



LATVIJAS BANKA
EIROSISTĒMA

FINANCIAL STABILITY REPORT 2013/2014



ISSN 1691-1202

Financial stability – condition of the financial system enabling it to withstand shocks, thereby mitigating the likelihood of disruptions in the financial intermediation process which would impair the allocation of savings and investment opportunities.

The purpose of the "Financial Stability Report" is to promote the public awareness of the Latvian financial system and draw attention to systemic risks representing potential threats to the stability of the Latvian financial system.

The Financial Stability Report analyses and evaluates the performance of the Latvian financial system and risks, in particular focussing on the credit institution operation on the basis of financial market data available up to the end of April 2014, economic data available up to the end of March 2014 or later at the moment of compiling the current report, credit institution, NBFS and financial infrastructure data available up to the end of March 2014. 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.

Charts have been compiled on the basis of data provided by Bloomberg (Charts 1.1–1.3), the CSB (Charts 1.4–1.6, 1.10, 1.11, 1.13–1.17, 3.1, 3.2, P1.8 and P1.9), the SEA (Chart 1.6), the ECB, the respective national central banks and/or Latvijas Banka (Charts 1.7, 1.10, 1.11, 1.17, 2.11–2.15, 2.18, 2.32–2.35, 2.39, 3.1, 4.1–4.3, and Tables 4.1, P1.1 and P1.2), SRS (Chart 1.8), Eurostat (Chart 1.9 and 1.12), Latio Ltd. (Chart 1.17), credit institution surveys on risks to the Latvian financial system, organised by Latvijas Banka (Table 1.1 and Chart 1.18), the FCMC (Charts 2.3, 2.4, 2.16, 2.19, 2.22, 2.25–2.28, 2.36, 2.37, 2.39, 3.3, 3.4, Table 2.1, Charts P1.2–P1.5, P1.8 and P1.10, and Tables P1.1–P1.3), lending survey conducted by euro area banks (Charts 2.5–2.10), estimates prepared by Latvijas Banka, also based on the FCMC data (Charts 2.1, 2.2, 2.17, 2.20–2.24, 2.29, 2.31, 2.38, 2.40 and 2.41, Table 2.2, Charts P1.1, P1.6, P1.7 and P2.2), Reuters (Chart 2.39), LCD (Charts 4.4, 4.5, and Table 4.2), and data provided by Latvijas Banka, FCMC, ECB, Eurostat and CSB (Charts P5.1–P5.7), and estimates prepared by Latvijas Banka, based on the household borrowers' survey data.

ABBREVIATIONS

BCBS – Basel Committee on Banking Supervision	FSI – Financial Stress Index
BRRD – Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council	FOP – free of payment
CAR – capital adequacy ratio	FRS – US Federal Reserve System
CDS – credit default swap	GAP – repricing gap or difference between RSA and RSL
CPI – Consumer Price Index	GDP – gross domestic product
CRD IV – Directive of the European Parliament and of the Council on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC	GSII – globally systemically important institution
CRR – Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012	IMF – International Monetary Fund
CSB – Central Statistical Bureau of Latvia	JSC – joint stock company
CIS – Commonwealth of Independent States	LCD – Latvian Central Depository
DENOS – the securities settlement system of LCD	LCR – liquidity coverage ratio
DGF – Deposit Guarantee Fund	Ltd. – limited liability company
DGSD – Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes	MFI – monetary financial institution
DVP – delivery versus payment	NBFS – non-bank financial sector
EBA – European Banking Authority	NSFR – net stable funding ratio
EC – European Commission	OFI – other financial intermediary
ECB – European Central Bank	OSII – other systemically important institution
EEA – European Economic Area	PMI – Purchasing Managers' Index
EKS – electronic clearing system of Latvijas Banka	RIGIBOR – Riga interbank offered rate
EMU – Economic and Monetary Union	ROA – return on assets
EONIA – Euro overnight index average	ROE – return on equity
ESA 95 – European System of Accounts 1995	RSA – interest rate sensitive assets
ESM – European Stability Mechanism	RSL – interest rate sensitive liabilities
ESRB – European Systemic Risk Board	RWA – risk weighted assets
EU – European Union	SAMS – interbank automated payment system of Latvijas Banka
EURIBOR – euro interbank offered rate	SEA – State Employment Agency
Eurostat – statistical office of the European Union	SEPA – Single European Payments Area
FCCM – Financial and Capital Market Commission	SH – solvent household
	SJSC – state joint stock company
	SRM – Single Resolution Mechanism
	SRS – State Revenue Service
	SSM – Single Supervisory Mechanism
	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)
	VH – vulnerable household
	WTO – World Trade Organisation

CONTENTS

EXECUTIVE SUMMARY	4
1. MACROFINANCIAL ENVIRONMENT	8
1.1 External macrofinancial environment	8
1.2 Domestic macrofinancial environment	11
Box 1. <i>Survey of credit institutions on risks to Latvia's financial system</i>	14
1.3 Financial vulnerability of credit institution customers	15
1.3.1 Financial vulnerability of households	15
1.3.2 Financial vulnerability of non-financial corporations	17
1.3.3 Real estate market development	19
2. DEVELOPMENTS AND RISKS IN THE CREDIT INSTITUTION SECTOR	22
2.1 Loan developments and credit risk	22
Box 2. <i>Euro area bank lending survey</i>	25
2.2 Funding and liquidity risk	27
2.3 Market Risk	31
2.3.1 Foreign exchange risk of credit institutions	31
2.3.2 Interest rate risk of credit institutions	33
2.4 Profitability	35
2.5 Capitalisation	38
2.6 Shock-absorption capacity of credit institutions	40
3. DEVELOPMENT OF NBFS	44
3.1 Leasing companies and OFIs	44
3.2 Insurance corporations	46
3.3 The operations of investment funds and private pension funds	48
3.4 Credit unions	49
4. FINANCIAL INFRASTRUCTURE	51
4.1 Payment systems	51
4.2 Securities settlement systems	53
APPENDICES	
Appendix 1. Performance indicators of credit institutions	57
Appendix 2. Capital requirements set out in the new CRD IV/CRR legislative package	62
Appendix 3. Proposals for the leverage ratio and liquidity ratios put forth by the BCBS and EBA	66
Appendix 4. Key elements of the Banking Union and benefits of participation in the Banking Union	68
Appendix 5. Risk diagram as a tool for assessment and communication of the most important financial stability risk changes	72
Appendix 6. Survey-based assessment of household borrowers' financial vulnerability	76

EXECUTIVE SUMMARY

Overall, moderate development is observed in the financial sector; i.e. the loan portfolio quality, operational efficiency and profitability are improving; capitalisation and liquidity remain high; the amount of deposits received has increased substantially, but lending is still weak, although it is slowly recovering. The non-bank financial sector is also profitable, experiencing some growth overall. The changeover to the euro in Latvia on 1 January 2014 was a significant structural change faced by the financial sector. According to the baseline scenario, moderate growth and further gradual improvement of borrowers' solvency are forecast in Latvia. However, the geopolitical tension in Russia and Ukraine increases external risks and uncertainty. Significant deterioration of external circumstances may have an impact on borrowers' solvency, lending recovery, expansion of operation of credit institutions and their profitability prospects. The key systemic risks to Latvia's financial stability stem from instability in the external environment and financial vulnerability of borrowers. The shock-absorption capacity of Latvia's credit institutions is high as their capitalisation and liquidity levels are high. Furthermore, Latvia's joining the euro area and the related participation of Latvia in the Banking Union are essential stabilising factors which along with important supervisory reforms in Europe (adoption of CRD IV/CRR and BRRD) further facilitate overall financial stability.

In 2013 overall, financial stability risks decreased in all main structural risk categories, and this reduction is reflected in the risk diagram developed by Latvijas Banka (see Appendix 5). The credit, solvency, profitability, liquidity and funding risks, as well as domestic and external macrofinancial environment risks diminished. However, at the beginning of 2014 uncertainty in the external macrofinancial environment in relation to the geopolitical tension in Russia and Ukraine and its possible impact on the domestic macrofinancial environment augmented again.

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

- 1) weakening of external demand and continuation of high uncertainty in the external macrofinancial environment that can have a negative impact on Latvia's economic growth, the loan portfolio quality and profitability of credit institutions;
- 2) fragile creditworthiness of borrowers and their limited possibility to absorb additional shocks.

Uncertainty of the external macrofinancial environment remains the key systemic risk to the stability of Latvia's financial system. Previously the external instability was mainly linked with the weak macrofinancial situation in Europe and its sovereign debt risks. Currently the macrofinancial environment and confidence are gradually improving in Europe and its financial markets experience stabilisation; the ability of financial institutions to absorb shocks has increased overall. However, the recovery of economic growth is still fragile, and this fact along with the high private and public sector debt level in many European countries still poses the major risk. Moreover, economic growth in Europe has been threatened by several downside risks: development in global financial markets (including concerns about reassessment of global risk premiums) and emerging market economies and developing countries (hereinafter, developing countries), geopolitical risks in relation to the Russian and Ukrainian conflict, as well as the risk of insufficient structural reforms in European countries.

In this context, it is important that a significant progress has been made in strengthening the European financial system: the new international BCBS standards regulating the prudential requirements for credit institutions (Basel III standards) and harmonised requirements with regard to micro-prudential and macro-prudential supervision in the EU have been implemented as of 1 January 2014 when CRD IV/CRR took effect (see Appendix 3). The creation of the Banking Union and entering into force of its first

pillar – the SSM in November 2014 is a great achievement. Micro-prudential and macro-prudential supervision of credit institutions of the Member States participating in the SSM will be carried out within this pillar in cooperation between the ECB and national supervisory institutions. In preparation for the SSM, asset quality review and stress testing of credit institutions subject to the ECB direct supervision are currently under way. The final agreement on the SRM has been reached. The objective of the SRM is to centralise resolution decision-making on the Banking Union's banks and gradually accrue a resolution fund financed by the banking sector, via the harmonised banking resolution principles and instruments laid down in the BRRD. It will be possible to use this fund for banking resolution upon the fulfilment of certain requirements (see Appendix 4).

Against the background of the European macrofinancial stabilisation, the geopolitical tension in Russia and Ukraine has become a source of essential external risks and uncertainty. The degree of risk depends on further development of the tension. Russia is the third largest export market of Latvia's goods, and its development also affects demand in two largest export markets of Latvia – the neighbouring countries Lithuania and Estonia. Furthermore, Russia plays an important role in Latvia's services export and in Latvia's energy supply. Weaker growth in Russia and other regional countries, depreciation of the Russian ruble, sanctions against Russia and its possible counter-sanctions, as well as growing uncertainty may have a negative impact on exports of Latvia's goods and services, investment, confidence and overall growth. Depending on the degree of risk the negative impact on the real sector may materialise in borrowers' solvency, profitability of credit institutions and future prospects of operation.

At the regional – Nordic and Baltic level there are still concerns about the risk of possible overheating of the real estate market and the high household debt level in Sweden and Norway, the home countries of Latvia's largest parent credit institutions, and the potential effect of this risk on the financial systems of the Nordic and Baltic countries, inter alia on the borrowing opportunities of parent banks in financial markets. However, it should be noted that both Sweden and Norway are implementing risk mitigation supervisory measures, and borrowers' creditworthiness in these countries remains high.

According to the baseline scenario, moderate, although slightly slower, domestic economic growth will continue unless the impact of unfavourable external factors intensifies. The increase in real wages, gradual employment growth and low interest rates will support households' solvency and private consumption that will continue to be the key driver of growth. However, the persistence of uncertainty in the external environment and changing confidence hamper recovery of investment which has been stagnating over the past quarters. The continuation of weak investment, including the fall in investment in manufacturing, is a medium-term economic development risk.

Against the background of economic growth and further deleveraging, the financial vulnerability of both households and non-financial corporations is decreasing overall and credit risk indicators are improving. Loans past due over 90 days granted to residents have shrunk almost by a third since the beginning of 2013. Restructured loans and their share are contracting and the provisions made for these loans are rising. However, the stock of restructured loans is still rather high, and the amount of newly and repeatedly restructured loans remains significant. Moreover, the results of the household borrowers' survey carried out by Latvijas Banka suggest that the share of financially vulnerable households and their sensitivity to income, interest rate and unemployment shocks has declined marginally and that there is still a significant share of financially vulnerable borrowers whose financial situation is improving slowly. The financial position of non-financial corporations is more volatile; however, the overall trend in a longer term is positive. Heightening uncertainty in the external macrofinancial environment potentially increases credit risk. At the same time, the results of the credit risk sensitivity analysis and stress tests carried out by Latvijas Banka suggest that the capacity of Latvian credit institutions to absorb higher credit risk, including potential shocks stemming from deterioration of the external macrofinancial environment, overall is high.

Thus, on the one hand, there are several factors favourable for gradual lending growth, while, on the other hand, there is still a sufficient number of reasons to remain vigilant with regard to demand for and supply of loans. The results of lending surveys show that the moderate trend of the increase in demand for loans experienced as of 2010 has stalled and the share of the households planning to borrow is still small as the level of savings and disposable income is low. Non-financial corporations are also cautious and substitute loans from credit institutions with equity capital or use other funding sources, including EU structural funds. The surveyed entrepreneurs acknowledge that access to financing in general is not a notable obstacle to development. According to the assessment provided by entrepreneurs the main constraint for receiving loans from credit institutions is the high credit standards and the price of loans. Credit institutions, in turn, believe that the major obstacles to lending from the supply perspective are uncertainty in the domestic legal environment (mainly with regard to the plans to substantially alleviate insolvency proceedings of natural persons), attainment of strategic objectives of the credit institutions and problems in the existing loan portfolio, as well as the limited number of the potential borrowers meeting the lending standards. Provided that the external instability increases the overall caution, the annual growth rate of lending is expected to remain in negative territory. The domestic loan portfolio has decreased more than by one third over the past five years. This can largely be considered an adjustment of the excessively accrued debt level before the crisis, particularly taking account of the large share of delinquent loans. However, a lasting negative lending growth rate poses a risk to economic growth and profitability prospects of credit institutions.

Deposits play a pivotal (and increasing) role in funding of credit institutions in both segments of the Latvian banking sector, i.e. in the segment of banks servicing mainly residents and in the segment specialising in service of non-residents and having no close links with the domestic economy. In the resident service segment dominated by subsidiaries and branches of Nordic banks, funding provided by parent banks continues to shrink along with the decline in lending, but resident deposits significantly increased at the end of 2013 in connection with the euro changeover. The funding of credit institutions specialising in non-resident service mainly consists of non-resident deposits. Overall, the growth rate of non-resident deposits tends to slow down slightly. Both resident and non-resident deposits are short-term or demand deposits. Therefore, the share of long-term resources is declining in funding of credit institutions and the maturity mismatch between assets and liabilities of credit institutions is increasing. At the same time, liquidity indicators in both segments of credit institutions are high – well above the minimum liquidity requirements set by the FCMC. Higher liquidity and capital requirements set by the FCMC for credit institutions focusing on servicing non-residents additionally limit liquidity and funding risks in this credit institutions' segment. The stable financial situation of parent banks mitigates the refinancing risk in subsidiaries and branches of Nordic banks. The results of the liquidity stress tests carried out by Latvijas Banka suggest that the liquidity risk is limited both for credit institutions servicing residents and non-residents. At the same time, further increase in the maturity mismatch between assets and liabilities poses a potential risk which has to be monitored closely. Although possibilities of credit institutions to notably boost long-term financing are limited, further monitoring is required with regard to whether their ability to withstand potential funding and liquidity shocks remains high enough. Further monitoring and assessment of the potential risks related to servicing non-residents is also required.

The year 2013 was the second consecutive year when the credit institution sector in general recorded profits. Although credit institutions incurred substantial costs due to the euro changeover and their income from currency exchange and commissions and fees will be lower in the future, an increase in credit institution profitability is observed as the loan portfolio quality is improving and expenditure on provisions is declining. The contraction of liabilities to MFIs and the low interest rates provide an opportunity to reduce funding costs. Credit institutions also make efforts to advance their operational efficiency and increase return on equity.

Capital adequacy of credit institutions and their ability to absorb unexpected losses remain high. CAR and Tier 1 capital adequacy ratios of credit institutions have reached their historical highs. The paid-up share capital of credit institutions is the main component of own funds, ensuring high quality of the credit institution capital. The high level of the average leverage ratio of credit institutions also suggests that their capitalisation is high. Although credit institutions are expected to increasingly focus on efficient capital management in the future, their capitalisation level is expected to be high also in 2014.

1. MACROFINANCIAL ENVIRONMENT

On the backdrop of European macrofinancial stabilisation, geopolitical tension in Russia and Ukraine has become a major external risk and source of uncertainty. Decelerating growth in Russia and other countries in the region, depreciation of the Russian ruble, sanctions against Russia and its possible counter sanctions accompanied by overall uncertainty could have an adverse effect on Latvia's exports, investment, confidence and overall development. Depending on the likelihood of risk materialisation, its spillovers to the real sector may affect borrowers' solvency, profitability of credit institutions and the future growth outlook. According to the baseline scenario, provided that the impact from adverse external factors does not amplify, the economy will proceed on the track of moderate, albeit slightly slower growth, while borrowers' creditworthiness is likely to continue to improve modestly. Persistent external uncertainty and unstable confidence hamper investment recovery thus posing a risk to the economic advance in the medium term. Given the on-going economic growth and the continuous deleveraging, the vulnerability of both households and non-financial corporations is being broadly reduced. Nevertheless, the creditworthiness of a part of borrowers is recovering rather slowly, and their ability to absorb additional shocks still remains limited. Some upswing in the activity on the real estate market is observed.

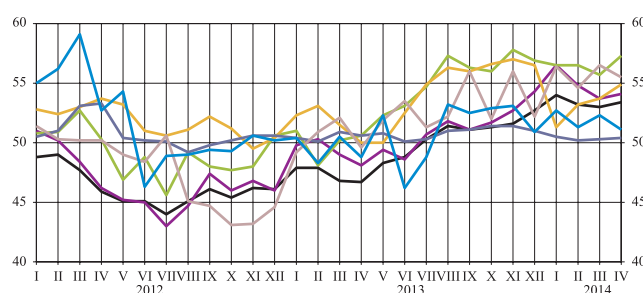
1.1 External macrofinancial environment

External risks remain notable. Of these, the weakening in Russia's economy and the Russian–Ukrainian geopolitical conflict figure prominent. On the global scale, the discourse about risks related to the reassessment of risk premium and, consequently, an eventual interest rate rise is intensifying. Meanwhile, the signs of the euro area economic recovery are becoming more pronounced, and so far the risk premium repricing process going on in the global financial markets has had no negative effect on the financial markets in Europe. Building a stronger EMU is in progress, which, coupled with a gradual economic advance in the euro area, abates tensions related to the sovereign debt crisis.

The external environment remains volatile. Positive trends are mainly related to some recovery signals of the euro area economy. Despite the concerns about eventual deepening of the euro area sovereign debt crisis in early 2013 supported by uncertainty surrounding the growth outlook for the euro area economy, the problems of Cyprus and unstable political situation in Spain and Italy, the second half of the year saw such promising developments as gradual improvement in the economic situation and sentiment, stabilisation in the euro area financial market, and improved access to market financing for banks, governments and non-financial corporations. The fourth quarter GDP data of 2013 confirm that the euro area economy has been growing for already three consecutive quarters and has exited recession. The leading economic indicators are continuously on the rise and since December 2013 hover above their historical averages, thereby pointing to a gradual recovery in the euro area also in 2014 (see Chart 1.1). In 2014 overall, the GDP growth is expected to turn positive, and according to the ECB June projections it is likely to approach 1.0%. The outlook for other advanced regions has also improved, except for Japan, for which a slower-than-previously-projected GDP growth in 2014

Chart 1.1

PMI IN MANUFACTURING



is predicted by the IMF. According to general IMF forecasts, the growth rate of global economy (mainly in developing countries) is likely to decelerate somewhat.

Central bank activities and communication continue to be the focus of the financial markets. In 2013, the ECB lowered, on two occasions, the interest rate on the main refinancing operations. Amid low inflation and sluggish lending conditions, the ECB's Governing Council resolved at its meeting in June 2014 to lower the interest rate on the main refinancing operations (to 0.15%), the interest rate on the marginal lending facility (to 0.40%), and the interest rate on the deposit facility (to -0.10%) as well as to introduce additional economic stimulus measures, including conducting of new targeted longer-term refinancing operations in September. These ECB monetary policy decisions supporting economic recovery and its statements about the launching of extra instruments, when necessary, facilitated stabilisation of the European financial markets. So far, the intra-euro-area political events have had limited impact on financial markets. Overall, the sovereign debt insurance costs for most European countries have been declining since the beginning of 2013, and a substantial contraction in debt servicing costs was also observed in peripheral countries (see Charts 1.2 and 1.3).

Chart 1.2

GOVERNMENT 10-YEAR BOND YIELDS (%)

— USA
— Germany
— Italy
— Spain
— Sweden
— Norway
— Portugal

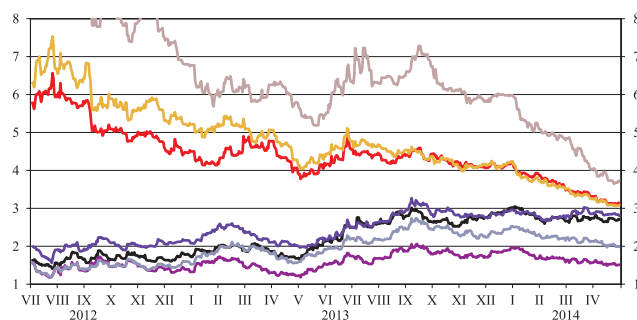
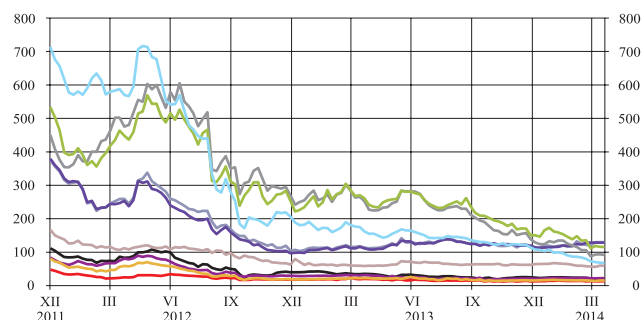


Chart 1.3

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

— Germany
— Finland
— Norway
— Sweden
— Latvia
— Lithuania
— Estonia
— Spain
— Italy
— Ireland



Risks related to reassessment of risk premium and the subsequent increases in interest rates elevated in the global financial market in 2013. Excess liquidity, having accumulated in the financial markets as a result of central banks' stimulating measures over the last few years, as well as investors' search for safe haven facilitated a drop in the yields on safer-deemed government securities. As a consequence, investors' interest about riskier and thereby more profitable government and corporate securities increased and yields contracted also in this bond segment. In the spring of 2013, the inconsistency between the low level interest rates on government and corporate debt, on the one hand, and the fundamental indicators, on the other, added momentum to the discussions about risks eventually resulting from risk premium repricing and interest rate hikes. Moreover, in 2013, notable policy disparities across the world's leading central banks came to the fore: their impact on global financial market developments was significant then and continues to drive financial market tensions also in 2014. The gradual tapering of the asset purchase programme started by the FRS in December 2013 was the central event. Even though the concerns about the alleged destructive effects of this FRS's statement on global financial markets did not come true, risk perception revaluation processes became more intensive

on the global scale, amplifying capital outflows from the developing countries and foreign exchange market volatility. These countries responded differently to capital outflows and depreciation of their national currency. Central banks of some countries pushed up interest rates and engaged in massive interventions, thereby deteriorating the growth perspective of their own economies.

So far, these processes have had limited impact on the euro area financial markets. The improving economic indicators and investor expectations for the ECB's expansionary policy in the near future have ensured the status of a safe haven for the euro area and facilitated an increase in investors' risk appetites, including investing in economies under stress, in its financial markets. Consequently, debt financing and insurance costs in these countries contracted markedly, financial market fragmentation continued to lessen, and Italy, Spain and Greece succeeded in attracting financing from bond markets.

Nevertheless, given the persisting fragility of the euro area economy, geopolitical tensions stemming from the Russian–Ukrainian conflict and changing sentiment of investors, these positive trends may turn out to be unstable. A moderate rise in the ECB's composite indicator of systemic stress (CISS), which in 2013 hit the early-2007 low, points to some increase in tension. Reassessment of risk premium in Europe would translate into more costly financing and/or its limited availability for governments, non-financial corporations and banks amid high refinancing needs in 2014 and 2015; it would also signify adverse repricing of bank securities portfolios and deterioration in the quality of loan portfolios due to weaker corporate financial positions with an effect on bank profitability indicators.

The unfavourable course of macrofinancial developments in Russia, which was even more amplified by capital increasingly flowing out of Russia due to the Russian–Ukrainian conflict and the threatening economic sanctions, posted aggravating risk to external demand in Latvia and a number of economies in Europe. In recent years, Russia's economic growth has notably decelerated amid weak exports and investment. In 2013, the recorded GDP growth stood at a mere 1.3% (3.4% in 2012). Persistence of the conflict and resulting uncertainty may be a significant drag on the investment environment, acting as a driver strongly scaling down foreign investment in both countries. A notable depreciation of the Russian ruble and the Ukrainian hryvnia as well as a marked drop in major stock exchange indices have already been observed. Such deterioration of the political and economic situation in Russia and Ukraine increases risk for Latvia's exports of goods and services to these markets (Russia and Ukraine account for 10.8% and 0.4% respectively in total goods and services exports from Latvia). This impact may spill over to goods and services exports from Latvia to other markets as well, particularly so if economic sanctions against Russia are imposed. The claims of Latvian credit institutions¹ on Russian and Ukrainian residents are insignificant. In March 2014, they accounted for 4.3% of credit institutions' total assets, whereas the funds attracted from the respective residents made up only 4.0% of total assets of the credit institutions sector. Deterioration in the economic situation of Russia and Ukraine may have adverse repercussions also for the recovery in the euro area. The extent of any adverse effect will depend on the further course of events and activities of the two conflicting parties.

In Sweden and Norway, home countries of the largest credit institutions of Latvia, the growth continues to be quite subdued yet stronger in comparison with other European economies. At the close of 2013, the Swedish economic growth accelerated on account of robust domestic consumption, and GDP picked up 1.5% in annual terms overall. In Norway the rate of GDP growth lost some momentum in 2013 (2.0%).

Meanwhile, continued accumulation of risks related to unbalanced development of household debt and housing market was observed in Sweden and Norway. Housing prices continued to accelerate in Sweden, and concern about eventual excessive price rises for particular types of housing persisted. Loans granted to households kept on growing. In Norway, however, the dynamics of housing price rises softened, with the respective prices even going down in the concluding months of 2013. Nonetheless, these processes did not

¹ Funds with correspondent banks, loans granted and investment in securities.

as yet bear any implications for the household borrowing rate, and household indebtedness continued to grow. It should be noted that in both Sweden and Norway risk mitigating supervisory measures are being implemented and borrowers' creditworthiness is high.

Alongside the growing threats of global risk premium reassessment, the concerns about the reliance of Nordic parent banks on the short-term market financing and market confidence are also aggravating. So far, the risk premium reassessment processes had limited effect on the financial markets of Sweden and Norway. In 2013, the yields on government bonds of the two countries increased in line with the bond market trends of the developed countries; however, since September 2013, the yields on the Swedish government bonds have been gradually falling. In 2013, the CDS prices were still very low in both countries. Amid volatile financial markets, the CDS prices of the parent banks grew slightly in January 2014, albeit rebounded to an even lower level quickly. Overall, credit risk of Scandinavian countries and their major banks remains low.

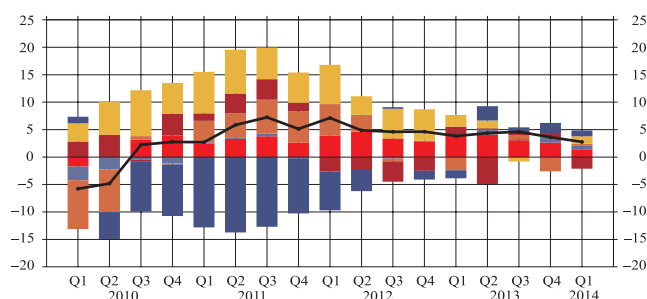
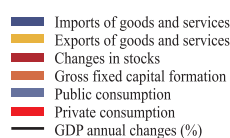
1.2 Domestic macrofinancial environment

In 2013, risks related to the domestic macrofinancial environment gradually abated. The economic growth was resilient, and Latvia's GDP picked up 4.1%, albeit at a slower pace than in previous years. For 2014, moderate economic growth of 3.3% is projected. Improving labour market conditions and rising real wages due to low inflation and moderately growing nominal remuneration facilitate gradual improvement in the creditworthiness of non-financial corporations and households. Latvia's entry into the euro area also supports risk mitigation. Several international credit rating agencies upgraded Latvia's credit rating in the first half of 2014, thus acknowledging robustness of the country's economic growth. Domestic factors are overall still supportive of further economic development, while external risks are gaining momentum due to the Russian–Ukrainian conflict and a weaker demand in Russia that may reduce confidence and investment dynamics.

In 2012, exports, investment and private consumption contributed equally to the GDP growth; in 2013 and 2014, however, private consumption took the lead. Its increase was mainly on account of higher disposable income, which, in turn, was driven by rising average wages and salaries and growing employment. In contrast to the pre-crisis period, the income growth is more sustainable and consistent with labour productivity gains. In 2013, spending of savings also ranked prominent as consumption boosting factor. Although households placed part of their cash savings on current accounts in anticipation of the euro changeover, a certain share of those savings was actively used, thereby boosting consumption (see Chart 1.4).

Chart 1.4

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



The weak investment growth is considered a discouraging trend: gross fixed capital formation decelerated in 2013. Non-financial investment data show that public sector investment, and namely, investment in public buildings, road infrastructure, pipelines, etc., grew faster on account of the EU funding. The expansion of private investment, on the other hand, was weaker and in 2013 determined to a large extent by external uncertainties, "wait-and-see" stances associated with the euro changeover and completion of large-scale investment projects. Although in early 2014 gross fixed capital formation recovered some momentum and in 2014 and 2015 the economy will be entitled to larger

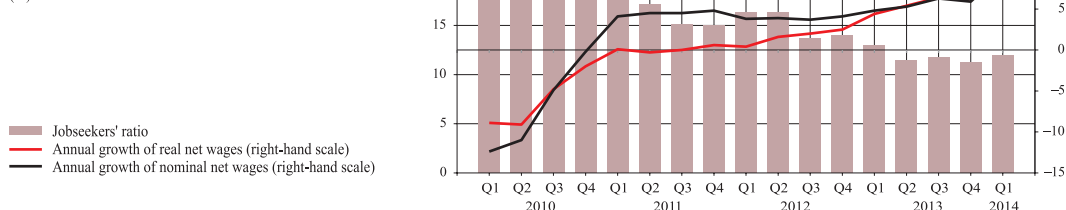
financing from the EU funds, on account of external uncertainties the investors are likely to maintain their wait-and-see position at least in part.

Real exports of goods and services display certain growth rate deceleration. Overall exports grew by 1.4% in 2013 and maintained similar dynamics also in early 2014. Although competitiveness of exporters remains robust, the weak external demand slows down export development. Discontinuation of JSC Liepājas metalurģs operation had an additional negative impact on exports. At the same time, growth in export performance of several groups of goods (including such major ones as wood, food products, machinery and electrical equipment) was positive also in 2013. With economies of the EU Member States gradually recovering, Latvia's exports again expanded in the EU direction. According to the WTO data, Latvia's market shares in global imports are continuing to rise. As the deficit of foreign trade in goods declined and the surplus of foreign trade in services grew, the current account deficit of Latvia's balance of payments contracted and in 2013 stood at -0.8% of GDP. In the first quarter of 2014, it accounted for 2.2% of GDP.

Latvia's labour market situation is becoming more favourable for the employees, thereby supporting gradually improving purchasing power of the population. From its peak in early 2010, the unemployment rate shrank by almost a half, i.e. to its historical average. According to the CSB's labour survey data, job seekers at the end of 2013 accounted for 11.3% of the economically active population (an annual decrease of 2.6 percentage points; see Chart 1.5). Registered unemployment, in turn, declined by 1.0 percentage point over the year, standing at 9.5% of the economically active population at the close of it. In 2013 in general, the number of the employed recorded a dynamic upswing. Employment has increased on account of new job vacancies in the private sector, thus its rise is sustainable rather than a result of artificially implemented anti-crisis measures.

Chart 1.5

JOBSEEKERS' RATIO AND ANNUAL GROWTH RATE OF NET WAGES
(%)



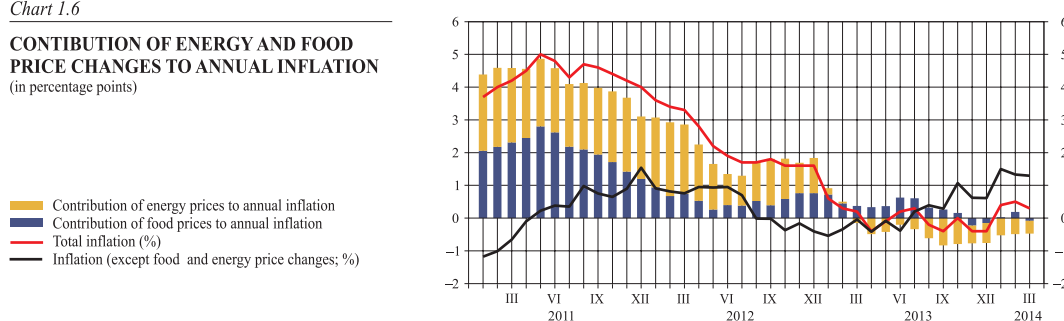
The average wages and salaries for full-time employment in the economy are recovering their pre-crisis levels. Remuneration increases are observed across all sectors of the economy. Meanwhile, the annual growth in nominal average monthly gross wages does not exert a significant pressure on competitiveness and inflation. Several one-off factors determined the acceleration in labour remuneration observed in the first quarter of 2014. Low inflation supports a robust growth in the purchasing power of wages, with a balance between wages and productivity gains preserved in the medium term, for it is an important prerequisite for a positive contribution from the domestic macrofinancial environment to financial stability in Latvia. Duly accounting for deceleration in the employment growth rate towards the close of 2013, a further economic advance is assumed to rely more strongly on labour productivity gains providing a fundamental basis for remuneration rises. Rather notable decline in unemployment rate in the last three years in Latvia is expected to ease somewhat in 2014. In the first quarter of 2014, a slight rise has already been recorded. A sustainable decline in unemployment rate in Latvia is possible on account of decreasing structural unemployment, which needs to be facilitated not only by a resilient economic growth but also by intensive implementation of labour market policy measures.

Amid still fragile creditworthiness of households and non-financial corporations, a positive development is the persisting and atypically low inflation for economic growth, mainly determined by external and supply-side factors (see Chart 1.6). Although

economic growth is generally likely to translate into an extra pressure on prices, it has not been observed. The demand effects on consumer prices were set off by a commensurate productivity and wage rise, which has not turned into a cost factor pushing up prices either. Meanwhile, such essential cost factors as energy and food prices do not exert pressure on the prices of goods and services supplied by the other sectors. The global energy prices positively impact the respective domestic prices, too, whereas some food prices record contractions on the global scale. In 2013, both average inflation according to the national methodology and harmonised index of consumer prices (HICP) stood at 0.0%, while the average annual growth rate of producer prices in manufacturing fell to 1.5%. Though remaining low in 2014, inflation is approaching rates typical for economic growth and is returning to the positive territory. On the whole, however, price hike effect on borrowers' creditworthiness is insignificant.

Chart 1.6

CONTRIBUTION OF ENERGY AND FOOD PRICE CHANGES TO ANNUAL INFLATION
(in percentage points)



In 2013, total expenditure grew at a faster pace than did revenue, and the general government consolidated budget recorded a deficit, estimated on a cash flow basis, of 0.6%; anticipated deficit, estimated on the accrual basis (ESA 95), amounts to 1.7% of GDP. In comparison with 2012, when a surplus was recorded, the 2013 deficit, estimated on the cash flow basis, resulted from a smaller basic budget surplus and a higher consolidated local government budget deficit; as to the deficit of the central government special budget, it remained almost unchanged. In 2013, contributions to the pension capital of the 2nd pillar of pension scheme were raised, affecting the budgetary balance and translating into a departure from structural deficit of 0.5% of GDP achieved in 2012. The Law on Fiscal Discipline came into effect on 6 March 2013, and the Fiscal Discipline Council was established towards the close of the year. Consequently, the fiscal policy implementation in the future will be based on sustainability principles. At the end of 2013, the general government debt estimated according to the cash flow principle amounted to 35.0% of GDP, whereas according to the ESA 95 methodology it reached 39.1% of GDP.

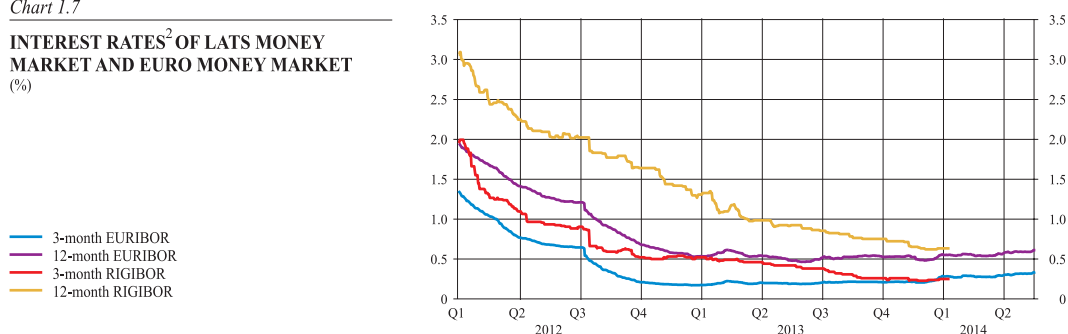
Latvia's long-term financing opportunities continue to improve. It is largely attested by a successful issuance of Latvia's 7-year Eurobonds in January 2014 (at 2.815% rate) and 10-year Eurobonds in April 2014 (at 2.961% rate). Overall, interest rate on the Latvian government 10-year bonds in the secondary market dropped from 4.57% in 2012 to 3.34% in 2013 and to 2.80% in April 2014. In 2013, outstanding corporate debt securities in all currencies registered with the LCD grew by 268.2 million euro (to 643.1 million euro), because in order to obtain funding necessary for their operation, credit institutions and non-financial corporations diversified their sources of financing. In 2013, an important step made towards the development of the domestic financial market was the introduction of savings bonds, with the market mostly focusing on the offer of long-term savings bonds.

In 2013 Latvia had fulfilled the Maastricht criteria convincingly, its credit ratings had been upgraded and ample lats liquidity surplus was maintained in the interbank market; consequently RIGIBOR, Riga Interbank Offered Rate, continued on a downward trend throughout the year until it reached a record low (see Chart 1.7). On the average, 3-month RIGIBOR stood at 0.36% and 6-month RIGIBOR was 0.61%. Also, EURIBOR was lower in 2013 than in 2012. As a result, in 2013 overall, the interest payment burden on resident households and non-financial corporations, whose interest rates on loans were pegged to the lats or euro money market indices, eased somewhat. At the same time, EURIBOR

has slightly risen since the end of 2013 due to somewhat reduced liquidity surplus of euro area credit institutions. Nevertheless, the interbank market interest rates remain very low and their increases are marginal, consequently not exerting any pressure on borrowers' interest payment burden and their creditworthiness.

Chart 1.7

INTEREST RATES² OF LATS MONEY MARKET AND EURO MONEY MARKET (%)



Overall, the FSI dynamics also testify stable development of the domestic financial system. In 2013, the FSI value fluctuated around its long-term average (see Chart A1).

The domestic factors remain overall supportive for further growth. The economic sector indicators for the fourth quarter of 2013 and operative data for the first quarter of 2014 suggest that the economic development has been robust yet slightly slower. It is projected that GDP is going to pick up 3.3% in 2014. Nevertheless, the external risks associated with the Russian-Ukrainian conflict and the sluggish economic growth in Russia may impact economic progress and sentiment indicators in Latvia and the region adversely.

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

In 2013 and 2014, Latvijas Banka continued to conduct credit institution surveys on risks to Latvia's financial system. 14 credit institutions were surveyed. According to the assessment by credit institution experts, major risks that may potentially influence the Latvian financial system within 6 upcoming months are the persistence of weak lending and negative repercussions of the deepening EU sovereign debt crisis for the Latvian economy (see Table 1.1 for a full summary of risks). The likelihood of the weak lending persistence risk and its potential impact has been generally estimated as average. In credit institutions' view, the likelihood of the deepening of the EU sovereign debt crisis has eased somewhat, yet overall it and its potential impact is still assessed as medium. Among major risks, credit institutions repeatedly refer to eventual worsening of non-financial corporation creditworthiness and assess the likelihood and potential impact of this risk as medium.

Table 1.1

ASSESSMENT OF POTENTIAL RISKS (RESULTS OF RISK SURVEY CONDUCTED IN JANUARY 2014)³

	Indicator	Expected likelihood	Potential impact
1.	Prolonged weak new lending	3.4	2.9
2.	Deepening of the EU sovereign debt crisis and its potential adverse impact on Latvia's economy	2.6	3.5
3.	Deterioration of non-financial corporation creditworthiness	2.6	3.2
4.	Deterioration of household creditworthiness	2.3	3.2
5.	Deterioration of Latvia's economic situation	1.9	3.5
6.	Rapid changes in real estate prices	1.7	3.5
7.	Deterioration of availability of financing for Latvian credit institutions	1.9	2.9
8.	Excessive pace of deleveraging	1.9	2.6
9.	Population's falling confidence in stability of Latvia's financial system	1.6	2.9

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

Note. Square brackets mean that the interval endpoint is included, parenthesis – that it is not included.

[0.0–0.5)	[0.5–1.5)	[1.5–2.5)	[2.5–3.5)	[3.5–4.5)	[4.5–5]
-----------	-----------	-----------	-----------	-----------	---------

² Latvijas Banka discontinued the calculation of RIGIBOR as of 1 January 2014.

³ Risk likelihood and potential impact are arithmetic means of respondents' assessment according to the risk level scale.

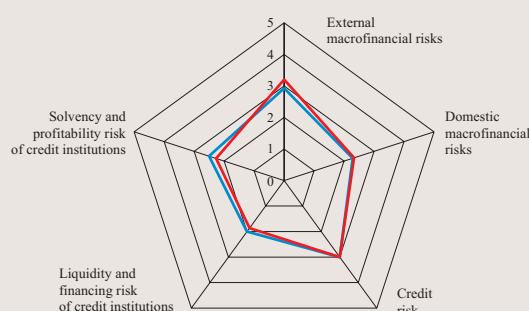
Having assessed other risks, several credit institutions in their comments referred to the impact of legal risks on the financial system, primarily arising from potential amendments to the Insolvency Law with negative effects on the lending policy, as being potentially strong⁴.

Assessing the five risk categories defined by Latvijas Banka in terms of risk level, credit institutions deem the credit risk and external macrofinancial risk as most significant (see Chart 1.8). Overall, these risks are assessed as being of average level. Credit institutions assessed the remaining other risk categories, i.e. the liquidity and financing risk, profitability and solvency risk as well as the domestic macroeconomic risk, as being lower than average. Vis-à-vis the results of the January 2013 survey, the assessment of solvency and profitability risks has been raised somewhat, while that of the external macrofinancial risk received a slightly lower assessment.

Chart 1.8

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

— 2013
— 2014



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

1.3 Financial vulnerability of credit institution customers

Amid the environment of stable economic growth, financial vulnerability of credit institution customers kept on easing in 2013. Labour market gains and the increasing real income promoted creditworthiness of households and non-financial corporations. Activity continued to strengthen gradually in the real estate market, too. It should be noted, however, that gains in creditworthiness come slowly for a part of borrowers because of their excessive debt obligations.

1.3.1 Financial vulnerability of households

The household financial situation kept on improving gradually in 2013. It was supported by labour market gains and rising labour remuneration, which coupled with low inflation facilitated higher disposable income. This is well confirmed also by substantial contribution from private consumption to GDP growth and a gradual rise in the economic sentiment indicator of consumers. Compared with 2012, unemployment expectations of consumers declined and the assessment of the outlook for household financial situation improved (see Chart 1.9). The effect from the increase to 320 euro of the minimum monthly wages and salary as of 1 January 2014 on the income of the employed, particularly for low-income groups, has been positive, as has the impact of amended legislation slightly reducing the labour tax burden and of other tax allowances⁵.

On the whole, however, the household creditworthiness should be appraised as fragile and their ability to absorb financial shocks as limited. The results of the survey of household borrowers consolidated by Latvijas Banka in 2013 suggest that the share of financially

⁴ Draft law passed by the Saeima of the Republic of Latvia in the 2nd reading provides for the settlement of debt obligations after the sale of collateral or the so-called principle of returned keys, thus reducing the period of obligation settlement substantially. Credit institutions stated that as a result of passing such amendments the volumes of newly issued loans would contract notably as tougher credit standards would come into effect (e.g. increased amount of first down payment on loans for house purchase, higher margin, etc.).

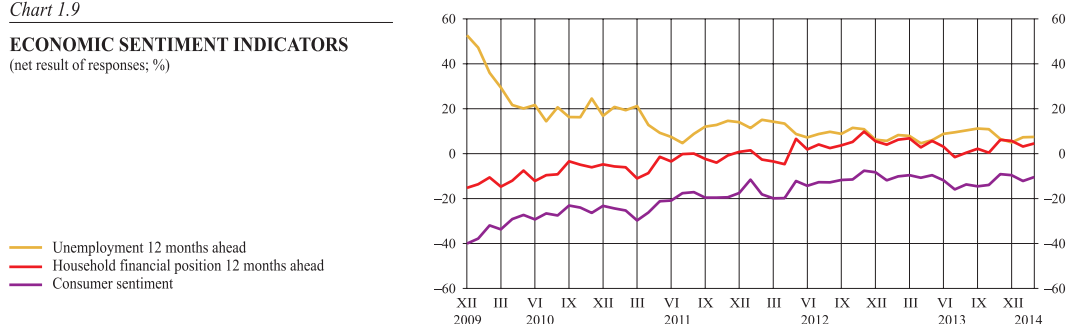
⁵ The Law "Amendments to the Law "On State Social Insurance" of 6 November 2013 (in effect as of 1 January 2014) provides for reducing the rate of compulsory social security contributions by employee from 11% to 10.5% and by employer from 24.09% to 23.59%. Also, personal income tax relief for dependents and the untaxed minimum was raised to 165 euro and 75 euro respectively.

vulnerable households and sensitivity towards income, interest rate and unemployment shocks have decreased only marginally. Consequently, despite the overall trend towards household financial gains, a large share of financially vulnerable borrowers still exists, and their situation is improving very slowly (see Appendix 6).

Chart 1.9

ECONOMIC SENTIMENT INDICATORS

(net result of responses; %)



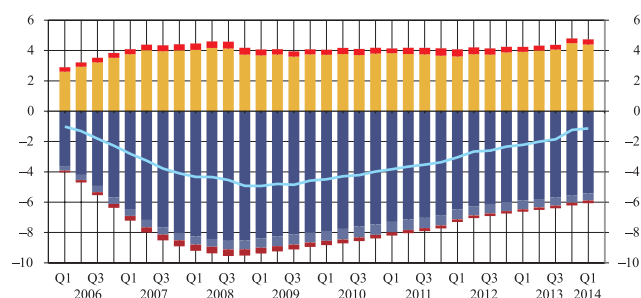
Under the impact of both contracting nominal debt amount and growing GDP and disposable income, the household debt burden continued to ease in 2013 (see Chart 1.10). At the end of the fourth quarter of 2013, the ratio of total household debt (to MFIs and leasing companies) to GDP was 26.7% (a decrease of 3.9 percentage points against end-2012). Meanwhile, the ratio of household debt to disposable income stood at 44.2% at the end of 2013 (6.9 percentage points less than at end-2012). The upcoming changeover to the euro notably boosted household deposits with MFIs towards the close of 2013. In the fourth quarter of 2013, deposits to GDP made up 20.7%. Thus, the net household position vis-à-vis MFIs and leasing companies improved notably at the end of 2013, and its ratio to GDP was 5.3%. In the first quarter of 2014, in the meantime, the volume of household deposits shrank somewhat (deposits with MFIs to GDP stood at 20.2%), yet debt to MFIs and leasing companies continued to decrease (to 25.8% of GDP; 29.6% of GDP in the first quarter of 2013); as a result, the net position vis-à-vis MFIs and leasing companies continued to improve slowly.

Chart 1.10

HOUSEHOLD DEPOSITS WITH MFIs, LIABILITIES TO MFIs AND LEASING COMPANIES, NET POSITION VIS-À-VIS MFIs AND LEASING COMPANIES

(in billions of euro)

- Deposits with credit unions
- Long-term deposits with credit institutions
- Short-term deposits with credit institutions
- Debt to leasing companies
- Debt to credit unions
- Short-term debt to credit institutions
- Long-term debt to credit institutions
- Net position



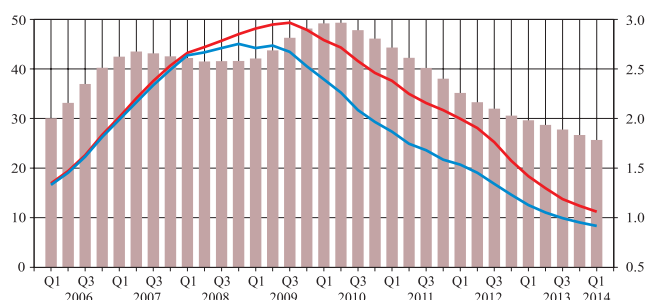
With real income consistently on the upward trend and persistently low interest rates, the interest payment burden for households eased as well, both in terms of absolute interest amount paid and also vis-à-vis disposable income (see Chart 1.11). In 2013, the ratio of household interest paid to GDP was 0.95% (1.23% in 2012). The trend continued also in the first quarter of 2014 when household interest paid to GDP stood at 0.92%. The household creditworthiness gains were reflected also by a decline in the difference between interest estimated and paid⁶, which implies that households were constantly improving on their debt obligations. Whereas no interest rate rises are projected in the near term, their eventual rise from the current historical low in the future may present problems to borrowers and push up the share of financially vulnerable households.

⁶ 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.

Chart 1.11

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

Household debt to MFIs and leasing companies
Household interest payment estimated (right-hand scale)
Recognised interest income from loans to households (right-hand scale)



In 2013, the number of insolvency petitions filed by natural persons fluctuated, with the total number of declared insolvency proceedings (1 571 proceedings) recording a 14.6% rise in comparison with 2012. Meanwhile, the completed insolvency cases, albeit still in small numbers, increased markedly from 92 in 2012 to 172 in 2013. The main reasons for termination of proceedings still were non-application of the debt obligations extinguishing procedure after the completion of bankruptcy procedure, or detection of restrictions for the application of insolvency proceedings, and implementation of the plan for extinguishing the obligations. It should be noted that amending of the Insolvency Law was still underway at the beginning of 2014, and, depending on the amendments made to the Law, the process could be streamlined and sped up for natural persons, yet eventual credit institution losses due to the simplified process give rise to concerns about impending tightening of credit standards.

1.3.2 Financial vulnerability of non-financial corporations

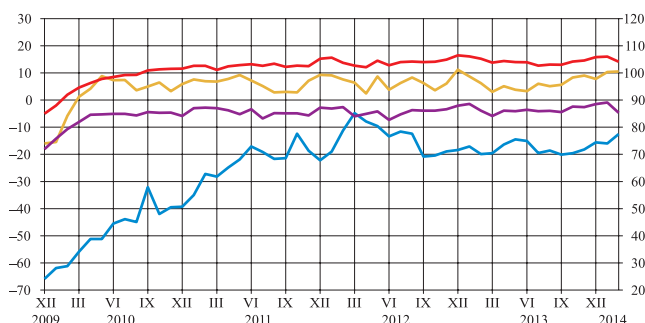
Financial position of non-financial corporations improved overall in 2013⁷. Despite the sectoral development being uneven, businesses generally increased their profitability and went on cutting the debt burden. Further stable and sustainable improvements in financial indicators of non-financial corporations, however, may be curbed by external uncertainties and weak investment growth.

In 2013 in comparison with 2012, the average economic sentiment indicator of businesses showed only slight signs of recovery (see Chart 1.12). Speaking about the sectoral development, the sentiment indicators of both retail trade and construction displayed positive trends in the second half of 2013, which have been observed also in the initial two months of 2014. As to manufacturing, the improvement in its sentiment is quite modest, with the indicator failing to enter positive territory as yet. Further exporting sectors' development will depend on their ability to expand exported volumes that will essentially affect the financial situation of non-financial corporations as well.

Chart 1.12

LATVIAN BUSINESSES' ECONOMIC SENTIMENT INDICATOR AND SECTOR INDICATORS
(in points; net result of responses)

Retail trade sentiment indicator
Construction sentiment indicator
Manufacturing sentiment indicator
Economic sentiment indicator (right-hand scale; %)



Profitability of non-financial corporations improved overall in 2013⁸ and was 3.5% on average (an increase of 0.4 percentage point against 2012; see Chart 1.13). It increased for corporations in such sectors as manufacturing, transportation and storage, accommodation

⁷ Based on non-financial corporation survey data of CSB.

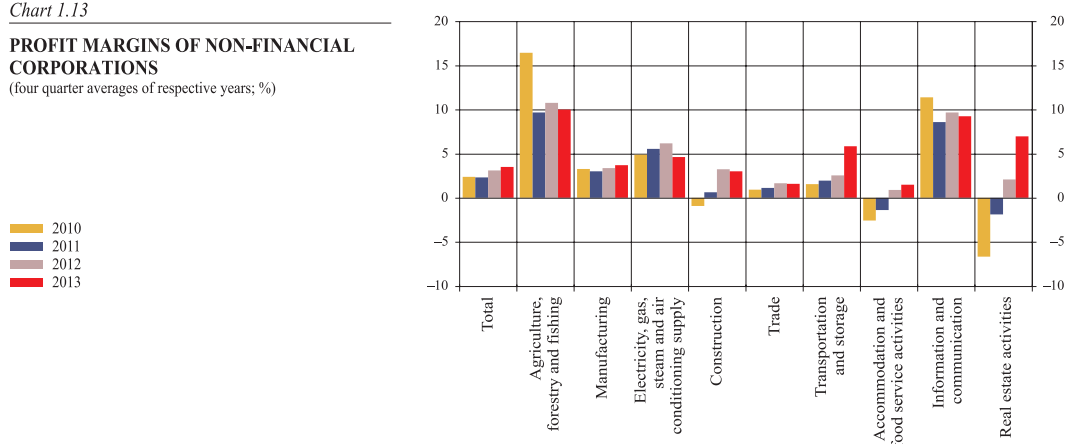
⁸ Profitability – profit before taxes to net turnover.

and food service activities as well as real estate activities. On the positive side, profitability of all these sectors was with a plus sign for the second consecutive year, with the lowest in trade as well as accommodation and food service activities. The latter phenomenon could be explained by corporations competing toughly in these sectors, also testified by higher nominal profits and turnover in all sectors, excluding energy, in comparison with 2012.

Chart 1.13

PROFIT MARGINS OF NON-FINANCIAL CORPORATIONS

(four quarter averages of respective years; %)

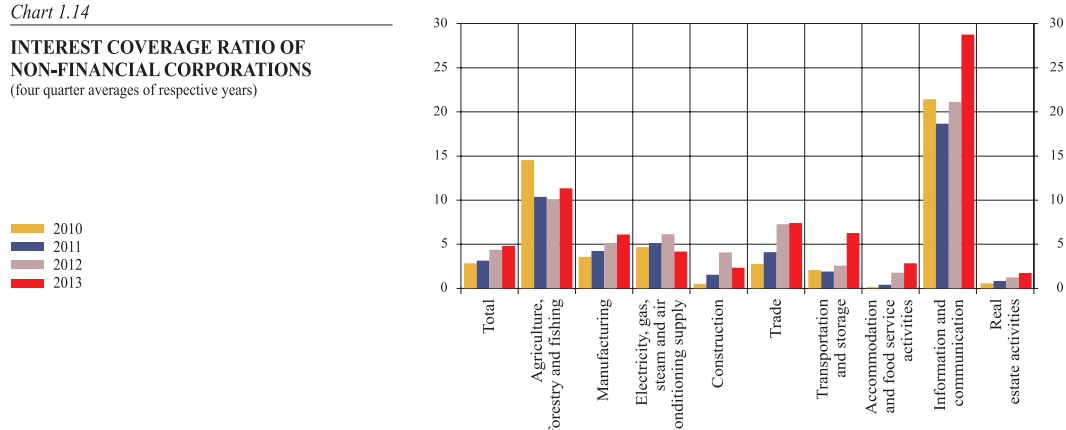


Higher profits earned by non-financial corporations contributed positively to debt servicing, which rose to the highest average level over the last few years (see Chart 1.14). In 2013, the average interest coverage ratio⁹ for non-financial corporations on the whole increased to 4.8 times (4.3 times in 2012). The energy sector and the construction sector, with profit levels falling somewhat in the former and interest payments rising quicker than profits in the latter, were the only two exceptions reporting some interest coverage ratio decline in comparison with the 2012 average indicators. In terms of debt servicing, financially most vulnerable were construction, accommodation and food service activities, and real estate activities. On the positive side, however, this indicator was above the critical threshold (interest coverage ratio <1 suggests that the respective corporation incurs problems to cover its debt servicing expenses with profit earned in the reference period) for all of the sectors.

Chart 1.14

INTEREST COVERAGE RATIO OF NON-FINANCIAL CORPORATIONS

(four quarter averages of respective years)

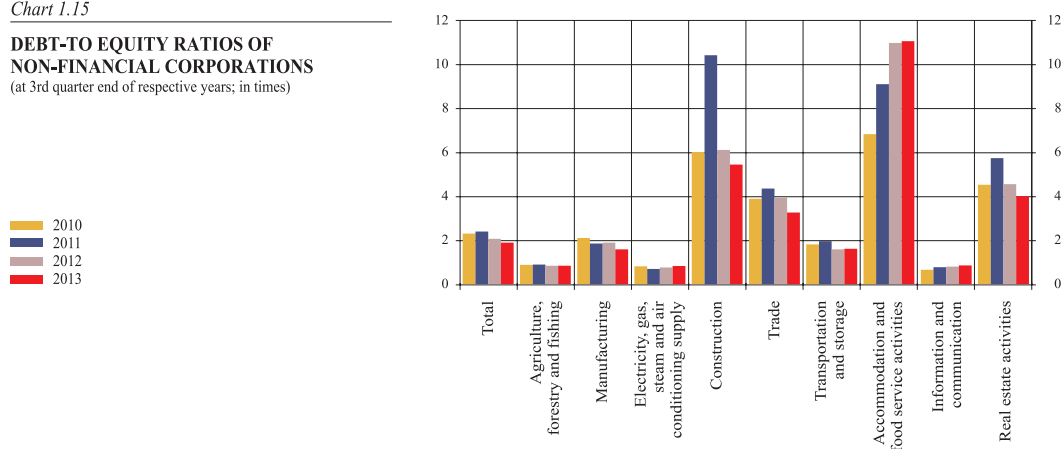


The ongoing easing in 2013 of the debt burden of non-financial corporations was a positive development, too (see Chart 1.15). Overall debt-to-equity ratio of non-financial corporations was 1.9 in the third quarter of 2013 and 1.86 in the fourth quarter (2.0 in the fourth quarter of 2012). The debt burden eased in almost all major sectors. Accommodation and food service activities as well as construction and real estate activities recorded the largest debt burdens along with the lowest debt servicing capacity, which both point to a more pronounced financial fragility of these sectors.

⁹ Interest coverage ratio – profit before taxes and interest payments to interest payments.

Chart 1.15

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



In 2013, the pace of launching new non-financial corporations decelerated somewhat. The number of newly founded commercial companies and small capital limited liability companies dropped by 2.8% and 4.1% respectively, while the number of new limited liability companies increased by 3.9% against 2012. Small capital limited liability companies continued to account for the largest share of commercial companies, i.e. 64.6% of the new companies, in 2013. Furthermore, a slightly accelerating activity was observed in this respect in the first quarter of 2014.

As to the insolvency process of legal persons, the number of cases remained fluctuating. In 2013 against 2012, a decrease of 7.0% was recorded. The number of filed insolvency cases soared towards the close of 2013, with the pace subsiding and returning to the average level of around 70–80 new applications per month in the initial months of 2014.

1.3.3 Real estate market development

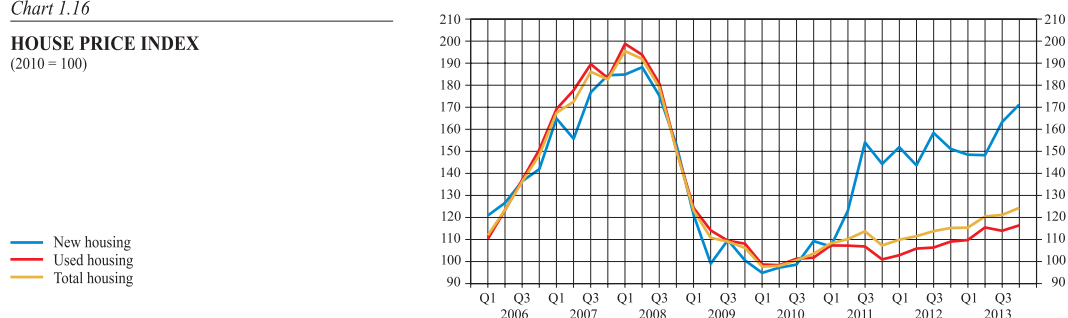
The real estate market activity continued to gradually gain momentum in 2013. The number of purchase agreements registered with the State Unified Computerised Land Register picked up 11.7% year-on-year, with Riga reporting a 16.8% increase. In the first months of 2014, on the other hand, some decline driven by seasonal factors was observed.

Residential property price rises occurred at a slightly accelerated pace in 2013. According to the CSB's House Price Index (HPI) data, a year-on-year upswing was observed in the total house price index and the existing house price index in the fourth quarter of 2013 (7.9% and 6.8% respectively; see Chart 1.16). The average price of standard apartments in Riga tended to go up and at end-2013 it reached 613 EUR/m² (586 EUR/m² at end-2012), while the annual growth rate increased to 4.6%¹⁰. In addition, the average price continued on an upward trend also in the first quarter of 2014 suggesting that the financial position of the local residents is improving and the interest about house purchases is growing. Meanwhile, the rise in the CSB's index for new housing was even more dynamic in 2013 due to the bustling activity of non-residents (13.3%). The assessment of prices in new housing projects in the fourth quarter of 2013 according to Latio Ltd. disclosed a persistently strong annual growth for housing in new projects in the segments most favoured by non-residents, i.e. in central Riga and Old Town (14.2% and 7.3% respectively). Annual price rises accelerated for new project apartments in Riga outskirts as well (9.5%), indicating bustling activities of local purchasers and increasing interest about recently built and higher quality housing.

The largest contribution to the more expensive segment of the real estate market in 2013 came from the non-residents. In 2013, total transactions with real estate by non-resident natural persons in Latvia increased by 43.9% year-on-year. In addition in the respective period, the number of requests for temporary residence permits grew by 56.8%. The

¹⁰ Average price is calculated using public information released by Latio Ltd., Arco Real Estate Ltd. and Ober Haus Real Estate Ltd.

Chart 1.16

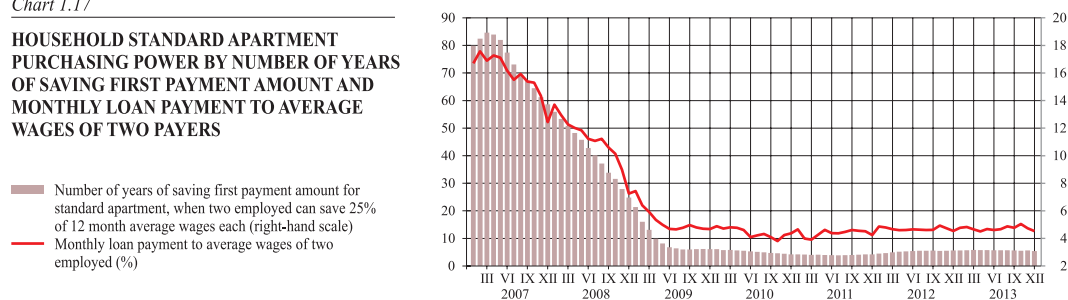
HOUSE PRICE INDEX
(2010 = 100)

share of non-resident transactions in total 2013 purchase agreements in Latvia had picked up to 6.8% by the end of the year. Following a second review requested by the President, the Saeima of the Republic of Latvia passed amendments to the Immigration Law with respect to allowing non-residents to receive a temporary residence permit in Latvia, provided a real estate purchase is made (their coming into effect is projected for 1 September 2014¹¹). The amendments are likely to affect the transaction activity and prices in the segments most favoured by non-residents and also such sectors as construction and real estate activities.

Affiliated companies of credit institutions that engage in real estate management also played an important part in the real estate market in 2013. In contrast to previous years, the said companies discontinued taking the properties over and more actively started to sell real estate owned, often offering good lending terms for making purchases.

The accessibility to standard apartments improved due to higher real income and still low interest rates (see Chart 1.17). The fourth quarter of 2013 saw both the average time needed to accrue the down payment amount and the monthly loan payment amount to average wage go down (to 12.7%). In line with creditworthiness gains, the local residents' interest focused more often on housing in new projects, yet accessibility to it was poorer and prices during 2013 were growing faster than for standard apartments.

Chart 1.17

HOUSEHOLD STANDARD APARTMENT PURCHASING POWER BY NUMBER OF YEARS OF SAVING FIRST PAYMENT AMOUNT AND MONTHLY LOAN PAYMENT TO AVERAGE WAGES OF TWO PAYERS

The developments in the housing rental market also speak in favour of improvements in the household financial situation in 2013. According to the Latio Ltd. data, standard apartment rent in Riga continued on a gradual upward trend, at end-2013 reaching 4.3 EUR/m² or 7.5% above the end-2012 level. The interest inhabitants showed gave rise to high demand for quality apartments for rent, particularly in new housing projects where there was a lack of adequate supply; as a result, an opportunity to raise rent at least somewhat opened up. According to the CSB data, a rise in the rent index was observed also in the first quarter of 2014, which points to an ongoing upward trend.

The commercial real estate market was active in 2013. As vacancy rates decreased, the lack of quality office space became evident. According to the Latio Ltd. estimates, the

¹¹ The main amendment stipulates that non-residents shall be entitled to temporary residence permit upon purchasing one unit of real estate worth at least 250 thousand euro, and that 5% of the purchased property value shall be transferred to the state budget.

market of high-class office premises is already almost short of vacant space. As businesses act cautiously, implementation of new projects is not underway as yet, and, although rent in most favoured segments tends to slightly rise, it is deemed insufficient for commencing new construction projects. However, some new office buildings are planned to open in 2014, thus contributing to commercial space vacancy.

2. DEVELOPMENTS AND RISKS IN THE CREDIT INSTITUTION SECTOR

Domestic economic growth, the successful changeover to the euro as well as macro-financial stabilisation in the EU Member States supports mitigation of risks and improvement of the credit institution performance indicators in Latvia. The quality of the loan portfolio and operational efficiency of credit institutions are improving. Credit institutions in general, including the biggest credit institutions, are operating with profit, the level of their capitalisation and shock-absorption capacity is high. At the same time, the dynamics of new loans remains sluggish as both loan supply and demand remain wary and the number of potential borrowers that could meet the lending standards applied by credit institutions is limited. Moreover, the geopolitical risks associated with Russia and Ukraine add to the uncertainty and the probability of higher credit risk, given the fragile creditworthiness of the borrowers and the volume of restructured loans. At the same time, the results of the credit risk sensitivity analysis and stress tests carried out by Latvijas Banka suggest that Latvian credit institutions' capacity to absorb higher credit risk overall as well as in association with potential shocks stemming from deterioration of the external macro-financial environment remains high. With further shrinking of the loan portfolio, the share of liquid assets in aggregate assets of credit institutions increased. As regards credit institution liabilities, further growth is reported for deposits (mainly short-term), whereas the funding provided by Nordic parent banks to their subsidiaries and branches in Latvia continues to shrink. As a result, the maturity mismatch between assets and liabilities of credit institutions increases. Nevertheless, the liquidity stress test results suggest that the credit institutions' ability to absorb shocks from the potential financing outflows remains high.

2.1 Loan developments and credit risk

Despite further solid economic growth the development of domestic lending remains sluggish. The quality of the loan portfolio and the indicators characterising the financial position of borrowers are improving, pointing to a decline in credit risk. Nevertheless, as the creditworthiness of many borrowers is still fragile, the safety cushion available to absorb additional shocks is small and the outstanding amount of restructured loans is significant, the credit risk remains higher-than-average. The credit risk could materialise mainly in the circumstances of further significant deterioration of the external environment that would also have a notable effect on the domestic macro-financial environment.

Domestic loan portfolio continues to shrink which is still, to a large extent, attributable to the consequences of the crisis: write-offs of long past due loans and gradual adjustment of household debt. An important additional factor affecting the rate of decline in lending from the second half of 2013 was the structural changes in the credit institution sector as three credit institutions gave up their credit institution licences¹². In March 2014, the annual rate of decline in loans to residents was 9.1% or 5.8% when excluding the impact of one-off factors.

In comparison with end of 2012 – beginning of 2013, the rate of decline in loans to non-financial corporations has accelerated (see Chart 2.1) which can be explained by both repayments of previously-granted sizeable short-term loans and weak investment largely determined by external uncertainties and the completion of large-scale investment projects. Although the new household loans are gradually growing, with loan write-offs increasing, the rate of decrease of the household loan portfolio and its contribution to the overall domestic loan portfolio shifts remained broadly unchanged.

Excluding the one-off impact of credit institutions giving up their credit institution licences and loan write-offs, the loan portfolio of non-financial corporations has remained unchanged in 2013, with the rate of change close to zero also in the first months of 2014. Although

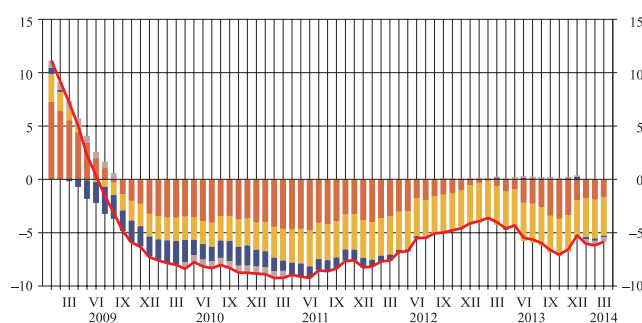
¹² The credit institution licence of JSC GE Money Bank was cancelled in October 2013 and those of SJSK *Latvijas Hipoitēku un zemes banka* and JSC UniCredit Bank as of 1 January 2014; consequently, thereafter their credit portfolios were excluded from the credit institution statistics.

Chart 2.1

ANNUAL RATE OF CHANGE IN RESIDENT LOANS AND THEIR COMPONENTS BY SECTOR¹³

(in percentage points)

■ Government
 ■ Financial institutions
 ■ Households
 ■ Non-financial corporations
 — Total (%)



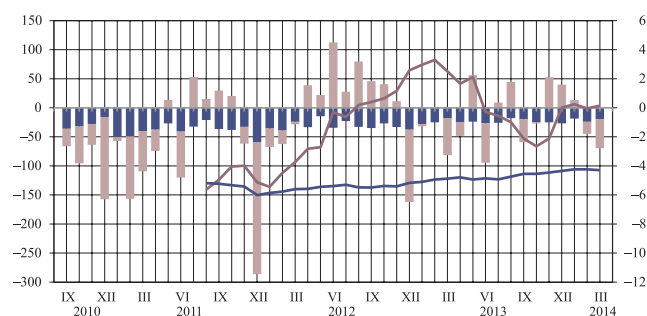
the shrinking of the household loan portfolio, adjusted for the impact of loan write-offs and the one-off impact of the cancellation of the credit institution licences, has recently decelerated, the annual rate of change remains negative: -4.3% at the end of March 2014 (see Chart 2.2). The loan write-offs do not reflect the current economic developments; therefore, the above adjustment enables a more accurate evaluation of the most recent lending developments in the economy. The adjusted rate of change in the loan portfolio of non-financial corporations remained broadly unchanged in 2013. In the case of the household loan portfolio, the adjusted annual rate of decrease was still negative despite a further steady deceleration of the fall on account of the increasing amount of new loans. As the outstanding amount of long past due loans (particularly household loans) remains considerable, loan write-offs will continue to have a significant effect on loan developments in the medium-term.

Chart 2.2

DEVELOPMENTS IN LENDING TO NON-FINANCIAL CORPORATIONS AND HOUSEHOLDS, EXCLUDING THE IMPACT OF LOAN WRITE-OFFS¹⁴

(in millions of euro)

■ Non-financial corporations (monthly changes)
 ■ Households (monthly changes)
 — Non-financial corporations (annual changes; %, right-hand scale)
 — Households (annual changes; %, right-hand scale)



In order to have a more complete picture of the situation in the lending market, the January 2014 survey on credit institution lending included a question on obstacles to lending development. According to the survey results, the growth of lending is decelerated by the interaction of several demand and supply factors. The main obstacle on the demand side is the inability of the potential borrowers to fulfil the conditions for receiving a loan (insufficient cash flow, own funds, collateral). The interest rates charged by credit institutions also dampen the loan demand quite significantly. Loan supply is limited by several factors: problems with the existing loan portfolio, high credit risk of the potential borrowers and the achievement of the strategic goals of the credit institutions. The most significant factor currently weighing on the loan supply according to the credit institutions, however, is the Latvian legislative initiatives, primarily the proposed amendments to the Insolvency Law.¹⁵

The domestic loan portfolio is expected to shrink further in 2014. Lending to non-

¹³ To ensure comparability, the time series have been adjusted excluding the one-off effects associated with JSC Parex banka, JSC *Latvijas Krājbanka*, JSC GE Money Bank, SJSC *Latvijas Hipotēku un zemes banka* and JSC UniCredit Bank.

¹⁴ To ensure comparability, the time series do not include the data of JSC Parex banka and JSC *Latvijas Krājbanka* and they have been adjusted excluding the one-off effects associated with JSC GE Money Bank, SJSC *Latvijas Hipotēku un zemes banka* and JSC UniCredit Bank.

¹⁵ The draft Law which has passed the second reading in the Parliament of the Republic of Latvia provides for cancellation of obligations following the foreclosure of the collateral or the so-called "walk-away" clause and for significantly speed-up of the procedure to cancel the obligations. Credit institutions admitted that following the approval of those amendments new loans would contract considerably, as the credit standards would be tightened (e.g. larger first down-payment on housing loans as well as higher margins on loans).

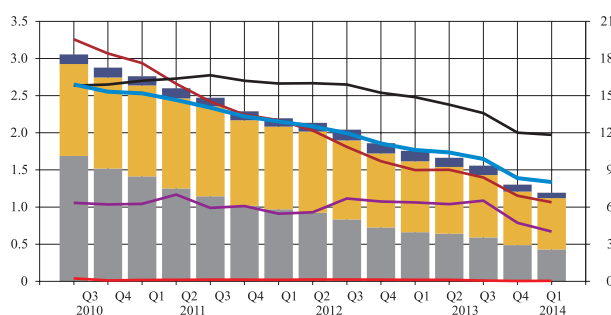
financial corporations will, in all likelihood, strengthen in 2014 as compared to 2013, with credit institution loans to finance long-term investment increasing moderately. Moderate economic growth would also encourage more active lending to households. The downside risks to the lending recovery, however, have grown. In the most recent months, certain external risks have emerged that could impair the investor confidence, thereby having a negative effect on the lending prospects of non-financial corporations. The uncertainty associated with the amendments to the Insolvency Law, potentially resulting in a further tightening of the credit standards, also persists.

The quality of the credit institutions' loan portfolio continues to improve steadily. With the creditworthiness of borrowers gradually recovering and credit institutions slightly stepping up their balance sheet cleaning efforts, loans past due over 90 days and their share in the aggregate loan portfolio of credit institutions is shrinking (8.0% at the end of March 2014). As the economy continues to develop vigorously, both the outstanding amount and share of long past due loans are contracting in the case of households as well as all major economic sectors and also as concerns the non-resident loan portfolio (see Chart 2.3). The outstanding amount and share of total loans past due are also decreasing gradually.

Chart 2.3

LOANS PAST DUE OVER 90 DAYS AND THEIR SHARE IN THE TOTAL STOCK OF THE RESPECTIVE GROUP OF LOANS¹⁶
(in billions of euro)

Other residents
Non-residents
Resident households
Resident non-financial corporations
Resident non-financial corporations (percentage share; right-hand scale)
Resident households (percentage share; right-hand scale)
Non-residents (percentage share; right-hand scale)
Other residents (percentage share; right-hand scale)
Total (percentage share; right-hand scale)

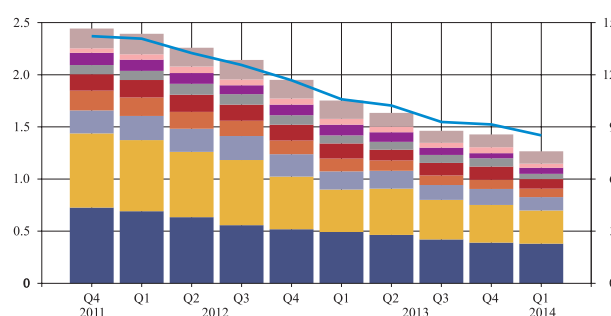


A positive development is the continuous shrinking of restructured loans. As a result, the credit institutions' exposure to the loan portfolio quality deterioration risk in the event of potential shocks is declining further. Even in the absence of a significant delay with payments, restructured loans act as an additional risk factor with regard to the loan quality deterioration and its probability is largely dependent on the economic development prospects. Considering that the provisions for those loans were lower in comparison with other groups of problematic loans, deterioration in the quality of those loans could result in a need to build additional provisions. The share of restructured loans past due less than 90 days in the aggregate loan portfolio of credit institutions shrank to 8.5% in March, with a decline in such loans being reported for all major economic sectors, households and also non-residents (see Chart 2.4).

Chart 2.4

RESTRUCTURED LOANS PAST DUE LESS THAN 90 DAYS BY MAJOR ECONOMIC SECTORS AND THEIR SHARES IN THE AGGREGATE LOAN PORTFOLIO OF CREDIT INSTITUTIONS¹⁶
(in billions of euro)

Other sectors
Accommodation and food service activities
Trade
Construction
Manufacturing
Other loans to households
Non-residents
Real estate activities
Household loans for house purchase
Share in aggregate loan portfolio (%; right-hand scale)



¹⁶ To ensure comparability, the time series do not include the data on JSC Parex banka and JSC Latvijas Krājbanka.

Despite the gradual reduction in the financial vulnerability of borrowers and improvements in their financial position supported by the stable growth of disposable income of households and overall positive development of the financial indicators of non-financial corporations, the fragile creditworthiness remains a considerable challenge for a significant part of the borrowers. The debt burden on some borrowers remains heavy. The outstanding amount of restructured loans is still viewed as significant and for non-financial corporations the flows of restructured loans remain sizeable.

Loan quality is expected to improve further in 2014, although this process is likely to decelerate. Assuming further solid economic growth according to the baseline scenario, the creditworthiness of borrowers will also continue to improve. Higher borrowers' creditworthiness will be mostly evident in a further reduction of new loans past due. Borrowers already having long past due loans whose debt burden in most cases is heavy will benefit less from this tendency; therefore, the existing loans past due over 90 days will shrink mainly as a result of writing off such loans. Should the external risks grow, the domestic macro-financial environment could also deteriorate and limit the quality improvements of the loan portfolio. If the situation in the external environment develops in accordance with an adverse scenario having a significant impact on the rate of the domestic economic development, the risk of continued fragility of the borrowers' creditworthiness could materialise, thereby impairing the quality of the loan portfolio. The Russian–Ukrainian conflict could also have a direct negative effect on the quality of the credit institutions' non-resident loan portfolio. Nevertheless, the impact of such a scenario would be limited as the credit institution claims on those countries are negligible, with loans to Russian and Ukrainian residents representing less than 2% of the aggregate assets.

Box 2. Euro area bank lending survey

With Latvia becoming a fully-fledged member of the EMS on 1 January 2014, Latvijas Banka discontinued its previous lending survey. In the future, it will conduct a quarterly euro area bank lending survey in cooperation with the ECB, involving four Latvian credit institutions. As of April 2014, the responses of the credit institutions included in Latvia's sample are incorporated in the results of the euro area bank lending survey. The main purpose of the survey is to promote the Eurosystem's understanding of the role of lending in the monetary policy transmission mechanism, thereby providing more extensive information to serve as a basis for monetary policy analysis.

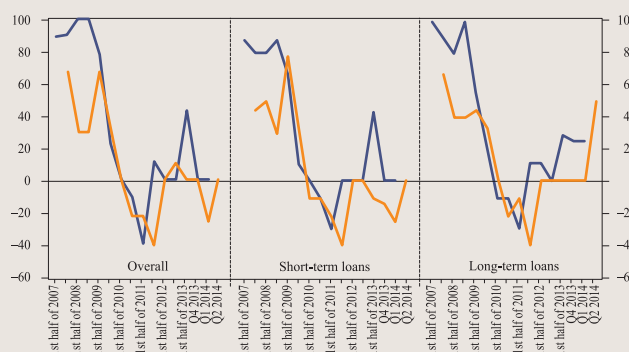
Credit standards and terms and conditions

The results of the credit institution survey suggest that the credit standards remained broadly unchanged in the fourth quarter of 2013 and the first quarter of 2014 (see Charts 2.5 and 2.6). Some credit institutions reported tightening of standards applied to certain types of loans to non-financial corporations, whereas one credit institution eased its standards for household loans for house purchase.

Chart 2.5

CHANGES IN CREDIT STANDARDS FOR NON-FINANCIAL CORPORATIONS¹⁷
(net percentage of credit institutions reporting tightening of credit standards)

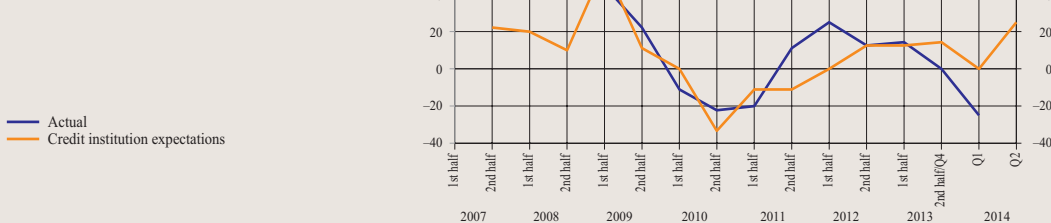
— Actual
— Credit institution expectations



¹⁷ Hereinafter the results of the euro area bank lending survey are reported starting from the fourth quarter of 2013. They are not comparable with the previous time series as up to the first half of 2013 the results of the survey of credit institution lending conducted by Latvijas Banka are reported.

Chart 2.6

CHANGES IN CREDIT STANDARDS FOR HOUSEHOLD LOANS FOR HOUSE PURCHASE
(net percentage of credit institutions reporting tightening of credit standards)



Credit institutions indicated that overall there were no factors significantly affecting the credit standards (see Charts 2.7 and 2.8). The tightening of credit standards applied to certain types of loans in the first quarter of 2014 was prompted by the economic outlook and the development prospects of individual sectors and companies. Credit institutions also pointed out that should the amendments to the Insolvency Law be approved the lending policies vis-à-vis loans for house purchase would be reviewed considerably. Credit institutions also mentioned the potential impact of the Russian–Ukrainian conflict on the economic development and lending to non-financial corporations in Latvia.

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)

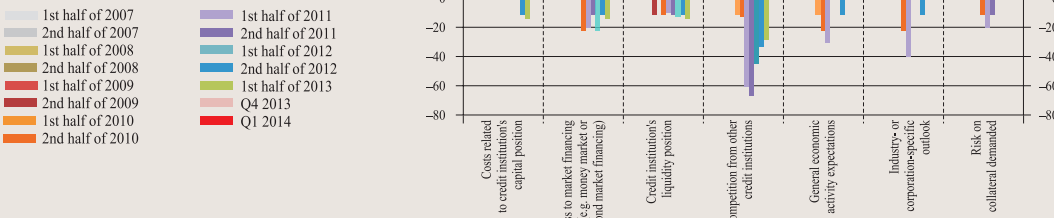
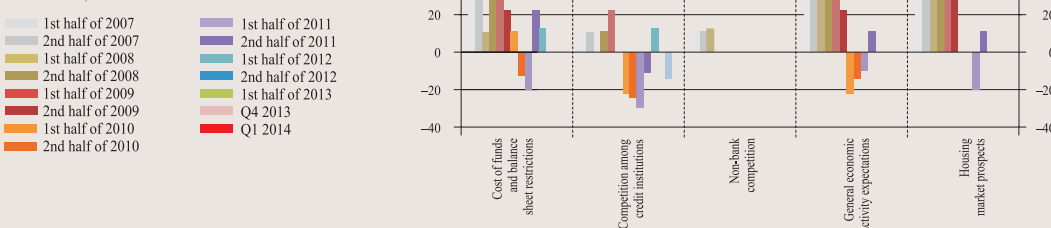


Chart 2.8

FACTORS CONTRIBUTING TO TIGHTENING OF CREDIT STANDARDS APPLIED TO HOUSEHOLD LOANS FOR HOUSE PURCHASE
(net percentage of credit institutions reporting positive factor contributions)



They continued to tighten slightly the terms for loans and credit lines granted to non-financial corporations, with margins on average and/or riskier loans, collateral requirements at some credit institutions increasing and size of new loans contracting. The terms and conditions for household loans for house purchase have not changed significantly, with only one credit institution changing the margin.

Overall, credit institutions have no plans of changing the credit standards applied to non-financial corporations and households in the second quarter of 2014. At the same

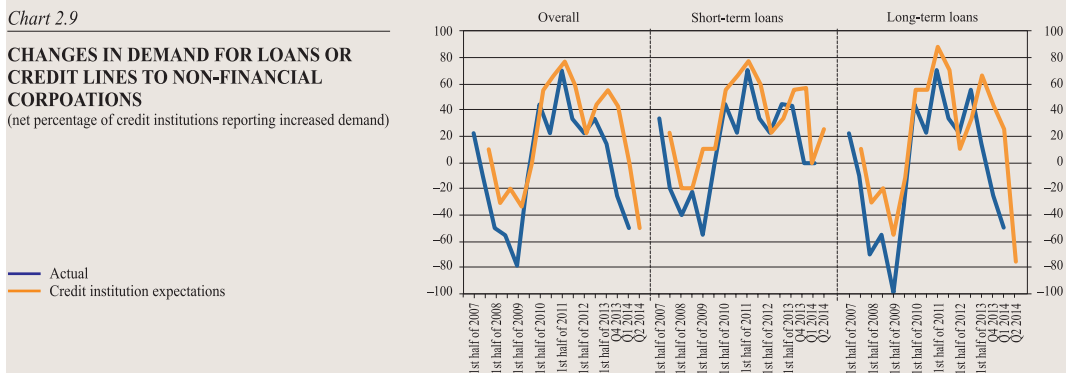
time, credit institutions plan to tighten the standards for long-term loans to non-financial corporations and one credit institution intends to tighten the standards for household loans for house purchase.

Loan demand

Credit institutions reported a slight fall in the non-financial corporations' demand for individual types of loans (see Chart 2.9). Interesting to note that credit institutions viewed the impact of fixed investment on loan demand of non-financial corporations differently. Although the impact of this factor in the first quarter of 2014 was overall neutral, this was the only factor that could explain the fall in demand. The need to finance inventories and working capital did not support an increase in loan demand at the beginning of 2014, although the contribution of this factor was relatively strong in the fourth quarter 2013.

Chart 2.9

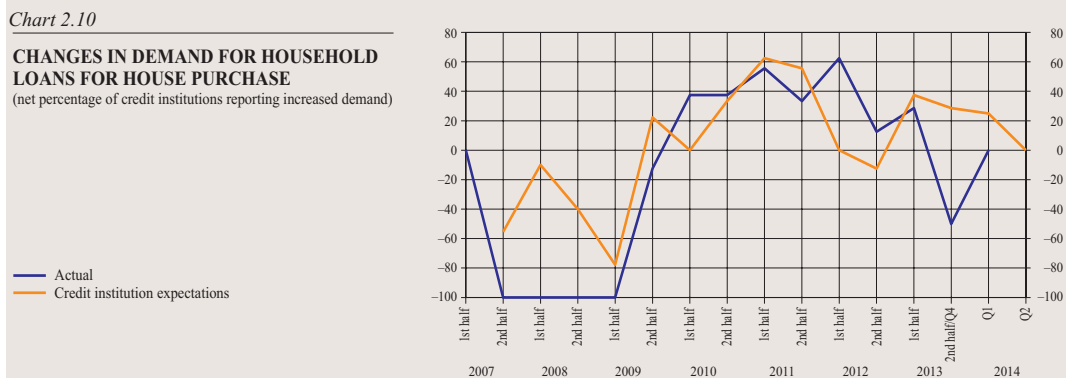
CHANGES IN DEMAND FOR LOANS OR CREDIT LINES TO NON-FINANCIAL CORPORATIONS
(net percentage of credit institutions reporting increased demand)



Demand for loans for house purchase went down in the fourth quarter of 2013, whereas in the first quarter of 2014 the situation overall stabilised (see Chart 2.10). Nevertheless, credit institutions viewed the demand for housing loans differently which can be mostly explained by differences in the evaluation of customer confidence by credit institutions. Housing market prospects still act to increase the demand for housing loans. By contrast, the level of household savings and borrowing from other credit institutions are mentioned by credit institutions as a factor dampening demand.

Chart 2.10

CHANGES IN DEMAND FOR HOUSEHOLD LOANS FOR HOUSE PURCHASE
(net percentage of credit institutions reporting increased demand)



Credit institutions expect a decline in non-financial corporations' demand for loans, except short-term loans. Their views on the development of the demand for household loans for house purchase in the second quarter of 2014, however, differ. Consequently, the household demand could overall stay at the level of the first quarter.

2.2 Funding and liquidity risk

In 2013 and at the beginning of 2014, credit institutions continued to deleverage overall, primarily on account of the shrinking Nordic parent bank funding, with both resident and non-resident non-bank deposits growing. The increase in resident deposits accelerated as a result of both stable economic growth and euro changeover which reduced currency in circulation significantly. The growth of non-resident deposits, in turn, decelerated. With

the share of non-bank short-term deposits in the overall financing composition expanding and the long-term funding from parent banks contracting, the maturity mismatch between assets and liabilities of credit institution increases further, resulting in a higher rollover risk. This risk is mitigated by the sound position of the Nordic parent banks and the increased liquidity and capital requirements imposed by the FCMC on credit institutions primarily servicing non-residents. The results of the liquidity stress tests carried out by Latvijas Banka suggest that the liquidity risk is currently limited for both the credit institutions servicing residents as well as non-residents.

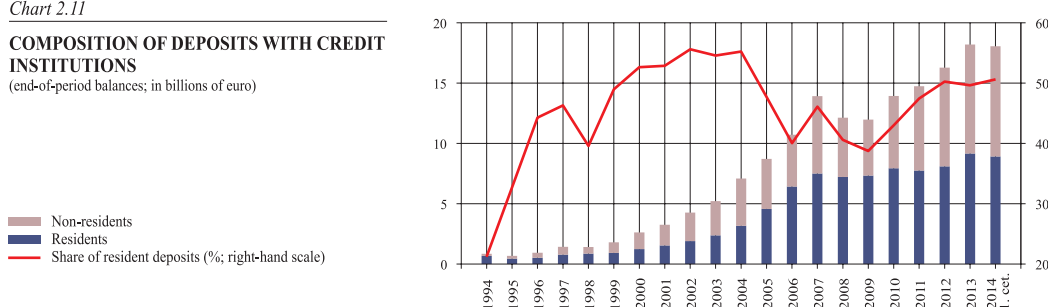
To carry out a more accurate analysis of the funding and liquidity risks, Latvia's credit institutions were divided into two groups based on the composition of the funding received and the placement of this funding (the grouping as per Financial Stability Report 2012). Group 1 credit institutions¹⁸ mainly draw financing from resident non-banks and Nordic parent banks, and the assets of this group account for 60.9% of the aggregate assets of Latvia's credit institutions. Group 2, in turn, comprises the rest of the credit institutions, mainly engaged in business with non-residents and accepting non-resident deposits, as well as the branches of Nordic banks providing internal support functions to their parent banks.

Historically, the amount of non-resident deposits in the financing of Latvia's credit institutions has been significant (see Chart 2.11), constituting about half of all accepted non-bank deposits (an all-time-high was 55%). These deposits are primarily related to the non-financial corporations and households of the CIS countries. Overall, non-resident deposits constitute almost 40% of GDP which is much less than in a part of other EU Member States providing services to non-residents. As at the end of March 2014, the credit institutions servicing non-residents accounted for 87.1% of all non-resident deposits and they have no close links with the domestic economy. Only 12% of all loans have been granted to residents at those credit institutions and resident deposits comprise merely 9% of their aggregate deposits.

Chart 2.11

COMPOSITION OF DEPOSITS WITH CREDIT INSTITUTIONS

(end-of-period balances; in billions of euro)



In the first quarter of 2014, the annual rate of growth of the aggregate financing of Group 1 credit institutions remained negative as a result of a gradual reduction in the long-term financing from parent banks due to the shrinking resident loan portfolio. Parent bank financing is expected to shrink further as no significant increase of the loan portfolio can be anticipated in the nearest future. Contrary to that, resident deposits expanded notably (see 2.12), supported by both the stable economic development and the euro changeover in Latvia. The annual rate of growth in aggregate resident deposits was 7.3% in the first quarter of 2014, including a rise in private non-financial sector deposits of 13.1%. In the case of Group 1 credit institutions, parent bank loans were partly substituted by resident deposits. Thus the loan-to-deposit ratio of those credit institutions continued to improve.

¹⁸ Credit institutions which grant more than 50% of loans to residents and receive more than 50% of deposits from residents. As at the end of the first quarter of 2014, this group comprised 11 credit institutions. In comparison with 2013, credit institutions that wound up their operations in 2013 and the beginning of 2014 were excluded from the group. JSC GE Money Bank wound up its business in October 2013. Based on the applications submitted by the particular credit institutions, as of 1 January 2014 credit institution licences were cancelled for JSC UniCredit Bank which left the Baltic market due to changes in the group strategy and SJSC *Latvijas Hipotēku un zemes banka* which was transformed into SJSC *Latvijas Attīstības finanšu institūcija ALTUM*.

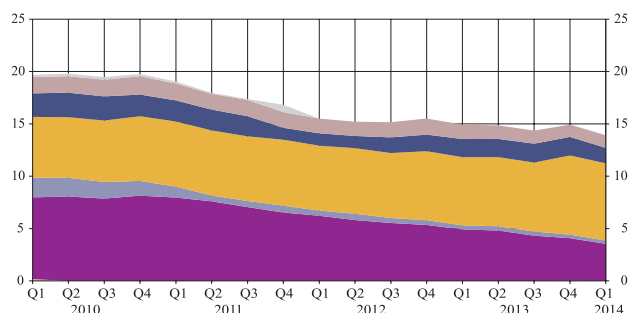
At the end of the first quarter of 2014, it contracted to 118.5% (see Chart 2.14), whereas the loan-to-deposit ratio of the resident private sector reached 142.0%.

Chart 2.12

FUNDING DEVELOPMENTS OF GROUP 1 CREDIT INSTITUTIONS

(in billions of euro)

- Debt securities issued
- Non-resident deposits
- Other resident deposits
- Resident private non-financial sector deposits
- Liabilities to other credit institutions
- Liabilities to affiliated credit institutions
- Liabilities to Latvijas Banka



In Group 2 where financing is dominated by non-resident deposits (see Chart 2.13), the growth of those deposits decelerated in the last quarters, despite significant capital outflows from Cyprus in the first half of 2013 and from Russia and Ukraine in the first quarter of 2014. The annual growth of non-resident deposits slowed in 2013 and amounted to less than 10% (5.2% in March 2014). Partly, the rise in non-resident deposits is held back by higher capital requirements imposed by the FCMC in 2009 on credit institutions accepting non-resident deposits. In order to limit the rollover and liquidity risks of those credit institutions, the FCMC set individual minimum liquidity ratio requirements at the beginning of 2013. For some credit institutions they can even reach up to 60% as opposed to the standard minimum liquidity requirement set by the FCMC at 30%.

Chart 2.13

FUNDING DEVELOPMENTS OF GROUP 2 CREDIT INSTITUTIONS

(in billions of euro)

- Debt securities issued
- Non-resident deposits
- Other resident deposits
- Resident private non-financial sector deposits
- Liabilities to other credit institutions
- Liabilities to affiliated credit institutions
- Liabilities to Latvijas Banka

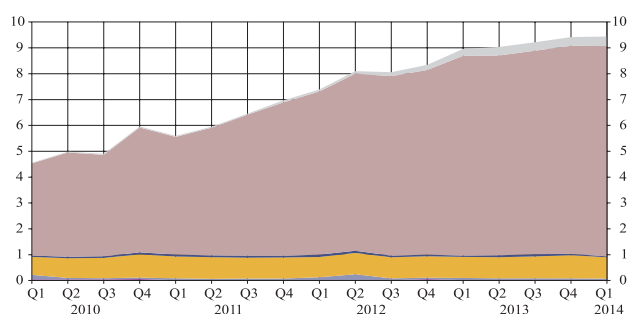
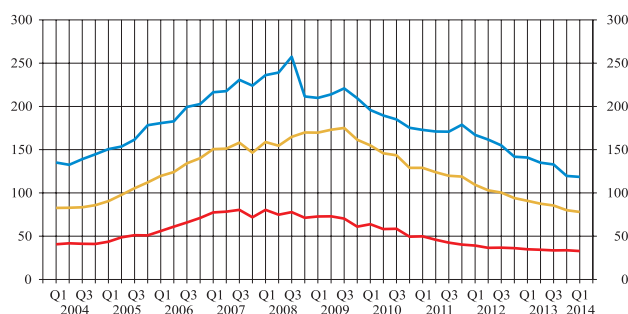


Chart 2.14

LOAN-TO-DEPOSIT RATIO (%)

- Group 1 credit institutions
- Group 2 credit institutions
- Credit institutions – total



Non-resident deposits remained the most significant financing source for the credit institutions from this Group, amounting to more than 86% of the total funding. Individual credit institutions continue to issue long-term debt securities in order to slightly diversify the maturity composition of the financing. The debt securities issued accounted for 3.9% of all financing at the end of the first quarter 2014, representing a 0.9 percentage point increase over the same period of the previous year. The loan-to-deposit ratio of Group 2 credit institutions has decreased to 32.9% suggesting that lending is not the primary type of liquidity placement for those credit institutions.

Non-resident deposits increase Latvia's gross short-term external debt and pose reputational risk to its economy with regard to potential money laundering and terrorist

financing. The large share of non-resident deposits in the aggregate assets of credit institutions has a negative effect on international credit rating agency and investor evaluation of Latvia and increases the borrowing costs of the public and private sectors. In order to reduce the reputational risk, the requirements aimed at prevention of money laundering and terrorist financing were strengthened by implementing the latest international standards in this field. The current legislative framework in Latvia and the internal control system set up in credit institutions are compliant with the requirements of foreign supervisory institutions and correspondent banks¹⁹.

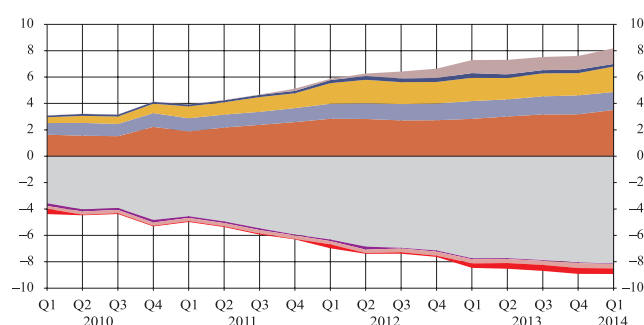
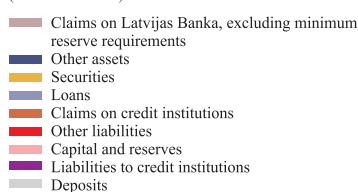
In Group 1, with the shrinking of the predominantly long-term Nordic parent bank financing, the share of short-term financing in the maturity composition continues to grow, as resident deposits mostly are with the residual maturity of up to 1 year (see Chart P1.2), while 55.0% of the aggregate deposits consist of demand deposits (at the end of March 2014, the share of demand deposits had increased by 12.2 percentage points in comparison with the end of 2012). A significant share of the Group 1 assets, in turn, consists of much longer maturity loans. As a result, the maturity mismatch between assets and liabilities of those credit institutions gradually increases. Nevertheless, this risk is mitigated by the sound financial positions of the Nordic parent banks and the funding drawn from those credit institutions still represents more than one fourth of their aggregate financing. Moreover, almost half of the parent bank funding is long-term financing.

The maturity composition of Group 2 financing, is dominated by short-term deposits (see Chart P1.3), mainly received from abroad. Moreover, at the end of March 2014 86.0% of the deposits were demand deposits. The credit institutions of this Group invest their short-time funds in highly liquid assets, e.g. the correspondent accounts of the leading credit institutions of Austria, Germany, Switzerland and United Kingdom and Latvian, US, German and Canadian government securities. Part of them is also placed on accounts with Latvijas Banka. With Latvia joining the euro area from 2014, those credit institutions started to actively resort to the Eurosystem's deposit facility. Thus the short-term financing drawn by Group 2 credit institutions from abroad is overall balanced with the liquidity placed abroad (mainly in the most liquid instrument) and with the Eurosystem (see Chart 2.15).

Chart 2.15

FOREIGN ASSETS AND LIABILITIES COMPOSITION OF GROUP 2 CREDIT INSTITUTIONS

(in billions of euro)



The liquidity risk of credit institutions remains limited, as they still place a major part of their financing in liquid assets. The biggest credit institutions of Group 2 increased their liquid assets significantly in the previous year and improved their liquidity ratios vis-à-vis the FCMC requirement²⁰ (see Chart 2.16), thereby mitigating the liquidity risks associated with potential outflows of short-term funds. The liquidity ratio of Group 1 also

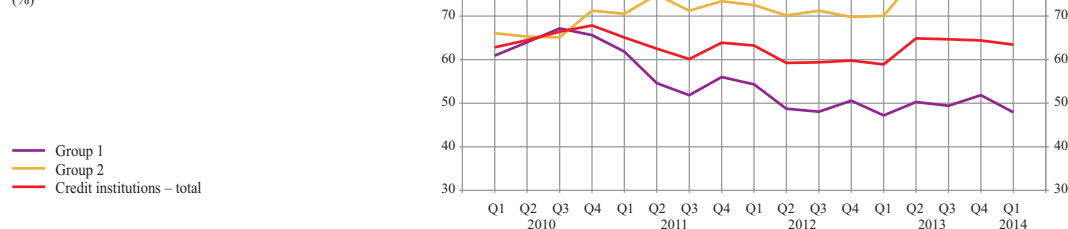
¹⁹ At its July 2012 plenary session, the Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism (MONEYVAL) of the Council of Europe reviewed the Report on the Fourth Assessment Visit of the Council experts on Anti-Money Laundering and Combating the Financing of Terrorism. No significant drawbacks were detected in the operation of the FCMC as well as Latvia's financial sector.

²⁰ Liquid assets (vault cash; claims on Latvijas Banka 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.

increased as a result of the steep rise in resident deposits related with the euro changeover and their subsequent placement into the most liquid assets. Nevertheless, this is a one-off factor and the liquidity ratio of the Group could return to the previous level in the future. Overall, the actual liquidity ratio based on the minimum liquidity requirement for credit institutions set by the FCMC at 30% was 63.5% in February 2014.

Chart 2.16

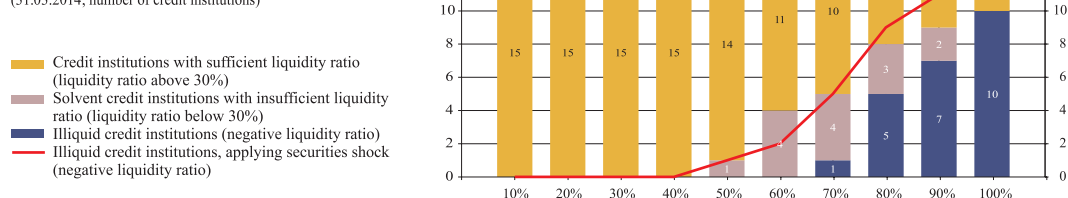
LIQUIDITY RATIO (DEFINED BY FCMC) BY CREDIT INSTITUTION GROUP (%)



The liquidity stress tests, conducted by Latvijas Banka with the purpose of evaluating the significance of the potential consequences of financial outflows, suggest that with further shifts into the liquid assets²¹, the credit institution resilience to the shock of financial outflows has improved²². At the end of March 2014, credit institutions could withstand the outflow of at least 40% of resident deposits (40% at the end of 2012) and the outflow of over 60% of non-resident deposits (40% at the end of 2012). For Group 2, the stress tests were supplemented with potential shocks affecting the liquid assets based on the following assumptions: no possibility to pledge or sell the securities portfolio, except those government securities where at least one of three ratings by international credit rating agencies²³ is no lower than AAA, and Latvian government securities having lost 30% of their value that can be used as collateral in the Eurosystem's monetary operations at a 7.5% discount. The application of those additional conditions does not deteriorate the stress test results significantly and Group 2 could withstand the outflow of no less than 40% of non-resident deposits (see Chart 2.17). Overall, the stress test results show that the current liquidity risk of Group 2 credit institutions is limited and even smaller than at the end of 2012, i.e. the credit institutions could withstand the outflow of at least 60% of non-resident deposits, as the credit institutions' holdings of highly liquid assets are sufficiently large.

Chart 2.17

LIQUIDITY STRESS TEST RESULTS FOR GROUP 2 CREDIT INSTITUTIONS IN CASE OF NON-RESIDENT DEPOSIT OUTFLOWS (31.03.2014; number of credit institutions)



2.3 Market Risk

2.3.1 Foreign exchange risk of credit institutions

The overall direct foreign exchange risk of credit institutions remains low. In 2013 and particularly at the turn of the year, the foreign exchange market developments were significantly affected by the changeover from the lats to the euro as of 1 January

²¹ The liquid assets defined in the calculation of the FCMC liquidity ratio.

²² 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.

²³ Standard & Poor's, Moody's and Fitch Ratings.

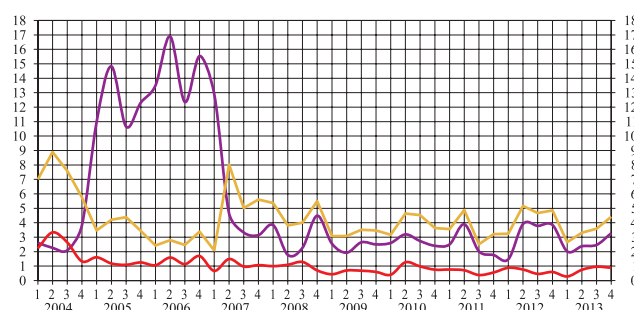
2014. With the adoption of the euro, the indirect foreign exchange risk of Latvia's credit institutions associated with the large share of foreign currency loans in their credit portfolios and stemming from mismatching income and loan currencies decreased significantly.

The weighted average open foreign exchange position of credit institutions in all currencies remained low in 2013, standing at 4.41% of own funds at the end of the year (4.85% at the end of the previous year; see Chart 2.18). With the approaching euro changeover, particularly the rise in the open position in euro had the most significant impact on the overall open foreign exchange position. Following a drop in the first quarter of 2013, the credit institutions' weighted average open position in euro reached 3.28% of own funds or 73.7 million euro, representing a slight decrease over 3.85% reported at the end of the previous year. The weighted average open US dollar position of credit institutions also remained low at 0.9% of own funds or 17.8 million euro.

Chart 2.18

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

— Euro
— Overall
— US dollar

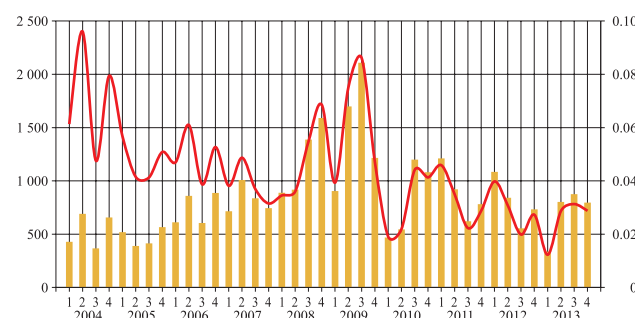


Assessment of the foreign exchange risk based on VaR²⁴ points to a slight increase of the risk in 2013. The potential losses of credit institutions within a 10-day period at 1% probability could exceed 797.0 thousand euro, representing a slight increase over 732.5 thousand euro in the previous year, although this foreign exchange risk value remained broadly unchanged (0.03%; see Chart 2.19) vis-à-vis own funds which also increased.

Chart 2.19

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

■ In thousands of euro
— % of own funds (right-hand scale)



The credit institutions' sensitivity to the movements of the US dollar, the second most significant currency in foreign exchange transactions of credit institutions, grew in 2013 primarily on account of a higher, albeit still low, open position in US dollar. The long open positions in US dollar increased for many credit institutions during the reporting period. Nevertheless, the aggregate losses of credit institutions from a 10% fall in the US dollar exchange rate vis-à-vis the lats would not have exceeded 0.09% of the credit institutions' own funds at the end of 2013 (0.08% at the end of the previous year). Should the US dollar appreciate by 10% against the lats, the potential losses of the credit institutions

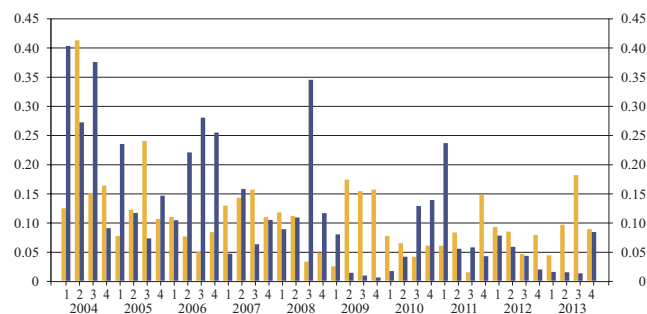
²⁴ The calculations of the quantitative risk analysis indicator VaR (Value-at-Risk) use the solo data on open foreign exchange positions of credit institutions for each individual currency and the historical daily exchange rate changes for the respective currency within one year prior to the VaR evaluation date. Since repegging the lats to the euro, VaR calculations no longer included the euro component. The VaR used in the present Report was obtained by aggregating the individual VaR of credit institutions. The actual overall VaR from foreign exchange movements is smaller due to the lack of complete positive correlation between the VaR values of individual credit institutions.

would not have exceeded 0.08% of own funds at the end of 2013, which is more than 0.02% estimated at the end of the previous year (see Chart 2.20). Higher sensitivity to the US dollar appreciation was caused by the increase in the short open positions in US dollars of separate credit institutions.

Chart 2.20

SENSITIVITY OF CREDIT INSTITUTIONS TO FLUCTUATIONS IN THE US DOLLAR EXCHANGE RATE
(aggregate losses; % of own funds)

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



According to the aggregate estimates of own funds and minimum capital requirements of credit institutions, the share of the direct foreign exchange risk requirement in the overall capital requirement of credit institutions remained unchanged year-on-year at 0.8% at the end of 2013. The credit institutions' capital requirement for direct foreign exchange risk was smaller in 2013 and ranged from 0.4% to 0.7%, yet in December it increased primarily in association with the impact of the preparations for the euro changeover on the foreign exchange transactions of credit institutions and their open positions in euro. The share of the foreign exchange risk in the overall capital requirement for market risk, in turn, tended to shrink in 2013 before increasing again at the end of the year and reaching 44.5% of the overall capital requirement for market risks or 9.7 million euro.

2.3.2 Interest rate risk of credit institutions

Judging by the potential impact of the market interest rate developments on the annual interest income and economic value of credit institutions, the credit institutions²⁵ exposure to interest rate risk remained broadly unchanged during the reporting period in comparison with 2013. Similarly as in the previous years, the aggregate cumulative difference between RSA and RSL or GAP²⁶ of credit institutions remained positive both in the short-term (up to one year) as well as in the long-term, suggesting that higher market interest rates would have a positive effect on the net interest income of credit institutions.

The cumulative 1-year GAP relative to the credit institution assets increased from 11.6% at the end of 2012 to 12.2% at the end of 2013. The steep decline of the GAP within the time-band of up to 1 month was more than offset by the rise within the time-band from 1 month to 6 months (see Chart 2.21). With the RSA growing faster than the RSL, the GAP increased. To a large extent, the RSA and RSL developments reflected the fact that the long off-balance sheet positions that are sensitive to interest rate movements grew faster than the respective short positions. Of the RSLs on the credit institutions' balance sheet, deposits with a maturity of up to 1 month grew considerably as customers made sizeable lats deposits with the credit institutions at the end of 2013 in order to facilitate the conversion to the euro. The increase in credit institution deposits with Latvijas Banka on the asset side, however, was even faster.

A similar indicator of interest rate risk, the cumulative 1-year RSA and RSL ratio, was 1.14 at the end of both 2012 and 2013 (see Chart P1.4). The exposures of various credit

²⁵ Interest rate risk was assessed based on the data of credit institutions active at the beginning of 2014. Thus the impact of JSC UniCreditBank, SJS Latvijas Hipotēku un zemes banka and JSC GE Money Bank has been excluded.

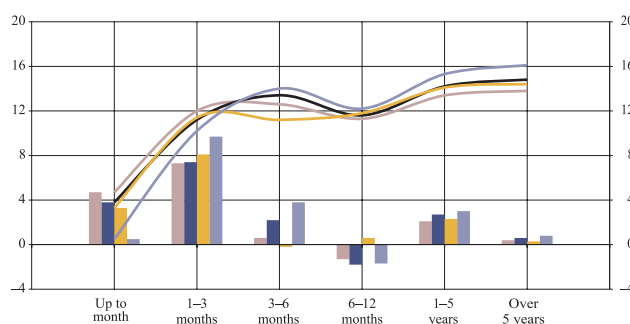
²⁶ The GAP of a pre-defined time-band is the difference between the RSA and RSL values within the specific time-band. The larger a particular credit institution's GAP, the higher its interest rate risk exposure. In the event of a positive GAP, the credit institution will incur losses from an interest 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.

institutions to the interest rate risk differ: in credit institutions primarily engaged in business with residents, the cumulative RSA and RSL ratio was only slightly above 1 in most time-bands, while in credit institutions mostly engaged in business with non-residents it was higher in the respective time-bands (see Chart P1.5).

Chart 2.21

GAP'S SHARE IN AGGREGATE CREDIT INSTITUTION ASSETS (%)

GAP
 1st half of 2012
 2nd half of 2012
 1st half of 2013
 2nd half of 2013
 Cumulative GAP
 1st half of 2012
 2nd half of 2012
 1st half of 2013
 2nd half of 2013



Sources: Latvijas Banka and FCMC data.

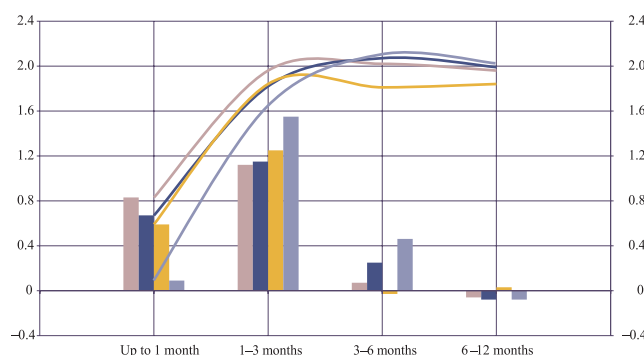
Note: In preparing the Chart, the data of credit institutions active at the beginning of 2014 have been used, excluding the impact of JSC UniCredit Bank, SJSC Latvijas Hipotēku un zemes banka and JSC GE Money Bank.

According to the results of the short-term sensitivity analysis, the potential impact of changes in market rates on the net annual interest income of credit institutions²⁷ was as low as in the previous year in 2013. At the end of both 2013 and 2012, assuming a parallel rise in the market rates by 200 basis points²⁸, the net annual interest income of credit institutions would have increased by an average of 2.0% of own funds (see Chart 2.22). Assuming an identical parallel fall of the market rates, the net annual income of the credit institutions would have contracted. At the end of 2013, credit institutions would start to feel the changes in market rates slightly later, as the net interest income within the time-band of up to 1 month became less sensitive to the developments of market rates, whereas in longer time-bands (1 to 3 months and 3 to 6 months) their sensitivity increased. The sensitivity of the credit institutions' annual net interest income has remained close to the previous level because the fall of the GAP in the time-band of up to 1 month is more significant than the increase of GAP in longer time-bands, as changes in the money market rates first affect the income of credit institutions within the shortest time-bands.

Chart 2.22

SHORT-TERM SENSITIVITY ANALYSIS: IMPACT OF INTEREST RATE INCREASE BY 200 BASIS POINTS ON THE ANNUAL NET INTEREST INCOME OF CREDIT INSTITUTIONS* BY MATURITY (% of own funds)

Impact
 1st half of 2012
 2nd half of 2012
 1st half of 2013
 2nd half of 2013
 Cumulative impact
 1st half of 2012
 2nd half of 2012
 1st half of 2013
 2nd half of 2013



Sources: Latvijas Banka and FCMC data.

Note: In preparing the Chart, the data of credit institutions active at the beginning of 2014 have been used, excluding the impact of JSC UniCredit Bank, SJSC Latvijas Hipotēku un zemes banka and JSC GE Money Bank.

Looking by credit institution, the impact of a parallel increase of interest rates by 200 basis points strengthened, with the central inter-quartile range widening (see Chart

²⁷ 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: $(12 - 0.5 \times (3 + 6)) / 12 = 0.625$. 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 2013.

²⁸ 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 also feature a parameter for unexpected interest changes at the level of 200 basis points.

P1.6). The exposure to interest rate risk had a tendency to increase more in those credit institutions where it was comparatively higher already in the previous year. By contrast, several more conservative credit institutions within the central inter-quartile range reduced their exposure to interest rate risk. The maximum rise in the annual net interest income of credit institutions that could be caused by a parallel increase in market rates of 200 basis points was 10.1% of own funds at the end of 2013, representing a 1.9 percentage points increase over the previous year, whereas the maximum fall in the annual net interest income was 8.1% of own funds which is 0.1 percentage point more than in the previous year.

The euro money market rates can be expected to be more volatile in 2014. If the economic growth of the euro area decelerates or inflation is low, this could support further monetary easing in the euro area. The growth of the euro money market rates could accelerate slightly in the event of a further escalation of the geopolitical turbulences that could result in an increase of the risk premiums embedded in the interest rates. Although the euro money market rates may become more volatile in the short-term, no steep and steady rise in the euro money market rates is expected anytime soon, as suggested by the Eurosystem's commitment to keep the interest rates low for a longer period of time and closely follow the developments on the euro money market as well as the decision to resort to several untraditional monetary policy instruments to head off deflation risk.

When measuring the interest rate risk, it is important to complement a short-term analysis based on the sensitivity of the income of credit institutions with a long-term sensitivity analysis²⁹ based on the economic value³⁰ of credit institutions, providing information on the economic value of the credit institution assets, liabilities and off-balance sheet items. Assuming a 200 basis points rise in the market rates, the decline in the economic value of credit institutions at the end of 2013 would have amounted to 2.0% of the own funds of the credit institutions and would have been the same as in the previous year (see Chart P.1.7). A parallel rise in the market rates by 200 basis points would have had a less significant impact on the contraction of the economic value of credit institutions in the majority of the examined institutions. At the end of 2013, the central inter-quartile range of the values representing the fall in the economic value of credit institutions narrowed to range from 0.4% to 4.2% (from 0.2% to 5.7% at the end of 2012). In comparison with the previous year, the respective range between the 10th and 90th percentiles also narrowed and the maximum fall in the economic value of credit institutions decreased from 11.1% to 9.8% of own funds.

Overall, the direct exposure of Latvia's credit institutions to interest rate risk was limited and the net interest income of credit institutions, most likely, will not change significantly in 2014. Considering the role of credit institutions in the economy and Latvia's financial system, it is important that they choose a conservative risk management model. To escape the impact of unexpected volatility in market rates, it is vital for credit institutions to balance their RSA and RSL at a particular point of time and also to monitor their adequacy continuously.

2.4 Profitability

In line with sustainable domestic economic growth, the profitability ratios of credit institutions continue to improve, which is supported by rising net interest income and net commissions and fees and a reversal of loan loss provisions.

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%.

³⁰ 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.

The aggregate profit of credit institutions on a solo basis was 246.2 million euro in 2013³¹ (174.1 million euro in 2012), whereas the consolidated profit totalled 262.7 million euro (166.3 million euro in 2012). Excluding the losses of the two credit institutions that discontinued their business in 2014, the solo profit of the credit institutions would have been bigger in 2013, i.e. 276.0 million euro. Most, i.e. 15, credit institutions operated with a profit in 2013. Their aggregate profit totalled 333.0 million euro and their assets accounted for 97% of credit institution assets. The significant surge in the profit was primarily attributable to higher net interest income and net commissions and fees as well as reduced provisioning expenses (see Charts 2.23 and 2.24). In 2013, the profitability of the credit institutions was adversely affected by the falling income from reversal of provisions, lower trading income and rising operating costs. Credit institutions have also started the year 2014 quite successfully. Although the credit institution profit totalled 43.0 million euro in the first quarter of 2014, representing a year-on-year decrease of 34%, the overall fall is attributable to the impact of a one-off factor³² and does not reflect the general financial position.

Chart 2.23

CREDIT INSTITUTION PERFORMANCE RESULTS AND THEIR CHANGES

(in millions of euro)

■ Profit-reducing item
■ Profit or profit-increasing item

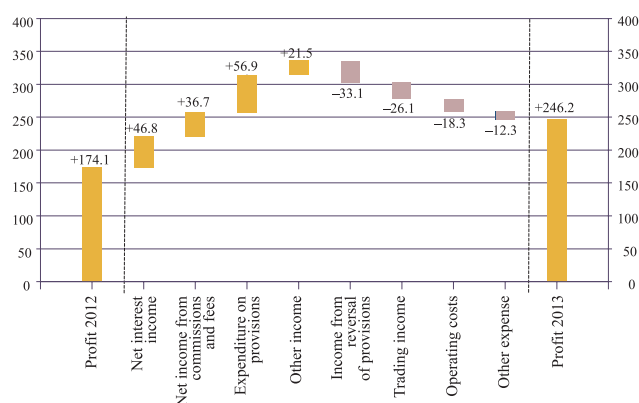
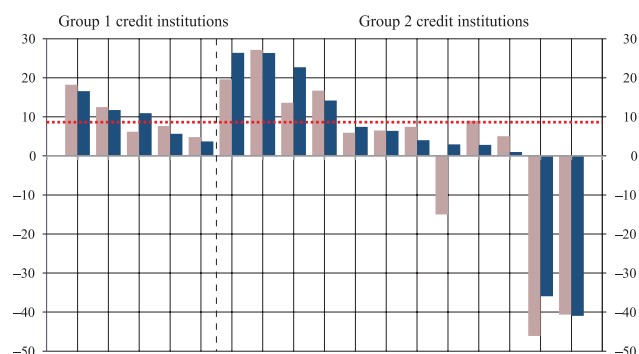


Chart 2.24

ROE OF CREDIT INSTITUTIONS (%)

■ 2012 ROE
■ 2013 ROE
..... 2013 weighted average ROE



Overall, ROE and ROA of credit institutions improved significantly in comparison with 2012. ROE increased from 5.6% in 2012 to 8.6% in 2013. The weighted average ROE of credit institutions, excluding the results of the two credit institutions that discontinued their business in 2014, was 10.4%. In the first quarter of 2014, ROE improved further, reaching 13.1%. This tendency is likely to persist and credit institutions will seek opportunities to improve their ROE, inter alia still focussing on achieving higher capital efficiency. The previously-observed tendency for the return ratios of Group 2 credit institutions to be higher than those of Group 1 persists, although the range of Group 2 ratios is relatively wider (see Chart 2.24). ROA also improved in 2013, reaching 0.9% in comparison with 0.6% in the previous year. In the first quarter of 2014, ROA stood at 0.6%.

The cost-to-income ratio of credit institutions deteriorated slightly in the first quarter

³¹ This Section analyses the 2013 performance, including the losses of the credit institutions that wound up their business as of 1 January 2014 (SJS Latvijas Hipotēku un zemes banka and JSC UniCredit Bank).

³² The one-off effect was related to structural changes in one credit institution affecting the provisioning policies at the group level as well as share revaluation which are not resulting from the business activity of the credit institution.

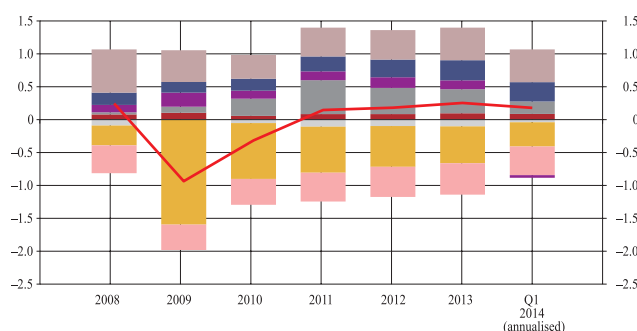
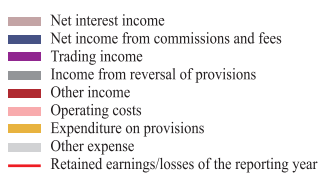
of 2014 as a result of the above-mentioned one-off effect, reaching 53.5% (50.7% in December 2013). It is expected to recover in the coming months and gradually approach the pre-crisis level. This improvement will be primarily supported by the growing income.

Operating income totalled 946.1 million euro in 2013, representing a slight increase over 2012 (898.6 million euro). Operating income has been growing for several years already, although the growth rate decelerated in 2013 and it has not returned to the pre-crisis level yet. Net interest income and net commissions and fees were the largest contributors to the increase in operating income.

The previously-observed tendency for both interest income and interest expense to shrink due to the low interest rates continued. Net interest income, the most significant income item, increased by 10% year-on-year in 2013 and reached 494.4 million euro, representing half of the operating income (see Chart 2.25). Net interest income continues on an upward path in 2014 as well, reaching 124.6 million euro in the first quarter and representing a year-on-year increase of 5%. The decrease in interest income is strengthened also by the shrinking of the loan portfolio, whereas interest expense was affected by the use of cheaper financing instruments.

Chart 2.25

COMPOSITION OF CREDIT INSTITUTIONS' INCOME AND EXPENSE AND PERFORMANCE RESULTS
(in billions of euro)



Net commissions and fees, the second most important income item, reached 306.4 million euro in 2013, representing a year-on-year increase of 14%. The rise continues also in 2014: in the first quarter, net commissions and fees grew by 8% year-on-year. Income from commissions and fees in 2014 could overall remain at the level of 2013, as the upward effect of the economic growth on this income will be offset by the loss of income from commissions relating to currency conversion following the euro changeover.

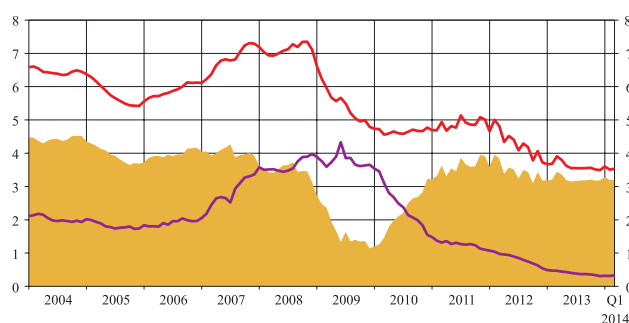
Trading income declined by 16% year-on-year in 2013 and was 134.9 million euro. This decline is mainly associated with lower income from dealing in foreign currencies and income from trading in securities. In the first quarter of 2014, trading income contracted considerably due to the above-mentioned one-off effect and the losses from trading in securities sustained to a particular credit institution. In the absence of income from converting the lats to the euro, trading income is expected to remain at the previous level or slightly decrease in 2014.

The overall margin on outstanding amounts (for resident non-financial corporations and households) remained unchanged in the first quarter of 2013 and the first quarter of 2014, at about 3.2 percentage points (see Chart 2.26). Both the interest rates on loans to residents and deposits from residents still remained at their historical lows. The overall margin on new business rose slightly in 2013, reaching 4.34 percentage points in December as compared to 3.48 percentage points in December 2012. At the beginning of 2014, it was volatile and edged down to 3.83 percentage points at the end of the first quarter. Lending and deposit rates are expected to stay low in 2014 and their developments will cause only minor volatility in the case of EURIBOR.

Chart 2.26

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

■ Overall margin (in percentage points)
— Weighted average lending rate
— Weighted average deposit rate



Overall, the operating costs of the sector edged up to 476.2 million euro in 2013, partly in relation to the spending associated with the euro changeover. The costs have increased for Group 2 credit institutions as well as for most of the credit institutions from Group 1, yet the rise is steeper in the case of Group 2 credit institutions, reflecting an increase in business with non-residents. Generally, the credit institutions continue with the ongoing cost optimisation measures, focussing on a transition to electronic services and cutting down on the services provided on-site at the branch offices.

Net amount from expenditure on provisions and income from reversal of provisions in Latvia's credit institutions shrank by 11% in comparison with 2012 and was 194.5 million euro. This minor fall was mainly associated with lower spending on provisions. No major changes are expected in 2014, the loan portfolio quality will continue to improve and the flow of new delinquent loans will gradually diminish. Therefore, the loan loss provision expenses will continue to contract. At the same time, 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. Differences across credit institutions in terms of provisioning can be observed.

With the current performance results trends persisting, the credit institutions' profit could remain at the level of 2013 in 2014. A further rise in profit will be dampened by the loss of income related to currency conversion following the euro changeover, including profit from foreign exchange trading, and lower income from commissions and fees, as Latvia has to ensure that the charges for cross-border payments in euro correspond to the prices of domestic transfers³³. No significant decline in income due to the euro changeover is expected, as credit institutions attempt to boost the income received from other services in order to offset the shrinking foreign exchange income. The data for the first quarter of 2014 show a year-on-year fall in income from foreign currency trading by 5.3 million euro or 24% and an increase in income from commissions and fees by 5.5 million euro or 8%. In addition to that, a downward effect on profitability could be exerted by the interest rates which are expected to stay low and shrinking income from reversal of provisions. Economic growth and improved cost efficiency will have a positive effect on profitability in 2014. Business with non-residents will make a significant contribution to the overall profit of credit institutions.

2.5 Capitalisation

Capital adequacy of credit institutions and their ability to absorb unexpected losses remain high.

At the end of 2013, CAR of credit institutions and Tier 1 CAR reached their historical highs of 18.9% and 17.3% respectively (see Chart 2.27). The capitalisation level of

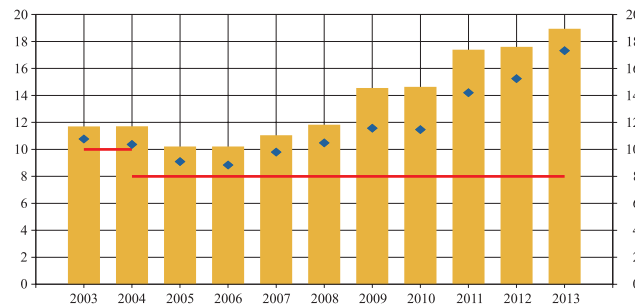
³³ Regulation (EC) No 924/2009 of the European Parliament and of the Council of 16 September 2009 on cross-border payments in the Community and repealing Regulation (EC) No 2560/2001 promotes the single European payments market by setting requirements to levy the same charges for national and cross-border payments in euro. The introduction of SEPA credit transfers in Latvia was successfully completed with the changeover to the euro on 1 January 2014 when all respective credit transfers in lats were replaced by SEPA credit transfers. National direct debit will be replaced by the respective SEPA products by 1 January 2015, i.e. by SEPA credit transfers combined with e-invoicing or SEPA direct debit.

credit institutions is expected to remain high in 2014 as well and it will be supported by retaining the 2013 earnings, the forecasted 2014 profit of credit institutions and the capital boosting measures taken by some credit institutions.

Chart 2.27

CAR DEVELOPMENTS
(% of RWA)

- CAR
- ◆ Tier 1 Ratio
- Minimum capital requirement



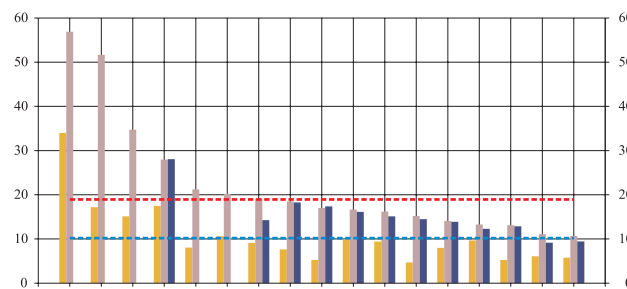
For most credit institutions, the consolidated CAR was only slightly lower than that on a solo basis (see Chart 2.28). Analysis of the leverage ratio³⁴ of credit institutions also leads to a conclusion that the capitalisation level is high. The average leverage ratio of the sector was 10.2% at the end of December 2013, which is significantly higher than the minimum threshold of 3% set by Basel III requirements.

Chart 2.28

CREDIT INSTITUTIONS' CAR (SOLO AND CONSOLIDATED) AND LEVERAGE RATIO
(%: 31.12.2013)

- Leverage ratio*
- CAR on a solo basis
- CAR at a consolidated level (if any)
- Average leverage ratio of credit institution sector
- Average CAR of credit institution sector

* Estimated based on Basel III methodology.

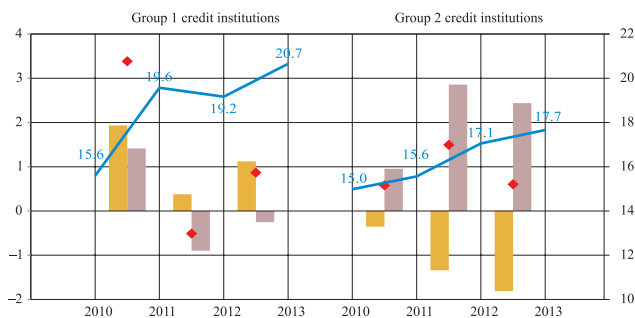


The CAR of both credit institution groups increased in 2013, yet the contributions of the various elements of the ratio to the CAR development varied. Within the last three years, RWA of Group 1 contracted, having a positive effect on CAR (see Chart 2.29). Own funds of Group 1 decreased in 2012 and 2013, having a compressing effect on CAR; nevertheless, in 2013 this was offset by the significant shrinking of RWA mainly on account of the decreasing loan portfolio, and CAR climbed to 20.7% at the end of 2013. By contrast, the increase in Group 2 CAR is associated with additional capital inflows. In the case of Group 2, the contribution of capital inflows was higher than the increase of RWA in the last three years, resulting in an improvement of the Group's CAR.

Chart 2.29

COMPARISON OF GROUP 1 AND GROUP 2 CAR AND THE CONTRIBUTIONS OF ITS ELEMENTS TO CAR DEVELOPMENT
(in percentage points)

- RWA contribution to changes in CAR
- Own funds contribution to changes in CAR
- ◆ Overall changes in CAR during the period (contribution of RWA and own funds)
- CAR (%; right-hand scale)



³⁴ A measure unrelated to risk which is set as the ratio of Tier 1 capital to total risk-unweighted exposure expressed as a percentage. The minimum leverage ratio requirement set by Basel III standards is 3%. CRR provides for the monitoring of this ratio and an observation period has been set from 1 January 2014 to 31 December 2016 in the EEA, including Latvia. If the monitoring results reveal a necessity to introduce a regulatory requirement for the leverage ratio, it will be implemented as of 1 January 2018. Credit institutions are also obliged to disclose information concerning the size of their leverage ratios and the data used for their estimates as of 1 January 2015.

At the end of 2013, the own funds of credit institutions totalled 2.8 billion euro. No significant changes were observed in 2013, as the attempts of credit institutions to increase their capital base using profit and investment were roughly offset by the repayments of the subordinated capital and losses in some credit institutions. The paid-up share capital of credit institutions remains the main component of own funds, ensuring high quality of the credit institution capital. With Tier 1 capital growing and Tier 2 capital shrinking considerably, the composition and quality of credit institution capital continued to improve. Tier 1 capital totalled 2.5 billion euro at the end of 2013, representing 91% of own funds of credit institutions (87% at the end of 2012).

In 2013, the value of capital raising transactions of credit institutions slightly declined in comparison with the previous periods. In the course of the year, 11 credit institutions increased their capital for the total amount of 152.8 million euro, including a 106.7 million euro injection in the paid-up share capital and that of 40.3 million euro in subordinated capital. Credit institutions plan to continue capital increases in 2014 as well, primarily by means of retained earnings. Some of the Group 2 credit institutions plan to raise subordinated capital. Overall, the value of capital raising transactions could be slightly smaller than in 2013.

2.6 Shock-absorption capacity of credit institutions

The results of the sensitivity analysis and stress tests carried out by Latvijas Banka suggest that the credit institutions' capacity to absorb an increase in credit risk overall, including in association with shocks stemming from potential impairments of the external macro-financial environment was high at the beginning of 2014. In 2013, the most significant factors underpinning the high credit risk shock-absorption capacity again were the solid quality improvement tendency seen in the loan portfolio, high capitalisation level of credit institutions inter alia supported by capital boosting measures implemented by separate credit institutions, and the high level of provisions.

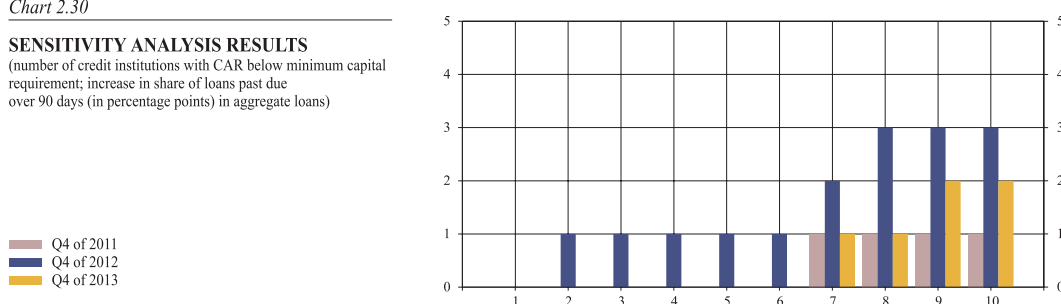
Latvijas Banka conducts regular sensitivity analysis and stress tests with regard to credit institutions. Estimates are based on the solo data of credit institutions as at the end of 2013, taking into account the changes in capital planned by credit institutions in 2014. The threshold for the stress tests was set at 8.0% of CAR.

The results of the sensitivity analysis (see Chart 2.30) point to an improvement in the credit risk shock-absorption capacity of credit institutions during 2013. Overall, 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 loans expanding by 6.8 percentage points or an increase in the amount of loans past due over 90 days by slightly less than a half.

Chart 2.30

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)



Latvijas Banka also conducts regular macroeconomic stress tests³⁵ in order to measure the resilience of Latvia's credit institutions to various adverse macroeconomic shocks. Stress tests as a method to evaluate the credit institutions' shock-absorption capacity are based

³⁵ Stress tests cover credit institutions with the size of their loan portfolios exceeding 15 million euro.

on an assumption that the materialisation of those shocks is possible, yet the probability is low. The results of the credit risk stress tests enable an assessment as to whether the credit institutions' capital is sufficient to absorb potential losses stemming from a rise in credit risk in particularly adverse or even extreme macroeconomic circumstances without additional capital injections.

The macroeconomic stress tests carried out by Latvijas Banka are based on the credit risk model of Latvijas Banka³⁶. At the beginning of 2014, the specification of the credit risk model was changed within the framework of improving the credit risk modelling tools. According to the new specification, the model has two basic factors explaining changes in the share of loans past due over 90 days in the aggregate loan portfolio of a credit institution: the real GDP growth rate (current and lagged 1 quarter) and 3-month EURIBOR (lagged 2 quarters). EURIBOR index was selected as an indicator of the credit institutions' funding costs and consequently the costs of loans granted by credit institutions to their borrowers.

The macroeconomic stress test analyses three scenarios: baseline scenario, stress scenario and severe scenario.

The baseline scenario is based on the most recent macroeconomic forecasts featured in Latvijas Banka Macroeconomic Development Report³⁷. The baseline scenario assumes that, despite the uncertainties stemming from potential external risks, Latvia's GDP growth will remain relatively high in 2014, reaching 3.3%.

When selecting the shocks to be included in the hypothetical stress scenario and severe scenario, the main attention was paid to the risks relating to the developments in the external macroeconomic environment as one of the most important systemic risk sources identified in the present Report (see Subsection 1.1). Materialisation of the external risks would affect Latvia's economy through two primary channels.

First, external shocks can affect Latvia's economy via the foreign trade channel. Potential volatility on the global financial markets caused by the materialisation of the risk premium repricing risk and the related rise in interest rates could encourage a wave of fire sales of financial assets in emerging markets as well as the developed markets. The related fall in confidence and economic activity could endanger the economic recovery process in the euro area and slow down the growth of other regions, including Latvia's main trade partners. Considering the above risk factors, a potential decrease in external demand would have a negative effect on Latvia's export development.

Second, external shocks can have an effect on Latvia's economy through the investment channel. External macro-financial uncertainties and the related negative sentiment are currently also among the most significant factors dampening investment activity in Latvia. Should the external risks materialise, the above uncertainties could grow considerably and progressively impair the confidence of domestic and foreign investors.

With the external risks materialising, potentially adverse export and investment developments are the two most significant factors that could have a downward effect on Latvia's economic growth and result in higher credit risk.

Considering all the above-mentioned, the hypothetical stress scenario analyses the response of Latvia's economy to a combination of two shocks: a 10% fall in external demand and deterioration of investor confidence resulting in a 5% decrease in investment.

In order to evaluate the credit risk shock-absorption capacity of credit institutions in extremely unfavourable circumstances, another hypothetical severe scenario was analysed. This scenario is based on the same shocks as the stress scenario, yet the gravity of the shocks has been doubled.

³⁶ The macroeconomic stress testing methodologies are described in the Bank of Latvia's *Financial Stability Report 2009*.

³⁷ Macroeconomic Development Report. Riga: Latvijas Banka, June 2014.

Changes in real GDP, based on the scenario assumptions (shocks) were evaluated, using the macroeconomic model of Latvijas Banka³⁸. In the baseline scenario, the 3-month EURIBOR value estimate is based on the values of 3-month EURIBOR futures rates³⁹ of the stress test period. The stress scenario and severe scenario, in turn, assume that the value of the 3-month EURIBOR remains unchanged in comparison with the baseline scenario.

The stress test period covers four quarters from the second quarter of 2014 to the first quarter of 2015. It is assumed that the shocks envisaged under the stress test scenarios materialise at the beginning of the period, i.e. in the second quarter of 2014.

With the shocks envisaged in the stress scenario materialising, Latvia's real GDP growth would decelerate significantly, albeit remaining in a positive territory. In the case of the severe scenario, however, Latvia's economy would be facing a relatively deep recession (see Table 2.1).

Table 2.1

VALUES OF MACROECONOMIC STRESS TEST SCENARIO FACTORS AND ESTIMATED SHARE OF LOANS PAST DUE OVER 90 DAYS IN AGGREGATE LOAN PORTFOLIO FOR EACH SCENARIO

(Q2 2014–Q1 2015; %)

Indicator	Baseline scenario	Stress scenario	Severe scenario
Real GDP growth (period average)	3.8	0.2	–3.4
3-month EURIBOR (period average)	0.2	0.2	0.2
Estimated share of loans past due over 90 days in aggregate loan portfolio (end of Q1 2015)	6.9	9.8	13.8

Taking into consideration the resulting values of the macroeconomic fundamentals, the potential development of the credit institutions' loan portfolio quality was assessed using the above-mentioned credit risk model developed by Latvijas Banka experts. According to the baseline scenario, the quality of credit institutions' loan portfolio is expected to continue improving gradually. Thus the share of loans past due over 90 days in the aggregate loan portfolio will contract by 1.1 percentage points at the end of the first quarter of 2015 in annual terms, to stand at 6.9%.

A significant deceleration of Latvia's economic growth and deterioration of macro-financial environment under the stress scenario and severe scenario would cause an increase in credit risk translating into an impairment of loan portfolio quality. Under the stress scenario, the share of loans past due over 90 days in the aggregate loan portfolio of credit institutions could grow by 1.8 percentage points year-on-year by the end of the first quarter of 2015, reaching 9.8%, whereas under the severe scenario it would increase by 5.8 percentage points, to 13.8%.

An assessment of the credit institutions' capacity to absorb an increase of credit risk up to the above level suggests that credit institutions are highly resilient to adverse macroeconomic shocks. The capitalisation of credit institutions is overall sufficient to absorb rather sizeable additional provisions due to higher credit risk (see Table 2.2).

Table 2.2

AGGREGATED MACROECONOMIC STRESS TEST RESULTS⁴⁰

Indicator	Stress scenario	Severe scenario
Number of credit institutions with CAR below 8%	0	0
Additionally required capital (in millions of euro)	0	0
Additionally required provisions (in millions of euro)	109.4	401.3
Additionally required provisions (% of aggregate credit institution assets)	0.5	1.6

³⁸ See Beņkovskis, K., Stikuts, D. *Latvia's Macroeconomic Model*. Riga : Latvijas Banka. Working Paper No 2/2006.

³⁹ Source: Bloomberg.

⁴⁰ Sensitivity was estimated based on the credit institutions' solo data as at the end of 2013.

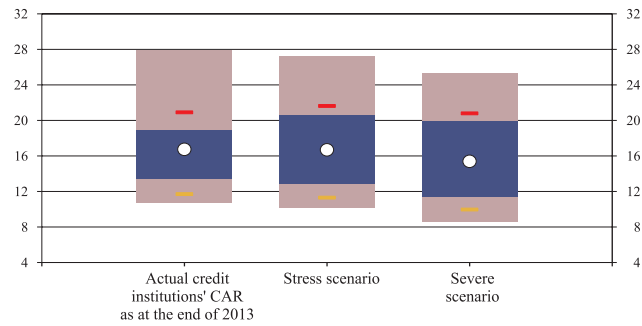
The decrease in the aggregate CAR of credit institutions would be relatively small under both scenarios (0.2 percentage point and 1.9 percentage points respectively) and aggregate CAR would remain significantly above the statutory minimum capital adequacy requirement (see Chart 2.31).

Chart 2.31

DISTRIBUTION OF CREDIT INSTITUTIONS' CAR

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

- Minimum and maximum range
- Inter-quartile
- Aggregate CAR
- 10th percentile
- 90th percentile



3. DEVELOPMENT OF NBFS

Overall, the year 2013 was successful for the NBFS institutions, and this was supported by their positive performance in the financial markets and improved confidence. Almost all NBFS sub-sectors whose principal activity is related to investing funds have generated high yields and recorded positive financial results. However, some NBFS sub-sectors whose operation is primarily related to Latvia's resident non-financial corporations and households experienced a slight slowdown in activity, although at the current juncture the pace of growth was positive. Overall, the amount of both new leasing loans and OFI⁴¹ loans decreased, with loans granted to resident non-financial corporations declining in particular. Taking into account the fact that the role of the NBFS in Latvia's financial sector did not increase significantly, the systemic impact of their developments on the financial stability is still relatively limited. Mutual relations with resident credit institutions decreased somewhat both on the liability and asset side in 2013, and the significance of time deposits with credit institutions continued to diminish for many NBFS sub-sectors, while the contribution of the capital market instruments in financing increased.

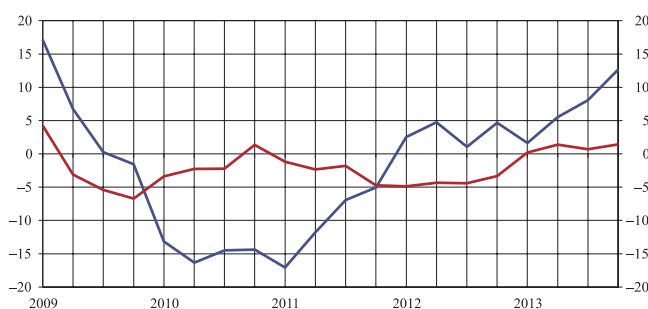
Overall, the risks to the future development of the NBFS are mainly related to the potential slowdown in economic activity that may have a negative impact on the currently improving quality of loans and reduce the demand for the NBFS investment services. The risks associated with low yields and rapid changes in the financial market conditions also still persisted.

In 2013, the NBFS⁴² assets grew by 12.8% (the highest growth rate since 2009; see Chart 3.1). The growth rate of some NBFS sub-sectors had accelerated⁴³. At the end of 2013, the NBFS assets amounted to 5.1 billion euro, while their share in Latvia's overall financial sector increased to 14.9% (13.6% at the end of 2012, but 12.7% at the end of 2011).

Chart 3.1

ANNUAL GROWTH RATE OF NBFS AND CREDIT INSTITUTION ASSETS (%)

— NBFS
— Credit institutions



The assets of all NBFS sub-sectors (excluding non-life insurance corporations, with their assets declining by 7.0% in the course of the year) increased in 2013. At the same time, investment funds recorded the most rapid rise in assets in 2013 (25.6%), thus becoming the largest institutional investor in Latvia, hence the assets of investment funds exceeded the assets of non-life insurance corporations. The OFI assets likewise grew quite rapidly, while their share in the assets of the non-bank financial sector increased to 47% (see Chart P1.8).

3.1 Leasing companies and OFIs

Of all NBFS sub-sectors, leasing companies are still the most important non-bank financial

⁴¹ The OFIs include the financial intermediaries that engage in activities auxiliary to financial service activities, holding companies and other lending services providers, e.g. pawnshops, quick credit providers, as well as the payment service providers.

⁴² The CSB quarterly report on leasing loans "1-leasing" and the quarterly report on financial assets and liabilities "3FAP" have been used in the NBFS analysis.

⁴³ For example, the assets of leasing companies increased by 7.8% in 2013 (in the previous year – by 0.1%), the assets of investment funds expanded by 25.6% (before decreasing by 1.7% in the previous year), while the OFI assets – by 18.4% (in the previous year – by 6.4%).

intermediaries engaged in granting loans to the economy. However, their activity that can be measured as the amount of new leasing loans started to moderate in 2013. New leasing loans of all types (financial leasing, operative leasing) decreased year-on-year. For the time being, however, a decline in new business has not had any significant influence on the outstanding amount of the leasing loan portfolio. As loans account for 80% of the total assets of leasing companies, the risks to these companies are primarily related to the quality of the loans granted. The risks are concentrated in the domestic services sector (see Chart P1.9).

The outstanding amount of the financial leasing and factoring loans⁴⁴ of leasing companies granted to resident and non-resident non-financial corporations that is equivalent to credit institution lending amounted to 1 182.1 million euro at the end of 2013 to be above the year-on-year indicator by only 1.4%. Moreover, the relatively minor rise in loans equivalent to credits in 2013 was primarily determined by a steeper increase in the factoring loan portfolio (12%; to 108.0 million euro), while the outstanding amount of financial leasing grew only somewhat (by 0.4%; to 1 074.1 million euro).

The breakdown of the financial leasing portfolio by economic sector remained virtually unchanged. The most intensive use of financial leasing services was still recorded in the transport and communication sector. Its share in the financial leasing portfolio was 23.8% at the end of 2013 (25.8% in the previous year). With the outstanding amount of leasing loans granted to companies in the sector of agriculture, hunting, forestry and fishing increasing by 13.6% in 2013, the share of this sector in the financial leasing portfolio rose to 14.0%. At the same time, the share of loans to households in the financial leasing portfolio remained broadly unchanged (15.0%). The share of loans issued to companies in the trade sector increased somewhat (from 11.2% to 12.9%), while the share of those issued to non-financial corporations operating in manufacturing declined slightly (from 9.4% to 8.9%). The outstanding amount of financial leasing granted to non-residents decreased in 2013, amounting to 4.8 million euro at the end of the year (a fall of more than 50%).

The OFI sector was the major NBFS sub-sector in terms of assets (instead of the outstanding amount of loans). The OFI assets amounted to 2 418.9 million lats at the end of 2013, and the asset structure also changed, with the share of loans in total OFI assets decreasing to 30.1% (40.8% at the end of 2012). In 2013, the OFI assets started to be dominated by participating interest in other non-financial corporations, and this was fostered by an increase in the holding company investment in the capital of non-financial corporations and the expansion of activities of the companies supporting businesses. Participating interest in other non-financial corporations amounted to 39.0% of OFI assets at the end of 2013 (31.1% at the end of 2012). The majority of these financial resources (82.1%) were invested in resident non-financial corporations.

The OFI loan portfolio amounted to 726.8 million euro at the end of 2013 (12.8% lower year-on-year). Loans were primarily granted to resident non-financial corporations and households; however, almost 15% of the loan portfolio were loans to non-residents, predominantly to non-financial corporations registered outside the euro area. The outstanding amount of the OFI loans granted to resident households continued to grow in 2013, amounting to 217.7 million euro, while the outstanding amount of loans to non-resident households declined significantly (almost 15.6 million euro at the end of 2012; 2.8 million euro at the end of 2013). Thus, loans issued by both the leasing companies and OFIs showed some signs of weakening activity in 2013, in particular regarding loans granted to resident non-financial corporations, while the outstanding amount of loans granted to non-residents decreased. Like leasing companies, the risks of other sub-sectors related to lending, i.e. some OFI non-financial companies, are also primarily associated with the quality of the loan portfolio granted to residents.

The financing structure of leasing companies remained unchanged in 2013: leasing

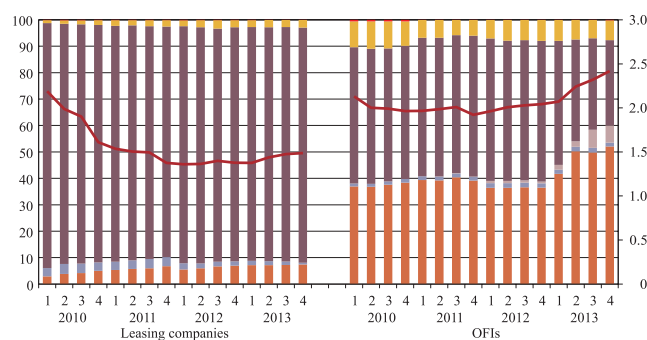
⁴⁴ The CSB quarterly report on leasing loans "1-leasing" has been used in the leasing portfolio analysis.

companies financed their operation by predominantly using loans attracted from resident and (more) non-resident MFIs, and these loans accounted for 30.0% and 60.0% of total liabilities respectively. At the same time, substantial changes were observed in the financing structure of OFIs in 2013. The OFI loans from MFIs decreased notably (by 28.3%) to 780.6 million euro or 32.3% of the OFI total liabilities at the end of 2013, with the share of loans from non-resident MFIs in total liabilities also contracting significantly (from 30.0% at the end of 2012 to 11.0% at the end of 2013). Meanwhile, OFIs increased their capital and attracted funds actively by issuing debt securities in 2013. The amount of debt securities outstanding in the OFI liabilities increased to 157.9 million euro in the third quarter (almost 7% of total OFI liabilities; see Chart 3.2).

Chart 3.2

STRUCTURE OF LIABILITIES OF LEASING COMPANIES AND OFI AND OUTSTANDING AMOUNT OF LIABILITIES ON THE BALANCE SHEET (%)

■ Other liabilities
■ Other accounts payable not previously listed
■ Loans
■ Debt securities issued
■ Provisions
■ Equity capital
— Balance sheet (in billion of euro; right-hand scale)



3.2 Insurance corporations

In 2013, the developments in the insurance corporation sector were dynamic given the diversity and regularity of the insurance cases (natural hazards, fires and other events) affecting the performance indicators of insurance companies. The assets of non-life insurance corporations⁴⁵ were still lagging behind the pre-crisis level after the decline in 2009, while the assets of life insurance corporations were approaching the pre-crisis level.

The assets of non-life insurance corporations decreased by 7.0% (to 395.0 million euro) in 2013. The operational specifics of non-life insurance corporations and a high share of financial investment in assets explained the fact that non-life insurance corporations were among the largest institutional investors in Latvia.

Investment in financial assets (260.8 million euro) accounted for 94.0% of the total investment portfolio of non-life insurance corporations. Almost all other investments in non-financial instruments were related to real estate (mainly for building and construction needs rather than investment).

A substantial share of investment of non-life insurance corporations in financial instruments was placed in low-risk fixed-income securities, with 64.4% of the total investment portfolio's value invested in debt securities issued by state and local governments at the end of 2013 (53.3% at the end of the previous year). Moreover, although the share of Latvian government bonds (27.0%) in the state and local governments' debt securities portfolio was high, Lithuanian government debt securities played a far more important role as their share in total debt securities outstanding was almost one time and a half higher. Investment in non-fixed income securities in the investment portfolio decreased in comparison with the previous year, and this was underpinned by a decline in investment made in investment fund certificates traded on the regulated market. Non-life insurance corporations invested only 2.3% of the total investment portfolio's value in shares and financial instruments equivalent to shares at the end of 2013. Deposits with credit institutions in the investment portfolio also continued to decline; moreover, they decreased by almost one third, accounting for 17.0% of the total financial investment portfolio respectively at the end of 2013.

⁴⁵ Six non-life insurance corporations were operating in the Latvian market at the beginning of 2013; however the FCMC took a decision to revoke the licence for the operation of the insurance JSC *Balva*, thus five risk insurance companies registered in Latvia stayed on the market at the end of 2013.

In 2013, non-life insurance corporations registered in Latvia failed to increase the level of signed premiums significantly, while the level of compensations did not improve either. Gross signed premiums reached 310.2 million euro, representing a year-on-year decline of 2.6%, while gross compensations amounted to 165.1 million euro, representing a year-on-year drop of 2.2%. Trends in signing premiums and paying compensations suggest a slight decline in activity on the non-life insurance market: the number of premiums signed decreased in 14 types of insurance (out of 21).

Although the level of gross signed premiums was lower, the technical result of non-life insurers' profit that is primarily based on the premiums earned and claims and takes into account expenses other than those related to investment management improved in 2013, reaching 10.1 million euro (31.9% more than in 2012) also because non-life insurance corporations managed to reduce expenses related to direct operation. At the same time, the pre-tax profit of non-life insurance corporations dropped to 9.4 million euro (14.2% over the previous year). It was determined by lower income from the investment portfolio, while losses from the revaluation of the investment portfolio increased significantly.

The assets⁴⁶ of life insurance corporations rose to 135.5 million euro (by 4.7%) in 2013. The growth rate of assets was slower than in the previous year. The financial investment portfolio accounted for the major share of the assets of life insurance corporations (73.1% of the total asset value or 99.5 million euro). Types of other investment, such as investment in land and real estate or associated non-financial corporations, accounted for a much smaller share. At the end of 2013, 20.2% of the total assets of life insurance corporations (27.3 million euro) were placed in the investment portfolio which is separated from traditional types of life insurance and whose investment risk is assumed by the owners of life insurance policies since purchasing life insurance policies and personally assuming investment risks become increasingly popular among customers.

The ratio of shares and other non-fixed income securities in the financial investment portfolio of life insurance corporations exceeded investment in other financial instruments, amounting to almost 40% of the total portfolio's value. Moreover, this expansion was mainly on account of an increase in investment fund investment certificates (41% in comparison with the end of the previous year). Investment fund certificates were primarily registered in Luxembourg, the UK and Ireland. Overall, the contribution of the life insurance sector in funds is diversified by currency and issuer's country. Once the largest investment of life insurance corporations, time deposits with credit institutions, likewise shrank in 2013, reaching 26.8% of the total investment portfolio's value. The share of investment in debt securities and similar instruments rose only somewhat in 2013: at the end of 2013, the share of investment in these financial instruments was 33.4% (30.2% in the previous year). Moreover, life insurers opted for investing almost a half (48.4%) of total investment in debt securities in Latvian government debt securities.

Unlike non-life insurance corporations, life insurers increased the level of gross signed premiums by 12.5% in 2013; hence it reached 39.0 million euro. At the same time, the level of gross compensations posted a much more rapid rise (by 47.4%) to 27.6 million euro, thus having a negative impact on the technical profit indicator. Consequently, relatively lower net investment income and a lower ratio of premiums earned to compensations guaranteed resulted in losses for life insurance corporations in 2013. Since corporations which are active in this sector reduced expenditure, a combination of these factors only slightly contributed to a negative technical result (−0.7 million euro). During the reporting period, total losses were somewhat offset by income from investment (non-technical), thus life insurers' losses before taxes amounted to 633.2 thousand euro. Insurance corporations finished the year 2012 with high profit (2.8 million euro).

The solvency ratio of insurance corporations reflecting the financial stability of their

⁴⁶ Two life insurance corporations registered in Latvia, JSC SEB Life Insurance and JSC Citadele Life, were operating in the market in 2013.

activities improved in 2013 for life insurance corporations and deteriorated for non-life insurance corporations; however, the solvency indicator considerably exceeded the minimum level in both sub-sectors of insurance corporations, with life insurance corporations reaching 181.9%, but non-life insurance corporations – 163.0%.

The risks of insurance corporations remained broadly unchanged in comparison with the previous year and were mainly related to returns on the investment portfolio against the background of a low interest rate environment. Lately external macroeconomic risks have also escalated: This may have an adverse effect on the level of insurance premiums signed by insurance corporations as the economic growth rate decelerated due to geopolitical escalation.

3.3 The operations of investment funds and private pension funds

In 2013, the investment fund market experienced considerable changes, with several investment funds and investment management companies leaving the market or initiating liquidation procedures⁴⁷. In many cases, changes in the investment portfolio of investment funds resulted in shifts in the market participant composition. Overall, the assets of investment funds increased by 25.6% (to 416.8 million euro).

Investment in shares and other non-fixed income instruments in the investment portfolio of investment funds rose markedly in 2013 (by 79.0%). Thus, the ratio of investment in shares and securities equivalent to shares in the total investment funds' portfolio increased from 30.0% at the end of 2012 to 42.7% at the end of 2013. Investment in debt securities in the total investment funds' portfolio declined from 30.9% to 28.2% in 2013 (in contrast to the trend observed in the previous year). Looking for higher returns, in 2013 the majority of debt securities were corporate debt securities (accounting for 77.0 million euro or 65.4% of total debt securities in the investment fund portfolio at the end of 2013), although in the previous year fixed-income instruments were dominated by debt securities issued by state and local governments (the share of these securities in total debt securities was even 51.8%, while that of corporate securities – 47.9%). Like in other NBFS, the share of time deposits continued to shrink due to low interest rates, whereas in 2013 it declined to 11.7% (15.3% at the end of the previous year). Demand deposits also contracted notably (see Chart P1.10).

The outstanding amount of the financial instruments issued by issuers registered in Latvia in the investment portfolio of investment funds increased in 2013. At the same time, the share of the financial instruments issued by Latvian issuers in the portfolio decreased to 54.2% (59.5% at the end of 2012). Investment in Russian issuers' securities recorded an increase (the share of such investment in the total portfolio was 10.7% at the end of 2012, but 16.5% in 2013, see Chart 3.3).

In 2013, the assets of private pension funds⁴⁸ rose to 236.4 million euro (by 16.3% compared to 18.6% in the previous year), thus the pension capital accumulated voluntarily under the third pillar amounted to 235.7 million euro. The assets of the pension plan per pension plan participant increased by 9.4% in 2013, but the growth rate of the assets

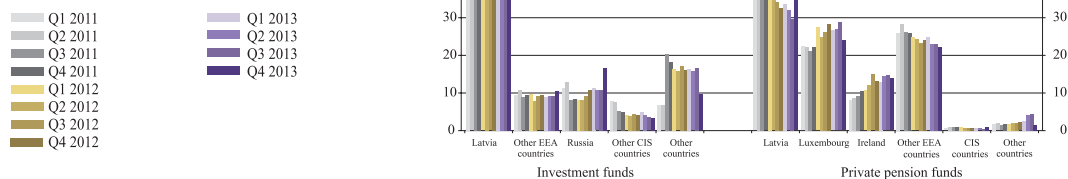
⁴⁷ At the beginning of 2013, 40 investment funds of different types were registered on the investment market; however, the number of funds on the market decreased to 27 within the course of the year. Moreover, six new funds – three bond funds and three stock funds – were registered in 2013. Changes in the investment fund market were also determined by the fact that some companies surrendered their licences. For example, two of three funds of the investment management company GE Money Asset Management auxiliary to JSC GE Money Bank were liquidated in autumn of 2013, with JSC GE Money Bank leaving the market, but the third fund was put under the management of the investment management company JSC Citadele Asset Management. Two investment funds of JSC Investment Management Company "Hipo Fondi" were liquidated in 2013.

⁴⁸ Seven private pension funds which offered 18 pension investment plans to their customers were registered in Latvia at the end of 2013. Licences were revoked for two credit institutions in 2013, and this, in turn, caused minor changes in the private pension fund market. With JSC GE Money Bank group discontinuing its operation in Latvia and pursuant to positive Competition Council's decision No. 41 of 22 August 2013, JSC GE Money Open Pension Fund managing two third pillar pension plans was merged with JSC Citadele Open Pension Fund; however, the merger was not completed until the end of 2013.

decelerated, and these developments may be driven by the fact that the average yield on investment of the private pension plans declined from 8.45% in 2012 to 2.8% in 2013.

Chart 3.3

GEOGRAPHICAL STRUCTURE OF INVESTMENT PORTFOLIO OF INVESTMENT FUNDS AND PRIVATE PENSION FUNDS (%)



The investment portfolio of the private pension plans did not record any notable changes in 2013. Similar to the previous years, the funds were mainly invested in investment fund certificates (49.0% of the total investment portfolio's value was invested in these instruments); moreover, the majority of them were registered outside Latvia – in Ireland and Luxembourg. However, the share of investment fund certificates in the portfolio decreased year-on-year (55.2% in 2012). In 2013, the share of investment of private pension funds in debt securities recorded an increase (from 29.1% to 33.6% of the investment portfolio's value) and deposits with credit institutions expanded slightly (from 15.0% to 16.5%; see Chart P1.10).

The geographical structure of the pension fund investment narrowed somewhat, with private pension funds investing in the instruments of the issuers registered in 24 countries at the end of 2013 (25 countries at the end of 2012; 29 countries at the end of 2011). Moreover, lately investments have been mostly channelled to the nearest regions (Lithuania, Estonia or Poland) or the largest global stock markets (Luxembourg or Ireland). The investment portfolio of private pension funds no longer contained financial instruments of the issuers registered in Portugal, Greece or Spain since 2012, and investment in Kazakhstan and Azerbaijan shrank.

In view of the operations of investment funds and pension funds, the risks to these sub-sectors (like the insurance sub-sector) are mainly related to the fact that the period of low yields persisted for a longer time, thus limiting (having a negative effect on) yields these funds could offer to customers.

3.4 Credit unions

Although credit unions⁴⁹ in Latvia are one of the smallest NBFS sub-sectors, they report a moderate, while sustainable growth rate of the assets annually. At the end of 2013, the assets of credit unions registered in Latvia increased by 9.0%, amounting to 21.9 million euro, although the growth rate of the credit union assets started to decelerate somewhat within the last three years (9.8% in 2012; 10.2% in 2011).

Loans granted by credit unions amounted to 16.2 million euro at the end of 2013 (an increase of 9.0%), and the ratio of loans to assets still stood at 72.2%. Like other NBFS, the share of the credit union deposits with MFIs decreased (from 24.3% at the end of 2012 to 21.5% at the end of 2013). In 2013, the balance between loans and deposits in the term structure improved somewhat for credit unions: the share of long-term deposits in the maturity profile of deposits recorded an increase, while the share of long-term loans in assets declined and that of short-term loans expanded.

⁴⁹ Credit unions provide deposit and loan services to a limited number of customers – their members for whom credit unions are partly like financial service providers. In 2013, 35 cooperative credit unions were operating in Latvia's market.

The trend of improved quality of the credit union loans was observed in 2013. First, the share of sub-standard loans in the total loan portfolio decreased and the share of doubtful and lost loans remained unchanged. Second, the growth rate of close-watch loans became weaker, and the growth rate of lost loans deteriorated significantly.

In 2013, the profit of credit unions increased by 55.6%, reaching 353.8 thousand euro. This improvement is mostly related to better operational results due to an increase in income from loans. A fall in net expenditure on loan loss provisions likewise had a positive impact on the growth of credit unions' profit.

The average capital adequacy ratio (CAR) of credit unions improved somewhat (21.3%; 20.1% in the previous year). Yet for some credit unions, this indicator had fallen below 10% in 2013, to go up again later following the necessary improvements. Overall, the number of the credit unions with their CAR decreasing and approaching the minimum capital requirement (10%) did not increase at the end of the year.

Given the operational specifics of credit unions, the risks of this NBFIs are primarily related to the quality of the loan portfolio. As the share of credit unions in the overall financial market is not high, the overall financial stability risks remained relatively contained.

4. FINANCIAL INFRASTRUCTURE

Latvijas Banka assessed systemic risk of the systemically important financial market infrastructures SAMS and DENOS within the oversight framework also in 2013, since the operational disruptions of the above infrastructures might affect the financial stability. The assessment confirmed that the probability of systemic risk was persistently low in the systems. In 2013, 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.

Smooth operation of financial market infrastructure is crucial for the safeguarding of financial stability. Payment and settlement systems are part of the financial market infrastructure and are used for the settlement of transactions executed by the financial market participants. Liquidity problems incurred by the financial market participants in a payment or settlement system or in the event of an operational disruption in a system, where such system would be insufficiently protected against risk, may trigger further disruptions amongst participants or systemic disruptions in the financial system.

4.1 Payment systems

In 2013, the SAMS was the only systemically important payment system for the settlement in lats in Latvia since it continued to provide real-time gross settlement in lats for the monetary policy operations of Latvijas Banka, large-value interbank payments, final settlement or netting settlement of other payment systems operating in Latvia and urgent customer payments.

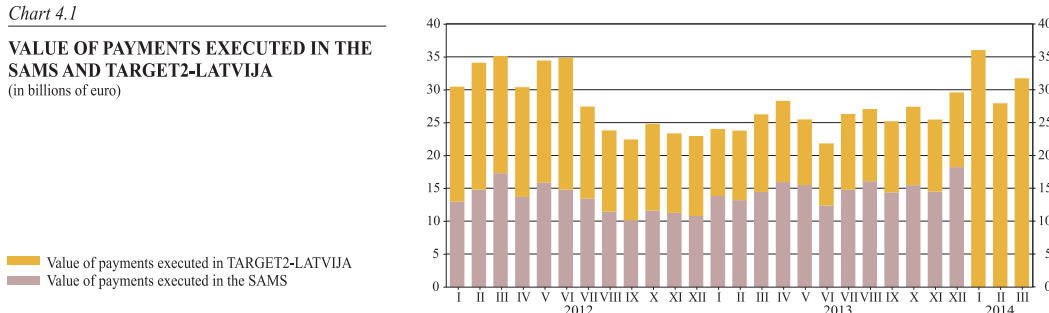
TARGET2-Latvija took over the functions of the SAMS as of the euro changeover day, and Latvijas Banka terminated the operation of the SAMS. Latvijas Banka provided a smooth changeover to the settlement in euro for the SAMS participants in TARGET2-Latvija.

Statistical data

The total value of payments processed in the SAMS recorded a year-on-year increase of 13.0% in 2013, reaching 125.6 billion lats (178.7 billion euro), while the total volume of payments rose by 2.3% and stood at 235.0 thousand payments. The expanding value was primarily attributable to an increasing value of interbank payments. Higher value in December 2013 was on account of the placement of overnight deposits during the last days of the year since a seven-day deposit facility was not provided to the participants for the placement of their excess settlement funds in lats at the end of the year due to the termination of the system's operation (see Chart 4.1). The daily average of payments processed via the SAMS amounted to 936 payments with the value of 500.5 million lats (712.1 million euro). Payments executed in lats via the SAMS until the euro changeover day have also been processed in TARGET2-Latvija since the introduction of the euro and an increase in the value of payments effected in TARGET2-Latvija has been observed in the first quarter of 2014. Higher value may be predominantly explained by liquidity transfers executed among credit institution subsidiaries and branches of Nordic credit institutions in Latvia and their parent credit institutions as well as an active participation of Latvia's credit institutions in the Eurosystem's fixed-term deposit tenders.

Chart 4.1

VALUE OF PAYMENTS EXECUTED IN THE SAMS AND TARGET2-LATVIJA
(in billions of euro)



Liquidity adequacy

In 2013, liquidity of the SAMS participants used for effecting payments and fulfilling the minimum reserve requirements stipulated by Latvijas Banka was high (unchanged from 2012) due to the fact that a substantial amount of excess funds available to credit institutions over the year was placed on the settlement accounts in the SAMS. Hence the value of funds on the settlement accounts several times exceeded the value required for the payment execution. There were no payment queues in the SAMS – all payments submitted and accepted were executed immediately. An intraday overdraft facility/credit limit of a cash account was available to the SAMS participants. A substantial amount of settlement funds, several times exceeding the value required for the payment execution, was placed on credit institution accounts in TARGET2-Latvija after the introduction of the euro.

Business continuity

The SAMS availability ratio was 100.0% in 2013, since there were no incidents which could cause discontinuity of the critical processes of Latvijas Banka over the year (see Table 4.1).

Table 4.1

THE SAMS OPERATIONAL CONTINUITY INDICATORS

Indicators	2012	2013
Disruptions per annum	0	0
Length of disruptions per annum (minutes)	0	0
System's availability (%)	100.0	100.0

Risk assessment

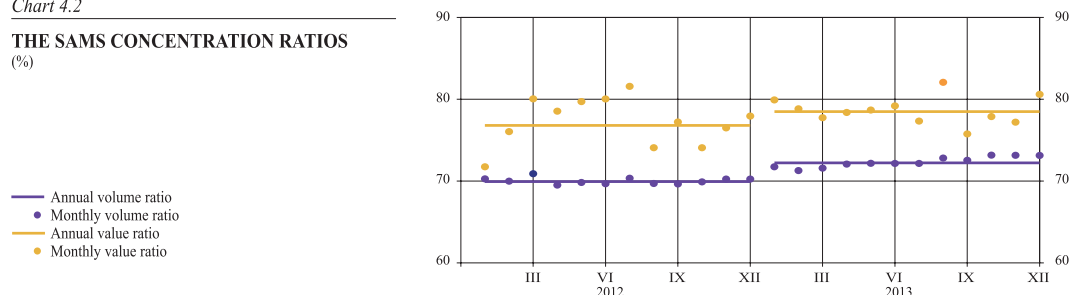
Three indicators were analysed to assess systemic risk, overall pointing to the probability of the materialisation of systemic risk: 1) the share of the system in the respective segment of payments; 2) concentration ratio and 3) netting effect ratio. The share of a systemically important payment system in the respective segment of payments exceeding 80% and a concentration ratio above 80% point to systemic risk in the event that the netting effect ratio is above 100%.

In 2013, 94.1% of all interbank credit transfers initiated in Latvia in lats were executed via the SAMS and their share of value amounted to 95.2% (94.3% and 92.0% in 2012 respectively).

The volume concentration ratio of the SAMS was 72.2% and value concentration ratio stood at 78.5% in 2013 (69.9% and 76.8% in 2012 respectively; see Chart 4.2). In August and December, the concentration ratio exceeded 80% in terms of the value, with the payments executed by Latvijas Banka accounting for the most part, *albeit* Latvijas Banka as the national central bank did not create credit and liquidity risk.

Chart 4.2

THE SAMS CONCENTRATION RATIOS (%)

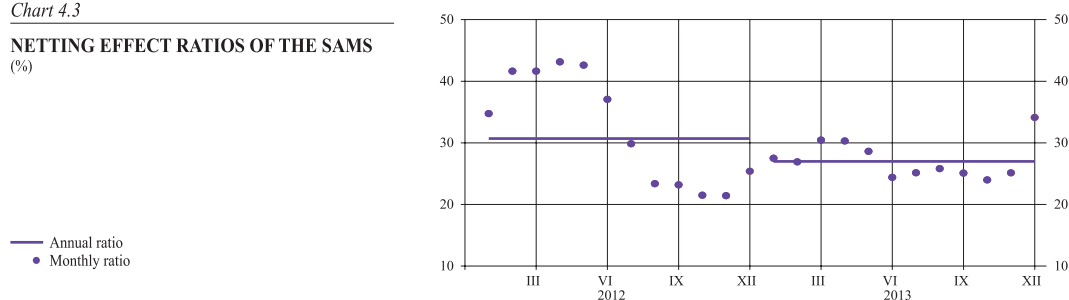


The netting effect ratio of the SAMS representing the utilisation of settlement funds in the event of a gross settlement system, amounted to 27.0% in 2013 (30.7% in 2012; see Chart 4.3). It has been calculated as the ratio of the annual average value of daily payments sent by the participants via the SAMS to the average daily balance on the

participants' accounts with Latvijas Banka. In 2013, the annual average value of daily payments and the average daily balance on the participants' accounts amounted to 315.6 million lats and 1.2 billion lats respectively⁵⁰. The netting effect ratio had remained low. The value of payments executed per day in efficient payment systems may even several times exceed that of the funds available on the accounts. Such a netting effect ratio was attributable to the fact that a substantial amount of settlement funds was available on the participants' accounts, exceeding notably the level required for the settlement.

Chart 4.3

NETTING EFFECT RATIOS OF THE SAMS (%)



The share of SAMS in the respective segment of payments still pointed to a very high systemic importance of the system in the segment of large-value interbank payments and the fact that it was actually not substitutable. This meant that the SAMS could exert substantial impact on the financial system of Latvia, should a default by a participant or several participants in the SAMS cause the domino effect and operation of the SAMS would be disrupted. However, the concentration ratios were below 80% and also the netting effect ratio was low (27.0%), overall pointing to a low probability of the materialisation of systemic risk.

4.2 Securities settlement systems

In 2013, DENOS, the securities settlement system maintained by the LCD, was the only systemically important securities settlement system in Latvia since it was used for the monetary policy operations of Latvijas Banka and mobilisation of collateral securities of the participants in the monetary policy operations for the purpose of receiving an intraday credit in the SAMS. Financial instruments related settlements of DENOS in lats were processed in the SAMS.

Latvijas Banka, in cooperation with the Eurosystem, performed the compliance assessment of DENOS against the ECB "Standards for the Use of EU Securities Settlement Systems in ESCB Credit operations" in order to establish that DENOS and Latvia's securities registered with it were eligible for the Eurosystem's monetary policy operations as of the changeover day to the euro. DENOS was deemed to be eligible for the use in the Eurosystem's monetary policy operations and intraday credit operations as of 1 January 2014 and was included in the List of eligible securities settlement systems published by the ECB.

Latvijas Banka provided consultations to the LCD in order to ensure smooth transition of DENOS to the euro in TARGET2-Latvija. The LCD connected to TARGET2-Latvija on a timely basis, having completed the necessary tests and having amended the System Rules of DENOS for the settlement in euro.

Statistical data

In 2013, the total value of financial instruments transfers (hereinafter under Section DENOS, the transfers) processed by means of DVP in DENOS totalled 587.8 million lats per annum (836.4 million euro; a year-on-year increase of 16.3%) and the volume of transfers amounted to 42.7 thousand (a year-on-year decrease of 15.1%), including

⁵⁰ The payments submitted by Latvijas Banka are not taken into account in the calculation.

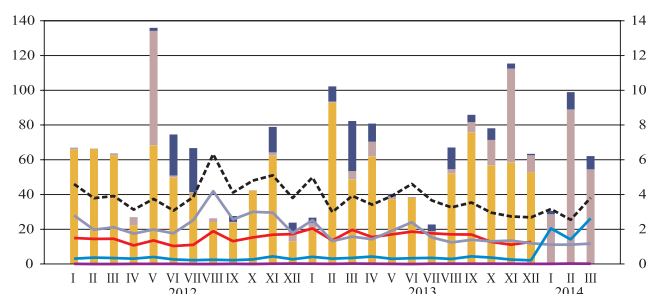
DVP – 23.5 thousand and FOP – 19.2 thousand. The daily average volume of total transfers processed via DENOS stood at 170 and the daily average value of DVP transfers was 2.4 million lats (3.3 million euro) in 2013. The decline in FOP transfers was a primary contributor to a shrinking volume of transfers, since no transfers were executed from JSC *Latvijas Krājbanka* in 2013 due to the fact that the provision of financial services had been suspended, while its operation had resulted in a notable rise in the volume of FOP transfers in 2012. The expanding value of DVP transfers is mainly on account of a growing transaction value of the government debt securities' auctions, to be explained by the Latvian government debt securities management policy and higher liquidity of credit institutions. Single sizable transactions contributed to an increase in the value of DVP transfers in February and November 2013, as the volume of DVP transfers followed a downward path in the above months. The value of transfers shrank in January 2014 since no auctions of the government debt securities were held in January, whereas in February a pickup in value was attributable to single sizable transactions (see Chart 4.4).

Chart 4.4

VALUE AND VOLUME OF TRANSFERS PROCESSED IN DENOS

(in millions of euro)

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



Liquidity adequacy

The lats settlement executed in DENOS was processed via the SAMS where the participants had substantial account balances. In 2013, the cases of a settlement delay due to insufficient funds were not identified, hence it might be concluded that the LCD participants provided the necessary liquidity in the amount of 100% for cash leg settlement of DVP transfers executed in lats.

The LCD participants provided the necessary liquidity in the amount of 100% for cash leg settlement of DVP transfers effected in lats through TARGET2-Latvija as of the first quarter 2014.

Business continuity

In 2013, the availability ratio of DENOS was 99.3% (99.6% – in 2012; see Table 4.2). In 2013, two operational disruptions were identified in DENOS during which an alternative data exchange solution was applied by the LCD, and thus the settlement in DENOS was not affected.

Table 4.2

DENOS OPERATIONAL CONTINUITY INDICATORS

Indicators	2012	2013
Disruptions per annum	2	2
Length of disruptions per annum (minutes)	560	1 040
System's availability (%)	99.6	99.3

Pursuant to the assessment performed by Latvijas Banka, the operational disruptions in DENOS did not affect the SAMS and its ancillary systems as well as the monetary policy operations and intraday credit operations of Latvijas Banka.

Operational disruptions were not identified in DENOS in the first quarter of 2014.

Risk assessment

In the securities settlement systems, settlement risks may be related both to cash leg

settlement and financial instruments settlement. Latvijas Banka assessed the probability of the materialisation of systemic risk for the lats transfers via DENOS in 2013, since such a settlement might affect the operation of the SAMS.

a) Cash leg settlement

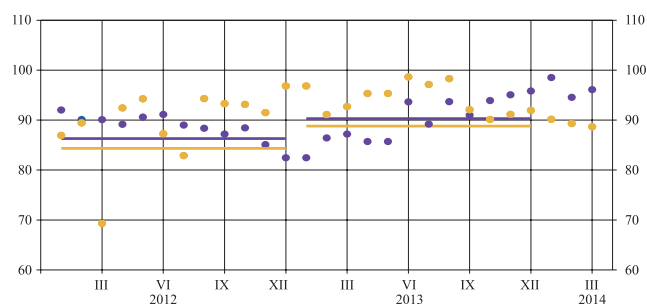
Two indicators were analysed to assess systemic risk of the cash leg settlement in DENOS, overall pointing to the probability of the materialisation of systemic risk: 1) concentration ratio; 2) the share of payment value of DENOS in the SAMS. A concentration ratio above 80% points to the probability of the risk materialisation, where the value of DENOS cash leg settlement executed in the SAMS is substantial.

In 2013, the annual concentration ratio of DVP transfers (gross and net) executed in lats and processed via DENOS stood at 90.3% and 88.8% in terms of the transfer volume and value respectively (86.3% and 84.3% in 2012 respectively; see Chart 4.5). High concentration ratios are typical for DENOS as the securities market is smaller in Latvia than in other EU Member States, hence some major players in the market are more active since they have developed a more competitive securities transaction service segment or are more actively involved in the securities market on their own behalf. Since the value of DVP transfers executed in lats via DENOS is mainly attributable to the settlement for the purchase of the government debt securities, the increasing concentration ratio may be explained by the fact that in 2013 some major players in the market made larger investment in the government debt securities than other participants.

Chart 4.5

CONCENTRATION RATIOS OF DVP TRANSFERS EXECUTED VIA DENOS (%)

— Annual volume ratio
● Monthly volume ratio
— Annual value ratio
● Monthly value ratio



In 2013, the value of DVP transfers executed in lats and processed via DENOS (unchanged from 2012) amounted only to 0.3% of the total value of payments processed in the SAMS. The daily average balance on the SAMS accounts was 1.2 billion lats in 2013; 315 million lats were on average used for credit institution cash leg settlement per day, while the daily average value of DENOS settlement executed via the SAMS stood at 1.7 million lats. The value of DENOS cash leg settlement executed in the SAMS was minor; hence the operation of the SAMS was not impaired.

The monthly concentration ratios remained high in DENOS over the first quarter of 2014, while the value of DVP transfers executed in euro via DENOS amounted only to 0.2% of the total value of payments processed in TARGET2-Latvija.

In 2013, the concentration ratios of DENOS were above 80%, albeit the value of DENOS cash leg settlement executed in the SAMS was minor. Overall, the above trend points to a low probability of the materialisation of system risk. Indicators for the first quarter of 2014 also pointed to a low probability of the materialisation of system risk.

b) Financial instruments settlement

Systemic risk to securities settlement systems may arise if a seller of financial instruments fails to provide financial instruments for the buyer on the settlement day, whereas the buyer needs these instruments for a further discharge of obligations. The value of default transfers was analysed upon conducting an assessment of systemic risk for the financial

instruments settlement in DENOS. Default transfers represent a significant additional risk, where their value exceeds 5% of the total value of transfers executed in a securities settlement system.

In 2013, more than 99.9% of transactions were effected in DENOS on the planned settlement date both in terms of the volume and value respectively (unchanged from 2012). The value of default transfers is below 5% of the total value of transfers executed in a securities settlement system, hence the default transfers are not considered to be an important source of risk.

The analysis of systemic risk suggested that the materialisation of systemic risk remained low in DENOS in 2013 overall.

The probability of systemic risk remained low in the SAMS and DENOS in 2013 overall, since liquidity required for the settlement was sufficient, the SAMS concentration ratios did not point to a high systemic risk and 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, and both systems ensured high accessibility ratio in 2013. 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.

Indicators for the first quarter of 2014 pointed to a low probability of the materialisation of system risk as operational disruptions were not identified in DENOS and the value of DVP transfers executed in euro via DENOS amounted only to 0.2% of the total value of payments processed in TARGET2-Latvija.

Appendix 1

PERFORMANCE INDICATORS OF CREDIT INSTITUTIONS

Table P1.1

OVERALL PERFORMANCE INDICATORS OF CREDIT INSTITUTIONS

	2005	2006	2007	2008	2009	2010	2011 ¹	2012 ¹	2013	Q1 2014
Balance sheet items										
Number of credit institutions and subsidiaries of foreign credit institutions	23	24	23	27	27	29	30	29	28	26
Total assets (in millions of euro)	15 570	22 634	31 184	33 072	30 845.5	31 256.5	29 775.7	28 784.4	29 192.3	27 871.1
Share of loans in total assets (%)	63.6	68.3	68.1	71.4	71.2	65.3	62.9	58.0	53.5	53.4
Share of deposits in liabilities (%)	56.7	48.8	46.4	42.0	44.1	50.6	52.9	61.7	66.8	68.3
Share of liabilities to MFIs in liabilities (%)	29.9	37.3	40.1	41.9	35.9	31.2	24.5	20.5	15.4	14.1
Loans to deposits ratio (%)	112.23	140.14	146.53	169.96	161.6	129.0	119.0	94.1	80.1	78.1
Profitability										
ROE (%) ²	26.4	25.6	24.2	3.6	-41.6	-19.7	-11.2	5.6	8.6	13.1
ROA (%) ³	2.1	2.1	2.0	0.3	-3.5	-1.6	-0.9	0.6	0.9	0.6
Cost-to-income ratio (%) ⁴	50.4	47.6	45.5	51.7	54.4	72.0	60.3	52.6	50.7	53.5
Profit margin (%) ⁵	48.0	53.0	53.7	11.6	-132.3	-77.2	-25.1	24.3	31.4	27.8
Capital adequacy										
CAR (%)	10.1	10.2	11.1	11.8	14.6	14.6	17.4	17.6	18.9	-
Tier 1 capital ratio (%)	8.8	8.8	9.8	10.3	11.4	11.5	14.2	15.2	17.3	-
Liquidity										
Liquidity ratio (%) ⁶	52.3	51.1	55.7	52.8	62.8	67.9	63.9	59.8	64.4	63.5
Liquid assets to total assets ratio (%) ⁷	26.7	23.9	25.0	21.6	21.1	27.3	27.4	32.3	36.5	36.2
Asset quality										
Share of provisions for non-performing loans in the loan portfolio (%)	0.7	0.5	0.5	1.9	8.6	11.3	11.5	8.0	6.1	6.1
Share of loans past due over 90 days in the loan portfolio (%)	1.1	0.4	0.7	3.6	16.4	19.0	17.5	11.1	8.3	8.0

¹ The Latvia Branch of the Allied Irish Banks Plc, JSC *Latvijas Krājbanka* and JSC *Parex banka* have been excluded from the profitability, capital adequacy and liquidity ratios for 2011 and 2012.

² Annualised profit/loss ratio to average capital and reserves of the reporting period (excluding data of foreign credit institution subsidiaries).

³ Annualised profit/loss ratio to average assets of the reporting period.

⁴ Cost-to-income ratio = (administrative expenses + 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.

⁵ Ratio of pre-tax profit to operating income.

⁶ Liquid assets as stipulated by the FCMC (vault cash; claims on Latvijas Banka 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, unrestricted) must not be less than 30% of credit institutions' total current liabilities with residual maturity under 30 days.

⁷ Liquid assets = vault cash + claims on central banks and other credit institutions + central government fixed income debt securities.

Table P1.2

PERFORMANCE INDICATORS OF GROUP 1 AND GROUP 2 CREDIT INSTITUTIONS

	Group 1 credit institutions ⁸						Group 2 credit institutions ⁹					
	2009	2010	2011 ¹⁰	2012 ¹⁰	2013	Q1 2014	2009	2010	2011 ¹⁰	2012 ¹⁰	2013	Q1 2014
Balance sheet items												
Number of credit institutions and subsidiaries of foreign credit institutions	13	14	15	14	13	11	14	15	15	15	15	15
Total assets (in millions of euro)	25 188.0	24 171.7	21 709.0	19 207.5	18 345.0	16 969.9	5 657.5	7 084.8	8 066.6	9 576.9	10 847.3	10 901.2
Share of loans in total assets (%)	76.5	72.5	73.7	71.8	68.6	70.2	46.8	40.4	33.8	30.5	28.0	27.1
Share of deposits in liabilities (%)	36.6	41.4	41.2	50.6	57.3	59.2	78.4	83.0	84.9	83.9	83.0	82.5
Share of liabilities to MFIs in liabilities (%)	43.2	39.5	33.1	30.2	24.0	22.8	3.4	1.6	1.0	1.1	0.8	0.6
Loans to deposits ratio (%)	209.4	175.3	178.9	141.8	119.7	118.5	59.8	48.6	39.8	36.3	33.8	32.9
Profitability												
ROE (%) ¹¹	-55.4	-26.3	5.7	4.8	6.8	10.3	-3.3	-2.0	5.0	7.6	13.1	18.9
ROA (%) ¹²	-4.2	-1.9	0.5	0.6	0.8	0.0	-0.5	-0.2	0.4	0.6	1.0	1.5
Cost to income ratio (%) ¹³	53.7	76.5	55.0	51.6	50.5	55.9	56.5	62.3	57.7	54.6	51.0	50.8
Profit margin (%) ¹⁴	-173.7	-112.9	27.3	26.2	29.3	6.4	-11.2	-5.3	15.7	20.9	34.5	55.1
Capital adequacy												
CAR (%)	14.1	14.5	18.1	17.9	19.7	-	16.3	15.0	15.6	17.1	17.7	-
Tier 1 capital ratio (%)	10.7	11.0	14.9	16.1	19.4	-	14.7	13.2	12.5	13.4	13.8	-
Liquidity												
Liquidity ratio (%) ¹⁵	60.9	65.6	56.0	50.6	51.9	-	66.4	71.3	73.4	69.8	77.7	-
Liquid assets to total assets ratio (%) ¹⁶	16.7	21.6	19.8	22.9	25.6	23.3	41.1	47.2	48.2	51.2	54.8	56.2
Asset quality												
Ratio of provisions for non-performing loans in the loan portfolio (%)	8.9	11.7	12.1	8.0	5.8	5.7	6.8	8.9	8.6	8.1	7.4	7.5
Share of loans past due over 90 days in the loan portfolio (%)	16.2	19.4	18.2	10.8	7.8	7.4	17.5	16.2	13.2	12.7	10.4	10.4

⁸ Group 1 credit institutions are credit institutions with loans granted to residents and deposits received from residents exceeding 50% of their loans granted and deposits collected.

⁹ Group 2 credit institutions – other credit institutions.

¹⁰ The Latvia Branch of the Allied Irish Banks Plc, JSC *Latvijas Krājbanka* and JSC *Parex banka* have been excluded from the profitability, capital adequacy and liquidity ratios for 2011 and 2012.

¹¹ Annualised profit/loss ratio to average capital and reserves of the reporting period (excluding data of foreign credit institution subsidiaries).

¹² Annualised profit/loss ratio to average assets of the reporting period.

¹³ Cost-to-income ratio = (administrative expenses + 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.

¹⁴ Ratio of pre-tax profit to operating income.

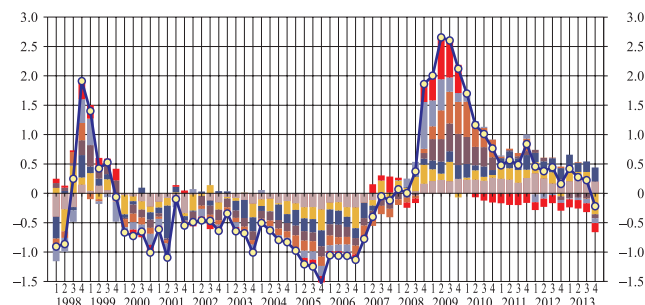
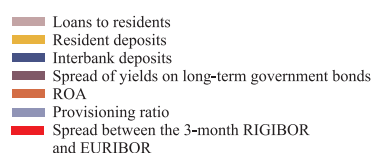
¹⁵ Liquid assets as stipulated by the FCMC (vault cash; claims on Latvijas Banka and solvent credit institutions whose residual maturity does not exceed 30 days, and deposits with other maturity, if a withdrawal of deposits prior to the maturity has been stipulated in the agreement; investment in financial instruments, if their market is permanent, unrestricted) must not be less than 30% of credit institutions' total current liabilities with residual maturity under 30 days.

¹⁶ Liquid assets = vault cash + claims on central banks and other credit institutions + central government fixed income debt securities.

Latvian financial stress index

Chart P1.1

FINANCIAL STRESS INDEX



Note: The relatively rapid deceleration of the financial stress index in the fourth quarter of 2013 (the index dropped below the long-term average) is a result of a one-off effect. It was triggered by an atypically high rise in resident deposits due to the euro changeover process (see also Subsection 2.2.).

Profitability and capitalisation of credit institutions

Table P1.3

OWN FUNDS, RISK-WEIGHTED ASSETS, CAPITAL REQUIREMENT AND CAR OF CREDIT INSTITUTIONS

(at end of period; in millions of euro)

	2011	2012	2013	Annual changes (%)
Own funds	2 713.3	2 722.9	2 769.2	1.7
Tier 1 capital	2 215.0	2 358.0	2 532.0	7.4
Tier 2 capital	498.3	365.1	237.2	-35.0
Paid-up share capital	2 320.0	2 426.7	2 447.6	0.9
Risk-weighted assets	15 595.8	15 465.8	14 618.6	-5.5
CAR (%)	17.4	17.6	18.9	+1.3 percentage points
Tier 1 CAR (%)	14.2	15.2	17.3	+2.1 percentage points

Funding and liquidity risks

Chart P1.2

FUNDING STRUCTURE OF GROUP 1 CREDIT INSTITUTIONS IN THE RESIDUAL MATURITY BREAKDOWN

(in billions of euro)

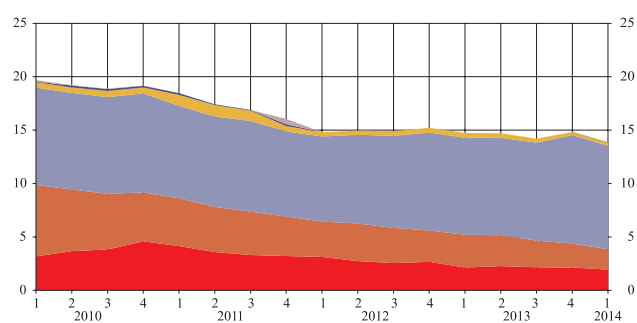
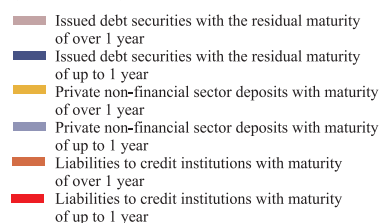
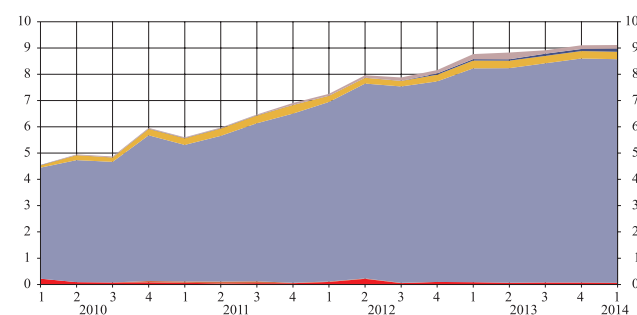
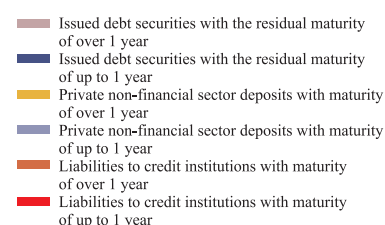


Chart P1.3

FUNDING STRUCTURE OF GROUP 2 CREDIT INSTITUTIONS IN THE RESIDUAL MATURITY BREAKDOWN

(in billions of euro)

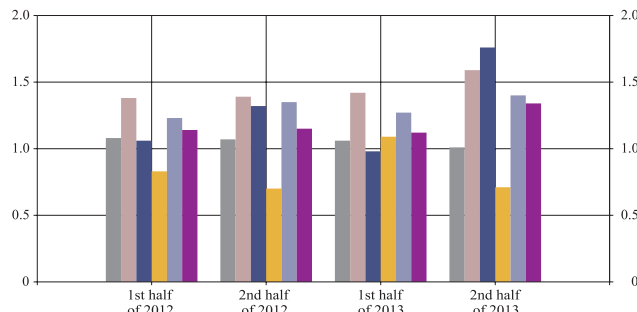


Market risk

Chart P1.4

RSA TO 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

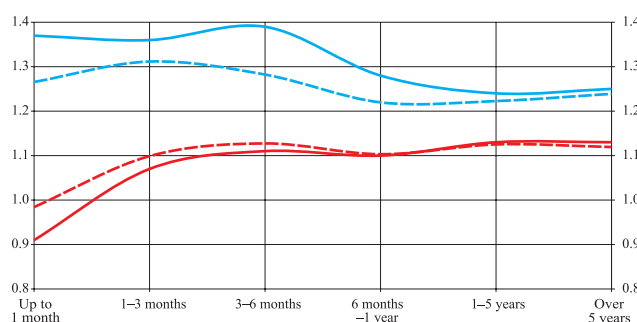


Note: The data of credit institutions active at the beginning of 2014 have been used, excluding the impact of JSC UniCredit Bank, SJSC *Latvijas Hipotēku un zemes banka* and JSC GE Money Bank.

Chart P1.5

CUMULATIVE RSA TO RSL RATIO BY GROUPS OF CREDIT INSTITUTIONS

- Group 1 credit institutions; in the 2nd half of 2012
- Group 1 credit institutions; in the 2nd half of 2013
- Group 2 credit institutions; in the 2nd half of 2012
- Group 2 credit institutions; in the 2nd half of 2013

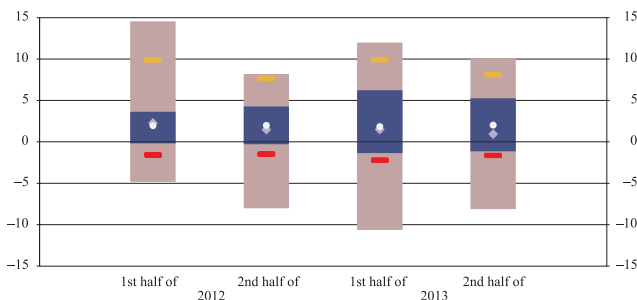


Note: The data of credit institutions active at the beginning of 2014 have been used, excluding the impact of JSC UniCredit Bank, SJSC *Latvijas Hipotēku un zemes banka* and JSC GE Money Bank.

Chart P1.6

SHORT-TERM SENSITIVITY ANALYSIS: IMPACT OF INTEREST RATE INCREASE BY 200 BASIS POINTS ON THE ANNUAL NET INTEREST INCOME OF CREDIT INSTITUTIONS (% of own funds)

- Minimum – maximum range
- Interquartile
- Median
- Weighted average
- 90th percentile
- 10th percentile



Note: The data of credit institutions active at the beginning of 2014 have been used, excluding the impact of JSC UniCredit Bank, SJSC *Latvijas Hipotēku un zemes banka* and JSC GE Money Bank.

Chart P1.7

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

- Minimum – maximum range
- Interquartile
- Median
- Weighted average
- 90th percentile
- 10th percentile



Note: The data of credit institutions active at the beginning of 2014 have been used, excluding the impact of JSC UniCredit Bank, SJSC *Latvijas Hipotēku un zemes banka* and JSC GE Money Bank.

Development of NBFS

Chart P1.8

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

- Credit unions
- Private pension funds
- Investment funds
- Life insurance corporations
- Non-life insurance corporations
- Leasing companies
- OFIs
- NBFS share (in %; right-hand scale)

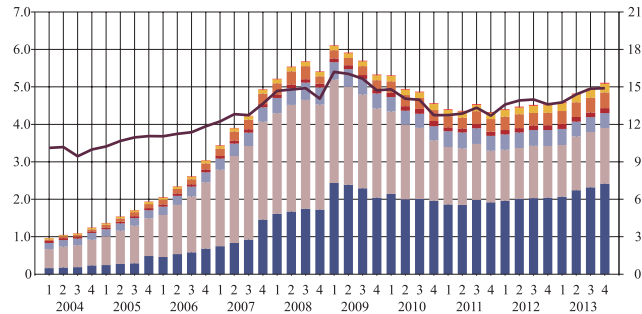


Chart P1.9

OUTSTANDING AMOUNT OF FINANCIAL LEASING PORTFOLIO OF LEASING COMPANIES IN BREAKDOWN BY ECONOMIC SECTORS
(in billions of euro; share, %)

- Other
- Public utilities, social and individual services
- Transport and storage
- Trade
- Construction
- Manufacturing
- Agriculture, hunting, forestry and fishing
- Households
- Government
- Financial institutions

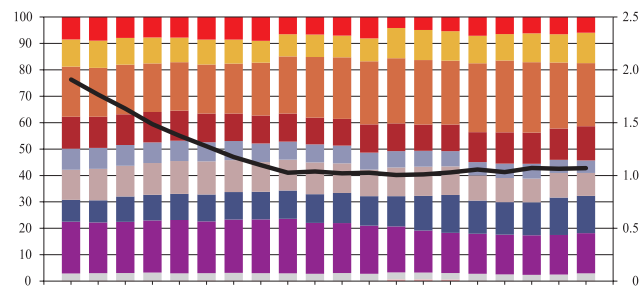
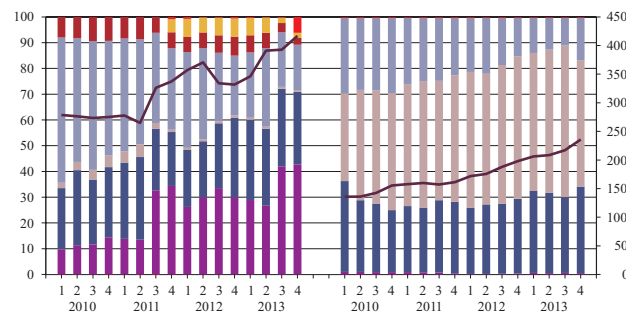


Chart P1.10

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

- Other
- Loans
- Investment property
- Time deposits and claims on credit institutions
- Certificates of investment funds
- Debt securities and other fixed-income securities
- Shares and other non-fixed income securities
- Investment portfolio (in millions of euro; right-hand scale)



Appendix 2

CAPITAL REQUIREMENTS SET OUT IN THE NEW CRD IV/CRR LEGISLATIVE PACKAGE

On 26 June 2013 the European Parliament and the Council adopted documents regulating supervisory requirements of credit institutions and investment brokerage firms (published in the Official Journal of the European Union on 27 June):

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

2) Directive 2013/36/EU of the European Union and the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (hereinafter, CRD IV).

The CRD IV/CRR legislative package lays down both mandatory minimum capital requirements for credit institutions and additional capital buffer requirements (they supplement the second pillar instruments supervisors have at their disposal) the designated national authorities may use to reduce risks in the financial system. Part of additional capital requirements for credit institutions has to be established by EU Member States mandatory, but part – at their own initiative. CRR is a directly applicable regulation that entered into force on 1 January 2014. In turn, EU Member States have to transpose the requirements of CRD IV into their national law. Latvia has transposed them into the Credit Institution Law and the Financial Instruments Market Law. CRD IV stipulates that additional capital buffer requirements at the national level may be imposed by a competent authority of an EU Member State (in Latvia – the FCMC) or another responsible authority designated by an EU Member State. The FCMC has been designated the responsible authority in Latvia with regard to additional capital buffer requirements.

The minimum capital requirements are unitary across the EU, and they consist of¹ 8.0% of own funds of RWA, 6% of Tier 1 capital of RWA and 4.5% of Common Equity Tier 1 capital. A graphic summary of capital requirements arising from the CRD IV/CRR legislative package has been provided in Chart P2.1.

Chart P2.1

CAPITAL REQUIREMENTS INCLUDED IN THE CRD IV/CRR LEGISLATIVE PACKAGE

<i>Bank's own buffer</i>	1–2%	}	<i>Bank-specific additional own fund</i>
<i>Pillar II</i>	0–2%		
<i>G-SII capital buffer (mandatory), O-SII capital buffer (at the initiative of an EU Member State) and/or a systemic risk buffer (at the initiative of an EU Member State)</i>	0–5%	}	<i>Additional capital buffers</i>
<i>Countercyclical capital buffer (mandatory)</i>	0–2.5%*		
<i>Capital conservation buffer (mandatory)</i>	2.5%		
<i>Tier 2</i>	2%	}	<i>Basic requirement</i>
<i>Additional Tier 1</i>	1.5%		
<i>Common Equity Tier 1</i>	4.5%		

* It is also possible to set a higher countercyclical capital buffer.

¹ Article 92 of CRR.

Additional capital buffer requirements

1. Capital conservation buffer²

A capital conservation buffer is an instrument to be used mandatory, and it constitutes 2.5% of RWA. Credit institutions have to ensure the requirement by Common Equity Tier 1 capital. The objective of this requirement is to build up capital buffers in periods free of stress so that in the event of a turmoil credit institutions could easier absorb the incurred losses. The requirement to maintain a capital conservation buffer is in force in Latvia as of 28 May 2014.

2. Countercyclical capital buffer³

A countercyclical capital buffer is also a mandatory instrument and the requirement has to be met by using Common Equity Tier 1 capital. The aim of the requirement is to strengthen resilience of credit institutions to future losses, taking into account the situation of the macrofinancial developments in an EU Member State (the credit cycle and risks caused by excess credit growth). The responsible authority designated by an EU Member State is in charge of setting a countercyclical capital buffer rate for exposures in this country taking account of the dynamics of credit to GDP ratio and its deviation from the long-term trend, as well as other indicators in compliance with ESRB guidelines (including guidelines on the calculation methodology). The requirement is between 0% to 2.5%, and the designated authority is entitled to set it in excess of 2.5%. The requirement has to be recalculated each quarter, and it has to be published and notified to the ESRB. An individual countercyclical capital buffer requirement for each credit institution is a variable expressed as a percentage of RWA, taking into account the geographical breakdown of credit institutions' exposures. Pursuant to the Credit Institution Law the instrument will take effect from 2016. It is expected that the FCMC will first announce the countercyclical capital buffer rate at the end of 2014 or beginning of 2015, and it will be binding for credit institutions a year after the date of the announcement.

3. The requirement for EU Member States to set **G-SII and O-SII capital buffers**⁴ for credit institutions refers to G-SII or O-SII licensed within jurisdiction of an EU Member State. Credit institutions have to meet both G-SII and O-SII capital requirements by using Common Equity Tier 1.

Each G-SII has to implement the G-SII capital buffer requirement (1.0%–3.5% of RWA) at a consolidated level according to the G-SII sub-category. EBA has to submit draft regulatory standards, which will include a detailed methodology for G-SII identification, to the EC by 30 June 2014.

The competent or designated authority may require O-SII, on a consolidated, sub-consolidated or individual basis, to maintain O-SII capital buffer of up to 2.0% of RWA. Unlike the G-SII capital buffer, the O-SII capital buffer is not a mandatory instrument, but it may be activated at the discretion of the designated authority. However, a list of systemically important institutions must be established. The systemic importance of an institution is assessed on the basis of at least one of the following criteria: a) size; b) importance for the economy of the EU or of the relevant EU Member State; c) significance of cross-border activities; d) interconnectedness of the respective institution or group with the financial system. EBA, after consulting the ESRB, publishes guidelines by 1 January 2015 on the criteria to determine the conditions of application of this paragraph in relation to the assessment of O-SII. Pursuant to the Credit Institution Law the instrument will take effect from 2016. The designated authority has to review the list of systemically important institutions at least annually and notify the EC, ESRB and EBA of the names of these institutions, as well as disclose these names to the public.

² Article 129 of CRD IV.

³ Articles 130 and 136–140 of CRD IV.

⁴ Article 131 of CRD IV.

4. Systemic risk buffer⁵

The objective of the systemic risk buffer is to mitigate long-term non-cyclical systemic or macroprudential risks not covered by other requirements of the CRD IV/CRR package. This is not a mandatory requirement, and it may be established for the whole credit institution sector, for a group of individual institutions or individual exposures. EU Member States themselves may set the requirement not exceeding 3.0%, but they have to request the EC to provide its opinion if the requirement is to be set between 3.0%–5.0%. The requirement above 5.0% may be set only by an EC decision. Where the risks addressed by the systemic risk buffer and G-SII or O-SII buffer overlap, a credit institution has to maintain the highest of both requirements. Pursuant to the Credit Institution Law the instrument will take effect from 2015.

5. Article 458 of CRR provides an opportunity to EU Member States to establish **stricter national minimum requirements** if changes are found at the level of macroprudential oversight or systemic risks, and if these changes may have a negative impact on the financial system and real economy of the respective country. The more stringent requirements may include CAR, risk weights to mitigate formation of asset price bubbles in the housing and commercial real estate market, limits on large exposures, limits on transactions made with financial institutions, higher capital conservation buffer requirements, liquidity requirements and information disclosure requirements. The instruments mentioned in Article 458 of CRR may be used only if an EU Member State can justify that none of the other additional instruments offered by the second pillar or CRD IV is not or cannot be efficient for mitigating the systemic risk. Establishment of stricter requirements within the first pillar has to be harmonised with the European Parliament, European Council, EC, ESRB and EBA. The final decision on establishment of stricter national minimum requirements is made by the European Council. The FCMC is the designated authority in Latvia regarding the fulfilment of Article 458 of CRR.

Calculation of a countercyclical capital buffer based on the historical time series

When establishing the size of countercyclical capital buffer requirements for loans granted to residents, the designated authority has to take into account the dynamics of loans granted to the private sector and GDP growth, as well as other significant factors and guidelines published by the ESRB. Results of several studies show that the ratio of the dynamics of the loans granted to the private sector and GDP growth (the methodology offered by the BCBS for establishing the need to increase buffer requirements) is the best indicator to identify excessive lending. At the same time, taking account of specifics of each country, it is possible to improve this indicator by using other additional indicators.

According to the methodology offered by the BCBS, a capital buffer is set in compliance with the deviation of the credit-to-GDP ratio from its long-term trend. A buffer is set if this deviation exceeds 2 percentage points and reaches 2.5%, if the deviation from the long-term trend exceeds 10 percentage points. In order to calculate the long-term trend, the BCBS recommends using the so-called one-sided⁶ Hodrick-Prescott filter with a smoothing parameter value⁷ $\lambda = 400\,000$. It should be noted that the trend estimate (and thus also the buffer size) substantially depends on the data starting point. This feature is particularly prominent in many new EU Member States and is connected with the short time series and structural changes in economy of these countries.

Chart P2.2 shows the calculation results⁸ regarding the size of the countercyclical capital

⁵ Article 133 and 134 of CRD IV.

⁶ Only information available until the time moment t is used to calculate the trend.

⁷ The larger the parameter λ , the smoother the trend estimate. $\lambda = 400\,000$ corresponds the financial cycle which is 3–4 times longer than the economic cycle.

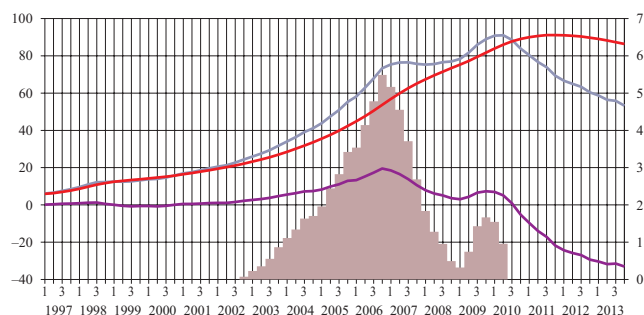
⁸ The calculation is theoretical. It has been performed by using only the methodology published by the BCBS "Countercyclical capital buffer proposal" based on the credit-to-GDP ratio. In practice, other essential factors would be taken into account. The calculation does not take account of the fact that higher buffer requirements could increase interest rates on loans thus causing a decrease in the granted loans.

buffer requirement in Latvia if such a requirement was already set as of 1997. Data of the credit-to-GDP ratio starting with the first quarter of 1996 were used in the calculation. Simulation results suggest that if a small-size requirement was set already in the middle of 2002, it would have rapidly increased and reached its maximum (5.49%) in the fourth quarter of 2006. To interpret the simulation results correctly, the structure of the credit institution sector dominated by subsidiary credit institutions of EU banks, as well as the institutional framework have to be taken into account. After Latvia joined the EU, the principles of freedom of establishment of credit institutions and freedom to provide services apply. Chart P2.2 provides a good illustration of the need for international coordination regarding the application of countercyclical capital buffer requirements. If there was such a requirement, credit institutions in Latvia would have had to apply the buffer requirement reflected in the Chart in full between 2005 and 2007, while the requirement for credit institutions abroad and their branches in Latvia could not exceed 2.5%. Most probably, the volumes and pace of lending would not change substantially, but redistribution of the market among credit institutions licensed in Latvia would take place in favour of branches of EU Member State banks and service providers from the EEA, and, possibly, subsidiary credit institutions of EU banks would change their status to become branches. The FCMC is authorised to supervise branches only concerning limited number of issues. At the same time, if the requirement to maintain the countercyclical capital buffer was applied, credit institutions would be better capitalised and would be able to easier absorb the losses incurred during the crisis. Overall, historical data suggest that the methodology offered by the BCBS is appropriate for the situation in Latvia. Based on this methodology, the countercyclical capital buffer would have been increased during the periods when the strongest lending growth and a decrease in additional Tier 1 capital maintained by credit institutions were observed.

Chart P2.2

**CALCULATION OF THE
COUNTERCYCLICAL CAPITAL BUFFER
FOR THE TIME SERIES FROM 1997**
(%)

■ Countercyclical capital buffer rate
(% of RWA; right hand scale)
— Credit-to-GDP ratio (%)
— Long-term trend of the credit-to-GDP ratio (%)
— Deviation from the trend (p.p.)



Appendix 3 PROPOSALS FOR THE LEVERAGE RATIO AND LIQUIDITY RATIOS PUT FORTH BY THE BCBS AND EBA

The new international standards governing credit institution operation (Basel III) have been developed to address the weaknesses of the regulatory framework, clearly revealed by the global financial crisis of 2008, during which the quality of credit institutions' own funds as well as the levels of own funds and liquidity were insufficient to cope with the serious systemic shocks. Therefore Basel III not only establishes tougher requirements for the quality and quantity of capital adequacy and anti-cyclical elements, but also sets quantity standards for minimum liquidity anew to improve the supervision of the received funding and liquidity risk.

To incorporate the regulatory standards of Basel III in the EU, the Capital Requirements Directive (CRD IV) to be transposed into the national laws of the EU Member States, and Capital Requirements Regulation (CRR) – a directly applicable regulation (in effect as of 1 January 2014) have been adopted. Selective provisions of CRD IV/CRR will be gradually phased in until mid-2019. At the same time it should be noted that the requirements of CRD IV have not yet been implemented in a number of countries as the legislative process appeared to be longer than expected at the beginning. CRD IV/CRR provide basis for the so-called single rule book aimed at providing a single or harmonised set of prudential regulations to be complied with by banks across the EU. The EBA plays a key role in implementing Basel III standards in the EU since the EBA has provided technical expertise to the EU institutions during the process of drafting legislation and is currently mandated to draft a number of proposals, guidelines and reports for the implementation of the CRD IV/CRR legislative package which will serve as the grounds for the EC to adopt the delegated legal acts supplementing the requirements stipulated by CRD IV/CRR.

The standards of Basel III foresee to introduce the following ratios on an international scale:

- the leverage ratio calculated by dividing Tier I capital by total unweighted risk exposure (including off-balance sheet transactions). Hence this ratio is not subject to risk adjustments and shall act as a supplement to CAR. It is comparatively simple and provides additional safeguard against risks related to the application of complex models in the calculation of capital requirements and valuation errors. The minimum level of this ratio shall not be below 3%;
- the liquidity coverage ratio (LCR), calculated as the ratio of a bank's high-quality liquid assets to the simulated net cash outflows for the next 30 calendar days,¹ stipulates the minimum amount for the bank to maintain, over an established thirty day horizon, in unencumbered high-quality liquid assets to offset net cash outflows the bank could encounter under an acute stress scenario. The LCR is a short-term liquidity ratio envisaged as a short-term liquidity buffer to offset unexpected short-term funding (up to 30 days) outflow. This ratio shall not be below 1;
- the net stable funding ratio (NSFR) calculated as a ratio of available stable funding² to required stable funding³. The NSFR determines the minimum amount of required stable funding duly accounting for the composition of bank's assets or operational liquidity.

¹ Cash outflow at full amount is used to calculate the net cash outflow, while the amount not exceeding 75% of the amount of cash outflow is included in the calculation of cash inflow.

² The available stable funding comprises equity and the received long-term funding at full amount, as well as partly also demand deposits and other short-term funding with weights consistent with the stability of each received funding category.

³ The required stable funding is measured based on the amount of assets to be covered with available stable funding, with risk weights determined for such assets in line with the risk weight categories.

This ratio as a long-term liquidity ratio will limit the credit institution capacity to finance long-term assets with short-term funds. The NSFR shall not be below 1.

The EU banks shall have to comply with the LCR as of 2015, while its calculation methodology is to be stipulated by a specific legal act delegated by the EC. Banks have to calculate and submit the NSFR and leverage ratio currently to the supervisory authority of the respective EU Member State solely for information purposes. Banks are expected to comply with the leverage ratio and NSFR as of 1 January 2018.

Credit institutions shall have to publish the leverage ratio stipulated by Basel III standards in their financial statements at a consolidated level as of January 2015. In June 2013, the BCBS published a detailed ratio calculation methodology for public consultation, defining tougher transactions in derivatives and limiting the bilateral netting of securities financing transactions. Wide discussions about the components to be included in the calculation of the ratio are now held with the sector and most likely will conclude only in 2017, when the BCBS will have to present the final ratio calculation methodology.

The LCR calculation methodology developed by the BCBS was open for public discussion in January 2013. EBA published opinion on the LCR calculation at the end of 2013, upon the involvement in drafting the EC delegated legal acts¹. At the same time, the EC plans to adopt the final definitions of the LCR calculation until June 2014 for the LCR to become effective in 2015, when the ratio has to be complied with in the amount of 60%, whereas 100% compliance has to be achieved until 2018. The first report published by the EBA on the impact of the LCR on the financial stability in the EU presents a conclusion that the LCR calculation proposed by the BCBS is overall appropriate for the banks of the EU Member States. In the second report on the definitions of extremely high quality liquid assets and high quality liquid assets, the EBA recommends that all bonds issued or guaranteed by EEA countries or EEA national central banks in the national currency and supranational institutions qualify as extremely high quality liquid assets. However, it is recommended that covered bonds should not be included in this category. At the same time, the EBA recommends that covered bonds, corporate bonds, residential mortgage backed securities, bonds issued by local government institutions and highly liquid equities and credit quality could also be included in high quality liquid assets.

In January 2014, the BCBS proposed to expand the coverage of the amount of available stable funding of the NSFR with operational deposits, funding with a maturity of up to one year irrespective of the collateral and other liabilities with a maturity of 6 months to one year. The calculation of the required stable funding provides for higher compatibility with the definition of extremely high quality liquid assets of the LCR, lower share of unencumbered residential mortgages and small businesses which qualify for a risk weight below 35% and several assets with a risk weight above 35%, and higher amount of required stable funding for loans to non-bank financial institutions and securities that are inconsistent with the definition of high quality liquid assets, high quality liquid assets encumbered from 6 months to one year, and interbank transactions with a maturity of 6 months to one year. The offered changes will facilitate the credit institutions' compliance with the NSFR. The proposal put forth by the BCBS for the calculation of the NSFR was open for public consultation until 11 April 2014, and any stakeholder could submit proposals and raise objections.²

¹ <http://www.eba.europa.eu/-/eba-publishes-reports-on-liquidity>.

² <http://www.bis.org/publ/bcbs271.pdf>.

Appendix 4

KEY ELEMENTS OF THE BANKING UNION AND BENEFITS OF PARTICIPATION IN THE BANKING UNION

The launch of the first two elements of the Banking Union – the Single Supervisory Mechanism (SSM) and single rule book marks significant structural changes in the implementation and institutional environment of the European banking supervision and the regulatory framework of credit institutions. The national central banks and competent authorities of the euro area countries will work together with the ECB, implementing the functions of the macro-prudential supervision and micro-prudential supervision of credit institutions. The role of the central prudential supervisor is conferred upon the ECB within this system. It has been stated that the SRM will complement the SSM in 2015, thus strengthening the Banking Union.

The recent global financial crisis explicitly demonstrated that, given the nowadays buoyantly expanding cross-border activities of credit institutions, a new comprehensive and complex system of the European credit institution supervision and crisis management had to be created instead of the old nationally segmented and mainly on individual credit institution risk assessment-oriented supervisory system. In 2012, the Heads of State and Government of the euro area countries agreed to break the negative feed-back loop between credit institutions and sovereigns and restore confidence in the European credit institutions. In this context, the creation of the Banking Union was deemed to be the key priority.

The project of the Banking Union was initiated in June 2012, when the President of the European Council in collaboration with the President of the European Commission, President of the European Central Bank and the President of the Eurogroup prepared a report on their vision for the future EMU that would ensure long-term stability and prosperity. The EMU architecture proposed in the report was based on four essential building blocks: an integrated financial framework (banking union), an integrated budgetary framework, an integrated economic policy framework and strengthened democratic legitimacy and accountability.

According to the report, the above EMU architecture would be developed in 10 years time.

The Banking Union is mandatory for all euro area countries and is also open to other EU countries. The Banking Union is envisaged to be based on three pillars: the SSM, the SRM and a European deposit insurance scheme which is not subject to mutualisation under the current model of the Banking Union. The above three pillars together with the single rule book and financial back-stops are the key building blocks of the banking union.

Currently the implementation of the SSM is under way. The ECB will perform the micro-prudential supervision of credit institutions and also fulfil particular functions of macro-prudential supervision in cooperation with the national competent authorities within the framework of the SSM. Around 120¹ groups of the euro area credit institutions deemed to be of systemic significance are expected to be put under the direct supervision of the ECB. The direct supervision of all other euro area credit institutions will continue to be under the control of the relevant national competent authorities of the EU countries, while the ECB will exercise their indirect supervision and will be mandated to take over the supervision of indirectly supervised credit institutions at any time.

As regards micro-prudential supervision, wide powers and tasks have been conferred on the ECB, such as authorisation and withdrawal of authorisations of credit institutions, imposing sanctions, performing inspections and applying the crisis management measures. In the area of macro-prudential supervision, the ECB may oppose the

¹ Source: List of supervised entities notified of the ECB's intention to consider them significant. ECB, 26 June 2014. The given number is preliminary. The final list of the significant supervised groups will be published by the ECB by 4 September 2014.

requirements for capital buffers stipulated by the EU countries. Where the ECB deems it necessary, the ECB may apply higher requirements for capital buffers than those applied by the national competent authorities.

Prior to assuming micro-prudential supervision, the ECB, in cooperation with the national competent authorities of the EU countries, performs comprehensive assessment of credit institutions to carry out the supervisory risks assessment, asset quality review and stress tests for the credit institutions that will be subject to a direct supervision by the ECB. The key objectives of the comprehensive assessment of credit institutions are the improvement of balance-sheet transparency, adjustments based on the results of credit institution asset quality review and strengthening confidence in European credit institutions. The ECB will commence the supervision of credit institutions on 4 November 2014.

Negotiations of the EU countries about the establishment of the SRM – the second pillar of the Banking Union – have been more complicated than in the case of the SSM, since the EU Treaties currently do not provide for an EU institution which would assume the responsibility for a centralised decision-making regarding the resolution. Different opinions on the principles of setting up the Single Resolution Fund of the Banking Union of the EU countries presented additional difficulties. The SRM is created on the basis of the resolution tools provided for by the BRRD, principles of their application and mechanism of funding such a resolution, including a bail-in tool, which has to be transposed into the national legislation of all EU countries by 1 January 2016. Upon drafting the above Directive, one of the key principles was the resolution of problems encountered by financially troubled credit institutions by means of the funding from the credit institution sector, and where no threats are posed to financial stability, by applying insolvency procedures to credit institutions and at the same time by minimizing the costs to taxpayers.

To create the SRM in the Participating Member States of the Banking Union, a draft Single Resolution Mechanism Regulation (hereinafter, the SRM Regulation) was developed and harmonised, stipulating also the establishment of a credible resolution framework and principles of setting up a Single Resolution Fund. On 27 March 2014, the EU Council issued a statement on the agreement with the European Parliament. After reaching the above agreement the European Parliament adopted the SRM Regulation in the first reading. It is planned that the above Regulation will establish the Single Resolution Board entrusted with wide powers. After the receipt of a statement from the ECB, as the supervisor of the SSM, that a credit institution is failing or is likely to fail, or on its own initiative, the Single Resolution Board will assess the necessity of a credit institution's resolution and, where appropriate, adopt a resolution scheme stipulating the relevant resolution tools and also the use of the Single Resolution Fund, where appropriate.

The target level of the Single Resolution Fund is 1% of all covered deposits or according to the current estimates it amounts to about 55 billion euro to be contributed by all credit institutions and expected to accumulate gradually over eight years. The Participating Member States of the Banking Union have committed, complementary to the SRM Regulation, to adopt and ratify an intergovernmental agreement stipulating the transfer and mutualisation of credit institution contributions to the Single Resolution Fund and providing for a number of provisions to abate legal and constitutional concerns in some EU countries.

As regards the creation of the third pillar of the Banking Union, it should be noted that currently the European system of deposit guarantees is based on the DGSD harmonising the principles of deposit guarantee for all EU countries. The above Directive stipulates a harmonised level of deposit protection in the event of withdrawal of a bank's authorisation and requires that a deposit guarantee fund funded by the credit institution sector be established in each EU country. Currently it is not planned to mutualise the funds of individual countries within the Banking Union.

The CRD IV/CRR legislative package, binding on all EU countries, lays down the regulatory requirements for banking operation and supervision. CRD IV/CRR establishes the so-called single rule book along with the regulations and technical standards developed by the EBA. The single rule book took effect at the beginning of 2014, when CRR entered into force and the EU countries had to transpose the requirements of CRD IV into their national legislation. The primary objective of the single rule book is to provide a single or harmonised set of prudential regulations to be complied with by credit institutions across the EU. CRR stipulates minimum own funds requirements in the EU, provides for a gradual implementation of the liquidity coverage ratio and leverage ratio as well as regulates limits applicable to counterparty's credit risk, large exposures and information disclosure requirements. CRD IV covers the launch of credit institutions' operation and cross-border operation within the EU, supervisory principles, capital buffer requirements, elements of corporate governance and potential sanctions in the event of an infringement. It should be noted that in many EU countries the transposition of CRD IV into the relevant national legislation is carried out at a slower pace than initially expected.

The Banking Union also provides for a financial support, most frequently understood as a resort to the European Stability Mechanism (ESM) for a direct recapitalisation of credit institutions. However, the final political agreement on the operational guidelines of this element has not yet been reached. The ESM as one of the temporary financial backstops is also considered with respect to the Single Resolution Fund of the SRM. In June 2013, finance ministers of the euro area countries approved the main principles providing for the resort to the ESM for direct recapitalisation of credit institutions, including the shifting of loss burden to credit institution shareholders and applying the principles provided for by the BRRD. The finance ministers announced that following the final adoption of such an instrument of the ESM and implementation of the SSM, the ESM will provide up to 60 billion euro to be used for the direct recapitalisation of credit institutions that pose a serious threat to the financial stability or systemically significant credit institutions. In December 2013, the finance ministers of the euro area countries stated that the ESM might be one of the temporary fiscal backstops for the Single Resolution Fund of the SRM.

It would be important to assess the benefits of the participation in the Banking Union. First, gains from the perspective of the euro area economy as well as the general public can be viewed through the prism of a higher financial stability supported by the establishment of the Banking Union. Implementation of a new prudential regulation within the CRD IV/CRR legislative package and establishment of a centralised supervisory system of credit institutions under the ECB governance create new stimulus for effective and harmonised activities aimed at mitigating risks to financial stability and inaction bias both at the level of the EU countries and also at that of the EU. More effective supervision means lower probability of future financial crisis and lower crisis management cost burden for public at large.

Improved opportunities to implement a counter-cyclical policy, where necessary, allowing for more efficient dampening of an excessively rapid expansion of lending, are also a substantial benefit derived from the participation in the SSM. It is of a particular importance to small euro area countries, where credit institutions are potentially subject to a regulatory arbitrage risk due to the dominance of foreign credit institutions.

Second, from a monetary policy perspective more efficient cross-border supervision within the Banking Union will help to contain the fragmentation of the European financial market caused by the impact of the euro area sovereign debt crisis in recent years. That, in turn, would support the elimination of the barriers to an effective functioning of the euro area monetary policy transmission mechanism.

Third, the benefits of the establishment of the Banking Union and SSM would be derived not only by the economy and public at large, but also by credit institutions. Thus, the SSM and the single rule book will provide for creating a better performance environment and

reduction of costs related to the compliance with the harmonized regulatory requirements, rules and methods for groups of cross-border credit institutions simultaneously operating in several Participating Member States of the Banking Union. The establishment of the SSM will further strengthen the cooperation and increase synergies among the national competent authorities of the EU countries and the ECB; will help reduce competitive distortions on credit institution market due to a possibility of regulatory arbitrage. Hence minimising of national particularities and subjectivity will facilitate the creation of a level playing field in the euro area with respect to the competition between large cross-border operations oriented credit institutions and small domestic market oriented credit institutions.

The SRM is expected to complement the SSM, creating additional benefits for the euro area countries. First, it should be noted that the global financial crisis, which began in 2008, clearly demonstrated that weak credit institutions may contribute to higher sovereign financial vulnerability. The creation of the SRM and compliance with the requirements of the BRRD will help prevent the recurrence of similar situations in the future, since a bail-in tool will be applied in the resolution of systemically significant credit institutions, with the relevant costs covered from the Single Resolution Fund financed by the credit institutions sector. Hence the risk of adverse impact on the EU public finances related to the resolution of financial problems of credit institutions will be minimised as much as possible.

Second, an opportunity to achieve effective resolution of large groups of cross-border credit institutions and reduction of the contagion effect on other countries arising from credit institution crisis have to be mentioned among the most important benefits of the creation of the SRM.

Third, considerable experience will be gained in the area of credit institution resolution within the SRM, combining expertise of the EU countries regarding the credit institution market and specific legislation and experience of the SRM regarding the cross-border resolution of credit institution groups at the EU-wide level.

It should be noted that the euro area countries will not only derive benefits from participation in the Banking Union, but also incur some costs. Direct costs arising from the participation in the SSM and operation of the SRM as well as the accumulation of the funds with the Single Resolution Fund are planned to be covered by credit institutions and not by taxpayers. Thus an additional cost burden will reduce profitability of credit institutions which is in line with the current euro area policy stance according to which the costs arising from the prevention and management of crisis are to be borne by the sector of credit institutions.

Overall, benefits related to higher financial stability and confidence in the long term are expected to outweigh substantially any costs incurred due to the participation in the Banking Union.

Appendix 5

RISK DIAGRAM AS A TOOL FOR ASSESSMENT AND COMMUNICATION OF THE MOST IMPORTANT FINANCIAL STABILITY RISK CHANGES

After the creation of the IMF Global Financial Stability Map in 2010 and its regular publication in the Global Financial Stability Report to provide graphical presentation of risks and conditions affecting financial stability, cobweb diagrams became a more popular tool for assessing financial stability and for communication. Currently cobweb diagrams are used not only by the IMF but also, for example, by the central banks² of Norway, Sweden, Finland and New Zealand.

In 2013, based on experience of the IMF and other central banks, Latvijas Banka developed a cobweb diagram for assessment of financial stability in Latvia. The aim of this risk diagram is to present the most important topical financial stability risks and the direction of their changes together in one place. The financial stability risks were divided into six risk categories:

- domestic macroeconomic risks;
- external macrofinancial risks;
- credit risk of non-financial corporations
- household credit risk;
- liquidity and funding risks of credit institutions;
- solvency and profitability risks of credit institutions.

Each risk category includes 7–9 indicators that best describe trends and changes of the specific risk. Quarterly data, starting with 2002 (or from the moment data are made available if they are accessible at a later date) are used in calculations. After the introduction of the required modifications, each indicator is assessed by using one of the three methods depending on the distribution of the time series of the indicator and its economic interpretation³. Thus, the assessment of each indicator ranges from 0 to 10 (a higher assessment means a higher risk). In some cases, justified by special circumstances not covered in the risk diagram, indicator assessment could be adjusted by experts' assessment.

The overall assessment of a category is the arithmetic mean of assessment of the indicators included in the category (all indicators of the category have an equal weight)⁴. The summary of risk category assessment is shown in Chart P5.1. Assessment of each risk category and contribution of individual indicators included in each category to the total risk category assessments are reflected in individual indices.

² See P. Dattels, R. McCaughrin, K. Miyajima and J. Puig. *Can You Map Global Financial Stability?* IMF, 2009. Available at: <http://www.imf.org/external/pubs/ft/weo/2010/01/pdf/c1.pdf>.

See P. Bedford and C. Bloor. *A cobweb model of financial stability in New Zealand*. The Reserve Bank of New Zealand, 2009. Available at: http://www.rbnz.govt.nz/research_and_publications/articles/details.aspx?id=4125.

See G. A. Dahl, T. B. Kloster, U. Larsen, K. J. Rakkestad, R. Reisvaag, B. D. Syversten and C. B. Træe. *A cobweb model of financial stability in Norway*. Norges Bank, 2011. Available at: <http://www.norges-bank.no/en/about/published/publications/staff-memo/77962/15/>.

See *Financial Stability 2010: Bank of Finland*, 2010. Available at: http://www.suomenpankki.fi/en/julkaisut/bulletin/financial_stability/Documents/FinancialStability_2010.pdf and

K. Jönsson and C. Leung. *Cobweb charts as a tool for summarising the stability assessment*. Sveriges Riksbank, 2012. Available at: http://www.riksbank.se/Documents/Rapporter/Ekonomiska_kommentarer/2012/rap_ek_kom_nr05_121128_eng.pdf.

³ If the indicator distribution is not close to the normal one, the standard method is used (the sorted values of a time series are divided into 11 intervals with an equal number of observations; the middle interval contains a median and corresponds to rating 5). If the distribution of the time series of the indicator is asymmetric, an alternative median-based method is used (the middle interval containing the median and corresponding to rating 5 is chosen; other observations are divided into 10 intervals; the length of intervals from the minimum value of the indicator to the middle interval is different from the length of intervals from the middle interval to the minimum value of the indicator). Expert assessment is used for assessing some indicators.

⁴ Only the composite systemic stress indicator developed by the ECB has a greater weight than other indicators in the external macrofinancial risk category. This is based on the way this indicator assesses a stress situation not only in one but in several important segments of the financial system of the euro area: money, bonds, shares and currency markets, as well as in the financial sector.

Interpretation of the average assessment "5" is important. This assessment reveals the average historical benchmark of observations, i.e. the indicator level that was more characteristic of Latvian economy during the observation period. It cannot be automatically considered a "normal" assessment of a risk or vulnerability level, and it cannot be interpreted as a long-term equilibrium level either. A risk diagram does not assess the absolute degree of risk in the specific period. Risk categories are assessed in comparison with retrospective average historical benchmarks. Thus, risk levels are assessed only in relation to their average historical value or compared to the selected period (the previous quarter, the respective period of the previous year, etc.). This means that the risk diagram does not determine the condition of financial stability but the direction of its change. Category assessments are not mutually comparable. When the latest indicator observations are released, category assessments (including their average historical benchmarks) are reassessed.

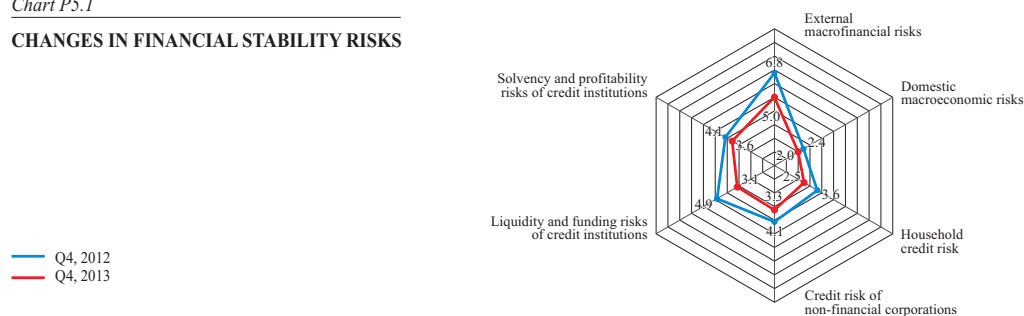
The results of historical assessment testing have been satisfactory. In 2008 and 2009 risk category assessments of the risk panel signalled threats to financial stability⁵.

Changes in financial stability risks in 2013

Overall, financial stability risks decreased in 2013. It is important that assessment of all risks, except external macroeconomic risks, is below the average historical benchmark suggesting that the risk level is relatively low (see Chart P5.1).

Chart P5.1

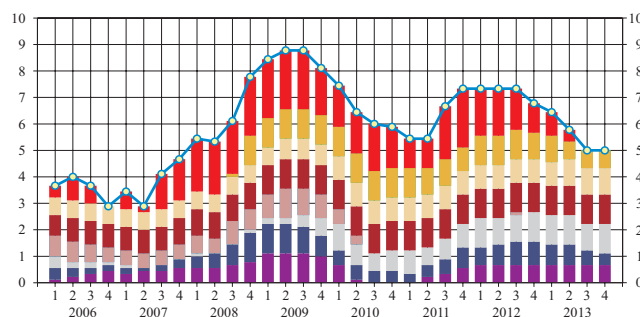
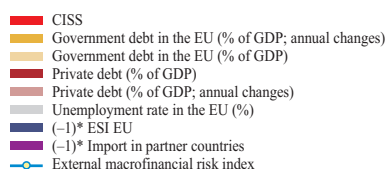
CHANGES IN FINANCIAL STABILITY RISKS



The external macrofinancial risks decreased significantly within a year. It was facilitated by lessening of the EU sovereign debt crisis, financial market stabilisation and the growth of economic activity in the euro area (see Chart P5.2).

Chart P5.2

ASSESSMENT OF CHANGES IN EXTERNAL MACROFINANCIAL RISKS (DYNAMICS OF THE INDEX AND ITS COMPONENTS)



* The indicator that has an inverse relationship with the risk.

In 2013, the domestic macroeconomic situation continued to improve. This was mainly enhanced by sustained GDP growth and signs of improvement in the labour market (see Chart P5.3).

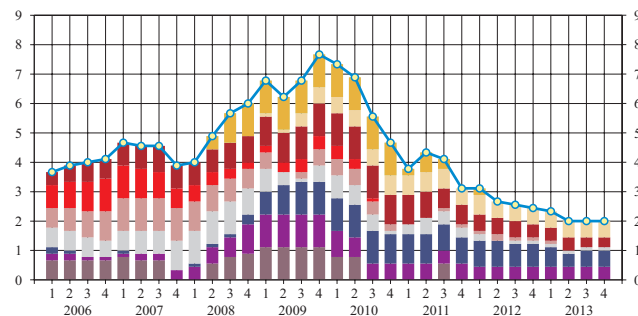
⁵ Taking into account the fact that indicators with certain delay from each other signal a rise in risk, they often "compensate" the risk level to one another. Thus, the overall category signals the historically highest risk when the assessment is 8 or 9, but not 10.

Chart P5.3

ASSESSMENT OF CHANGES IN DOMESTIC MACROECONOMIC RISKS (DYNAMICS OF THE INDEX AND ITS COMPONENTS)

(%)

- Government debt changes (% of GDP)
- Government debt (% of GDP)
- Resident loans (% of GDP)
- Credit-to-GDP gap (resident loans; percentage points)
- Current account balance (% of GDP)
- PCI inflation (%)
- Unemployment rate (%)
- (-1)* LV ESI
- Real GDP (annual changes; %)
- Domestic macroeconomic risk index



* The indicator that has an inverse relationship with the risk.

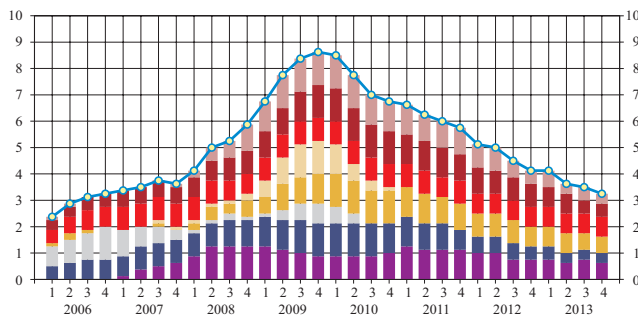
Both the credit risk of non-financial corporations and households continues to diminish gradually. The reduction of the credit risk of non-financial corporations was facilitated by the decrease in debt obligations, better interest coverage ratio and improvement of quality of loans granted to non-financial corporations (see Chart P5.4).

Chart P5.4

ASSESSMENT OF CHANGES IN NON-FINANCIAL CORPORATION CREDIT RISK (DYNAMICS OF THE INDEX AND ITS COMPONENTS)

(%)

- (-1)* Interest coverage
- Debt-to-equity ratio of non-financial corporations
- The Herfindahl Index
- Share of loans past due over 90 days (annual changes; percentage points)
- Share of loans past due over 90 days, %
- Credit-to-GDP gap (loans to non-financial corporations; percentage points)
- Credit-to-GDP (loans to non-financial corporations; percentage points)
- (-1)* Profitability of non-financial corporations
- Non-financial corporation credit risk index



* The indicator that has an inverse relationship with the risk.

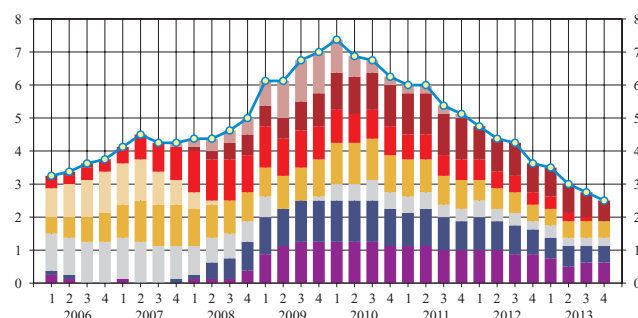
In turn, the household credit risk reduction was enhanced by the decline in unemployment and improvement of the financial situation of borrowers in conditions of favourable economic growth, the drop in loans past due and the decrease in interest payments in relation to disposable income (see Chart P5.5).

Chart P5.5

ASSESSMENT OF CHANGES IN HOUSEHOLD CREDIT RISK (DYNAMICS OF THE INDEX AND ITS COMPONENTS)

(%)

- Share of loans past due over 90 days (annual changes; in percentage points)
- Share of loans past due over 90 days
- Ratio of interest payments to disposable income
- Ratio of household debt to disposable income (gap, percentage points)
- Ratio of household debt to disposable income
- Housing affordability indicator
- (-1)* Real net wage (annual changes)
- Unemployment
- Household credit risk index



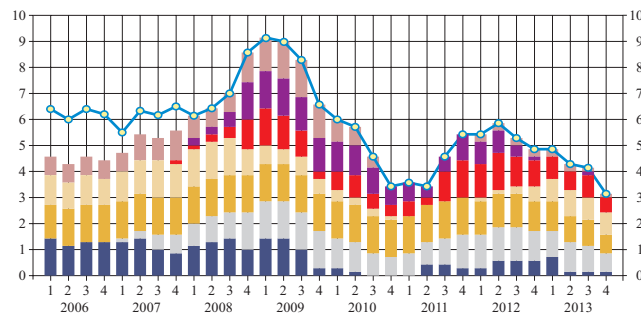
* The indicator that has an inverse relationship with the risk.

In 2013, the risk diagram showed a notable abatement of credit institutions' liquidity and financial risks resulting, in part, both from domestic economic growth and individual one-off factors, for example, the impressive increase in resident deposits at the end of 2013 due to the expected euro changeover (see Chart P5.6). With CDS spreads of Nordic countries and Latvia significantly shrinking, the credit risk assessment of Latvian credit institutions in financial markets remained low thus reducing the liquidity and funding risks.

Chart P5.6

ASSESSMENT OF CHANGES IN LIQUIDITY AND FUNDING RISKS (DYNAMICS OF THE INDEX AND ITS COMPONENTS)

- (%)
- Spread between 3-month RIGIBOR and EURIBOR (in percentage points)
- 5-year CDS price of Latvia (in basis points)
- 5-year CDS price of Swedish and Norwegian parent credit institutions (in basis points)
- Stable funding indicator of resident assets
- Ratio of resident loans to resident deposits
- (-1)* Annual changes of resident loans
- (-1) FCMC liquidity indicator
- Liquidity and funding risk index



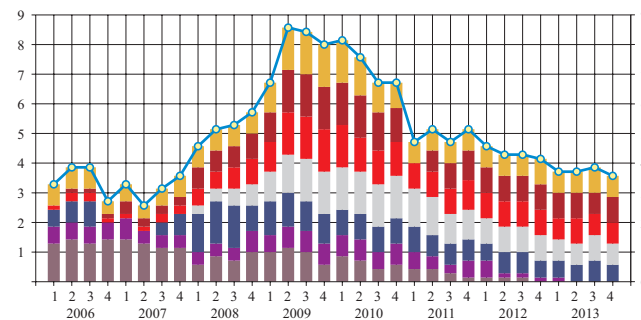
* The indicator that has an inverse relationship with the risk.

The solvency and profitability risks of credit institutions also recorded a minor decline with the capital adequacy ratios reaching their historical high, with the loan portfolio quality of credit institutions improving and the indicators of return on capital and return on assets improving as well (see Chart P5.7).

Chart P5.7

ASSESSMENT OF CHANGES IN SOLVENCY AND PROFITABILITY RISKS (DYNAMICS OF THE INDEX AND ITS COMPONENTS)

- (%)
- (-1)* Spread of the overall interest rates on outstanding amounts (in percentage points)
- Net provision expense to operating income
- (-1)* ROE
- Ratio of net loans past due over 90 days to capital
- (-1)* Provisioning ratio
- (-1)* Ratio of capital and reserves to assets
- (-1)* Common Equity Tier 1 indicator
- Solvency and profitability risk index



* The indicator that has an inverse relationship with the risk.

Appendix 6

SURVEY-BASED ASSESSMENT OF HOUSEHOLD BORROWERS' FINANCIAL VULNERABILITY

The financial position of households, their ability to cover their expenses and make savings have a significant effect on economic growth. However, there is a group of households whose financial situation was most seriously affected by the crisis. This group includes many borrowers, but access to information about their financial position has always been limited.

Latvijas Banka has carried out a survey of household borrowers that have at least one loan for house purchase, renovation or reconstruction to get an insight into their financial situation by interviewing households about their liabilities, income and expenses. "TNS" Ltd. surveyed 1 002 household borrowers on behalf of Latvijas Banka. Overall, 35.6% of the respondents were from Riga, 20.1% – from Pierīga, 14.2% – from Kurzeme region, 13.2% – from Vidzeme region, 10.7% – from Zemgale region and 6.2% – from Latgale region. Most of the respondents (53.6%) had taken loans specifically for house purchase, while 32.0% – to cover other costs (reconstruction, renovation, land purchase) except house purchase. This is only the second survey of its kind. The first survey was carried out in 2011. Its results were not made public, but they were used for approbation of methodology.⁶ The survey data are unique for Latvia, combining information about household income, expenses and savings, as well as detailed information on liabilities and collateral in one source.

Based on the survey data, financial margin of each surveyed household is calculated. Financial margin shows the remaining disposable income after deduction of debt servicing costs and basic living expenditure. If the financial margin is positive, the household is able to cover both household expenses and loan payments and is considered solvent (SH). In turn, if the financial margin is negative, the household has solvency problems and is considered vulnerable (VH). On the basis of the financial margin calculation it is possible not only to assess differences between SHs and VHs but also model the effect of changes of different indicators affecting the economy on household solvency, e.g. a decline in income, rise in loan interest rates and increase in unemployment.

Initially⁷ 10.2% of household borrowers can be considered VHs (their financial margins are negative) and the share of liabilities of these households constitutes 12.7% of the credit portfolio for house purchase. A slight improvement can be observed in comparison with the household borrowers' survey carried out in 2011, i.e. according to the previous survey 11.2% of household borrowers could be considered VHs. The small difference suggests that the financial position of household borrowers still remains problematic. Although household income has increased over the past two years, part of household borrowers still finds it very difficult to balance their expenses and income.

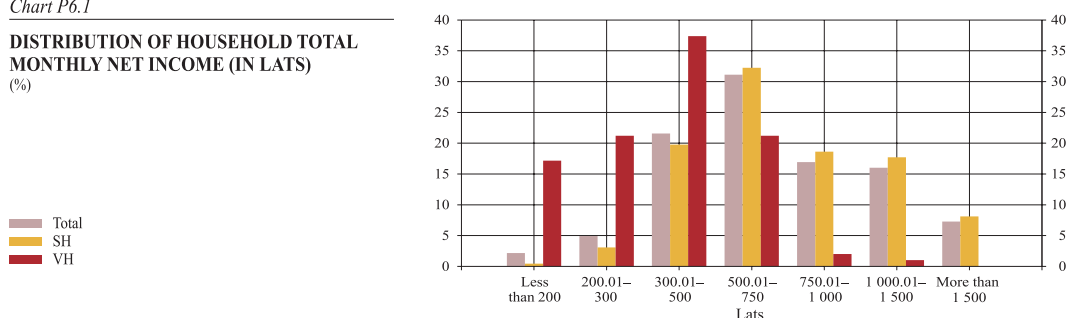
The results of the analysis indicate that the most vulnerable households are the ones which had undertaken credit liabilities during the period of the strongest economic growth and the highest real estate prices – and thus their loan amounts and interest payments are higher. Moreover, several years after the beginning of the crisis part of these households has not been able to regain the lost solvency, and they are still facing challenges of balancing their income and expenses.

Differences between VHs and SHs are apparent in several aspects. Although salaries in the economy in general have increased since the crisis, VHs are still poor. This is confirmed by the distribution of household monthly net income (see Chart P6.1), i.e. the share of VHs in the lowest income groups is larger. Thus, their total income is lower than that of SHs and the whole sample on average.

⁶ The survey carried out in 2011 has to be regarded as a pilot survey, and the range of its questions was narrower.

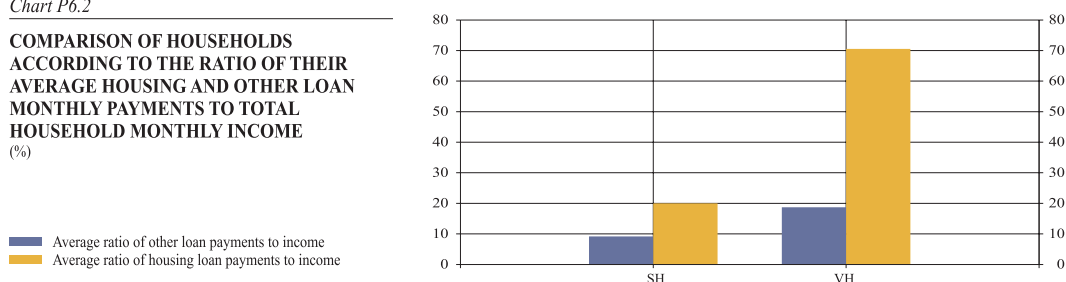
⁷ When generalising the results of the analysis to the next calendar year (in the case of the 2013 survey – to 2014 in general; in the case of the 2011 survey – to 2012).

Chart P6.1

DISTRIBUTION OF HOUSEHOLD TOTAL MONTHLY NET INCOME (IN LATS)
(%)


The debt burden between SHs and VHs also significantly differs. The average total monthly income of SHs is 863 lats, but that of VHs – 386 lats, but the average housing loan amount is 18.5 thousand lats and 23.8 thousand lats respectively. Moreover, the average number of loans taken is 1.5 loans in SHs, but 1.8 loans in VHs. This leads to a conclusion that in nominal terms the debt burden of VHs is higher, but income – significantly lower. This is also supported by the average ratio of monthly loan payments to total household income. This proportion for VHs is considerably higher than that of SHs (see Chart P6.2). Consequently, it confirms the different financial position of household borrowers and suggests that VHs have serious problems to service their debts.

Chart P6.2

COMPARISON OF HOUSEHOLDS ACCORDING TO THE RATIO OF THEIR AVERAGE HOUSING AND OTHER LOAN MONTHLY PAYMENTS TO TOTAL HOUSEHOLD MONTHLY INCOME
(%)


Differences are also present among the employed members of households, i.e. on average, the number of persons employed is lower in VHs than in SHs (1.4 and 1.8 persons employed respectively), as well as VH members are less often employed in high-wage sectors and employees from VHs are less likely to hold higher education diplomas.

Overall, household borrowers can be still assessed as rather vulnerable to shocks of declining income (see Chart P6.3) and increasing interest rates (see Chart P6.4), but less vulnerable to shocks of rising unemployment rates. A relatively minor decrease in income or interest rate rise would cause a faster expansion of VH share than a minor increase in unemployment, as well as it would cause a need for credit institutions to augment provisions for delinquent loans. The increase in losses of credit institutions would be limited; however, this loss calculation is based on an assumption that the real estate used as collateral for loans granted to VHs could be sold at the current market price.

Chart P6.3

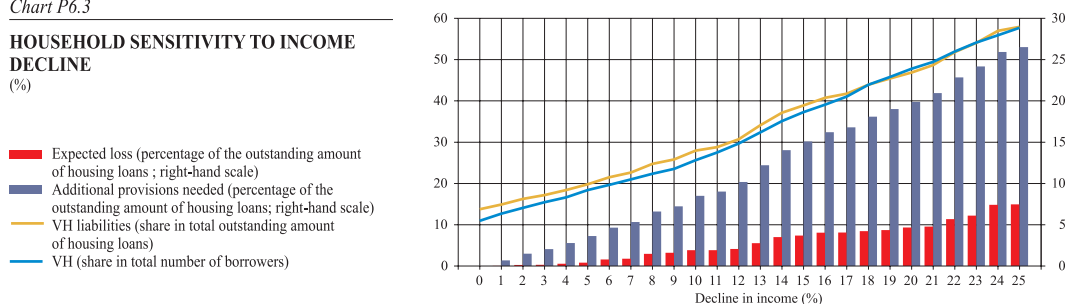
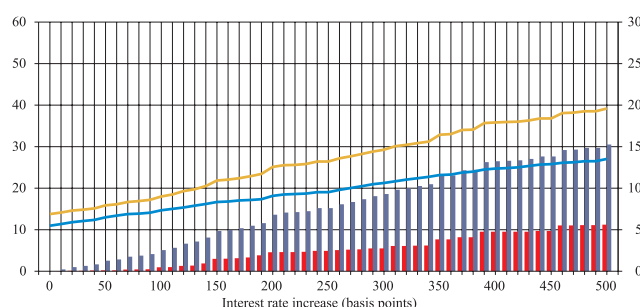
HOUSEHOLD SENSITIVITY TO INCOME DECLINE
(%)


Chart P6.4

HOUSEHOLD SENSITIVITY TO INTEREST RATE INCREASE (%)

- Expected loss (percentage of the outstanding amount of housing loans ; right-hand scale)
- Additional provisions needed (percentage of the outstanding amount of housing loans; right-hand scale)
- VH liabilities (share in total outstanding amount of housing loans)
- VH (share in total number of borrowers)



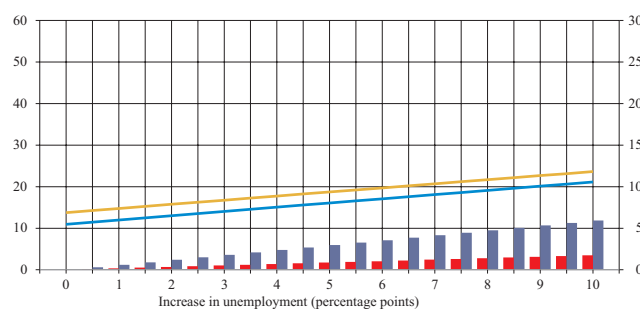
The rise in interest rates has more effect on households with large credits. This is supported by faster growth rate of the share of VHs in the total outstanding amount of housing loans than by the growth rate of the share of VHs themselves, with interest rates increasing.

In turn, household sensitivity to an increase in unemployment within a year is moderate (see Chart P6.5). This is attributed to the fact that the analysis is based on the assumption that in the event of loss of job all persons employed receive unemployment benefit. However, this may not happen due to the "envelope wages" when taxes for part of the employed are paid partially. Therefore, their unemployment benefits would be significantly smaller than income of these persons employed.

Chart P6.5

HOUSEHOLD SENSITIVITY TO INCREASE IN UNEMPLOYMENT (%)

- Expected loss (percentage of the outstanding amount of housing loans ; right-hand scale)
- Additional provisions needed (percentage of the outstanding amount of housing loans; right-hand scale)
- VH liabilities (share in total outstanding amount of housing loans)
- VH (share in total number of borrowers)



Although household borrowers are rather vulnerable to various unfavourable macroeconomic shocks and their vulnerability has decreased only slightly, the possible losses related to their solvency have become more moderate for lenders. This has been facilitated both by real estate price growth over the past years and a decrease of housing loan stock.

The full text of the above discussion material is available on the website of Latvijas Banka: http://www.bank.lv/images/stories/pielikumi/publikacijas/petijumi/DM_1-2014-EN.pdf