risk heightening, signalled by the CISS, occurred during periods of deeper tensions on the international markets. As regards Romania, the major spikes in systemic risk were the result of knock-on effects from the recent global crisis. Moreover, the sovereign debt crisis and the downgrading of the US credit rating also generated episodes of systemic risk in Romania. Risks to the domestic financial system generally trended downwards during 2013. This trend was, however, brought to a halt by the impact of escalating political and military tensions in Ukraine.

Chart 7.5. The CISS calculated by assigning dynamic or constant weights



The results for the CISS prove the utility of an approach that takes into consideration the dynamic correlations between financial market sectors, by highlighting the periods when stress becomes manifest across the entire system. In this context, the correlation among sub-indices is proportional to the degree of financial instability, in line with both the “horizontal” perspective of systemic stress, where attention is confined to the financial system, and the “vertical” perspective, in which the two-sided interaction between the financial system and the real economy is taken into account, according to the ECB definition²⁰.

7.6. Recent developments in the prudential regulatory framework

Bank resolution and deposit guarantee schemes

The year 2013 and the early months of 2014 saw significant progress across the EU in the creation of the Banking Union. A major breakthrough in the single regulatory framework for the banking sector

²⁰ European Central Bank (2011), *Special Feature C: Systemic risk methodologies*, Financial Stability Review, June, pp. 141-148.

was marked by Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No. 1093/2010 and (EU) No. 648/2012 of the European Parliament and of the Council (the BRR Directive) and by Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (the DGS Directive), which were published in the Official Journal of the European Union, L173 of 12 June 2014, along with the EU Regulation establishing a Single Resolution Mechanism (the SRM Regulation).

The BRR Directive introduces an extended and harmonised set of recovery and resolution rules and tools for effectively dealing with credit institutions and investment firms that are either failing or likely to fail, whose implementation aims, inter alia, to ensure the continuity of critical functions, to avoid adverse effects on financial stability by preventing contagion risks, and to protect public funds by minimising reliance on public financial support. The Directive provides for the need to establish a resolution authority and a national resolution fund, financed from banks' contributions, whose available financial means should reach 1 percent of the amount of covered deposits by 31 December 2024. Member States may set a higher target level for the resolution fund and may confer on the resolution authorities powers and tools in addition to those conferred on them under the Directive, provided they are consistent with the resolution principles and objectives and do not impinge on the effective resolution of cross-border groups. Starting 1 January 2014, the National Bank of Romania has powers regarding the resolution of credit institutions in Romania.

Setting up the resolution fund and introducing the bail-in tool ensure that the private sector, in particular shareholders and creditors, bears the largest part of resolution costs. Specifically, in the event that prevention measures prove insufficient and the financial standing of a credit institution continues to deteriorate, the resolution authorities may apply, inter alia, the bail-in tool for adjusting capital and eligible debt, with a view to safeguarding financial stability and protecting covered depositors. If, following these measures, additional funding is needed to cover the losses, the resolution fund may be used. Although the use of the bail-in tool provides benefits by breaking the negative feedback loop between banks and sovereigns, it may also imply additional funding costs, while the possible legal and operational barriers during its implementation could hinder the resolution of a failing institution. Furthermore, the resort to this tool might be complicated in the event of a systemic crisis. State intervention for the recapitalisation of failing banks should occur as a last resort only, after all other resolution tools have been used to the fullest extent and if the crisis is systemic in nature, and not before shareholders and creditors have made a contribution to loss absorption and recapitalisation of at least 8 percent of total liabilities. Public support shall be conditional on the prior and final approval under the EU state aid framework.

In line with the provisions of the European directive, the Bank Deposit Guarantee Fund (BDGF) in Romania shall be liable for the amounts by which covered deposits would have been written down in order to absorb the losses in the institution, had covered deposits been included within the scope of bail-in. When one or more resolution tools other than the bail-in tool is applied, the BDGF shall be liable for the amount of losses that covered depositors would have suffered, had covered depositors suffered losses in proportion to the losses suffered by creditors with the same level of priority under the national law governing normal insolvency proceedings. Covered depositors shall not be affected by the application of the resolution tools for covered deposits, pursuant to the DGS Directive.

The recovery and resolution decisions taken at banking group level should be aimed at safeguarding financial stability and minimising the negative economic and social impact in all Member States where those banking groups operate. Therefore, the resolution authorities in the Member States where the parent undertaking, its subsidiaries and significant branches are established need to cooperate in developing a group resolution plan and taking the resolution measures applicable to the entities in the group, as well as preparing the financing arrangement for such measures. In the event that funding from national financing arrangements is needed, the Member States where the concerned group entities are established shall share responsibility, depending on certain criteria laid down in the directive.

The SRM Regulation and the intergovernmental Agreement on the transfer and mutualisation of contributions to the Single Resolution Fund (the SRF Agreement) set the institutional and financing framework required for implementing the rules laid down in the BRR Directive in the Member States participating in the Banking Union. The SRM Regulation and the SRF Agreement provide for a European resolution authority at the level of the Single Resolution Board, thereby facilitating the resolution of cross-border credit institutions, and the establishment of a Single Resolution Fund, consisting in the progressive mutualisation (over an eight-year period) of resources from national resolution funds. However, at least in the early stage, the resolution activity will be carried out primarily at national level, while the pooled resources of the single resolution fund may be resorted to only if national resolution is not possible. Given Romania's formal intention to join the SSM by entering into close cooperation with the ECB, considering that the capital in the domestic banking system originates mainly in the euro area, Romania will automatically participate in the SRM as well starting on the date of engaging in close cooperation with the ECB.

The main changes introduced by the Directive on deposit guarantee schemes (the DGS Directive) refer to extending the scope of coverage to all non-financial undertakings, regardless of their size, the calculation of contributions depending on the risk profile of each credit institution and of the volume of covered deposits, as well as to shortening the repayment period from 20 working days to seven working days. The financing of DGSs shall be harmonised by setting an *ex ante* target level of 0.8 percent of the amount of the covered deposits, to be reached by 3 July 2024. The Directive sets forth, as a national option, that Member States may stipulate that branches established by a credit institution which has its head office outside the Union must join a DGS in operation within their territories, if the protection provided by the DGS in the home country is not equivalent to that provided under the European regulatory framework.

Structural reform of the banking sector

The European Commission's projects aimed at strengthening the stability of the European banking sector include the structural reform of the EU banking sector, whose purpose is to prevent regulatory arbitrage that might become manifest through the migration of banking activities, subject to stricter regulation, over to the shadow banking sector. This particular project consists of two legislative proposals, namely the proposal for a Regulation of the European Parliament and of the Council on reporting and transparency of securities financing transactions and the proposal for a Regulation of the European Parliament and of the Council on structural measures improving the resilience of EU credit institutions. The two European regulations are currently under negotiation in the working groups set up at European level.

The draft Regulation on reporting and transparency of securities financing transactions aims to enhance the monitoring and assessment of risks and interlinkages across the entire EU financial system, while its reporting requirements complement those of Regulation (EU) No. 648/2012 – the EMIR, which provides for the obligation to report derivative contracts to trade repositories.

The draft Regulation on structural measures improving the resilience of EU credit institutions addresses the issue of “too-big-to-fail” banks and aims at curtailing the artificial expansion of banks’ balance sheets, particularly those activities of a purely speculative nature, thereby reducing the risk that taxpayers have to step in to save failing banks, and lowering the cost and complexity of any resolution when required. The proposal is also an important complement to the Directive establishing a framework for the recovery and resolution of credit institutions and investment firms.

The proposed Regulation applies to large credit institutions or banking groups that qualify as “too-big-to-fail” institutions, particularly those with significant trading activities, whose failure could negatively affect the entire financial system and the economy overall. Specifically, the requirements apply to the European banks that are identified as being of global systemic importance or that exceed certain thresholds in terms of total assets and trading activity. The proposed Regulation also stipulates the possibility of separating certain trading activities carried out by the credit institutions or banking groups, such as market making, investing in and sponsoring risky securitisation, and trading in OTC derivatives.

For the purposes of this Regulation, the consolidating supervisor shall be deemed to be the competent authority with regard to all group entities that belong to the same group as the EU parent and that are subject to this Regulation. The prohibition on trading activities subject to this measure becomes effective on 1 January 2017, while the provisions on separation of trading activities from credit institutions will become effective on 1 July 2018.

The two Regulations are expected to yield benefits in terms of financial stability by enhancing transparency on financial markets and limiting the risk of contagion from the trading activity to deposit-taking. No credit institution in Romania meets the quantitative criteria listed in the draft Regulation on structural measures improving the resilience of EU credit institutions, but these legislative provisions shall apply indirectly to local credit institutions that are part of European banking groups of global systemic importance or that fulfil the quantitative criteria. Proprietary trading by credit institutions in Romania is relatively subdued, while the domestic banking sector would be exposed to external contagion risk if European banks of global systemic importance or having subsidiaries and branches in Romania incurred significant losses from proprietary trading.

New rules for money market funds

The Commission (together with other European legislators) has implemented or is currently implementing several measures aimed at mitigating risks in the financial sector by setting clear rules governing financial institutions in the shadow banking sector and their relationship with banks and other financial institutions in the regulated sector. Regulatory initiatives in this sector include, inter alia, the proposal for a Regulation of the European Parliament and of the Council on money market funds (MMFs), currently under negotiation, meant to improve MMF resilience against stressed market conditions by strengthening their liquidity profile and stability. The main regulated issues include the authorisation procedure, eligible assets, requirements on portfolio liquidity and diversification, as

well as requirements on “know-your-customer” policies, stress test scenarios and reducing reliance on external ratings by introducing internal assessment procedures for credit risk. At the same time, the proposals laid down in the draft Regulation distinguish between MMFs with a variable net asset value (NAV) and constant NAV MMFs, the latter being subject to specific requirements regarding authorisation, maintaining at all times a buffer amounting to at least 3 percent of the total value of their assets, and the use of the NAV buffer.

The proposed measures could contribute to strengthening the MMF prudential framework, resulting in the enhanced stability of the entire European financial system. In light of the small size of MMFs in Romania, the direct impact of the draft Regulation on the local financial system is deemed to be limited at this point in time. Moreover, the volume of funding raised by domestic credit institutions from local or foreign MMFs in the form of deposits is immaterial. On the other hand, a proactively prudent stance is warranted in order to prevent the build-up and heightening of potential risks to financial stability, especially in the context of certain developments in the financial sector and in response to the new EU regulations.

