LATVIJAS BANKA

ISSN 1691–1202

FINANCIAL STABILITY REPORT

2012

ABBREVIATIONS

CAR – capital adequacy ratio
CSB – Central Statistical Bureau of Latvia
CIS – Commonwealth of Independent States
DENOS – the securities settlement system of LCD
DVP – delivery versus payment
EBA – European Banking Authority
EC – European Commission
ECB – European Central Bank
EEA – European Economic Area
EFSF – European Financial Stability Facility
EIOPA – European Insurance and Occupational Pensions Authority
EKS – electronic clearing system of the Bank of Latvia
EMU – Economic and Monetary Union
EONIA – Euro overnight index average
ESA 95 – European System of Accounts 1995
ESM – European Stability Mechanism
EU – European Union
EU15 – EU countries before 1 May 2004
EURIBOR – Euro interbank offered rate
FCMC – Financial and Capital Market Commission
FOP – free of payment
FRS – US Federal Reserve System
GAP – repricing gap or difference between RSA and RSL
GDP – gross domestic product
IMF – International Monetary Fund
JSC – joint stock company
LCD – Latvian Central Depository
Ltd. – limited liability company
MFI – monetary financial institution
NBFS – non-bank financial sector
OFI – other financial intermediary
RIGIBOR – Riga interbank offered rate
ROA – return on assets
ROE – return on equity
RSA – interest rate sensitive assets
RSL – interest rate sensitive liabilities
RWA – risk weighted assets
SAMS – interbank automated payment system of the Bank of Latvia
SEA – State Employment Agency
SRS – State Revenue Service
Treasury – Treasury of the Republic of Latvia
UK – United Kingdom
US – United States of America
VaR – the maximum expected losses over a certain period of time and with a given probability (Value-at-Risk)
VAT – value added tax

The Financial Stability Report analyses and evaluates the performance of the Latvian financial system and risks, focussing on the credit institution operation, on the basis of financial market data available up to 15 March 2013, economic data available up to the end of February 2013 or later, credit institution, NBFS and financial infrastructure data available up to 31 December 2012. Forecasts are also based on the most recent available data.

Data on the branches of foreign banks registered in the Republic of Latvia have been disregarded for the purposes of calculating ROE, CAR and Tier 1 CAR, open foreign exchange positions, the liquidity ratio set by the FCMC; nor have they been used for liquidity and credit risk sensitivity and stress tests or sensitivity analysis of currency and interest rate risks.

Sources: the CSB, the FCMC, LURSOFT (Database of the Republic of Latvia Register of Enterprises), the LCD, the SEA, Bloomberg, Reuters, Latio Ltd., Ober Haus Real Estate Latvia Ltd., Arco Real Estate Ltd., the ECB, Eurostat, the State Unified Computerised Land Register, the State Land Service, the Treasury, and the Bank of Latvia.

Charts have been compiled on the basis of data provided by Bloomberg (Charts 1–3), the CSB (Charts 1.4–1.6, 1.8, 1.10–1.14, 3.1 and 3.2), the SEA (Chart 1.6), the ECB, the respective national central banks and/or the Bank of Latvia (Charts 1.7, 1.9, 1.10, 1.14, 1.16, 2.1, 2.14, 2.15, 2.18, 2.31–2.35, 2.39, 3.1, 4.1–4.3, and Tables 2.2 and 4.1), the SRS (Chart 1.8), Eurostat (Chart 1.11), Arco Real Estate Ltd. and Ober Haus Real Estate Latvia Ltd. (Chart 1.15), Latio Ltd. (Charts 1.15 and 1.16), credit institution surveys on risks to the Latvian financial system, conducted by the Bank of Latvia (Chart 1.17 and Table 1.1), the FCMC (Charts 2.2–2.4, 2.16, 2.17, 2.19, 2.22, 2.25–2.28, 2.36, 2.37, 2.39, 3.3, 3.4, and Table 2.1), credit institution lending surveys conducted by the Bank of Latvia (Charts 2.5–2.13), estimates prepared by the Bank of Latvia, also based on the FCMC data (Charts 2.20, 2.21, 2.23, 2.24, 2.29, 2.30, 2.38, 2.40, 2.41, and Table 2.3), Reuters (Chart 2.39), and the LCD (Charts 4.4, 4.5, and Table 4.2).

Latvijas Banka (Bank of Latvia)
K. Valdemāra iela 2A, Riga, LV-1050, Latvia
Tel.: +371 67022300 Fax: +371 67022420
http://www.bank.lv
info@bank.lv

CONTENTS

EXECUTIVE SUMMARY

The year 2012 was marked by successful development of the domestic macrofinancial environment which supported the strengthening of the stability of Latvia's financial system and a recovery in the credit institutions' profitability. Credit institutions continued to maintain a high level of capitalisation and provisions overall, preserving a good capacity to absorb unexpected losses. The share of short-term financing in the credit institutions' financing composition expanded, yet the overall capacity of credit institutions to absorb financing outflow shocks remained high because of the large liquid asset holdings of credit institutions. In 2013, further improvements in the domestic macrofinancial environment and continued strengthening of Latvia's financial system can be expected. Nevertheless, the external macrofinancial developments, particularly with regard to the euro area sovereign debt crisis, remains the main source of uncertainties and systemic risk in Latvia's financial system, especially considering that the creditworthiness of households continues to be impaired.

Despite the weakening of the economic growth in Europe and the persistently high external risks, against the background of the stabilisation observed in the European and global financial markets and the EMU strengthening measures, the external risks to Latvia's financial stability decreased slightly in 2013. Moreover, they were balanced out by the stable positions in the major Nordic parent banks and their home countries as well as by the broadly positive economic growth rates of the main trade partners.

Risks to the financial stability associated with the domestic macrofinancial developments decreased in 2012 due to the dynamic and balanced nature of the economic development. The economic growth and consumer and business confidence were resilient to the external economic uncertainties, inflation remained low, wage growth was commensurate with productivity gains, employment increased, the current account deficit and consolidated general government budget deficit remained low. The positive macrofinancial trends facilitated gradual solvency improvements for non-financial corporations and households as well as supported the upgrading of Latvia's credit rating and its outlook, steeply falling risk perception and lower interest rates in the government securities market.

The credit risk faced by credit institutions declined slightly in 2012 as the quality of the credit institutions' loan portfolio continued to improve because of the favourable economic developments, gradual improvement of the borrowers' creditworthiness and decreasing debt burden and also because credit institutions cleaned their balance sheets from unrecoverable loans and were more active in their work with delinquent loans. Moreover, the rate of decline in past due loans and restructured loans accelerated. Nevertheless, credit risk remains a major risk for credit institutions due to the large share of loans past due and restructured loans as well as the scarce safety cushion built by the borrowers and available to absorb additional shocks which was determined by the persistently high unemployment and the overall low level of household income.

The process of deleveraging continued in 2012 and the credit institution assets contracted. Repayments of loans granted in the previous years still exceeded the amount of new loans. Nevertheless, the annual rate of decrease of the loan portfolio decelerated as a result of resumed activity in lending to non-financial corporations. Demand for loans to non-financial corporations increased, while the easing of credit standards applied to non-financial corporations was affected by the competition among credit institutions, a more positive outlook on the creditworthiness of non-financial corporations and the macroeconomic conditions as well as improvements in the financial positions of the credit institutions themselves. At the same time, the amount of loans granted to households remained insignificant, suggesting that the range of potential creditworthy borrowers in the household sector is limited.

The composition of the credit institutions' financing retained the previous trends: against the background of the general contraction of the loan portfolio, financing from Nordic parent banks to their branches in Latvia continued to decrease, resident deposits remained stable, whereas non-resident deposits increased. As a result of shrinking long-term financing received from parent banks and growing short-term deposits, the share of long-term financing in the credit institutions' liabilities contracted and the maturity mismatch between assets and liabilities of credit institutions increased.

Nevertheless, the liquidity stress tests conducted by the Bank of Latvia with the purpose of evaluating the significance of the potential consequences of financial outflows suggest that with the liquid assets of the credit institutions remaining at a high level, the credit institutions' capacity to absorb financial outflow shocks generally remains high. This applies also to the credit institutions accepting short-term non-resident deposits, as these deposits are mostly invested in liquid debt securities or deposits at major foreign credit institutions with high credit ratings, and the liquidity ratios of those credit institutions remain overall high. However, the credit institutions receiving sizeable short-term non-resident deposits should pay increased attention to limiting the potential liquidity and funding risks. With a view to ensuring that the credit institutions focussing on non-resident services continue to maintain liquidity ratios commensurate with their risks, the FCMC tightened the liquidity requirements in 2013. A higher liquidity ratio is set on an individual basis for each credit institution whose non-resident deposits exceed 20% of the credit institution assets within the framework of the second pillar of the international standards for financial supervision, Basel II, which can be as much as two times higher than the current minimum liquidity requirement. Moreover, credit institutions focussing on non-resident services are subject to higher capital requirements within the second pillar framework as well as overall tighter on-site and off-site supervision.

With Latvia's macrofinancial environment and loan portfolio quality of credit institutions improving, the profit of credit institutions expanded in absolute terms and most credit institutions operated with profit. The rise in profit was mainly attributable to reversal of loan loss provisions, higher income from commissions and fees and larger contribution from trades and revaluation of financial instruments. Credit institutions continued with cost-cutting measures in order to increase the persistently low return on equity.

In 2012, credit institutions continued to maintain a high level of capitalisation overall, preserving a good capacity to absorb unexpected losses. Moreover, the credit institutions' capital consists primarily of Tier I capital, which suggests that Latvia's credit institutions are already fully compliant with the prospective Basel III capital requirements. The results of the credit risk sensitivity analysis and stress tests also suggest that the credit risk shock-absorption capacity of credit institutions overall remained high in 2012. Even in the event of the adverse macroeconomic scenario the overall capital adequacy of credit institutions would remain significantly above the statutory minimum capital adequacy requirement.

The wind-up of the SJSC *Latvijas Hipotēku un zemes banka* business and selling of four commercial packages within the framework of restructuring into a development bank was significant for Latvia's financial sector in 2012. The selling of the remaining two commercial packages is scheduled for 2013. The credit institution licence of the JSC *Latvijas Krājbanka* was cancelled as well as the licence of the JSC *Parex bank*a which was transformed into the JSC *Reverta*, a management company for the toxic assets.

It is expected that the domestic macrofinancial environment would improve further in 2013 and the related risks would abate, yet substantially depending on the precondition of the external macrofinancial environment remaining unimpaired. The quality of loans will continue to improve. This will be determined by a moderate improvement in borrowers' creditworthiness and cleaning of the credit institutions' balance sheets from unrecoverable and delinquent loans. It is expected that the recovery in the creditworthiness of non-financial corporations will outpace that of households. In 2013 and 2014, the process of cleaning the credit institutions' balance sheets of the problematic household loans could accelerate. The number of completed insolvency proceedings will increase.

As growth continues, the demand for loans and competition to attract borrowers will strengthen. Nevertheless, the growth of lending in the household and non-financial corporation segments will continue to differ considerably. Lending to non-financial corporations will be supported by further improvements in both demand-side and supply-side factors. At the same time, with the creditworthiness of households remaining impaired, the amount of new loans granted to households will still be limited.

As concerns the composition of the credit institutions' financing, the previously-observed trends will persist. It is important that the potential risks associated with services to non-residents continue to be closely monitored and limited.

The profit earned by credit institutions in 2013 could be equal to that in 2012 or even slightly higher. Profitability will be supported by the expected economic growth and improved operational efficiency. Although credit institutions are likely to pay increasingly more attention to effective capital management and increase dividend payouts, the capitalisation level of credit institutions is expected to remain high in 2013 as well. This will be supported by the incorporation of the profit for 2012 into the capital base, the forecasted profit of credit institutions in 2012 and the capital boosting measures taken by some credit institutions.

The main systemic risks to the stability of Latvia's financial system as a whole are as follows:

1) external risks related to the potential deepening of the euro area sovereign debt crisis and its negative impact on the development European (including Latvian) economy;

2) limited creditworthiness of households and the persistently rather significant amount of past due and restructured loans, potentially having an adverse effect on the credit risk and profitability risk of credit institutions should the domestic macrofinancial environment deteriorate.

1. MACROFINANCIAL ENVIRONMENT

In 2012 and early 2013, the external risks remained high. The eventual deepening of the euro area sovereign debt crisis and its potential negative effect on the economic growth in Europe and other regions still are the main risks to the economic development and financial stability in Latvia. Meanwhile, the domestic economic growth and consumer and investor confidence in 2012 were resilient to the external economic uncertainties. Also, creditworthiness of borrowers, non-financial corporations in particular, gradually improved. It received an extra impetus from both falling interest rates and easing debt burden. As to households, their creditworthiness remained impaired due to still high unemployment and rather low income. Likewise, the real estate market activity continued to be rather sluggish. The domestic macrofinancial environment is expected to improve gradually well into 2013, yet the still high external risks can have an adverse effect on the pace of its recovery.

1.1 External macrofinancial environment

Supported by deteriorating fiscal situation in some euro area countries, escalation of the sweeping sovereign debt crisis and weaker economic growth, the external risks remained at a high level also in 2012. The pace of the global economic growth decelerated, while on account of the deepening sovereign debt crisis the euro area economy entered recession in 2012. Notwithstanding the improving availability of financing and more favourable lending terms from the euro area banks in the second half of the year owing to the ECB launching a new programme of Outright Monetary Transactions, in 2012 overall, credit institutions were still in a tight position, which had a negative impact on the accessibility to loans for the real sector of the euro area economy. At the same time, the EU country decisions on substantial reforms at the national and euro area level, aimed not only at overcoming the sovereign debt crisis but also at strengthening the EMU and integrating deeper in the banking and fiscal union, are of particular importance. On a positive note, the impact of the euro area sovereign debt crisis on the pace of economic growth in Latvia's main trading partners and the countries of origin of major Latvian credit institutions' parent banks has been limited. The combination of central bank stimulus measures and economic support packages by governments in a number of countries gives rise to hopes that the global economy will gain momentum as early as the second half of 2013.

The external environment was extremely volatile in 2012. At the beginning of the year, the decisions of the ECB and other major national central banks, coupled with some significant political achievements, e.g. strengthening of the EFSF and ESM lending capacity, alleviated the financial market strain. In addition, the performance of other leading economies and euro area countries turned out to be better than expected. Since April, however, the escalation of already tight political situation in several euro area countries and the dramatic plunge into a deeper sovereign debt crisis not only increased the uncertainty cladding the euro area economic outlook but also translated into deteriorating economic performance.

Political instability in Greece and concerns about the country potentially exiting the euro area were among the main factors rapidly driving the sovereign debt crisis forth. Spain was another hotspot. Loss of market participants' confidence in the Spanish government's ability to achieve budget consolidation and the worsening of the banking crisis resulted in the downgrading of Spain's and some of its credit institutions' credit ratings, a steep rise in government bond interest rates, and a significant capital outflow. In May, the Spanish government was forced to nationalise the country's fourth largest lender *Bankia*, but in June an agreement was reached on a rescue package from the ESM worth 100 billion euro for recapitalisation of *Bankia* and other ailing banks. At the end of June, Cyprus joined in and applied for financial assistance in support of its credit institutions. Uncertainty about the international support to Cyprus and unstable political situation in Italy kept the concerns about the euro area sovereign debt crisis alive.

With the problems of European credit institutions aggravating, brisk discussions about establishing a banking union started among high-ranking officials in May 2012. The statement on four essential building blocks of the EMS future architecture, approved in June by the EU Council, was an important step towards mitigating financial market tensions (an integrated financial framework, an integrated budgetary framework, an integrated economic policy framework, and democratic legitimacy and accountability of decision-making). In September, the EC made public its vision of a European banking union, whereas in December, the EU Council made a decision on the establishment of the Single Supervisory Mechanism.

As the confidence of financial markets in successful implementation of planned reforms at the national and European levels was initially weak, it is essential to note the crucial role of the ECB and other major national central banks of the world in reducing the financial market tensions in the second half of 2012. In September, the ECB announced the launching of its new programme of Outright Monetary Transactions and a further broadening of collateral requirements. Other world's major central banks continued their support programmes: the Bank of England and Bank of Japan expanded their securities purchase programmes, while the FRS made an announcement on the third round of its securities purchase programme. All major central banks confirmed their commitment to proceed, if necessary, with their securities purchase programmes also in 2013, while the Bank of Japan is considering the extension of its programme in 2014 as well. The Funding for Lending Scheme launched by the Bank of England in cooperation with the HM Treasury in early 2012 contributed positively to the lending activity of credit institutions as early as the second half of the year. Towards the end of the year, essential changes were introduced to the FRS monetary policy target, and the inflation target was supplemented with a new FRS monetary policy target for the unemployment rate.

In the first half of 2012, the costs of sovereign debt financing in the euro area periphery and the credit risk insurance costs in a number of European countries increased (see Charts 1.1 and 1.2); in the second half of the year, in turn, central bank stimulus packages and the vision of a stronger euro area contributed to the weakening of tensions in financial markets, and the risk appetite increased. As since July the respective costs had notably decreased in the euro area most vulnerable countries, the spread between these indicators and those for the other countries also narrowed. A stronger risk appetite translated into higher European and other major stock market indices in the second half of the year.

Chart 1.1

GOVERNMENT 10-YEAR BOND YIELDS
(%)

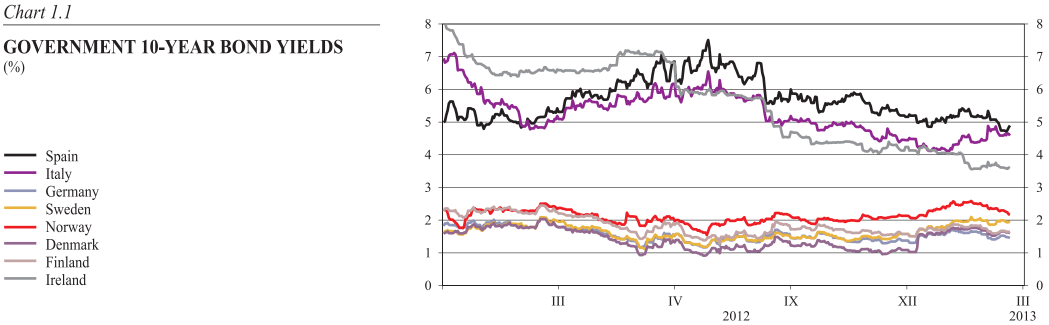
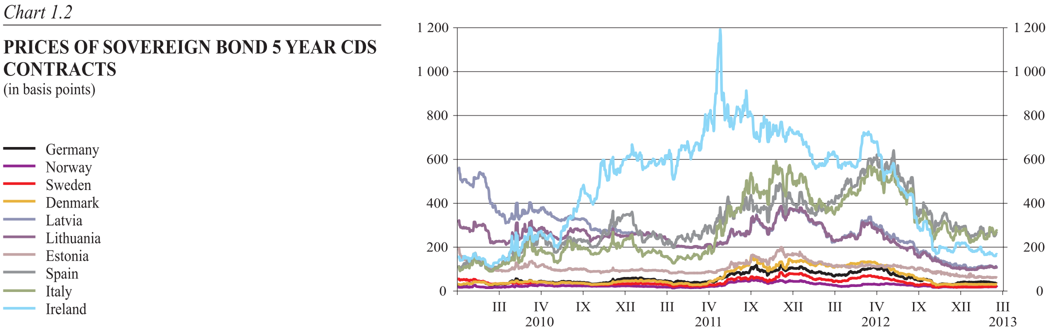


Chart 1.2

PRICES OF SOVEREIGN BOND 5 YEAR CDS CONTRACTS
(in basis points)



Despite significantly improved accessibility to financing for euro area governments and non-financial corporations in the second half of the year, the still notable spread between sovereign bond yields of most vulnerable euro area countries (Italy, Spain, Portugal, Greece, Ireland and Cyprus) and the other countries suggests an on-going fragmentation in European financial markets.

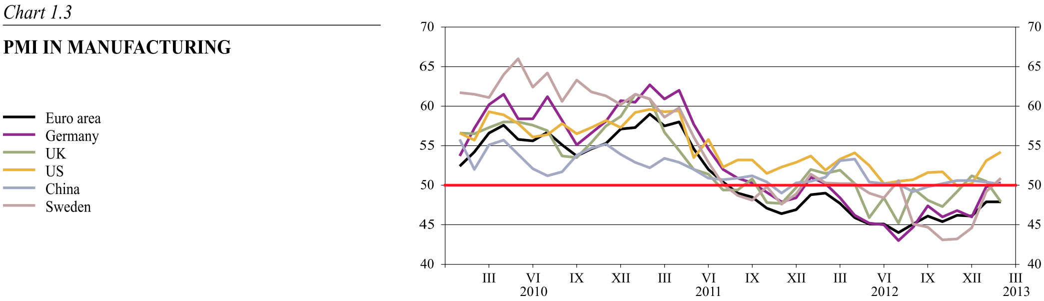
In the context of substantial excess liquidity of euro area credit institutions, with the minimum reserve ratio being reduced and the ECB lowering its key interest rates, EURIBOR (to which the interest rates on non-MFI loans in euro are linked) continued to fall gradually. In 2012 on average, 3-month EURIBOR stood at 0.57%, and 6- month EURIBOR was 0.83%.

The volatile financial market conditions, sluggish economic growth or even recession in several euro area countries, and the projected tighter regulatory requirements for credit institutions restricted the recovery of lending and, consequently, also the economic growth in Europe. The ECB lending survey results indicate that in 2012 credit institutions in Europe continued to tighten credit standards on account of more pessimistic expectations regarding general economic activity, higher costs related to the capital position, and limited access to financing. The demand for loans has substantially fallen (particularly for loans to non-financial corporations). In 2012, loans to the euro area private sector posed an average year-on-year contraction of 0.7%. It was primarily on account of a 2.3% decrease in loans to non-financial corporations, while loans to households grew by 0.5%.

Deterioration in the economic situation in Europe and in the world in general suggested that sustained high levels of external risks were still in place. According to the IMF assessment, global GDP picked up a mere 3.2% in 2012. Although the euro area was the only leading economy recording a downturn in GDP in 2012, the IMF assessment shows that economic growth had lost momentum also in the CIS countries, China, India and Latin America. Of European countries, only few economies, including Norway, Sweden and the Baltic States, managed to perform better than was expected in early 2012; in the global perspective, the same is true about the US and Japan. High and rising unemployment has become a growing concern around Europe. Meanwhile in the second half of the year, the global financial market situation improved, and the implementation of central bank stimulus packages may have positive implications also for the real sector as early as the second half of 2013, which is confirmed by somewhat better leading economic indicators in Europe and the world as a whole. Since October of the previous year, the PMI in manufacturing has been recording an upswing, standing almost at or above 50[1] (see Chart 1.3), in several countries; the economic sentiment indicators also point to a slight improvement in Europe.

Chart 1.3

PMI IN MANUFACTURING



The Scandinavian countries, with their relatively good economic performance and low-level exposure to euro area peripheral countries in contrast to the strained political and fiscal situation not only in the periphery but also some core euro area economies, strengthened their safe haven status. Although heightened investor interest resulted in a notable appreciation of exchange rates in Sweden and Norway, which had an adverse effect on exporters' competitiveness amid a tight external trade environment, the home

[1] PMI value below 50 implies that activity is falling, while one above 50 suggests that activity is rising.

countries of parent banks of Latvia's major credit institutions continued to demonstrate stronger economic performance vis-á-vis the other European countries also in 2012. Moreover, the parent banks are not only sustainably resilient to the sovereign debt crisis in EU countries but, consistently with the 2012 financial statements, can be currently regarded as the best-capitalised and strongest credit institutions in Europe. The parent banks have managed to boost their capital despite tighter regulatory requirements[2], improve the term structure of financing, move towards reducing their dependence on market financing, and, at the same time, enlarge dividend payout ratios. In 2012, CDS spreads in the Nordic countries were very low; moreover, their negative gap with the German CDS was expanding. The parent bank CDS spreads continued to decrease and the gap with the 10 largest European credit institutions' average also increased towards the close of the year.

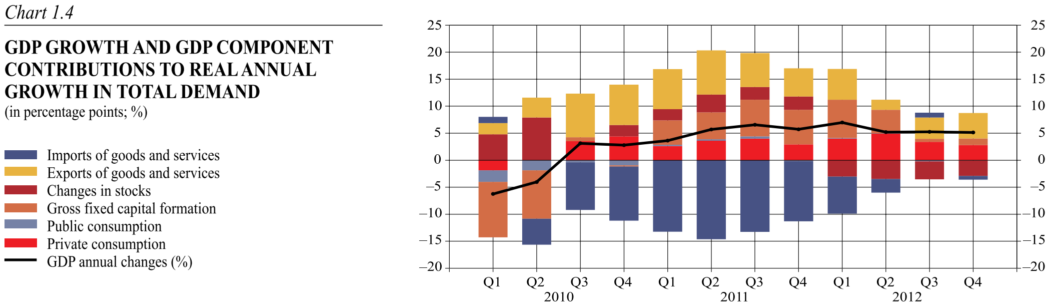
1.2 Domestic macrofinancial environment

In 2012, the domestic macrofinancial environment kept improving in Latvia, with the country's economic growth being dynamic and balanced. Exports and sentiment indicators showed resilience to unfavourable effects of external conditions and were on an upward trend. The success gained in the economic growth and fiscal stabilisation was confirmed by the upgrading of Latvia's credit rating and its outlook, steeply falling risk perception as well as lower interest rates in the government securities market. These positive macrofinancial trends spurred gradual solvency improvements for non-financial corporations and households; hence the risks to financial stability on account of the domestic macrofinancial environment should be treated as downward. It is expected that the domestic macrofinancial environment would improve further in 2013 and the related risks would abate, yet strongly depending on the precondition of the external macrofinancial environment remaining unimpaired.

In 2012, all major sectors of the economy recorded growth, and GDP picked up 5.6% annually. The economic growth in 2012 was driven by and received equal contribution from private consumption, investment and exports (see Chart 1.4).

Chart 1.4

GDP GROWTH AND GDP COMPONENT CONTRIBUTIONS TO REAL ANNUAL GROWTH IN TOTAL DEMAND
(in percentage points; %)



Private consumption grew by 5.4% in 2012, with its more dynamic recovery resting on higher disposable income and better household sentiment due to non-materialisation of previous worries about the negative effects of external developments on exports and subsequently also on the domestic demand. During 2012, the consumer sentiment indicator was gradually getting better, finally returning to the pre-crisis level.

Gross fixed capital formation posted an overall 12.3% increase in 2012, albeit its growth rate decelerated in the second half of the year. Investment was primarily financed with own funds on account of improving corporate profit indicators and previously accumulated savings. The expansion in investment was notably spurred by foreign direct investment and financing from the EU funds. A further investment growth was confined by the sluggish lending activity and the hesitant stance of businesses due to

[2] From 2013 Sweden implements a risk weight floor of 15% for mortgages in determining CAR for credit institutions, and introduced a requirement on the liquidity coverage ratio (at aggregated currency levels and individually in euro and US dollars), whereas in Norway transitional rules are in effect, i.e. the CAR requirement is stricter than in other countries.

uncertainties surrounding the economic outlook for Europe. As the rise in productive investment was stronger than that in other investment, positive changes continued to affect the investment structure, with half of non-financial investment in 2012 going to manufacturing and transport (as was the case in 2011 as well).

Despite the lack of stability in global growth and an overall low external market demand, Latvia's foreign trade activity, albeit more moderate than in the previous year, was still on the rise. In 2012, real exports of goods and services expanded by 9.8% and 0.2% respectively. Export performance was enhanced by the regained competitiveness in manufacturing, diversified export markets and assortment of goods, rising labour productivity and producer value added which, in turn, was supported by a very steep increase in investment in 2011.

This dynamic export growth determined that in 2012 the current account deficit in the balance of payments remained at a low level (1.7% of GDP).

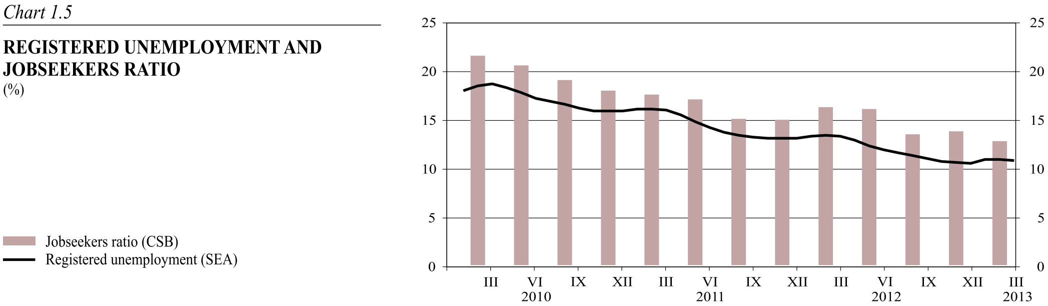
As the economic growth was more dynamic than projected and a conservative budget spending policy was pursued, fiscal indicators of general government improved substantially in 2012. The consolidated general government budget ran a surplus of 0.1% of GDP on the cash flow basis, or, on the accrual basis (ESA 95), a deficit of 1.2% of GDP. On the cash flow basis, the general government debt stood at 36.4% of GDP at the end of the year (37.5% of GDP at the end of 2011), while according to the ESA 95 methodology, it had fallen to 40.7% of GDP by the end-2012 (41.9% of GDP at the end of 2011).

The global financial market participants and international credit rating agencies positively assessed Latvia's success achieved in the stabilisation and growth of the national economy; as a result, Latvia's credit rating and its outlook were upgraded in 2012. The government of Latvia was thus enabled to borrow from financial markets at historically lowest interest rates, to refinance the sovereign debt, and to make an early (at the close of 2012) repayment of the entire outstanding obligations under the international loan programme to the IMF. Latvia ratified the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, which provides for the strengthening of fiscal discipline in national legislation. The Saeima of the Republic of Latvia adopted the Law on Fiscal Discipline on 31 January 2013, designed to avoid a potential return to procyclical budgetary policy in the future.

The overall improvement in the macroeconomic situation in 2012 was accompanied by a gradual sustained recovery of the labour market conditions, which underpinned a somewhat better household creditworthiness (see Chart 1.5). According to the CSB labour survey data, the number of employed increased by 2.8% in 2012. Meanwhile, the number of registered unemployed decreased almost by half in the period from March 2010 (a historic high) to end-2012. During 2012, registered unemployment fell 1.0 percentage point[3], and at the end of the year accounted for 10.5% of economically active population. At the same time, the share of jobseekers in economically active population contracted by

Chart 1.5

REGISTERED UNEMPLOYMENT AND JOBSEEKERS RATIO
(%)



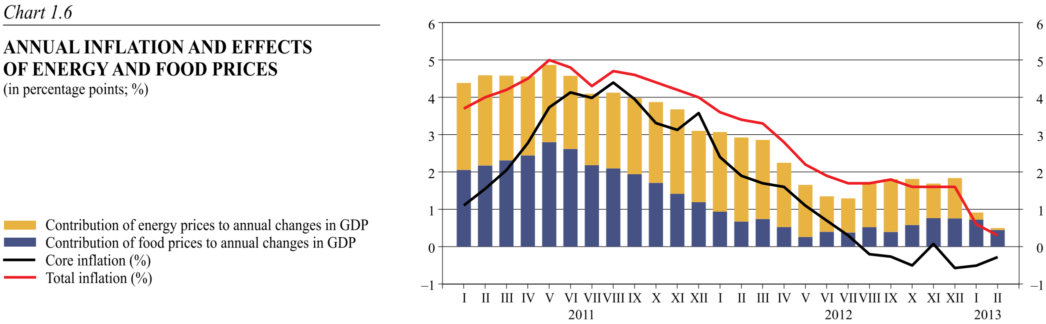
[3] The registered unemployment rate was revised in April 2012 with the 2011 population census data taken into account. As a result of this adjustment, registered unemployment went up 1.6 percentage points, while without it the rate would have declined by 2.6 percentage points.

1.9 percentage points (to 14.9%). Improvements in labour market supported a moderate wage rise commensurate with labour productivity gains. In 2012, the average monthly real net wage went up by 1.6%. The unemployment rate is nevertheless high, household income is subdued overall, and structural problems are still weighing on the labour market.

In the situation of generally sustained fragile household creditworthiness and of non-financial corporations regaining their competitiveness, it was important that the growth of the average annual consumer and producer prices in 2012 (2.3% and 3.7% respectively) was rather moderate and followed a continuously downward trend (see Chart 1.6). The experienced downturn in inflation was driven by the price stabilisation of global resources and such domestic factors as the balanced dynamics of average wages and labour productivity (with no demand side pressure on prices), tightening competition in some services as well as the basis effect of indirect taxes (raised in the previous year) and the reduction of VAT standard rate. As the risks to price stability were contained, the Bank of Latvia cut the rates on the main refinancing operations and eased the minimum reserve ratio for credit institutions, thus providing a more broad-based access to financing for the economy[4].

Chart 1.6

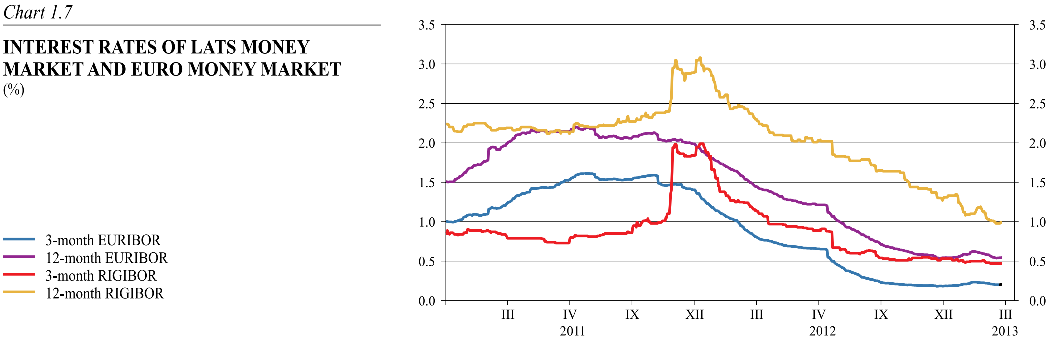
ANNUAL INFLATION AND EFFECTS OF ENERGY AND FOOD PRICES
(in percentage points; %)



The low interest rate policies pursued by national central banks coupled with ample liquidity of the Latvian credit institutions as well as the country's solid economic performance and regained access to international financial markets were reflected also in a further decline, to record lows, in interest rates on interbank transactions in both the national and foreign currencies[5]. RIGIBOR (to which the interest rates on non-MFI borrowing in lats are linked) hit an all-time low in 2012. 3-month RIGIBOR stood at 0.89% and 6-month RIGIBOR at 1.42% in 2012 (0.96% and 1.51% in 2011 respectively; see Chart 1.7). The spread between RIGIBOR and EURIBOR narrowed at the beginning of 2012 and further on remained at a low level suggesting abating risk perceptions. As both the lats and euro money market indices went down, the interest rate burden eased

Chart 1.7

INTEREST RATES OF LATS MONEY MARKET AND EURO MONEY MARKET
(%)



[4] In 2012, the Bank of Latvia lowered its refinancing rate overall from 3.50% to 2.50%. The overnight deposit facility rate was reduced from 0.25% to 0.05%, whereas the 7-day deposit facility rate was cut from 0.375% to 0.075%. The Bank of Latvia also lowered the marginal lending facility rate in three steps. The minimum reserve ratios for deposits with an agreed maturity of over two years, deposits redeemable at notice of over two years and non-callable debt securities issued by credit institutions with an original maturity of over two years were cut from 3.00% to 2.00% in January 2012; for other liabilities included in the reserve base, the former was lowered from 5% to 4%.

[5] In the domestic interbank market, which, like in all previous years, was dominated by uncollateralised overnight transactions, the weighted average interest rate on overnight transactions in lats declined from 0.39% in January 2012 to 0.10% in December, with the weighted average interest rate on euro transactions decreasing from 0.23% to 0.08% respectively.

for the most part of resident households and non-financial corporations, which had undertaken liabilities either in lats or euro in the preceding years.

In line with the Bank of Latvia's forecast baseline scenario published in January, the current economic trends are expected to continue also in 2013, albeit due to external factors the GDP growth would be somewhat slower (around 3.6%). Major risks continue to be associated with the external environment, and responsibly implemented economic policy will still be crucial.

1.3 Financial vulnerability of credit institution clients

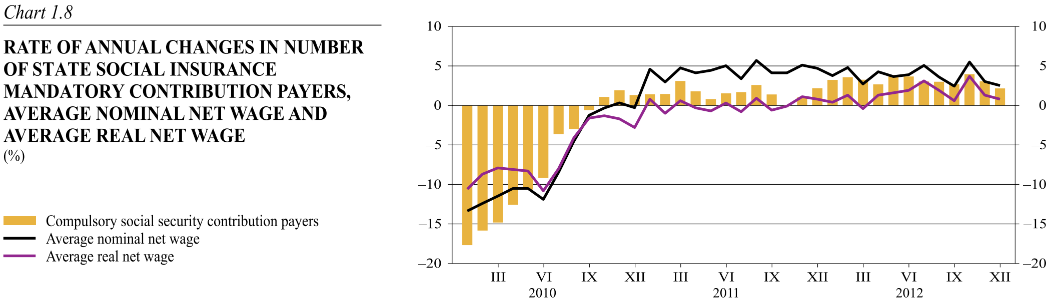
With the economic growth rate accelerating, financial vulnerability of credit institution clients continued to abate in 2012. Lesser financial vulnerability of these sectors is driven, step by step, by rising household income and employment, and increasing profitability of non-financial corporations. The real estate market is gradually recovering as well. Overall, however, the improvement of household sector's financial situation is hampered by excessive debt liabilities accumulated by a major part of households and continuously low overall levels of employment and income.

1.3.1 Financial vulnerability of households

The household creditworthiness continued on a gradual upward trend in 2012. It was driven by rising employment and declining unemployment, higher real and nominal wages for the employed (see Chart 1.8), low inflation and interest rates. The improvement in household financial situation is confirmed by stronger private consumption, better economic sentiment of consumers, and higher demand for loans for house purchase.

Chart 1.8

RATE OF ANNUAL CHANGES IN NUMBER OF STATE SOCIAL INSURANCE MANDATORY CONTRIBUTION PAYERS, AVERAGE NOMINAL NET WAGE AND AVERAGE REAL NET WAGE
(%)



Overall, however, household creditworthiness is still fragile and their capacity to absorb extra financial market turmoil is limited amid persisting high unemployment and generally low income levels. The share of delayed and restructured loans, despite a downward trend, remains large, and the number of insolvency proceedings started is growing, pointing to still excessive debt burdens of a significant part of households. In comparison with the previous year, the number of private persons' insolvency petitions increased by 65.3% in 2012 (1.4 thousand petitions all together or below 0.2% of the household total).

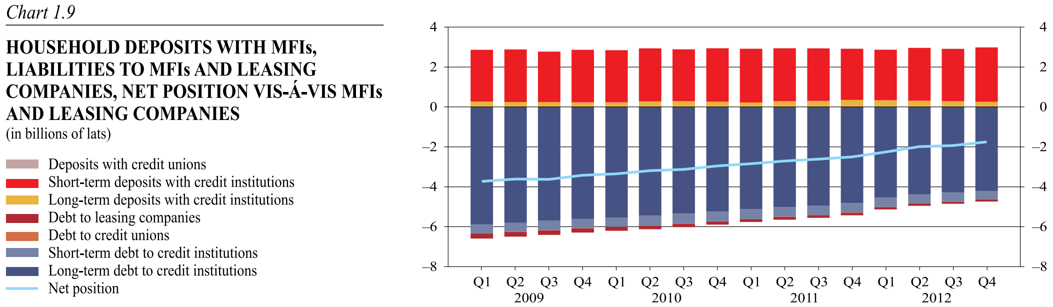
In general, the household debt burden was shrinking in 2012 mainly on account of contracting household liabilities to credit institutions (see Chart 1.9). A part of this contraction in household liabilities was due to two credit institutions[6] whose licences were revoked and their loans to households were not included in the MFI balance sheet statistics. Meanwhile, new loans in 2012 vis-á-vis 2011 grew slightly, yet not commensurately with the decrease of the total credit portfolio in the respective period. With the effects from these two credit institutions excluded, household liabilities to credit institutions had decreased by 7.9% year-on-year by the end of 2012. Household debt liabilities to leasing companies also melted swiftly (by 19.1 million lats or 14.5% against the end of the previous year). With liabilities contracting and GDP growing faster than expected, the total household debt ratio to GDP was 7.5 percentage points lower and stood at 30.5% in 2012 (see Chart 1.10).

[6] The licences to engage in credit institution's operations were revoked in March 2012 for JSC *Parex banka* and in May 2012 for JSC *Latvijas Krājbanka*.

Household deposits remained almost unchanged in 2012, displaying some slight upward trend towards the end of the year. Along with shrinking liabilities, the household net position continued to improve (see Chart 1.9), and its ratio to GDP was 10.6% at the end of 2012 (16.6% at the end of 2011).

Chart 1.9

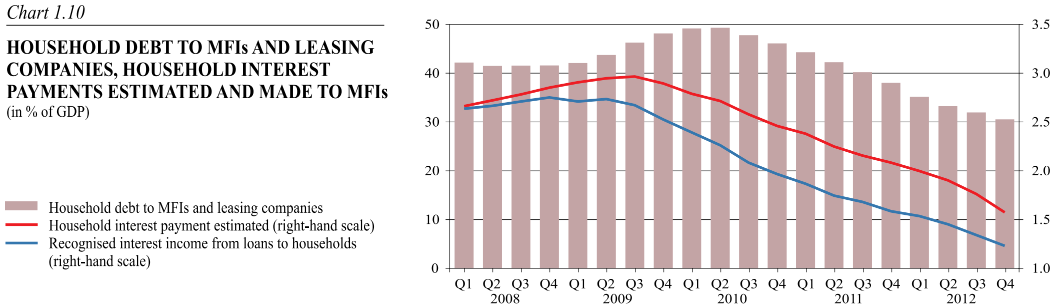
HOUSEHOLD DEPOSITS WITH MFIs, LIABILITIES TO MFIs AND LEASING COMPANIES, NET POSITION VIS-À-VIS MFIs AND LEASING COMPANIES
(in billions of lats)



The interest payment burden of households continued to contract due to swiftly falling household liabilities and low interest rates (see Chart 1.10). As a result, interest payments to MFIs in 2012 were by 15.6% lower than a year ago, and their ratio to GDP was 1.24% at the end of the year. The difference between household interest paid and estimated[7] contracted at the end of 2012, as credit institutions wrote off sizeable amounts of past due loans.

Chart 1.10

HOUSEHOLD DEBT TO MFIs AND LEASING COMPANIES, HOUSEHOLD INTEREST PAYMENTS ESTIMATED AND MADE TO MFIs
(in % of GDP)



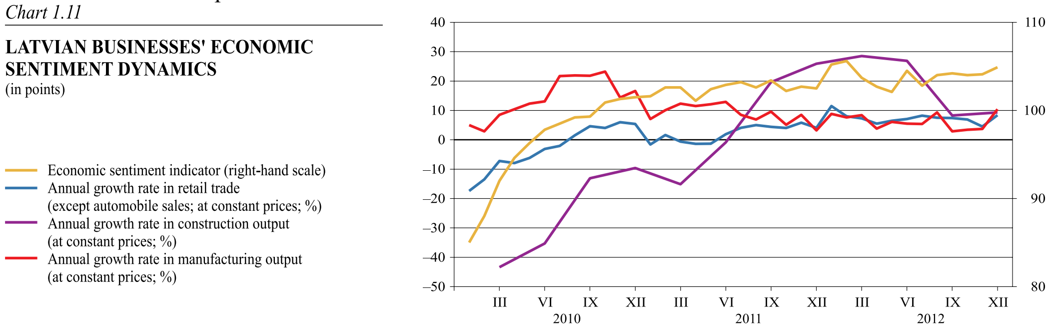
1.3.2 Financial vulnerability of non-financial corporations

In 2012, the economic growth was more buoyant than projected; hence non-financial corporations boosted their profitability and debt servicing capacity as well as slightly reduced the debt burden. New non-financial corporations, mainly small capital limited liability companies, emerged actively in 2012 as well; nevertheless, resorting to insolvency proceedings also grew somewhat.

In 2012, the economic sentiment of businesses, retail trade turnover as well as manufacturing and construction output all were on a sustained upward trend (see Chart 1.11). The year was favourable also for exporting sectors: against the previous year, the volume of exports of goods recorded a 15.4% increase at current prices. This positive move supported the efforts of non-financial corporations to strengthen their financial positions and boost creditworthiness.

Chart 1.11

LATVIAN BUSINESSES' ECONOMIC SENTIMENT DYNAMICS
(in points)



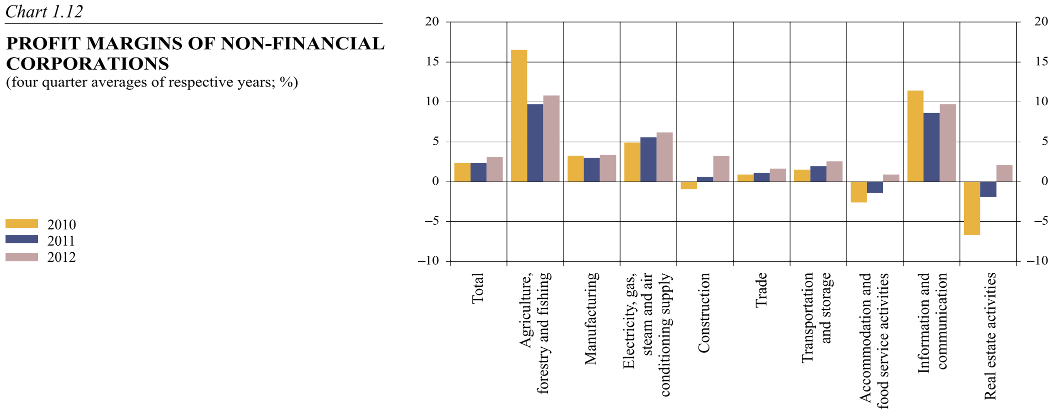
[7] Household interest estimated is the total interest payable by households calculated on the basis of principal outstanding and average interest rates of the given period. The difference between interest estimated and interest paid characterises income unearned by MFIs due to households delaying their debt obligations.

As profits of non-financial corporations[8] in 2012 rose faster than the turnover, their profitability margin[9] amounted to 3.11% (2.32% in 2011; see Chart 1.12). In the meantime, profitability in manufacturing remained stable, but that in trade continued to grow gradually. Likewise, profitability increased also in such sectors as electric energy, gas supply, heating and air conditioning, transport and storage as well as information and communication services. In 2012, profitability was positive also in the sectors related to real estate (real estate and construction), and in the sector of hospitality and catering services. It confirms that even the crisis hardest-hit sectors are regaining their profitability, thus reducing risks to their creditworthiness.

Chart 1.12

PROFIT MARGINS OF NON-FINANCIAL CORPORATIONS

(four quarter averages of respective years; %)

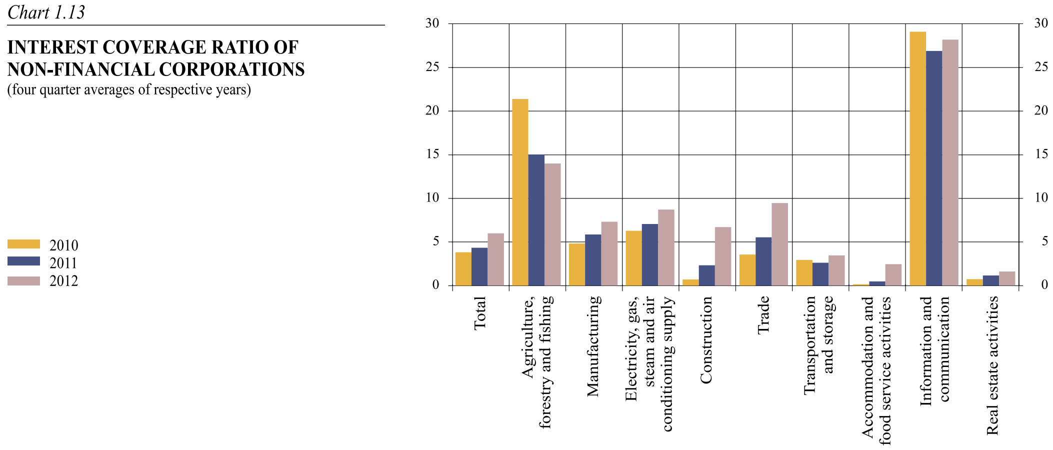


Against the background of increasing earnings and persistently low interest rates, the capacity of non-financial corporations to meet their obligations improved faster in 2012 than a year before. Overall in 2012, non-financial corporations pushed up their interest coverage ratio[10] to six times vis-á-vis 4.3 times in the previous year (see Chart 1.13). Interest converge grew in almost all sectors. Agriculture, forestry and fishing was the only sector where interest coverage continued to drop, because interest payments increased at a faster pace than profits did. This, however, is no source of concern, because in this sector, due to a relatively small debt burden, interest coverage remains at a very high level. Meanwhile in the real estate sector, interest coverage, albeit slightly growing over the year, was close to the critical level (an interest coverage ratio below 1 indicates that the non-financial corporation is having problems to satisfy its interest (debt servicing)

Chart 1.13

INTEREST COVERAGE RATIO OF NON-FINANCIAL CORPORATIONS

(four quarter averages of respective years)



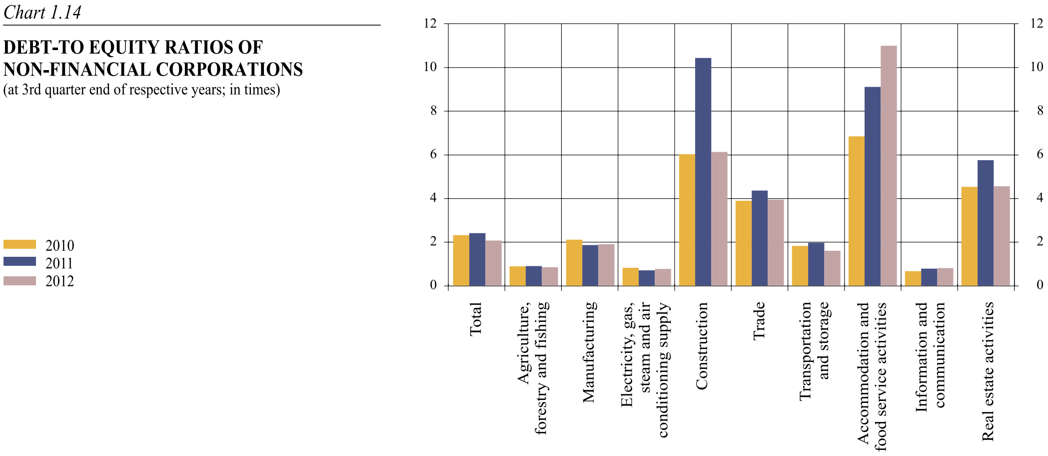
[8] Based on the CSB's survey of non-financial corporations data.
[9] Profitability margin is a ratio of pre-tax profit to net turnover. Adjustments to reduce the increment in profitability from JSC *Latvenergo* fixed asset sales in the second and fourth quarters of 2011 are included.
[10] Interest coverage ratio is a ratio of company's earnings before taxes and interest to interest expenses.

expenses with the revenues of reference period), pointing to still fragile financial position of this sector.

Debt burden of non-financial corporations eased somewhat in 2012, yet the improvement was sluggish overall. Their debt-to-equity ratio was 2.1 at the end of the third quarter (2.4 at the end of the respective period of 2011; see Chart 1.14). A significant contribution to the decline in the debt-to-equity ratio came from construction and real estate activities, both succeeding in raising equity in 2012; liabilities of the construction sector grew (trade credit primarily, on account of the sector's activity intensifying in 2012), while those of real estate contracted slightly. A rise in debt burden was observed in the sector of hospitality and catering services.

Chart 1.14

DEBT-TO EQUITY RATIOS OF NON-FINANCIAL CORPORATIONS
(at 3rd quarter end of respective years; in times)



The number of newly emerging non-financial corporations in 2012 was7% smaller than in the previous year, yet overall it remained at a high level. Most of the newly founded non-financial corporations were limited liability companies (94.7% of the total), of which the majority (69.2%) were small capital companies. On the positive side, the LURSOFT data testify that small capital limited liability companies founded in past years are evolving well and increasing their equity capital[11].

Meanwhile, the number of insolvency petitions from legal entities slightly increased (by 7.1%) in 2012, but, as there were considerable differences in the monthly numbers of insolvency petitions filed, a common trend cannot be unmistakably established. Nevertheless, the observed improvement in non-financial corporations' financial position suggests that no radical upswing in legal entities' insolvency is to be expected in the near future. By contrast, the number of closed-down and liquidated non-financial corporations is likely to rise faster due to the amendments passed 29 November 2012 by the Saeima of the Republic of Latvia to the Commercial Law of the Republic of Latvia[12], by which the Enterprise Register of the Republic of Latvia or the SRS is entitled to terminate the operation of economically inactive non-financial corporations[13], deleting their entries from the Commercial Register.

1.3.3 Real estate market developments

Latvia's real estate market activity continued to intensify in 2012, albeit it was slower than in the previous year. Most segments of the market retained the same price levels, except the segment of most expensive apartments where price rises were recorded.

[11] Ķirsons, Māris. *Pamatkapitālu palielina tikai katra piektā mazkapitāla SIA* (Equity capital raised only by every fifth small capital limited liability company). From *Dienas Bizness*, 6 March 2013.

[12] Section 314.1 of the Law on Amendments to the Commercial Law of 29 November 2012 (in effect as of 1 January 2013).

[13] For instance, the operation of a non-financial corporation can be terminated in the event that the company board has not had representation rights for a period exceeding three months and this deficiency has not been corrected within three months since the receipt of a written notice, or a non-financial corporation has not protractedly responded to the sanctions imposed by the SRS.

In 2012, the total number of purchase agreements registered with the State Unified Computerised Land Register grew by 5.7% (by 13.9% in 2011). The largest contributors to this increase were Riga, Riga region, Jūrmala and Daugavpils where the amount of agreements registered in the respective land register departments accounted for 49.9% of the total. The demand from non-residents continued to grow, with the number of transactions with real estate by non-resident natural persons rising by 18.4%. Likewise, non-residents continued to display interest about temporary residence permits via acquiring (investing in) real estate in Latvia. The number of applications for temporary residence permits in 2012 increased (by 46.7%). Real estate purchased in return for residence permits was mainly located in Riga, Jūrmala and Riga region.

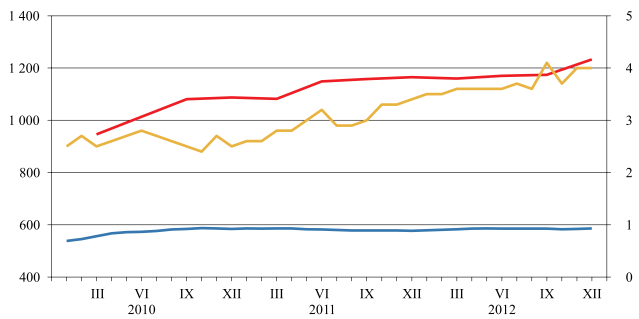
On 15 November 2012, the Saeima of the Republic of Latvia made amendments to the Law on Real Estate Tax[14], thereby entitling local governments to set for their territories individual tax rates in their binding regulations. This approach is aimed at enabling local governments to correlate the real estate tax burden with the inhabitants' purchasing power.

Price developments were uneven across the real estate market. The prices of standard apartments remained relatively unchanged in Riga (584 euro per square meter on average in 2012). Despite a rather stable average price level in the first half of 2012 for new apartments, the prices in the respective segment continued to elevate in the fourth quarter due to gradually strengthening demand and posted a year-on-year rise of 5.8% (see Chart 1.15). In most cases, such a vast range of prices was determined by quality distinctions of offered dwellings, e.g. as standard apartments often needed large extra inputs for renovation, the amount of additionally required investment was considerably higher. Apartments in new buildings, on the other hand, which are the property of credit institutions and their real estate management companies, often entitled the purchaser to better financing terms and conditions, and thus were more attractive despite their higher prices. For apartments in new and renovated buildings, the price hikes were steeper in downtown Riga and Old Riga, yet the share of such property transactions in total real estate activity was relatively small. The elevation of apartment prices in new buildings acted as a driver for credit institutions' real estate management companies to operate more actively in the respective market, and for some of them 2012 was a turning point, because they managed to sell more dwellings than were taken over from insolvent debtors.

Chart 1.15

AVERAGE PRICE AND RENT PER SQ.M. OF STANDARD APARTMENT IN RIGA; AVERAGE PRICE OF APARTMENT IN NEW BUILDINGS IN RIGA SUBURBS
(euro per square meters)

- Average price of standard apartments in Riga (averages based on information released by Latio Ltd., Arco Real Estate Ltd., Ober Haus Real Estate Ltd.)
- Average price of apartments in new buildings in Riga suburbs (Latio Ltd.)
- Average rent for a standard apartment in Riga (Latio Ltd.; right-hand scale)



Despite the activity in the real estate market and the prices of apartments in new buildings continued to increase, new construction remained subdued due to considerable offer of new and unsold apartments. According to the CSB data, dwelling space in new multi-dwelling houses built in 2012 fell back by 23.8% year-on-year; at the same time, the space in newly-built single-dwellinghouses increased by 34.1%. Likewise, building permits issued in 2012 do not point to any radical rise in the construction of new multi-dwelling houses in the near future, as their capacity shows contraction by 23.1%.

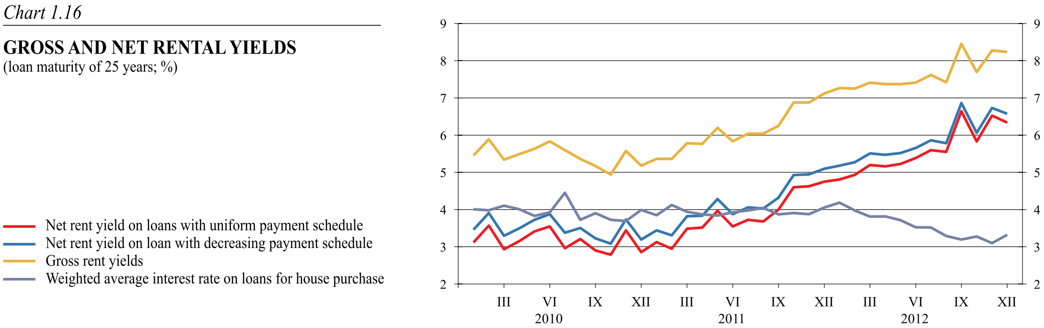
The housing rental market, where the demand remained solid also in 2012, saw the rent hikes to persist (see Chart 1.15). The said demand was supported by gradually reviving purchasing power of households and and the situation in the real estate market described

[14] The Law on Amendments to the Law on Real Estate Tax passed on 15 November 2012 (in force as of 18 December 2012).

above (the need for extra financial input from the buyer if one should decide to purchase a standard apartment). As interest rates were low and rent was rising, both gross rental yields[15] and net rental yields[16] were constantly growing in 2012 (see Chart 1.16). On account of the above developments and a relatively low interest paid by credit institutions on long-term deposits, more and more entrepreneurs and private persons with adequate savings were motivated to purchase apartments with the aim to renovate them and rent out.

Chart 1.16

GROSS AND NET RENTAL YIELDS
(loan maturity of 25 years; %)



Note. The calculation of yields is based on the average rental price per 1 square meter as quoted by Latio Ltd. for standard apartments in Riga suburbs and the average purchase price of a standard apartment in Riga; the interest rate is the average weighted interest on loans in all currencies to households for housing purchase.

As to the commercial real estate rental market, the activity in 2012 was gaining momentum. Due to a rather buoyant expansion of retail trade, the retailpremises rental market recorded some decrease in vacancy rates, with most-sought premises, e.g. in Old Riga, let out almost 100%. As a result, the rent soared: according to the estimates by Rent in Riga Ltd., in 2012 the commercial premises rent went up by around 20% in downtown Riga and by 10% in other localities[17]. In the office space market, the demand focused on small offices, and the office rent rose.

Box 1. Survey of credit institutions on risks to Latvia's financial system

In 2012, the Bank of Latvia launched the first risk survey of credit institutions, aimed at aggregating credit institutions' risk perceptions regarding current and potential risks that may affect Latvia's financial stability in six months to come. The Bank of Latvia is planning to conduct the survey twice a year in January and July. The risk survey consists of two questions; it invites respondents' opinions about risk categories defined by the Bank of Latvia and welcomes their comments regarding stability of Latvia's financial system and risk factors affecting it. In January 2013, when the risks for the first half of 2013 were assessed, 15 credit institutions of Latvia were surveyed.

According to this assessment, the main risk that can affect the financial system over the coming 6 months is an aggravation of the sovereign debt crisis in the EU with a potential adverse impact on the Latvian economy. The expected likelyhood of risk materialisation and its potential impact have been generally assessed as medium (see Table 1.1 for complete risk assessment).

Credit institutions point to deteriorating creditworthiness of non-financial corporations as the second major risk, and assess its likelihood and potential impact as medium.

Deterioration in the economic situation in Latvia, of household creditworthiness and of quality of loan portfolio are listed as the next risk group, yet with lower-than-medium expected likelihood (from 1.5 to 2.5). The risk of deterioration in loan portfolio quality

[15] The gross rental yield reflects the income of an apartment owner if the apartment is purchased and let out. Gross yield (per annum) = (average rent per square meter × 12 months) : (average selling price per square meter) × 100.
[16] Net rental yield indicates the income of an apartment owner if the apartment is purchased, a loan maturing in 25 years is taken and the purchased apartment is let out. Net yield (per annum) = (average rent per square meter × average apartment space x 12 months × loan maturity in years – aggregate interest rate on credit) : (average selling or market price of apartment × loan maturity in years) × 100.
[17] Rent in Riga Ltd. *Komercplatību nomas tirgus apskats, 2012.*

is primarily associated with the quality of issued loans, whereas materialisation of the risk of impaired creditworthiness of households and non-financial corporations not only threatens the quality of credit institutions' loan portfolio, but also would affect financial positions of other financial institutions and the entire economic situation in the country.

Table 1.1

Assessment of potential risks

(the results of risk survey conducted in January 2013)[18]

Indicators	Expected likelihood	Potential impact
Deepening of EU sovereign debt crisis and its potential adverse impact on Latvian economy	3.1	3.3
Deterioration in non-financial corporations' creditworthiness	2.6	3.0
Deterioration in Latvia's economic situation	2.4	3.2
Deterioration in the quality of Latvia's credit institutions' loan portfolio	2.3	3.1
Deterioration in household creditworthiness	2.3	2.9
Fall in confidence in Latvia's financial system	2.1	2.8
Deterioration in availability of financing for Latvian credit institutions	2.0	3.0
Rapid changes in real estate prices	1.7	3.1
Excessive pace of deleveraging	1.5	2.4

[0.0–0.5)	[0.5–1.5)	[1.5–2.5)	[2.5–3.5)	[3.5–4.5)	[4.5–5.0]

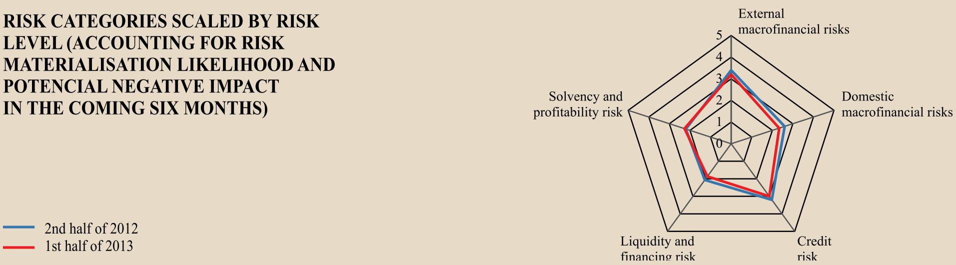
Scale where 1 denotes low risk level, 2 – below medium, 3 – medium, 4 – above medium, and 5 – high.
Note. Square bracket means that the interval endpoint is included, parenthesis – that it is not included.

When assessing the risk of deterioration in availability of financing, credit institutions assess the expected likelihood as being lower than average and the potential effect as average.

When assessing the five risk categories defined by the Bank of Latvia, experts of credit institutions list the external macrofinancial risks as the major ones (see Chart 1.17). In comparison with the results of the previous survey (September 2012), this risk received a lower assessment by credit institutions.

Chart 1.17

RISK CATEGORIES SCALED BY RISK LEVEL (ACCOUNTING FOR RISK MATERIALISATION LIKELIHOOD AND POTENCIAL NEGATIVE IMPACT IN THE COMING SIX MONTHS)



Scale where 1 denotes low risk level, 2 – below medium, 3 – medium, 4 – above medium, and 5 – high.

The credit risks rank second by significance. In general, the level of this risk is assessed as average, and according to survey respondents, this risk has eased.

Such other risk categories as the liquidity and financing risk, profitability and solvency risk as well as the domestic macroeconomic risk are assessed by credit institutions as being lower than average.

[18] Expected likelihood of risk materialisation and its potential impact are calculated as arithmetic means from respondents' assessment in accordance with the risk level scale.

2. DEVELOPMENTS AND RISKS IN THE CREDIT INSTITUTION SECTOR

With the economy developing buoyantly and significant improvement of investor confidence in the Latvian economy and financial sector, the credit institution performance continued to improve in 2012. The quality of the loan portfolio improved and alongside with positive changes in the overall domestic economic environment and the financial position of borrowers supported a generally slow decline in the credit risk faced by credit institutions. Credit institutions continued deleveraging, mainly as a result of the shrinking loan portfolio and low lending activity. Most Latvia's credit institutions earned stable profit in 2012. The CAR of credit institutions was high, with the aggregate CAR more than two times exceeding the minimum capital requirement set by the FCMC. Credit institutions continued to expand their capital in 2012. Most of the capital consists of prime quality capital or the so-called Tier 1 capital. Therefore, it can be concluded that Latvia's credit institutions are currently fully compliant with the prospective Basel III requirements. With further shrinking of the loan portfolio, the share of liquid assets in total assets of credit institutions expanded. Further growth was reported for the share of (mainly short-term) deposits in credit institution liabilities, whereas the (primarily long-term) funding provided by the banks of Nordic countries to their branches in Latvia continued to shrink. As a result, the maturity mismatch between assets and liabilities of credit institutions increased further. Nevertheless, the liquidity stress testing results suggest that the credit institutions' ability to absorb shocks stemming from financing outflows remains high.

2.1 Loan developments and quality[19]

Improvements in the domestic macro-financial environment supported a gradual recovery of the lending market in 2012. The quality of the loan portfolio continued to improve, as the credit institutions were more active in their work with borrowers facing financial difficulties and wrote off unrecoverable loans. The improvements observed in the domestic economic environment, the financial position of borrowers and loan portfolio quality point to a slow decline in the credit risk. Nevertheless, the large amount of loans past due and restructured loans, the still high unemployment rate, the low level of household income as well as the scarce safety cushion built by the borrowers and available to absorb additional shocks, keep the credit risk at a high level.

Although the annual changes in lending remained negative, the rate of decline of the loan portfolio decelerated significantly. Resident loans shrank by 4.1%, representing a much smaller decrease in comparison with 2011 (8.3%). Excluding the impact of loan write-offs, the annual rate of decrease in resident loans stood at 1.0% at the end of December (5.9% at the end of December 2011; see Chart 2.1). At the beginning of 2012, the resident loan portfolio contracted moderately. Starting from the second quarter of 2012, the activity in the lending market increased notably and the overall contraction of resident loans in the period up to November was insignificant (moreover, in June and August month-on-month increases were observed in domestic loans for the first time since October 2008). The domestic loan portfolio contracted notably in December which was mainly attributable to seasonal factors. Loan write-offs, traditionally significant at the close of a reporting year, reached an all-time-high at 92 million lats in December 2012, whereas loan repayments by non-financial corporations were also quite considerable in December, similarly as in the previous years.

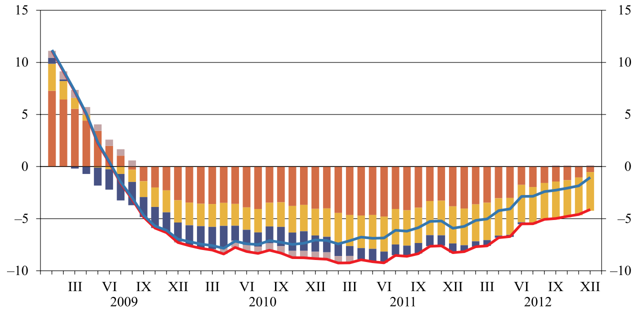
Lending to non-financial corporations accelerated, whereas the amount of new loans granted by credit institutions to households remained rather insignificant, suggesting that the number of potential creditworthy borrowers in the household sector is impaired. The overall contraction of the loan portfolio in 2012 was almost fully attributable to the shrinking of the household loan portfolio (see Chart 2.1). With the financial position of non-financial corporations gradually improving (see Subsection 1.3.2) and the loan

[19] For the sake of comparison, all the time series in this Section exclude the data on the JSC *Parex banka* and the JSC *Latvijas Krājbanka*.

Chart 2.1

ANNUAL RATE OF CHANGE IN RESIDENT LOANS AND THEIR COMPONENTS BY SECTOR
(in percentage points)

Government
Financial institutions
Households
Non-financial corporations
Total (%)
Total (excluding the impact of loan write-offs; %)



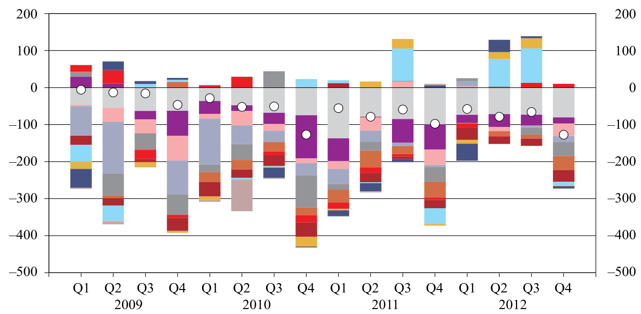
demand also increasing according to credit institutions, loans to non-financial corporations expanded slightly since the second quarter. Conversely, the situation in the household sector remained broadly unchanged: as a result of persistently low lending activity, household loans continued to contract. According to the results of the credit institution survey conducted by the Bank of Latvia, the credit standards on loans for house purchase were tightened slightly in the first and the second half of the year (see Box 2). At the same time, credit institutions reported a rise in the demand for household loans.

The electricity supply sector and (to a much smaller extent) agriculture and transport sectors were the main supporters of the recovery in lending to non-financial corporations in 2012, while the contraction observed in loans granted to other major sectors was smaller than in 2011. Loans to electricity, gas, heating and water supply sectors expanded notably in the second and third quarters (see Chart 2.2), with credit institutions financing the implementation of large investment projects and also granting short-term loans to increase current assets. Lending to the rapidly growing agricultural sector was also following an upward path for the second consecutive year. Although the performance of manufacturing remained strong, it did not find its reflection in an increase of loans granted to the sector yet, which could be explained by a more active recourse to other funding sources (including financing from foreign parent companies). Thus the loans granted to manufacturing continued to contract, with the rate of decrease reaching 5.0% in December (primarily as a result of writing off the long past due loans of the sector).

Chart 2.2

QUARTERLY CHANGES IN STRUCTURE OF RESIDENT LOAN PORTFOLIO BY MAJOR SEGMENT
(in millions of lats)

Other loans
Other loans to non-financial corporations
Agriculture, hunting and forestry
Electricity, gas and water supply
Other household loans
Transport and communication
Construction
Trade
Financial intermediation
Manufacturing
Real estate activities
Household loans for house purchase
Loan write-offs



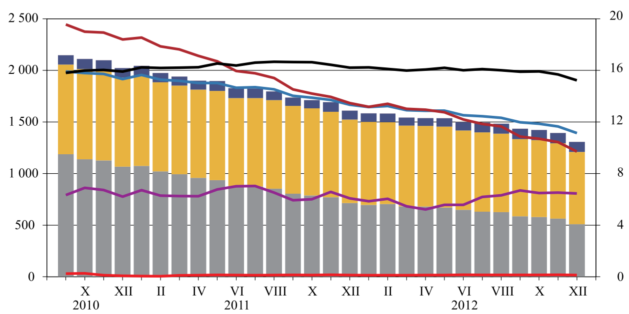
Note. The changes in the loan portfolio in the fourth quarter of 2001 were adjusted for the sectoral reclassification effect associated with one credit institution.

Lending developments are expected to remain heterogeneous across the borrower categories in 2013 as well: lending to non-financial corporations is likely to rebound gradually, whereas household lending will experience further stagnation. Continued economic growth and gradual improvements in the financial positions of non-financial corporations could support the availability of credit institution financing to a wider range of businesses. Credit institutions will continue to be active in the sectors which received the bulk of loans granted by credit institutions in the previous year. Loans granted to real-estate-related sectors (real estate activities and construction) will continue to shrink, thereby improving the diversification of the credit institutions' loan portfolio and reducing its exposure to real estate related risks. Household lending is not expected to recover significantly in 2013, given the persistently high financial vulnerability of the sector and only minor signs of improvement. The share of long past due loans in the loan portfolio of households remains substantial. Labour market is showing some improvement, although, considering the relatively high unemployment rate and moderate increase in real wages, the extent of improvement is insufficient to speed up the recovery of lending significantly.

Against the background of the favourable economic developments, the quality of the credit institutions' loan portfolio improved further in 2012, more significantly than before. The share of loans past due over 90 days contracted to 11.1% at the end of December (see Chart 2.3). With the financial performance of non-financial corporations improving (see Subsection 1.3.2) and gradual cleaning of the credit institution balance sheets of long past due loans, a reduction in loans past due granted to non-financial corporations was broadly observed across all major economic sectors and most notably in real estate activities, manufacturing, accommodation and food service activities. The amount of loans past due over 90 days in the household loan portfolio also decreased, particularly in the fourth quarter; nevertheless, the contraction of the share of loans past due over 90 days in the portfolio was not as pronounced because of the significant decrease reported for the household loan portfolio in general.

Chart 2.3

LOANS PAST DUE OVER 90 DAYS AND THEIR SHARE IN THE TOTAL STOCK OF THE RESPECTIVE GROUP OF LOANS
(in millions of lats)



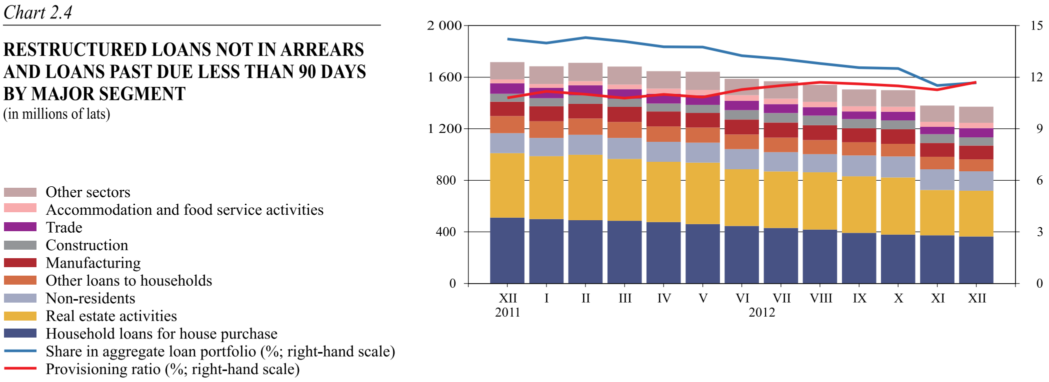
Assuming moderate economic growth, according to the baseline scenario, the share of loans past due over 90 days will continue to shrink gradually. Moderate improvement of the borrowers' creditworthiness will support a further reduction in the probability of default (thereby also dampening the formation of new past due loan flows) and it is possible that some of the borrowers with loans past due could still restore their creditworthiness. It is expected that the cleaning of the balance sheets of the unrecoverable loans accumulated during the crisis will retain the leading role in compressing the share of long past due loans. Most of the loans past due over 90 days are in workout and are likely to be written off in the future.

Currently, the balance sheet clean-up process at credit institutions is slow, but it could accelerate in the household loans segment in 2013 and 2014. Since the enactment of the amended Insolvency Law as of 1 November 2010 which improved the resort to insolvency proceedings, the number of insolvency petitions filed by individuals has increased. As the insolvency proceedings consisting of bankruptcy procedure and the procedure of extinguishing obligations in succession require some time and a more substantial part of the debt is extinguished during the procedure of extinguishing obligations taking 2–3.5 years, it can be expected that the first insolvency proceedings will be completed within the next two years. The provisioning ratio for loans in workout (a significant share of which could be composed of debts to credit institutions of borrowers undergoing insolvency proceedings) is high, i.e. credit institutions have already built sufficient provisions for those unrecoverable loans.

The developments in restructured loans were downward in 2012; therefore, the credit institution exposure to the risk of potential deterioration in the loan portfolio quality, with the economic growth decelerating, decreased gradually (see Chart 2.4). Restructured loans not in arrears or past due less than 90 days contracted from 14.2% of the total loan portfolio of credit institutions at the end of 2011 to 11.7% at the end of 2012. The

Chart 2.4

RESTRUCTURED LOANS NOT IN ARREARS AND LOANS PAST DUE LESS THAN 90 DAYS BY MAJOR SEGMENT
(in millions of lats)



reduction in restructured loans not in arrears or past due less than 90 days was the most pronounced in the segments where the amount of those loans were the largest, i.e. in real estate activities and household loans for house purchase.

Although credit institution loans to non-residents increased by 7.4% in 2012, at the end of December non-resident loan portfolio still accounted for 12.9% of the total loan portfolio of credit institutions. Dissatisfied with the business prospects in the domestic market, some credit institutions focussed on lending to non-residents. Non-resident lending entails additional risks (sovereign, legal and reputation risks); therefore, the credit risk management practices and risk mitigation measures implemented by credit institutions with significant increases of the non-resident loan portfolios deserve particular attention in 2013. The data on the loan portfolio quality so far do not confirm the presence of those risks. On the contrary, the quality of non-resident loans is much better than that of the resident loans (see Chart 2.3) and remained broadly unchanged in 2012.

Box 2. Survey of credit institutions on lending to non-financial corporations and households

In 2012, the Bank of Latvia continued to conduct surveys on credit institution lending to non-financial corporations and households. The survey results furnish aggregated information about the lending development trends in 2012 and the expectations of credit institutions for the first half of 2013. The last survey covered nine credit institutions representing over 92% of the aggregate domestic loan portfolio of credit institutions.

Credit standards, terms and conditions

The aggregated survey results show that the credit standards applied to non-financial corporations and households remained broadly unchanged in 2012. Only a few credit institutions reported tightening of the credit standards for some types of household loans (see Charts 2.5 and 2.6). Overall, the credit institutions have no plans of introducing any major changes to the credit standards in the first half of 2013 and only one credit institution mentioned potential tightening of credit standards for household loans for house purchase.

Chart 2.5

CHANGES IN CREDIT STANDARDS FOR NON-FINANCIAL CORPORATIONS
(net percentage of credit institutions reporting tightening of credit standards)

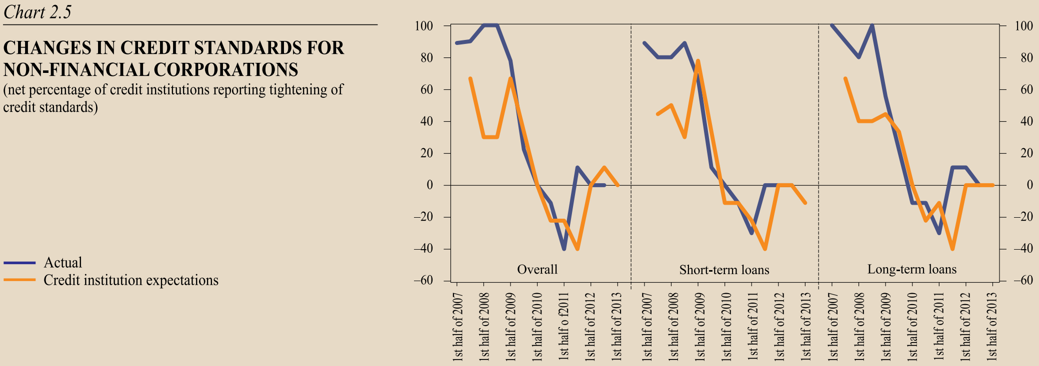
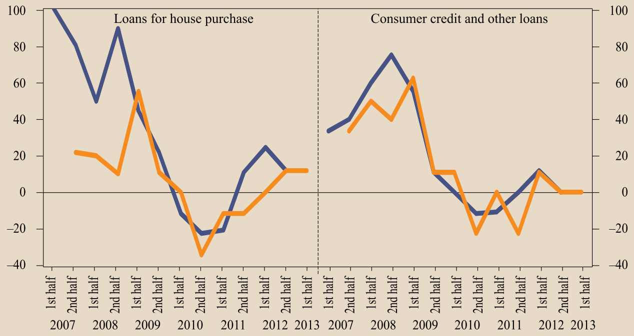


Chart 2.6

CHANGES IN CREDIT STANDARDS FOR HOUSEHOLDS

(net percentage of credit institutions reporting tightening of credit standardss)

Actual
Credit institution expectations



Competition from other credit institutions was again reported as one of the factors contributing to the easing of the credit standards applied to non-financial corporations, while some credit institutions also mentioned the relatively favourable market conditions, the financial position of the credit institutions and more optimistic expectations regarding the general economic activity and industry outlook (see Chart 2.7). Overall, none of the factors had any significant impact on the credit standards applied by credit institutions to household loans for house purchase in 2012 (see Chart 2.8), whereas competition and more favourable economic outlook contributed to the easing of the standards applied to consumer credit and other loans (see Chart 2.9).

Chart 2.7

FACTORS CONTRIBUTING TO TIGHTENING OF CREDIT STANDARDS APPLIED TO LOANS AND CREDIT LINES TO NON-FINANCIAL CORPORATIONS

(net percentage of credit institutions reporting positive factor contributions)

1st half of 2007
2nd half of 2007
1st half of 2008
2nd half of 2008
1st half of 2009
2nd half of 2009
1st half of 2010
2nd half of 2010
1st half of 2011
2nd half of 2011
1st half of 2012
2nd half of 2012

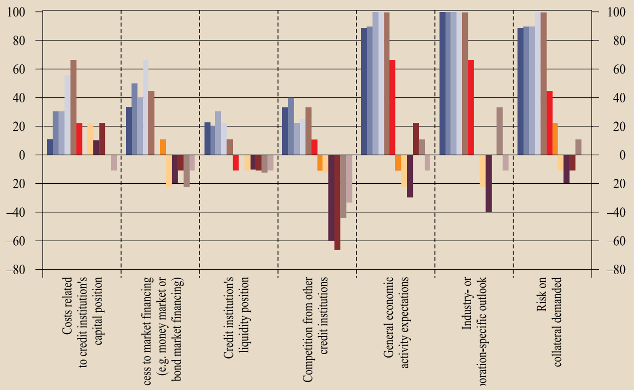
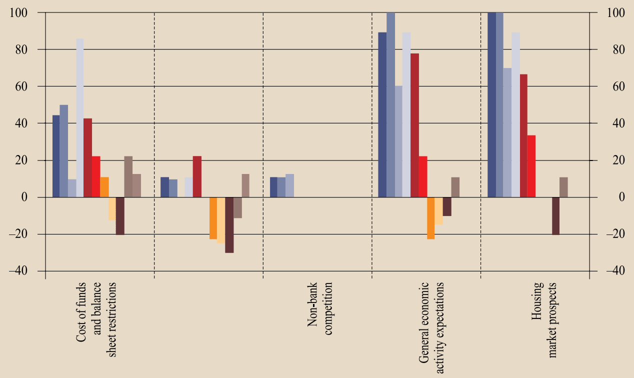


Chart 2.8

FACTORS CONTRIBUTING TO TIGHTENING OF CREDIT STANDARDS APPLIED TO HOUSEHOLD LOANS FOR HOUSE PURCHASE

(net percentage of credit institutions reporting positive factor contributions)

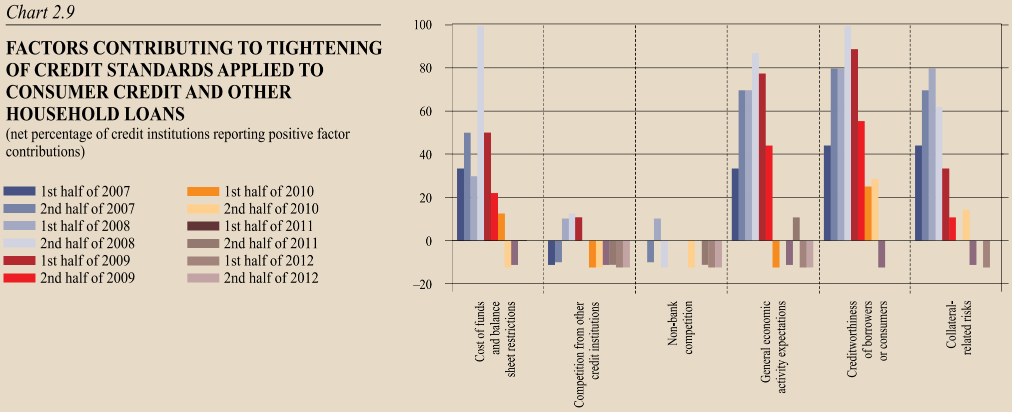
1st half of 2007
2nd half of 2007
1st half of 2008
2nd half of 2008
1st half of 2009
2nd half of 2009
1st half of 2010
2nd half of 2010
1st half of 2011
2nd half of 2011
1st half of 2012
2nd half of 2012



Further tightening of the credit standards for loan approval applied by credit institutions mainly affected households in 2012. Several credit institutions widened their margins on risky loans to non-financial corporations as well as risky and ordinary loans to households. With respect to household loans for house purchase, tighter conditions were set for the loan-to-value ratio and loan maturity.

Chart 2.9

FACTORS CONTRIBUTING TO TIGHTENING OF CREDIT STANDARDS APPLIED TO CONSUMER CREDIT AND OTHER HOUSEHOLD LOANS
(net percentage of credit institutions reporting positive factor contributions)



Loan demand

Credit institutions reported a further increase in the demand for loans to non-financial corporations in 2012 (see Chart 2.10) due to the need to finance fixed asset investment as well as inventories and current assets; in addition, less opportunities to tap internal financing sources emerged as a new factor for non-financial corporations in the second half of the year. The rise in the demand for loans to households observed since 2010 stabilised in the second half of 2012 (see Chart 2.11). It was mainly underpinned by higher borrowers' confidence in improving their financial situation and more optimistic housing market prospects. Credit institutions are expecting a substantial boost in the demand for loans (mainly to non-financial corporations) in the first half of 2013.

Chart 2.10

CHANGES IN DEMAND FOR LOANS OR CREDIT LINES TO NON-FINANCIAL CORPOATIONS
(net percentage of credit institutions reporting increased demand)

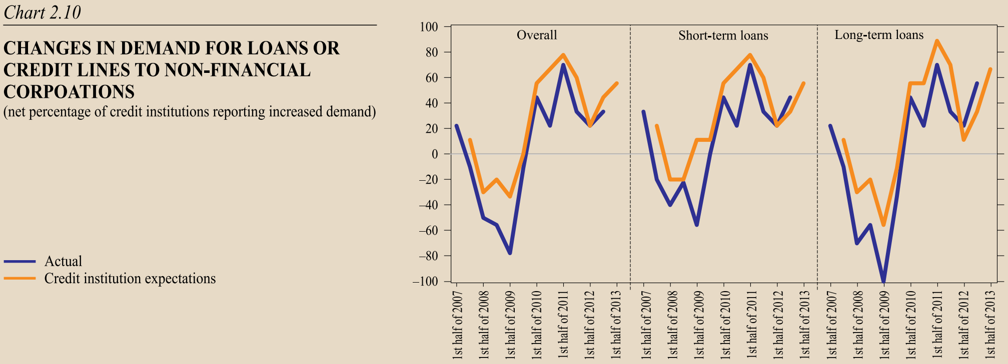
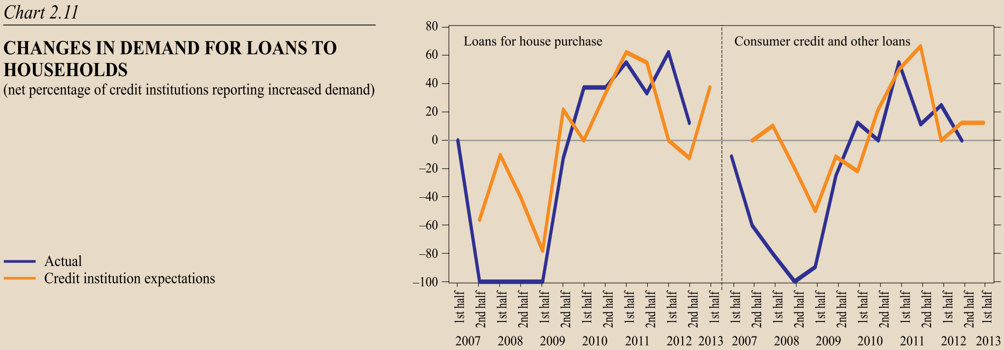


Chart 2.11

CHANGES IN DEMAND FOR LOANS TO HOUSEHOLDS
(net percentage of credit institutions reporting increased demand)

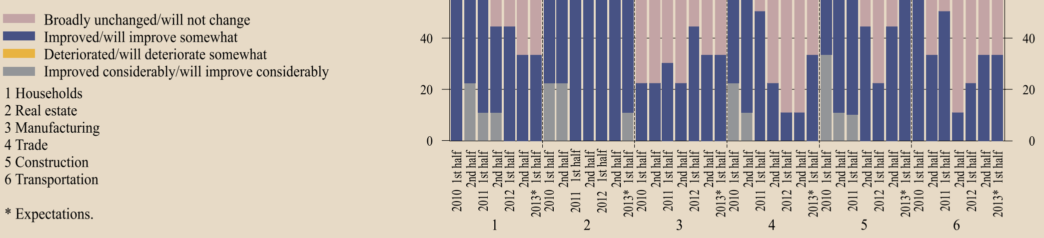


Financial position of borrowers

According to the credit institutions, the financial position of borrowers continued to improve in all major economic sectors as well as in the household sector in 2012. The assessment was particularly positive for trade and manufacturing (see Chart 2.12).

Chart 2.12

ASSESSMENT OF CHANGES IN FINANCIAL POSITION OF HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS IN INDIVIDUAL SECTORS
(number of responses; %)



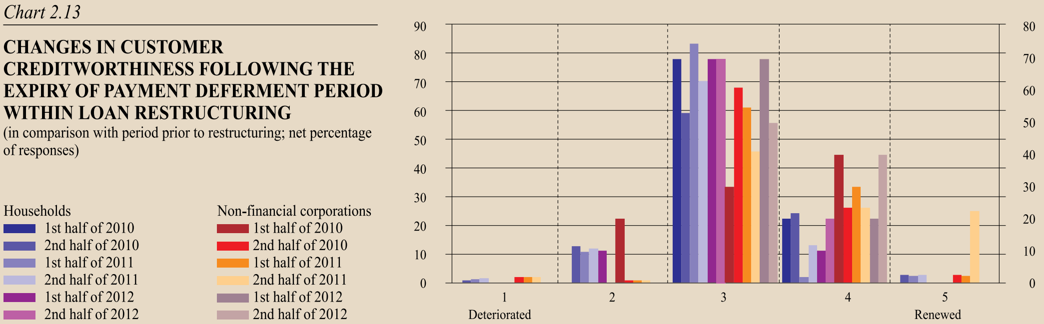
It is noteworthy that credit institutions are very optimistic about further improvement prospects as regards the financial situation of households and non-financial corporations coming from the leading economic sectors (except construction) in the first half of 2013.

Loan restructuring

The survey responses reveal that the creditworthiness of households after applied temporary postponement of debt liabilities in most cases is assessed as unchanged or slightly improved (see Chart 2.13). The views of credit institutions with regard to the creditworthiness of non-financial corporations following restructuring have become more positive in the second half of the year, with half of the respondents pointing to an improvement.

Chart 2.13

CHANGES IN CUSTOMER CREDITWORTHINESS FOLLOWING THE EXPIRY OF PAYMENT DEFERMENT PERIOD WITHIN LOAN RESTRUCTURING
(in comparison with period prior to restructuring; net percentage of responses)



2.2 Funding and liquidity risks

Deposits continued to grow in 2012, whereas the Nordic parent bank funding to Latvian subsidiaries shrank further. Due to the low interest rates the share of the received long-term funding contracted, thereby increasing the maturities mismatch of the credit institution assets and liabilities. Nevertheless, the liquidity stress testing results suggest that the credit institution ability to absorb funding outflow shocks has remained high, mostly as a result of credit institution policies maintaining a high amount of liquid assets as well as the supervisory actions by the FCMC to mitigate the liquidity risk.

In order to have a more accurate analysis of the funding and liquidity risks, Latvia's credit institutions were divided into two groups based on the composition of the funding and the placement of this funding. Group 1[20] draws financing mainly from resident non-MFI deposits and parent banks in Europe and invests mainly in the domestic economy. The aggregate assets of Group 1 represented two thirds of the total assets of Latvia's credit

[20] Credit institutions which grant more than 50% of loans to residents and receive more than 50% of deposits from residents as well as one average-sized credit institution primarily receiving resident deposits and granting resident loans in Latvia and other Baltic States.

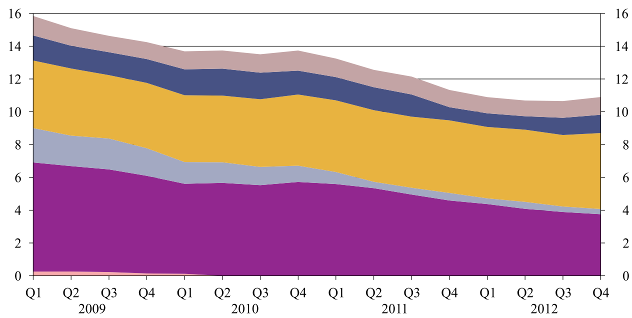
institutions. Group 2, in turn, comprises the rest of the credit institutions, mainly engaged in business with non-residents.

In 2012, the funding of Group 1 continued on a downward trend, falling by 431.6 million lats over the year (see Chart 2.14), mainly on account of the shrinking loan portfolio. The overall contraction in the financial resources was mainly determined by the repayments of parent bank funding totalling 836.7 million lats that were partly offset by the inflow of resident deposits (an increase of 520.1 million lats for Group 1 in 2012). Although government deposits amounting to 306.5 million lats contributed significantly to the overall rise in deposits, the role of resident private sector deposits representing 43% of the total funding at the end of 2012 became increasingly more stable. With the composition of the funding of Group 1 credit institutions changing, their loan-to-deposit ratio also improved, contracting by 37.1 percentage points during the year, to 141.8%.

Chart 2.14

FUNDING DEVELOPMENTS OF GROUP 1 CREDIT INSTITUTIONS
(in billions of lats)

Non-resident deposits
Other resident deposits
Resident private non-financial sector deposits
Liabilities to other credit institutions
Liabilities to affiliated credit institutions
Liabilities to the Bank of Latvia

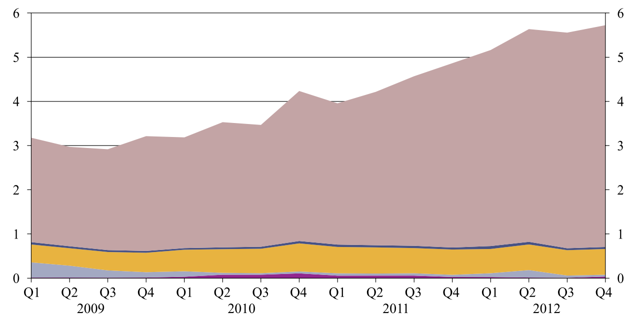


The funding of Group 2 credit institutions, in turn, grew by 860.1 million lats in the course of the year. The only significant funding source of those credit institutions was non-resident deposits (see Chart 2.15) and non-resident deposits accounted for almost 90% of the total funding. The rise in non-resident deposits was supported by the restored confidence in the stability of Latvia's financial sector.

Chart 2.15

FUNDING DEVELOPMENTS OF GROUP 2 CREDIT INSTITUTIONS
(in billions of lats)

Non-resident deposits
Other resident deposits
Resident private non-financial sector deposits
Liabilities to other credit institutions
Liabilities to affiliated credit institutions
Liabilities to the Bank of Latvia

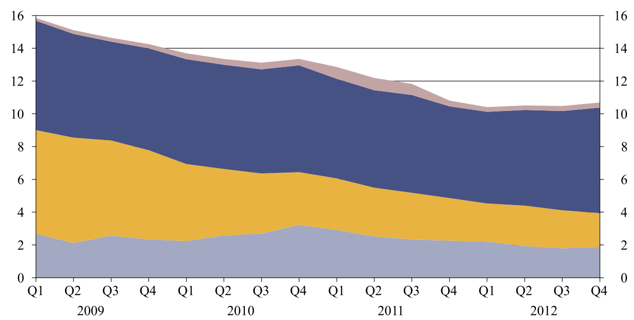


The share of short-term funding in the composition of funding received by both groups of credit institutions increased continuously. In the case of Group 1, it was a result of both a decline in long-term liabilities to MFIs (primarily parent banks; see Chart 2.16) as well as an increase in short-term resident deposits. The share of liabilities with a

Chart 2.16

FUNDING PROFILE OF GROUP 1 CREDIT INSTITUTIONS BY RESIDUAL MATURITY
(in billions of lats)

Private non-financial sector deposits with maturity of over 1 year
Private non-financial sector deposits with maturity of up to 1 year
Liabilities to credit institutions with maturity of over 1 year
Liabilities to credit institutions with maturity of up to 1 year

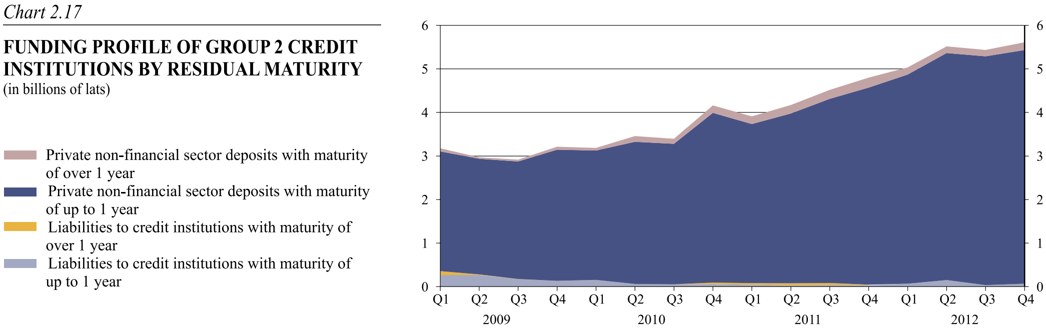


residual maturity of over 1 year in the funding of Group 1 credit institutions shrank by 5.1 percentage points over a year. Nevertheless, overall the parent bank funding of those credit institutions represented 34% (including long-term financial resources amounted to 19.0%) of the total funding.

The funding of Group 2 credit institutions was dominated by deposits with a maturity of up to 1 year (see Chart 2.17), representing 95% of all funding (including demand deposits representing 80.6% of all funding). Nevertheless, credit institutions attempt to increase the share of long-term funding in their overall funding by raising subordinated capital and issuing debt securities. At the end of 2012, long-term funding amounted to 4.4% of the total funding, two times more than in the previous year.

Chart 2.17

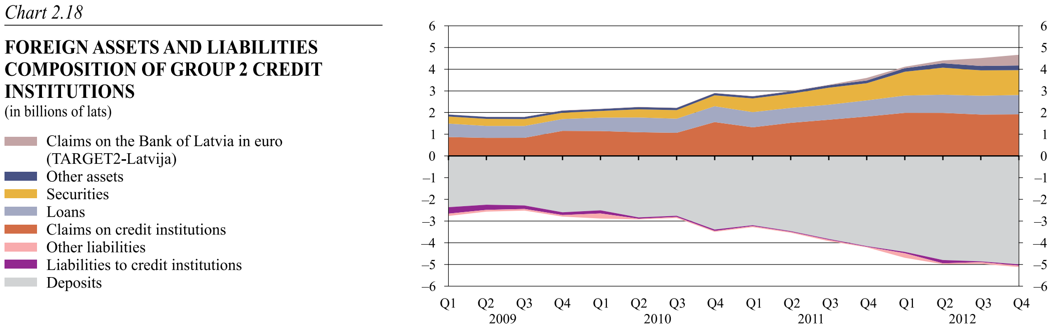
FUNDING PROFILE OF GROUP 2 CREDIT INSTITUTIONS BY RESIDUAL MATURITY
(in billions of lats)



Moreover, the funding of Group 2 credit institutions was mainly invested in liquid foreign assets and had no close relation with the domestic economy (see Chart 2.18). These credit institutions placed their free liquidity primarily in claims on MFIs and securities, investing with credit institutions of Germany, Austria, the UK and Switzerland as well as in debt securities issued in Latvia, USA, Germany and Canada. Assets placed abroad accounted for 69.3% of the aggregate assets of Group 2 credit institutions. The Chart includes a separate indication of the euro resources handled within the framework of TARGET2-Latvija, as credit institutions preferred to place short-term euro liquidity with the Bank of Latvia (highly liquid investment) in 2012. At the end of 2012, Group 2 credit institutions also had a very high degree of compliance with the liquidity ratio set by the FCMC[21] (see Chart 2.19). Nevertheless, the financial vulnerability of the credit institutions which placed part of the received short-term funding in illiquid long-term assets (mainly loans) was stronger.

Chart 2.18

FOREIGN ASSETS AND LIABILITIES COMPOSITION OF GROUP 2 CREDIT INSTITUTIONS
(in billions of lats)

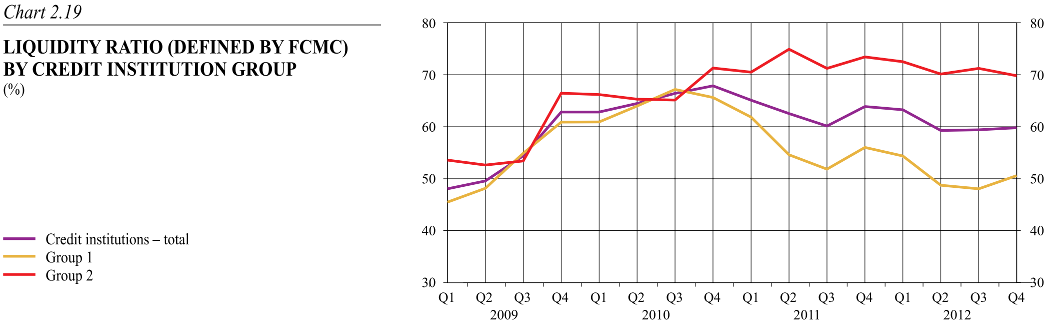


Conversely, the liquidity of Group 1 credit institutions deteriorated at the beginning of the year as, with the financial situation improving, the credit institutions gradually shed their liquid assets; nevertheless, a slight increase in their liquidity was observed towards the end of the year (see Chart 2.19). As the liquidity ratios of Group 1 credit institutions were historically lower because their financial operations are primarily domestically-

[21] Liquid assets (vault cash; claims on the Bank of Latvia and solvent credit institutions whose residual maturity does not exceed 30 days, and deposits with other maturity, if a withdrawal of deposits prior to the maturity has been stipulated in the agreement; investment in financial instruments, if their market is permanent and unrestricted) must not be less than 30% of banks' total current liabilities with residual maturity under 30 days.

Chart 2.19

LIQUIDITY RATIO (DEFINED BY FCMC) BY CREDIT INSTITUTION GROUP
(%)



orientated and most credit institutions can tap their parent banks for funding (therefore, their liquidity risks are lower), the liquidity ratios of the credit institutions falling into this group can be expected to continue on a downward path towards the pre-crisis level. Overall, the actual liquidity ratio based on the liquidity requirement for credit institutions set by the FCMC was 59.8% at the end of 2012.

The liquidity stress tests conducted by the Bank of Latvia with the purpose of evaluating the significance of the potential consequences of financial outflows suggest that with the liquid assets of the credit institutions[22] remaining at a high level, the credit institution resilience to the shock of financial outflows has remained broadly unchanged[23]. In order to assess the potential effect of the funding outflow on the credit institution ability to fulfil their liabilities, stress tests were conducted for all credit institutions based on three potential scenarios:
1) outflows of resident deposits – the stress test assesses mainly the resilience of Group 1 credit institutions to a deposit run as the credit institutions of this group mostly receive resident deposits;
2) outflows of non-resident deposits – the stress test assesses mainly the resilience of Group 2 of credit institutions to a deposit run as the share of non-resident deposits in those credit institutions is high;
3) outflows of funding with a maturity of up to three months (both deposits and the MFI funding) – stress tests of all credit institutions enabling the assessment of their resilience to short-term funding runs as they evaluate credit institution resilience to both domestic and external financial turbulences.

Currently, the swift rise in non-resident deposits and the resilience of credit institutions to the risk stemming from potential non-resident deposit runs is in the centre of attention (scenario 2). Overall, it is obvious that the ability to absorb such a shock has not deteriorated over the year and credit institutions would be able to survive a 46% outflow of their funding (see Charts 2.20 and 2.21). In the event of an outflow of more than 50% of non-resident deposits, only one small credit institution would default on its liabilities. The historical (2008 and 2009) data also reveal that the maximum cumulative outflow of non-resident deposits overall did not exceed 30% of total non-resident deposits.

With a view to ensuring adequate management of risks inherent in providing non-resident services, the FCMC set a higher CAR on an individual basis for each credit institution whose non-resident deposits exceed 20% of the credit institution assets and, in addition to that, introduced a higher liquidity requirement (up to 60%) within the framework of the second pillar of Basel II in the beginning of 2013.

Stress test scenarios 1 and 3 examine the credit institutions' resilience to domestic and general short-term funding outflow shocks. The results of those stress tests confirm that all credit institutions would be able to survive the shocks caused by as much as 40% outflow of resident deposits (including government deposits) or 40% of all funding

[22] The liquid assets defined in the calculation of the FCMC liquidity ratio.
[23] The results of the liquidity stress tests indicate the tolerance of the credit institutions to the outflows of non-resident non-MFI deposits, resident non-MFI deposits and total (MFI and non-MFI) funding with the residual maturity of up to three months before their liquidity ratios reach 0, subject to a condition that the credit institutions do not borrow additional funding to offset the funding outflows.

Chart 2.20

LIQUIDITY STRESS TEST RESULTS IN CASE OF NON-RESIDENT DEPOSIT OUTFLOWS
(31.12.2012; number of credit institutions)

Credit institutions with sufficient liquidity ratio (liquidity ratio above 30%)
Solvent credit institutions with insufficient liquidity ratio (liquidity ratio below 30%)
Illiquid credit institutions (negative liquidity ratio)

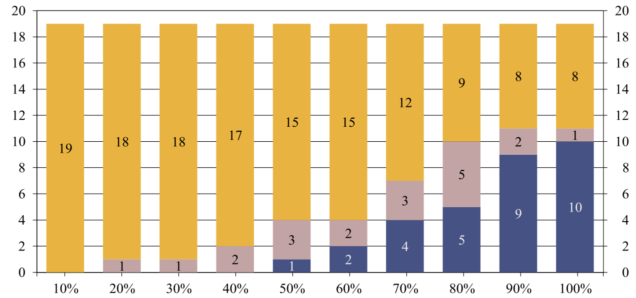
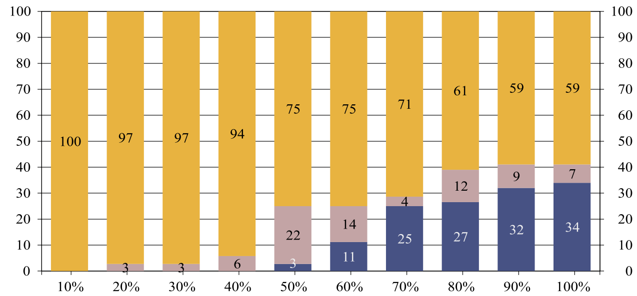


Chart 2.21

LIQUIDITY STRESS TEST RESULTS IN CASE OF NON-RESIDENT DEPOSIT OUTFLOWS
(31.12.2012; % of total credit institution assets)

Credit institutions with sufficient liquidity ratio (liquidity ratio above 30%)
Solvent credit institutions with insufficient liquidity ratio (liquidity ratio below 30%)
Illiquid credit institutions (negative liquidity ratio)



with a residual maturity of up to three months. The credit institutions' resilience to the shock caused by an outflow of funding with a residual maturity of up to three months deteriorated slightly over the year, yet this can be primarily explained by the decrease in the liquidity ratio of Group 1 credit institutions.

2.3 Market risk

Overall, the market risk faced by credit institutions was negligible. With the credit institutions' open position in euro increasing slightly, the overall net open foreign exchange position of Latvia's credit institutions grew, albeit remaining generally small, in 2012. The direct exposure of Latvia's credit institutions to the interest rate risk was limited; the gap between RSA and RSL, however, widened slightly.

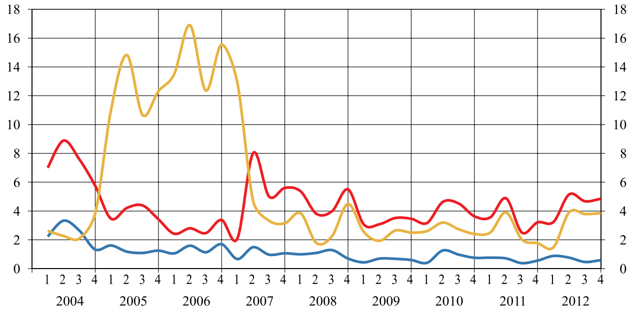
2.3.1 Foreign exchange risk of credit institutions

Despite a slight rise over 2011, the direct foreign exchange risk faced by credit institutions in 2012 remained low in comparison with the overall risks. According to the aggregate estimates of own funds and minimum capital requirements, the share of foreign exchange risk requirement in the total amount of the credit institutions' capital requirements was 0.8% at the end of 2012, while the respective percentage at the end of 2011 was 0.5%. Consequently, the share of the requirement for foreign exchange risk in the overall capital requirement for market risks also grew marginally in 2012, to 1.7%.

The weighted average overall net open foreign exchange position of credit institutions expanded. As at the end of 2012, the overall net open foreign exchange position was 4.85% of the credit institutions' own funds, representing an increase of 1.63 percentage points over the end of 2011. The changes in the overall net open foreign exchange position in 2012 were mainly driven by the rising open position in euro. As at the end of 2012, the weighted average open euro position of credit institutions was 3.85% of own funds or 73.8 million lats (1.77% at the end of 2011). Moreover, most credit institutions experienced an increase in their weighted average open euro positions in comparison with the end of 2011. The net open positions of other foreign currencies, including the net open US dollar position, remained broadly unchanged in 2012 (see Chart 2.22).

Chart 2.22

WEIGHTED AVERAGE OPEN FOREIGN EXCHANGE POSITIONS OF CREDIT INSTITUTIONS
(% of own funds)

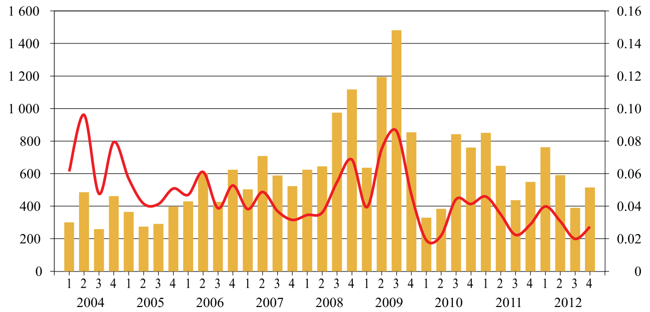


Notes: Calculations use the absolute values of the open foreign exchange positions. Open foreign exchange positions of individual credit institutions are own funds-weighted. Pursuant to the FCMC Regulation, between 1 January 2005 and May 2007, the open foreign exchange positions of the euro were excluded from the calculations of the aggregate open foreign exchange position.

The results of the foreign exchange risk evaluation using the quantitative risk analysis instrument VaR[24] which reflects the expected threshold value to be exceeded by the potential losses over a certain period of time with a given probability confirm that the threshold value for potential losses caused by exchange rate volatility continued to decline in 2012 for all credit institutions overall. 1% 10-day VaR calculated at the end of 2012 shows that in a period of 10 days there is only 1% probability that the expected losses from exchange rate movements could exceed 514.8 thousand lats (549.2 thousand lats at the end of 2011 respectively); nevertheless, the foreign exchange risk of credit institutions has remained broadly unchanged vis-á-vis their own funds: the value of VaR as at the end of 2012 was just below 0.03% of the credit institutions' own funds (see Chart 2.23).

Chart 2.23

FOREIGN EXCHANGE RISK: 1% 10-DAY VaR FROM EXCHANGE RATE FLUCTUATIONS IN LATVIAN CREDIT INSTITUTIONS



In Latvia's foreign exchange market, the euro is the most significant currency in transactions against the lats, while the US dollar retained the second position for a long time. The credit institutions' sensitivity to the US dollar fluctuations against the lats, estimated based on a 10% change in the US dollar exchange rate, decreased in 2012 overall. The aggregate losses of credit institutions from a rise in the US dollar exchange rate vis-á-vis the lats would not have exceeded 0.08% of the credit institutions' own funds at the end of 2012, whereas the losses caused by a fall in the respective US dollar exchange rate would not have exceeded 0.02% of their own funds (see Chart 2.24).

2.3.2 Interest rate risk of credit institutions

The mismatch between the credit institutions' RSA and RSL widened slightly in 2012, as suggested by the increase in the cumulative 1-year RSA to RSL ratio from 1.07 at the end of 2011 to 1.13 at the end of 2012 (1.13 at the end of 2010). Nevertheless, the RSA to RSL ratio was close to the optimum level both overall and looking by maturity (see Chart 2.25).

The overall indicator of the credit institutions' interest rate risk masked diverging interest rate risk development trends in the subsidiaries of the EU15 and Norwegian credit

[24] The VaR calculations use the solo data on open foreign exchange positions of credit institutions and the historical daily exchange rate changes within one year prior to the VaR evaluation date. Since repegging the lats to the euro, VaR calculations no longer include the euro component. The overall VaR of Latvia's credit institutions was obtained by aggregating the individual VaR of credit institutions. The actual overall VaR is smaller due to the lack of complete positive correlation between the VaR values of individual credit institutions.

Chart 2.24

SENSITIVITY OF LATVIAN CREDIT INSTITUTIONS TO FLUCTUATIONS IN THE US DOLLAR EXCHANGE RATE

(aggregate losses of the credit institution sector to aggregate total own funds; %)

US dollar depreciates by 10% against the lats
US dollar appreciates by 10% against the lats

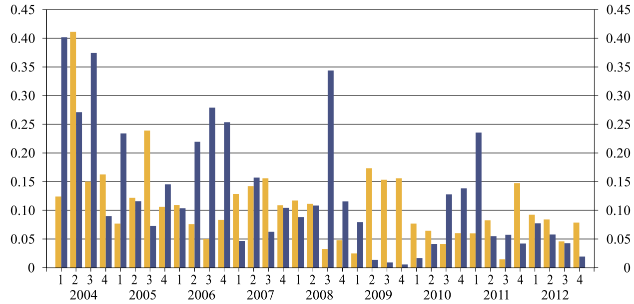
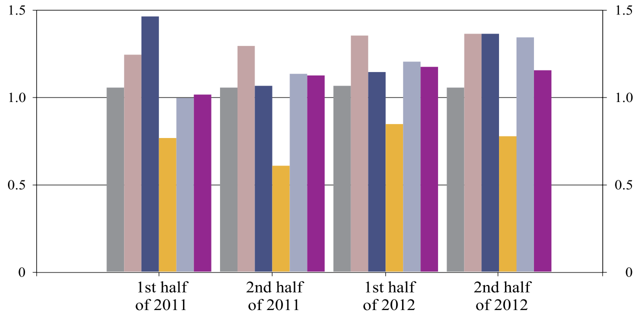


Chart 2.25

RSA AND RSL RATIO OF LATVIAN CREDIT INSTITUTIONS

Up to 1 month
1–3 months
3–6 months
6–12 months
1–5 years
Over 5 years



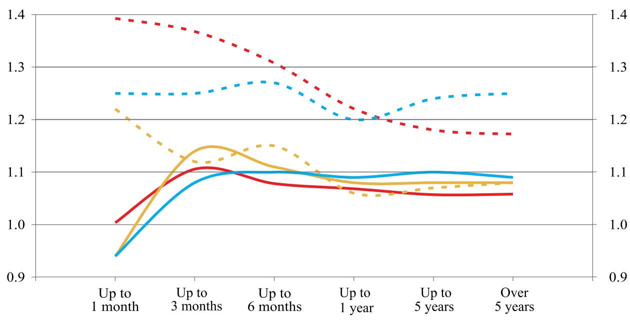
institutions and other credit institutions. The EU15 and Norwegian credit institutions group had a larger proportion of loans on the RSA side in comparison with other credit institutions group (51.5% and 32.7% at the end of 2012 respectively), whereas the proportion of debt securities and other fixed income securities (1.0% and 18.7% respectively) as well as claims on credit institutions and foreign central banks was smaller (8.7% and 17.2% respectively). On the RSL side, in turn, the proportion of liabilities to MFIs was larger in the case of subsidiaries of the EU15 and Norwegian credit institutions (22.2% and 3.1% at the end of 2012 for both groups respectively), while the proportion of deposits was smaller (39.6% and 55.1% respectively).

The interest rate risk of the EU15 and Norwegian credit institutions group was almost fully balanced in 2012 as well. The cumulative 1-year RSA to RSL ratio of those credit institutions remained broadly unchanged, growing from 1.08 at the end of 2011 to 1.09 at the end of 2012 (see Chart 2.26), with an almost equal reduction in the RSA and RSL within the given time-band (of 2.7% and 3.9% respectively). The decrease in the RSA of this credit institutions group was primarily determined by a contraction in the loan portfolio and the long off-balance sheet positions that are sensitive to interest rate movements, whereas the decline in the RSL was stemming from larger repayments of parent bank funding and the shrinking of the short off-balance sheet positions that are sensitive to interest movements.

Chart 2.26

CUMULATIVE RSA AND RSL RATIO OF LATVIAN CREDIT INSTITUTIONS

For subsidiaries of the EU15 and Norwegian credit institutions in the second half of 2010
For subsidiaries of the EU15 and Norwegian credit institutions in the second half of 2011
For subsidiaries of the EU15 and Norwegian credit institutions in the second half of 2012
For other credit institutions in the second half of 2010
For other credit institutions in the second half of 2011
For other credit institutions in the second half of 2012



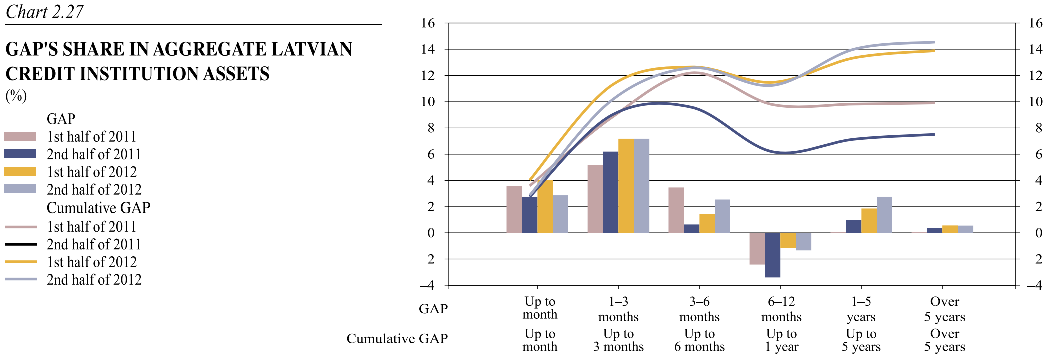
In other credit institutions group, where the RSA traditionally exceed the RSL (resulting in a higher exposure of their income to the risk of falling market rates), the cumulative 1-year RSA to RSL ratio grew significantly in 2012 (from 1.06 to 1.20), returning to the end-2010 level (see Chart 2.26). The RSL of those credit institutions within the time-band of up to one year contracted notably in 2012 (by 12.2%), mainly as a result of a decrease in interest rate sensitive deposits (the deposits placed with the JSC *Citadele banka* following the default of the JSC *Latvijas Krājbanka*, contracted gradually in 2012; due to the transformation of the SJSC *Latvijas Hipotēku un zemes banka* into a development bank, its deposit portfolio was transferred to the JSC *Swedbank*) as well as a reduction in the issued debt securities as a result of winding up the operation of the JSC *Parex banka*. At the same time, the RSA of other Latvian credit institutions within the time-band of up to one year remained broadly unchanged (a contraction of 0.5%), with the positions of interest rate sensitive loans, debt securities and other fixed income securities increasing significantly in loan portfolios of some credit institutions and thereby largely offsetting the reductions in the RSA positions caused by the above-mentioned changes in the composition of the credit institution sector.

The analysis of GAP[25] also suggests that the overall exposure of credit institutions to interest rate risk increased in comparison with the previous years, albeit remaining relatively low (see Chart 2.27). The cumulative 1-year GAP relative to the assets of Latvian credit institutions increased from 6.2% at the end of 2011 to 11.3% at the end of 2011, only slightly exceeding the respective ratio as at the end of 2010 (10.6%). As the GAP is positive, the interest income of credit institutions would contract quicker than in the previous years in the event of the market rates going down. Should the market rates increase, the rise in the interest income of credit institutions would be steeper. Looking by credit institutions, the cumulative 1-year GAP widened only slightly in the case of the subsidiaries of the EU15 and Norwegian credit institutions (from 8.6% to 9.8%), while for other credit institutions it grew from 4.2% at the end of 2011 to 12.8% at the end of 2012.

Chart 2.27

GAP'S SHARE IN AGGREGATE LATVIAN CREDIT INSTITUTION ASSETS

(%)



RSA and RSL mismatches increased in most time-bands with a positive GAP relative to the Latvian credit institution assets in 2012, whereas in the only time-band with a negative GAP relative to Latvian credit institution assets (from 6 to 12 months) the mismatch decreased. In most time-bands, the GAP tended to increase relative to the credit institution assets. This was determined by the repayments made by subsidiaries of the EU15 and Norwegian credit institutions of the long-term financing received from their parent banks, substituting it for shorter-term deposits, as well as by the expansion of the long-term loan portfolio and debt securities and other fixed income securities observed in other credit institutions. The changes in RSA and RSL were also affected by excluding the data on the JSC Parex banka from the estimates after it lost its status as a credit institution. Moreover, there was a tendency for some interest rate sensitive long and short off-balance sheet positions in longer time-bands to become more balanced.

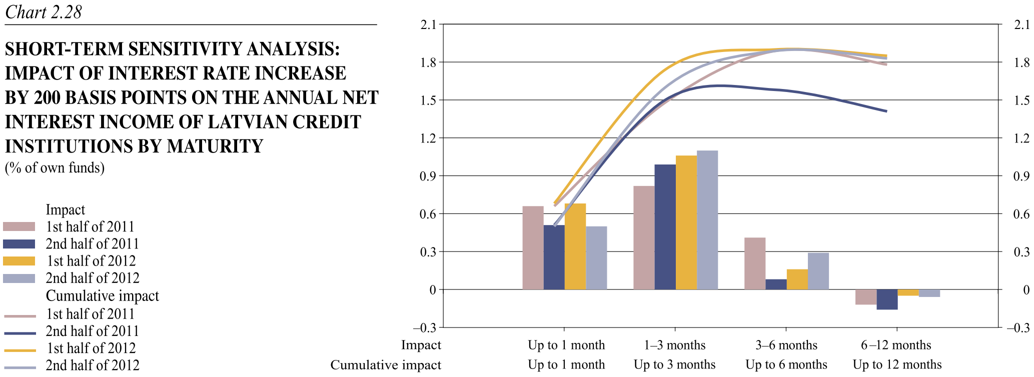
[25] The GAP of a pre-defined time-band is the difference between the RSA and RSL values within the specific time-band. The larger a particular credit institution's GAP, the higher its interest rate risk exposure. In the event of a positive GAP, the credit institution will incur losses from an interest rate decline, as the RSA exceed the RSL and, therefore, the credit institution's interest income will shrink more notably than the expenditure. In the event of a negative GAP, the credit institution will incur losses from a rise in interest rates, as the liabilities exceed the assets and, therefore, the credit institution's interest expenditure will grow more than the income.

According to the short-term sensitivity analysis results, the impact of potential interest rate movements on net annual interest income of Latvia's credit institutions[26] in 2012 would not have been much different from that at the end of the previous year and would have been overall negligible (see Chart 2.28). With interest rates increasing by 200 basis points[27], within the positive GAP time-bands (i.e. up to 1 month, 1–3 months and 3–6 months), the net annual interest income of Latvian credit institutions would have increased by 0.5%, 1.1% and 0.3% of the aggregate own funds of the credit institutions respectively (in 2011, by 0.5%, 1.0% and 0.1% respectively). Conversely, within the negative GAP time-band of 6–12 months, the income would have decreased by 0.1% (by 0.2% in 2011). Thus, all GAP time-bands of up to 1 year combined, an interest rate increase by 200 basis points would have boosted the net annual interest income of credit institutions by 1.8% of the aggregate own funds of the credit institutions (by 1.4% in 2011).

Chart 2.28

SHORT-TERM SENSITIVITY ANALYSIS: IMPACT OF INTEREST RATE INCREASE BY 200 BASIS POINTS ON THE ANNUAL NET INTEREST INCOME OF LATVIAN CREDIT INSTITUTIONS BY MATURITY

(% of own funds)

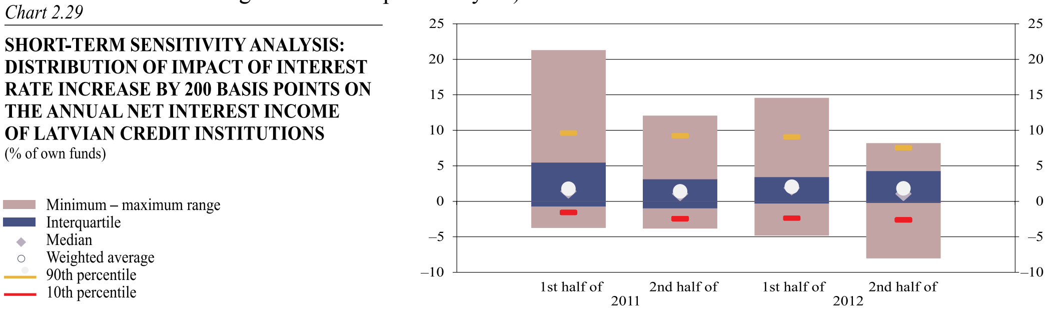


As a result of the changes in RSA and RSL observed in 2012, the overall breakdown of credit institutions according to the potential impact of interest rate movements on the annual net interest income of credit institutions shifted downwards, whereas in the case of the credit institutions falling into the central inter-quartile range it shifted slightly upwards (see Chart 2.29). For half of the credit institutions, the impact of a parallel increase in the interest rates by 200 basis points on the annual net interest income would have been from –0.2% to 4.3% of their own funds within the inter-quartile range (from –1.0% to 3.1% in the previous year). The maximum rise in the annual net interest income would have amounted to 8.2% of own funds (3.9 percentage points less than at the end of the previous year), whereas the maximum fall would have been 8.0% (4.2 percentage points larger than in the previous year).

Chart 2.29

SHORT-TERM SENSITIVITY ANALYSIS: DISTRIBUTION OF IMPACT OF INTEREST RATE INCREASE BY 200 BASIS POINTS ON THE ANNUAL NET INTEREST INCOME OF LATVIAN CREDIT INSTITUTIONS

(% of own funds)



[26] The impact on net annual interest income within each time-band is calculated by multiplying the time-band's GAP with the interest rate change and the ratio of this time-band characterising the part of the year when the GAP of this time-band will be active. For the purposes of calculating the ratio, it is assumed that repricing will take place in the middle of the time-band. For example, 3 to 6 month time-band ratio is calculated as follows: (12 – 0.5 × (3 + 6))/12 = 0.625. The overall impact on the profit for the year is the aggregate effect for the first four time-bands. As the calculations are based on the GAP method, they do not take into account the interest rate impact on the credit institution's economic value and are based on the structure of the credit institution's balance sheet as at the end of 2012.

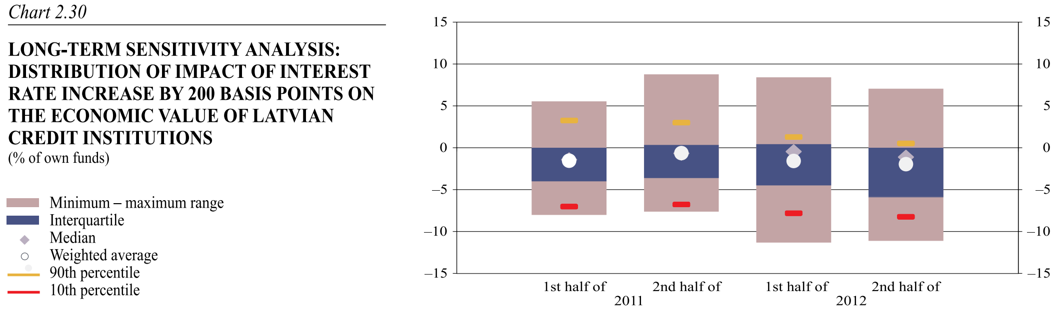
[27] EBA, following the recommendations of the Basel Committee on Banking Supervision, proposes to set the level of unexpected parallel shift of interest rates (parallel rate shock) at 200 basis points. (Sources: Principles for the Management and Supervision of Interest Rate Risk. Basel Committee on Banking Supervision. July 2004; Technical aspects of the management of interest rate risk arising from non-trading activities under the supervisory review process. Committee of European Banking Supervision. October 2006.) Such parameter value for the interest rate shock has currently also been introduced by the FCMC in the Regulations on the Management of Interest Rate Risk, Preparation of a Report on the Calculation of Economic Value Decline and of a Report on the Term Structure of Interest Rate Risk.

The euro money market rates are expected to become more volatile in 2013, albeit overall remaining broadly unchanged over the year. Their movements will be largely affected by the developments in the EU peripheral economies struggling with a debt crisis and the economic development of the euro area. In the event of the economic development of the euro area weakening significantly and inflation remaining low, the ECB could reduce the interest rate of the main refinancing operations which would cause a decline in longer-term money market rates as well. Higher risk premia could exert an upward pressure on the money market rates, e.g. if financial support has to be provided to another euro area member state. Should Latvia receive a positive decision about its joining the euro area, the slightly higher lats money market rates can be expected to continue converging towards the euro money market rates. In the event of the materialisation of the scenario forecasted by market participants at the end of April 2013, i.e. the euro market rates going down in 2013, most credit institutions would experience a slight fall in their net interest income.

The results of an economic-values-based sensitivity analysis[28] providing information on the impact of interest rate movements on both credit institutions' income as well as the economic value of credit institutions' assets, liabilities and off-balance sheet items suggest that the effect of the interest rate risk on the economic value of credit institutions over the long-term horizon also increased in 2012. With the interest rates growing by 200 basis points, the economic value of credit institutions banking book would deteriorate by roughly 2.0% of the aggregate own funds of credit institutions (by 0.6% in 2011)[29]. For half of the credit institutions, the changes in the economic value caused by an interest rate increase by 200 basis points would not exceed 2% of own funds, yet the maximum fall in the economic value of credit institutions would grow in comparison with the previous year, to 11.1% of own funds (see Chart 2.30). In the central inter-quartile range, the downward effect of a parallel credit institution interest rate increase by 200 basis points on their economic value would have been larger, within the range between 0.0% and –5.8% of their own funds (between 0.3% and –3.6% in 2011).

Chart 2.30

LONG-TERM SENSITIVITY ANALYSIS: DISTRIBUTION OF IMPACT OF INTEREST RATE INCREASE BY 200 BASIS POINTS ON THE ECONOMIC VALUE OF LATVIAN CREDIT INSTITUTIONS
(% of own funds)



Overall, the direct exposure of Latvian credit institutions to interest rate risk was limited, yet the GAP of credit institutions was mostly positive and tended to grow. According to the expected market rates development scenario and the current RSA and RSL composition of credit institutions, the net interest income of credit institutions should remain broadly unchanged in 2013. A further widening of GAP cannot be considered optimal both from the risk management perspective as well as economic efficiency. In order to avoid exposure to unexpected interest rate volatility, credit institutions should strike a better balance between their RSA and RSL, particularly focussing on imbalances observed in shorter GAP time-bands.

[28] A credit institution's economic value is the discounted value of the credit institution's expected future net cash flow generated by claims and liabilities that are both on and off the credit institution's balance sheet.

[29] The FCMC Regulations on the Management of Interest Rate Risk, Preparation of a Report on the Calculation of Economic Value Decline and of a Report on the Term Structure of Interest Rate Risk stipulated that the decline of a bank's economic value is calculated applying the modified duration method, taking into account the parallel rate shock at 200 basis points set by the FCMC and assuming that the assets or liabilities mature in the middle of the respective time-band and the average yield of financial instruments is 5%.

2.4 Profitability

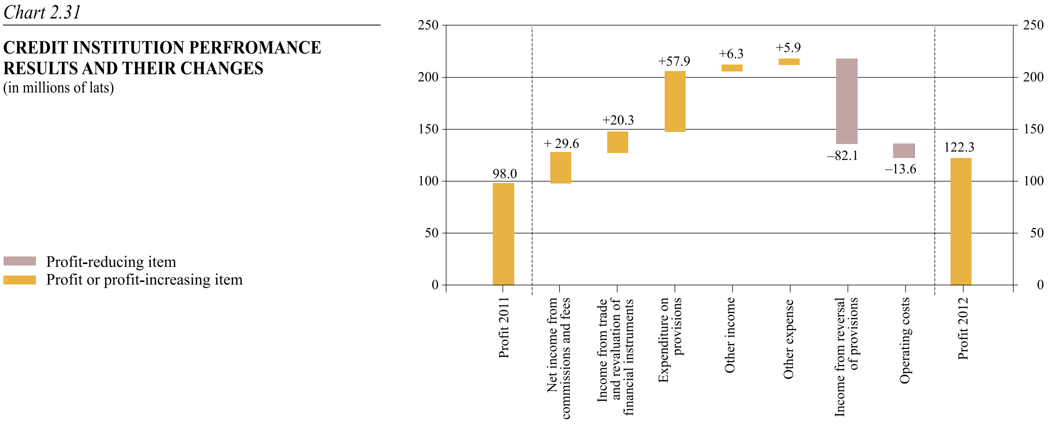
The profitability of credit institutions improved in 2012 and their profit increased in absolute terms; nevertheless, return on equity remained low. No significant changes in the profitability of credit institutions are be expected for 2013.

With Latvia's economic environment and loan portfolio quality of credit institutions continuously improving, the profit of credit institutions expanded in absolute terms. The aggregate profit of credit institutions on a solo basis was 122.3 million lats (98.0 million lats in 2011)[30]. The consolidated results of credit institutions did not differ significantly in comparison with the solo data on which the profitability analysis described in this Section is based. The consolidated profit of credit institutions amounted to 116.9 million lats in 2012 (89.9 million lats in 2011). Most credit institutions earned profit. Overall, 19 credit institutions ended the year with profit. Their total profit amounted to 196.3 million lats, whereas their assets represented 94.1% of total credit institution assets.

The rise in profit was mainly attributable to lower loan loss provisions for loan losses, higher income from commissions and fees and larger trading income (see Chart 2.31). Lower income from reversal of provisions and higher operating costs had a negative effect on the profitability of credit institutions.

Chart 2.31

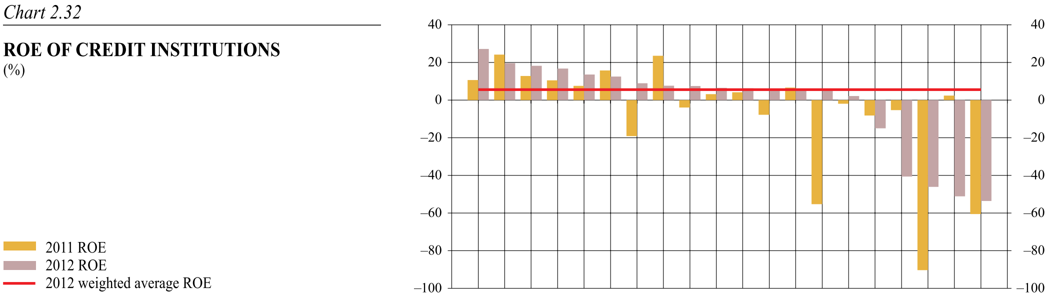
CREDIT INSTITUTION PERFROMANCE RESULTS AND THEIR CHANGES
(in millions of lats)



Overall, the profitability ratios of credit institutions remained low. ROE stood at 5.6% in 2012 (5.5% in 2011). Although the views on the cost of equity for credit institutions differ, most international analysts believe that it currently exceeds 10.0%. Therefore, it can be expected that credit institutions will actively seek opportunities to improve their ROE and pay more attention to higher capital efficiency. This could support consolidation within the sector in the medium-term. There was a great degree of variance in ROE across credit institutions, the same as in 2011, with several credit institutions significantly exceeding and some notably underscoring the weighted average ROE (see Chart 2.32). ROE was higher in the case of Group 2 (7.6%), whereas for Group 1 it was 4.8%.[31] Group

Chart 2.32

ROE OF CREDIT INSTITUTIONS
(%)



[30] The comparison with 2011 in the Section was made for the currently active credit institutions, excluding from the 2011 results the data on the Latvian branch of Allied Irish Banks Plc, the JSC *Latvijas Krājbanka* and the JSC *Parex banka*.
[31] Credit institutions which grant more than 50% of loans to residents and receive more than 50% of deposits from residents as well as one average-sized credit institution primarily receiving resident deposits and granting resident loans in Latvia and other Baltic States.

2 achieved a higher ROE on account of more substantial net income from commissions and fees and trading income. Group 1, in turn, had a more effective cost composition and smaller net loan loss provisions. The overall ROA of credit institutions remained low at 0.6% in 2012 (0.5% in 2011).

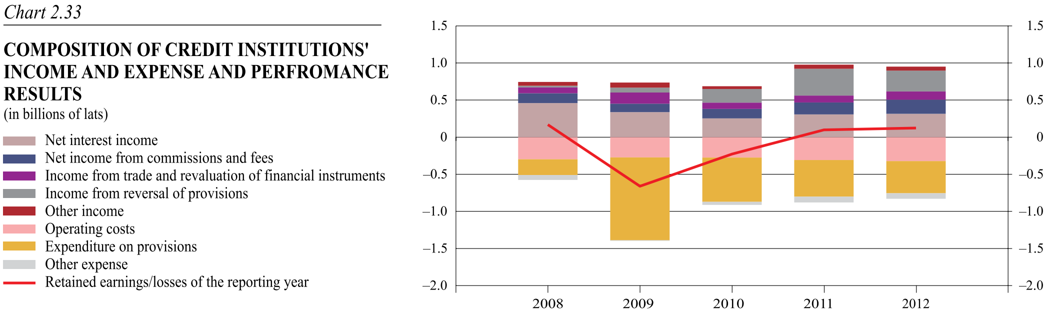
The cost-to-income ratio of credit institutions improved further, reaching the lowest level of the last three years at 52.6%, yet remaining significantly higher than during the pre-crisis period. This improvement was primarily supported by the growing operating income. In 2013, the cost-to-income ratio is likely to remain at the level of 2012. The increase in credit institution costs associated with the preparation for the euro changeover will be offset by higher income and improved operational efficiency.

The operating income of credit institutions totalled 631.5 million lats, representing an increase of 10.6% in comparison with 2011. A rise in the operating income was observed for the second consecutive year; nevertheless, it did not return to the pre-crisis levels yet. The largest contributors to the rise in operating income were higher income from commissions and fees and trading income.

Net interest income totalled 314.6 million lats which was practically the level of 2011, representing slightly less than a half of operating income and remaining the most significant source of this income. With interest rates declining, both interest income and interest expense shrank significantly in comparison with 2011, yet the effect on net interest income was marginal because of the mutually offsetting effect of those two items (see Chart 2.33). With regard to the net interest income, it can be expected that both the interest income and interest expense to will tend to decrease further in 2013, with both declines continuing to offset one another and resulting in broadly unchanged net interest income. The contraction in the interest income will be primarily determined by the expected shrinking of the loan portfolio. The interest expense will decrease as a result of lower cost of financing and deleveraging.

Chart 2.33

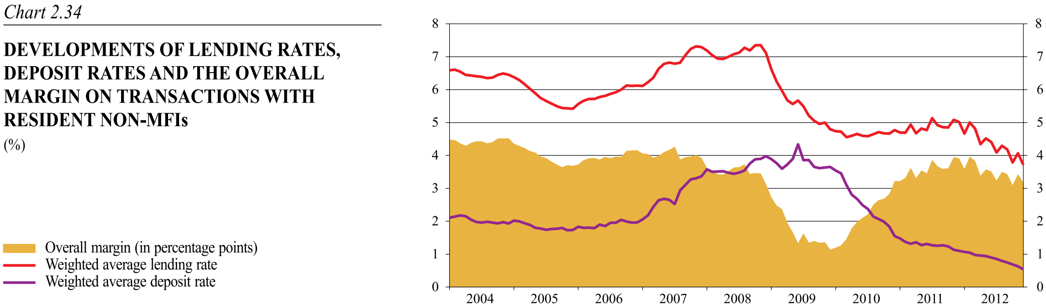
COMPOSITION OF CREDIT INSTITUTIONS' INCOME AND EXPENSE AND PERFROMANCE RESULTS
(in billions of lats)



The overall margin on business with resident non-financial corporations and households narrowed in 2012 and was 3.2 percentage points at the end of the year (see Chart 2.34). As a result of the falling money market rates, both the interest rates on loans to residents and the rates on resident deposits hit their all-time-lows. The overall margin on new business was rather volatile in 2012, ranging between 3.0 and 4.3 percentage points (3.5 percentage points at the end of the year). The interest rates on loans and deposits are expected to stay low in 2013 as well.

Chart 2.34

DEVELOPMENTS OF LENDING RATES, DEPOSIT RATES AND THE OVERALL MARGIN ON TRANSACTIONS WITH RESIDENT NON-MFIs
(%)



Net income from commissions and fees was the second most important operating income item in 2012 and it increased notably in most credit institutions. The rise was underpinned by both the recovery of the economic activity as well as pricing policy reviews at credit institutions. Net income from commissions and fees totalled 189.6 million lats, representing an 18.5% increase over 2011, and its share in operating income expanded to 30.0%. The net income from commissions and fees exceeded the pre-crisis level. It can be expected that the net income from commissions and fees will continue to grow in 2013, albeit at a more moderate rate in comparison with 2012.

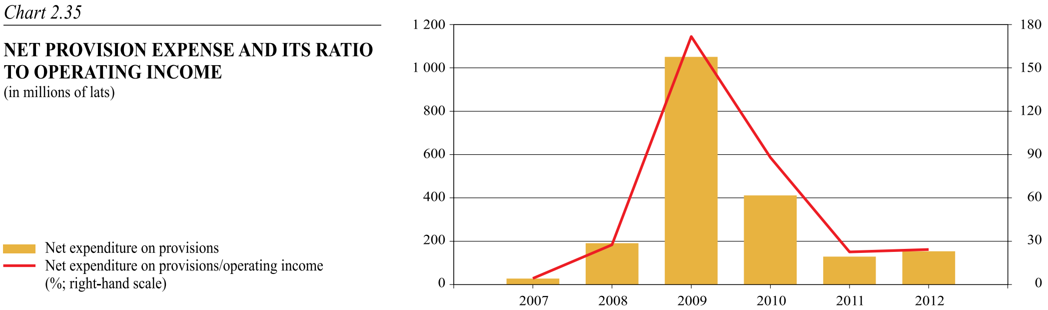
Trading income was the fastest growing income item in 2012 (a rise of 21.9% and total amount of 113.1 million lats), and its contribution to operating income expanded to 17.9%. Despite quite considerable volatility demonstrated by this item, the gains are expected to stay similar in 2013 as well, with the contribution of foreign currency trading remaining significant. The euro changeover in 2014 will have a considerable impact particularly on this source of credit institution income. As lats and euro exchange transactions will no longer be carried out, this particular income could shrink to about half of the value of 2012.

Although credit institutions actively implement cost-optimisation measures and for some credit institutions the operating costs did decrease, the overall operating costs of credit institutions grew by 4.4% year-on-year in 2012, totalling 321.8 million lats. Slightly more than a half of the operating income was used to cover the operating costs. Credit institutions have publicly claimed that the optimisation of the operating costs will remain on their agenda in 2013 as well. In order to reduce costs, credit institution optimise their regional branch networks, streamline the services offered by branches and pull out of unprofitable customer segments as well as provide incentives to customers to use electronic services more extensively. Credit institutions operating in all Baltic countries tend to merge their governance functions in the Baltics.

Loan loss provisions which were practically the main source of credit institution losses sustained during the years of the financial crisis remained the most significant expenditure item, albeit declining from 491.8 million lats in 2011 to 433.9 million lats in 2012. Income from reversal of provisions shrank by 82.1 million lats in comparison with 2011, as the loan recovery income of credit institutions decreased. As a result, the net expenditure on loan loss provisions grew from 129.2 million lats in 2011 to 153.4 million lats (see Chart 2.35). Nevertheless, for some credit institutions the income from reversal of provisions exceeded the loan loss expenses. The quality of loan portfolios is expected to improve further in 2013 and the flows of new delinquent loans will be smaller. Thus the loan loss provision expenses will continue to contract. At the same time, it has to be recognised that the income from reversal of provisions is also likely to be smaller because the improvements in the loan portfolio quality will be partly achieved on account of writing off unrecoverable loans.

Chart 2.35

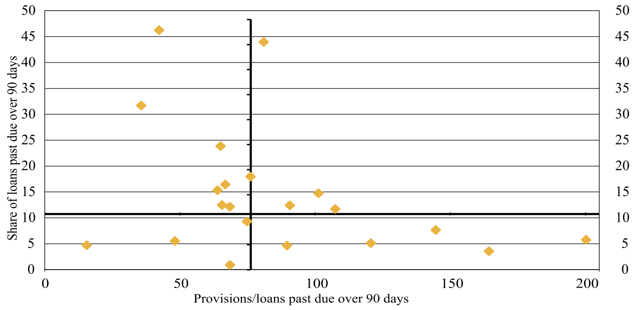
NET PROVISION EXPENSE AND ITS RATIO TO OPERATING INCOME
(in millions of lats)



There were still notable differences across credit institutions in terms of provisioning (see Chart 2.36). The share of loans past due over 90 days in the loan portfolio was chosen to measure the loan portfolio quality. The level of provisions is assessed based on the ratio of provisions to loans past due over 90 days. The Chart does not depict the credit institutions with no loans past due over 90 days. The division into quadrants was based on the weighted average data of the sector. In comparison with the average data,

Chart 2.36

CREDIT INSTITUTION LOAN PORTFOLIO QUALITY AND PROVISIONING RATES
(%)



the dispersion of the results is relatively high confirming the heterogeneity of the actual provisioning ratios.

Overall, no significant changes are expected in the profitability of credit institutions in 2013. According to the baseline scenario which assumes further improvement of the loan portfolio quality, the profit earned by credit institutions in 2013 could be equal to that in 2012 or slightly higher. Profitability will be supported by the expected economic growth, higher net income from commissions and fees and operational efficiency. The expected interest rate stagnation, a fall in income from reversal of provisions and the costs related to the preparations for the euro changeover will have a downward effect on profitability.

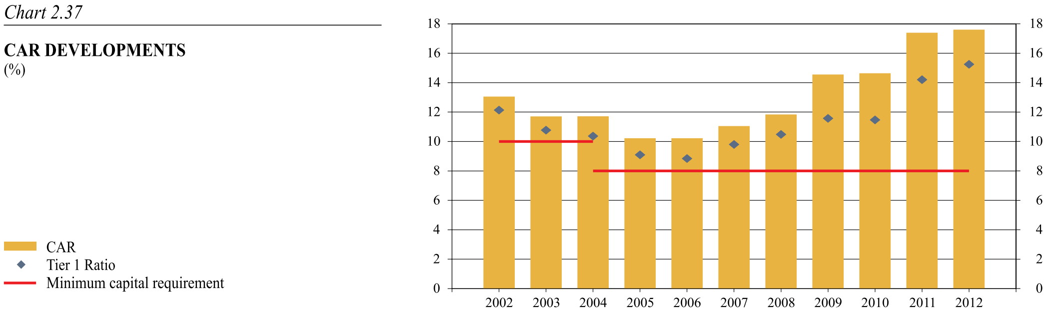
2.5 Capitalisation

Credit institutions continued to maintain a high level of capitalisation in 2012 overall, preserving a good capacity to absorb unexpected losses. The capitalisation level of credit institutions is expected to remain high in 2013 as well.

At the end of 2012, the CAR and Tier 1 capital ratio of credit institutions on a solo basis was 17.6% and 15.2% respectively (see Chart 2.37 and Table 2.1). The level of capitalisation was higher in the case of Group 1 credit institutions whose CAR was 17.9% at the end of 2012 (17.1% in the case of Group 2 credit institutions). The aggregate CAR of credit institutions peaked in April 2012 at 18.1%, slightly declining thereafter, whereas Tier 1 capital ratio reached its historical high at the end of 2012. Although credit institutions are likely to pay increasingly more attention to effective capital management and increase dividend payouts, the capitalisation level of credit institutions is expected to remain high in 2013 as well. This will be supported by the retaining the 2012 profit, the forecasted profit for credit institutions in 2013 and the capital boosting measures taken by some credit institutions.

Chart 2.37

CAR DEVELOPMENTS
(%)



The aggregate own funds of credit institutions remained broadly unchanged in 2012, as the attempts to increase the capital base using profit and external investment were roughly offset by the repayments of the subordinated capital and losses in some credit institutions. At the end of 2012, own funds of credit institutions totalled 1.9 billion lats. With Tier 1 capital growing and Tier 2 capital shrinking, the capital composition of credit institutions continued to improve. Tier 1 capital totalled 1.7 billion lats at the end of 2012, representing 86.6% of own funds.

Table 2.1

Own funds of banks, capital requirement and CAR

(at end of period; in millions of lats)

Indicators	2011	2012	Year-on-year changes (%)
Own funds	1 906.9	1 913.7	0.4
Tier 1 capital	1 556.7	1 657.2	6.5
Tier 2 capital	350.2	256.6	–26.7
Paid-up share capital	1 630.5	1 705.5	4.6
Risk weighted assets	10 960.8	10 869.4	–0.8
Capital requirement	876.9	869.6	–0.8
Capital requirement for credit risk	783.4	778.8	–0.6
Capital requirement for position, foreign exchange and commodities risks	10.7	15.0	39.8
Capital requirement for operational risk	82.8	75.8	–8.4
CAR (%)	17.4	17.6	+0.2 percentage point
Tier 1 capital ratio to RWA (%)	14.2	15.2	+1.0 percentage point

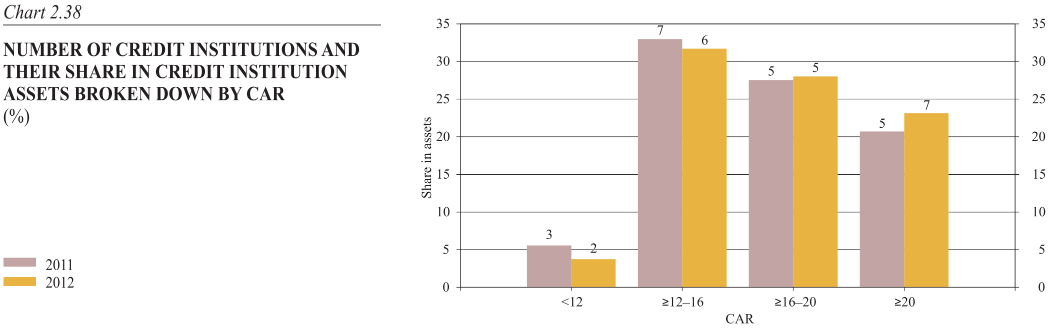
In 2012, the value of capital raising transactions declined at credit institutions in comparison with the previous years. Overall, 12 credit institutions increased their capital in the course of the year (for the total amount of 124.2 million lats, including a 86.3 million lats injection in the paid-up share capital and 37.9 million lats in subordinated capital). Some credit institutions plan to continue capital increases in 2013 as well, while their value could be smaller than in 2012.

The downward trend observed during the previous years in the capital requirements for credit institutions was not as significant as in 2012, with the capital requirement shrinking by 0.8%. This was mainly determined by stabilisation of the capital requirement for credit risk caused by a less significant contraction of the loan portfolio. The changes affecting the capital requirements for other risks were much more substantial; nevertheless, as those requirements only represented 10.4% of the overall capital requirement, they did not have any notable effect on the size of the overall capital requirement.

The range of CAR narrowed across credit institutions. The share of the credit institutions with their CAR exceeding 20% continued to grow (see Chart 2.38), whereas the share of the credit institutions with their CAR below 12% contracted further.

Chart 2.38

NUMBER OF CREDIT INSTITUTIONS AND THEIR SHARE IN CREDIT INSTITUTION ASSETS BROKEN DOWN BY CAR
(%)



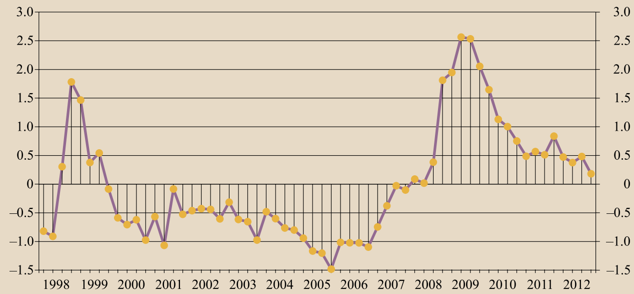
Box 3. Latvian financial stress index

In 2012, the Bank of Latvia further improved its set of tools for the monitoring of the stability of Latvia's financial system. The Latvian financial stress index (FSI) methodology was enhanced based on the analysis of the experience of various countries and the methodological features of indicators widely applied internationally in the field of financial stability monitoring. A full description of the conceptual features of the FSI and calculation methodology was published in a discussion paper of the Bank of Latvia.[32]

Overall, the development of the Latvian FSI during the last two years suggests that the general situation in the domestic financial system has stabilised. In 2011 and 2012, the FSI value fluctuated within 0.5 standard deviation and approached the long-term average towards the end of 2012 (see Chart 2.39).

Chart 2.39

FINANCIAL STRESS INDEX
(in standard deviations)



The overall performance of credit institutions improved in 2012: profitability strengthened, resident deposit base remained stable and provisions for non-performing loans contracted. The stabilisation of the financial system was also reflected in the money market rates developments: the spread between 3-months RIGIBOR and EURIBOR was persistently narrow. Positive changes in the domestic macro-financial environment accompanied by the improvements in the macroeconomic indicators and the subsequent rating upgrades by international credit rating agencies, facilitated a decrease in the spread between average yields on 10-year Latvian and German government bonds. All the above factors contributed to mitigating the stress reflected by the FSI in 2012.

2.6 Credit risk shock-absorption capacity

The results of the credit risk sensitivity analysis and stress tests suggest that the credit risk shock-absorption capacity of credit institutions overall remained high in 2012. This was ensured by a high level of capitalisation and provisions at credit institutions, capital increases and improvements in the quality of loan portfolios, with the share of delinquent loans gradually shrinking. Thus even in the event of the severe scenario the overall capital adequacy of credit institutions would remain significantly above the statutory minimum capital adequacy requirement.

The Bank of Latvia has conducted a sensitivity analysis and a macroeconomic stress test. Estimates use the solo data of credit institutions as at the end of 2012, taking into account the changes in capital planned by credit institutions in 2013. The threshold for the stress tests was set at 8.0% of CAR.

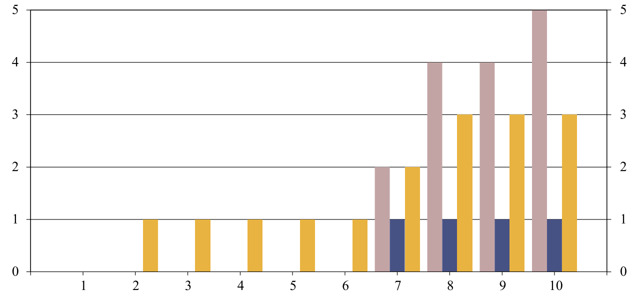
The results of the sensitivity analysis[33] (see Chart 2.40) point to deterioration in the credit risk shock-absorption capacity at the end of 2012 in comparison with the respective period of the previous year. Nevertheless, it has to be stressed that it is related to the

[32] See Siņenko, N., Titarenko, D., Āriņš, M. *Latvian Financial Stress Index*. Riga : Bank of Latvia. Discussion Paper, No. 1, 2012. Available at: http://www.bank.lv/images/stories/pielikumi/publikacijas/petijumi/DM_1-2012-final.pdf.
[33] Sensitivity test results provide an indication of the scale of increase in loans past due over 90 days that credit institutions would be able to absorb before their CAR falls below the minimum capital requirement. The estimates assume that a credit institution has to build provisions in the amount of 60% of the increase in the loans past due over 90 days. The own funds and RWA are reduced by the amount of the additional provisions.

Chart 2.40

SENSITIVITY ANALYSIS RESULTS

(number of credit institutions with CAR below minimum capital requirement; increase in share of loans past due over 90 days (in percentage points) in aggregate loans)



weakening of the credit risk shock-absorption capacity in two small banks. Overall, as at the end of 2012, without any additional capital injections Latvian credit institutions would have been able to absorb a potential increase in the credit risk resulting in the share of loans past due over 90 days in the aggregate loan portfolio of credit institutions expanding by 6.9 percentage points.

The Bank of Latvia also conducts regular stress tests[34] in order to measure the resilience of credit institutions to adverse macroeconomic shocks. The probability of those shocks materialising is low. The application of those shocks in stress tests enables an assessment of the credit institutions' credit risk shock-absorption capacity under extreme circumstances.

External macro-financial developments remain one of the most significant sources of the systemic risk and uncertainty in the Latvian economy overall and in the financial system. Therefore, the credit institutions' capacity to absorb a higher credit risk caused by the potential negative impact of a probable escalation of the euro area sovereign debt crisis on Latvia's macroeconomic environment was analysed within the framework of the macroeconomic stress test. The macroeconomic stress test analyses three scenarios (see Table 2.2).

Table 2.2

Macroeconomic stress test scenarios for 2013

(%)

Indicators	Baseline scenario	Stress scenario	Worst case scenario
Real GDP growth	3.6	0.3	–2.9
Rate of jobseekers (annual average)	13.7	14.8	15.9
Inflation (annual average)	2.0	2.1	2.2

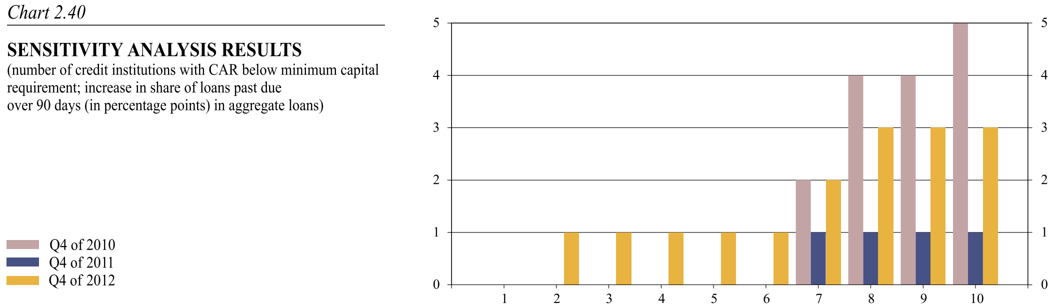
The baseline scenario is based on the macroeconomic forecasts prepared by the Bank of Latvia at the beginning of 2013.[35] They assume a slowdown of Latvia's economic growth in 2013 as a result of export deceleration and lower growth of investment and private consumption. Latvia's GDP growth is forecasted to reach 3.6%, the rate of jobseekers to decline to 13.7%, whereas the average annual inflation is expected to be 2.0%.

The stress scenario analyses the reaction of the Latvian economy to a combination of three shocks: a 10% decrease in the foreign demand, an equal loss of investor confidence and a 5% increase in oil prices. The stress scenario reflects a hypothetical situation where the deepening of the euro area sovereign debt crisis would result in further deceleration of the economic growth in Latvia's main trade partners, thereby increasing the pessimism of businesses and consumers. That, in turn, would support a decline in foreign demand. Lower foreign demand would have a negative effect on Latvia's exporters, resulting in general deterioration of business sentiment in Latvia which would converge with the EU average. That, in turn, would cause a decline in the domestic investor confidence

[34] The macroeconomic stress testing methodologies are described in the Bank of Latvia's *Financial Stability Report 2009*. Stress tests cover credit institutions with the size of their loan portfolios exceeding 1 million lats.
[35] Macroeconomic Development Report. Riga: Bank of Latvia, January 2013.

Chart 2.40

SENSITIVITY ANALYSIS RESULTS
(number of credit institutions with CAR below minimum capital requirement; increase in share of loans past due over 90 days (in percentage points) in aggregate loans)



(and hence in investment) which would be further exacerbated by lower activity of foreign investors. Oil price shocks would have an additional downward effect on growth. Although weaker growth dampens the effect of demand on commodity price developments, oil prices could rise under the impact of political instability caused by regional unrest.

In order to evaluate the credit risk shock-absorption capacity of credit institutions in extremely unfavourable circumstances, another hypothetical scenario, called t**he severe scenario**, was analysed. It assumes that the decline in the euro area economic activity would turn into a long period of recession under deeper fiscal consolidation circumstances which would facilitate the return of a recession also in the Latvian economy through the previously-described channels. This scenario is based on the same shocks as the stress scenario, yet the gravity of shocks has been doubled.

The measures of the macroeconomic fundamentals, i.e. GDP, inflation and unemployment developments, based on the scenario assumptions (shocks) were obtained by using the macroeconomic model of the Bank of Latvia[36]. Should the shocks assumed in the stress scenario materialise, GDP growth would slow down to approximately 0% in 2013, the rate of jobseekers would grow by 1.1 percentage points, whereas inflation would remain broadly unchanged. In the case of the **severe scenario**, the Latvian economy would face another downslide in 2013, i.e. GDP growth would return to a negative territory, the rise in the rate of jobseekers and inflation would be twice as high as in the stress scenario.

Taking into consideration the resulting values of the macroeconomic fundamentals, the potential development of the credit institutions' loan portfolio quality was assessed based on the assumptions of the above scenarios, using the credit risk model of the Bank of Latvia. The results show that under the baseline scenario the share of loans past due over 90 days in the aggregate loan portfolio of credit institutions would continue to shrink in 2013 and would be 1.1 percentage points lower year-on-year at the end of 2013 (10.0%).

Under the stress scenario, assuming deterioration in the domestic macro-financial environment, the loan portfolio quality would deteriorate to a relatively small degree, i.e. the share of loans past due would grow by 2.2 percentage points (to 13.3%) at the end of 2013 in comparison with the actual situation as at the end of 2012. In the event of **the severe scenario** materialising, however, the deterioration in the credit institutions' loan portfolio quality would be much steeper and the share of loans past due over 90 days would reach 17.6%. Evaluating the capacity of credit institutions to absorb a credit risk increase up to the above thresholds, it has to be noted that even under the severe scenario the impact on credit institutions would be rather limited. Although some credit institutions would have to build sizeable additional provisions, the capitalisation of the credit institutions would be sufficient to absorb this increase in provisions and the capital shortage would be negligible (see Table 2.3). The decrease in the aggregate CAR of credit institutions would be relatively small under both scenarios (1.2 percentage points and 3.6 percentage points respectively) and the aggregate CAR of credit institutions would remain significantly above the statutory minimum capital adequacy requirement (see Chart 2.41).

[36] See Beņkovskis K., Stikuts D. *Latvia's Macroeconomic Model*. Riga : Bank of Latvia, Working Paper No. 2, 2006.

Table 2.3

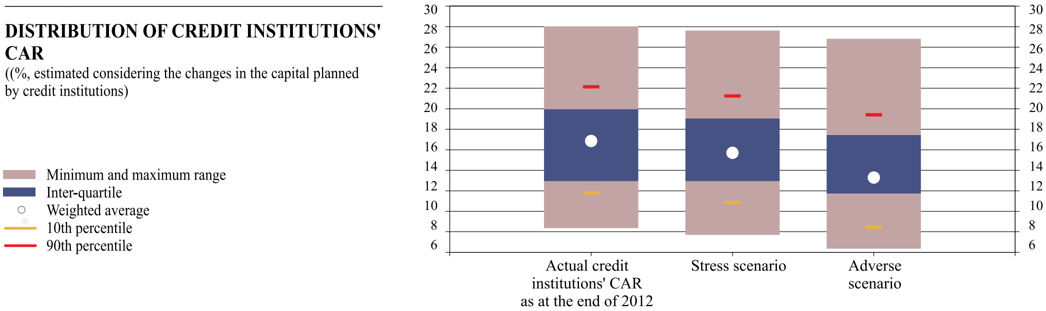
Aggregated macroeconomic stress test results

Indicators	Stress scenario	Worst case scenario
Number of credit institutions with CAR below 8%	1	1
Additionally required capital (in millions of lats)	1.4	7.3
Additionally required provisions (in millions of lats)	148.9	446.0
Additionally required provisions (% of aggregate credit institution assets)	0.7	2.2

Chart 2.41

DISTRIBUTION OF CREDIT INSTITUTIONS' CAR

((%, estimated considering the changes in the capital planned by credit institutions)



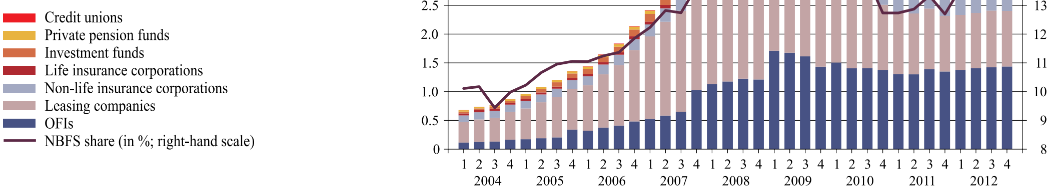
3. DEVELOPMENT OF NBFS

Favourable developments in the Latvian economy and global financial markets ensured that the year 2012 was successful for the NBFS institutions. The downward trend in assets of the institutions whose principal activity is related to granting loans which was observed in the previous periods ended in 2012. At the same time, the institutions whose principal activity is related to investing funds mostly generated high yields in 2012, as the price dynamics of financial assets was positive and higher investment portfolio risks undertaken in 2011 were justified. In the context of financial stability, the share of NBFS in the financial sector remained low; thus the impact of NBFS on the financial sector was not pronounced overall. The risks within the NBFS were not high either: no notable changes in loans, deposits or ownership were observed, and the NBFS institutions were not highly dependent on each other. Regulatory changes in some NBFS sub-sectors are likely to affect further business of these institutions. Regulatory adjustments in the operation of other non-MFI lending services providers continued, along with compulsory licensing and capital requirement calculation additionally envisaging restrictions to the lending standards for quick credit providers. Changes driven by the implementation of Solvency II Directive in the nearest future are also likely to occur in the operation of insurance corporations (see Appendix 4 for more detailed information).

Following the decline in assets of the NBFS institutions in 2011, the underlying trend in the development of NBFS rebounded in 2012, and total assets increased by 4.7%, amounting to 3.2 billion lats (see Chart 3.1). Given further declines in the credit institutions' assets, the role of NBFS in the financial sector strengthened somewhat in 2012; nevertheless, it continued to be minor (the share of NBFS in the overall financial sector accounted for 13.6% at the end of 2012 and 12.7% in 2011). All NBFS sub-sectors reported a positive annual growth of assets. The leasing companies and investment funds were an exception (the assets of the two sub-sectors decreased by 1.7%). The assets of all other NBFS sub-sectors expanded in 2012. The annual growth of assets of private pension funds reached 20.0%, the assets of life insurance corporations increased by 14.8%, while those of credit unions grew by 10.8%. The assets of non-life insurance corporations expanded by 7.5% in the course of the year, while the OFI[37] assets picked up 6.4%. Overall, the OFI assets continued to gain importance in the NBFS structure also in 2012: the share of these institutions in the NBFS assets amounted to 45%, while the role of other NBFS sub-sectors remained broadly unchanged.

Chart 3.1

NBFS ASSETS BY SUB-SECTOR AND NBSF ASSET SHARE IN TOTAL FINANCIAL SECTOR'S ASSETS
(in billions of lats)



3.1 Leasing companies and OFIs

The leasing companies and OFIs are the most significant NBFS participants. The total of NBFS loans equivalent to credits continued to be dominated by credits of the leasing companies: the financial leasing and factoring loans totalled 819.6 million lats at the end of 2012; moreover, the leasing and factoring portfolio continued to grow. By contrast, the outstanding amount of operative leasing was still declining (by 20.1% against the end of the previous year) and was merely 46.2 million lats. The OFI loans accounted for a smaller share (586.0 million lats). The assets of both leasing companies and OFIs were

[37] OFIs are companies that engage in financial servicing activities, like holding companies and other lending services providers, e.g.pawnshops and quick credit providers, as well as the other OFIs.

dominated by loans (85.0% and 41.0% of assets of these companies respectively). Thus the main risks to these companies were related to the quality of their loan portfolio. The risks of both leasing companies and OFIs, which might result from investing in other financial institutions, are relatively contained. Participating interest in other institutions and investment in shares are more characteristic of OFIs.

Loans granted to residents increased somewhat in the financial leasing portfolio (the annual increase of 3.0%). At the same time, loans granted to non-resident non-financial corporations posted a steep decline (annual decrease of 57.0%, to 7.8 million lats). The outstanding amount of financial leasing to companies of the traditionally leading sector in the leasing portfolio, i.e. transport and communication, increased by 12.6% in 2012, whereas the outstanding amount of loans to companies in the sector of agriculture, hunting, forestry and fishing increased by 16.5%. Several other sectors also attained annual growth above 10%.

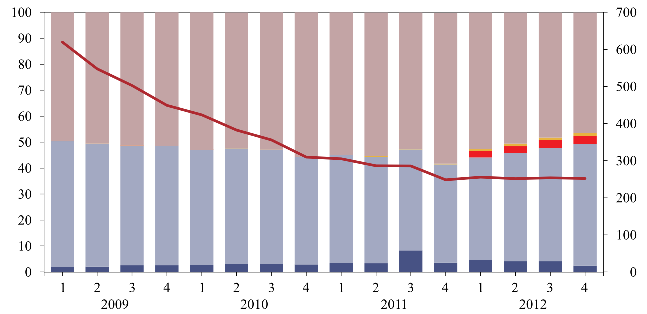
The role of OFIs in the Latvian financial market increased significantly, albeit their development was not steady. Total OFI assets amounted to 1.4 billion lats at the end of 2012. The assets of institutions whose principal activity is the provision of other lending services[38] (including quick credit providers and pawnshops) were not among the largest OFI assets (accounting for 18% of total OFI assets). In terms of assets, financial intermediation n.e.c.[39] was the largest OFI sub-sector. Its assets accounted for a half of total OFI assets.

In 2012, the replacement of leasing loans with OFI loans was observed in the structure of loans to resident households (mostly OFIs, including also quick credit providers and pawnshops; see Chart 3.2). Most often, such a shift affected consumer credit. The fact that the outstanding amount of OFI loans granted to households increased to the same extent as the leasing portfolio declined suggests that household debt to NBFS has not decreased notably.

Chart 3.2

OFI AND LEASING COMPANY LOANS TO HOUSEHOLDS AND THEIR STRUCTURE
(in %)

Leasing company loans to resident household
Loans of other lending services providers to non-resident households
Loans of other OFI lenders to non-resident households
Loans of other lending services providers to resident households
Loans of other OFI lenders to resident households
Loans to households (total; in millions of lats; right-hand scale)



Loans accounted for the most significant part of the financing structure of leasing companies and OFIs, both major sub-sectors of the NBFS (88.6% and 53.3% of total liabilities respectively). It should be noted that the capital of service providers of the OFI sub-sector "Other credit granting" increased in 2012, following the establishment and introduction of the minimum share capital for quick credit providers and pawnshops at the end of 2011. Loans from non-resident MFIs (49.2% at the end of 2012) and resident MFIs (31.4%) dominated the liabilities of leasing companies. At the same time, the role of non-resident MFI financing and loans from resident non-MFIs increased in OFI

[38] In accordance with NACE Rev. 2 classification, Section K "Financial and Insurance Activities", class 6492 "Other credit granting". This class includes non-MFI credit institutions, except leasing companies, e.g. quick credit providers and pawnshops.

[39] In accordance with NACE Rev. 2 classification, Section K "Financial and Insurance Activities", class 6499 "Other financial service activities, except insurance and pension funding n.e.c.". This class is actually not related to credit granting, yet can engage in factoring service activities. This class includes companies that provide financial services for expanding entrepreneurship and attracting investment as well as a number of holding companies that in addition to holding company's activities provide these financial services mainly also to affiliated companies. This class includes also companies engaging in activities auxiliary to entrepreneurship, e.g. Latvijas Garantiju aģentūra Ltd., which provide export and credit guarantees and manage venture capital funds. Companies offering payment settlements for services or bills, including a part of those registered with the FCMC, are also included.

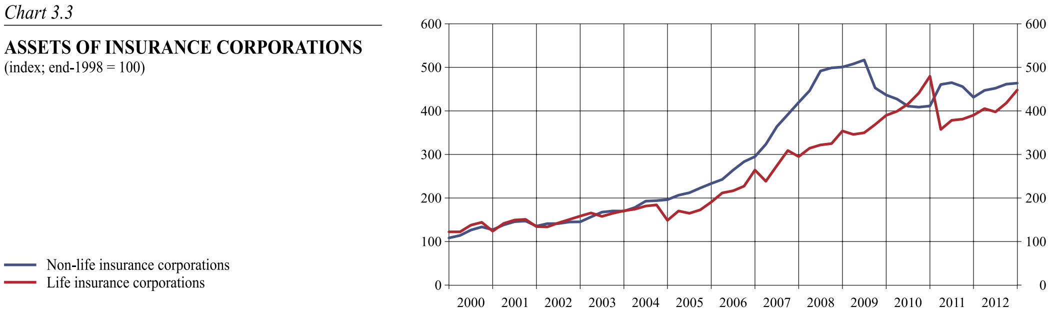
liabilities in 2012. Loans from resident non-financial corporations and OFIs posted a particular increase (they more than doubled during the year), albeit they were not large.

3.2 Insurance corporations

Amid on-going post-crisis recovery of the economy, the insurance sector developed quite successfully. The assets of non-life insurance corporations expanded notably in 2012 (to 298.6 million lats), and the annual asset growth rate was two times higher than in 2011 (see Chart 3.3). The assets of life insurance corporations likewise grew in 2012 (to 90.8 million lats). Two life insurance and seven non-life insurance corporations (nine in 2011) were operating in Latvia in 2012. Of late, re-registration of insurance corporations has notably affected their assets and individual performance indicators.

Chart 3.3

ASSETS OF INSURANCE CORPORATIONS
(index; end-1998 = 100)



Favourable developments in the Latvian economy ensured that gross insurance premiums signed by insurance corporations in 2012 increased, with the gain primarily on account of a higher level of non-life insurance premiums. The number of premiums signed by life insurance corporations changed only slightly. Likewise, gross compensations paid out by non-life insurance corporations did not change substantially while augmenting markedly for life insurance corporations and leaving an effect on their direct performance results. Nevertheless, the profits of life insurance corporations amounted to 2.8 million lats, which was the best attainment of several years. It was strongly supported by the growing income from investment and falling administrative costs. Non-life insurance corporations earned 7.4 million lats in profits in 2012; their income from investment contracted, while administrative costs increased, thus reducing profits earned from their direct operation.

The investment policy of insurance corporations did not change much in 2012. As to the financial investment portfolio of life insurance companies, similar to 2011, around 40% of investment was placed with credit institutions as deposits. On the other hand, the ratio of debt securities and other fixed income securities in the life insurance portfolio was almost on par with the ratio of shares and other non-fixed income securities (30.5% and 30.2% respectively). Noteworthy that a higher investment in stock markets positively affected the investment portfolio, because global stock markets were performing well in 2012. The share of time deposits in the financial investment portfolio of non-life insurance corporations slightly increased (to 24.8%), while investment in debt securities shrank (to 67.6%). The total investment of all the insurance corporations in Europe's problem-hit periphery fell below 2% of the total investment portfolio's value towards the close of 2012; hence, in the event of problem escalation, the return on portfolio is most likely to remain almost unaffected.

Duly accounting for the anticipated relatively strong economic advance, the economy-based risks to insurance corporations seem to be conditionally weaker in 2013 than the risks related to financial investment. The period of low yields is continuing in a few financial asset markets and may have an adverse effect on the rate of return on investment. In addition, the Solvency II Directive, which is likely to be applicable from 1 January 2014, will be an important factor affecting the performance of both life and non-life insurance corporations.

Box 4. Insurance and reinsurance market framework

Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of insurance and reinsurance (Solvency II; recast) is a regulatory framework for the operation of insurers and reinsurers throughout the EU. This Solvency II Directive was drafted with the aim to harmonise the EU legal framework and to introduce a uniform level of the solvency capital requirement, i.e. the minimum capital requirement and the solvency capital requirement for insurance and reinsurance companies, as well as to conduct the valuation of assets and liabilities at fair value and streamline the procedure for report submission to regulators. Although it was planned to put the Solvency II Directive into effect on 1 January 2013 and to replace the so far effective directives in the field of insurance and reinsurance (known collectively as Solvency I Directives), the effective date of the former has been postponed.

The Omnibus II Directive is a supplementing and amending directive of the Solvency II Directive. First, the Omnibus II Directive postpones the implementation timeframe, in compliance with the Lisbon Treaty additionally supplementing the requirements for supervisory institutional architecture and granting complementary rights to the EIOPA (e.g. in the event of disagreement, EIOPA should resolve such disagreement by mediating between national regulators). This Directive also specifies the requirements for transition from the provisions of Solvency I Directive to Solvency II Directive. The draft Omnibus II Directive was released in January 2011. The tripartite negotiations of the EC, the European Parliament and the Council about the text of this Directive and the requirements therein have not been concluded as yet.

The requirements under the Solvency II Directive shall be applicable to all insurance and reinsurance corporations, with the exception of such companies whose gross signed premiums do not exceed, on an annual basis, 5 million euro and whose gross technical provisions, either at company or group level, fall below 25 million euro as well as corporations that engage in reinsurance operations not exceeding either 0.5 million euro of the company's gross signed premiums, 2.5 million euro of the company's gross technical provisions, or 10% of either gross signed premiums or gross technical provisions. According to the information supplied by the FCMC, with the Solvency II Directive coming into effect, its new provisions will be binding on all insurance corporations registered in Latvia.

According to the Solvency II Directive, the valuation of assets and liabilities will be at fair value. Calculation of the capital requirement will be based on the assessment of insurance underwriting risk, operational risk, market risk and credit risk. The present capital requirement establishes the solvency requirement using the latest historical data. In line with the Solvency II Directive, the assessment envisages to account for insurance corporation's projections of future developments and potential risks.

The principles for calculating the minimum capital requirement are not substantially changed in the new Directive: they are broadly similar to those currently effective for calculating the solvency requirement, while the solvency capital requirement, an innovation at the European framework level, is additionally introduced. The solvency capital requirement will be calculated as value-at-risk with a 99.5% probability over the horizon of one year; the calculation will include all potential quantifiable risks over a future 12-month horizon.

The requirements under Solvency II Directive introduce new risk-assessment-based supervisory principles, thus enhancing the protection of policy holders (insured persons) against the event of default on behalf of insurance service deliverers.

In order to check the insurers' readiness to meet the capital requirement under the Solvency II Directive, the FCMC has conducted the assessment of quantitative impact. The results obtained allow surmising that in general the insurance corporations would not run into trouble with meeting the capital requirement under the Directive. Due to the Solvency II Directive's regime, which demands a risk-assessment-based calculation of capital requirement, insurers will need additional funding to improve their internal systems. Consequently, the introduction of new processes is likely to require larger extra financing from insurance corporations with local capital and no access to the know-how and technological basis of their parent companies established in the EU countries.

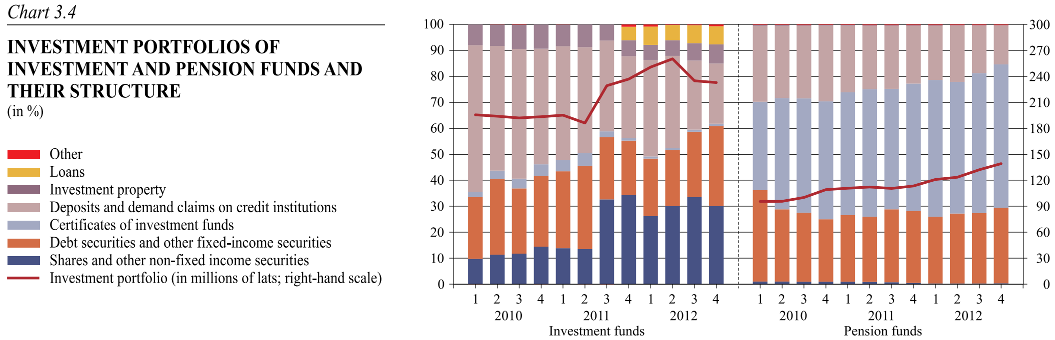
3.3 Investment funds and private pension funds

The assets of investment funds declined towards the close of 2012, yet the overall results of fund investing (yields) are to be assessed as successful. It is noteworthy that in 2012 the developments in this non-MFI sub-sector were under a strong impact of changes in the market participants' composition (a number of investment management companies' investment funds were closed). The investment structure of this sector, following shifts in the funds market participant composition, also changed in the investment portfolio of investment funds. These market structure developments notwithstanding, similar to the private pension funds, all types of investment funds, whether classified in terms of investment strategy (except mixed funds accounting for only 1.5% of total assets of investment funds) or in terms of operational policy (open-end and closed-end funds), recorded decreasing time deposits with credit institutions and increasing investment in debt securities and other fixed-income securities (see Chart 3.4). In 2012, the allocation of portfolio investment for loans augmented, primarily on account of transactions by closed-end real estate funds[40], for open-end funds are basically forbidden to grant loans at the expense of the fund.

In 2012, the assets of private pension funds went on expanding, and, more importantly, their growth rate accelerated; by the end of the year, the accumulated pension capital had amounted to 142.4 million lats (see Chart 3.4). Amid historically low yields, the pension funds reduced the share of deposits with credit institutions in their investment portfolios in 2012, and, at the close of the year, only 15.0% of total investment was kept on credit institutions' deposit and settlement accounts (22.2% in 2011). In 2012, the pension plans did not change their investment ratios in debt securities and other fixed-income securities substantially, and as previously a major part of investment was placed in investment fund certificates (55% of total investment portfolio). Noteworthy that only 2.2% of total investment in investment fund certificates was placed with the investment funds registered in Latvia, while the rest of investment in investment fund certificates was made in Luxembourg, Ireland, France and the UK.

Chart 3.4

INVESTMENT PORTFOLIOS OF INVESTMENT AND PENSION FUNDS AND THEIR STRUCTURE
(in %)



The average investment result of private pension plans was positive (8.5%) owing to the improving structure of the investment portfolio of private pension funds due to positive shifts in the financial market. It should be noted that the performance of private pension

[40] Pursuant to the Law on Investment Management Companies (Section 33, Paragraph (8), Clause 4)), loans may not be granted at the expense of the fund. The said restriction is not applicable to asset buy-back transactions, which may be conducted taking into account the limitations under this law, and to investing at the expense of the closed-end investment fund in property (real estate).

plans recorded gains particularly in the second half of the year in line with the recovery of the financial market. Consequently, as the market situation was favourable, investment policies pursued by private pension funds in 2012 brought good results. Increasing numbers of pension plan participants also gave a positive impetus to the growth of the industry. At this intersection, the risks to both investment and pension funds primarily depend on low financial asset prices and minor yields (rate of return on investment).

Box 5. Framework of alternative investment funds

On 8 June 2011, Directive 2011/61/EU of the European Parliament and of the Council on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010 (hereinafter, the Directive) was adopted. It foresees to establish a common regulatory (legal) EU framework for all financial market participants engaged in providing of alternative investment fund management services. Within the EU, uniform requirements have so far been developed for governing only the operation of UCITS and their managing companies. UCITS are entitled to invest solely in transferable securities (traded in the regulated market) and other liquid financial instruments complying with certain limits on the amount of investment. Along with the UCITS, there operate funds that are also allowed to make other alternative investment not subject to the abovementioned investment limits. In order to implement the provisions of this Directive, the FCMC drafted the Law on Alternative Investment Fund Managers (hereinafter, the draft law) to be forwarded to the Saeima of the Republic of Latvia for examination and approval in 2013.

At present, the requirements regulating fund management activities are laid down in the Law on Investment Management Companies and are applicable to open-end investment funds, which are managed by investment management companies and can operate only as UCIS, and to closed-end investment funds. This Law stipulates that these funds have to be registered with the FCMC. However, there are funds that have been established and operate in Latvia without such registration. Predominantly, these are venture capital corporations, with their operation regulated by the Commercial Law and without subjection to an extra financial supervision. In Latvia, venture capital corporations are mainly established as limited liability companies. The new framework prescribes the requirements for operation, accountability and supervision as well as uniform requirements for disclosure of information to investors, depending on whether the company is registered or licensed. It will assist in assessing potential risks related to the operation of alternative investment fund managers and their negative implications for the financial system; it will likewise enhance effective cooperation among supervisory institutions to monitor and mitigate such potential risks as well as to improve the protection of investors' interests. The regulation provides also for the entitlement to establish open-end alternative investment funds with no subjection to UCIS requirements. The introduction of the new framework offers an opportunity to establish alternative investment funds not only as aggregates of assets but also as legal entities, and to establish open-end alternative investment funds without them being subject to the requirements set out for UCIS.

The provisions of the draft law prescribe:
1) the requirements for the registration of the manager (company) of alternative investment funds, provided that the operation of such an alternative investment fund managed by the company and its asset level both meet at least one of the following criteria:
a) the assets of the funds managed by the company, including those obtained by way of financial leverage, do not in total exceed 100 million euro;
b) the assets of the funds managed by the company do not in total exceed 500 million euro under the condition that none of the funds uses financial leverage and buy-back (repurchase) rights in the course of five years after the expiration of initial placement date of the investment share/unit issuance. A registered manager will be allowed to operate only in the territory of Latvia and will be subject only to selective provisions of the draft law;

2) the licensing requirements for the manager of alternative investment funds if the assets of alternative investment funds managed by the respective manager exceed the asset amount thresholds set for the registered manager or the manager intends to operate outside Latvia within the territory of the entire EU. Most licensing provisions and procedures are predominantly in line with regulatory enactments for other financial sectors, i.e. the requirements are set out for officials, shareholders, a custodian bank, manager's action programme, remuneration policies, disclosing of regular information, principal terms and conditions for operation (minimum own funds requirement, management of fund's inherent or potential risks, including liquidity risk management for open-end alternative investment funds, management of the risk of conflict of interest, etc.) as well as institutional arrangements and delegation of services;
3) the requirements for the operation of alternative investment funds, i.e. their registration, similar to the registration requirement for closed-end investment funds laid down in the Law on Investment Management Companies, in order to ensure effective control over manager's compliance with the requirements;
4) the rights and obligations of the FCMC related to registration and licensing of managers and funds, their supervision and imposition of sanctions;
5) the procedure for exchange of information among supervisory institutions of Member States and foreign countries to ensure oversight and mitigation of the risks resulting from the operation of managers.

3.4 Credit unions

The assets of credit unions[41] rank among the smallest in the NBFS (only 14.1 million lats at the end of 2012). Nevertheless, in contrast to credit institutions whose assets were on a downward trend, the assets of credit unions continued to increase in 2012. As in the previous year, the pace of asset growth was close to 10% on an annual basis, while the asset structure remained almost unchanged. The share of loans in assets was 72%, and a constant amount of financing (around 24%) was deposited with resident credit institutions. The liabilities of credit unions, on the other hand, were dominated by deposits of their members; in the breakdown by currency, the lats prevailed in both assets and liabilities.

The average capital adequacy ratio (CAR) remained unchanged year-on-year (20.1% on average). Yet for some credit unions, it only slightly hovered above the minimum capital requirement (10.0%), while towards the close of 2012, five credit unions (four in 2011) reported their CAR below 12.0%. Generally, the risks to credit unions are mainly related to the worsening quality of their loan portfolios, which was a trend partly observed in 2012 as well (declining share of standard loans in total portfolio and a rising number of close-watch and lost loans).

[41] The basic activities of credit unions consist in receiving deposits and providing loans to their members. The operation of credit unions is regulated by the Credit Union Law, while their supervision is in the competence of the FCMC. At the end of 2012, 34 credit unions were registered in Latvia.

4. FINANCIAL INFRASTRUCTURE

The Bank of Latvia assessed systemic risk of the systemically important financial market infrastructures SAMS and DENOS within the oversight framework in 2012, since the operational disruptions of the above infrastructures might affect the financial stability. The assessment confirmed that the probability of risk was persistently low in the systems. In 2012, these settlement systems ensured efficient and secure payment and settlement environment to the participants and the entire financial system, and their smooth operation facilitated the financial stability.

4.1 Payment systems

The SAMS is a systemically important payment system processing the lats payments, where, in case the system was not sufficiently protected against risk, disruption within it could trigger further disruptions among the system's participants or systemic disruptions in the financial system. The SAMS continued to ensure real-time gross settlement in lats in the Bank of Latvia monetary policy operations, large-value interbank payments, final settlement or netting of other payment systems operating in Latvia and urgent customer payments in 2012.

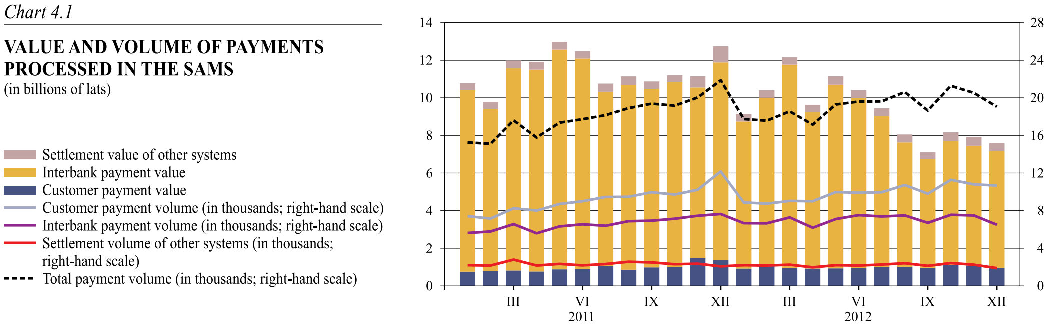
The Bank of Latvia did not implement any technical changes and legal amendments to the SAMS in 2012. If Latvia joins the Economic and Monetary Union on 1 January 2014, the Bank of Latvia will terminate the maintenance of the SAMS due to the fact the Bank of Latvia provides the operation of the payment system TARGET2-Latvija for large-value and urgent customer payments in euro.

In 2012, the Bank of Latvia assessed, within the scope of the oversight, the compliance of the SAMS with the *Core Principles for Systemically Important Payment Systems approved by the Committee on Payment and Settlement Systems* (CPSS) of the Bank for International Settlements for the purpose of promoting secure and efficient development of payment systems, and concluded that the SAMS observes the above Core Principles.

The volume of payments processed in the SAMS recorded a year-on-year increase of 6.1%, to 229.7 thousand, while their total value declined by 19.3%, to 111.2 billion lats in 2012. The shrinking value of payments accounted primarily for the drop in the value of interbank payments (see Chart 4.1). The payments related to the Bank of Latvia's monetary policy operations are also processed by way of the interbank payments, and the falling value in 2012, in the second half in particular, is attributable to a gradual reduction of the Bank of Latvia's deposit rates in July and September 2012 resulting in a shrinking value of the payments related to the deposits of the SAMS participants with the Bank of Latvia.

Chart 4.1

VALUE AND VOLUME OF PAYMENTS PROCESSED IN THE SAMS
(in billions of lats)



The assessment of systemic risk

The Bank of Latvia analysed the liquidity adequacy in the system, concentration ratio and continuity of the system's operation upon assessing systemic risk.

Liquidity adequacy in the system

Since the credit institution deposits used for effecting payments and fulfilling the minimum reserve requirements stipulated by the Bank of Latvia are held on the SAMS accounts, the value of funds on these accounts exceeds the value required for the payment execution. The procedures for the liquidity risk containment (an intraday credit line within an intraday credit limit and marginal lending facility) are applied to the SAMS. In 2012, the central bank's marginal lending facility was not resorted to and all payments submitted to the SAMS and accepted were executed on the same business day, the same as in 2011.

To analyse the liquidity conditions and identify the probability of systemic risk, the Bank of Latvia performed an additional analysis (simulations) with the help of the model BoF-PSS2 simulating the payment and settlement system operation and developed by Suomen Pankki Finlands Bank. The data simulations were made on the basis of the data on payments processed within a month in the system and those on liquidity available to the participants. In 2012, the highest value of payments submitted to the SAMS (12.2 billion lats) was recorded in March; hence the data for March were used to perform the analysis of the liquidity adequacy. The value of settlement funds sufficient for enabling the efficient execution of the daily payments was analysed in the simulation, stating the following:

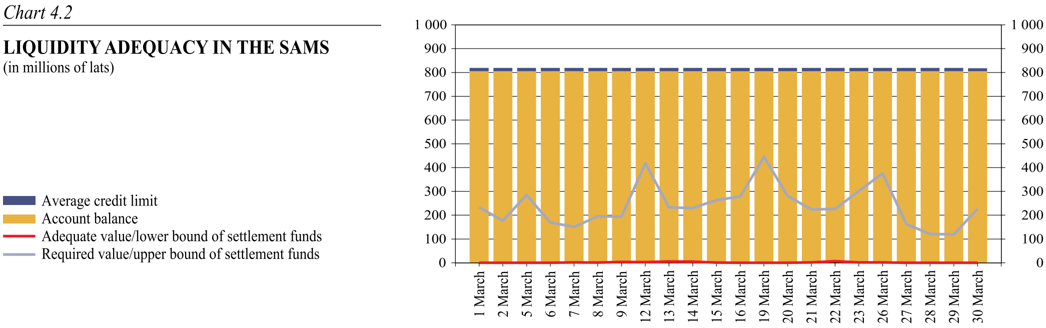
– the value of the settlement funds required for an immediate execution of all payments (upper bound), and

– the value of the settlement funds required for the execution of all payments by the end of the SAMs business day (lower bound).

The results of simulation led to a conclusion that in order to provide for immediate execution of all payments, i.e. once they were submitted to the system, the upper liquidity bound was 5.3 billion lats in March or 30.0% on average of the settlement fund value available to the system's participants (see Chart 4.2). At the same time, in order to provide for the execution of all payments by the end of the SAMs business day, the lower liquidity bound was only 31.2 million lats, which amounted only to 0.1% of the settlement fund value available to the system participants, given the balance on the accounts of the SAMS participants.

Chart 4.2

LIQUIDITY ADEQUACY IN THE SAMS
(in millions of lats)



In 2012, the indicator of the highest necessary liquidity level (peak upper bound) was observed on 19 March (444.8 million lats or 55.3% of the liquidity value available to the SAMS participants on that day) and the indicator of the highest adequate liquidity level (peak lower bound) was observed on 22 March (6.8 million lats).

Taking into account the SAMS liquidity adequacy ratios and the results of the simulation, it may be concluded that in 2012 the liquidity available in the SAMS substantially exceeded the liquidity required for the settlement.

Concentration ratios

Year-on-year, the payment volume concentration ratio of the SAMS declined from 71.9% to 69.9% in 2012 and the payment value concentration ratio fell from 78.4% to 76.8% (see Chart 4.3). The changes in the SAMS participants have contributed to the shrinking concentration ratios.

The annual concentration ratios of SAMS stood below 80% both in terms of the volume and value in 2012. This suggests that systemic risk was not high in the SAMS settlement and had declined year-on-year.

Continuity of the system's operation

In 2012, the SAMS availability ratio was 100.0% in 2012 (99.9% in 2011; see Table 4.1), since there were no incidents which could cause discontinuity of the Bank of Latvia's critical processes over the year.

Chart 4.3

THE SAMS CONCENTRATION RATIOS
(%)

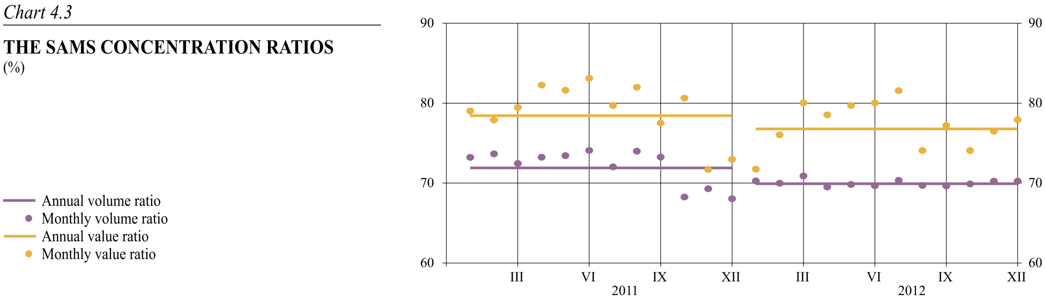


Table 4.1

The SAMS operational continuity indicators

Indicators	2011	2012
Disruptions per annum	4	0
Length of disruptions per annum (minutes)	69	0
System's availability (%)	99.9	100.0

4.2 Securities settlement systems

DENOS is a systemically important securities settlement system, where, in case the system were insufficiently protected against risk, disruption within it could trigger further disruptions among the system's participants or systemic disruptions in the financial system. The LCD maintains the operation of DENOS. It executes cash leg settlement for the securities transactions made in lats on the central bank's accounts in the SAMS.

At the end of 2012, the technical changes and legal amendments were made to DENOS enabling the LCD participants to submit the settlement orders of over-the-counter DVP and FOP transfers, specifying the intended settlement date as a past date. The changes have been implemented to harmonise the settlement with the central depositories of the Baltic States, prepare DENOS for the settlement on TARGET2-Securities platform providing for the above functionality, and thus to contain the default transfers.

The Bank of Latvia issued a positive assessment in 2012 within the scope of the oversight regarding the compliance of DENOS against the recommendations of the European System of Central Banks and the Committee of European Securities Regulators (ESCB-CESR)[42], developed in order to promote the credibility of financial instruments market, ensure a better safeguarding of investors and contain systemic risk.

In 2012, the volume of transfers processed in DENOS declined by 18.9% year-on-year, totalling 50.2 thousand per annum. 58.5% of the total transfer volume (29.4 thousand) were FOP transfers and the residual were DVP transfers. 82.1% of all DVP transfers (17.1 thousand) were executed in lats. Such a fall in the transfer volume is on account of an increasing cautiousness of investors with respect to the equity investment. The volume of FOP transfers rose in the second half of the year (see Chart 4.4) since the securities held at the insolvent JSC Latvijas Krājbanka were transferred to other participants of the LCD.

The total value of DVP transfers processed in DENOS declined by 26.5% year-on-year, totalling 492.1 million lats per annum in 2012. The value of transfers executed in lats

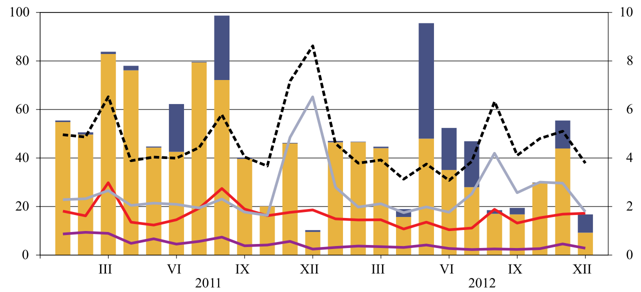
[42] The European Securities and Markets Authority (ESMA) as of 1 January 2011.

was 380.1 million lats (77.2% of the total value of DVP transfers). The above decline was primarily attributable to the shrinking value of transfers related to the transactions of the government debt securities' auctions on account of a decreasing need for the Latvian government funding. In December, the auctions of government securities were not held, hence the value of DVP transfers shrank (see Chart 4.4).

Chart 4.4

VALUE AND VOLUME OF TRANSFERS PROCESSED IN DENOS
(in millions of lats)

Value of DVP transfers in other currencies
Value of DVP transfers in lats
Volume of DVP transfers in lats (in thousands; right-hand scale)
Volume of FOP (in thousands; right-hand scale)
Volume of DVP transfers in other currencies
Total volume (in thousands; right-hand scale)



The assessment of systemic risk

The Bank of Latvia analysed, upon assessing the systemic risk of DENOS, the liquidity adequacy in the system, concentration ratio and continuity of the system's operation.

Liquidity adequacy in the system

More than 99.99% of the transactions were settled in DENOS on the planned settlement date in terms of the volume and value respectively, while 99.99% of transactions outstanding on the settlement date were settled within one or two business days of the outstanding transaction date in 2012, as was the case in 2011. In 2012, the cases of the settlement delay due to insufficient funds were not identified, hence it might be concluded that the LCD participants provided liquidity for cash leg settlement of DVP transfers in the amount of 100% in the SAMS. Taking into account the SAMS liquidity adequacy ratios, it may be concluded that the liquidity of DENOS was sufficient in 2012.

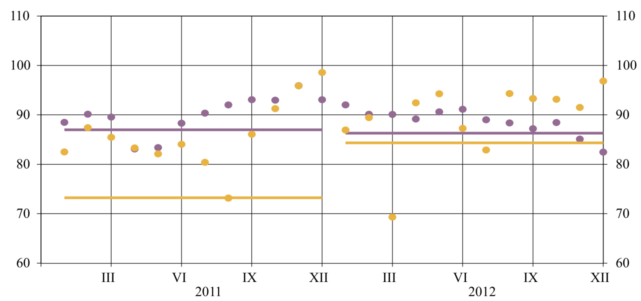
Concentration ratios

The volume concentration ratio of DENOS dropped from 87.0% to 86.3% year-on-year, while the value concentration ratio rose from 73.2% to 84.3% in 2012 (see Chart 4.5). In 2012, the annual concentration ratio of DVP transfers (total gross and net DVP) made in lats and processed in DENOS exceeded 80% in terms of the transfer volume and value, pointing to a highly concentrated market and a need to pay special attention to the systemic risk mitigation measures. Since the value of DVP transfers executed in lats via DENOS is mainly attributable to the settlement for the purchase of government securities, the increasing concentration ratio may be explained by the fact that in 2012 some major players in the market made larger investment in the government debt securities that other participants. High concentration ratios are typical for DENOS as the securities market is smaller in Latvia than in other European countries, hence some major players in the market are more active since they have developed competitive securities transaction service segment or are more actively involved in the securities market on their own behalf.

Chart 4.5

CONCENTRATION RATIOS OF DVP TRANSFERS IN LATS PROCESSED IN DENOS
(%)

Annual volume ratio
Monthly volume ratio
Annual value ratio
Monthly value ratio



To mitigate the probability of systemic risk and ensure secure and smooth settlement, the LCD and NASDAQ OMX Riga stipulated the procedures for the settlement risk containment (DVP, a Guarantee Fund of NASDAQ OMX Riga and a postponement of transactions). The settlement in lats was also executed via the SAMS where the participants had substantial account balances. The total value of DVP transfers made in lats and processed in DENOS only amounted to 0.3% of the total value of payments processed in the SAMS; hence the probability of the materialisation of systemic risk was low.

Continuity of the system's operation

DENOS availability ratio was 99.6% in 2012 (99.9% in 2011). In 2012, two major operational disruptions (incidents) were identified in DENOS and it was not available for 560 minutes overall (see Table 4.2). On the days of identifying the operational disruptions in DENOS, the system's operation was resumed during the same day and the LCD settled all transfers submitted to DENOS, where the settlement date coincided with the date of the identified disruption.

Table 4.2

DENOS operational continuity indicators

Indicators	2011	2012
Disruptions per annum	1	2
Length of disruptions per annum (minutes)	160	560
System's availability (%)	99.9	99.6

Pursuant to the assessment performed by the Bank of Latvia, the operational disruptions in DENOS did not affect the SAMS and its ancillary systems as well as the Bank of Latvia's monetary policy operations and intraday credit operations. Hence it may lead to a conclusion that the operational disruptions in DENOS did not trigger further disruptions among the system's participants and systemic disruptions in the financial system in 2012.

Overall, the probability of systemic risk remained low in the SAMS and DENOS in 2012, since the liquidity was sufficient for the settlement, the SAMS concentration ratios did not point to a high systemic risk and DENOS provided appropriate risk mitigation procedures and both systems ensured high accessibility ratio. The SAMS and DENOS provided efficient and secure payment and settlement environment to their participants and the entire financial system and their smooth operation facilitated the financial stability.

APPENDIX

Credit institutions performance indicators

	Group 1[1]					Group 2[2]				
	2008	2009	2010	2011	2012	2008	2009	2010	2011[3]	2012[3]
Balance sheet items										
Number of credit institutions and subsidiaries of foreign credit institutions	13	13	14	15	14	14	14	15	15	15
Total assets (in millions of lats)	19 176.9	17 702.2	16 988.0	15 257.2	13 499.1	4 066.4	3 976.1	4 979.2	5 669.3	6 730.7
Share of loans in total assets (%)	75.8	76.5	72.5	73.7	71.8	50.7	47.3	40.5	34.0	30.5
Share of deposits in liabilities (%)	35.8	36.6	41.4	41.2	50.6	71.0	77.4	82.0	84.5	83.9
Share of liabilities to MFIs in liabilities (%)	48.8	43.2	39.5	33.1	30.2	9.5	3.4	3.0	1.3	1.1
Loans to deposits ratio (%)[4]	241.0	234.9	199.8	189.9	156.4	71.4	61.2	49.6	40.4	36.4
Profitability										
ROE (%)[5]	0.0	–55.4	–26.3	5.7	4.8	15.1	–3.3	–2.0	5.0	7.6
ROA (%)[6]	0.1	–4.2	–1.9	0.5	0.6	1.1	–0.5	–0.2	0.4	0.6
Cost-to-income ratio (%)[7]	53.2	53.7	76.5	55.0	51.6	48.1	56.5	62.3	57.7	54.6
Profit margin (%)[8]	5.5	–173.7	–112.9	27.3	26.2	27.3	–11.2	–5.3	15.7	20.9
Capital adequacy										
CAR (%)	11.0	14.1	14.5	18.1	17.9	15.6	16.3	15.0	15.6	17.1
Tier 1 ratio (%)	9.5	10.7	11.0	14.9	16.1	14.1	14.7	13.2	12.5	13.4
Liquidity										
lr (%)[9]	51.3	60.9	65.6	56.0	50.6	56.2	66.4	71.3	73.4	69.8
Liquid assets to total assets ration (%)[10]	18.1	16.7	21.6	19.8	22.9	37.9	40.7	46.7	48.0	51.2
Asset quality										
Share of provisions for non-performing loans in the loan portfolio (%)	1.8	8.9	11.7	12.1	8.0	2.7	6.8	8.9	8.6	8.1
Share of loans past due over 90 days in the loan portfolio (%)	3.4	16.2	19.4	18.2	10.8	5.2	17.5	16.2	13.2	12.7

[1] Credit institutions with loans granted to residents and deposits received from residents exceeding 50% of their total loans granted and deposits received.
[2] Other credit institutions.
[3] The Allied Irish Banks Plc Latvia Branch, JSC Latvijas Krājbanka and JSC Parex banka data have been excluded from the profitability, capital adequacy and liquidity ratios for 2011 and 2012.
[4] Excluding general government loans and deposits.
[5] Annualised profit/loss ratio to average capital and reserves of the reporting period (excluding data of foreign credit institution subsidiaries).
[6] Annualised profit/loss ratio to average assets of the reporting period.
[7] Cost-to-income ratio = (operating costs + intangible and fixed asset depreciation and disposal)/(net interest income + + income from dividends + net commissions and fees + profit/loss from trades of financial instruments + financial instrument revaluation result + net ordinary income + adjustment for impairment of available-for-sale financial assets) x 100.
[8] Ratio of pre-tax profit to operating income.
[9] Liquid assets as stipulated by the FCMC (vault cash; claims on the Bank of Latvia and solvent credit institutions whose residual maturity does not exceed 30 days, and deposits with other maturity, if a withdrawal of deposits prior to the maturity has been stipulated in the agreement; investment in financial instruments, if their market is permanent and unrestricted) must not be less than 30% of banks' total current liabilities with residual maturity under 30 days.
[10] Liquid assets = vault cash + claims on central banks and other credit institutions + central government fixed income debt securities.