LATVIJAS BANKA
EIROSISTĒMA

FINANCIAL STABILITY REPORT
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Financial stability – the condition in which the financial system (financial intermediaries, markets and market infrastructures) is capable of withstanding shocks, thereby mitigating the likelihood of disruptions in the financial intermediation process which could impair the allocation of savings and investment opportunities.

The purpose of the "Financial Stability Report" is to raise 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 developments on the basis of financial market data available up to the end of February 2015, economic data available up to the end of March 2015 or later at the moment of compiling the current report, credit institution and financial infrastructure data available up to the end of March 2015. Forecasts are 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, the total capital ratio, Tier 1 capital ratio, the Common Equity Tier 1 capital ratio, the open foreign exchange position, 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 and tables have been compiled on the basis of the following data sources: Bloomberg and the IMF (Chart 1.1), Bloomberg (Charts 1.2–1.4), the ECB, the respective national central banks and/or Latvijas Banka (Charts 1.5, 1.16, 2.2, 2.5–2.8, 2.12, 2.16–2.19, A1.4, A3.1–A3.4 and A4.1, Tables 1.1, 2.2, 2.3 and A4.1), the CSB (Charts 1.6–1.9, 1.14 and 1.15), Eurostat (Charts 1.10 and 1.13), Latvijas Banka and the CSB (Chart 1.11), the ECB, the respective national central banks and/or Latvijas Banka and Eurostat (Chart 1.12), estimates by Latvijas Banka based on data of the State Unified Computerised Land Register (Chart 1.17), estimates by Latvijas Banka prepared on the basis of the CSB, Latio Ltd., Oberhaus Ltd. and Arco Real Estate Ltd. data (Chart 1.18), estimates by Latvijas Banka based on data provided by the CSB, Latvijas Banka and Latio Ltd. (Chart 1.19), estimates by Latvijas Banka prepared on the basis of the FCMC data (Charts 2.1, 2.3, 2.11, 2.13–2.15 and A1.5–A1.8), the FCMC (2.4, 2.9, 2.10, 2.20, 2.21, 3.5, A1.1–A1.3 and Table 2.1), estimates by Latvijas Banka based on data of the FCMC and the CSB (Charts 3.1–3.4), the LCD (Chart 4.3), Latvijas Banka and the FCMC (Tables A1.1 and A1.2), estimates by Latvijas Banka prepared on the basis of data provided by Latvijas Banka and the CSB (Charts A1.10 and A4.1), estimates by Latvijas Banka based on data provided by Bloomberg, Latvijas Banka, the FCMC, the ECB, Eurostat and the CSB (A2.1–A2.7), the credit institution survey on risks to the Latvian financial system organised by Latvijas Banka (Chart A2.8 and Table A2.1) and estimates by Latvijas Banka based on data provided by Latvijas Banka, the FCMC, Bloomberg and the ECB (Chart A2.9).

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ABBREVIATIONS

BCBS – Basel Committee on Banking Supervision
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
CDS – credit default swap
CPI – Consumer Price Index
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
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
CSB – Central Statistical Bureau of Latvia
CIS – Commonwealth of Independent States
DENOS – the securities settlement system of LCD
DVP – delivery versus payment
EC – European Commission
ECB – European Central Bank
EKS – Electronic Clearing System of Latvijas Banka
ESI – economic sentiment indicator
ESM – European Stability Mechanism
ESRB – European Systemic Risk Board
EU – European Union
EURIBOR – Euro Interbank Offered Rate
Eurostat – statistical office of the European Union
FCMC – Financial and Capital Market Commission
FDI – foreign direct investment
FOP – free of payment
GAP – repricing gap or difference between RSA and RSL
GDP – gross domestic product
IMF – International Monetary Fund
JSC – joint stock company
LCD – Latvian Central Depository
LCR – liquidity coverage ratio
LGD – loss given default
Ltd. – limited liability company
MFI – monetary financial institution
NBFS – non-bank financial sector
PD – probability of default
ROA – return on assets
ROE – return on equity
RSA – interest rate sensitive assets
RSL – interest rate sensitive liabilities
RWA – risk weighted assets
SAMS – Interbank Automated Payment System of Latvijas Banka
SJSC – state joint stock company
SRM – Single Resolution Mechanism
SSM – Single Supervisory Mechanism
UK – United Kingdom
US – United States of America

EXECUTIVE SUMMARY

The most significant indicators characterising Latvia's financial sector development continue to improve: credit institutions' total profit, cost efficiency and return on equity are on a rise and their capitalisation and liquidity remain high. Against the background of moderate economic growth, domestic borrowers' creditworthiness and loan portfolio quality of credit institutions are gradually improving. At the same time, loans granted by credit institutions to residents continue on a downward trend. Prolonged weak lending hinders investment expansion, constraining the potential of sustainable economic growth and narrowing the future income base of credit institutions. Deteriorating external macrofinancial environment and growing uncertainty related thereto continue to pose major risks to Latvia's economic growth and financial stability. External macrofinancial risks have risen primarily due to increasing economic and political risks in Russia. Meanwhile, the high capitalisation and liquidity level of the Latvian credit institutions suggest that they are in a good position to absorb potential external and internal shocks. This is also confirmed by the results of macroeconomic stress tests, sensitivity analysis and liquidity stress tests carried out by Latvijas Banka. Launching of the SSM in November 2014 is an important factor for strengthening the financial stability in Latvia and other euro area countries.

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

1) deteriorating external macrofinancial environment and prolonged high uncertainty, especially in relation to the political and economic situation in Russia, which might have a negative impact on the economic growth, asset quality and profitability of credit institutions in Latvia;

2) prolonged weak lending constraining economic growth and credit institutions' profit opportunities in the future.

A deteriorating external macrofinancial environment and potentially prolonged high uncertainty related thereto pose most important risks to the stability of Latvia's financial system. Against the background of some improvement in the euro area economic outlook, external risks are increasing mainly on account of deteriorating political and economic situation in Russia: its economic downturn, considerable changes in oil prices, depreciation of the Russian ruble, high-level political uncertainty (including new risks of sanctions and counter-sanctions) as well as downgrading Russia's credit rating below the investment grade. The said factors could affect Latvia's economy and financial stability primarily via the foreign trade channel, weaker confidence, limited investment and slowdown in overall growth. With these processes becoming more pronounced or lasting longer, the creditworthiness of borrowers cooperating closely with Russia and, at a later stage in the form of a secondary impact, also of a larger number of non-financial corporations and households might be negatively affected, thus finding reflection in deteriorating loan portfolio quality and profitability of lenders.

Despite the fact that the euro area still faces risks of weak economic growth and deflation and the solution for the Greek sovereign debt problem is unclear, the conditions for the macrofinancial outlook in the euro area have overall improved slightly. The comprehensive assessment of the euro area bank assets has brought more clarity on the euro area credit institution sector. The launching of the SSM in November 2014 is an important factor for strengthening the financial stability of the euro area. Over the last few months, the confidence indicators of the EU and the euro area have improved slowly, and in the fourth quarter of 2014, GDP of the euro area countries, Germany in particular, was better than expected. Depreciation of the euro is having a favourable effect on the euro area exports. Owing to the low oil prices, the costs of non-financial corporations are declining and the disposable income of households is increasing. The ECB's decision on expanding the asset purchase programme has provided stimulus for investment and consumption while prolonging the period of low interest rates. Monetary

policy was also reviewed in several other non-euro area countries, including Sweden where Sveriges Riksbank adopted a decision on negative interest rates and launching a small asset purchase programme. At the same time, the low interest rate environment also gives rise to concerns about new financial stability risks in a broader context related to weaker profit earning opportunities for financial institutions, potential tendency of excessive risk appetite when searching for higher yield, as well as possible impact of a sudden reassessment of risk premia.

In the environment of low interest rates, the government and parent bank funding conditions in Sweden and Norway, home countries of the Latvian credit institutions' largest parent banks, have remained favourable. Meanwhile, risks related to the rising level of household debt and high real estate prices continue to accumulate despite macro-prudential measures taken. These risks are also important in the regional Nordic and Baltic context, considering their potential impact on the financial systems of the Nordic and Baltic countries, inter alia on the borrowing capacity of the parent banks in financial markets.

Domestic economic growth is somewhat moderating on account of external risks. Deteriorating export conditions in Russia and the markets facing higher competition due to the Russian factor have an impact on a part of Latvian non-financial corporations. However, overall real exports of goods and services continue to grow. Attempts to find new markets help to maintain production and export volumes. Higher external risks and uncertainty of the domestic legal environment related to the planned introduction of the non-recourse principle for new mortgage loans to households have affected confidence of producers and services providers negatively; hence, the investment expansion is overall weak. The allocation of available EU funds helps maintaining investment activity. The economic growth is primarily driven by domestic consumption. Due to a notable rise in real wages, disposable income of households follows an upward trend, facilitating an improvement in consumer sentiment. At the same time, the labour market improvement decelerates. According to the baseline scenario, moderate and somewhat slower-than-before economic growth is projected for 2015.

A slowdown in economic growth has not yet found its reflection in the indicators characterising domestic borrowers' creditworthiness and loan portfolio quality. A decline in household net debt and interest payment burden, an increase in disposable income and contraction in the share of loans past due and restructured suggest an improvement in the household creditworthiness. At the same time, household creditworthiness remains sensitive to an even slight potential income decline primarily due to the relatively low level of income. Considering the projected further rise in disposable income of households, the credit risk of loans to households was not increased. Financial indicators of domestic non-financial corporations and improvement in the quality of loans granted to these corporations also suggest a gradual overall improvement in non-financial corporations' creditworthiness. However, owing to deterioration in the external environment, financial vulnerability risks are increasing for a part of non-financial corporations. In the event that unfavourable external factors strengthen or last longer and their impact on the economy becomes more pronounced, credit risk will also increase for a wider range of borrowers.

With risks in Russia hightening, credit risk of loans granted to non-residents and risks with regard to other Russia-related investments go up. The above risks are higher for non-residents servicing credit institutions whose investment is significant relative to their capital. The results of the stress tests and sensitivity analysis carried out by Latvijas Banka suggest that Latvia's credit institution sector is soundly resilient to higher credit risk if Russia-related shocks augment significantly.

The domestic loan portfolio has been shrinking for the seventh consecutive year, with loans posting a 40% decrease at the end of 2014 as compared to the end of 2008. The annual rate of change in loans granted to both resident households and non-financial corporations is negative even excluding the written-off loans and the impact of one-off

factors. According to the results of the bank lending survey, demand for loans by non-financial corporations remains weak and credit institutions are not planning to ease credit standards for non-financial corporations either. This is mainly on account of the growing external uncertainty. Meanwhile, lending to households was affected by unstable domestic legal environment regarding the potential introduction of the mandatory non-recourse principle for new mortgage loans to households in 2014. The non-recourse principle was eventually introduced as an option, and credit institutions have reviewed their former tight credit standards for households. Launching the programme of state-issued guarantees for construction or purchase of the first housing will somewhat stimulate lending to households; however, the volume of the programme is small. The domestic loan portfolio is expected to shrink further in 2015. Prolonged weak lending hinders investment expansion, constrains the potential of sustainable economic growth and narrows the future income base of credit institutions.

Resident and non-resident deposits play an increasing role in the funding structure of credit institutions. Against the background of declining domestic lending and growing resident deposits, the ratio of domestic loans to deposits has decreased significantly. Hence, credit institutions are largely able to finance lending by means of resident deposits, and parent bank funding (especially, long-term funding) has a general tendency to shrink. With long-term funding from the parent banks declining, the maturity mismatch between assets and liabilities of credit institutions engaged in servicing residents continues to increase. The high level of liquid assets and the support available from the parent banks mitigate the financial and liquidity risks for these credit institutions.

Although the increase in assets of and non-resident deposits with the credit institutions primarily engaged in servicing non-residents has accelerated, a substantial depreciation of the euro vis-à-vis the US dollar and other major currencies (in which most non-resident deposits are made) has been the primary contributor thereto. Non-resident deposits are still mainly invested in short-term foreign assets, with liquid assets accounting for a significant share in the total assets of these credit institutions. The liquidity stress tests conducted by Latvijas Banka for the purpose of evaluating the significance of the potential consequences of financial outflows suggest that the credit institution resilience to the shock of financial outflows remained high and had not changed in 2014. Potential risks related to the business model of credit institutions engaged in servicing non-residents are mitigated by additional individual liquidity and capital adequacy requirements set by the FCMC for these credit institutions in the framework of the supervisory review process (Pillar 2). The level of these requirements depends on both the share of transactions with non-residents and the pace of their increase.

Profitability and cost efficiency of credit institutions continued to improve in 2014. However, the total profit increased further primarily on account of less pronounced provisioning and reduction in previously-made provisions, while profit before provisioning and taxes and operating income contracted slightly in 2014. In the near term, risks related to the profitability of credit institutions overall remain low. However, there is a growing uncertainty surrounding profit opportunities in the future due to higher external risks as well as the slowdown in domestic growth, decline in the loan portfolio, environment of low interest rates and decreasing opportunities to further reduce provisions and operating costs.

Credit institutions' capital adequacy is high, and the related risks are generally low. Since 2014, capital adequacy of credit institutions has been calculated in line with the CRR/CRD IV requirements, including both minimum and overall capital requirements for credit institutions. The new capital requirements have no substantial impact of indicators describing capitalisation of Latvian credit institutions, since these indicators are even higher than previously, well above the minimum and overall capital requirements laid down in the CRR. Common Equity Tier 1 capital of credit institutions constitutes the core share of their own funds, ensuring a high level of capital quality.

Pursuant to the amendments to the Credit Institution Law providing for the CRD IV requirement on the introduction and maintenance of the CCB, the FCMC sets and publishes the CCB rate on a quarterly basis as of 2015. The purpose of the CCB as an additional capital requirement is to strengthen resilience of credit institutions to cyclical systemic risks arising from excessively accelerating credit growth. Given contraction in lending, the FCMC set the CCB rate for risk exposures to Latvian residents at 0% for the first time in January 2015. According to the current lending and GDP growth rate forecasts, the FCMC expects that there will be no need to raise that rate over the next few years.

The FCMC continues to pay close attention to credit institutions engaged in servicing non-residents, setting tighter capital and liquidity requirements for these credit institutions. In the framework of the supervisory review process (Pillar 2), the annual review of capital adequacy requirements and individual liquidity requirements for credit institutions engaged in servicing non-residents was conducted.

Overall, the year 2014 was successful for the NBFS. The contribution of non-bank lending services to NBFS assets increased further, with lending services providers reporting particularly high profits. Among other NBFS financial services providers, a more rapid asset growth was observed for private pension funds and insurance corporations. Part of lending services providers, mainly leasing companies, are exposed to a higher credit risk due to deteriorating macrofinancial situation in Russia. On account of persistently low interest rates, profitability risk of the rest of the NBFS financial services providers is increasing. For the time being, however, their operating income remains positive. Due to a relatively small volume of NBFS assets, the impact of the NBFS on the financial system overall remains limited. The share of NBFS assets in the financial sector contracted slightly in 2014. Links between NBFS and the credit institution sector pose no significant risks to the financial stability either.

Systemically important financial market infrastructures TARGET2-Latvija and DENOS provide efficient and secure payment and settlement environment to their participants and the entire financial system and their smooth operation facilitates financial stability. The likelihood of systemic risk remained low both in TARGET2-Latvija and DENOS in 2014, since the available liquidity exceeded liquidity required for settlements significantly. The availability ratio of both systems stood at 100% in 2014 and in the first quarter of 2015.

1. MACROFINANCIAL ENVIRONMENT

The macrofinancial environment of Latvia's financial sector was affected by several important developments. The launching of the SSM in November 2014 was an essential structural and financial-stability-enhancing change. Meanwhile, political and economic risks escalating in Russia slowed down Latvia's economic advance and exposed some borrowers and Russia-related investment to a larger credit risk. Moderate growth, albeit slower than before, is still characteristic for the economy, and overall creditworthiness of borrowers continues to improve. Some volatility in the domestic legal environment (primarily on account of the amended Insolvency Law and changes in the policy for temporary residence permit issuance) in 2014 affected the dynamics of lending to households for house purchase and triggered trends of uneven development in some real estate market segments. Meanwhile, the domestic financial situation gets a positive impetus from the upgrades by international credit rating agencies to Latvia's sovereign credit rating. Interest rates are going down under the impact of the ECB monetary policy, and the asset structure of Latvia's credit institutions is undergoing a change: due to contracting credit institutions' deposits with Latvijas Banka, investment in debt securities is expanding. Amidst the environment of low interest rates, the largest Nordic parent banks retain favourable terms and conditions of financing. However, in home countries of the parent banks at the same time, risks related to eventual sharp risk premium reassessment, the development trends in their credit and real estate markets as well as the high level of household indebtedness aggravate.

1.1 External macrofinancial environment

The risks of external macrofinancial environment have aggravated primarily due to deteriorating macrofinancial situation in Russia, which is mirrored in the Latvian economy as a slowdown in growth and heightening of uncertainty. The euro area economy is gradually recovering, yet its overall growth remains weak. The risks associated with the Greek sovereign debt have notably intensified, yet without a substantial impact on the euro area's financial market thus far. In general, the situation is stabilising in the euro area financial markets and their fragmentation has substantially declined. The launching of the SSM is essential for enhancing financial stability in the euro area. ECB's extended asset purchase programme is likely to drive lending recovery in the euro area. In the meantime, the environment of low interest rates and the related search for higher yields underpin the concerns about new risks to emanate due to a possible sudden reassessment of risk premium. Materialisation of such risks may have an adverse effect on the largest parent banks of Latvia's credit institutions which rely on market financing.

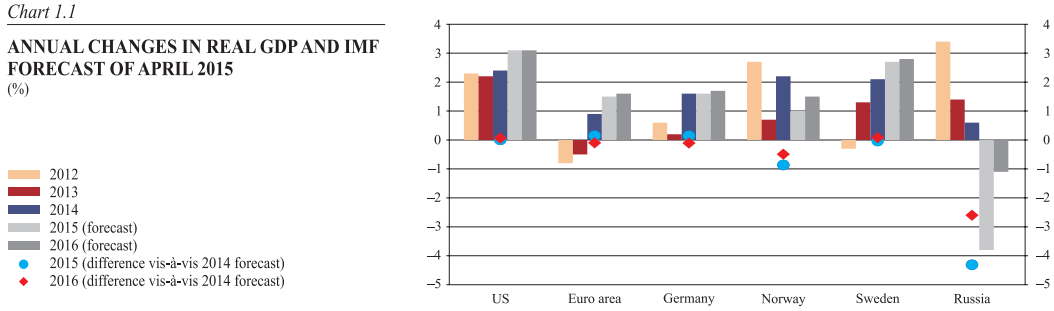
The global economy is gradually recovering, yet the growth trends across regions differ greatly. The external macrofinancial environment is impacted by low interest rates, falling risk premia and the related capital flows in search of higher yields, substantial exchange rate fluctuations, oil price plunges, marked aggravation of geopolitical and economic risks in Russia, growing uncertainty about Greece's sovereign debt and other important developments.

A gradual economic recovery is continuing in the euro area; it is, however, weak and uneven. In 2014, the GDP dynamics essentially differed both by quarters and across countries. Despite the euro area GDP indicators for the fourth quarter being better than expected, the euro area GDP picked up a mere 0.9% in the year overall (see Chart 1.1). The improvement of the euro area economic outlook is largely facilitated by the expectations for a positive effect from the ECB economic stimulus measures on regional development. Recent ECB projections suggest that GDP growth in the euro area may rise to 1.5% in 2015 and 1.9% in 2016.

Activities of the leading central banks still substantially influence the situation in financial markets and the global economic outlook. The ECB continued to pursue accommodative monetary policy and in January 2015 announced the launching of an expanded

Chart 1.1

ANNUAL CHANGES IN REAL GDP AND IMF FORECAST OF APRIL 2015
(%)



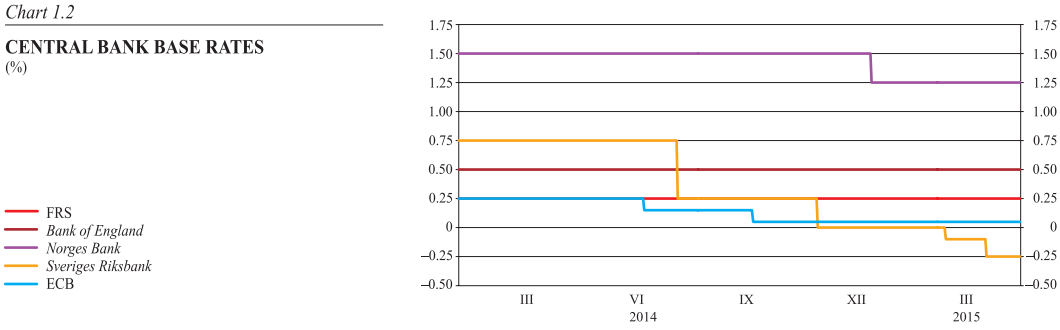
asset purchase programme.[1] The monetary stimulus measures implemented by the ECB focus on reducing fragmentation in the euro area, boosting confidence, and further improving accessibility and price of financing. At the same time, the implementation of needed structural reforms in the EU countries is an essential precondition for the revival of lending. At this juncture, it is difficult to estimate the impact of ECB's non-standard measures on the euro area's economy; nevertheless, its stabilising effects on the euro area financial markets were already apparent in January 2015 when the rise in Greek-related uncertainty was offset. Despite still negative overall annual lending growth in the euro area, the latter's outlook for lending has recently improved somewhat. The ECB's bank lending survey indicates that credit standards are easing and demand is strengthening.

The completion of the ECB's comprehensive assessment of banks, implementation of the related measures aimed at strengthening bank capital adequacy, and launching of the SSM in November 2014 played an essential role in boosting the financial stability in the euro area countries.

Amidst low interest rates (see Chart 1.2), the search for higher yields, positively impacting the euro area financial market situation, is going on in financial markets. Investors' demand for assets of euro area countries is supported by the gradual recovery of the euro area economy, expansion of the ECB's stimulus measures, and abating concerns about the risks associated with the euro area government debt crisis (these concerns aggravated again at end-2014 when the Greek factor came to the foreground). Yields are falling on bonds of both the public and corporate sector. 10-year government bonds of a large part of European countries have hit a record low (see Chart 1.3); their spreads vis-à-vis the German 10-year government bonds have also narrowed. As a consequence, the euro area financial market fragmentation has notably been reduced. It is noteworthy that the decline in bank financing prices is gradually reflected also in the decreasing interest rates on new loans to households and non-financial corporations. Meanwhile, with the global financial market volatility rising and concerns about the Greek sovereign debt reviving, the ECB's indicator of systemic stress level has somewhat grown and become more volatile. Overall, however, the euro area financial market stress remains at a rather low level, and the effects from the aggravation of Greek bank liquidity and financing risks on availability and prices of financing of other euro area banks and governments have thus far been contained.

Chart 1.2

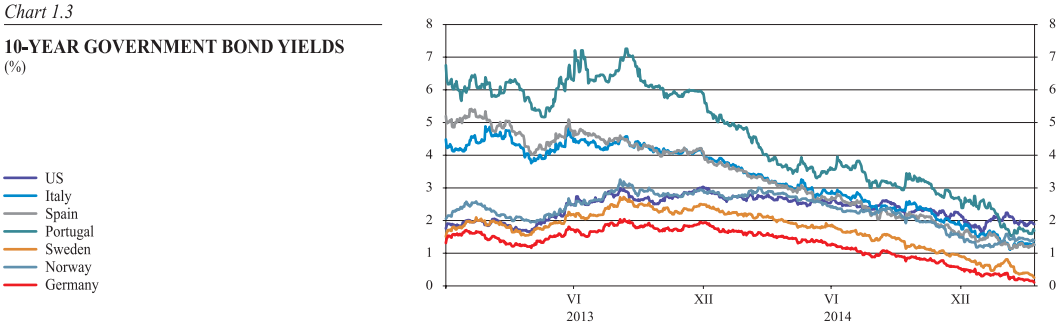
CENTRAL BANK BASE RATES
(%)



[1] Since March 2015, combined monthly asset purchases (bonds issued by euro area central governments, agencies and European institutions) have risen to 60 billion euro, and it is intended to carry out such purchases until at least September 2016 or the time when a sustainable inflation target is reached.

Chart 1.3

10-YEAR GOVERNMENT BOND YIELDS
(%)

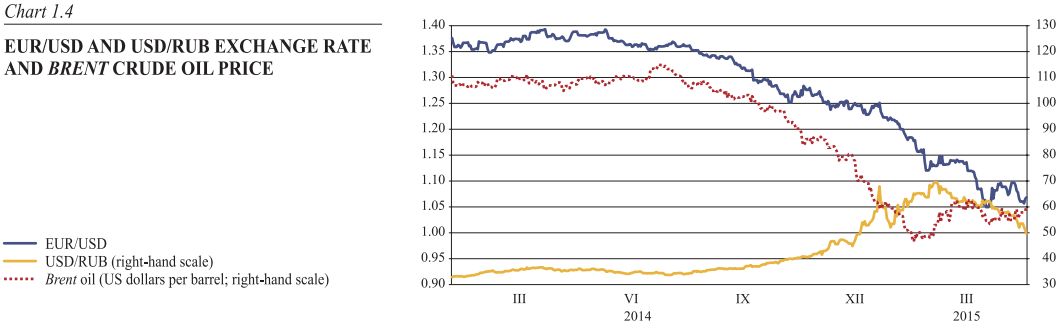


Lower interest rates on government debt servicing figure as a positive factor from the point of view of both financial market stabilisation and debt servicing; they, on the other hand, increase vulnerability associated with a sharp reassessment of the risk premium. Although likelihood of such risks is relatively low in a short term, risks to financial stability are aggravating due to low banking profits and excessive risk taking in search of higher yields.

The turn of 2014 and 2015 was characterised by substantial foreign exchange and commodity market fluctuations as well as a notable oil price downslide (see Chart 1.4). Financial market fluctuations increased also due to divergences in monetary policies of leading central banks, underpinned by different growth momentum in major world economies. Of crucial importance was the FRS decision made in October 2014 to end the asset purchase programme. Depreciation of the euro against the US dollar observed since May 2014 accelerated in late 2014 and early 2015. The ECB decision to launch an expanded asset purchase programme was followed by monetary policy decisions of other central banks outside the euro area.

Chart 1.4

EUR/USD AND USD/RUB EXCHANGE RATE AND *BRENT* CRUDE OIL PRICE



Whereas in the short term the direct impact of depreciating euro and falling oil prices on euro area economies is to be considered positive, the effects from these factors on financial stability due to amplifying geopolitical risks should not be neglected, particularly for countries with risks rising primarily on account of macrofinancial deterioration in Russia.

The slowdown of the Russian economic growth and depreciation of the Russian ruble were mainly caused by aggravating geopolitical situation, imposed sanctions, capital outflow, and oil price plunges. Despite massive interventions, the value of the Russian ruble against the US dollar had contracted by half since the beginning of 2014. Following a marked drop at the turn of the year, the Russian ruble rebounded later to the level of December 2014. GDP in Russia picked up a mere 0.6% in 2014, with a pronounced GDP contraction (of around 5%) to be likely for 2015; in addition, the forecast may be revised further downwards. The support of the Central Bank of the Russian Federation and the government to the banking sector has so far been effective to avoid a banking crisis. Whereas the direct impact of geopolitical conflict and counter-sanction measures on EU countries is limited and thus far has been weaker than expected, the risks related not only to declining confidence but also to more sluggish development of manufacturing, tourism and other sectors in individual EU countries, Latvia including, are heightening. The

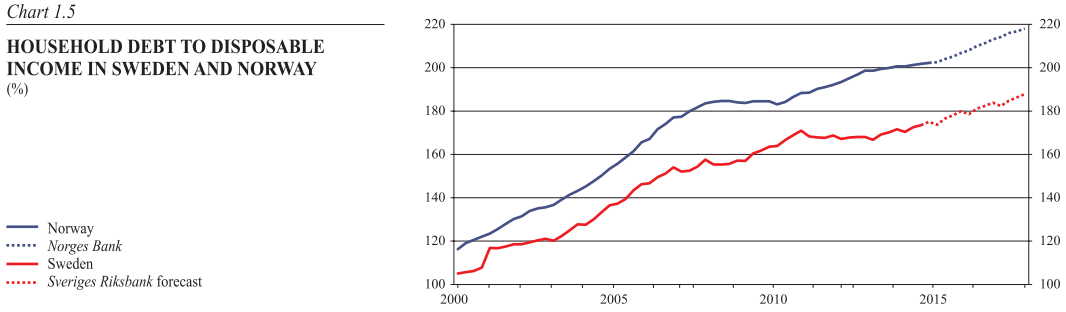
consequences of the slowing economic growth in Russia and depreciation of the Russian ruble are negative for external demand. At the current juncture, further deterioration of the economic and political situation in Russia is the major risk for Latvia's economic growth and financial stability. Due to economic recession in Russia and depreciation of the Russian ruble, solvency of those non-financial corporations which are related to Russia and the quality of loans to non-residents as well as of investment in CIS-issued securities might deteriorate (see Box 1 about the effects of the Russian–Ukrainian geopolitical developments on Latvia's economy and financial sector).

The main developments in home countries of the largest Nordic parent banks have recently been associated with base rate cuts and exchange rate fluctuations in Sweden and Norway. To push up inflation expectations, *Sveriges Riksbank* decided on a negative base rate (see Chart 1.2) and the launching of a government bond buying programme in early 2015. The pursuit of an accommodative monetary policy (including also implementation of non-standard measures) signals the commitment of the central bank to focus on price stability. *Norges Bank* cut the base rate to curb the effects of oil price fall on the economy. Responding to domestic and euro area central bank activities, these two countries have posted large fluctuations of their national currency (Norwegian krone and Swedish krona) in recent months. Overall financial indicators of the Nordic banks are still strong; moreover, the credit risk of these countries and their major banks is moderate as indicated by extremely low premium on government and bank credit default swaps.

In Sweden and Norway, home countries of the largest parent banks of Latvia's credit institutions, risks related to unbalanced development of their housing market and high indebtedness of households are still in place. Even though tightened supervisory requirements for credit institutions and high creditworthiness of borrowing households are risk-reducing factors, it is believed that the macroprudential supervisory measures introduced so far have not curbed a further build-up of risks associated with the high indebtedness of households and real estate market price dynamics. The household debt burden continues on an upward trend, and central bank estimates do not suggest any trend shifts in the near future (see Chart 1.5). Along with the increasing vulnerability related to risk premium reassessment across the world, concerns about the dependence of Nordic banks on short-term market financing and market confidence are sharpening as well.

Chart 1.5

HOUSEHOLD DEBT TO DISPOSABLE INCOME IN SWEDEN AND NORWAY
(%)



Box 1
Impact of geopolitical developments in Russia and Ukraine on Latvia's economy and financial sector

Aggravation of external geopolitical risks due to the Russian–Ukrainian conflict, imposed sanctions and counter-sanctions, substantial worsening of Russia's macrofinancial situation and depreciation of the Russian ruble have given rise to worries about the implications of these processes for the EU economies (Latvia including) and their financial stability.

The pass-through of the above factors to the Latvian economy and financial stability would be felt via adversely affected foreign trade in goods and services (associated with both a weaker demand coupled with deteriorating terms of trade in Russia and indirect impact in the form of tightened competition and more sluggish demand in other

markets), reduced confidence and investment, and decelerating overall growth. Should these processes intensify or drag on, creditworthiness of Latvian borrowers having close ties with Russia and later indirectly also that of a wider range of non-financial corporations and households may be undermined. This in turn can have repercussions for credit institutions and leasing companies' loan quality and profitability. If the risks in Russia continue to elevate sharply, the credit risk and country risk related to investment in Russia by Group 2 of credit institutions[2] may aggravate.

Notwithstanding Russia's abating significance in Latvia's external economic transactions since Latvia joined the EU and the fact that the EU countries now are Latvia's main investors and trade partners, Russia's share in Latvia's foreign trade and foreign investment is still comparatively large. In 2014, Russia figured as the third largest trade partner of Latvia in both exports (10.7%) and imports (8.0%) of goods (see Table 1.1). According to the balance of payments data, Russia is Latvia's second largest foreign trade partner in services (in 2014, Russia reached 9.7% in services exports and 7.0% in services imports). In the course of the previous year, Russia's share in Latvia's foreign trade in goods has shrunk, while exports and imports of services, transport services in the main, have not posted cardinal changes.

Table 1.1
RUSSIAN AND UKRAINIAN SHARE IN LATVIA'S FOREIGN TRADE AND FDI
(%)

Year	Russia		Ukraine	
Goods (% of total goods)				
	Exports	Imports	Exports	Imports
2013	11.3	8.3	0.3	1.0
2014	10.7	8.0	0.5	0.8
Services (% of total services)				
	Exports	Imports	Exports	Imports
2013	9.9	6.8	0.7	0.7
2014	9.7	7.0	0.6	0.5
FDI (% of total FDI)				
2013	4.9		0.8	
2014	6.9		0.7	

The share of Russian-sanction-affected goods in Latvia's exports of goods is small. In 2014, exports of above goods were worth 43.6 million euro and accounted for a mere 0.4% of goods exports (53 million euro and 0.5% of goods exports in 2013 respectively).

Russia is among the three major export partners also for other countries in the neighbourhood like Estonia, Lithuania and Finland, which in turn are major trade partners of Latvia as well. Consequently, competition with the other EU countries, particularly those in the region, is heightening, and so is the indirect negative impact due to sluggish demand and weakening confidence in these export markets of Latvia.

The proportion of Russian investment in total accrued FDI went up from 4.9% in 2013 to 6.9% in 2014. However, much of this increment is to be associated with a substantial investment inflow in the real estate sector on account of temporary residence permits (prior to tighter issuance terms becoming effective).

The Ukrainian share in Latvia's foreign trade and investment is insignificant; hence the effects of geopolitical developments on Ukraine's economic development are without pronounced direct effect on economic processes in Latvia.

The direct impact of Russia's sanctions on the Latvian economy has so far been low

[2] Group 1 of credit institutions is made up of those issuing over 50% of their credit portfolio to residents and attracting over 50% of deposits from residents, whereas all the other credit institutions mainly servicing non-residents and attracting non-resident deposits form Group 2.

and weaker than anticipated. The effects from sanctions are seen in export indicators of some merchandise groups and somewhat lower-than-projected state budget revenue from the corporate income tax as non-financial corporations have applied for tax holidays due to Russia-imposed embargo on goods. A much stronger effect is coming from the deceleration of Russia's economic growth and depreciation of the Russian ruble. Positions of Latvian exporters in the Russian market have deteriorated, the demand in Russia has weakened, competitiveness has tightened, and confidence is falling. Uncertainty about external risks is driving down the willingness of local businesses and foreign investors to invest. Risk escalation in Russia is primarily associated with many Russia-related non-financial corporations in the sectors of transport, tourism, agriculture and individual subsectors of manufacturing (wearing apparel, textile articles, electrical equipment, food products and beverages, transport vehicles). Short-term measures stabilising the cash flows (utilisation of savings, job cuts, tax holidays, etc.), and the positive impact of declining commodity and energy resources prices may dry out. For this reason, risks to financial positions of a part of borrowers have aggravated. At this juncture, however, foreign trade trends do not send signals of serious worsening, businesses engage in search for new markets, GDP is moderately growing, and creditworthiness of borrowers and quality of credit institutions' resident loan portfolios continue to improve.

Risk aggravation in Russia increases credit risk related to lending to residents of Russia (see Subsection 2.1 about lending dynamics and credit risk) and also of other investment in Russia and the CIS countries. This risk affects a part of Group 2 credit institutions whose investment in Russia is significant relative to their capital. Risks are minimised by tighter individual capital and liquidity requirements for those credit institutions that focus on servicing non-residents and also by large liquid asset holdings and overall high-level capitalisation of such credit institutions. According to the results of sensitivity analysis and stress tests conducted by Latvijas Banka, credit institutions' capacity to absorb potential external- and internal-shock-triggered elevation of credit risk and Russia's country risk is generally high (see Subsection 2.6 about shock absorption capacity of credit institutions). Moreover, these credit institutions are not significant participants in domestic lending and deposit taking.

From system's perspective, direct investment of Latvia's credit institutions in Russia and Ukraine is modest and at the close of 2014 (accounting for the country risk[3]) amounted to a total of 4.3% and 0.7% of credit institutions' assets respectively. In 2014 overall, the amount of this investment contracted somewhat.

Financing directly attracted from Russia and Ukraine (primarily deposits), on the other hand, accounted for 4.3% and 0.8% of credit institutions' assets respectively. Even though the share of directly attracted financing is rather small, it is noteworthy that most non-resident depositors of Group 2 credit institutions (both households and private non-financial corporations) depend on the macrofinancial and political situation in Russia. So far, significant changes in the growth trends of non-resident deposits have not been observed. In 2014 and early 2015, non-resident deposits continued to increase, with the pace, primarily affected by the US dollar appreciation and seasonal factors, accelerating towards the year's end.

Investment of Russia and Ukraine in the capital of Latvian credit institutions is quite modest: in February 2015, the assets of Latvian credit institutions with Russian and Ukrainian capital accounted for 2.4% and 4.6% of all assets of Latvian credit institutions respectively.

Thus far, the stability of the financial system in Latvia has not been substantially impaired by aggravating external geopolitical circumstances and deteriorating macrofinancial situation in Russia. Nevertheless, the external risk of potential further worsening of macrofinancial conditions in Russia remains high.

[3] Country risk of a particular country refers to foreign assets (except vault cash, holdings in the share capital of associated and affiliated companies, and trust assets), which include foreign assets of another country whose related risks are transferred to the said country (via collaterals and guarantees of residents of the said country) net of foreign assets of the said country, the related risks of which are transferred to other countries.

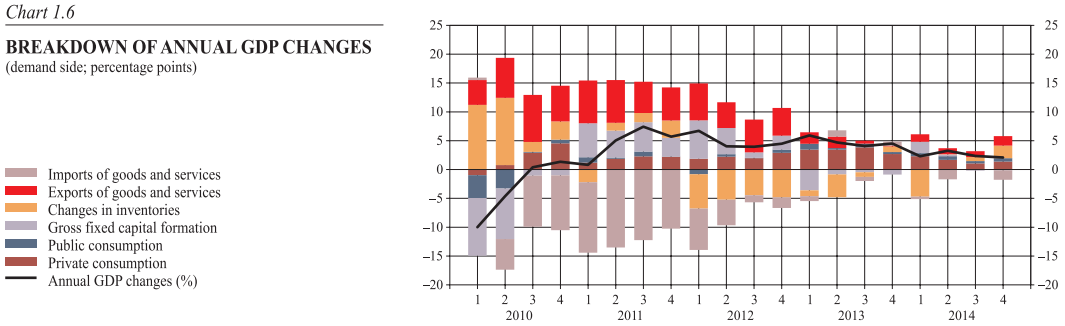
1.2 Domestic macrofinancial environment

Direct and indirect external risks, primarily those related to Russia, cause deceleration of economic growth, as the sectors and non-financial corporations having close links with Russia are exposed to risk escalation. Latvia's competitiveness remains robust in general, businesses refocus on new markets, and export data do not suggest any serious deterioration as yet. Private consumption continues to support the domestic growth. Available EU funding is driving investment activity. Economy as a whole is expected to progress moderately, albeit at a pace slower than before. Upgrading of Latvia's sovereign credit rating by the international rating agencies in 2014 has positively influenced the domestic financial environment.

The economic growth in Latvia has lost some momentum due to deteriorating external macrofinancial conditions. The pace of GDP growth from 4.1% in 2013 slowed down to 2.5% in 2014 (see Chart 1.6), and a more moderate growth of 2.0% is expected in 2015.

Chart 1.6

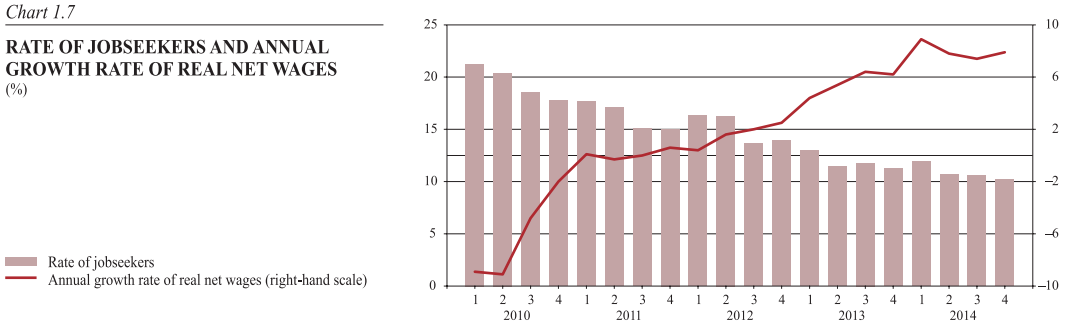
BREAKDOWN OF ANNUAL GDP CHANGES
(demand side; percentage points)



Domestic consumption is the main engine of economic expansion. Purchasing power of the population is improving on account of a significant annual increase in real net wages (8.0% in 2014), driven in turn by a decrease in both the labour tax burden and shadow economy as well as low inflation. The annual growth in real net wages is projected to decelerate somewhat in 2015, to still stand at a rather high level of around 5%. In the meantime, the labour market improvement, going on since 2010, moderated substantially. The rate of jobseekers lost a mere 1.1 percentage points in 2014, to stand at 10.2% at the close of the year. In 2015, it is likely to stabilise at around 10% (see Chart 1.7).

Chart 1.7

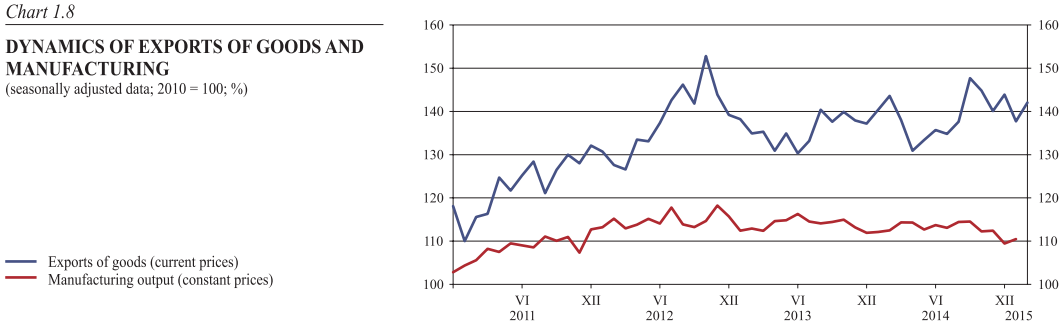
RATE OF JOBSEEKERS AND ANNUAL GROWTH RATE OF REAL NET WAGES
(%)



Exports rank second as an important engine of GDP growth. Despite depreciating ruble and contracting demand in Russia, sanctions imposed by Russia and weak growth in Europe, real exports of goods and services are growing (picking up 1.9% in 2014). The search for new markets assists in maintaining manufacturing and export volumes (see Chart 1.8). Nonetheless, should adverse external factors intensify notably or continue, their impact on the economic growth would amplify.

Chart 1.8

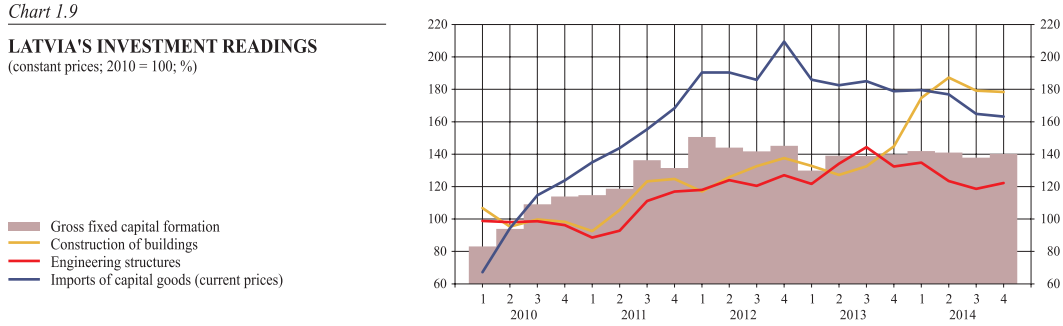
DYNAMICS OF EXPORTS OF GOODS AND MANUFACTURING
(seasonally adjusted data; 2010 = 100; %)



Aggravating external risks and changing domestic legal environment worsened investor sentiments. Although investment shrinkages in manufacturing have not been recorded as yet and gross fixed capital formation increased slightly in 2014, the investment dynamics was generally weak (see Chart 1.9). Imports of capital goods are contracting, and the activity in construction and real estate is slowing down due to amendments made to the Immigration Law and Insolvency Law, exerting adverse impact on formerly swiftly expanding construction of buildings. Persistently weak lending does not encourage investment growth either. The low investment figures as a serious risk to further sustainable development of the economy.

Chart 1.9

LATVIA'S INVESTMENT READINGS
(constant prices; 2010 = 100; %)



Fiscal policy remains broadly conservative, with no effects of the fiscal situation on risks to financial stability observed. In 2014, the government budget deficit was 1.4% of GDP (1.0% of GDP projected for 2015), and the government debt accounted for 40.0% of GDP.

With some moderate economic progress persisting, Latvia participating in the euro area, Latvia's sovereign credit rating improving and the Eurosystem launching an extended asset purchase programme, Latvia's long-term financing opportunities continue to improve. After the two successful euro bond issues in 2014, this enables the Treasury to plan a new euro bond issue in the external market in 2015. The secondary market yield on Latvia's 10-year government euro bonds, issued in the external market in 2014, decreased from 2.96% at the moment of issue (April 2014) to 0.47% at end-March 2015. The spread between the above and the respective German government bond yield also narrowed from 148 to 37 basis points. Interest rates in Latvia are falling under the impact of an overall interest rate decrease across the euro area: interest rates are going down in all euro area countries, except Greece. The stock of corporate debt securities, denominated in all currencies and registered with the LCD, continued to expand, thus testifying to the ability of the Latvian credit institutions and non-financial corporations to diversify the sources of financing.

1.3 Financial vulnerability of credit institution customers

There are several indicators (significant rise in real wages, substantially better household net debt position, decreasing interest payment burden), which point to a gradual improvement of household creditworthiness. Nevertheless, households remain relatively sensitive to even a slight eventual reduction in income, which is primarily determined

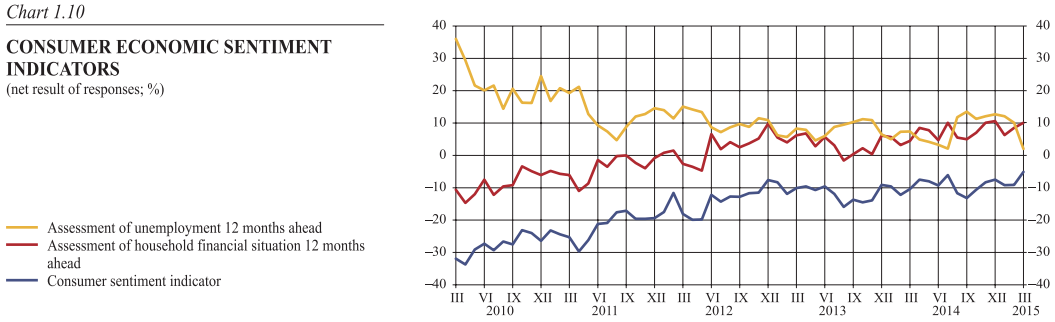
by the generally low household income level. Financial indicators of non-financial corporations likewise suggest that their creditworthiness is gradually strengthening. However, the deterioration of external environment and deceleration of the economic growth increase the financial vulnerability risk of some non-financial corporations, particularly of those exporting goods and services to Russia. The uneven development of the real estate market in 2014 was determined by the changes introduced in the temporary residence issuance procedure and the uncertainty emerging with respect to potential inclusion of the non-recourse principle in the Insolvency Law. Towards the close of 2014, the volume of real estate transactions had decreased and, following a steep rise prior to the enactment of the new temporary residence permit regulations, the prices in some market segments dropped.

1.3.1 Financial vulnerability of households

Amidst moderate economic growth, with remuneration increasing, low inflation and interest rates persisting, as well as debt burden melting, household creditworthiness remains on a gradual upward trend. Improvements in household financial position are attested by a higher-assessed outlook for household financial situation (see Chart 1.10) largely boosted by a substantial (8.0%) annual rise in real net wages in 2014. For 2015, a noticeable yet somewhat lower annual increase (of around 5%) in real net wages is likewise projected. Meanwhile, driven by external factors, consumer expectations for unemployment had been increasing since the second half of 2014. The downward unemployment trend weakened noticeably (see Subsection 1.2 about the domestic macrofinancial environment). Decelerating economic growth and weaker employment prospects are the important risk factors jeopardising further improvements in household creditworthiness.

Chart 1.10

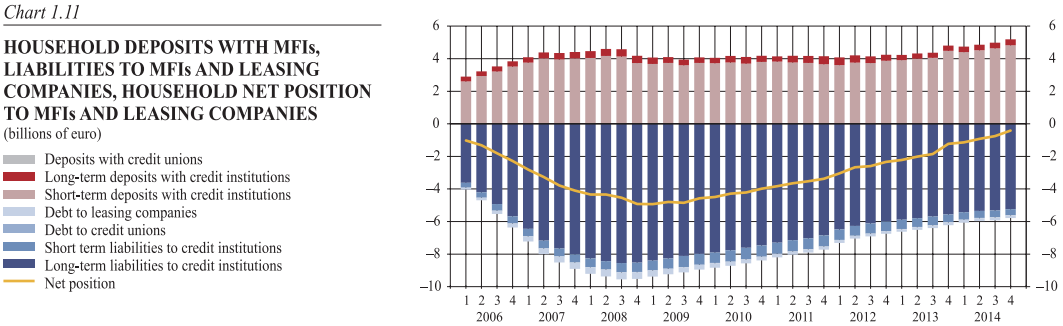
CONSUMER ECONOMIC SENTIMENT INDICATORS
(net result of responses; %)



Savings dynamics is another factor pointing to improving household financial situation: in 2014, household deposits picked up 8.1% and their ratio to GDP amounted to 21.6% at the end of the year (see Chart 1.11). The deposit growth was driven by both higher real incomes and more precautionary spending as well as by shifts in the saving behaviour in favour of non-cash saving as a consequence of the euro changeover.

Chart 1.11

HOUSEHOLD DEPOSITS WITH MFIs, LIABILITIES TO MFIs AND LEASING COMPANIES, HOUSEHOLD NET POSITION TO MFIs AND LEASING COMPANIES
(billions of euro)



At the same time, household debt to MFIs and leasing companies continued to contract in both absolute and relative terms. At the end of 2014, the ratio of household debt to MFIs and leasing companies relative to GDP was 24.0 (2.7 percentage point drop

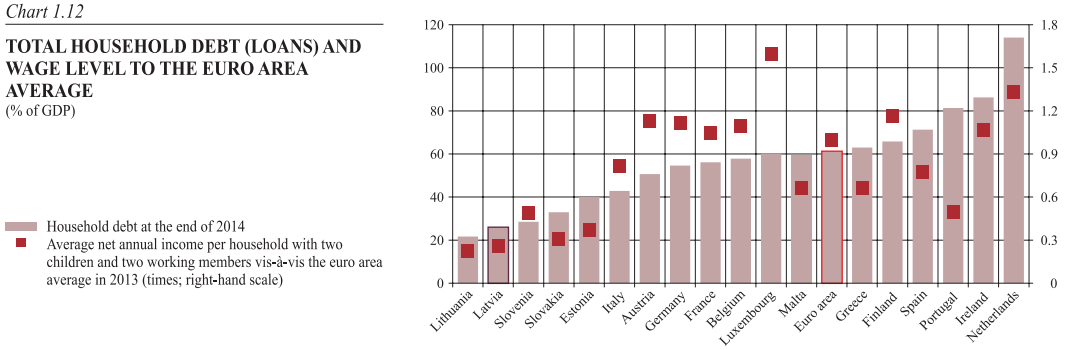
vis-à-vis end-2013). For this reason, the negative net position of households to MFIs and leasing companies improved notably towards the end of 2014 (1.7% relative to GDP). Provided that the pace of deposit and debt changes remains the same, the household net position is likely to turn positive in 2015 or 2016, i.e. household savings held with MFIs could exceed household debt to MFIs and leasing companies.

Low interest rates and the decreasing household debt both support a further alleviation of the interest payment burden. In 2014, the ratio of household interest payments to GDP stood at 0.83% (0.96% in 2013).

Latvia's households had the lowest debt-to-GDP ratio among the euro area countries at the end of the third quarter of 2014. However, the remuneration level is among the lowest in the euro area as well (see Chart 1.12).

Chart 1.12

TOTAL HOUSEHOLD DEBT (LOANS) AND WAGE LEVEL TO THE EURO AREA AVERAGE
(% of GDP)



Even though the real disposable income of households increases, Latvian households are rather susceptible to an even insignificant potential reduction in income due to generally low household income level[4].

According to the base scenario, household creditworthiness is expected to continue on a gradual upward trend on account of anticipated moderate economic growth and slightly rising real wages. Nevertheless, the pace of remuneration growth in 2015 is expected to slow down in comparison with 2014 because of a stronger exposure to the risk that decelerating economic growth may reduce the capacity of non-financial corporations to raise wages. A weaker employment growth perspective will translate into slower growing total incomes.

The process of amending the Insolvency Law affected behaviour of financially weak households. The draft amendments provided for streamlining the insolvency proceedings and reducing the duration of natural persons' insolvency process; hence households were motivated to postpone the filing of insolvency until the enactment of these amendments (1 March 2015). As a consequence, the number of insolvency cases filed by natural persons contracted by 22% year-on-year in the second half of 2014. In 2015, an increase in natural persons' insolvency petitions is expected. The year-on-year increase in the number of the respective cases was 19% in March 2015.

1.3.2 Financial vulnerability of non-financial corporations

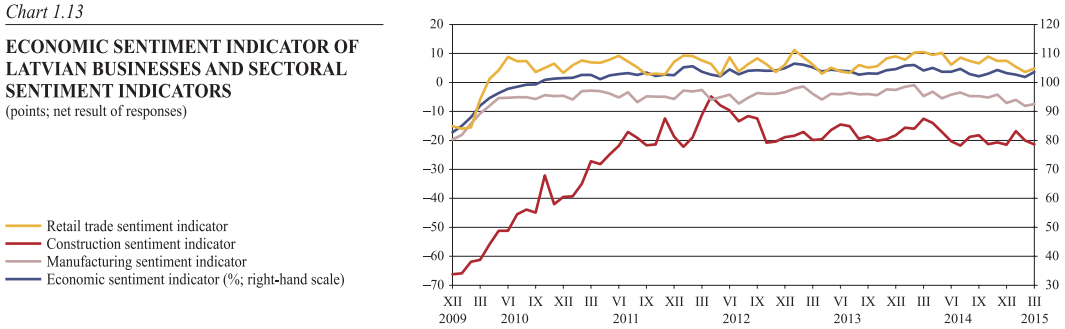
Creditworthiness of non-financial corporations improved overall, yet the pace at which their financial indicators improved decelerated in line with the slowdown of the economic growth.

Uncertainty associated with the external environment found its reflection in the worsening economic sentiment indicators of businesses (see Chart 1.13), felt particularly strongly in construction and manufacturing where the order and inventories assessment deteriorated.

[4] Āriņš, Mikus, Siņenko, Nadežda, Laube, Laura. *Assessment of Household Borrowers' Financial Vulnerability Based on Survey Data*. Riga: Latvijas Banka. Discussion Paper, No 1/2014.

Chart 1.13

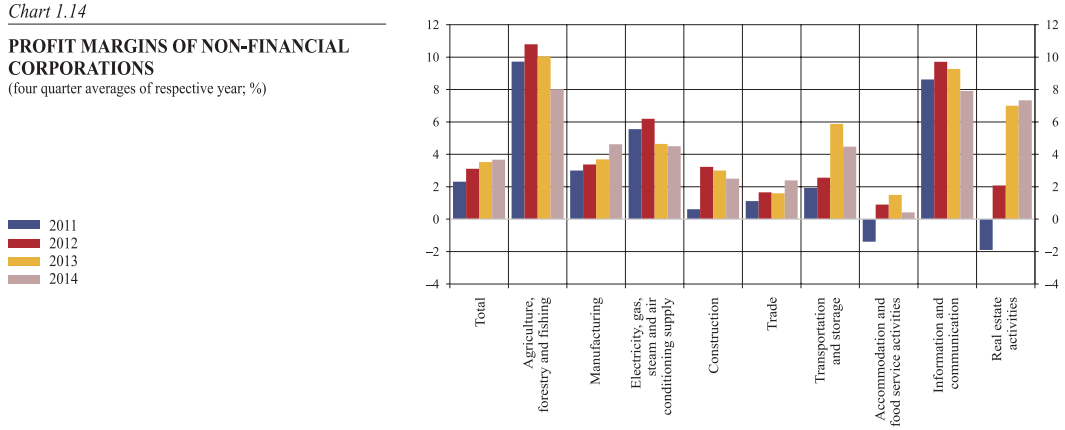
ECONOMIC SENTIMENT INDICATOR OF LATVIAN BUSINESSES AND SECTORAL SENTIMENT INDICATORS
(points; net result of responses)



Overall profitability of non-financial corporations continued to improve moderately, in 2014 reaching 3.7% (a 0.2 percentage point increase vis-à-vis 2013; see Chart 1.14). In the breakdown by sector, annual profitability improved markedly in manufacturing and trade, with some rise recorded by real estate as well; in agriculture, transport, construction, accommodation and food service activities, information and communication services as well as the energy sector (due to narrowing turnover), on the other hand, profitability weakened on account of profit shrinkages. In 2014, turnover strengthened in all sectors, except the energy sector and manufacturing, the former posting low turnover because of the warm winter.

Chart 1.14

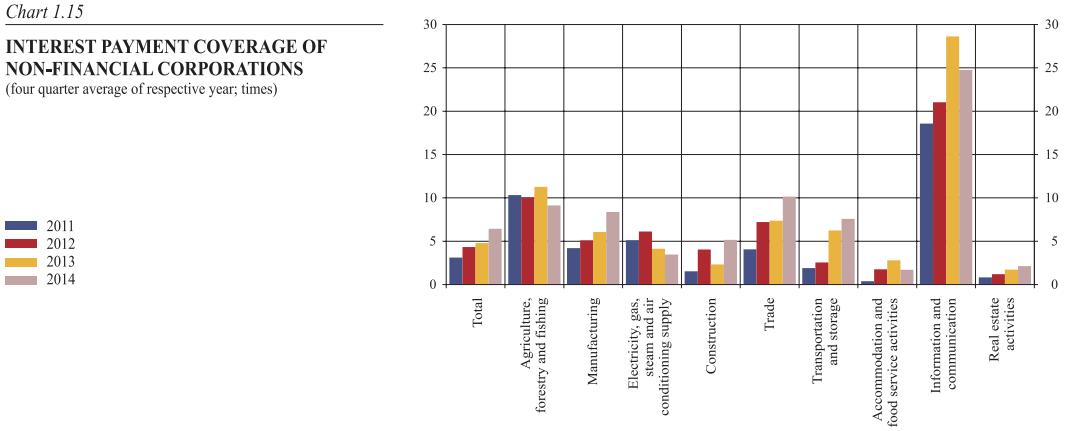
PROFIT MARGINS OF NON-FINANCIAL CORPORATIONS
(four quarter averages of respective year; %)



As lending activities were losing momentum, non-financial corporations' debt to MFIs went on shrinking. Notable improvement in the interest payment coverage indicator deserves particular attention (see Chart 1.15). From 4.8 times in 2013 it increased to 6.4 times in 2014. It was driven by higher profitability in manufacturing and trade and also smaller interest payments in construction and transport.

Chart 1.15

INTEREST PAYMENT COVERAGE OF NON-FINANCIAL CORPORATIONS
(four quarter average of respective year; times)

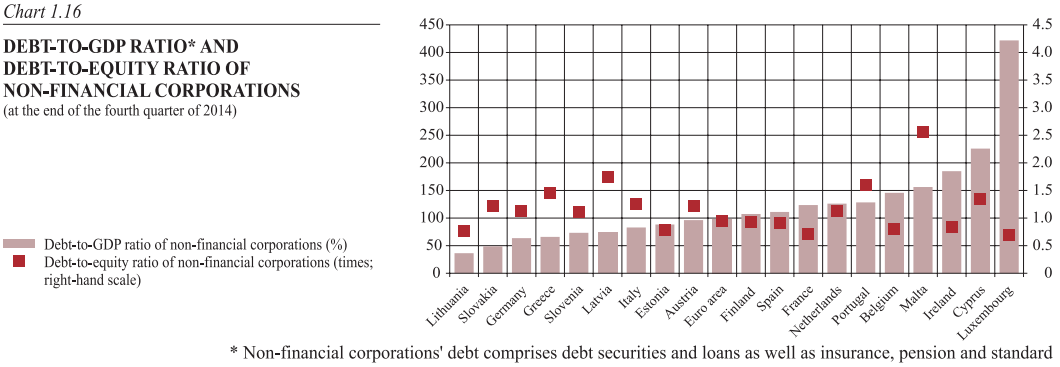


The non-financial corporations' total debt-to-equity ratio in turn improved only somewhat (from 1.86 at the end of 2013 to 1.81 at the end of 2014), which implies that

the ratio of non-financial corporations' equity to their total debt is still rather low, thus constraining their shock-absorption capacity. According to the ECB data, the non-financial corporations' debt-to-GDP in Latvia is smaller than in other countries and in the euro area on average (data at the end of the third quarter of 2014), while their debt-to-equity ratio is among highest in the euro area (see Chart 1.16).

Chart 1.16

DEBT-TO-GDP RATIO* AND DEBT-TO-EQUITY RATIO OF NON-FINANCIAL CORPORATIONS
(at the end of the fourth quarter of 2014)



* Non-financial corporations' debt comprises debt securities and loans as well as insurance, pension and standard guarantees.

Whereas in the second half of 2014 the number of insolvencies filed by legal persons picked up 32%, it was primarily on account of the promulgated amendments to the Insolvency Law providing for significant responsibility of board members in insolvency proceedings as of 1 March 2015.

The steeply deteriorating economic and geopolitical situation in Russia had an adverse effect on a part of Latvia's non-financial corporations in several Russia-related sectors (see Box 1 about the impact of geopolitical developments in Russia and Ukraine on Latvia's economy and financial sector). Risks to those borrowers will depend strongly on further political and economic developments in Russia and also on the capacity of Latvian businesses to diversify risks.

1.3.3 Real estate market development

In 2014, the Latvian real estate market (particularly its non-resident-oriented segment) was noticeably affected by changes in the procedure for temporary residence permit issuance[5]. As to residents, on the other hand, their demand was impacted by uncertainty surrounding the eventual inclusion of the non-recourse principle in the Insolvency Law[6].

The number of transactions registered with the State Unified Computerised Land Register in 2014 was unstable and fluctuated from a substantial 17% quarter-on-quarter increase in the third quarter to an 8% quarter-on-quarter downturn in the fourth quarter, mostly on account of decreasing transaction number in the non-resident sector due to enactment of amendments to the Immigration Law. During the first eight months of 2014, the total volume of real estate transactions in Latvia by non-resident natural persons increased by 50% year-on-year. In addition, the number of requested temporary residence permits picked up 73% in the given period. When the new regulation for temporary residence permit issuance came into effect, in the last four months of 2014 the total volume of non-resident natural person transactions with real estate in Latvia shrank by 42% year-on-year, and the temporary residence permit requests contracted by 18% year-on-year.

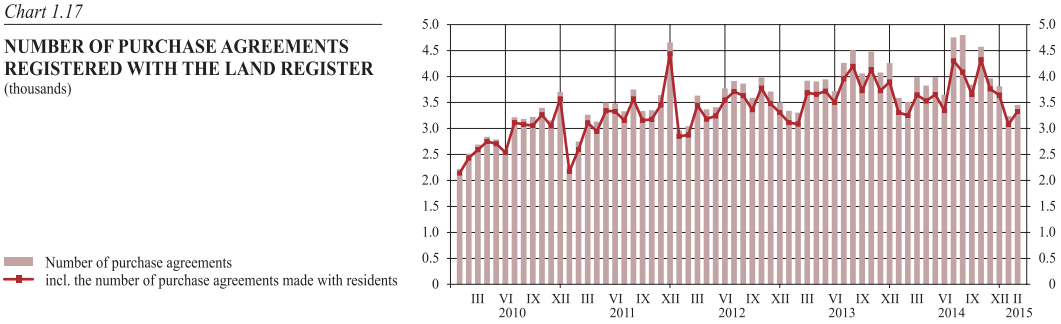
Prior to initially projected amendments to the Insolvency Law providing for the introduction of the non-recourse principle in mortgage lending coming into effect, credit

[5] The amended Immigration Law stipulates that, starting with 1 September 2014, the requirements for temporary residence issuance to non-residents shall be raised (e.g. investment in one functionally interconnected unit of real estate was raised from 142.3 thousand euro to 250 thousand euro, and payment to the general government budget in the amount of 5% of the real estate purchase value shall be made when requesting the first temporary residence permit).
[6] Initially, amendments to the Insolvency Law provided for the introduction of the so-called clause of returned keys on house mortgage secured loans as of 1 March 2015. In accordance with the amendments in the Insolvency Law and in the Consumer Rights Protection Law passed on 19 February 2015, the above clause of returned keys was made an option rather than a mandatory requirement for borrowers for house purchase.

institutions tightened their requirements for mortgage loans to households; this brought down the number of resident transactions, which posted a year-on-year 7% contraction in the resident segment in December 2014 and January 2015 (see Chart 1.17). At the end, however, instead of being mandatory, the non-recourse principle was introduced as an option. Consequently, the transaction activity is expected to recover in resident-favoured housing market segments, construction and operations with real estate.

Chart 1.17

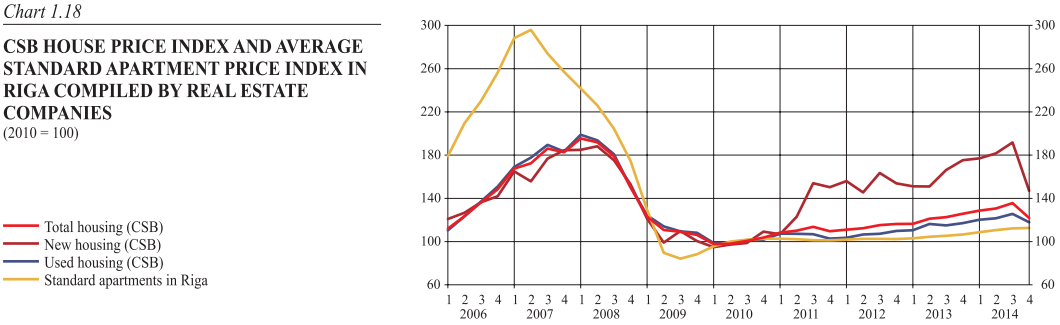
NUMBER OF PURCHASE AGREEMENTS REGISTERED WITH THE LAND REGISTER
(thousands)



The amendments made in 2014 to the Immigration Law and the Insolvency Law markedly affected price dynamics as well. Prior to their coming into force, some market segments recorded steeper housing price rises. In the third quarter of 2014, the house price index calculated by the CSB increased by 3.8% quarter-on-quarter; this development was primarily driven by price hikes for new housing, as non-residents hurried to obtain real estate before the enactment of the new Insolvency Law provisions. These price hikes were followed by price downturns in the fourth quarter of 2014 (3.2% year-on-year, with the new housing price index losing 16.2%; see Chart 1.18). According to the data of real estate companies, the prices in the segment of new housing decreased somewhat in the fourth quarter[7].

Chart 1.18

CSB HOUSE PRICE INDEX AND AVERAGE STANDARD APARTMENT PRICE INDEX IN RIGA COMPILED BY REAL ESTATE COMPANIES
(2010 = 100)



Meanwhile, preliminary data on the average standard apartment price in Riga housing estates, provided by Latvia's real estate companies for concluding months of 2014 and first two months of 2015, suggest that the amended laws referred to above have not affected the standard apartment market segment much. The average price of standard apartments in Riga housing estates[8] was on a gradual upward trend in the first eight months of 2014 but towards the end of the year stabilised at 644 euro per square meter (see Chart 1.18). Some real estate buyers with adequate savings for making the first elevated down payment took a wait-and-see position, expecting a further fall of real estate prices. Resident demand for housing is likely to revive gradually. No substantial falls in real estate prices are projected for 2015. The number of new apartments built in the second half of 2014 using previously issued building permits grew by 29% year-on-year.

On average, the level of standard apartment availability has not changed. The rise in real

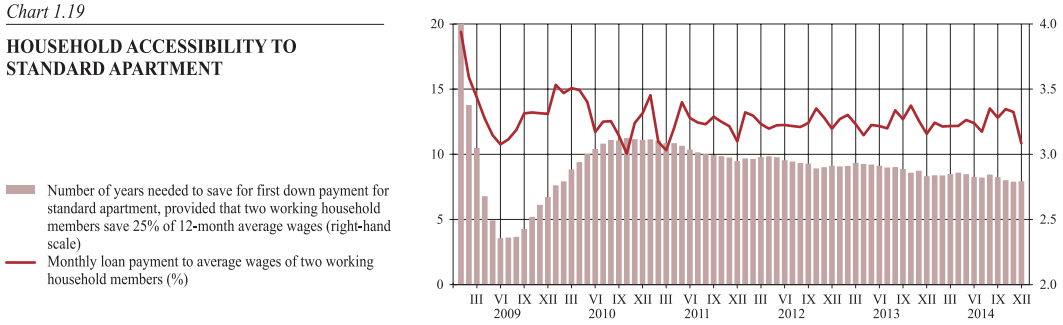
[7] The new house price index of CSB refers to previously uninhabited apartments in new residential buildings which are sold to households not later than three years after being put into operation. Real estate company surveys in turn use the data about new apartments in the secondary market.

[8] Average price calculations are based on information published by Latio Ltd., Arco Real Estate Ltd. and Ober Haus Real Estate Ltd.

disposable income was sufficient to compensate for higher standard apartment prices. The proportion of monthly payment on housing loan to average wages of two working members of household contracted by 0.8 percentage point primarily due to lower interest rates (see Chart 1.19).

Chart 1.19

HOUSEHOLD ACCESSIBILITY TO STANDARD APARTMENT



The rent index[9] was volatile, albeit with an upward trend in 2014, and some up-going seasonal adjustment was particularly pronounced in August and September. According to the assessment by Latio Ltd.[10], uncertainty surrounding amendments to the Insolvency Law did not generate any serious impact on the demand for rented apartments at the close of 2014.

The commercial real estate market maintained its activity. With the economic growth continuing, a trend to move offices from low-quality to better-facilitated premises was observed. As to office space, the market is characterised by stronger supply. Rent has not changed despite the supply of free premises heading upwards.

[9] The rent index is a subindex of CPI calculated by the CSB.

[10] *SIA "Latio" Mājokļu tirgus pārskats*. Riga, 2014. Available: *http://www.latio.lv/lv/pakalpojumi/tirgus-analize/majoklu-tirgus/131/latio-majoklu-tirgus-parskats-2014.pdf.*

2. DEVELOPMENT AND RISKS OF THE CREDIT INSTITUTION SECTOR

Along with the decline in domestic lending assets of the credit institutions primarily providing services to residents continue to decrease. These credit institutions continue to write off unrecoverable loans, and indicators characterising quality of the domestic loan portfolio improve. With external risks increasing, credit risk may rise and the quality improvement tendency of the domestic loan portfolio may come to a halt. With lending continuing to decline and an increase in resident deposits the ratio of domestic loans to deposits decreases significantly, i.e. credit institutions are largely able to finance lending by using resident deposits, and parent bank funding has a general tendency to shrink. Although an increase in assets and non-resident deposits of credit institutions primarily providing services to non-residents has accelerated, this expansion is mostly supported by the substantial depreciation of the euro. Non-resident deposits are still mainly invested in short-term foreign assets. Thus, the maturity structure of assets and liabilities, as well as the currency structure of credit institutions primarily providing services to non-residents are largely balanced. At the same time, greater external risks contribute to an increase in credit risk and country risk with regard to Russia-related investments. The above risks are more significant for those non-resident serving credit institutions in which these investments are important vis-à-vis their capital. Although profitability of credit institutions is improving considerably and the profitability risks are limited in the short term, higher external risks, the shrinking loan portfolio, the environment of low interest rates, as well as the diminishing opportunities to reduce further provisions and administrative expenses raise concerns as to credit institutions' future profitability prospects. It is important that the credit institutions of both groups in general have high capital adequacy and a large share of liquid assets in their total assets. Thus, the credit institutions' ability to absorb the possible external and internal shocks, as well as their ability to absorb the shocks caused by potential financing outflows is generally high. This is also confirmed by the results of the macroeconomic stress tests, sensitivity analysis and liquidity stress tests carried out by Latvijas Banka.

2.1 Loan developments and credit risk

Despite further moderate economic growth and general improvement in borrowers' creditworthiness, lending is still declining. Overall, credit risk indicators have continued to improve; however, the credit risk future assessment in relation to the loan portfolio of domestic non-financial corporations and non-residents has been slightly increased. As a result of mounting external, mainly Russia-related risks, a slight deterioration in the quality of the total loan portfolio is possible; however, the quality of the domestic loan portfolio will not change significantly.

The domestic loan portfolio continues to contract considerably. Loans to residents have been shrinking on average by 8% per year since the end of 2008. In February 2015, the domestic loan portfolio had shrunk by 8.4 billion euro or 40% compared to the end of 2008, reflecting the continuation of the deleveraging process of borrowers and credit institutions.

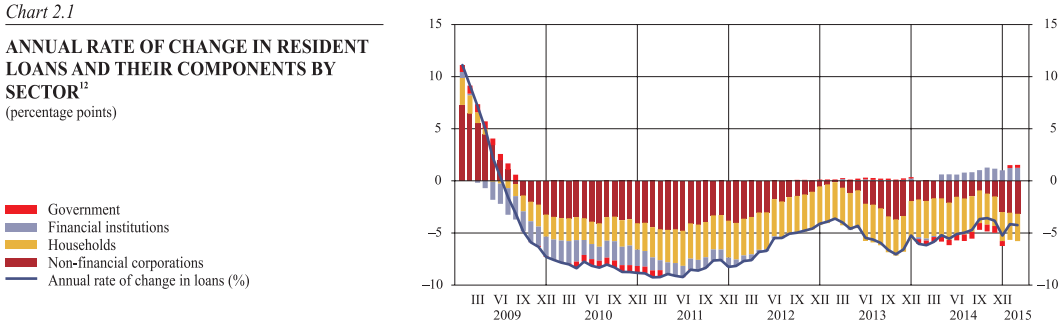
The annual rate of change in loans is negative both in the non-financial corporation and household sectors. The structural changes in the credit institution sector at the end of 2013 and in January 2014[11] still had a partial effect on the annual rate of change in loans in 2014. However, the exclusion of this one-off impact of structural changes does not yet eliminate the negative rate of decline in loans (see Chart 2.1).

In 2014, lending developments of non-financial corporations were largely influenced by uncertainty in the external environment in relation to the Russian–Ukrainian conflict,

[11] The credit institution licence of JSC GE Money Bank was cancelled in October 2013 and the credit institution licences of SJSC *Latvijas Hipotēku 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 SECTOR[12]
(percentage points)



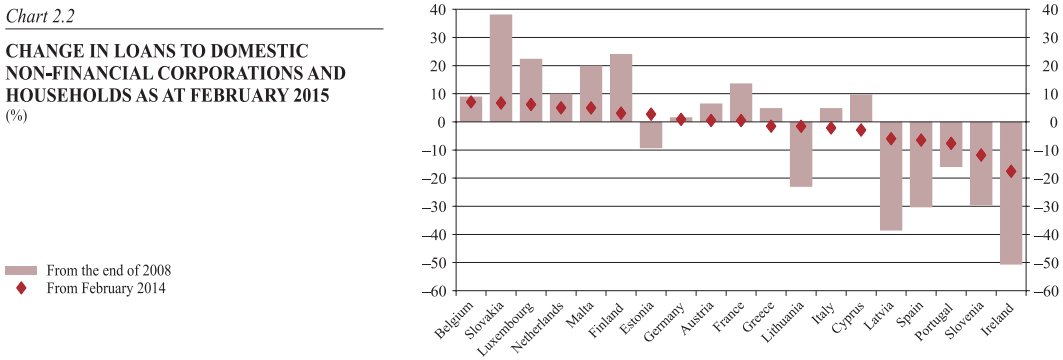
which increases caution of both credit institutions and potential borrowers. According tothe responses received from Latvia's respondents to the euro area bank lending survey, credit standards applied by credit institutions to non-financial corporations in general tightened somewhat as credit institutions were more pessimistic in assessing development prospects of individual economic sectors and non-financial corporations, as well as economic development as a whole. According to credit institutions, demand for loans by non-financial corporations also decreased in 2014. It was on account of lower demand for long-term loans. The weak lending does not facilitate more investment in the economy either. The increase in investment was quite weak over the past three years, posing risks to sustainable economic growth.

During the last year, uncertainty of the domestic legal environment with regard to the amendments to the Insolvency Law affected household lending and its future prospects. In September 2014, amendments to the law were adopted. They envisaged the introduction of the mandatory non-recourse principle for new mortgage loans to households. In the light of this provision, credit institutions were going to substantially tighten mortgage loan standards, e.g. to increase the first down-payment. Taking into account the assessment of the potential threats to further lending to the economy, the law was amended again in February 2015, before this controversial provision took effect, by abandoning a mandatory use of the non-recourse principle. In line with the amendments to the Law on Consumer Rights Protection adopted at the same time, the non-recourse principle was introduced as an option.

In comparison with other euro area countries, lending in Latvia remains weak for a lengthy period. Latvia is faced with the second largest rate of decrease of the loan portfolio in the euro area last seen at the end of 2008 and with still one of the highest annual rate of decrease of the loan portfolio (see Chart 2.2).

Chart 2.2

CHANGE IN LOANS TO DOMESTIC NON-FINANCIAL CORPORATIONS AND HOUSEHOLDS AS AT FEBRUARY 2015
(%)



With external risks increasing, it is projected that the domestic loan portfolio of credit institutions will further contract also in 2015. Lending to non-financial corporations will continue to depend to a large extent on developments in the external environment,

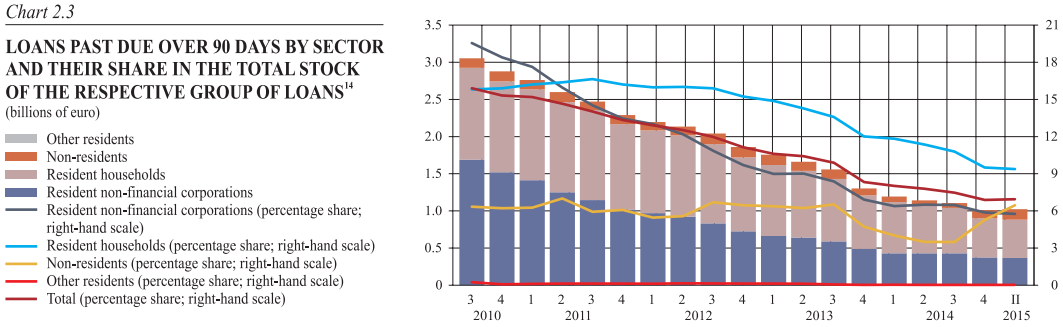
[12] To ensure comparability, the time series do not include the data of JSC *Parex banka* and JSC *Latvijas Krājbanka* and they have been adjusted excluding the one-off effects associated with JSC GE Money Bank, SJSC *Latvijas Hipotēku un zemes banka* and JSC UniCredit Bank.

including the economic growth in the main trade partner countries. It will determine development prospects of the local non-financial corporations. Following the non-introduction of the mandatory non-recourse principle, household lending could gradually resume (see also Annex 3 regarding public perception of demand for loans). The state-guaranteed mortgage loan programme launched in 2015 to support the construction or purchase of the first housing will somewhat stimulate it. However, the programme volume and consequently its effect will be modest[13]. ECB accommodative monetary policy measures are not expected to have significant impact on lending in Latvia in the near future.

Although the pace of economic growth is decelerating in Latvia due to external factors, currently the quality of the loan portfolio continues to improve. The share of loans past due over 90 days shrank from 8.1% at the end of February 2014 to 6.9% at the end of February 2015. Long past due loans and their share are decreasing steadily both in relation to domestic non-financial corporations and households (see Chart 2.3). In 2014, acceleration of the improvement in the quality of the loans granted to households is primarily attributable to an increase in loan write-offs and faster improvement in household financial situation. These trends are similar in all largest credit institutions, i.e. loans past due over 90 days granted to residents are shrinking in all largest credit institutions.

Chart 2.3

LOANS PAST DUE OVER 90 DAYS BY SECTOR AND THEIR SHARE IN THE TOTAL STOCK OF THE RESPECTIVE GROUP OF LOANS[14]
(billions of euro)



The significant deterioration in the economic and political situation in Russia has increased the credit risk of loans granted to non-residents, Russian and Ukrainian residents in particular, and loans to other borrowers whose guarantors are Russian citizens or collaterals are located in Russia. In February 2015, the share of loans granted to non-residents constituted 14.8% of the total loan portfolio, including the share of loans granted to residents of Russia (3.2%) and the share of loans granted to residents of Ukraine (0.4%). The quality of the non-resident loan portfolio has historically been higher than that of the domestic loan portfolio. At the end of 2013 and in the first half of 2014, the quality of the non-resident loan portfolio substantially improved. However, at the end of 2014 and beginning of 2015, it deteriorated and turned back to the level of 2013. In February 2015, the share of loans past due over 90 days granted to non-residents was 6.5% of the non-resident loan portfolio (see Chart 2.3). The risks related to an increase in non-resident credit risk pertain to some credit institutions providing services to non-residents. The results of the stress tests (see the section on shock-absorption capacity of credit institutions) and sensitivity analysis carried out by Latvijas Banka in relation to individual credit institutions suggest that Latvia's credit institution sector has sound resilience to higher credit risk in the event that Russia-related shocks augment significantly. The individual additional capital adequacy requirements set within the framework of the supervisory review process (Pillar 2) by the FCMC for the credit institutions providing services primarily to non-residents mitigate the risks. The level of requirements depends on the share of transactions with non-residents and the pace of their increase.

The share of the restructured loans past due less than 90 days contracted from 8.6% in February 2014 to 7.0% in February 2015. The outstanding amount of newly and

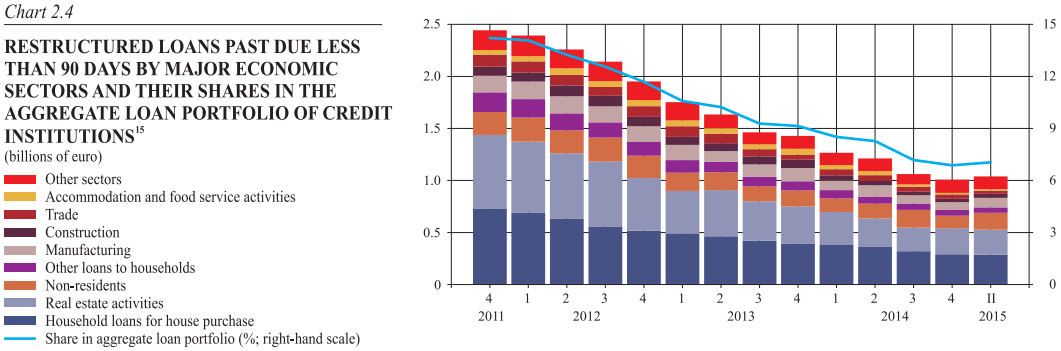
[13] The current volume of the programme makes it possible to guarantee approximately 600 loans. In comparison, 8.1 thousand new loans were granted to households for house purchase in 2014.
[14] To ensure comparability, the time series do not include the data on JSC *Parex banka* and JSC *Latvijas Krājbanka*.

repeatedly restructured loans is considerably smaller than in 2012 and 2013 as well. A positive development is the shrinking outstanding amount and share of restructured loans in relation to all major economic sectors and resident households. The share of restructured loans in the non-resident loan portfolio increased slightly at the beginning of 2015, following a decrease at the end of 2014. This is likely to be attributed to the deterioration in the economic situation in Russia and Ukraine (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 INSTITUTIONS[15]

(billions of euro)



Along with the increase in external risks, a slight deterioration in the quality of the total loan portfolio is possible in 2015. It is projected that the quality of the domestic loan portfolio will not change significantly. Household creditworthiness and the quality of loans granted to households will continue to improve modestly. This will be determined by further rise in disposable income of households and continued write-off of bad loans. Growing financial vulnerability of the non-financial corporations, which have close cooperation with Russia and Ukraine, as well as certain effect of the changes in the policy of the issuance of temporary residence permits on the non-financial corporations involved in construction and real estate activities increase the likelihood that the quality of the loan portfolio of non-financial corporations might slightly worsen. The deterioration in the quality of the non-resident loan portfolio is probable due to external risks. However, the volume of the non-resident loan portfolio is not sizeable, and credit institutions' ability to absorb the increase in the credit risk resulting from the potential shocks is high.

2.2 Funding and liquidity risks

Resident and non-resident deposits play an increasing role in funding of credit institutions. With the euro depreciating against the US dollar, non-resident deposits grow faster. The role of parent bank funding is diminishing as the decreasing lending to residents allows credit institutions to almost fully finance their loan portfolio by resident deposits. Overall, funding risks are limited by support available from Nordic parent banks to their subsidiaries in Latvia, as well as by the high liquidity and capital adequacy indicators of credit institutions. The FCMC has set additional individual liquidity and capital requirements for several credit institutions depending on their business model risk. Liquidity risk of credit institutions remains limited. In the light of negative interest rates credit institutions' investments in securities increased notably. The stress tests carried out by Latvijas Banka suggest that liquity risk did not increase in 2014.

The role of deposits continues to rise in the funding structure of credit institutions with the share of deposits in credit institution liabilities reaching 72% at the end of 2014 and beginning of 2015. The growth trend of resident deposits has not changed much in comparison with the previous years. The pick-up in resident deposits is on account of deposits received from the private non-financial sector, particularly household deposits, whose expansion, in turn, is facilitated by increasing disposable income of households and their cautious spending. Government deposits shrank at the end of 2014 and beginning of 2015, since the government repaid part (1.2 billion euro) of its debt in January 2015.

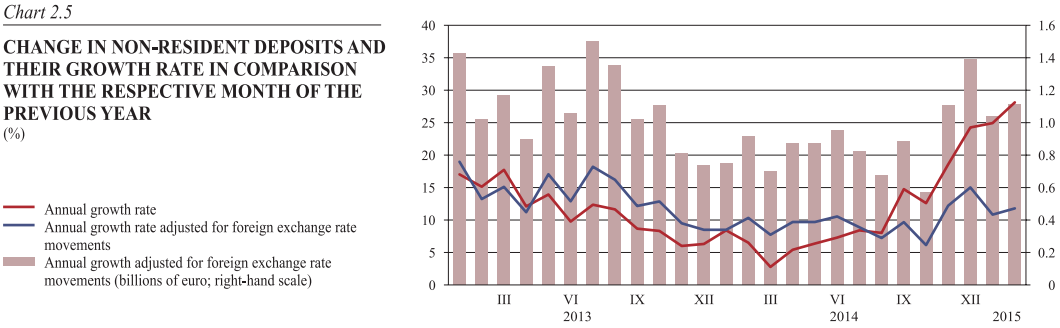
The increase in non-resident deposits accelerated at the end of 2014 and beginning of

[15] To ensure comparability, the time series do not include the data on JSC *Parex banka* and JSC *Latvijas Krājbanka*.

2015. This was mainly supported by a significant depreciation of the euro to US dollar and other major currencies, since most of non-resident deposits are made in these currencies. Looking beyond the effects of the exchange rate, the annual rate of growth in non-resident deposits remained close to the previous level (see Chart 2.5).

Chart 2.5

CHANGE IN NON-RESIDENT DEPOSITS AND THEIR GROWTH RATE IN COMPARISON WITH THE RESPECTIVE MONTH OF THE PREVIOUS YEAR
(%)



Overall, the role of parent banks in financing credit institutions is on a downward trend mainly on account of the continous decline in loan stock. However, funding provided by parent banks stabilised at the end of 2014, following a significant decrease in recent years. Currently credit institutions are largely able to finance the resident loan portfolio by using resident deposits; therefore, further growth of parent bank funding will depend on lending dynamics. This is also depicted by the loan-to-deposit ratio of residents which has declined to its historical lows (see Chart A1.4).

Since Latvia's credit institution sector is composed of two quite different credit institution segments, Latvia's credit institutions should be divided into two groups[16] for the purpose of more accurate analysis. These groups are different in terms of the composition of the funding received and its placement. Such division was also used in the previous "Financial Stability Reports". Group 1 credit institutions mainly draw financing from the resident private non-financial sector and Nordic parent banks, and the assets of this group account for 55% of the total assets of Latvia's credit institutions. Group 2 credit institutions, in turn, comprise the rest of the credit institutions, which primarily provide services to non-residents and accept non-resident deposits, as well as the branches of Nordic banks providing internal support functions to their parent banks. Group 2 credit institutions do not play a material role in granting loans to residents and attracting domestic deposits. At the end of February 2015, these credit institutions had granted only 13.0% of all loans to residents and gathered 9.2% of all resident deposits.

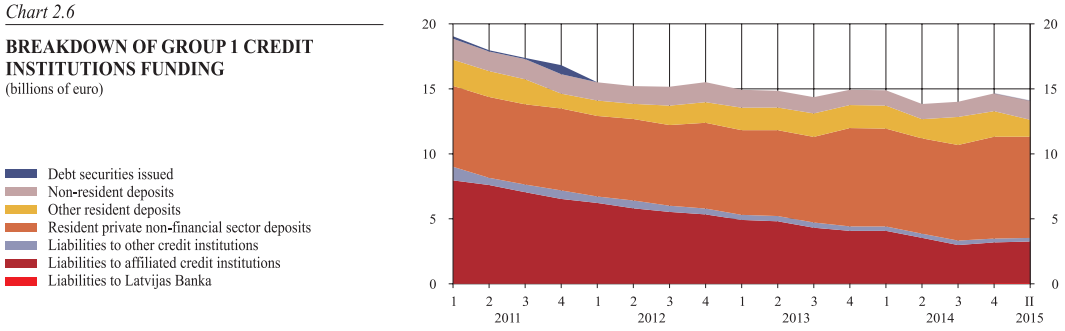
Resident private non-financial sector deposits, which constitute the most significant funding source of Group 1 credit institutions, continues a moderate rise (see Chart 2.6). Meanwhile, government deposits shrank sharply at the beginning of 2015 as a significant part (1.2 billion euro) of the sovereign debt was repaid (government deposits posted a notable rise in the middle of 2014 when the Governing Council of the ECB adopted a decision to introduce negative interest rates on the deposit facility in the national central banks of the euro area countries urging the government to move the major share of deposits from Latvijas Banka to credit institutions). The second most important source of financing for Group 1 credit institutions is funding provided by parent banks. It stabilised at the end of 2014, following a significant contraction in the previous years. Further changes in parent bank funding will depend on domestic lending development, since currently credit institutions are able to attract sufficient amount of resident deposits to avoid borrowing additional financing from parent banks. This is also attested by the loan-to-deposit ratio of Group 1 credit institutions which reached 107.4% in February 2015 (see Table A1.2) suggesting that the loan portfolio of these credit institutions can

[16] Group 1 credit institutions comprise credit institutions granting more than 50% of their loan portfolio to residents and receiving more than 50% of their deposits from residents, while Group 2 credit institutions comprise other credit institutions primarily providing services to non-residents and accepting non-resident deposits. As at the end of the first quarter of 2015, Group 1 comprised 10 credit institutions. In comparison with the first quarter of 2014, one small credit institution, whose non-resident deposits had considerably increased, was excluded from Group 1.

be almost entirely financed by non-bank deposits. However, these deposits are mainly short-term deposits (see Chart A1.1). With the share of long-term funding shrinking, the maturity mismatch between assets and liabilities of credit institutions continues to increase. The support available from parent banks and the high share of credit institutions' liquid assets mitigate this risk.

Chart 2.6

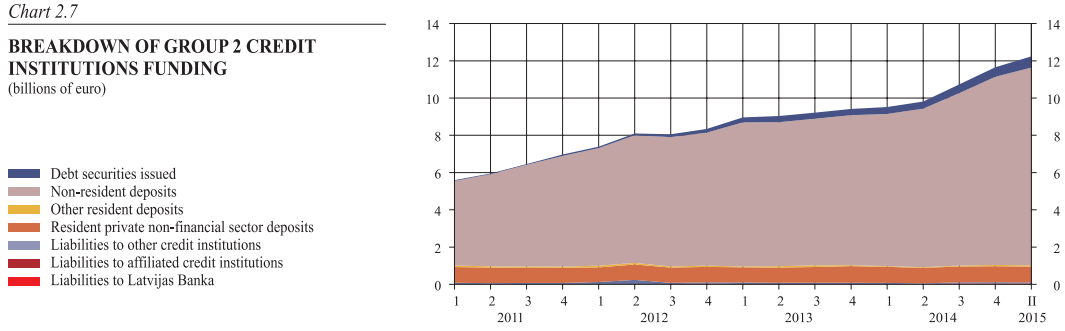
BREAKDOWN OF GROUP 1 CREDIT INSTITUTIONS FUNDING
(billions of euro)



Financing attracted by Group 2 credit institutions has sharply risen over the past year (see Chart 2.7). This was driven by an increase in non-resident deposits which accounted for 2.4 billion euro or 28.8% in February 2015 in comparison with the respective period of the previous year. However, the increase was largely determined by exchange rate effects as the euro substantially depreciated against all major foreign currencies at the end of 2014 and beginning of 2015. The rise in deposits was especially driven by US dollar deposits, which constituted 69% of all non-resident deposits in February 2015 (euro deposits accounted only for 27% of all non-resident deposits). Looking beyond the effects of the exchange rate, there are no significant changes in dynamics of non-resident deposits. Risks that may occur in relation to business models of Group 2 credit institutions are limited by the additional individual capital requirements and liquidity requirements imposed on these credit institutions by the FCMC. The level of these requirements depends both on the share of transactions with non-residents and the pace of their increase. In November 2014, the FCMC adopted amendments to the methodology for the calculation of additional capital requirements, increasing the impact of the rate of increase in transactions with non-residents on the calculation of additional capital requirements. Hence, these credit institutions will have to raise their capital adequacy level along with the pick-up in transactions with non-residents. The attracted funding (mainly non-resident short-term deposits) by Group 2 credit institutions is mostly invested in short-term foreign assets.

Chart 2.7

BREAKDOWN OF GROUP 2 CREDIT INSTITUTIONS FUNDING
(billions of euro)



Overall, the liquidity risk of credit institutions remains limited as credit institutions of both groups have a high share of liquid assets in their total assets. The liquidity ratio[17] set by the FCMC rose for Group 1 credit institutions in the second half of 2014 and at the beginning of 2015 (see Chart 2.9). The upward trend of Group 1 credit institution

[17] The ratio of 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) to credit institution's current liabilities whose residual maturity does not exceed 30 days. In compliance with the FCMC requirements, this ratio may not be less than 30%.

liquidity ratio was on account of an increase in liquid assets mainly caused by diminishing lending. On the one hand, the high share of liquid assets mitigates the liquidity risk of credit institutions. On the other hand, it limits a pick-up in returns on assets of these credit institutions which, in turn, may contribute to further contraction of parent bank financing.

Chart 2.8

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

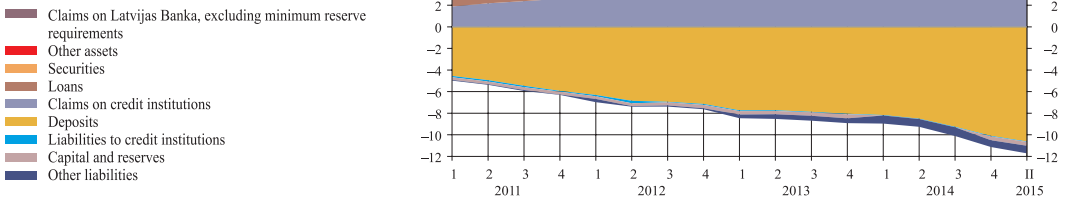
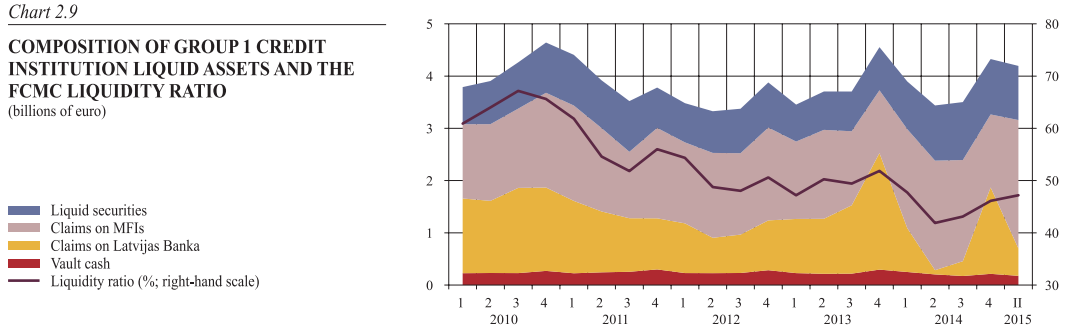


Chart 2.9

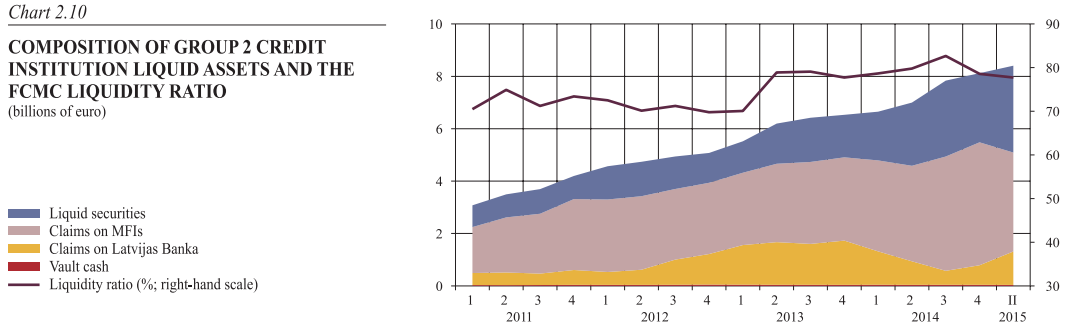
COMPOSITION OF GROUP 1 CREDIT INSTITUTION LIQUID ASSETS AND THE FCMC LIQUIDITY RATIO
(billions of euro)



The liquidity ratio of Group 2 credit institutions remains high, close to 80%. In the light of the ECB monetary policy decision to apply negative interest rates on the deposit facility in the national central banks of the euro area countries, changes in the liquid asset composition of Group 2 credit institutions have taken place, i.e. following the declining deposits with Latvijas Banka, the share of liquid securities in turn increased (28% in February 2014; 39% in February 2015; see Chart 2.10). However, the largest item of liquid assets remains claims on MFIs (mainly on the major credit institutions of the EU, Switzerland and the US). In comparison with the respective period of the previous year, the share of this item in liquid assets contracted by 7.1 percentage points and stood at 44.9% in February. Both an increase in the securities portfolio and adaptation to the anticipated LCR requirement contributed to a decrease in claims on MFIs. Contrary to the liquidity ratio set by the FCMC, the LCR has not included claims on credit institutions in its calculation of liquid assets.

Chart 2.10

COMPOSITION OF GROUP 2 CREDIT INSTITUTION LIQUID ASSETS AND THE FCMC LIQUIDITY RATIO
(billions of euro)



The liquidity stress tests conducted by Latvijas Banka for the purpose of evaluating the significance of the potential consequences of financial outflows suggest that with further increase in the liquid assets[18], the credit institution resilience to the shock of financial

[18] The liquid assets defined in the calculation of the FCMC liquidity ratio.

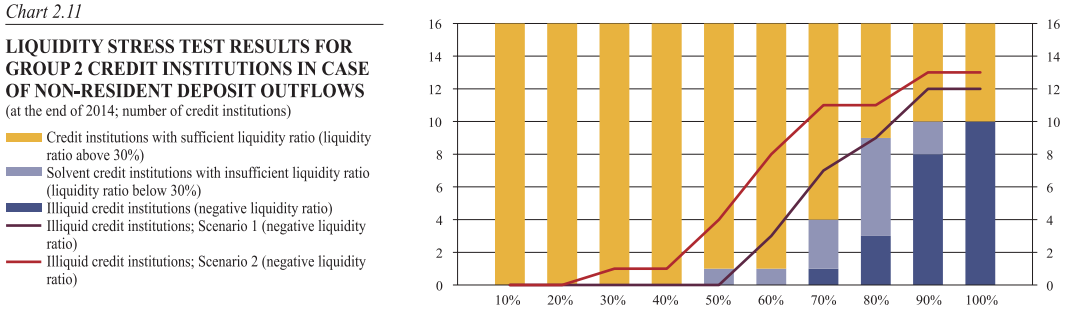
outflows remained unchanged in 2014[19]. Credit institutions were able to withstand the outflow of at least 40% of resident deposits and the outflow of more than 60% of non-resident deposits.

The stress tests of Group 2 credit institutions were supplemented with two particularly adverse scenarios: 1) it is impossible to pledge or sell the securities portfolio, except those government securities where at least one of three ratings by international credit rating agencies[20] is no lower than AAA, and Latvian government securities having lost 30% of their value that can be used in the Eurosystem's monetary operations at a 7.5% discount; 2) in addition to the above assumptions of Scenario 1, it is assumed that no credit institution has access to any claims on MFIs from a country on whose MFIs the respective credit institution has the highest volume of claims.

The application of Scenario 1 did not notably deteriorate the results of the basic stress tests. Moreover, they are better than those of the stress tests with the same assumption carried out at the end of March 2014. Group 2 credit institutions would be able to withstand the outflow of no less than 50% of non-resident deposits (see Chart 2.11; 40% at the end of March 2014). The application of Scenario 2 would reduce the ability to withstand the outflow of up to 20% of non-resident deposits (10% at the end of March 2014). The improvement in stress test results was driven by both high-quality liquid government debt securities (at least one of three ratings by international credit rating agencies is no lower than AAA) held in the credit institution portfolio and the reduction in volume concentration of claims on MFIs in individual countries.

Chart 2.11

LIQUIDITY STRESS TEST RESULTS FOR GROUP 2 CREDIT INSTITUTIONS IN CASE OF NON-RESIDENT DEPOSIT OUTFLOWS
(at the end of 2014; number of credit institutions)



Overall, the results of the stress tests suggest that currently the liquidity risk of Group 2 credit institutions is limited (it even slightly decreased in 2014), since credit institutions have increased their highly liquid assets. Meanwhile, the results of the stress tests in relation to Group 1 credit institutions remained broadly unchanged.

2.3 Market risk

Along with the changeover to the euro on 1 January 2014, the total currency risk profile of credit institutions changed considerably, i.e. the indirect currency risk of credit institutions diminished and the open foreign exchange position, which previously was not sizeable either, also contracted. The interest rate risk of Latvia's credit institutions[21] is relatively low due to their fairly well-balanced RSA and RSL. In 2014, disparities with regard to the sensitivity of credit institutions' net interest income to the developments of market rates widened. Considerable fluctuations capable of affecting net interest income and the economic value of Latvia's credit institutions are not expected in an environment of low market interest rates. However, the low interest rates may contribute to pushing up other risks of Latvian credit institutions.

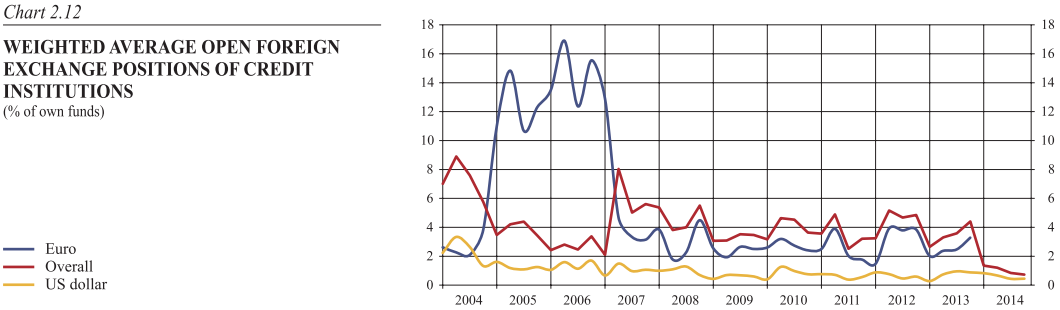
[19] The results of the liquidity stress tests indicate the tolerance of credit institutions to the outflows of non-resident non-MFI deposits, resident non-MFI deposits and the total (MFI and non-MFI) funding with the residual maturity of up to three months before their liquidity ratio reaches 0, subject to a condition that credit institutions do not borrow additional resources to offset the funding outflows.
[20] Standard & Poor's, Moody's and Fitch Ratings.
[21] Interest rate risk was assessed based on the data of credit institutions active at the beginning of 2014. Thus, the impact of JSC UniCreditBank, SJSC *Latvijas Hipotēku un zemes banka* and JSC GE Money Bank has been excluded.

2.3.1 Foreign exchange risk of credit institutions

Following the euro changeover on 1 January 2014, the total open position of credit institutions decreased significantly, and a large part of the credit institutions' foreign exchange risk source disappeared. In the first quarter of 2014, the weighted average open foreign exchange position shrank to 1.35% of own funds and later it continued to contract gradually, reaching 0.73% of own funds at the end of 2014 (see Chart 2.12; including 0.12% in Group 1 credit institutions and 1.63% in Group 2 credit institutions).

Chart 2.12

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

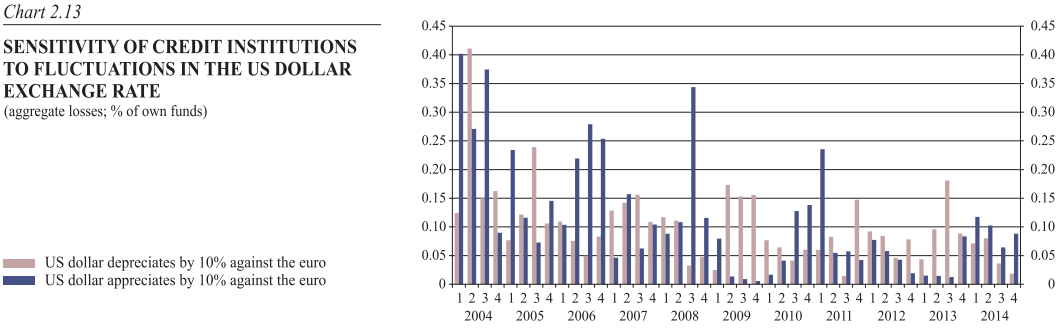


After the introduction of the euro, exposure to losses stemming from possible fluctuations of the euro exchange rate against the US dollar became the most significant common element of the foreign exchange risk. The US dollar represents the largest share in the open foreign exchange position, and it prevails in currency transactions carried out by credit institutions. Overall, the open US dollar position of credit institutions was short at the end of 2014 accounting for 6.4 million dollars, but at the beginning of 2014 it was long and amounted to 7.4 million euro. The weighted average open US dollar position of credit institutions vis-à-vis own funds decreased in the second half of 2014. It fluctuated around the level of 0.8% in the first quarter, but in the second quarter it almost halved. At the end of 2014, the weighted average open US dollar position was 0.4% in Group 1 credit institutions and 1.05% in Group 2 credit institutions. Open positions of other currencies were even smaller in 2014, for instance, the open position of the British pound sterling was close to 0.1% in 2014.

The sensitivity of credit institutions to US dollar exchange rate volatility against the euro changed in 2014, since the direction of credit institutions' total open position also changed during this period. The contraction of the long open US dollar position led to changes faced by many credit institutions. Thus, the potential total losses incurred by credit institutions as a result of the depreciation of the US dollar by 10% against the euro fell from 0.07% of own funds at the beginning of 2014 to 0.02% of own funds at the end of 2014. Meanwhile, the potential losses driven by the appreciation of the US dollar by 10% against the euro grew slightly in comparison with the previous periods on account of a rise in the short open US dollar position in a number of credit institutions. If the US dollar had appreciated by 10% against the euro, the potential losses incurred by credit institutions at the end of 2014 would have accounted for 0.09% of own funds (see Chart 2.13).

Chart 2.13

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



Currently many factors, including differences in monetary policy implemented by the leading central banks and mounting geopolitical risks in Russia, determine rising fluctuations in exchange rates in the foreign exchange market. Moreover, exchange rate volatility is on the rise in numerous currency pairs. This points to an increase in the foreign exchange market risk; however, the tiny open foreign exchange positions reduce the potential effect of the materialisation of this risk on credit institutions.

According to the market risk calculation using the standardised approach in relation to the foreign exchange risk[22], the significance of the exchange risk in the total calculated risk value was on a downward path in 2014. At the end of the first quarter of 2014, it was 0.42% of the total risk value, while at the end of 2014 this indicator had fallen to 0.25%. Moreover, the aggregate market risk, attributed to the position risk of securities, foreign currency and goods was not high either. It was on average 2.58% of the total calculated risk value at the end of the first quarter of 2014 and 2.16% at the end of 2014.

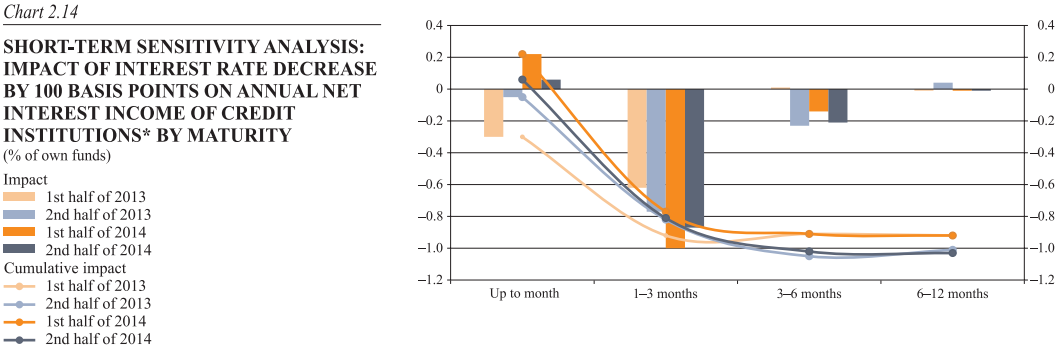
2.3.2 Interest rate risk of credit institutions

The risk that an increase in market interest rates might have a negative impact on Latvian credit institutions is currently relatively low. As a result of the ECB accommodative monetary policy the euro money market interest rates have reached a relatively low level and continue to follow a downward trend. From the middle of 2015 until the end of the year, the US market participants expect a slight rise in the US dollar money market interest rate. On account of a decline in the market interest rates in credit institutions with their RSA exceeding RSL, the annual net interest income goes down[23] by gradually repricing the net RSA, while the credit institutions' economic value[24] increases.

Judging by the potential impact of the decline in market interest rates on the annual net interest income of credit institutions, credit institutions' exposure to the interest rate risk remained broadly unchanged in 2014 as compared to the previous year, while, judging by the potential impact of that decline on the economic value of credit institutions, their exposure to the risk decreased. The same changes in market interest rates would have the same impact on the net interest income-to-equity ratio of Latvian credit institutions in 2015 as in the previous year. Assuming a parallel fall in the market interest rates by 100 basis points, the annual net interest income of Latvian credit institutions would decrease by an average of 1.0% of their own funds, and vice versa – with the market interest rates rising in parallel by 100 basis points, the annual net interest income of credit institutions would increase by an average of 1.0% of their own funds (see Chart 2.14).

Chart 2.14

SHORT-TERM SENSITIVITY ANALYSIS: IMPACT OF INTEREST RATE DECREASE BY 100 BASIS POINTS ON ANNUAL NET INTEREST INCOME OF CREDIT INSTITUTIONS* BY MATURITY
(% of own funds)



* See footnote 13.

[22] In compliance with the CRD IV/CRR requirements.

[23] The impact of market interest rate changes on the annual net interest income within each time-band is calculated by multiplying the time-band's GAP with the market 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 of market interest rate changes on the annual net interest income 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 impact of market interest rates on the credit institutions' economic value and are based on the structure of credit institutions' balance sheet as at the end of 2014.

[24] Credit institutions' economic value is the discounted value of credit institutions' expected future net cash flows generated by claims and liabilities that are both on and off the credit institutions' balance sheet.

With RSA shrinking at a slower rate than RSL, the RSA and RSL ratio (see Chart A1.5) expanded overall in 2014. RSA and RSL decreased along with almost evenly declining off-balance sheet items sensitive to changes in interest rates. RSA and RSL on the credit institutions' balance sheet increased: RSA on the credit institutions' balance sheet grew more rapidly, while RSL changed only slightly. RSA on the credit institutions' balance sheet increased largely due to a significant rise in the holdings of Latvian credit institutions' debt securities and other fixed income securities. Meanwhile, the amount of RSL on the Latvian credit institutions' balance sheet remained broadly unchanged, with credit institutions partly substituting their liabilities to credit institutions and central banks and other liabilities with deposits and issued debt securities. The RSA and RSL ratio of Group 1 credit institutions slightly exceeds 1 (fully balanced RSA and RSL ratio) remaining lower than that of Group 2 credit institutions (see Chart A1.6).

Credit institutions would feel negative effects of the market interest rate fall most notably after 1–3 months later. As the credit institutions' GAP for the year within the time-band of up to 1 month[25] was negative at the end of 2014, declining market interest rates will mean an immediate net interest income growth for credit institutions (see Chart P1.7). However, the widening of the GAP in the time-band of 1–3 months offset the narrowing of the GAP in the shorter time-band, and thus the cumulative result remained broadly unchanged in 2014 vis-à-vis 2013. Therefore, with market interest rates declining, in 1–3 months credit institutions will incur net interest income losses exceeding the gains expected in 1 month. In longer time-bands (3–6 months and 6–12 months) credit institutions' net interest income sensitivity to market interest rate changes has remained broadly unchanged or its changes had no significant impact on the total annual net interest income of credit institutions.

Changes in the term structure of interest rate risk observed in 2014 suggest that credit institutions optimised their term structure, narrowing the cumulative GAP of the shorter time-bands or maintaining it broadly unchanged and widening that of the longer time-bands. Thus, with market interest rates on a downward trend, credit institutions would immediately or after a short while see a decline in their annual net interest income to a lesser or almost the same extent, postponing the impact of market interest rate changes until a somewhat later time, when the course of the market interest rate development could change. In the event of declining market interest rates, the excess of RSA over RSL in the longer time-bands allows raising the economic value of credit institutions more rapidly.

The long-term economic value analysis of interest rate risk suggests that in a hypothetical situation, assuming a 100 basis points fall in market interest rates, the economic value of credit institutions would have increased by 1.6% of total own funds of credit institutions, posting 0.6 percentage point higher growth year-on-year at the end of 2014. With the euro and US dollar interest rates developing in different directions, the economic value of Latvian credit institutions most probably would not increase as rapidly.

The average weighted indicators of interest rate risk of credit institutions improved in 2014; however, some widening of disparities was observed among credit institutions with regard to their annual net interest income response to market interest rate changes. With a parallel downward shift in the yield curve by 100 basis points, the range of potential changes in the credit institutions' annual net interest income was larger at the end of 2014 as compared to that in the corresponding period of the previous year (see Chart A1.8). The maximum rise in the annual net interest income that could be caused by a parallel downward shift in the yield curve by 100 basis points was 2.8% of own funds in 2014, representing a 1.4 percentage point decrease in comparison with the end of the previous year, whereas their maximum fall was 7.8% of own funds, up 2.7 percentage

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

points year-on-year. In 2014, a parallel downward shift in the yield curve by 100 basis points, would still have ensured a rise in the economic value of most credit institutions (see Chart 2.15).

Chart 2.15

LONG-TERM SENSITIVITY ANALYSIS: AVERAGE IMPACT OF INTEREST RATE DECREASE BY 100 BASIS POINTS ON ECONOMIC VALUE OF LATVIAN CREDIT INSTITUTIONS* BY MATURITY
(% of own funds)

* See footnote 13.

The evaluation of the interest rate risk of Latvian credit institutions suggests a low risk level; however, it is closely linked to other market risks and, with short-term and medium-term market interest rates reaching negative values, this relation will become more pronounced. In the environment of low interest rates, the prices of securities (shares and previously issued bonds) tend to go up, providing for a short-term increase in the credit institutions' investment portfolio return on investment value growth. In the long term, however, there is a risk of overstating security prices, triggering a need for their downward revision. Negative yields on more secure bonds might encourage investors to look for additional profit opportunities by investing in riskier assets, thus increasing investment portfolio exposure to the risk of asset price fluctuations.

2.4 Profitability

Along with ongoing moderate economic growth, profitability of credit institutions is improving. The aggregate profit increased primarily on account of reduced provisioning and reversal of loan loss provisions. At the same time, the profit before provisioning and taxes, and the operating income contracted slightly in 2014. In short-term, risks related to the profitability of credit institutions overall remain low. However, with opportunities to reverse provisions and the operating costs gradually decreasing and considering the decline in the loan portfolio and the environment of low interest rates and higher external risks, there is a growing uncertainty surrounding profit prospects in the future. With the risks associated with Russia increasing, some of Group 2 credit institutions face higher profitability risk, as they may need to make additional provisions or sell part of their assets at a loss.

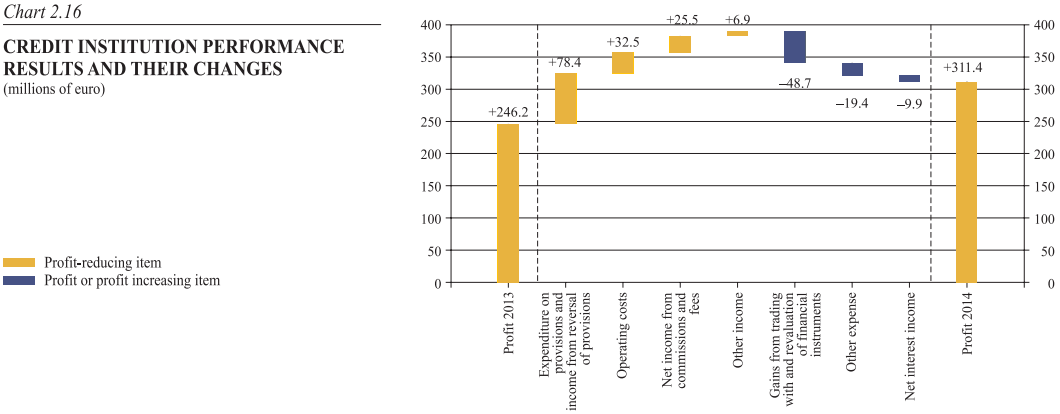
The aggregate profit of credit institutions on a solo basis was 311.4 million euro in 2014 (246.2 million euro in 2013[26]), whereas the consolidated profit totalled 316.9 million euro (262.7 million euro in 2013). The aggregate profit of Group 1 credit institutions was 188.2 million euro, accounting for 60% of the aggregate profit of all credit institutions. Profit indicators improved primarily on account of less pronounced provisioning. Profit was also favourably affected by a rise in net commissions and fees, in particular for Group 2 credit institutions, and improved cost efficiency (see Chart 2.16). Generally, credit institutions have also started the year 2015 successfully. In the first two months of 2015, the aggregate profit of credit institutions on a solo basis was 64.0 million euro.

Overall, ROE and ROA of credit institutions improved in comparison with 2013, reaching a relatively high level. In 2014 and the first two months of 2015, ROE was 11.1%, up from 8.6% in 2013. The previously-observed tendency for the return ratios of Group 2 credit institutions to be higher on average than those of Group 1 credit institutions persisted,

[26] Unless stated otherwise, this Section compares the performance results in 2014 to those in 2013, including the losses of the credit institutions that wound up their business as of 1 January 2014 (SJSC *Latvijas Hipotēku un zemes banka* and JSC UniCredit Bank).

Chart 2.16

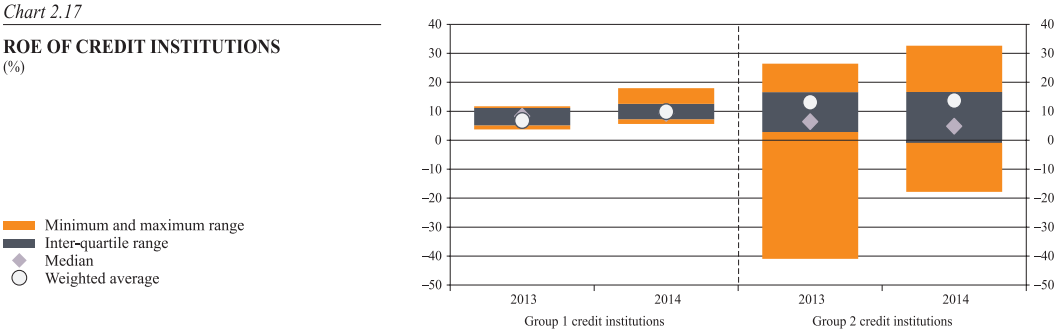
CREDIT INSTITUTION PERFORMANCE RESULTS AND THEIR CHANGES
(millions of euro)



although the range of Group 2 ratios was relatively wider (see Chart 2.17). ROA also improved slightly in 2014, reaching 1.1% in comparison with 0.9% in 2013. In the first two months of 2015, ROA was 1.3% as compared to 1.4% in the corresponding period of 2014. In comparison with the average ROA of EU credit institutions, that of Latvian credit institutions was more than twice as high. Lithuanian credit institutions also reached a similar ROA indicator (0.9% in 2014). ROA of Estonian credit institutions was slightly higher (1.6% in 2014)[27]. It is projected that in 2015 ROE and ROA of Latvian credit institutions will be approximately at the level of 2014. Due to a declining income base, the credit institutions' capacity to further improve their ROE and ROA will be limited, as they will focus more on achieving higher capital efficiency.

Chart 2.17

ROE OF CREDIT INSTITUTIONS
(%)



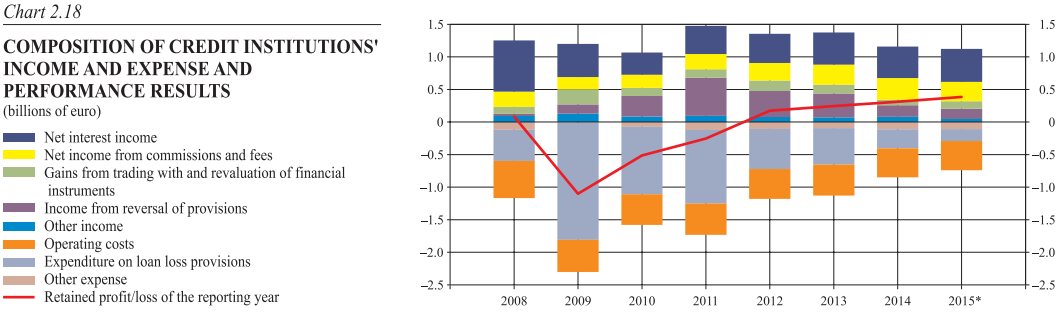
In 2014, the cost-to-income ratio of credit institutions improved slightly, standing at 49.7% at the end of December 2014 (50.7% in 2013). This tendency is likely to persist; however, in view of a declining income base, the improvement is expected to be slower than before.

In 2014, operating income of credit institutions totalled 916.4 million euro, which is by 1% lower as compared to that of the currently active credit institutions in 2013. In 2014, net interest income of Group 1 credit institutions remained at the level of 2013, while that of Group 2 credit institutions increased. For both groups of credit institutions, net interest income still accounted for approximately half of operating income (see Chart 2.18). The previously-observed tendency of a simultaneous decline in both interest income and interest expense continued. The share of non-interest income in financial operating income decreased slightly by 4%, reaching 431.8 million euro year-on-year. It is important to note that Group 1 credit institutions saw a significant fall of 44.9 million euro or 21% in non-interest income, since, due to the euro changeover, they lost a part of income from trading in foreign currency and foreign currency revaluation (a 36.0 million euro or 59% fall year-on-year). Group 2 credit institutions increased their non-interest income by 13% year-on-year owing to a higher income from commissions and fees. In the first two months of 2015, operating income stood at 5.8 million euro, growing by 4% as compared to the respective period of 2014.

[27] According to *Lietuvos bankas* and *Eesti Pank* data.

Chart 2.18

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



* The indicator is established by assigning the data for January and February to the whole year.

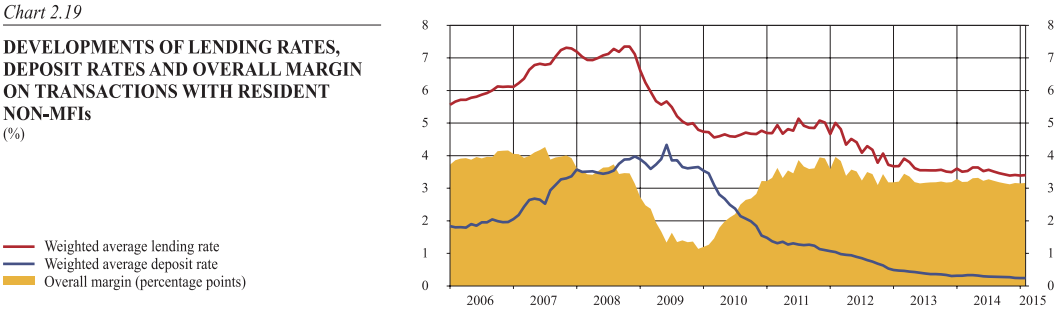
In 2014, operating costs of credit institutions (443.7 million euro) were not materially different from those of the currently active credit institutions in 2013. The dynamics of operating costs differed between Group 1 and Group 2 credit institutions. Group 1 credit institutions saw a decline in their operating costs, since they mainly focused on improving their cost efficiency by reducing the number of their branches in the regions and increasing the share of e-services, whereas the operating costs of Group 2 credit institutions rose by 15.1 million euro or 8% year-on-year. A raise in remuneration for the employees, the council and the board accounts for a major share in this increase.

The aggregate amount of expenditure on provisions and the income from reversal of provisions in credit institutions continued to contract sharply in 2014 (by 44.9 million euro or 28% in the currently active credit institutions as compared to 2013), standing at 116.1 million euro and thus providing the largest contribution to net income growth. Expenditure on provisions contracted particularly strongly in Group 1 credit institutions, with their total net expenditure on provisions standing at 17.5 million euro in 2014, down by 53.1 million euro or 75% year-on-year. A further improvement in the quality of the resident loan portfolio is not expected in 2015. In addition, due to higher risks associated with Russia, some of Group 2 credit institutions might need to build additional provisions for loans granted to non-residents.

In line with the ECB monetary policy, the interest rates on both loans to residents and deposits from residents were at their historical lows. No rise in interest rates is expected in the near future either. In 2014 and in the first two months of 2015, the overall margin on outstanding amounts for resident non-financial corporations and households decreased only slightly to approximately 3.1 percentage points as compared to 3.2 percentage points in the first quarter of 2014 (see Chart 2.19). The overall margin on new deals declined somewhat in 2014 and in the first two months of 2015, standing at 4.2 percentage points in February 2015, down from 4.3 percentage points in December 2013.

Chart 2.19

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



The credit institutions' total profit in 2015 is projected to be at the level of 2014. Credit institutions' capacity to increase their profits by cutting expenditure on provisions and recognising the income from reversal of provisions will be significantly lower in the future. The low interest rates and the weak lending development will be factors reducing profitability of credit institutions. Their profitability can be undermined by the negative impact of external factors. As a result, the borrowers' creditworthiness could deteriorate

and several credit institutions could face the necessity for additional provisioning and the impairment of assets as well as the need to sell a part of their assets at a loss. Improving cost efficiency, in turn, will have a positive effect on profitability.

2.5 Capitalisation

Capital adequacy of credit institutions has stabilised at a high level, and the related risks are generally low. The quality of credit institutions' capital is high, since own funds are primarily made up of Common Equity Tier 1 capital. Several Group 2 credit institutions are exposed to the risk of falling capitalisation level in relation to the need to build up provisions for a part of Russia- and Ukraine-related assets, to revalue them or realise them with losses.

Since 2014, capital adequacy of credit institutions has been calculated in line with the CRD IV/CRR legislative package laying down both the mandatory minimum capital requirements for credit institutions and additional capital buffer requirements[28] (see Table 2.1).

Table 2.1
CAPITAL REQUIREMENTS FOR CREDIT INSTITUTIONS IN LATVIA
(% of RWA)

Type of capital	Common Equity Tier 1 capital	Tier 1 capital (includes Common Equity Tier 1 capital and additional Tier 1 capital)	Own funds (include Tier 1 capital and Tier 2 capital)
Minimum capital requirements	4.5	6	8
Capital conservation buffer[29]	2.5*		
Countercyclical capital buffer[30]	0**		
Overall capital requirements	7	8.5	10.5

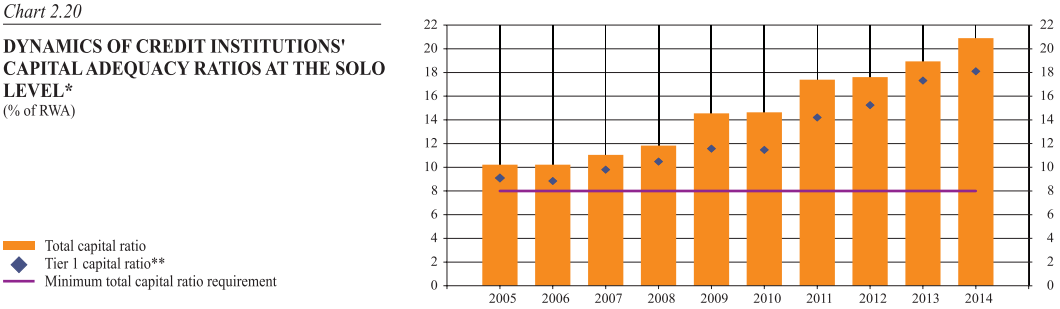
* Effective as of 28 May 2014.
** The decision was taken on 21 January 2015; the countercyclical capital buffer has to be maintained from 1 February 2016.

The capitalisation level of Latvian credit institutions is high, and the new CRD IV/CRR capital requirements have not exerted a significant effect on it. In the fourth quarter of 2014, the total capital ratio accounted for 20.9% and Tier 1 capital ratio stood at 18.1% at the solo level, which is well above the minimum capital requirements laid down in CRR (see Chart 2.20). Capital adequacy ratios are slightly lower at the consolidated level, i.e. the total capital ratio was 19.3% in the fourth quarter of 2014 and Tier 1 capital ratio – 16.7%. All credit institutions fulfil the minimum capital requirements both at the solo and consolidated levels. Two credit institutions do not comply with the overall capital requirements, which also include the capital conservation buffer of 2.5%, at the consolidated level. Both credit institutions plan to raise their capital in the future. Where credit institutions fail to meet the requirements of the capital conservation buffer, profit distribution restrictions are imposed on them. The total capital ratio and Tier 1 capital ratio of Latvian credit institutions exceed the EU average. The total capital ratio of Lithuanian credit institutions was similar to the level of Latvia (21.3%[31] at the end of December 2014), but the total capital ratio of Estonian credit institutions was considerably higher (above 40%[31]), since tax laws and regulations influenced the decision taken by most credit institutions not to distribute their profits.

[28] For a detailed summary concerning the new capital requirements for credit institutions set out in the CRD IV/CRR legislative package see the "Financial Stability Report 2013/2014" of Latvijas Banka. The requirements of the CRD IV were transposed into the Credit Institution Law as of 28 May 2014. A capital conservation buffer in Latvia is equivalent to 2.5% of RWA, and it was introduced without the transitional period stipulated by CRD IV.
[29] The capital conservation buffer of 2.5% above the minimum capital requirements is set as the so-called safety cushion to reduce the likelihood of credit institution capital falling to the level below the respective minimum requirement. If the relevant capital ratio declines below the overall capital requirements (which include the capital conservation buffer) but remains above the minimum capital requirement, this will not be considered noncompliance with regulatory requirements; however, payments of dividends and bonuses will be limited.
[30] The set ratio for exposures to Latvia's residents; see Appendix 4 for more details.
[31] According to *Lietuvos bankas* and *Eesti Pank* data.

Chart 2.20

DYNAMICS OF CREDIT INSTITUTIONS' CAPITAL ADEQUACY RATIOS AT THE SOLO LEVEL*
(% of RWA)

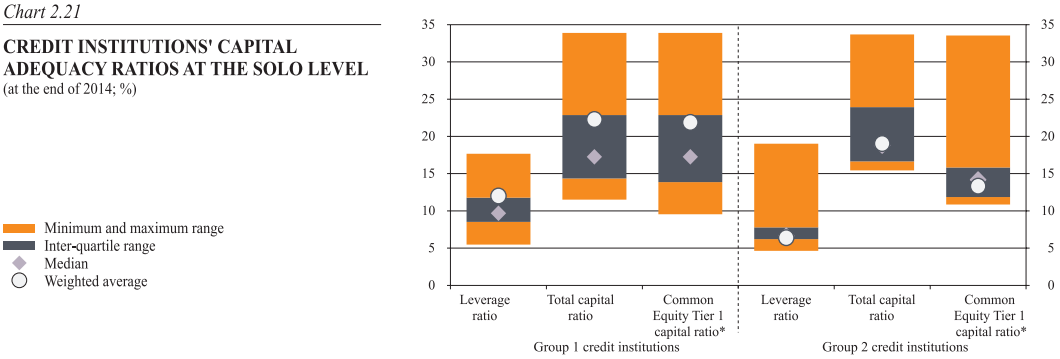


* Since 2014, capital adequacy has been calculated in compliance with the CRD IV/CRR legislative package, and it is not directly comparable with ratios of previous periods.
** Since 2014, the Common Equity Tier 1 capital ratio of credit institutions equals the Tier 1 capital ratio.

Common Equity Tier 1 capital of credit institutions still constitutes the main share (86.8%) of own funds, ensuring high quality of capital (see Chart 2.21). Common Equity Tier 1 capital is almost the only element of Group 1 credit institution own funds, while Tier 2 capital (mainly subordinated capital) makes up an essential part of Group 2 credit institution own funds. None of Latvian credit institutions has additional Tier 1 capital. Thus, Common Equity Tier 1 capital is equivalent to Tier 1 capital.

Chart 2.21

CREDIT INSTITUTIONS' CAPITAL ADEQUACY RATIOS AT THE SOLO LEVEL
(at the end of 2014; %)



* The Common Equity Tier 1 capital ratio of credit institutions equals the Tier 1 capital ratio.

The average leverage ratio of credit institutions was 9.3% at the end of December 2014. It was significantly higher than the minimum threshold of 3% set by Basel III and points to generally high capitalisation of credit institutions.

In 2014, approximately half of credit institutions increased their capital overall by 296.6 million euro, including an increase of 74.0 million euro in own funds (of which 66.2 million euro on account of retained earnings) and 60.4 million euro in subordinated capital. The capitalisation level of credit institutions is expected to be high in 2015 and it will be supported by retaining the 2014 earnings, by the forecasted 2015 profit of credit institutions, as well as by the capital boosting measures taken by some credit institutions through raising Common Equity Tier 1 capital and attracting subordinated loans. Some Group 2 credit institutions are exposed to the risk of falling capitalisation level owing to the deterioration in the economic situation in Russia and the need to build up provisions, revalue assets or realise them with losses. Moreover, as a result of the US dollar appreciation against the euro, the capitalisation level of Group 2 credit institutions whose majority of assets consists of US dollars could decrease, since their RWA rises in terms of euro. By contrast, a slight downward trend of RWA is expected for Group 1 credit institutions on account of the contracting loan portfolio; this contraction will have a positive impact on their capital adequacy ratios.

2.6 Shock-absorption capacity of credit institutions

The results of the sensitivity analysis and stress tests conducted by Latvijas Banka suggest that the capacity of credit institutions to absorb the potential rise in credit risk and Russian country risk caused by external and internal shocks is overall good. This is mainly because of the high capitalisation level of credit institutions which has been supported by a capital increase carried out by individual credit institutions and the significant level of provisions.

Latvijas Banka conducts a sensitivity analysis[32] and stress tests[33] of credit institutions on a regular basis. Estimates are based on the solo data of credit institutions as at the end of 2014, taking into account planned capital increases in 2015. The thresholds for stress tests are as follows: the total capital ratio of 8.0%, Tier 1 capital ratio of 6.0% and Common Equity Tier 1 ratio of 4.5%.

The results of the sensitivity analysis suggest that the credit institutions' capacity to absorb the potential increase in credit risk continued to improve in 2014. Overall, at the end of 2014, without raising any additional capital, credit institutions would have been able to absorb a potential rise in credit risk resulting in the share of loans past due over 90 days expanding by 9.8 percentage points.

Deterioration of the economic and political situation in Russia has been identified in this report as the major risk to Latvia's economic development and financial stability (see Subsection 1.1), hence the macroeconomic stress test assesses the Latvian credit institutions' capacity to absorb potential losses arising from an increase in credit risk due to Russian macroeconomic developments and a rise in Russia's country risk.

Initially, the deterioration of Russian macroeconomic situation and weak growth prospects in the euro area would have an impact on an increase in the credit risk of the domestic loan portfolio. In the stress scenario, with the external demand shrinking, with confidence on a downward trend and with growing risks to non-financial corporations and sectors related to the Russian economy, domestic risks would also go up. Rising risks in Russia, including Russia's economic recession and depreciation of the Russian ruble, increase risks of the quality of the non-resident loan portfolio and other investments made in the CIS countries, i.e. in securities issued by the CIS countries and in claims on credit institutions of the CIS countries.

Unlike the previously peformed macroeconomic stress tests, different assumptions about credit risk development in the resident and non-resident loan portfolios were employed to assess the effect of an increased credit risk on the quality of loans granted to residents and non-residents. The quality of loans to residents was assessed using Latvijas Banka's credit risk model according to the baseline and stress scenarios (see Table 2.2). The potential losses arising from loans granted to non-residents, investments in securities of the CIS countries and claims on MFIs of the CIS countries were calculated in accordance with the probability of default (PD) and loss given default (LGD) assumed in the stress test scenarios.

[32] A sensitivity analysis provides an indication of the scale of an increase in loans past due over 90 days a credit institution would be able to absorb before its capital adequacy ratios fall below the minimum capital requirements. The estimates assume that a credit institution has to build provisions in the amount of 60% of the increase in the loans past due over 90 days. Credit institution capital and RWA are reduced by the amount of the additional provisions.

[33] Stress tests cover credit institutions whose loan portfolios exceed 15 million euro. Macroeconomic stress tests measure the resilience of Latvia's credit institutions to various severe but plausible macroeconomic shocks. The results of the credit risk stress tests allow assessing whether credit institutions have sufficient capital for absorbing losses stemming from a rise in credit risk in particularly unfavourable and even extreme macroeconomic circumstances without additional capital injections.

Table 2.2
PARAMETERS OF THE MACROECONOMIC STRESS TEST SCENARIO FOR THE RESIDENT LOAN PORTFOLIO AND THE ASSESSED SHARE OF LOANS PAST DUE OVER 90 DAYS IN THE RESIDENT LOAN PORTFOLIO IN THE BASELINE AND STRESS SCENARIOS AT THE END OF 2015
(%)

Ratio	Baseline scenario	Stress scenario
Real GDP growth (year-on-year)	2.0	–5.5
3-month EURIBOR	0.055	0.055
Estimated share of loans past due over 90 days in the resident loan portfolio	7.0	14.3

Baseline scenario
The potential impact of the Russian economic recession on the Latvian economy, which could accordingly influence the quality of the loan portfolio granted to residents, has already been taken into account in the baseline scenario. The recent macroeconomic forecasts by Latvijas Banka were developed on the basis of the assumption that Russia's GDP will shrink by 5% and the average Brent crude oil price will be approximately 50 US dollars per barrel in 2015. The GDP forecast by Latvijas Banka is reflected in Table 2.2. It is projected that Latvia's real GDP growth rate will decelerate in 2015 and will stand at 2%.

To take account of the potential deterioration of the quality of the non-resident loan portfolio and the securities of the CIS countries, as well as the potential default on claims on MFIs of the CIS countries, the following assumptions have been made in the baseline scenario: in 2015, the PD for loans granted to residents of Russia, Ukraine and other CIS countries is 10%, but LGD accounts for 75%. The same assumptions have been made in relation to securities issued by the CIS countries and claims on MFIs of the CIS countries included in balance sheets of Latvian credit institutions. To reflect the potential losses arising from investments in the CIS countries more accurately, the amount of investments made in these countries was specified according to the data provided in country risk reports.

Stress scenario
The stress scenario analysed the response of Latvia's economy to a combination of three shocks: a 10% fall in external demand, deterioration of investor confidence resulting in a 20% decrease in investments and 5% drop in private consumption. The scenario assumes that the shocks of the decrease in external demand and investments affect the Latvian economy in the first quarter of 2015. The decline in private consumption caused by weakening consumer confidence follows with a lag of one quarter.

It is additionally assumed that in 2015 PD for the loans to residents of the CIS countries (25%) exceeds that of the baseline scenario 2.5 times, but LGD constitute 75%. The same assumptions have been made in relation to securities issued by the CIS countries and claims on MFIs of the CIS countries.

Changes in Latvia's real GDP in the stress scenario were evaluated employing the macroeconomic model of Latvijas Banka. The macroeconomic parameters of the stress scenario are reflected in Table 2.2. The effect of the stress scenario on the quality of loans to residents was assessed by applying the credit risk model[34] of Latvijas Banka. Taking into account close links between the economies of other Baltic States with Russia, it was assumed in the stress test that the credit risk of loans granted to Lithuanian and Estonian residents increases in the same proportion as the credit risk of the Latvian resident loan portfolio. The losses stemming from loans to non-residents, securities of the CIS countries and claims on MFIs were calculated according to the parameters assumed in the scenarios.

[34] The macroeconomic stress testing methodology is described in the "Financial Stability Report 2009" and "Financial Stability Report 2013/2014" of Latvijas Banka.

Stress test results

The standard threshold (the total capital ratio is not below 8%) was employed in the stress tests. In addition, the impact on Common Equity Tier 1 capital (CET 1) and Tier 1 capital was also assessed. The assessment period will last until the end of 2015 (see Table 2.3).

Table 2.3

MACROECONOMIC STRESS TEST RESULTS

Ratio	Stress scenario
Number of credit institutions with the total capital ratio below 8%	–
Number of credit institutions with the total capital ratio below 10.5%	1
Additionally required capital (millions of euro)	–
Potential losses[35] (millions of euro)	618.8
Assets of those credit institutions whose total capital ratio is below 8% (% of total credit institution assets)	–
Additionally required provisions (% of total credit institution assets)	2.0

According to the baseline scenario assumptions, it is expected that the quality of loans granted to residents in 2015 will slightly improve, but at a slower pace than in previous years. At the same time, the quality of loans to non-residents is projected to deteriorate resulting in an increase in the share of loans past due. In the stress scenario, the share of loans past due over 90 days would expand by 7.2[36] percentage points (to 14.3%) in the resident loan portfolio by the end of 2015.

In the event that the stress scenario materialises, all credit institutions would be able to meet the minimum requirement of the total capital ratio. However, two credit institutions would face problems to comply with the minimum requirement of Tier 1 capital ratio owing to the shock.

Additionally also taking into account the capital conservation buffer requirement of 2.5%, one credit institution would fail to fulfil the overall requirement of total capital ratio of 10.5% (including the capital conservation buffer), and three credit institutions would not be able to meet the overall capital requirement in relation to Tier 1 capital ratio (8.5%) in the event of a shock. The overall conclusion is that the capacity of credit institutions to absorb shocks stemming from the deterioration of the external macrofinancial environment is good.

[35] Additionally required provisions for loans and the estimated losses arising from securities of the CIS countries and claims on MFIs of the CIS countries.

[36] In comparison with the share of loans past due over 90 days at the end of 2014 (7.1%).

3. DEVELOPMENT AND RISKS OF NBFS

Overall, the NBFS institutions performed well in 2014. The profitability of NBFS improved substantially, with its profit indicators increasing nearly twice in comparison with the previous year. Both non-bank lending services providers[37] and other NBFS financial services providers[38] demonstrated stable development, and the minor decline in the NBFS assets was related to the reorganisation of individual closed-end investment funds. Non-bank lending services continued to increase in the assets of NBFS. Among other NBFS financial services providers, the assets of private pension funds and insurance corporations recorded stronger growth in 2014.

The quality of the loan portfolio of NBFS lending services providers improved. However, this was mainly underpinned by some non-bank financial corporations' policy of selling off sizeable amounts of past due loans. Credit risk of a part of lending services providers (mainly leasing companies) increases due to the deteriorating macrofinancial situation in Russia. Persistently low interest rates are the primary risk of other NBFS financial services providers; however, for the time being their profitability is still in a positive territory. The ratio based on the solvency requirement for insurance corporations and credit unions set by the FCMC is still high.

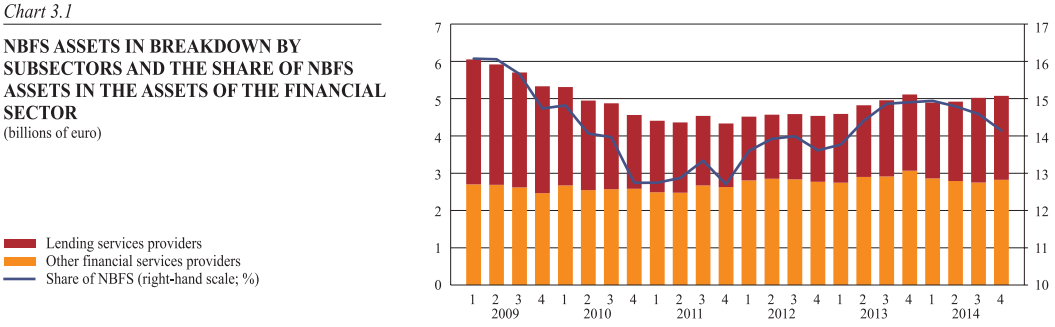
Overall, the impact of NBFS on the financial system still remains limited due to the relatively small size of its assets. The share of the NBFS assets in the financial sector shrank somewhat in 2014. The NBFS links with the credit institution sector do not pose significant risks to the financial stability either.

3.1 Development of NBFS

In 2014, the total NBFS assets remained broadly unchanged, amounting to 5.1 billion euro at the end of the year (see Chart 3.1 and Chart A1.9 for a detailed explication by subsectors). Their share in the financial sector declined from 14.9% at the end of 2013 to 14.1% at the end of 2014. Thus, the impact of NBFS on the financial sector at the systemic level still remains limited in terms of the asset value.

Chart 3.1

NBFS ASSETS IN BREAKDOWN BY SUBSECTORS AND THE SHARE OF NBFS ASSETS IN THE ASSETS OF THE FINANCIAL SECTOR
(billions of euro)



The NBFS links with the credit institution sector do not pose significant risks to the financial stability either. Although several NBFS subsectors have close direct links[39] with credit institutions, the relatively small amount of the NBFS assets and their stable

[37] At the end of 2014, NBFS lending services were provided by 150 (169 at the end of 2013) companies (in accordance with NACE Rev. 2 classification, Section K "Financial and Insurance Activities", class 64.91 and class 64.92, as well as credit unions). Of them, 56 were licensed to engage in lending related to collateral needed to secure leasing and a transport vehicle or other type of object (hereinafter referred to as "leasing"); granting payday loans (hereinafter referred to as "payday lending"); granting credits against collateral of movable property (hereinafter referred to as "a loan granted by a pawnshop"); granting credits for the purchase of goods and services, with contracts being concluded in the presence of both parties; granting credits for the real estate purchase or mortgage loans.

[38] Of 573 merchants, 38 are insurance corporations, pension funds and investment funds, while the rest of them are other financial services providers engaged in activities of holding companies (in accordance with NACE Rev. 2 classification, Section K "Financial and Insurance Activities", class 64.20), trusts, funds and similar financial entities (64.30), activities auxiliary to financial service and insurance activities (66), as well as other financial service activities, except insurance and pension funding (64.99).

[39] Direct links with credit institutions are formed if a NBFS institution is a subsidiary of a credit institution or takes active part in ensuring the operation of a credit institution. A part of leasing companies as well as investment management companies and private pension funds are subsidiaries of credit institutions.

development have a limited impact on the overall stability of the credit institutions. NBFS has also indirect links[40] with credit institutions, but they are not significant. Both the amount of loans granted to NBFS by credit institutions and the amount of NBFS deposits with credit institutions are still small – they do not exceed 3% of the credit institutions' assets and liabilities respectively (the respective amount that individual credit institutions have is larger, but does not exceed 10% of the assets and liabilities).

Non-bank lending services providers continued to increase their share in the NBFS assets in 2014, reaching 44.4% (40.0% in 2013). In 2014, the increase in the share of lending services was driven by both the rise in the assets of lending services providers (10.2%) and the decrease in the assets of other NBFS financial services providers (8.0%).

Overall, the profitability of NBFS improved substantially mainly due to the positive indicators of NBFS lending services providers. This was determined by the profit earned by payday loan providers and leasing companies. The profit of other NBFS financial services providers was also positive, yet persistently low interest rates entail future risks to their profitability.

3.2 NBFS lending services

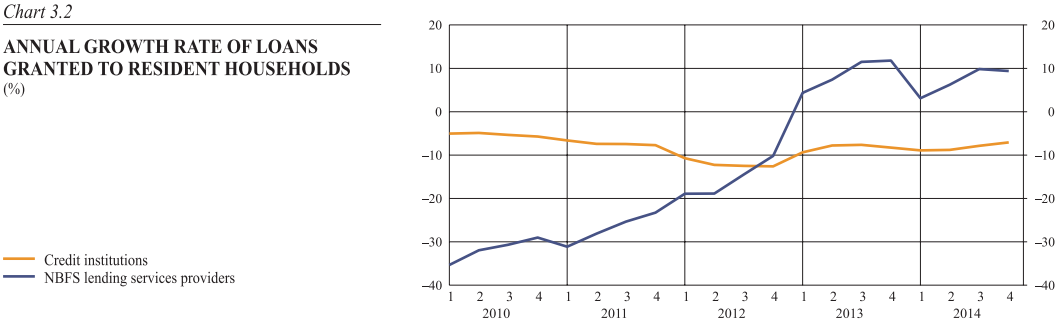
At the end of 2014, total loans granted by NBFS lending services providers amounted to 1.7 billion euro (a year-on-year increase of 6.0%), accounting for 10.1% of the credit institutions' loan portfolio (10.0% at the end of 2013). 61.6% of the NBFS loans were granted to resident non-financial corporations and 25.4% – to resident households. Loans granted to non-residents accounted for a minor share (5.4%) of the total amount of loans (2.2% at the end of 2013).

NBFS lending services are still dominated by financial leasing (mostly leasing loans). Although leasing loans decreased by 1.8% (to 1.1 billion euro) in 2014 and their share in the NBFS loans declined to 66.8% (72.2% at the end of 2013), the amount of new leasing loans increased considerably (by 65.5% in 2014 in comparison with a decrease of 22.0% in 2013). Loans by other NBFS lending services providers (including those of payday lenders, pawnshops and credit unions) rose by 8.6% (by 23.4% in 2013), with the slower pace of growth mainly explained by deceleration in lending by payday loan providers, pawnshops, etc. In absolute terms, the outstanding amount of loans granted by other NBFS lending services providers is still rather small (0.4 billion euro at the end of 2014).

NBFS lending to households and non-financial corporations recorded an increase, but loans granted by these credit institutions continued to shrink (see Charts 3.2 and 3.3).

Chart 3.2

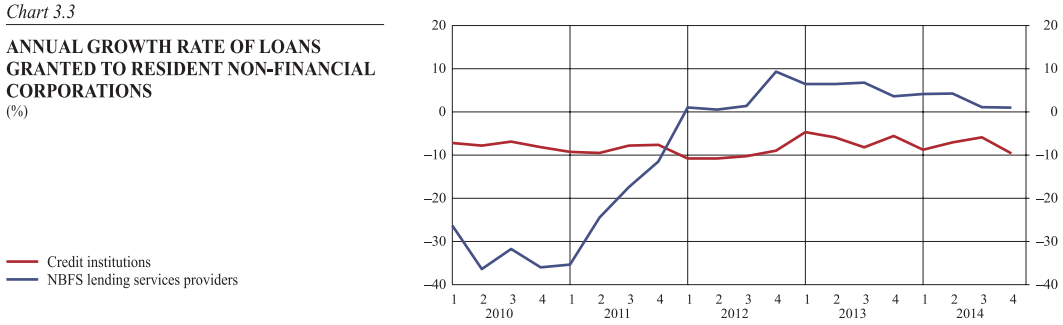
ANNUAL GROWTH RATE OF LOANS GRANTED TO RESIDENT HOUSEHOLDS
(%)



[40] Indirect NBFS links with credit institutions are formed when credit institutions place funds in NBFS (and vice versa).

Chart 3.3

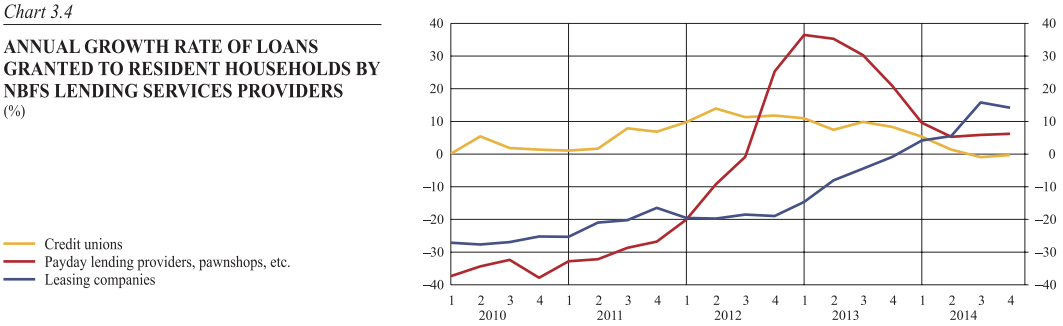
ANNUAL GROWTH RATE OF LOANS GRANTED TO RESIDENT NON-FINANCIAL CORPORATIONS
(%)



In 2014, the rise in resident household lending was mainly determined by an increase in leasing loans (see Chart 3.4). The growth rate of payday lending moderated in 2014 in comparison with 2013. This was primarily on account of the implementation of tighter regulatory requirements and self-regulatory measures adopted by the industry[41]. At the same time in the last three years overall, the share of payday lending, loans granted by pawnshops and other lenders in NBFS resident household lending has risen by approximately 10 percentage points (see Chart A1.10), exceeding 50%. In the second half of the year, loans granted to resident households by credit unions started to decrease and remained at a low level.

Chart 3.4

ANNUAL GROWTH RATE OF LOANS GRANTED TO RESIDENT HOUSEHOLDS BY NBFS LENDING SERVICES PROVIDERS
(%)



At the same time, leasing was still the most significant source of non-bank lending granted to non-financial corporations (more than 85% of the total NBFS loans were granted to non-financial corporations) mainly to finance the purchase of transport vehicles (passenger cars, commercial vehicles – buses and trucks) as well as agricultural and trade machinery. The usage of EU funds for the purchase of agricultural machinery continued, and cooperation between leasing companies and traders of motor vehicles strengthened in 2014; thus the share of agricultural equipment and motor vehicles in the structure of new lease transactions increased. Meanwhile, investment in commercial vehicles and industrial equipment posted a decline due to adverse external factors.

Credit risk is the most significant risk to NBFS lending services providers. Overall, the creditworthiness of households and non-financial corporations continued to improve (see Subsection 1.3 on the financial vulnerability of the credit institutions' customers); however, credit risk for a part of non-financial corporations having close cooperation with Russia tended to build up. Some non-financial corporations engaged in commercial transportation have already faced challenges of leasing repayment, and a part of these loans are restructured. At the same time, the creditworthiness of households, although gradually improving, is still rather vulnerable to the risk of declining income. According to the data of the Consumer Rights Protection Centre, the share of loans without delays in the outstanding amount of loans granted to households by NBFS rose by 1.9 percentage

[41] As of 2014, payday lending providers should evaluate borrowers' solvency more carefully, inter alia, not only their income but also expenses. If a creditor grants a credit to a consumer, without evaluating the consumer's creditworthiness, the creditor is not entitled to request that the consumer would pay more than lawful interest for the money use allocation granted in a credit contract and apply means of reinforcement of obligations or compensation to the consumer. Self-regulatory measures of the industry provide for the availability of information on the persons who are late with their credit payments to the industry association members.

points (to 82.2%, including the share of loans without delays in payday loans granted to households increased by 3.9 percentage points (to 67.8%)) in 2014. The improvement in the indicators was primarily determined by tighter regulatory requirements set out for payday lending providers and their policy of selling off sizeable amounts of past due loans.

In 2014, net profits earned by NBFS lending services providers amounted to 76.6 million euro (42.0 million euro in 2013), with profits earned from payday lending, loans granted by pawnshops and other loans accounting for the largest part – 53.0 million euro (31.1 million euro in 2013). The profit earned by leasing companies was 20.5 million euro in 2014 (10.6 million euro in 2013). Higher interest income and a fall in net expenditure on loans loss provisions, with a part of loans that were granted in the previous years regained, contributed to the growth of the profit earned by NBFS lending services providers.

3.3 Other NBFS financial services

The assets of other NBFS financial services providers were 2.8 billion euro at the end of 2014 (3.1 billion euro at the end of 2013). In 2014, the assets of insurance corporations (including foreign branches) increased by 8.7%, amounting to 0.6 billion euro at the end of 2014, while the assets of other financial services providers (including private pension plans and investment funds) decreased by 14.1% (to 2.2 billion euro), mostly on account of the liquidation of individual closed-end investment funds.

In 2014, the level of gross premiums signed by insurance corporations reached 371.1 million euro, representing a year-on-year increase of 6.0%. No major changes in the structure of the types of insurance were made in 2014 – motor vehicle insurance still remained the most significant type of insurance in terms of volume. The profit earned by insurance corporations grew by 19.4%, amounting to 9.9 million euro. Life insurers both increased the level of net earned premiums and earned profits from investment revaluation due to low interest rates. The profit earned by non-life insurers decreased in 2014. The combined ratio[42] of non-life insurance corporations was 99.9% in 2014 (close to the European average calculated by the European Insurance and Occupational Pensions Authority). This suggests that the level of premiums (similarly as in the previous years) is considered sufficient to cover the potential remuneration payments. The solvency ratios of insurance corporations[43] remain at a high level, although they have deteriorated slightly in 2014 (176.3% for life insurance corporations (181.9% in 2013) and 154.9% for non-life insurance corporations (163.0% in 2013).

The average yield on investment of insurance corporations, private pension plans and investment funds fluctuated around 5% in 2014. Persistently low interest rates limit the rate of return on investment, particularly for insurance corporations which have fixed cost obligations. However, insurance corporations have succeeded in earning higher profits so far. Private pension plans also continue to report positive average yields. Moreover, in 2014 their yields increased (see Chart 3.5). The bond price rose in a lower-yield environment, allowing pension funds to earn from the rising value of investment in the short run. However, low interest rates will reduce interest income of pension funds and insurance corporations in the longer term. To increase yields, this may encourage investors to look for alternative investment, which may potentially be of lower quality and with lower liquidity. At this stage, however, no increase in investment in higher-risk financial instruments is recorded in the balance sheets of Latvia's life insurance corporations and private pension plans.

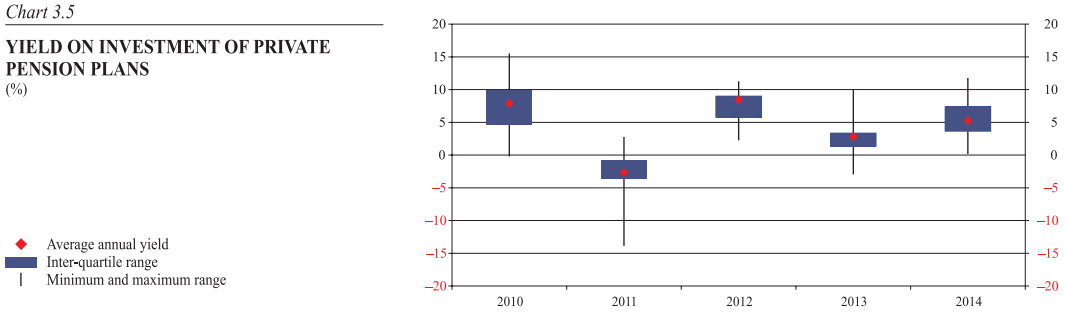
Overall, the structure of investment portfolios of insurance corporations and private pension plans can still be considered as conservative. Investment is mostly concentrated in high quality debt securities (mainly in government securities of Latvia or the European

[42] The combined or profitability ratio reflects the total of net claims on compensations guaranteed and net expenditure against net earned premiums.

[43] The solvency ratio is based on the relationship between own funds and the solvency requirement. The lowest admissible level of the ratio is 100%.

Chart 3.5

YIELD ON INVESTMENT OF PRIVATE PENSION PLANS
(%)



Economic Area countries) and time deposits with credit institutions. Thus, escalation of the geopolitical situation due to the Russian–Ukrainian conflict has not increased their credit risk related to the value of investment. At the same time, individual investment funds report negative yields associated with heightened risk investment in Russia. However, the share of investment in Russian shares and other non-fixed income securities in total investment of investment funds is small (1.2%) and does not pose significant risks to the overall activities of the funds (see Chart A1.11 for a detailed structure of investment portfolios of investment funds and private pension plans).

The risk management process of insurance corporations will be enhanced by the establishment of requirements of Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of insurance and reinsurance (Solvency II) as of 1 January 2016, thus ensuring significant changes in the area of capital adequacy and management. The new approach based on the assessment of specific economic risks will further strengthen the financial safety of insurance corporations. First, a transition period before new capital requirement calculations based on risk assessment apply has been foreseen (first pillar). Second, changes in the supervision of insurers and reinsurers (second pillar) will improve risk assessment in accordance with specific risk-related principles. Third, changes will also protect the rights of insured customers with respect to information disclosure (third pillar), with uniform principles of disclosing information to the EU, including for supervisory purposes, established.

4. SYSTEMICALLY IMPORTANT PAYMENT AND SETTLEMENT SYSTEMS

Latvijas Banka assessed financial risks of the systemically important financial market infrastructures TARGET2-Latvija and DENOS within the oversight framework also in 2014, since the operational disruptions of the above infrastructures might affect the financial stability in the country. The assessment confirmed that the probability of systemic risk was persistently low in the systems. The above infrastructures provided efficient and secure payment and settlement environment to their participants and the entire financial system and their smooth operation facilitated the financial stability.

Smooth operation of the financial market infrastructures is crucial for the safeguarding of the 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 among participants or systemic disruptions in the financial system.

4.1 Payment systems

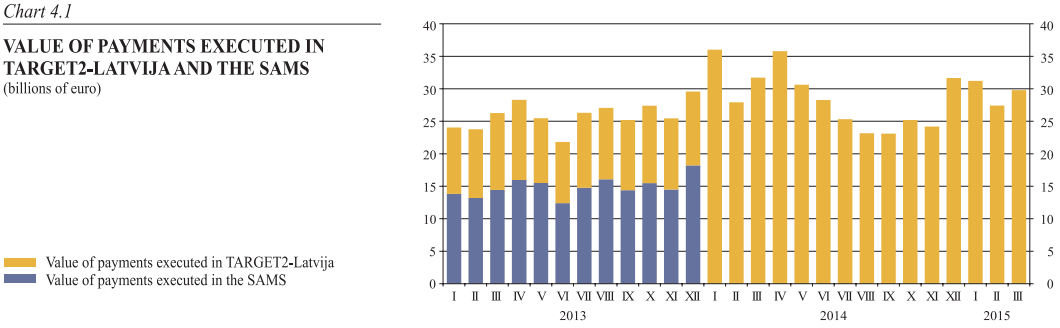
Latvijas Banka, together with other participants of the European System of Central Banks, ensured the operation of TARGET2, the Trans-European Automated Real-time Gross settlement Express Transfer system. Latvijas Banka maintained the component system TARGET2-Latvija, enabling the following: the settlement of the Eurosystem's monetary policy operations, interbank settlement of large-value payments, settlement of urgent customer payments and final settlement for the EKS, DENOS (the securities settlement system of the LCD) and the system of First Data Latvia Ltd.

Statistical data

In 2014, 356.3 thousand payments in the value of 343.0 billion euro were processed in TARGET2-Latvija. Since the introduction of the euro TARGET2-Latvija has also processed payments which were executed in lats via the SAMS until then: the payments related to the monetary policy operations, interbank and urgent domestic payments made by customers. In 2014, the total value of payments processed in TARGET2-Latvija recorded a growth of 10.4% (see Chart 4.1) in comparison with the total value of payments processed both in TARGET2-Latvija and the SAMS in 2013. In 2014, the daily average of payments processed in TARGET2-Latvija amounted to 1 397 payments in the value of 1.3 billion euro, while the daily average of such payments comprised 1 099 in the value of 1.4 billion euro in the first quarter of 2015.

Chart 4.1

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



Liquidity adequacy

Latvijas Banka performed the simulations of TARGET2-Latvija by means of the payment and settlement system simulator (model BoF-PSS2), developed by *Suomen Pankki – Finlands Bank*, in order to monitor the adequacy of liquidity in TARGET2-Latvija and determine the scope of impact on the participants' settlements, should any of the largest participants default on payments.

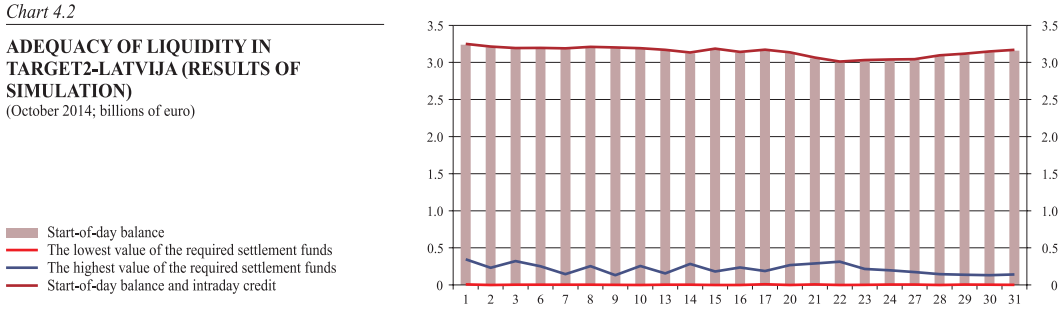
The overseers conducted the data simulations in November 2014, applying the transaction data of TARGET2-Latvija on the payments processed in the previous month and liquidity available to the participants. All payments executed in TARGET2-Latvija were taken into account in the simulations, including the transfers to Latvijas Banka made by its participants upon resorting to the Eurosystem's deposit facility. As regards liquidity available to the participants, an option to use intraday credit has also been provided.

To assess the adequacy of liquidity in TARGET2-Latvija, the overseers evaluated the amount of the settlement funds necessary for the execution of all payments submitted during the day. The following indicators were assessed: a lower bound of the settlement funds, i.e. the value of the settlement funds providing for the settlement of all payments by the end of TARGET2-Latvija business day at the latest, and an upper bound of the settlement funds, i.e. the value of the settlement funds ensuring an immediate execution of all the submitted payments.

The simulation results showed that the daily upper bound of the settlement funds amounted to 217.0 million euro on average or 6.9% of the settlement fund value available to the system's participants. The highest value of the upper bound of the settlement funds was 345.9 million euro, i.e. 10.7% of the amount of liquidity available to the participants in TARGET2-Latvija on the relevant day. The daily lower bound of the settlement funds, in turn, stood at 2.9 million euro on average or 0.1% of the settlement fund value available to the participants in TARGET2-Latvija. The highest value of the lower bound of the settlement funds amounted to 9.3 million euro or 0.3% of the total amount of liquidity. The results obtained show that the level of liquidity provided in TARGET2-Latvija overall has been substantially higher than the required level of liquidity (see Chart 4.2).

Chart 4.2

ADEQUACY OF LIQUIDITY IN TARGET2-LATVIJA (RESULTS OF SIMULATION)
(October 2014; billions of euro)



The overseers performed simulations of the stress situations to assess the scope of impact on the participants' settlements, should any of the largest participants (in terms of the extent of impact) default on payments. Two criteria were applied to determine the participants of TARGET2-Latvija exerting the largest impact on the system: the value of payments submitted by a particular participant and the factor of interdependence were taken into account. The factor of interdependence means that the more a participant is linked with other participants through the payment flows, the larger the impact it may exert on the whole payment system in the event a participant encounters a problem of submitting a payment order. Two TARGET2-Latvija participants (excluding Latvijas Banka) having the largest impact on the system were identified in the assessment.

Based on the assessment results, the overseers conducted simulations of the stress situations, analysed the relevant consequences in the cases when one of the two identified TARGET2-Latvija participants having the largest impact would not be able to execute payments on the relevant business day. The overseers, upon conducting the simulations, did not analyse a possibility that the participant having the largest impact would not be able to execute payments in TARGET2-Latvija for several subsequent days, since in such an event other participants would change their payment flows in response and would not make payments to the relevant participant. The overseers reviewed each settlement day of a month separately in the simulations, analysing the most prudent scenario of a failure by the relevant participant to make payments during the whole day.

The simulations of the stress situations in TARGET2-Latvija suggested that the level of liquidity provided on the settlement accounts of TARGET2-Latvija participants was sufficiently high and the settlement of payment orders submitted by the participants would also not be delayed in the cases when the settlement had not been made during the whole day for any of TARGET2-Latvija participants having the largest impact. Hence it might be concluded that the materialisation of systemic risk remained low.

Business continuity

TARGET2-Latvija is a component system of TARGET2, and the system's availability ratio is calculated for the whole system overall. The availability ratio of TARGET2 was 100% in 2014, unchanged from 2013. Operational disruptions were not identified in TARGET2 in the first quarter of 2015 as well.

4.2 Securities settlement systems

in 2014, 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 the Eurosystem and mobilisation of collateral securities of the participants in the monetary policy operations for the purpose of receiving an intraday credit in TARGET2-Latvija. Financial instruments related settlements via DENOS in euro were executed in TARGET2-Latvija.

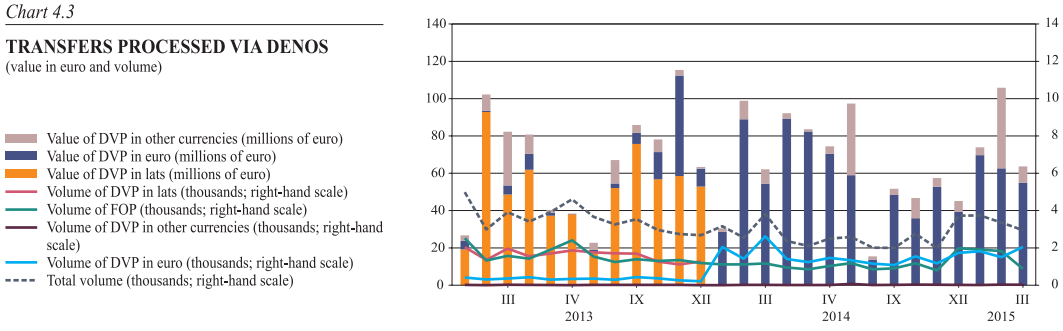
Statistical data

In 2014, the volume of financial instruments transfers (hereinafter, the transfers) processed in DENOS stood at 31.5 thousand (a 26.2% decrease year-on-year). The declining transfer volume of FOP and DVP transfers was similar, and it was attributable to a narrowing activity in the financial markets overall in the post-crisis period.

The total value of DVP transfers amounted to 755.6 million euro in 2014 (a 9.7% drop year-on-year). The shrinking value of DVP transfers is on account of a lower amount of securities offered by the Treasury at the government debt securities auctions vis-à-vis 2013. At the same time, the credit institution demand for the above securities increased in 2014, pointing to an excess liquidity which the credit institutions were willing to invest in low-risk securities. A decline in the value of DVP transfers in January and August 2014 was attributable to the fact that the Treasury did not organise the government debt securities auctions during these months (see Chart 4.3).

Chart 4.3

TRANSFERS PROCESSED VIA DENOS
(value in euro and volume)



The transfers and DVP transfers processed daily on average in DENOS stood at 127 and their value was 3.0 million euro in 2014.

Liquidity adequacy

Cash leg settlement executed in euro in DENOS was processed via TARGET2-Latvija where the participants had substantial account balances. In 2014, 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 euro.

The LCD participants provided the necessary liquidity in the amount of 100% for cash

leg settlement of DVP transfers effected in euro through TARGET2-Latvija in the first quarter of 2015 as well.

Business continuity

The availability ratio of DENOS was 100% in 2014 (99.3% in 2013). Operational disruptions were not identified in DENOS in the first quarter of 2015 as well.

Risk assessment

In the securities settlement systems, 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 euro transfers via DENOS in 2014, since such a settlement might affect the operation of TARGET2-Latvija.

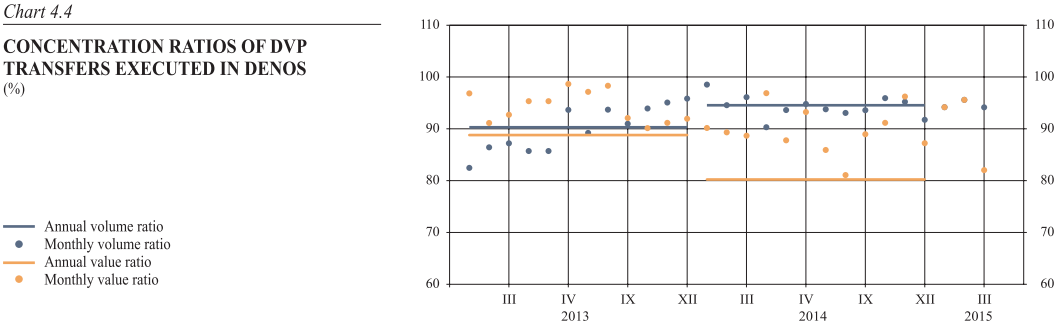
a) Cash leg settlement

Two indicators were analysed to assess systemic risk of the settlement of cash leg 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 TARGET2-Latvija. A concentration ratio above 80% points to the probability of the risk materialisation, if the value of DENOS cash leg settlement executed in TARGET2-Latvija were substantial (if the value of settlement in DENOS were equivalent to one of the largest participants in TARGET2-Latvija).

In 2014, the annual concentration ratio of DVP transfers executed in euro and processed in DENOS amounted to 94.5% in terms of the transfer volume (by 4.2 percentage points exceeding the above ratio of the lats transfers made in 2013). Transactions in equity (shares and investment fund shares or units) accounted for the majority of the transaction volume in DENOS. The expansion of the volume concentration in 2014 suggested that following the termination of the SJSC *Latvijas Hipotēku un zemes banka* operation, the majority of customers active in its equity market transferred their activities to the largest market players. In 2014, the annual concentration ratio of DVP transfers executed in euro and processed in DENOS amounted to 80.2% in terms of the transfer value (by 8.6 percentage points lower than the above ratio of the lats transfers made in 2013). The majority of transfers in DENOS account for the transactions in debt securities in terms of the value. A declining value concentration points to an increasing number of participants investing in debt securities; hence the value of transactions executed by a larger number of participants has been higher (see Chart 4.4).

Chart 4.4

CONCENTRATION RATIOS OF DVP TRANSFERS EXECUTED IN DENOS
(%)



High concentration ratios were typical for DENOS since the securities market was smaller in Latvia than in other EU countries, thus some major players in the market were more active due to the fact that they had developed a segment of competitive securities transaction service or were more actively involved in the securities market on their own behalf.

In 2014, 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. The simulation of TARGET2-Latvija data performed by the overseers in 2014 suggested that the highest value of the settlement funds required for the credit institution cash leg settlement in

October 2014 amounted to 217.02 million euro on average or 6.9% of the liquidity available to the participants of TARGET2-Latvija, while the daily value of settlement executed by DENOS via TARGET2-Latvija stood at 1.7 million euro on average. The value of DENOS cash leg settlement executed via TARGET2-Latvija was insignificant; hence the operation of TARGET2-Latvija was not impaired.

The concentration ratios of DENOS were above 80% in 2014, but the value of DENOS cash leg settlement executed via TARGET2-Latvija was insignificant. The above trend points to a low probability of the materialisation of system risk. The ratios for the first quarter of 2015 also pointed to a low probability of the materialisation of system risk since the total value of DVP transfers executed in DENOS in euro and processed in TARGET2-Latvija amounted only to 0.2% of the total value of payments processed, although the concentration ratios remained high in DENOS.

b) Financial instruments settlement

Systemic risk to securities settlement systems may arise if a seller of financial instruments has failed to provide the buyer with financial instruments on the settlement day, whereas the buyer needs these instruments for a further discharge of obligations. The value of settlement fails was analysed upon assessing systemic risk for the financial instruments settlement in DENOS. Settlement fails represent a significant additional risk, if their value exceeds a particular share of the total value of transfers executed in a securities settlement system. The EU framework for securities settlement systems regarding the governance of settlement fails is being drafted. The above draft framework provides a recommendation for the securities settlement systems to introduce an additional functionality for the monitoring of settlement fails, where the value of settlement fails exceeds 2.5 billion euro per annum and the rate of settlement fails exceeds 0.5% for two consecutive months.

In 2014, the value of those financial instruments transactions in DENOS, where the settlement has failed, amounted to 0.1% (as per transaction volume) and 0.01% (as per transaction value) on the settlement date stipulated as per transaction. The value of settlement fails was minor, hence the settlement fails were not considered as an important source of risk.

The analysis of systemic risk suggested that the materialisation of systemic risk remained low in DENOS in 2014 overall.

The probability of systemic risk remained low in TARGET2-Latvija and DENOS in 2014 overall, since the available liquidity exceeded liquidity required for settlement significantly – less than 10% of liquidity available daily to TARGET2-Latvija participants were used to settle the payments submitted by TARGET2-Latvija participants, while the total value of DVP transfers made in euro and processed in DENOS only amounted to 0.2% of the total value of payments processed via TARGET2-Latvija. The availability ratio of both systems was 100% in 2014 and the first quarter of 2015. Smooth operation of TARGET2-Latvija and DENOS provided efficient and secure payment and settlement environment to the participants and the entire financial system and thus facilitated the financial stability.

APPENDICES

Appendix 1
PERFORMANCE INDICATORS OF CREDIT INSTITUTIONS

Table A1.1

OVERALL PERFORMANCE INDICATORS OF CREDIT INSTITUTIONS

Indicator	2008	2009	2010	2011	2012[1]	2013[1]	2014	February 2015
Balance sheet items								
Number of credit institutions and subsidiaries of foreign credit institutions	27	27	29	30	29	28	26	26
Total assets (millions of euro)	33 072	30 845.5	31 256.5	29 775.7	28 784.4	29 192.3	30 814.9	30 915.6
Share of loans in total assets (%)	71.4	71.2	65.3	62.9	58.0	53.5	47.6	47.7
Share of deposits in total liabilities (%)	42.0	44.1	50.6	52.9	61.7	66.8	72.0	71.4
Share of liabilities to MFIs in total liabilities (%)	41.9	35.9	31.2	24.5	20.5	15.4	11.4	11.5
Loans to deposits ratio (%)	169.96	161.6	129.0	119.0	94.1	80.1	66.1	66.8
Profitability								
ROE (%)[2]	3.6	–41.6	–19.7	–11.2	5.6	8.6	11.1	11.1
ROA (%)[3]	0.3	–3.5	–1.6	–0.9	0.6	0.9	1.1	1.3
Cost-to-income ratio (%)[4]	51.7	54.4	72.0	60.3	52.6	50.7	49.7	51.2
Profit margin (%)[5]	11.6	–132.3	–77.2	–25.1	24.3	31.4	39.3	46.8
Capital adequacy[6]								
Own funds (millions of euro)	2 543.1	2 917.5	2 739.1	2 713.3	2 723.0	2 769.2	2 990.8	–
Common Equity Tier 1 capital/Tier 1 capital (millions of euro)[7]	2 221.8	2 294.0	2 145.8	2 215.0	2 358.0	2 532.0	2 597.3	–
Risk-weighted assets (millions of euro)	21 493.7	20 042.1	18 709.9	15 595.9	15 465.8	14 618.6	14 346.9	–
Total capital ratio (%)	11.8	14.6	14.6	17.4	17.6	18.9	20.9	–
Common Equity Tier 1 capital ratio/Tier 1 capital ratio (%)	10.3	11.4	11.5	14.2	15.2	17.3	18.1	–
Liquidity								
Liquidity ratio (%)[8]	52.8	62.8	67.9	63.9	59.8	64.4	63.1	64.0
Liquid assets to total assets ratio (%)[9]	21.6	21.1	27.3	27.4	32.3	36.5	39.9	39.0
Asset quality								
Ratio of provisions for non-performing loans in the loan portfolio (%)	1.9	8.6	11.3	11.5	8.0	6.1	5.3	5.3
Share of loans past due over 90 days in the loan portfolio (%)	3.6	16.4	19.0	17.5	11.1	8.3	6.9	6.9

[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] As of 2014, the capital adequacy of credit institutions and the related indicators have been calculated in line with the methodology of the CRD IV/CRR and cannot be directly compared with the indicators of the previous periods.
[7] Common Equity Tier 1 capital is equivalent to Tier 1 capital for all credit institutions in 2014. As regards the period until the end of 2013, data for Tier 1 capital are indicated.
[8] 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.
[9] Liquid assets = vault cash + claims on central banks and other credit institutions + central government fixed income debt securities.

Table A1.2

PERFORMANCE INDICATORS OF GROUP 1 AND GROUP 2 CREDIT INSTITUTIONS

Indicator	Group 1 credit institutions[10]						Group 2 credit institutions[11]					
	2010	2011[10]	2012[10]	2013	2014	February 2015	2010	2011[10]	2012[12]	2013	2014	February 2015
Balance sheet items												
Number of credit institutions and subsidiaries of foreign credit institutions	14	15	14	13	10	10	15	15	15	15	16	16
Total assets (millions of euro)	24 171.7	21 709.0	19 207.5	18 345.0	17 622.0	17 120.6	7 084.8	8 066.6	9 576.9	10 847.3	13 192.9	13 795.0
Share of loans in total assets (%)	72.5	73.7	71.8	68.6	64.9	66.2	40.4	33.8	30.5	28.0	24.5	24.8
Share of deposits in total liabilities (%)	41.4	41.2	50.6	57.3	63.4	61.6	83.0	84.9	83.9	83.0	83.6	83.6
Share of liabilities to MFIs in total liabilities (%)	39.5	33.1	30.2	24.0	19.4	20.3	1.6	1.0	1.1	0.8	0.7	0.6
Loans to deposits ratio (%)	175.3	178.9	141.8	119.7	102.4	107.4	48.6	39.8	36.3	33.8	29.3	29.6
Profitability												
ROE (%)[13]	–26.3	5.7	4.8	6.8	9.8	7.9	–2.0	5.0	7.6	13.1	13.7	17.1
ROA (%)[14]	–1.9	0.5	0.6	0.8	1.1	1.2	–0.2	0.4	0.6	1.0	1.1	1.4
Cost-to-income ratio (%)[15]	76.5	55.0	51.6	50.5	49.7	52.1	62.3	57.7	54.6	51.0	49.7	50.2
Profit margin (%)[16]	–112.9	27.3	26.2	29.3	41.8	48.1	–5.3	15.7	20.9	34.5	36.5	45.5
Capital adequacy[17]												
Own funds (millions of euro)	2 089.5	2 022.9	1 898.7	1 817.3	1 786.7	–	649.6	690.3	824.3	951.9	1 204.1	–
Common Equity Tier 1 capital/Tier 1 capital (millions of euro)[18]	1 574.5	1 661.4	1 710.5	1 786.3	1 755.1	–	571.3	553.5	647.4	745.7	842.1	–
Risk-weighted assets (millions of euro)	14 373.7	11 159.5	10 632.7	9 228.5	8 022.7	–	4 336.2	4 436.4	4 833.1	5 390.1	6 324.2	–
Total capital ratio (%)	14.5	18.1	17.9	19.7	22.3	–	15.0	15.6	17.1	17.7	19.0	–
Common Equity Tier 1 capital ratio/Tier 1 capital ratio (%)	11.0	14.9	16.1	19.4	21.9	–	13.2	12.5	13.4	13.8	13.3	–
Liquidity												
Liquidity ratio (%)[19]	65.6	56.0	50.6	51.9	46.1	47.2	71.3	73.4	69.8	77.7	78.6	77.7
Liquid assets to total assets ratio (%)[20]	21.6	19.8	22.9	25.6	27.7	26.6	47.2	48.2	51.2	54.8	56.4	54.5
Asset quality												
Ratio of provisions for non-performing loans in the loan portfolio (%)	11.7	12.1	8.0	5.8	4.9	4.9	8.9	8.6	8.1	7.4	6.9	6.5
Share of loans past due over 90 days in the loan portfolio (%)	19.4	18.2	10.8	7.8	6.1	6.0	16.2	13.2	12.7	10.4	9.6	10.1

[10] Group 1 credit institutions – credit institutions granting more than 50% of their loan portfolio to residents and receiving more than 50% of their deposits from residents.

[11] Group 2 credit institutions – other credit institutions primarily engaged in business with non-residents and accepting non-resident deposits.

[12] Profitability, capital adequacy and liquidity indicators for 2011 and 2012 do not contain data about the Latvian branch of the Allied Irish Banks Plc, JSC *Latvijas Krājbanka* and JSC *Parex banka*.

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

[14] Annualised profit/loss ratio to average assets of the reporting period.

[15] 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.

[16] Ratio of pre-tax profit to operating income.

[17] As of 2014, the capital adequacy of credit institutions and the related indicators have been calculated in line with the methodology of the CRD IV/CRR and cannot be directly compared with the indicators of the previous periods.

[18] Common Equity Tier 1 capital is equivalent to Tier 1 capital for all credit institutions in 2014. As regards the period until the end of 2013, data for Tier 1 capital are indicated.

[19] 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.

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

Funding and liquidity risks

Chart A1.1

BREAKDOWN OF THE FUNDING OF GROUP 1 CREDIT INSTITUTIONS
(in the residual maturity breakdown; billions of euro)

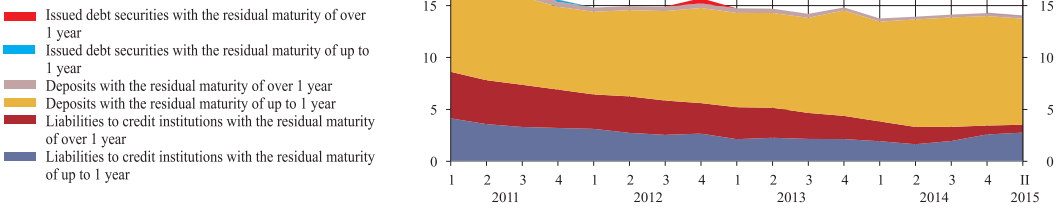


Chart A1.2

BREAKDOWN OF THE FUNDING OF GROUP 2 CREDIT INSTITUTIONS
(in the residual maturity breakdown; billions of euro)

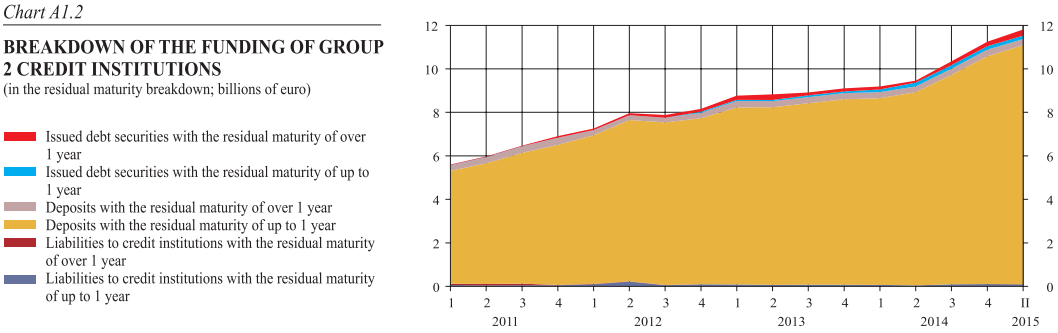


Chart A1.3

LIQUIDITY INDICATOR CALCULATED BY THE FCMC BY GROUP OF CREDIT INSTITUTIONS
(%)

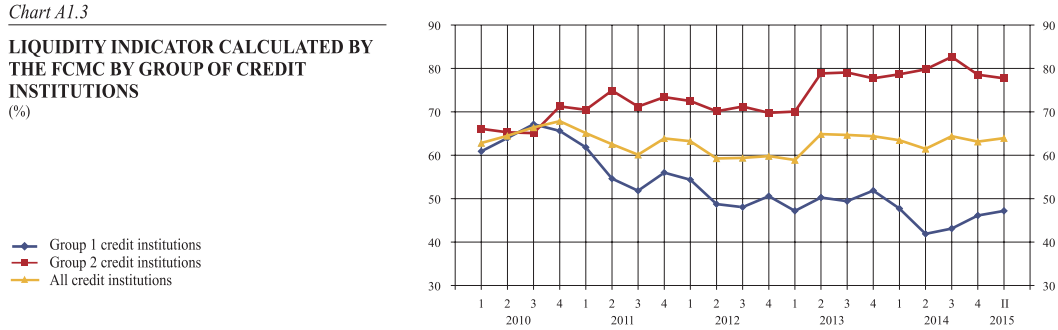
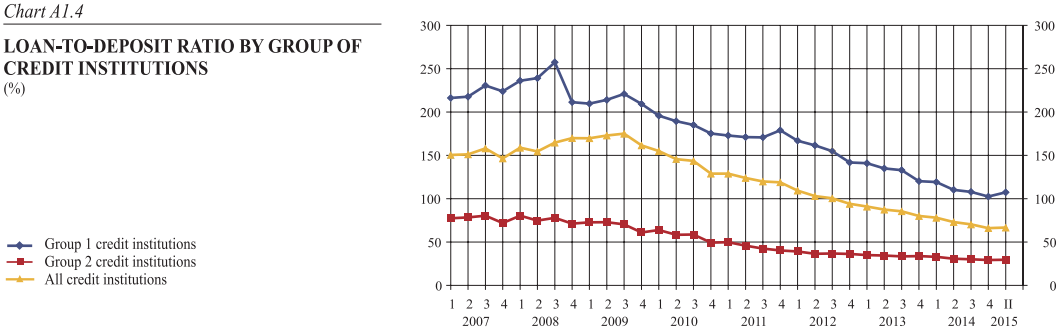


Chart A1.4

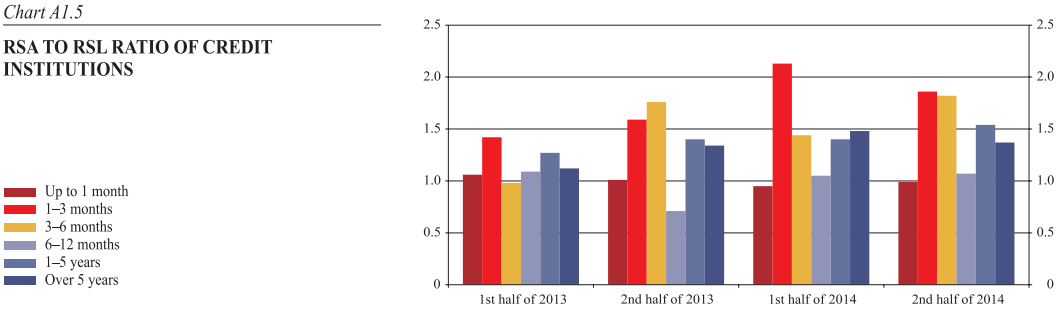
LOAN-TO-DEPOSIT RATIO BY GROUP OF CREDIT INSTITUTIONS
(%)



Market risk

Chart A1.5

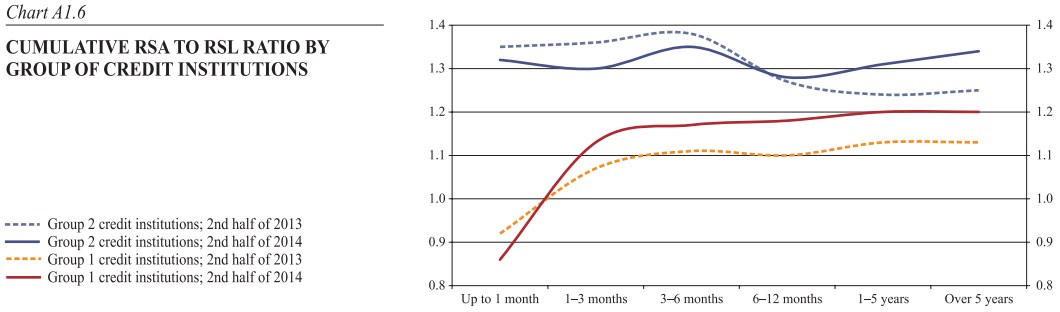
RSA TO RSL RATIO OF CREDIT INSTITUTIONS



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 A1.6

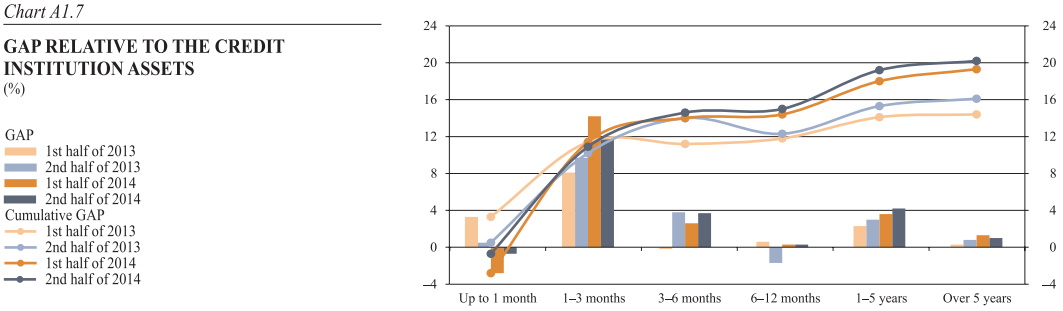
CUMULATIVE RSA TO RSL RATIO BY GROUP OF CREDIT INSTITUTIONS



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 A1.7

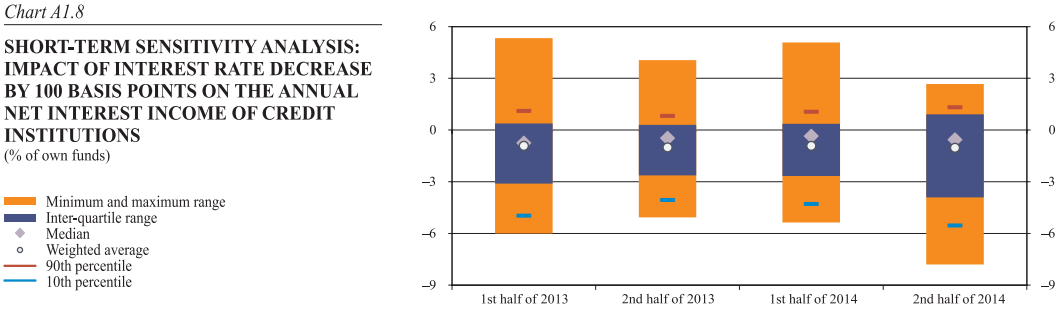
GAP RELATIVE TO THE CREDIT INSTITUTION ASSETS
(%)



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 A1.8

SHORT-TERM SENSITIVITY ANALYSIS: IMPACT OF INTEREST RATE DECREASE BY 100 BASIS POINTS ON THE ANNUAL NET INTEREST INCOME OF CREDIT INSTITUTIONS
(% of own funds)



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 A1.9

NBFS ASSETS BY SUBSECTORS
(billions of euro)

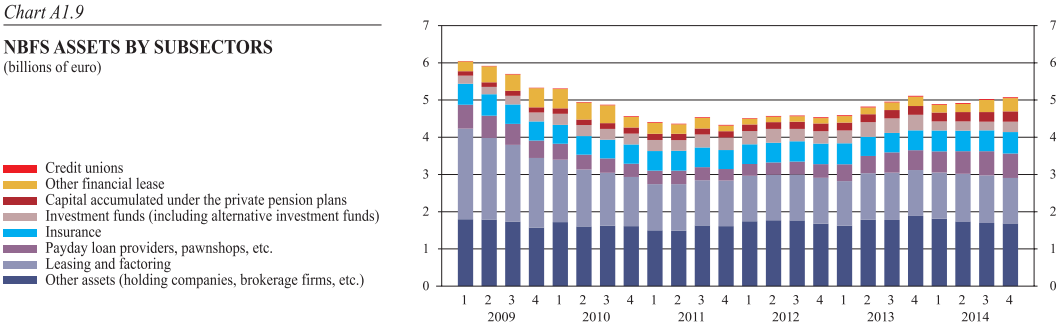


Chart A1.10

OUTSTANDING AMOUNT OF LOANS TO HOUSEHOLDS IN BREAKDOWN BY NBFS LENDING SERVICES PROVIDERS
(%)

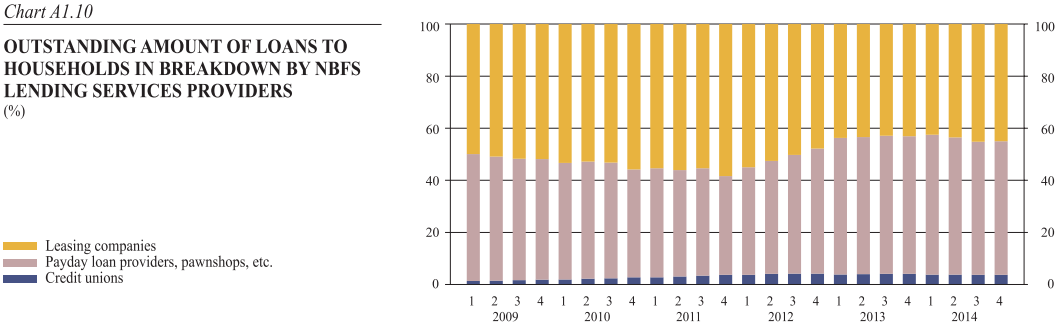
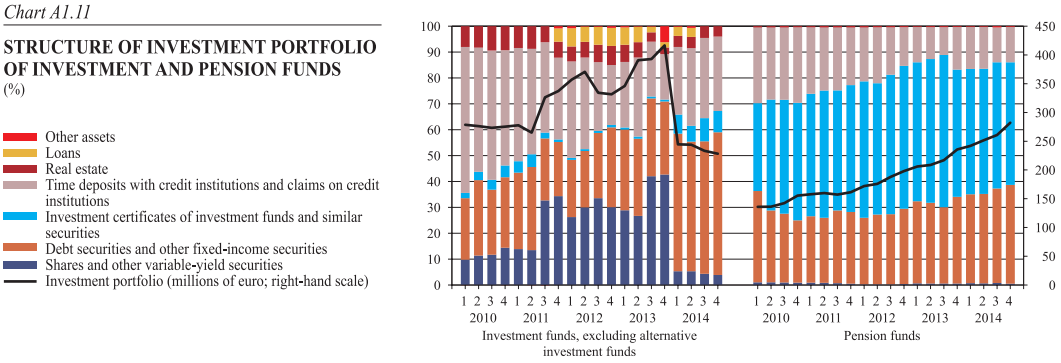


Chart A1.11

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



Appendix 2
FINANCIAL STABILITY RISK ASSESSMENT TOOLS

The risk assessment tools described in the Appendix are additional instruments used in the financial stability assessment process. It is important to take into account the technical limitations of these tools when interpreting results; expert assessment plays an important role in the final risk assessment.

Risk diagram and indices of risk categories

Chart A2.1

CHANGES IN FINANCIAL STABILITY RISKS

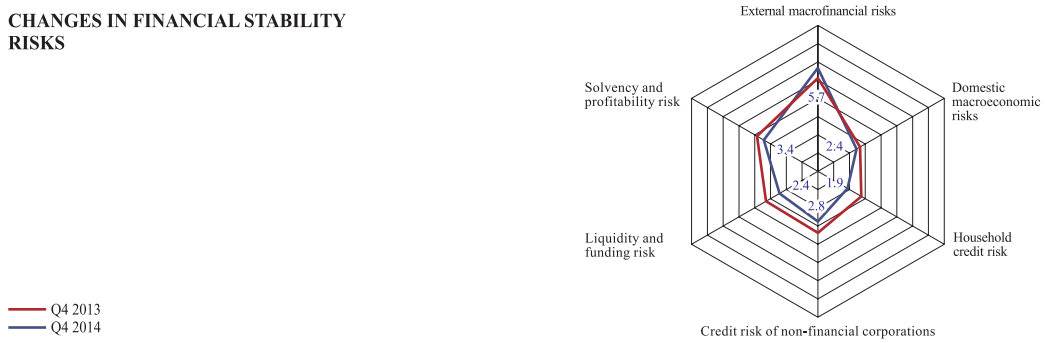
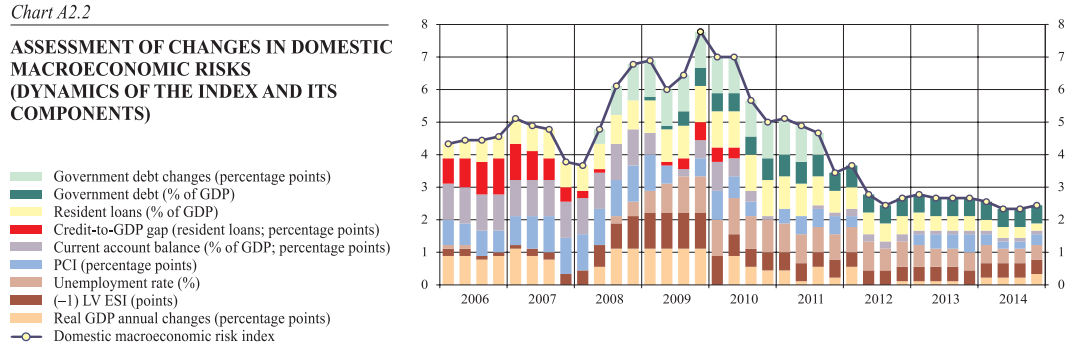


Chart A2.2

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



Note: (–1) represents indicators that have an inverse relationship with the risk.

Chart A2.3

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

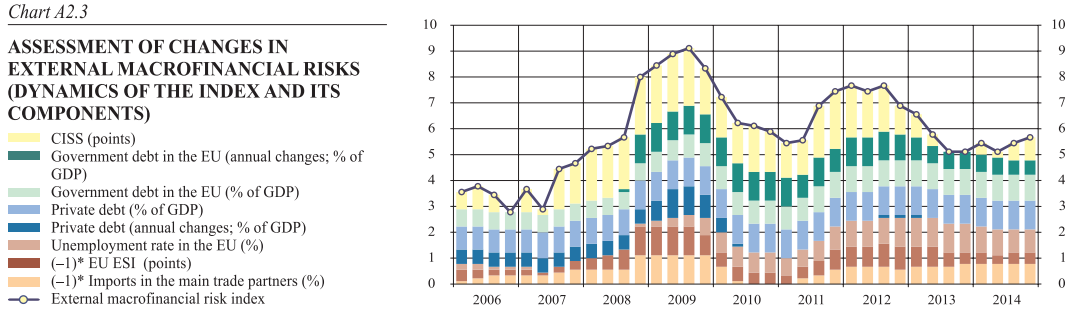


Chart A2.4

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–Hirschman 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 resident non-financial corporations; percentage points)
- Loans to non-financial corporations (% of GDP)
- (–1)* Profitability of non-financial corporations (%)
- Non-financial corporation credit risk index

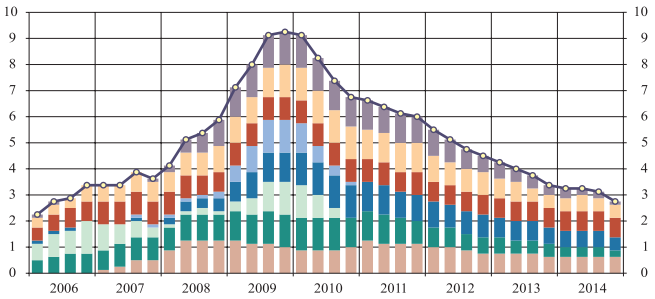


Chart A2.5

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

- Share of loans past due over 90 days (annual changes; 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 rate (%)
- Household credit risk index

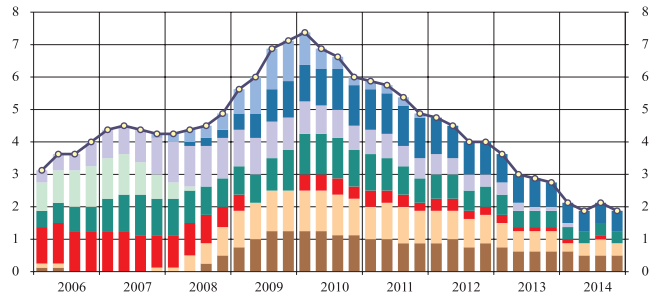


Chart A2.6

ASSESSMENT OF CHANGES IN LIQUIDITY AND FUNDING RISK OF CREDIT INSTITUTIONS (DYNAMICS OF THE INDEX AND ITS COMPONENTS)

- Spread between the 3-month RIGIBOR and EURIBOR (percentage points; until 2014)/historical volatility of the interest rate on overnight loans in euro (%; as of 2014)
- 5-year CDS premium of Latvia (basis points)
- 5-year CDS premium of Swedish and Norwegian parent banks (basis points)
- Stable funding indicator of resident assets (%)
- Resident loan-to-deposit ratio (%)
- (–1)* Annual changes in resident deposits (%)
- (–1)* FCMC liquidity indicator (%)
- Liquidity and funding risk index of credit institutions

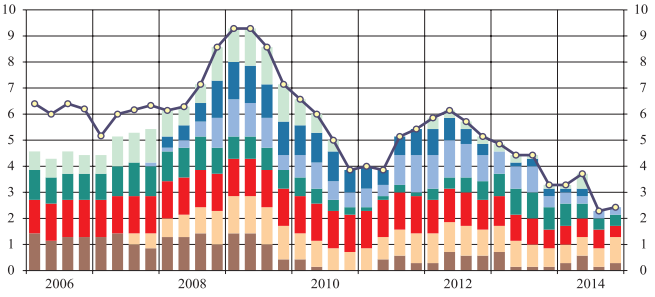
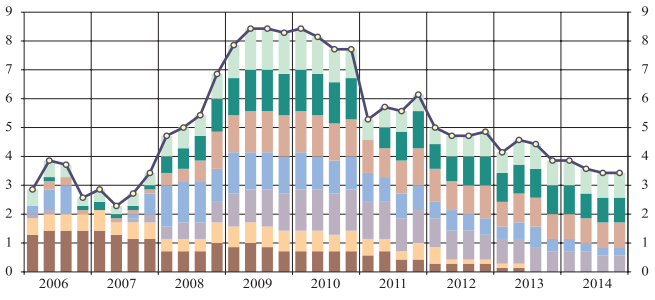


Chart A2.7

ASSESSMENT OF CHANGES IN SOLVENCY AND PROFITABILITY RISK OF CREDIT INSTITUTIONS (DYNAMICS OF THE INDEX AND ITS COMPONENTS)

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



Results of the credit institution survey on risks[1]

Table A2.1

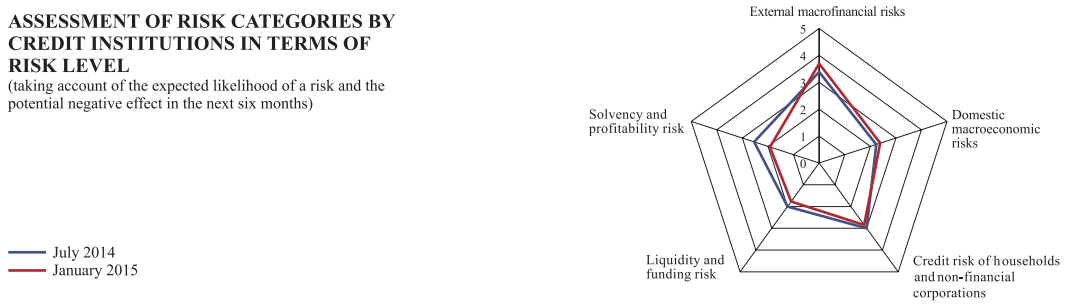
ASSESSMENT OF POTENTIAL RISKS BY CREDIT INSTITUTIONS IN JANUARY 2015
(the results of the risk survey conducted in July 2014 are provided in brackets)

Risks by their significance (expected likelihood multiplied by the potential effect)	Expected likelihood	Potential impact
1 Adverse impact of the deterioration of the economic and political situation in Russia on Latvia's economy and credit institutions.	4.0 (3.0)	3.5 (4.0)
2 Potential negative effect of weakening of external demand and continuation of the high uncertainty on Latvia's economy.	3.6 (3.3)	3.7 (3.5)
3 Environment of low interest rates in financial markets.	4.1 (3.0)	3.2 (4.0)
4 Prolonged weak new lending risk.	3.5 (3.0)	3.0 (4.0)
5 Impact of an unstable legal environment on Latvia's economy and financial system.	3.1 (–)	3.3 (–)
6 Deterioration of household creditworthiness.	2.8 (2.3)	3.2 (3.3)
7 Deterioration of non-financial corporation creditworthiness.	2.9 (2.5)	3.1 (3.2)
8 Rapid changes in real estate prices.	2.5 (2.1)	3.2 (3.5)
9 Impact of shortcomings of the legal framework on Latvia's economy and financial system.	2.6 (–)	2.8 (–)
10 Deterioration of Latvia's economic situation due to domestic factors.	2.2 (2.2)	3.1 (3.3)
11 Deterioration of financing conditions for Latvian credit institutions.	1.9 (1.8)	2.5 (3.0)

[0.0–0.5) very low	[0.5–1.5) low	[1.5–2.5) below medium	[2.5–3.5) medium	[3.5–4.5) above medium	[4.5–5] high

Chart A2.8

ASSESSMENT OF RISK CATEGORIES BY CREDIT INSTITUTIONS IN TERMS OF RISK LEVEL
(taking account of the expected likelihood of a risk and the potential negative effect in the next six months)

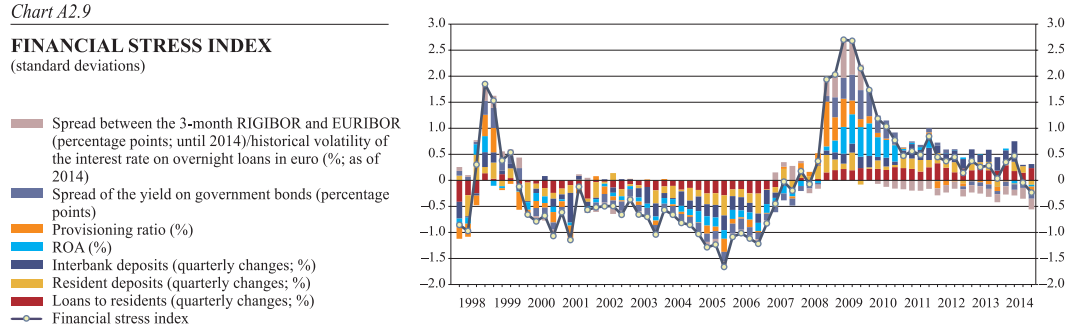


Scale 1–5 where 1 denotes a low risk level, 2 – a risk level below medium, 3 – a medium risk level, 4 – a risk level above medium, 5 – a high risk level.

Latvian financial stress index

Chart A2.9

FINANCIAL STRESS INDEX
(standard deviations)



[1] In January 2015, Latvijas Banka conducted its regular survey of credit institutions in relation to their assessment of risks to Latvia's financial system. 13 credit institutions were surveyed.

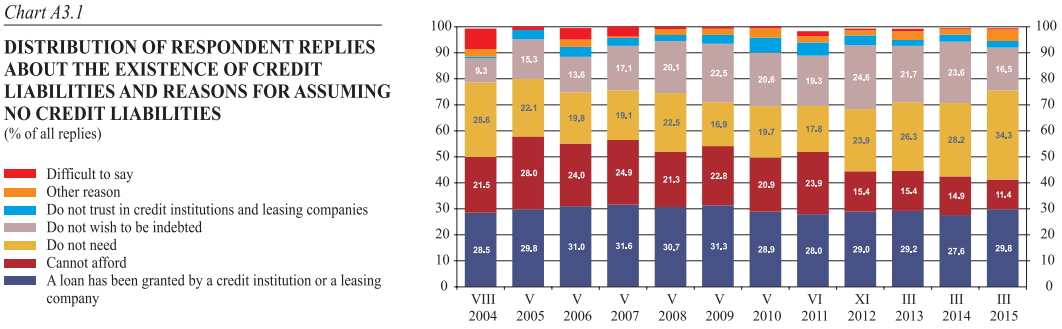
Appendix 3
SURVEY OF HOUSEHOLD APPROACH TO LENDING CONDUCTED BY LATVIJAS BANKA

Latvijas Banka conducts a household survey[1] annually for the purpose of clarifying the opinion of the population with respect to various economic processes, including lending. According to the results of the survey 2015, households remain cautious about assuming credit liabilities. However, with the assessment of their financial position improving, the number of households considering an option of borrowing for house purchase in the near future is gradually edging up.

The results of the survey suggest that the share of persons with at least one loan granted by a credit institution or a leasing company has remained unchanged over the last six years (slightly less than one third of respondents; see Chart A3.1). However, the reasons why households have not assumed credit liabilities have changed. As a positive trend, the share of persons referring to their inability to undertake credit liabilities has declined substantially over the last five years (11.4% in 2015; 23.9% in 2011). The majority of respondents (74.6% in 2015) pointing to their inability to undertake credit liabilities stated that their income was insufficient to make the relevant payments. Meanwhile, the number of respondents indicating that they do not need any loan has increased (34.3% in 2015; 17.8% in 2011). This is likely to point to the changing views of society – households are planning their expenses more prudently and/or make savings for the major purchases, and hence the need for loans decreases.

Chart A3.1

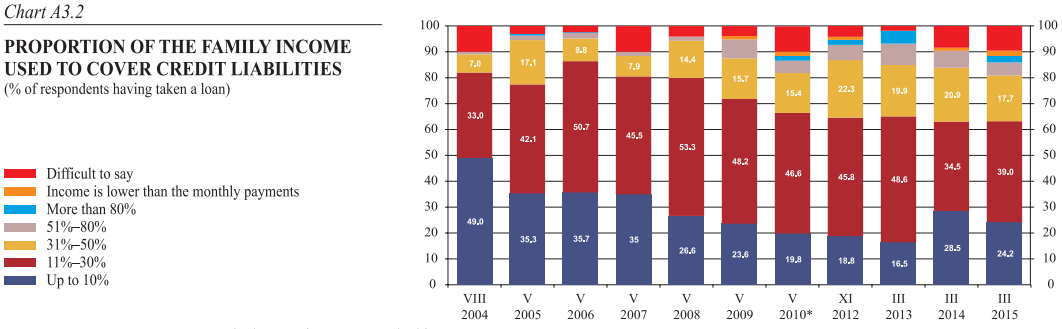
DISTRIBUTION OF RESPONDENT REPLIES ABOUT THE EXISTENCE OF CREDIT LIABILITIES AND REASONS FOR ASSUMING NO CREDIT LIABILITIES
(% of all replies)



The results of the survey point to a relatively stable payment burden (see Chart A3.2). Although a trend of a slightly increasing share of borrowers spending less than 10% of their monthly income on loan repayment has been observed, overall, the share of borrowers spending less than 30% of their monthly income has remained stable in the last six years (about 64% of the total number of borrowers). This means that the solvency of borrowers improves at a slow pace. However, a decline in the number of respondents indicating that loan repayments constitute a very large share (51%–80%) of their income is a positive phenomenon.

Chart A3.2

PROPORTION OF THE FAMILY INCOME USED TO COVER CREDIT LIABILITIES
(% of respondents having taken a loan)



* The question was not asked in 2011.

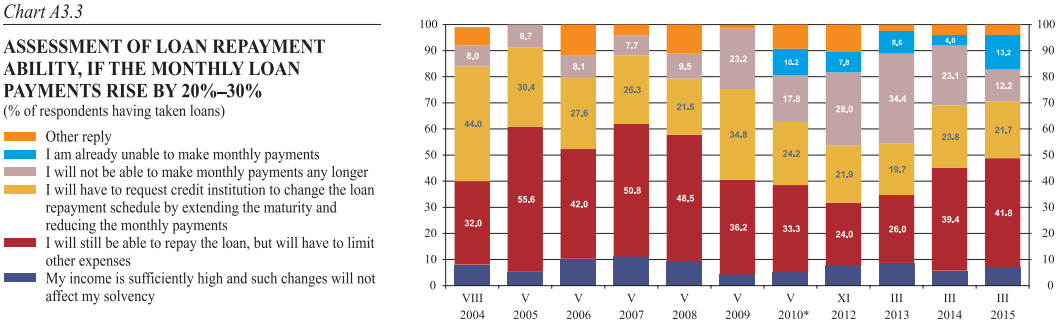
The borrower responses lead to a conclusion that the loan payment to income ratio has remained broadly unchanged, and the assessment of the respondents' ability to proceed

[1] At least 1 000 people are surveyed each year.

with making loan repayments in the event of higher payments has improved (see Chart A3.3). Respondents with at least one loan granted by a credit institution or a leasing company were asked to assess their ability to continue with loan repayment, should the monthly payments increase by 20%–30%. Over the last four years, the trend of a growing share of respondents pointing to their ability to continue with the loan repayment in full has been observed. The share of respondents indicating that in the event of higher payments they will be unable to make payments or will be obliged to request a credit institution to extend the maturity in order to reduce the relevant payments has declined. The large share of respondents still pointing to their inability to settle their monthly liabilities in full raises concern. Respondents have been asked the above question since 2010, but the largest share of the relevant respondents is recorded in survey 2015.

Chart A3.3

ASSESSMENT OF LOAN REPAYMENT ABILITY, IF THE MONTHLY LOAN PAYMENTS RISE BY 20%–30%
(% of respondents having taken loans)

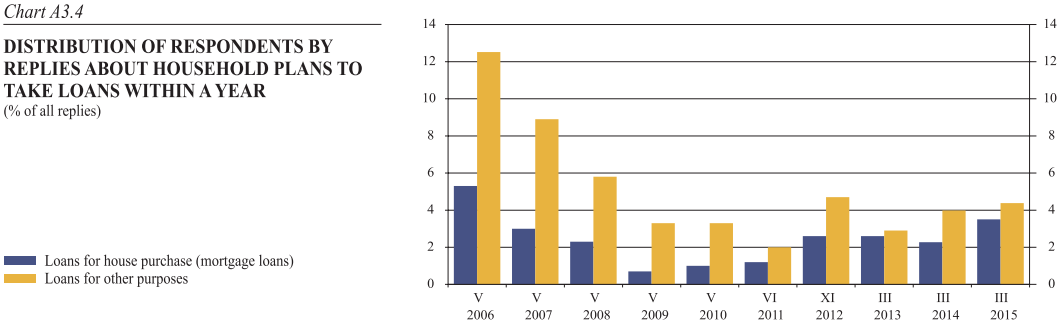


* The question was not asked in 2011.

Respondents remain cautious in assessing their ability to borrow in the next 12 months. Most of the respondents (88.6% in 2015) do not intend to assume credit liabilities in the next 12 months. However, the share of respondents who plan to apply for a loan for house purchase (or another mortgage-backed credit) or for other purposes in the next 12 months is gradually expanding (see Chart A3.4). This leads to a conclusion that respondents are increasingly optimistic about their financial situation and ever more frequently consider their ability to improve living standards.

Chart A3.4

DISTRIBUTION OF RESPONDENTS BY REPLIES ABOUT HOUSEHOLD PLANS TO TAKE LOANS WITHIN A YEAR
(% of all replies)



Appendix 4
COUNTERCYCLICAL CAPITAL BUFFER: ANALYTICAL FRAMEWORK AND APPLICATION

The new regulatory provisions for credit institutions stipulate the application of the countercyclical capital buffer (CCB) during periods of excessive credit growth. The CCB is designed to reduce pro-cyclicality in the financial system, by ensuring accumulation of capital during periods of economic growth to enable absorption of losses during periods of recession. At the current stage of the financial cycle in Latvia, there is no risk of excessive credit growth: a negative annual rate of change in domestic lending persists. Consequently, the current CCB rate in Latvia is set at 0%. According to credit and GDP growth rate forecasts, the CCB rate in Latvia is expected to remain at 0% over the next few years.

CCB is a new macroprudential tool to be introduced and used in Latvia and other EU countries on a mandatory basis from 1 January 2016 at the latest. It is is one of the elements of the reform package of credit institution regulatory framework (Basel III) published in December 2010 by the BCBS. The CCB was introduced in the EU by adopting the CRD IV, with Latvia transposing the respective CRD IV provisions into the Credit Institution Law. On 28 May 2014, the amendments to the Credit Institution Law took effect, providing for the CRD IV requirement on the introduction and maintenance of the CCB and establishing that the FCMC was the national designated authority responsible for setting the CCB in Latvia. In view of Latvijas Banka's experience in the research of economic cycles, the FCMC collaborates with Latvijas Banka that contributes to the CCB quantitative analysis.

Pursuant to the Credit Institution Law, beginning with 2015, the FCMC sets and publishes the CCB rate, expressed as a percentage of risk-weighted assets within the range 0%-2.5%[1] Credit institutions have to maintain the CCB requirement consisting of Common Equity Tier 1 capital. If the CCB rate is set above zero, credit institutions have to apply it no later than a year after its announcement; however, a shorter application deadline is possible in exceptional circumstances. Each credit institution has to calculate its institution-specific CCB rate. The above rate is calculated as the weighted average rate taking into account the geographical breakdown of each credit institution's exposures and the country-specific CCB rate[2].

The aim of the CCB as an additional capital requirement is to strengthen the resilience of credit institutions to cyclical systemic risks arising from excessive credit growth. Capital is accumulated when cyclical systemic risk is increasing, creating buffers that strengthen the resilience of credit institutions during the downswing of the financial cycle when the additional buffers can be used to absorb losses. The CCB is designed to help stabilise the financial cycle, i.e. to limit excessive credit growth during an upswing of the financial cycle and to maintain credit supply during its downswing.

CCB calculations are based on the ESRB recommendation[3] on guidance for setting CCB rates, published on 18 June 2014. Pursuant to the ESRB recommendation, the private non-financial sector credit-to-GDP ratio and the deviation from its long term trend (gap) as well as other indicators are taken into account when setting the CCB rate for exposures to residents.

An increased positive credit-to-GDP gap suggests that credit has reached excessive levels in relation to GDP and creates higher risks to the financial system. The CCB benchmark buffer guide is calculated on the basis of the credit-to-GDP gap; it is the starting point in guiding decision on the CCB rate, most notably in the build-up phase. If the credit-to-

[1] In cases provided for by the Credit Institution Law the FCMC may set a higher CCB rate exceeding 2.5%.
[2] The FCMC may also set the CCB rate for credit risk exposures with foreign residents to be applied by the credit institution when calculating the credit institution-specific CCB rate where no CCB rate has been set in the respective countries or where such rate has been set but its amount is not deemed adequate according to the FCMC assessment.
[3] Recommendation of the ESRB of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1).

GDP gap exceeds 2 percentage points, the CCB guide increases linearly (in accordance with the ESRB guidelines) from zero to the upper threshold of 2.5% of the risk-weighted exposure amount when the credit-to-GDP gap reaches 10 percentage points[4]. The FCMC may set a requirement exceeding 2.5% when necessary.

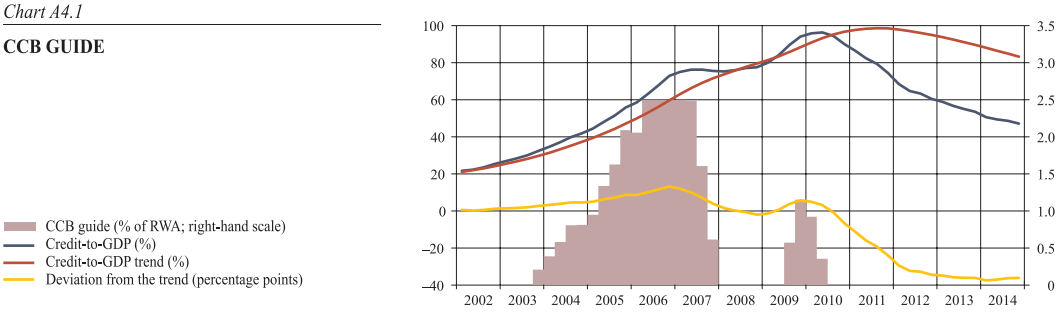
Empirical analysis suggests that the credit-to-GDP gap, calculated in accordance with the BCBS methodology[5], is the best indicator to identify excessive credit growth in the EU as a whole. However, in some EU countries (including Latvia), it is the national specificities, e.g. differences in the structure and development of the financial system, the quality and accessibility of credit data that determine that another method for calculating the credit-to-GDP gap than the one given in the BCBS guidance may demonstrate better signalling qualities.

According to the ESRB recommendation, in such cases EU countries may use alternative calculation of the gap, in addition to the Basel gap. In the case of Latvia, an additional gap and, accordingly, the CCB guide are calculated on the basis of a narrower credit measure that includes loans granted by credit institutions and the purchased non-financial sector debt securities. In comparison with the broad credit measure recommended by the BCBS, more narrowly defined credit data are more stable (they are not adjusted retrospectively) and become available sooner.

To calculate the long-term trend of credit-to-GDP according to the ESRB guidance, the so-called one-sided Hodrick–Prescott filter[6] with the smoothing parameter[7] value λ = 400 000 should be used. It should be noted that the trend estimate (and thus also the size of the CCB guide) substantially depends on the selection of time series' starting point. This feature is characteristic of many new EU Member States; it is mostly related to structural changes in these economies and the short time period for which data for the trend assessment are available. According to the estimates, a simulation of determining the historic CCB requirement in Latvia is the closest to experts' assessment about the credit cycle, if the year 1999 is used as the time series starting point. Chart A4.1 shows the historic size of the CCB guide if the CCB in Latvia had been determined before the period of accelerated credit growth and if the data from the beginning of 1999 had been used for calculating the CCB guide. In accordance with the above calculation, the CCB should have been applied in Latvia from the fourth quarter of 2003 until the fourth quarter of 2007. Whereas other variables supplementing the credit-to-GDP gap in setting an appropriate CCB rate would have signalled against a renewed increase of the CCB requirement in the third quarter of 2009.

Chart A4.1

CCB GUIDE



[4] While the CCB guide increases linearly with GDP and can thus take any value between zero and 2.5%, Article 136(4) of CRD IV specifies that the buffer rate set by the designated authority shall be calibrated in steps of 0.25 percentage point or multiples of 0.25 percentage point.

[5] The BCBS suggests using the standardised credit-to-GDP gap (Basel gap); its calculation is based on the definition of the broad measure of the stock of credit reflecting the liabilities of the private non-financial sector not only to credit institutions but also borrowings from non-bank financial institutions.

[6] Hodrick–Prescott filter is a standard mathematical tool used to establish the long-term trend of a variable. A one sided, recursive, HP filter ensures that only information available at each point in time is used for the calculation of the trend.

[7] The larger the parameter λ, the smoother the trend assessment. λ = 400 000 corresponds to the financial cycle that is 3–4 times longer than the economic cycle.

In the fourth quarter of 2014 in Latvia, the credit-to-GDP ratio stood at 47%, while its deviation from the long term trend was –36 percentage points; consequently, the CCB guide based on the additional credit-to-GDP gap was 0%.

According to the ESRB recommendation, in addition to the credit-to-GDP gap calculation a more extended range of information, i.e. additional indicators that might signal a systemic risk related to excessive credit growth, should be taken into account. Table A4.1 summarises those indicators from the groups recommended by the ESRB that are applicable to Latvia. The selected indicators and the CCB rate shall be published on the website of designated authorities. It should be noted that upon setting the CCB rate, not only the quantitative estimates but also comprehensive qualitative information, experts' assessment in particular, should be taken in to account.

Table A4.1
KEY INDICATORS FOR ASSESSING FINANCIAL CYCLE

Group	Indicators recommended by ESRB	Indicators applied in Latvia
1. Potential overvaluation of property prices	Commercial and residential real estate price-to-income ratio	1.1 Ratio of house price index to average net wage index
	Price gaps and growth rates	1.2 Annual growth rate of CSB house price index
2. Credit developments	Real total credit growth /real bank credit growth	2.1 Annual growth rate of private non-financial sector liabilities to credit institutions
	Deviation from trend in deflated M3	
3. External imbalances	Current account balance to GDP ratio	3.1 Current account balance to GDP ratio
4. Measures of the strength of credit institution balance sheets	Leverage ratio	4.1 Leverage ratio
5. Private sector debt burden	Debt service to income ratio	5.1 Ratio of the private sector (households and non-financial corporations) annual interest payments to GDP
		5.2 Non-financial corporation interest payment coverage ratio (four-quarter moving average)
6. Measures of potential mispricing of risk	Real equity price growth	6.1 OMXR
		6.2 OMXBBGI

The CCB guide and additional indicators suggest that at the current stage of the financial cycle in Latvia, there is no risk of excessive credit growth. A negative annual rate of change in domestic lending still persists, as the new loans do not offset loan repayments. Consequently, pursuant to the FCMC decision of April 2015, the CCB rate has been set at 0%. According to the current credit and GDP growth rate forecasts, no need to raise the CCB rate is expected over the next few years in Latvia.

For comparison, Norway and Sweden, i.e. countries of residence of Scandinavian parent banks of credit institutions active in the Latvian credit market, have set a CCB rate of 1% for transactions with residents. The requirement is justified by the development trends in the credit and real estate markets and the high level of accumulated household debt in Sweden and Norway. The CCB rate of 1% will take effect in June and September 2015 in Norway and Sweden respectively.

Appendix 5
MEASURES STRENGTHENING FINANCIAL STABILITY IN THE EURO AREA AND THE EUROPEAN UNION

The commenced establishment of the Banking Union has substantially strengthened financial stability in the euro area and investors' confidence in the euro area banking sector. The creation of the SRM, the second pillar of the Banking Union, is progressing at a slower pace than planned, since the adoption of the BRRD transposing legislation and ratification of intergovernmental agreement have been delayed in many countries of the euro area. At the beginning of 2015, the EU started a discussion about the project of a Capital Markets Union expected to have a significant impact on financial stability. One of the key principles of establishing the Capital Markets Union is the mitigation of the financial system's risks and enhancement of the shock-absorption capacity.

Since the publication of the previous Financial Stability Report the establishment of the Banking Union has been actively pursued in the euro area. All euro area countries are subject to a mandatory participation in the Banking Union, while the above union is also open to other EU Member States. The Banking Union is based on three pillars: the SSM, the SRM and harmonised European Deposit Guarantee Schemes. The above three pillars along with the single rule book and financial back-stop are the key building blocks of the Banking Union. The launch of the first elements of the Banking Union has substantially strengthened financial stability in the euro area and investors' confidence in the euro area banks.

On 4 November 2014, the ECB commenced the supervision of credit institutions of the Banking Union. Based on the SSM Regulation[1] and the ECB's SSM Framework Regulation[2], the ECB, with its comprehensive experience in the macroeconomic policy and analysis of financial stability, performs clearly defined functions of supervision in cooperation with the national competent authorities to safeguard the stability of Europe's financial system. The ECB directly supervises 130 credit institutions of the euro area deemed to be systemically important, including three credit institutions of Latvia. Hence 82% of credit institution assets of the euro area are under direct supervision of the ECB. The direct supervision of all other euro area credit institutions continues to be under the control of the national competent authorities of the relevant countries (the FCMC in Latvia), while the ECB exercises their indirect supervision and is mandated to take over the supervision of indirectly supervised credit institutions at any time.

Prior to commencing the supervision, the ECB, in cooperation with the national competent authorities, pursued extensive preparatory activities, i.e. performed comprehensive assessment of the directly supervised credit institutions. The key objectives of the comprehensive assessment were the improvement of balance-sheet transparency, adjustments based on the results of credit institution asset quality review and strengthening confidence in European credit institutions. Pursuant to the information furnished by the ECB,[3] the Comprehensive assessment identified credit institution asset value adjustments of 48 billion euro and total capital shortfall of 25 billion euro at 25 credit institutions. Twelve credit institutions have already covered their capital shortfall in 2014 by attracting new capital. Other credit institutions with capital shortfall submitted their capital increase plans. The Comprehensive assessment played a significant role in strengthening the financial market confidence in euro area credit institutions.

As of 1 January 2015, the SRM comprising all SSM member states complements the SSM. The SRM consists of the resolution authorities of the Banking Union states, established

[1] Council Regulation (EU) No. 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (SSM Regulation; OJ L 287/63, 29.10.2013).
[2] Regulation (EU) No. 468/2014 of the European Central Bank of 16 April 2014 establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities (SSM Framework Regulation; OJ L 141, 14.05.2014).
[3] The European Central Bank Aggregate Report on the Comprehensive Assessment, October 2014.

in line with the BRRD, and the Single Resolution Board, established in accordance with the SRM Regulation. The Single Resolution Board is an independent agency of the EU, financed by contributions from credit institutions. The Single Resolution Board performs only some of its functions currently. The Board is envisaged to perform all resolution related functions stipulated in the SRM Regulation as of 1 January 2016, with the creation of a Single Resolution Fund.

However, the SRM is established at a slower pace than planned, since the transposition of the BRRD requirements and ratification of intergovernmental agreement have been delayed in the majority of the Banking Union states.

The Banking Union project also envisages a financial back-stop. On 8 December 2014, the ESM Board of Governors comprising finance ministers of the euro area countries adopted the ESM direct recapitalization instrument. Currently this instrument can be resorted to for a direct recapitalization of the euro area credit institutions. As a last resort, this instrument allows the ESM to recapitalise directly the systemically important financial institutions of the euro area in certain cases. The ESM may only recapitalise credit institutions directly after a bail-in tool has been applied in accordance with the BRRD and a contribution has been made by a resolution fund. The ESM as one of options for a temporary financial guarantee for the Single Resolution Fund has been considered; however, active discussions about the issue have not been carried out lately.

At the beginning of 2015, the EC opened public consultations on the establishment of a Capital Market Union. Admitting that the European businesses do not have viable alternatives to financing from credit institutions and capital markets in Europe are nationally over-fragmented and insufficiently developed vis-à-vis a number of other jurisdictions (e.g., the US, Switzerland and Japan), the EC has set as one of its key priorities the establishment of a Capital Market Union, encompassing all EU, until 2019. The vision is presently in a very early stage of development, and the following fundamental principles of action are put forward: maximising the capital market gains for the economy and for the growth and employment; promotion of financial stability by means of a single rule book or harmonised regulatory requirements, elimination of restrictions imposed on cross-border investment in the EU and compliance with the principles of consumer and investor safeguarding as well as the attraction of investment from other world regions.

The EC identified a number of priority areas, including the elimination of barriers for access to capital markets (securities prospectus regime), expansion of the SME investor base, creation of a sustainable securitisation, development of Europe's private placement markets and fostering long-term investment. Consultations regarding the significance of the above areas and the necessary measures are currently open in the EU.

The EU continued to pursue other initiatives significant for the strengthening of financial stability along with the development of the aforementioned unions. The High-level Expert Group chaired by Erkki Liikanen, Governor of *Suomen Pankki – Finlands Bank*, issued a statement already in 2012 that the establishment of the Banking Union proved insufficient to avoid excessive build-up of financial structures which may become too big to fail. The statement presents risks encountered by large credit institutions actively engaged in trading activities and the shadow banking sector involved in securities financing transactions.

The EC proposed two draft regulations in view of the above statement.

The Regulation of the European Parliament and of the Council on structural measures improving the resilience of EU credit institutions intends to prevent systemically important credit institutions from involvement in excessively risky trading activities. However, diverse interests of the financial sector and supervisors across the EU Member States and national regulatory frameworks adopted recently or planned to be adopted by

some countries complicates the progress in drafting the above Regulation. Discussions also arise over the effectiveness of the acceptable resolution since consistent national legislative frameworks have not yet been fully implemented, and it is impossible to estimate the relevant impact in full. Proposals for improving the draft Regulation are currently prepared by the European Parliament and the Council and they most likely will differ materially from the initial proposal of the EC.

In turn, the compliance with the requirements of the Regulation of the European Parliament and of the Council on reporting and transparency of securities financing transactions would facilitate analysis of the shadow banking sector by competent authorities as well as provide the investors with information about the securities financing transactions executed by managers of collective investment undertakings and alternative investment funds. The EC, the European Parliament and the Council are expected to reach a prompt agreement on the final text of this Regulation.