LATVIJAS BANKA

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FINANCIAL STABILITY REPORT

2008

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ABBREVIATIONS

CAR – capital adequacy ratio
CSB – Central Statistical Bureau of Latvia
DENOS – securities settlement system of the LCD
DVP – delivery-versus-payment
ECB – European Central Bank
EKS – electronic clearing system of the Bank of Latvia
EU – European Union
EU15 countries – EU countries before 1 May 2004
FCMC – Financial and Capital Market Commission
FRS – US Federal Reserve System
GAP – repricing gap or difference between RSA and RSL
GDP – gross domestic product
IMF – International Monetary Fund
LCD – Latvian Central Depository
lr – liquidity ratio
LTV – loan to value
MFI – monetary financial institution
NBFS – non-bank financial sector
NPLs – non-performing loans
RIGIBOR – Riga Interbank Offered Rate
ROA – return on assets
ROE – return on equity
RSA – interest rate sensitive assets
RSL – interest rate sensitive liabilities
RWA – risk weighted assets
SAMS – interbank automated payment system of the Bank of Latvia
UK – United Kingdom
US – United States of America
VaR – the maximum expected losses over a certain period of time and with a given probability (Value-at-Risk)
VNS – securities settlement system of the Bank of Latvia

Data on the subsidiaries of foreign banks registered in the Republic of Latvia have been disregarded for the purposes of calculating ROE, CAR and tier 1 CAR, open foreign exchange positions, the liquidity ratio set by the Financial and Capital Market Commission; nor have they be used for liquidity and credit risk stress tests or bank sensitivity analysis with regard to currency and interest rate risks.

Sources: the Central Statistical Bureau of Latvia, the Financial and Capital Market Commission, the Latvian Central Depository, Reuters, Bloomberg, Latio Ltd., Ober Haus Real Estate Latvia Ltd., Ltd. Balsts, Arco Real Estate Ltd., the European Central Bank, Eurostat, the State Unified Computerised Land Register, the State Land Service, the Treasury of the Republic of Latvia and the Bank of Latvia.

Charts have been compiled on the basis of data provided by Reuters (Chart 1), Bloomberg (Chart 2), the State Unified Computerised Land Register (Chart 1.1), the State Land Service, Latio Ltd., Ober Haus Real Estate Latvia Ltd., Balsts Ltd., Arco Real Estate Ltd. (Chart 1.2), the Central Statistical Bureau of Latvia (Charts 1.3–1.4 and 13–18), Latio Ltd. (Chart 1.4), MG Media Ltd. (Charts 1.5–1.7), the Bank of Latvia (Charts 1.6–1.7, 5–10, 19–20, 22, 23, 32, 33, 40–42, 53 and 58–65), the relevant national central banks and the European Central Bank (Charts 3 and 4), bank lending surveys conducted by the Bank of Latvia (Charts 4.1–4.4), the Financial and Capital Market Commission (Charts 11–12, 24–31, 43–45, 50 and 57), the European Central Bank (Chart 21), Eurostat (Chart 21), the Latvian Central Depository (Charts 66–69), and estimates prepared by the Bank of Latvia, also based on the Financial and Capital Market Commission data (Charts 34–39, 46–49, 51, 52 and 54–56). The Appendix is based on the data of the Bank of Latvia and the Financial and Capital Market Commission.

Figures featured in the charts are rounded values.

K. Valdemāra ielā 2A, Riga, LV-1050, Latvia
Tel.: +371 6702 2300 Fax: +371 6702 2420
http://www.bank.lv
info@bank.lv

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EXECUTIVE SUMMARY

The year 2008 witnessed an overall recession in the global economy. A considerable moderation of the economic activity was observed already in 2007. As the economic growth in several countries turned negative at the end of 2008, the central banks and governments of the major countries launched extensive economic stimulus. The decrease in the global activity affected Latvia as well: in the second half of 2008 the economic activity dampened as a result of a decline in both domestic and external demand. Due to the sharp downturn in the activity the external imbalances and inflation pressures eased and the rise in wages and salaries subsided. The subdued lending resulted in a sharp drop in real estate prices, with Latvia ranking among the countries where the fall was the most pronounced. The global financial crisis, the notable dependence of the Latvian financial system on foreign funding and the sharp turn in the development of the domestic economy seriously aggravated the vulnerability of the Latvian financial system. The largest domestic bank could not handle its liquidity problems and requested help from the government, because during the last months of the year the bank's assets were impairing and deposits draining fast, thus affecting the capital adequacy and liquidity ratios. The government implemented active bail-out measures to stabilise the ailing bank.

Given the persisting tensions in global financial and credit markets and the growing uncertainly about the growth of the national economy, in 2009 domestic banks will continue to face serious funding liquidity risk. In light of intensive economic downturn, plummeting real estate prices and adverse developments in external economic environment, it is expected that the income of non-financial corporations and households will go down and their paying capacity will deteriorate, thus considerably aggravating the risks related to bank capacity to absorb the economic slowdown.

The lack of balance and the sharp downturn in the national economy only lessened investor confidence. The sovereign rating for Latvia below investment grade, combined with the tight liquidity situation in global interbank market caused by overall confidence crisis, created problems for banks to raise new funds, in particular for those that used to raise funds directly in the market. A sovereign rating below investment grade heightens the risk that foreign investors might become more reserved about investing in Latvia. Given the scarce external funding, it is critical that banks that have no access to financing from a parent bank are able to adjust their operations to a protracted funding squeeze.

As to households, though the hike of debt had ceased, vulnerability risks continued to mount, prevailingly due to a dropping income and intensifying unemployment risks. Already in late 2008 about half of bank loans past due over 30 days were household loans. Financial vulnerability risks aggravated rapidly for the households having difficulties with real estate loan payments: while real estate prices plunged, the chances to sell the property in order to pay off their debt became very limited.

Since the financial position of companies in real estate business has deteriorated considerably, the banks are incurring serious short-term and long-term risks on account of the high concentration of this sector in bank loan portfolio. The subsiding activities in the real estate market, combined with the price correction, had an adverse effect on the sector's profitability and interest rate coverage. Already in the fourth quarter of 2008 the profit made by these companies was less than a half of the interest expenses pertaining to the same period; thus, the sector's non-financial corporations had a negative operational result after interest.

Economic downturn is expected to have an adverse effect also on other sectors that are sensitive to the economic development cycle, such as construction, trade, hospitality and catering business, and will weaken their debt servicing capacity. Profitability of non-financial corporations in these sectors decreased in 2008. A further downslide of economic growth, contracting profit margins that will eventually slide into losses at a time when banks are increasing their lending margins and funding is becoming scarce are likely to jeopardise non-financial corporations' debt refinancing and heighten default risk.

There is an increasing probability that existing risks might materialise and drive the capital adequacy ratios of individual banks below minimum requirements unless extra capital is raised. In 2008, overall bank capacity to absorb credit risk shocks weakened somewhat. Given the economic recession, the quality of banks' loan portfolio is likely to impair rapidly over 2009. The slackening loan portfolio growth, higher financing costs and the need to make large loan loss provisions will notably dampen banks' profitability and melt away their capital reserves. One can expect that the banking sector will be operating at a loss; consequently, bank credit risk shock-absorption capacity will weaken in 2009. The inflow of liquid funds is subsiding due to loan payment delinquencies, thus reducing bank liquidity.

The impact of the materialisation of the said risks on the Latvian financial system is mitigated by bank shareholder structure. The banking sector in Latvia is majority-owned by the large Nordic bank groups that attract funds in markets at a group level. The measures launched by the respective governments in support of the financial sector are also of benefit to subsidiaries and branches in a group.

1. MACROFINANCIAL ENVIRONMENT

1.1 External Economic and Financial Environment

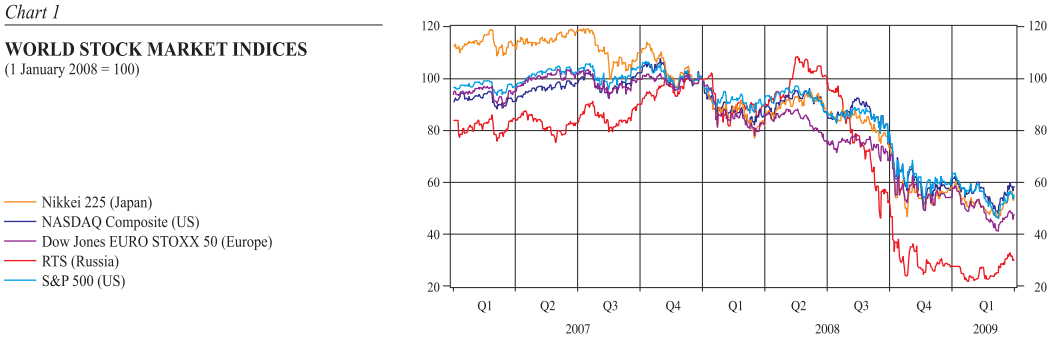
The global financial market crisis and subdued economic growth in Latvia's trade partner countries facilitated materialisation of external risks, making investors more cautious with regard to developing economies and markets therein, and minimising stabilisation effects of external demand on the depressed economy of Latvia.

The financial market turmoil that emerged in August 2007 unfolded in 2008. An ever increasing number of financial institutions in developed countries faced solvency and liquidity problems. In order not to allow bankruptcy of systemically important financial institutions, national governments opted for providing additional liquidity, increased deposit guaranties and purchased shares in a number of financial institutions. At the beginning of September, the US government was forced to take over the companies Fannie Mae and Freddie Mac. Thereafter, the US government bailed out the insurance giant AIG (American International Group Inc.), opening a credit line in exchange for the company's controlling stake. Having failed to raise the needed extra capital, the management of the investment bank Lehman Brothers Holdings Inc. announced insolvency and intention to sell parts of the company business. Apart from the US, pressure was also on a large number of financial institutions in Europe. For instance, the authorities of Belgium, Luxembourg and the Netherlands nationalised a part of the financial group Fortis' units; Belgian, French and Luxembourg governments reached an agreement on a temporary guaranty plan to cover Dexia's liabilities. The government of the UK also nationalised a number of banks, in full or in part, e.g. Bradford & Bingley, Royal Bank of Scotland and Lloyds Banking Group. In Germany, the government provided support to a major market lender Hypo Real Estate. In Iceland, authorities took over four major banks of the country (*Kaupthing*, *Lansbanki*, *Glitnir* and *Straumur*). The financial crisis eroded mutual confidence of financial institutions. As a result, money markets experienced a temporary rise in interest rates and the availability of funding diminished.

The world stock markets recorded a sharp fall in stock prices (see Chart 1). The global financial market turmoil and broadly-based uncertainty made market participants more cautious and eager to get higher risk premiums on funds invested. In the context of deteriorating economic outlook, profit projections of many companies became more pessimistic. Stock sales spurred a decline in stock prices, with investors unable to boost insufficient loan coverage due to falling stock prices.

Chart 1

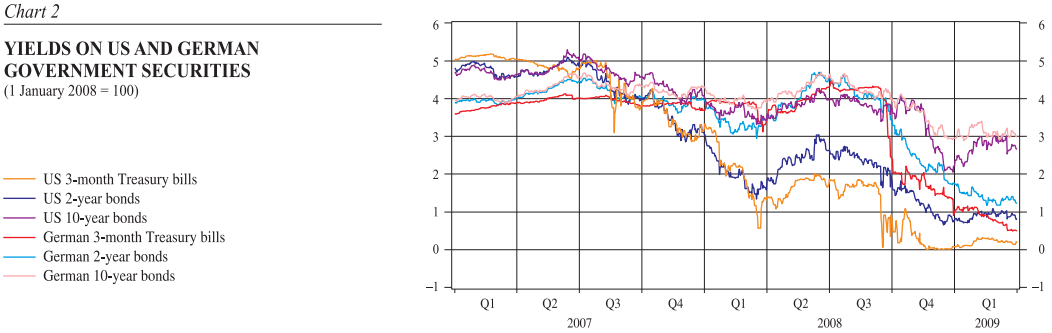
WORLD STOCK MARKET INDICES
(1 January 2008 = 100)



With investors looking for safer and more liquid investment opportunities, the yields on government securities, those with shorter term in particular, decreased steeply in the second half of the year (see Chart 2).

Chart 2

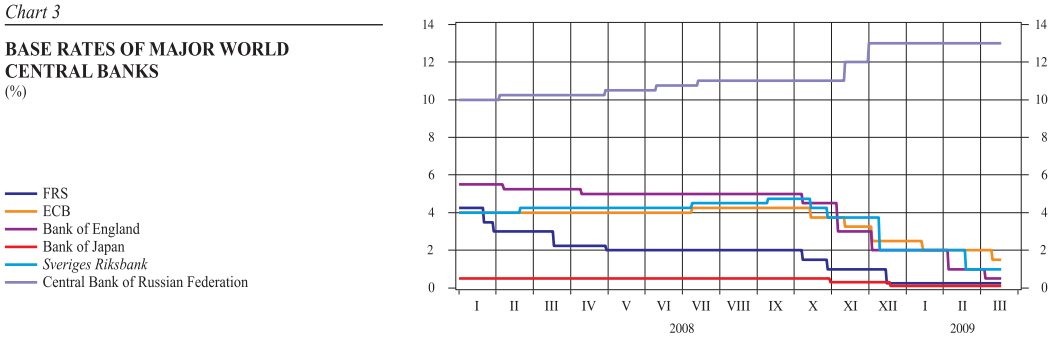
YIELDS ON US AND GERMAN GOVERNMENT SECURITIES
(1 January 2008 = 100)



Against the backdrop of deepening financial crisis, the major world central banks, in order to minimise the risk of economic downslide, began to ease monetary policy conditions (see Chart 3). Having raised euro key rates on 3 July, the ECB cut the euro rate on several occasions in the second half of 2008 and the first quarter of 2009. As of 9 October, the ECB reduced the interest rate spread of the marginal lending facility and the deposit facility from 200 basis points to 100 basis points around the refinancing rate. The Bank of England also lowered the base rate of the British pound sterling on several occasions. The FRS cut the US dollar base rate several times, landing at the corridor of 0%–0.25%. The Bank of Japan cut the base rate of the Japanese yen to 0.1%.

Chart 3

BASE RATES OF MAJOR WORLD CENTRAL BANKS
(%)



In order to bring stability to the money market, the world central banks increased liquidity supply, including also longer-term instruments. Moreover, some central banks notably expanded their lists of eligible collateral to sufficiently secure the extended loans. Both the US and European governments adopted comprehensive action plans to combat the crisis.

Although steps taken by authorities have resulted in a partial easing of market tensions, concerns about the spillover effects of the financial crisis on other financial institutions and the real economy triggered a severe contraction in lending. In addition, consumer confidence in the economic outlook has deteriorated, pressing down consumption and investment. As a result, the economic activity weakened in the developed countries and, with international trade and lending shrinking, slowed down also in the developing economies in the second half of the year. Moreover, several countries faced substantial capital outflows and country risk reassessment. Consequently, the access of these countries to financial market funding was undermined and their governments were compelled to resort to the assistance of international financial institutions.

In the situation of on-going real estate market price drops and financial sector volatility, the US economic growth decelerated to 1.1% in 2008, with GDP dropping 6.2% in the fourth quarter. As the external and domestic demand contracted and financial conditions deteriorated, companies had to lay off employees, thus pushing up unemployment. The FRS experts anticipate a further downslide in the economic activity in the near future to be followed by a gradual improvement in the activity thereafter.

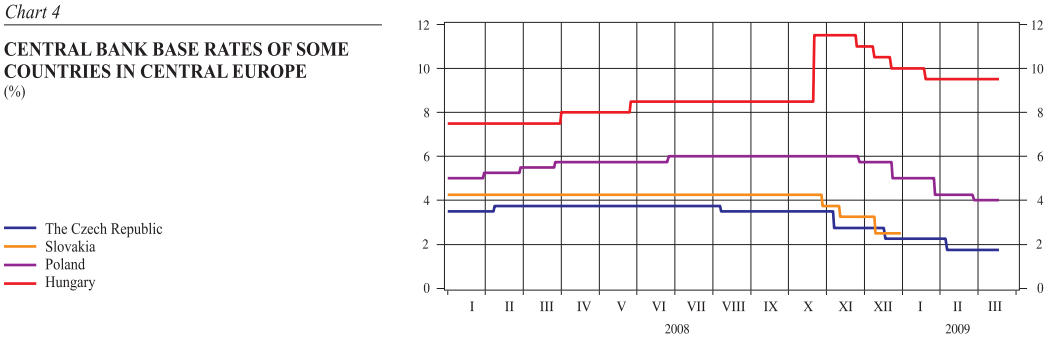
Along with decelerating global economic growth, weakening domestic demand and effects from the financial market turmoil, the economic activity in the EU15 countries subsided notably. Contracting global trade had an adverse effect on exports of this country group. The fourth quarter saw a particularly sharp export contraction. In 2008, GDP increased by a mere 1.3% in Germany, 0.7% in the UK, and 0.9% in Finland. The Swedish economy continued on a deceleration trend in the first three quarters of 2008, with GDP dropping

4.9% in the fourth quarter when the external economic environment deteriorated notably. A further downturn in economic activity is projected for EU15 countries in 2009, with recovery likely to recommence in 2010.

In the first half of 2008, the countries in Central and Eastern Europe continued to grow robustly; in the second half of the year, however, some signs of economic slowdown surfaced in some of them as a consequence of investor prudence, tighter credit standards and shrinking international trade. Despite economic stabilisation measures undertaken in Hungary in the previous years, the financial crisis severely hit the economy there. In November, international financial institutions reached an agreement on a close to 20 billion euro financial assistance in support of the Hungarian economy. *Narodowy Bank Polski*, *Česká národní banka* and *Národná banka Slovenska* cut base rates in response to subdued economic activity at the end of the second half of 2008 and beginning of 2009 (see Chart 4). *Magyar Nemzeti Bank*, by contrast, notably (by 300 basis points) raised the key policy rate (to 11.5%) in an attempt to rule out a further depreciation of the forint. However, at the end of 2008 and beginning of 2009, the base rate was again lowered several times. According to IMF analysts' forecasts, GDP is likely to decrease by 0.4% in 2009 in the countries of Central and Eastern Europe against a 3.2% increase in 2008.

Chart 4

CENTRAL BANK BASE RATES OF SOME COUNTRIES IN CENTRAL EUROPE
(%)



The global economic downturn in 2008 slowed down the economic growth in Lithuania and Estonia notably. The shift in economic cycles was amplified by an increasingly unfavourable external environment and financing conditions. In line with abating domestic demand, imports contracted and the current account balance improved. The slowdown in economic activity had a negative effect also on the labour market where unemployment continued to edge up in 2008. According to interim estimates of the European Commission[1] for 2009, GDP is expected to decline by 4.0% in Lithuania and 4.7% in Estonia.

The Russian economy posted unbalanced growth in 2008. Record high income from exports and lending growth had supported buoyant growth dynamics by mid-2008; in the second half of the year, however, when negative pressures from the global financial crisis intensified, the growth rate moderated. Development was notably subdued in construction, transport, and manufacturing. In order to curb the rising inflation and to contain capital outflows, the central bank of the Russian Federation raised the base rate in 2008 on several occasions (from 10.25% to 13%). Looking ahead, lower oil prices, banking sector strain, and negative wealth effects facilitated by falling stock prices and capital outflows are likely to figure as significant obstacles to economic growth. The IMF experts predict that the Russian economy will apparently contract by 0.7% in 2009.

1.2 Domestic Financial and Economic Environment

The global financial crisis of 2008 hit Latvia more severely than other developing countries in Europe, because Latvia had based its high growth momentum of the previous years on unbalanced economy, with progress achieved at the expense of foreign borrowings as well as current account and budget deficits. The global financial crisis, strong dependence of the Latvian financial system on foreign financing and an unexpected contraction in the country's economy amplified vulnerability of the Latvian financial market.

Following several years of buoyant economic development, the pace of growth subsided in 2008. A 4.6% drop in real GDP was triggered by abating domestic demand over the year and a weaker external demand towards the close of the year under the impact of a slowdown in global economic activity and deteriorating competitiveness. Although inflation declined steeply, its average annual rate remained high (15.4%). At the

[1] *European Commission, Directorate-General for Economic and Financial Affairs "Interim Forecast, January 2009", Press conference of 19 January 2009.*

beginning of the year, the high rate of inflation was supported by the domestic demand, rapidly rising global energy prices and the resulting cost upswing as well as by tax harmonisation with the EU legislation. Thereafter in June, inflation started to decline rapidly due to weakening economic activity, this decline well-supported by favourable global energy price trends.

The weakening in the domestic demand in 2008 was on account of both postponed investment plans and shrinking private consumption. Contractions in investment were determined by slower pace of lending, deteriorating corporate financial performance, real estate price drops (see Box 1), moderating activity and contracting number of new orders in construction, residential construction in particular, and negative development perspectives of the domestic and external demand. The soaring unemployment rate and deteriorating assessment of the economic situation amplified population's uncertainty about their future income. Worsening consumer confidence was an underpinning factor for household expenditure constraints reflected also in narrowing retail trade turnover, sharply falling motor vehicle sales within a year, and steeply contracting imports of goods and services. As a result of weakening domestic and external demand, real manufacturing output recorded substantial deceleration, particularly so towards the close of the year.

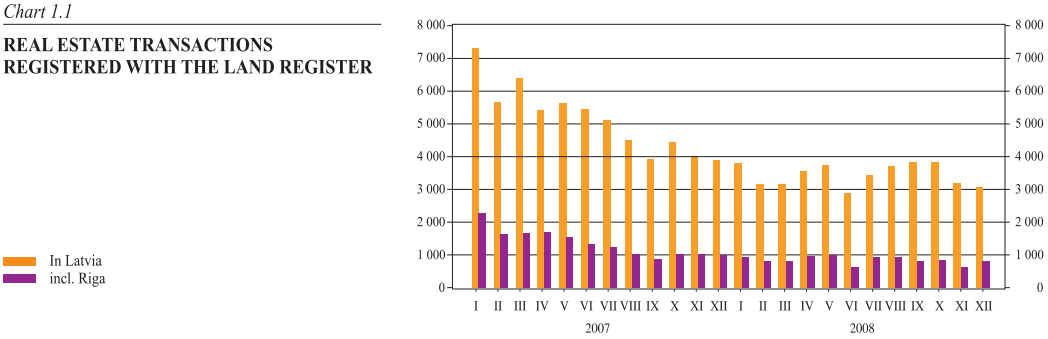
Box 1. Latvia's real estate market

In 2008, the demand and prices continued on a rapid downward trend on Latvia's real estate market. The standard apartment prices and those of apartments in new projects, houses and land declined. In the second half of the year, the decrease rate of prices accelerated thus also affecting rent prices to a greater extent.

The real estate market activity posted a rapid deceleration at the beginning of the year continuing on this trend again after being relatively unchanged in the middle of the year (see Chart 1.1). According to the State Land Service data on sales of residential premises, the total number of real estate transactions decreased by 33.1% but the area of premises for sale – by 34.7% in 2008, as compared with the previous year. The most notable decline accounted for trade of five and more room apartments (the number of transactions decreased by 58.0%) but the mildest decline – for that of one-room flats (the number of transactions decreased by 31.9%).

Chart 1.1

REAL ESTATE TRANSACTIONS REGISTERED WITH THE LAND REGISTER



There are several reasons for the rapid price drops. First, the measures under the government's anti-inflation plan were aimed at reducing the number of speculative real estate transactions (increasing the real estate stamp duty, the first down payment on credit, the income statement issued by the State Revenue Service) as a result of which some potential buyers lost ability to purchase property. Second, the unstable situation on the global financial markets significantly reduced the availability of financing for banks operating in Latvia. Banks tightened lending standards (a lower LTV (the loan-to-value ratio) and higher minimum income requirements) thus reducing the possibility to get loans for real estate purchases.

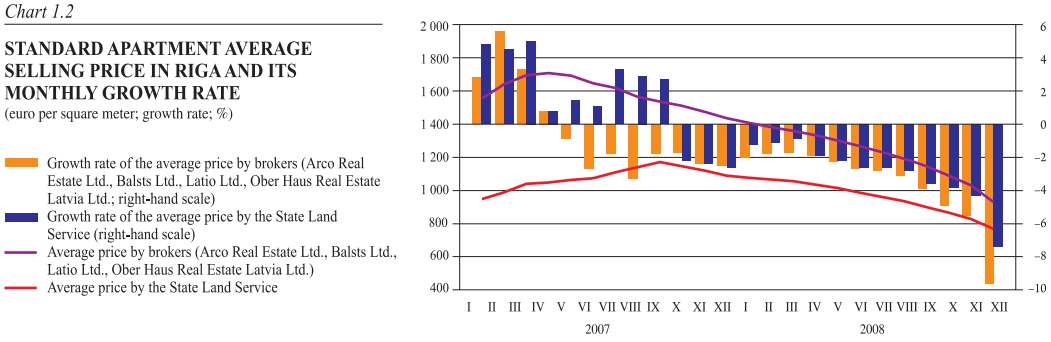
Although some of the requirements under the government's anti-inflation plan were revoked in 2008 (for example, the minimum first down payment for real estate purchases on 19 June 2008, the personal income tax for selling real estate if it has been held by an individual for less than five years or it has been his/her declared residence for less than a year – as of 1 January 2009), however this change is unlikely to affect the real estate market activity significantly.

In 2008, the standard apartment prices decreased by 35.2% (the monthly average – by 3.5%; see Chart

1.2). In comparison with the highest price level reached in April 2007, the standard apartment price had decreased by 45.5% at the end of 2008. The market for apartments in new projects also saw similar trends, however posting more pronounced difference in prices. For example, the prices of some apartments in new projects with bad construction quality have already reached the price level of standard apartments. The State Land Service data also record a similar trend: in 2008, the average price of one-room to four-room apartments decreased by 29.6% (apartments in new projects are also included). According to the market research data by the company Knight Frank[2], Latvia was the first as to falling housing prices. In 2009, the standard apartment price drops have even picked up.

Chart 1.2

STANDARD APARTMENT AVERAGE SELLING PRICE IN RIGA AND ITS MONTHLY GROWTH RATE
(euro per square meter; growth rate; %)



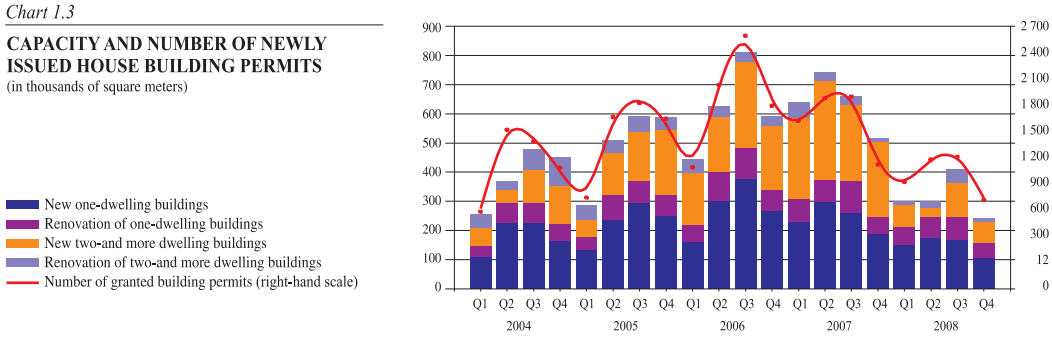
Although different additional benefits were offered on the new project market in the second half of the year (a new car when buying an apartment, some relief for the apartment purchase, for example, the possibility to rent the new apartment for the first two years with the right to redeem it or the possibility to cover only interest payments for the first two years with the principal amount being covered by the developer), they did not bring the expected results, and the prices of apartments in new projects also fell increasingly.

At the same time, the real estate owners showed more interest in change transactions with an additional payment, when, for example, a bigger apartment is changed to a smaller and more economic one. The demand for changing bigger apartments to smaller ones is more pronounced than that for changing smaller apartments to bigger ones.

For the new project developers the year 2008 can be assessed as very unfavourable. The low demand and pessimistic near-term perspective were reflected in the number of issued building permits that decreased by 37.2% with space planned in the building permits decreasing by 57.4% (see Chart 1.3). The volume of construction works also shrank.

Chart 1.3

CAPACITY AND NUMBER OF NEWLY ISSUED HOUSE BUILDING PERMITS
(in thousands of square meters)

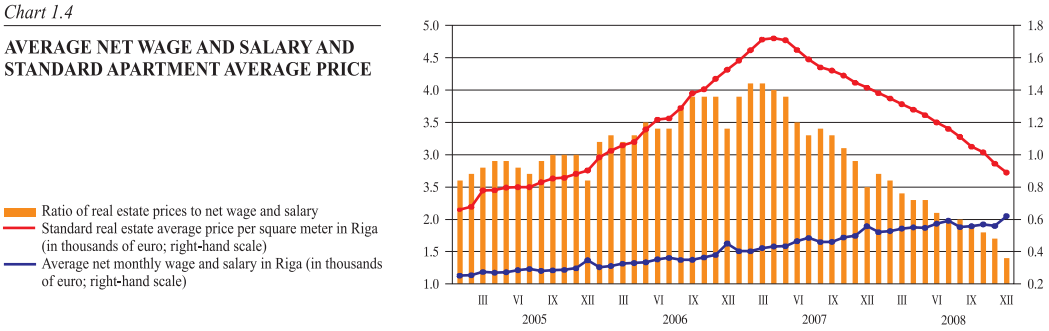


The rapid real estate price drops had a positive impact on the household purchasing power (see Chart 1.4) since the average net monthly wage and salary in Riga had increased by 11.2% in the last year thus reducing the number of average monthly wages necessary for buying one square meter to 1.4 – this is a significant decrease in comparison with the ratio (4.1) reached in March 2007. However, the increasing purchasing power was not a factor stimulating the real estate market activity sufficiently. The strict banks' lending conditions along with households' uncertainty about their future income and further price drop expectations had an adverse effect on the purchasing power.

[2] *Knight Frank Global House Price Index – Q4 2008* (available at http://www.knightfrank.co.uk).

Chart 1.4

AVERAGE NET WAGE AND SALARY AND STANDARD APARTMENT AVERAGE PRICE



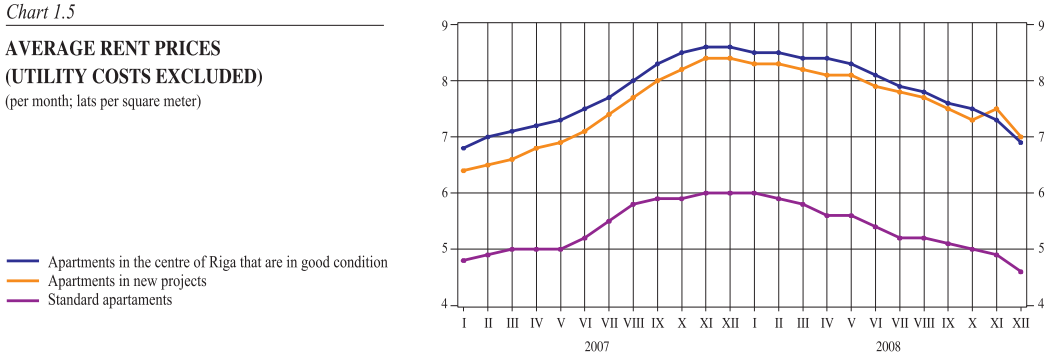
Real estate prices are expected to drop further also in 2009 but their rapid growth rate could also make the price stabilisation possible. With prices falling rapidly, a price level when almost no transactions are conducted will be achieved faster thus stopping further price falls and reducing the real estate supply on the market. However, if prices decrease at a more moderate pace, the price stabilisation will likely last till 2010. With lending to residents remaining in a low level, foreign investors who could make real estate purchases at the point of the lowest price level will play an important role in reviving the market.

The year 2008 saw significant excessive supply on the rental market as an increasing number of the real estate developers and owners who had planned to sell their real estate, decided to offer the property envisaged for sale on the rental market due to the low purchasers' demand. The growing supply and current tenants' readiness (particularly as the heating season began) to change the current rental space to smaller one with lower utility service tariffs exerted a significant pressure on the rent prices. Therefore rent prices for almost all apartment groups in Riga posted a downward trend (see Chart 1.5).

Chart 1.5

AVERAGE RENT PRICES (UTILITY COSTS EXCLUDED)

(per month; lats per square meter)



With rent prices falling throughout the year, long-term renting increasingly becomes an alternative since it is not necessary to look for funds or additional collateral that would cover a part of the desired property not covered by the mortgage loan, as well as to assume liabilities to the bank. Rent price stabilisation is most likely expected to take place along with the real estate price stabilisation.

With apartment prices falling, both the gross rental yield[3] and net yield[4] increased considerably (see Charts 1.6 and 1.7). In October 2008, the rapidly growing interest rates had almost reached the gross yield level and exceeded the net yield level, however they decreased again in the following months resulting in a significant difference between the interest rates on new loans granted for house purchase and the rental yield.

The contracting demand was also observed on the commercial real estate rental market – tenants of retail premises and offices were looking for smaller and more economic space (with lower utility service tariffs and other additional costs) thus creating excessive supply of premises that triggered rent price drops in

[3] The gross rental yield curve reflects the income of an apartment owner if the apartment is purchased and let out. Net yield (per annum) = (average rent per square meter x 12 months) / (average selling price per square meter) x 100.

[4] Net rental yield indicates the income of an apartment owner if the apartment is purchased, a loan maturing in 25 years is taken and the purchased apartment is let out. Net yield (per annum) = (average rent per square meter x average apartment space x 12 months x loan maturity in years – aggregate interest rate on credit) / (average selling or market price of apartment x loan maturity in years) x 100.

Chart 1.6

GROSS RENTAL YIELD AND INTEREST RATES ON LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE IN 2008

(%)

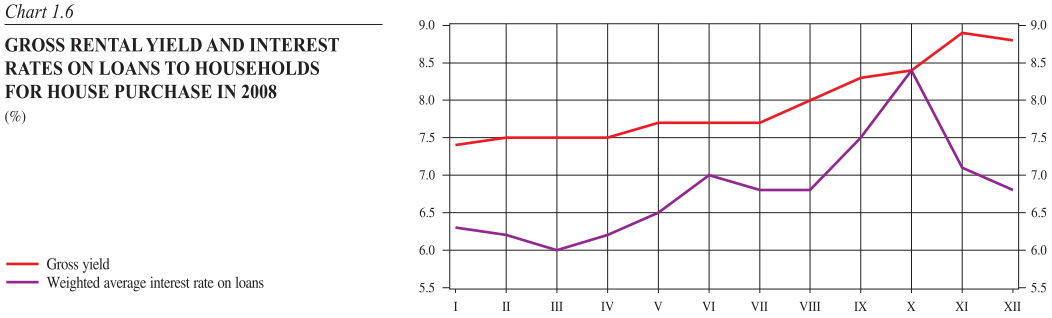
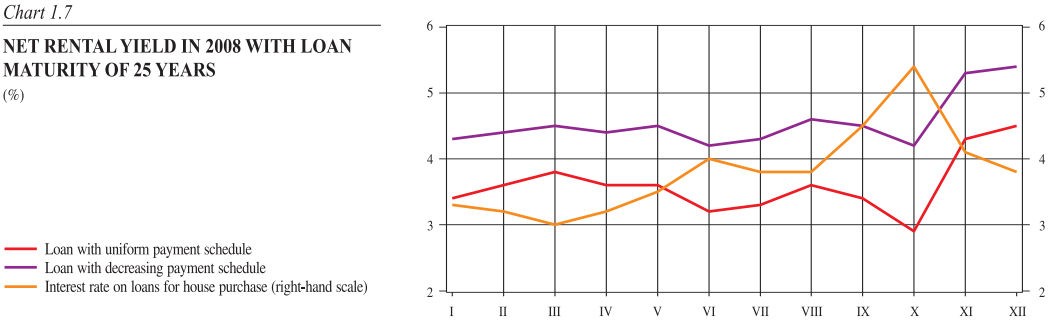


Chart 1.7

NET RENTAL YIELD IN 2008 WITH LOAN MATURITY OF 25 YEARS

(%)



Note: The calculation of yields is based on the average rental price per square meter of standard apartments in Riga housing estates quoted in MG Media Ltd. *internet catalogue* Rent in Riga*; the interest rate is the weighted average interest rate on loans in all currencies to private persons for house purchase.*

almost all commercial real estate segments. In the second half of the year, more and more owners of premises agreed to reduce the rent for the current tenants as finding new ones would take much more time.

Despite a still resilient external demand at the beginning of the year, the growth in Latvia's exports of goods and services markedly slowed down over the year due to the economic downturn and national currency depreciation in a number of Latvia's major trade partners.

Sharply moderating domestic economic activity reduced external imbalances, with foreign trade deficit narrowing notably and resulting also in a smaller current account deficit of the balance of payments in 2008 (to 12.6% of GDP). Contractions in imports are expected to cause further improvements in the current account, while the abating external demand at the close of the year contributed negatively to the export outlook. Over the year, the anticipated improvement in price and cost competitiveness, which is characterised by the real effective exchange rate of the lats, was undermined by both inflation that had soared in the first half of the year, prices that had fallen equally in Latvia and its trade partners, and trade partners' currencies that had depreciated over the concluding months of the year. As previously, the current account deficit in 2008 was covered by foreign direct investment and other investment (primarily borrowings of the banking sector and government). Foreign direct investment in Latvia, smaller than in the previous year, was in the amount of 4.0% of GDP in 2008. Similar to the previous years, investment was mainly channelled into financial intermediation, real estate and trade. Net inflow of other capital shrank by more than a half in 2008. A change in reserve ratio by the Bank of Latvia underpinned an increase in bank long-term debt obligations and a decrease in short-term ones in the first half of the year; in the second half of the year, the outflow of short-term capital or non-resident deposits was recorded. With the government engaging in long-term borrowings, capital inflows were recorded during the closing months of the year.

Previous years had seen labour shortages; in 2008, however, the demand for labour diminished and in the second half of the year was coupled with contractions in job vacancies, falling numbers of employed, and rising unemployment rate. The rate of jobseekers grew to 9.9% in the fourth quarter. The growth in wages and salaries decelerated sharply in 2008 (most pronouncedly in public administration).

Compared with the previous years, 2008 saw deterioration of almost all important fiscal indicators. In 2008, the financial deficit of the general government consolidated budget was 531.1 million lats or 3.3% of GDP (on the cash flow basis). The dynamic growth of the general government consolidated budget expenditure, which notably outpaced the revenue growth, was driven by funds channelled into public sector's wages and

salaries as well as into social expenditure, which, at the end of the year, was substantially boosted by the rising number of unemployed.

At the end of the year, the government of Latvia entered into an agreement with the IMF, the European Commission, the World Bank and other lenders on financial assistance for Latvia (7.5 billion euro) to stabilise the Latvian economy and put it back onto a sustainable growth path. The disbursement of 60% of the amount is projected for 2009, the rest, if required, will be paid out in 2010 and 2011. In order to enhance credibility of the Latvian financial sector, the amount of guaranteed deposits was simultaneously increased, a plan of state guarantees for banks drafted and adopted, and other measures implemented (see Box 2).

In 2008, the Bank of Latvia began easing its tight monetary policy in an attempt to support Latvia's financial market and economy in addressing spillovers from the global financial crisis. The Bank of Latvia actively engaged in adjusting the reserve ratio for banks, which at the beginning of the year was 8% of all bank liabilities but following several cuts was reduced to stand at 5% at the end of the year for bank liabilities with an agreed maturity of up to two years and at 3% for those with an agreed maturity of over two years. This reduction in the reserve ratio was implemented to release extra funds for bank lending, thereby creating a more favourable environment for growth. Extra financial resources for banks boosted their liquidity in the context of constrained attraction of foreign financing. In March 2009, the Bank of Latvia lowered the refinancing rate from 6% to 5% and cut the marginal deposit facility rate (on two occasions) by 2 percentage points (to 1%).

In 2008, the exchange rate of the lats gradually depreciated, at the end of September approaching the upper margin of the intervention band set by the Bank of Latvia. At the end of the year, the exchange rate of the lats rose due to international financial assistance received. In 2008 overall, the Bank of Latvia sold euro[5] at the net worth of 784.8 million lats. At the beginning of 2009, the exchange rate of the lats fluctuated within the standard fluctuation band and the Bank of Latvia interventions in the foreign exchange market subsided.

The developments related to the exchange rate of the lats and lower sovereign rating were factors that underpinned a weaker investors' interest in Latvia. In 2008, the international rating agencies Standard & Poor's and Fitch Ratings lowered Latvia's credit rating from BBB+ to BBB–, and Moody's Investors Services downgraded Latvia from A2 to A3. These rating agencies projected a negative future rating outlook as well. Latvia's rating was lowered from BBB– to BB+ again in February 2009 by Standard & Poor's and in April by Fitch Ratings. This rating is below the level required to attract investment at a negative future outlook.

Excess liquidity, impacting interest rates in the lats money market, was observed during a major part of the year. The weighted average money market interest rates on overnight transactions in 2008 amounted to 3.95% (102 basis points less than in 2007). 6-month RIGIBOR decreased, whereas 12-month RIGIBOR increased. The highest RIGIBOR of all maturities was recorded at the end of 2008, while at the beginning of 2009 the rates edged down, albeit remaining much above those recorded for the first half of 2008. Interest rates on overnight transactions were below the refinancing rate set by the Bank of Latvia. Excess lats liquidity, wich resulted from a reduced reserve ratio, and abating in market pessimism due to foreign financial assistance underpinned a downslide in the money market interest rates.

Weak external demand and strained global financial market conditions, adverse effects of domestic economic downturn on the labour market and state budget, and limited access to financing continue to be serious risks to the future economic growth. These factors are likely to trigger a severe downturn in the economic activity in 2009, with private consumption and investment contracting markedly and unemployment soaring. The success in avoiding a further economic downslide will greatly depend on renewed competitiveness that would stem from corporate ability to cut input costs, among them wages and salaries that have been soaring of late, enhanced credit availability, and implementation of the economic stimuli package within the framework of the state budget, including effective utilisation of the EU funding. A strong policy focus toward the introduction of the euro will be of particular significance.

[5] By settlement day.

Box 2. Government measures for enhanced stabilisation of Latvia's financial sector

When the global financial crisis spilled over to Europe in the fourth quarter of 2008, the EU countries developed action plans in support of the financial system stabilisation process. The government of Latvia also got involved in implementing a number of measures to stabilise the country's financial sector.

On 12 February 2009, amendments to the law "On Deposit Guarantee" were adopted prescribing that the amount of guaranteed compensation for deposits of natural persons and legal entities with banks and credit unions registered in the Republic of Latvia shall be increased to 50 000 euro.

On 14 November 2008, amendments were made to the law "On Budget and Financial Management" prescribing a support mechanism for the Latvian financial market. The amended law stipulates the right of the Minister for Finance to take a decision regarding the necessity to issue, in accordance with the procedure of the Cabinet of Ministers of the Republic of Latvia, state guarantees in order to mitigate general economic risks, avoid social and economic crises or minimise effects thereof, and ensure availability of financial resources to banks. Issuing of state guarantees is regulated by the Cabinet of Ministers Regulations No. 111 "On the Procedure for Issuing and Supervising Guarantees on Bank Loans" of 3 February 2009. Pursuant to the Regulation, the government can issue state guarantees for existing loans to banks registered in the Republic of Latvia, whose residual maturity does not exceed three years, and loans with the maturity of not less than six months and not exceeding three years drawn for refinancing purposes of the former loans. The bank shall pay an annual risk interest rate of 0.448% on the guarantee issued and remuneration in the amount of 0.5%; an annual service fee in the amount of 0.1% of the state guaranteed loan outstanding shall also be paid to the Treasury over the term of the guarantee servicing and supervision agreement.

On 18 December 2008, Saeima of the Republic of Latvia passed the law "On Bank Takeover" (in effect as of 31 December 2008), which stipulates the circumstances of and the procedure for a bank takeover by the State. The takeover of a bank is permissible only in exceptional cases when the stability of the banking system and smooth operation of payment systems in the Republic of Latvia are seriously threatened or could be threatened if the bank takeover does not take place and the bank is unable thereby to comply with the regulatory requirements stipulated by law. Bank takeover is permissible on the basis of an agreement or, if an agreement on a voluntary takeover is not reached, against a fair compensation on the basis of a special law. This procedure ensures the evaluation on behalf of the legislator of each specific case to conclude if an extraordinary situation necessitating the takeover of stock, assets, rights or liabilities of the respective bank to preserve the national banking system's stability, to provide smooth operation of payment systems and to safeguard the interest of the public has set in. Issues related to fair compensation are stipulated by the Republic of Latvia Cabinet of Ministers Regulations No. 112 "The Procedure for Setting the Amount, Offering and Paying of Fair Compensation to Bank Stockholders or Bank" of 10 February 2009.

2. THE FINANCIAL POSITION OF BANKS

2.1 Profitability

The economic downturn, drying up of the loan portfolio growth, higher costs of financing and necessity of making large provisions for doubtful debts considerably reduced the profitability of banks.

In 2008, unaudited profit of the banking sector amounted to 60.1 million lats {371.3 million lats}[6] (by 84% less than in 2007). Moreover, the rapid decrease in profit was observed just at the end of the year, when in December banks used a big part of the profit for provisions for doubtful debts (the annual profit was more than three times lower than profit in 11 months of 2008). Only two small banks reported positive profit growth in 2008 whereas the annual profit growth of the rest of banks was negative or they reported losses.

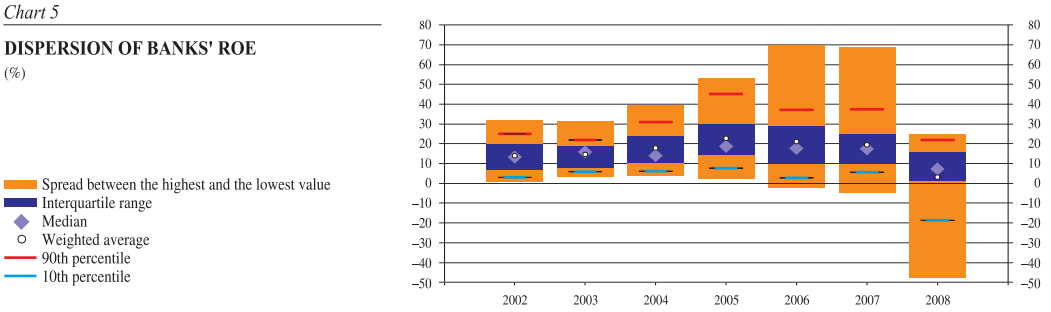
At the end of the year, banks' ROE declined to 3.6% but ROA – to 0.3%. The dispersion of ROE and ROA of banks also changed significantly shifting to the negative side (see Chart 5). Similar to the previous years, also in 2008 the profitability of subsidiaries of bank groups of EU15 countries exceeded that of other banks (see Appendix). The highest profitability was determined by availability of the cheapest resources of parent companies thus allowing for competition for attracting the best customers with other banks by way of

[6] The respective indicator of the previous year provided in braces.

Chart 5

DISPERSION OF BANKS' ROE

(%)



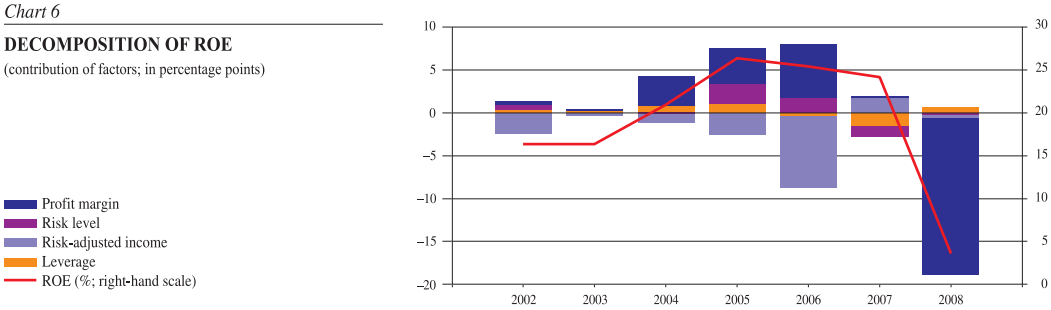
offering more favourable lending standards and ensuring more rapid growth of the loan portfolio and the highest efficiency indicated by a lower cost-to-income ratio (see Appendix).

ROE edged down mostly as a result of the rapid narrowing of the profit margin. It was determined by the significant rise in expenditure on provisions for doubtful debts and liabilities that considerably reduced pre-tax profit. The contribution of other components to changes in ROE was less pronounced. ROE improved only as a result of a higher leverage ratio with capital and reserves decreasing. As the growth of RWA was lower than that of assets, the level of risk decreased somewhat. At the same time, the risk-adjusted income also shrank with the RWA growing but operating income decreasing. Both these components had a negative impact on the ROE (see Chart 6).

Chart 6

DECOMPOSITION OF ROE

(contribution of factors; in percentage points)



	Profit margin		Risk-adjusted income		Risk level		Leverage
ROE =	Pre-tax profit / Operating income	x	Operating income / Risk-weighted assets	x	Risk-weighted assets / Assets	x	Assets / Capital and reserves

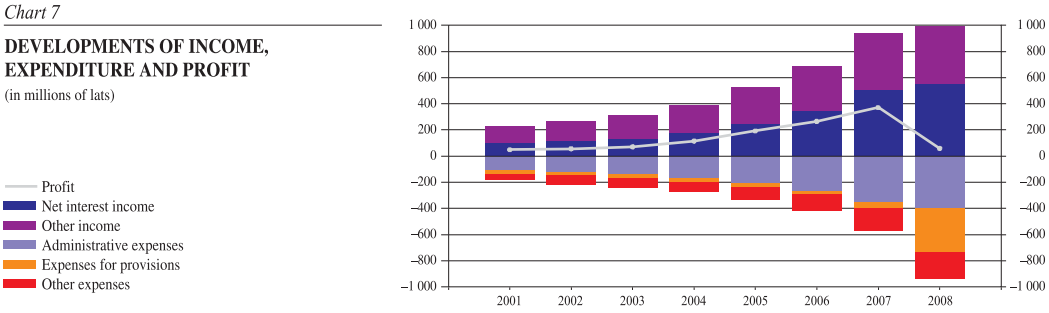
The cost-efficiency of the banking sector also deteriorated, as the cost-to-income ratio[7] increased to 51.7% {45.5%}.

Income increased at a more moderate pace than expenditure thus contributing to the shrinking profit. Although this trend continued for the third year running, a record high level of profit was recorded in the previous years when the growth rate of expenditure merely slightly exceeded that of income. However, in 2008 the difference in the growth rate expanded more thus reducing profit. In 2008, expenditure increased mostly on account of the rapid rise in expenditure on provisions for doubtful debts and liabilities (see Chart 7). Overall, during the year 336.4 million lats were directed to bank expenditure on provisions for doubtful debts and liabilities (out of which more than a half were used in December). The share of this item in expenditure also continued to expand even exceeding the amount of interest expenditure on non-MFI deposits at the end of the year. Expenditure on provisions for doubtful debts and liabilities of subsidiaries of bank groups of EU15 countries was relatively lower than that of other banks due to a better quality of the loan portfolio. Thus the share of expenditure on provisions for doubtful debts and liabilities of subsidiaries of bank groups of EU15 countries accounted for 16% of the total expenditure in comparison with other banks (21%). Expenditure of banks other than subsidiaries of bank groups of EU15 countries increased also on account of losses from the financial instrument revaluation.

[7] The cost-to-income ratio has been calculated based on the ECB methodology: (administtrative costs + intangible and fixed asset depreciation and disposal) / (net interest income + income from dividends + net commissions and fees + profit/loss from trades of financial instruments + financial instrument revaluation result + net ordinary expenditure + adjustment for impairment of available-for-sale financial assets) x 100.

Chart 7

DEVELOPMENTS OF INCOME, EXPENDITURE AND PROFIT
(in millions of lats)

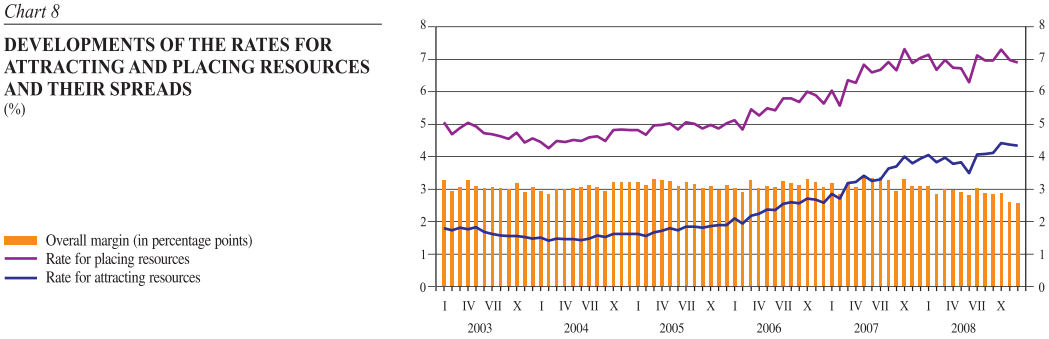


Interest income (the share of which in total income increased to 76%) remained the main source of banks' income. The annual increase of interest income amounted to 24%. As interest expenditure grew at a more rapid rate (36%), the net interest income increased merely by 9%. Although interest expenditure increased rather rapidly, its share in total expenditure decreased to 48% {52%}.

Interest expenditure mostly increased on account of a more rapid increase in the cost of financing with the common rate for attracting resources[8] growing faster than the rate for placing resources[9]. The spread between the rate for attracting deposits paid by banks for their liabilities to other MFIs and the received non-MFI deposits, and the rate for placing resources banks set for loans issued by non-MFIs and their claims on MFIs, declined to 2.6 percentage points in December resulting in the decrease in the total profit margin (see Chart 8).

Chart 8

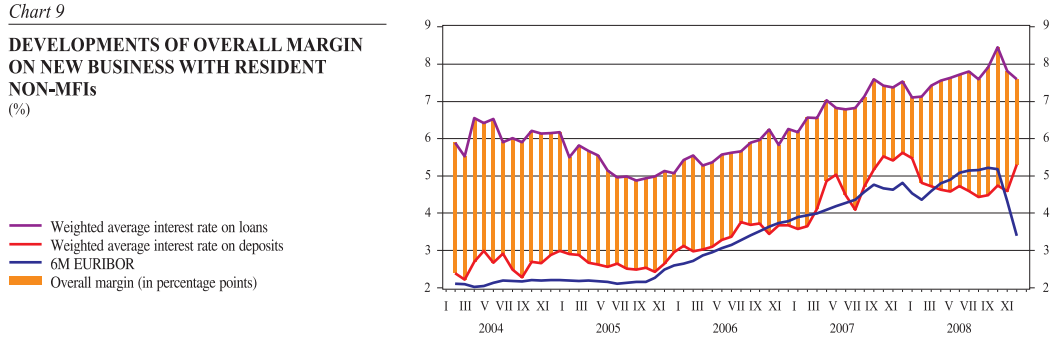
DEVELOPMENTS OF THE RATES FOR ATTRACTING AND PLACING RESOURCES AND THEIR SPREADS
(%)



In 2008, the overall margin[10] on new business with resident non-MFIs averaged 2.9 percentage points that is similar to the 2004 year level, only with higher interest rates (see Chart 9). The interest rates on loans and deposits set by banks, their spread and deviation from the money market trends at the end of the year reflected both the growing necessity of ensuring additional funding by way of attracting deposits and the incorporation of the growing risks into the loan premium.

Chart 9

DEVELOPMENTS OF OVERALL MARGIN ON NEW BUSINESS WITH RESIDENT NON-MFIs
(%)



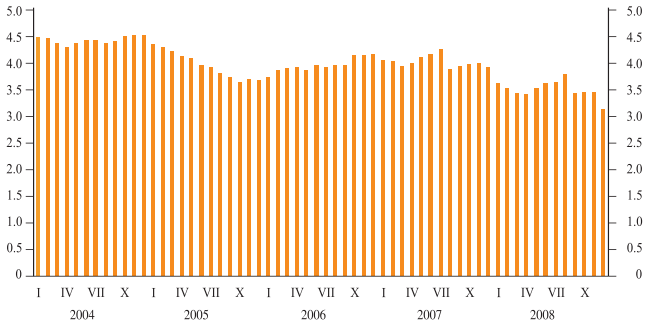
Note: Interest rates on new loans granted and deposits attracted by resident non-MFIs.

[8] The rate for attracting resources has been calculated as ratio of the interest expenditure paid for the liabilities to MFIs and non-MFI deposits to these liabilities and deposits.
[9] The rate for placing deposits has been calculated as ratio of the interest expenditure received for the liabilities to MFIs and loans to non-MFIs to these liabilities and loans.
[10] Overall margin has been calculated by subtracting the weighted average deposit rate from the weighted average lending rate of the respective month (in all currencies).

The low bank margins on loans granted in 2005–2007, the decrease in the euro money market interest rates at the end of the year and higher interest rates on deposits contributed to the narrowing of the overall margin on business with non-MFIs outstanding as it reached the lowest level since 2004 at the end of the year (see Chart 10).

Chart 10

DEVELOPMENTS OF OVERALL MARGIN ON BUSINESS WITH NON-MFIs OUTSTANDING
(%)



Note: Interest rates on loans granted and deposits attracted by resident non-MFIs.

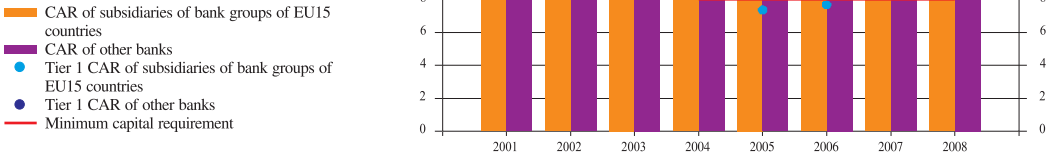
2.2 Capital Adequacy

In 2008, the capital adequacy of banks improved.

The CAR of banks amounted to 11.8% {11.1%} at the end of 2008. Bank own funds amounted to 1 787.3 million lats at the end of 2008, whereas the RWA – 15.1 million lats. Tier 1 CAR amounted to 10.5% at the end of the year. For 12 banks, the CAR increased during the year, but for eight banks – decreased. Unlike the previous years, in 2008 the CAR and tier 1 CAR were higher for subsidiaries of bank groups of EU15 countries (see Chart 11), and it was mainly on account of the incorporation of the record high audited profit gained in 2007 into own funds and the decrease in the RWA with the risk weights of the mortgage-backed credits (with a low LTV) deteriorating as stipulated by the new Regulation for Calculating the CAR[11].

Chart 11

CAR DEVELOPMENTS
(%)



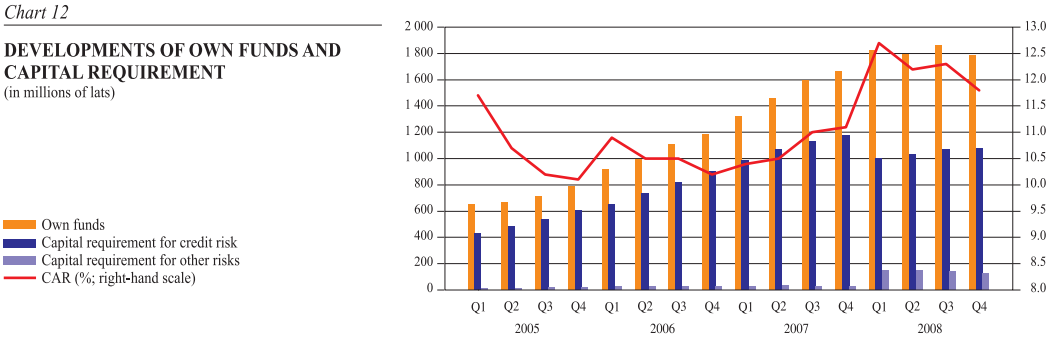
Methodological changes in the calculation of the CAR are related to both calculating own funds and specifying the capital requirement for different types of risks. Some banks use the most complicated internal rating based methods for calculating the CAR which lead to a more accurate risk measurement.

The capital requirement for a credit risk exposure still constitutes the most important part of the capital requirement, as its share in total capital requirement accounts for 90%. However, in 2008 the part of the credit risk for other risks that anew incorporates the capital requirement for operational risk increased (see Chart 12).

[11] The FCMC "Regulation for Calculating the Minimum Capital Requirement".

Chart 12

DEVELOPMENTS OF OWN FUNDS AND CAPITAL REQUIREMENT
(in millions of lats)



Box 3. Amendments to laws and regulations to ensure the financial stability and strengthen the supervision process

The current developments in the global and European markets show how important it is to strengthen and improve the supervision process of the financial sector. Two main instruments that would help to maintain the financial stability in the light of the economic downturn at the disposal of supervisory authorities and banks are capital and provisions for doubtful debts.

*The FCMC has prepared and adopted the **"Regulation for Developing the Capital Adequacy Assessment Process"** on 20 March 2009 (in effect as of 25 March 2009) aimed at providing guidelines for developing the capital adequacy process for banks. The Regulation has been prepared in compliance with the principles for developing the capital adequacy assessment process contained in the respective Directives of the European Parliament and of the Council and in the recommendations of the Basel Committee on Banking Supervision and of the European Committee on Banking Supervision and taking into account the experience of supervisory authorities of other countries in imposing the respective regulatory requirements and operational specifics of Latvia's banks.*

The aim of the capital adequacy assessment process is to ensure that the bank's capital in terms of the amount, elements and their share is sufficient to cover the risks inherent in the bank's current and planned business and the potential risks. The capital adequacy assessment process comprises the establishing of the capital amount necessary to cover the material risks inherent in the bank's current and planned business, capital planning and constant maintaining of the capital amount sufficient to cover the risks. The Regulation lays down the general principles for developing the capital adequacy assessment process, as well as establishes the minimum requirements for the assessment of the frequency, responsibility of the bank's Council and Board in the capital adequacy assessment process and requirements for documenting the capital adequacy assessment process, reviewing on a regular basis and internal auditing. The Regulation specifies methods that can be used by the bank for establishing the capital amount necessary to cover risks and capital reserve and describes simplified methods that, taking into account the principle of proportionality, can be used by small banks for these purposes.

*The **"Regulation for Assessing the Quality of Assets and Provision-Making"** adopted by the FCMC on 25 March 2009 (in effect as of 28 March 2009) that lays down guidelines for assessing the quality of loans and developing the provision-making methodology and describes the supervisory authority's approach to the assessment of the quality of the bank's loan and the provision-making process is also an important instrument for strengthening the supervision process.*

The "Regulation for Assessing the Quality of Assets and Provision-Making" stipulates that the bank recognises loan impairment losses and makes provisions in the financial statements in compliance with the IAS. When assessing the sufficiency of the provision made for envisaged losses, the bank also takes into account considerations that materially affect the quality of its loan portfolio but which are not taken into account in compliance with the IAS. A positive difference between the amount of expected losses and the provisions made in compliance with the IAS requirements is reported as a decrease in own funds in the calculation of own funds pursuant to binding regulation for meeting the capital requirements. This Regulation is binding to banks registered in the Republic of Latvia, investment brokerage companies and investment management companies which are subject to the requirements regulating the capital adequacy.

The following amendments to laws have also been made to enhance the supervision process.

*The amendments are made to the **Credit Institution Law** thus improving the supervision of credit institutions and additionally entitling the FCMC to act not only in cases when a credit institution has financial difficulties but also in cases when problems can be reasonably projected.*

*The law **"On the Financial and Capital Market Commission"** stipulates that the FCMC has exclusive right to take decisions on the restriction of rights, commitments and actions of the market participants.*

*The **Civil Procedure Law** states a shorter deadline for reviewing insolvency and liquidation cases.*

3. BANK CREDIT RISK

3.1 Financial Vulnerability of Bank Customers

With investment growth rate moderating, the indebtedness of non-financial corporations stabilised at all-time high. Given the cost increase and the weakening consumer purchasing power, the profitability of non-financial corporations dropped rapidly, thus only adding to their financial vulnerability. Several sectors of national economy even operated at a loss in the fourth quarter.

A pronounced economic downturn in 2008, declining domestic and external demand and cost increases resulted in a decrease of profit margins for non-financial corporations. The narrowing down of attractive investment opportunities and the tightening of lending standards by banks prompted by the credit risk assessment of non-financial corporations notably tempered the growth of non-financial corporations' debt obligations. The conditions for growth of non-financial corporations developed into far from favourable, while, for many non-financial corporations the unprecedented scope of downturn made it hard to reap the expected returns from investment made during the economic growth cycle.

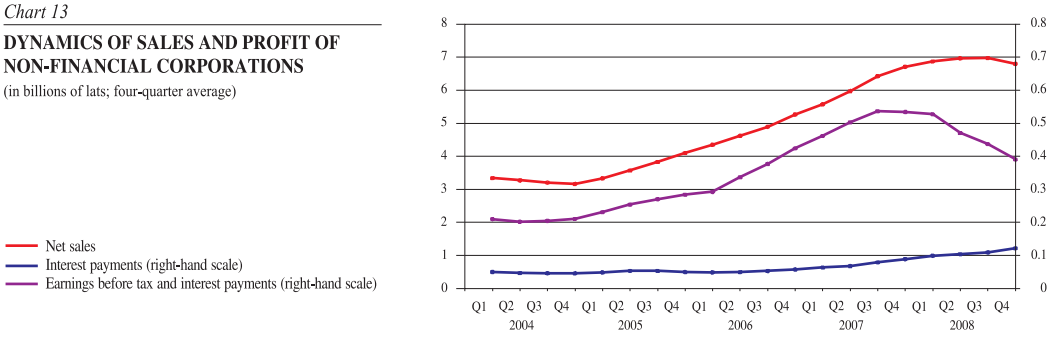
A further downslide of economic growth, contraction of profit margins and spreading of potential losses to balance sheets at a time when banks are increasing their lending margins and the availability of funding is becoming limited are likely to jeopardise non-financial corporations' debt refinancing and heighten default risk.

Notwithstanding the escalated annual inflation rate, according to preliminary quarterly data in 2008 the turnover of non-financial corporations was only somewhat higher than in the previous year, while profitability was much lower than in 2006 and 2007. With the stock of debt running high and lending standards tightening, the amount paid as interest continued to go up fast (see Chart 13)[12]. In the third quarter, these developments resulted in a sharp decrease of interest rate coverage (see Chart 14), while in the fourth quarter some sectors even had negative operating result after interest.

Chart 13

DYNAMICS OF SALES AND PROFIT OF NON-FINANCIAL CORPORATIONS

(in billions of lats; four-quarter average)



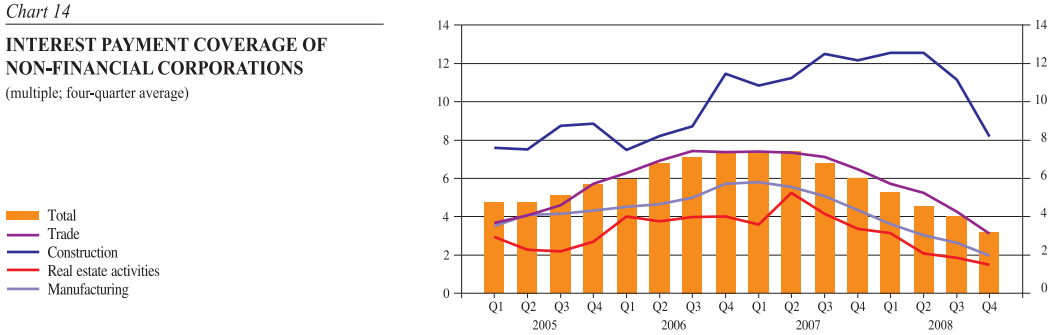
Liquidity risk arising from low interest rate coverage is dramatic, because in most sectors long-term default risks are high as well. Though the share of debt financing grew slower and the growth of investment by non-financial corporations moderated, nevertheless the debt reached its historical high.

[12] Source: CSB. Financial results of business activities.

Chart 14

INTEREST PAYMENT COVERAGE OF NON-FINANCIAL CORPORATIONS

(multiple; four-quarter average)

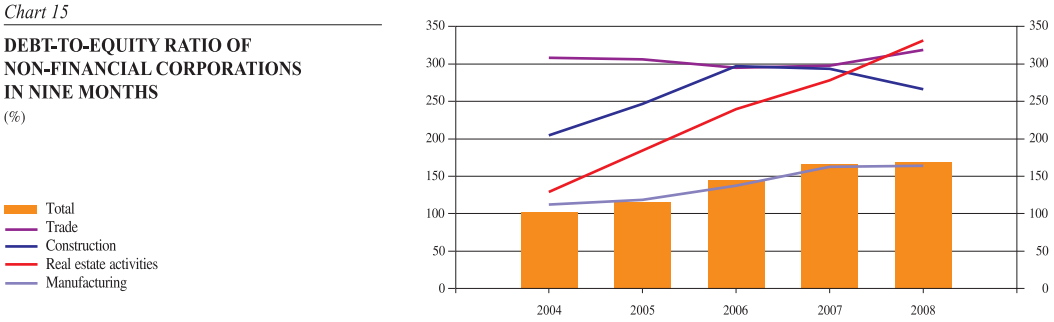


Business activities contracted and debt level stabilised: in manufacturing total debt even decreased in the third quarter, while in construction the availability of funds generated internally considerably reduced indebtedness in the sector. As to real estate activities, debt service capacity continued to deteriorate due to shortage of internally generated funds (see Chart 15)[13].

Chart 15

DEBT-TO-EQUITY RATIO OF NON-FINANCIAL CORPORATIONS IN NINE MONTHS

(%)

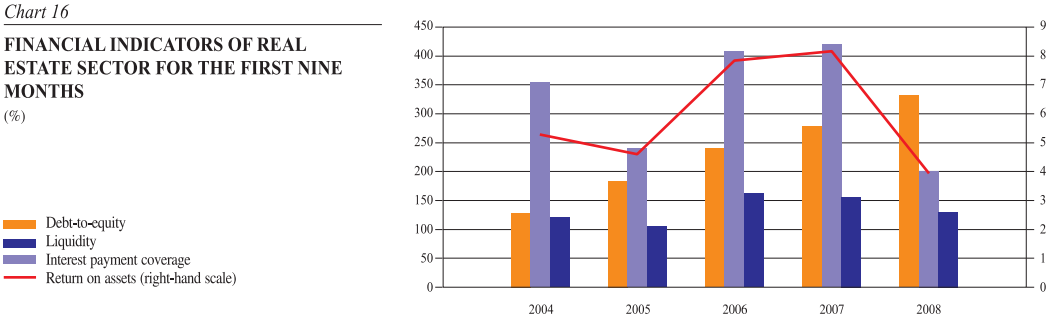


As to real estate activities, total equity even shrank in the third quarter. With debt-to-equity ratio reaching its all-time high and return on assets simultaneously going down, insolvency risk aggravated (see Chart 16)[13].

Chart 16

FINANCIAL INDICATORS OF REAL ESTATE SECTOR FOR THE FIRST NINE MONTHS

(%)



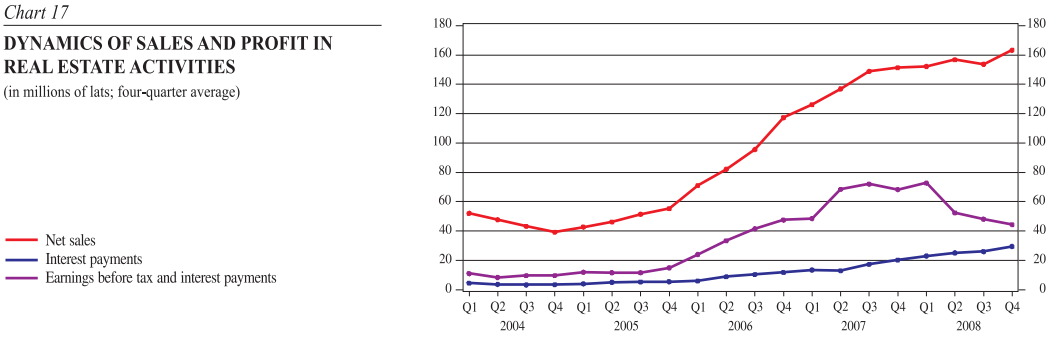
Subsiding activities in the real estate market, combined with price correction, had an adverse effect on the sector's profitability and interest rate coverage (see Chart 17)[13]. Compared to the previous year, profits had dropped dramatically and in the fourth quarter were sufficient to cover merely 42% of the interest rate payment pertaining to the current period, thus resulting in a negative operational result after interest for the sector's non-financial corporations. Insolvency risk mounted high for real estate developers who had just finished the construction projects or had them in the final phase. These were the developers who had to handle the exorbitant construction prices that continued to surge also in 2008, though at a slower pace, therefore there was little room left for price discounts in a market situation when demand continued on its downward path.

[13] Source: CSB. Financial results of business activities.

Chart 17

DYNAMICS OF SALES AND PROFIT IN REAL ESTATE ACTIVITIES

(in millions of lats; four-quarter average)



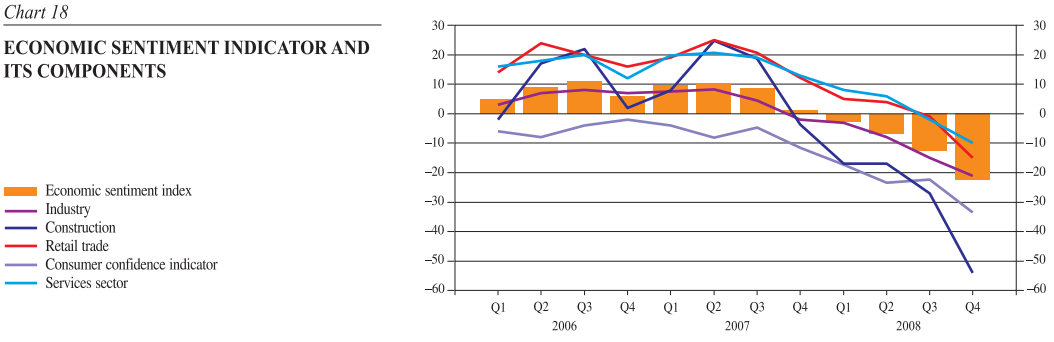
A 30% increase in the number of insolvency applications registered with the Commercial Register of the Register of Enterprises of the Republic of Latvia is evidence to the weakening of the financial position of non-financial corporations. Moreover, the profile of the initiators of insolvency process has changed over 2008: the share of applications filed by creditors went up notably, suggesting that insolvency process has been initiated against companies in active business – contrary to previous years when majority of applications came from the State Revenue Service in order to strike off dormant businesses. The number of newly registered non-financial corporations declined for the first time since 2002. According to the calculations by LURSOFT (Database of the Republic of Latvia Register of Enterprises), in 2008 the number of newly registered corporates posted a 20.1% year-on-year decline.

In 2008, the economic sentiment indicator plummeted. It was affected by the negative results both of business surveys in all sectors and consumer surveys. The considerable decline of the business confidence indicator was the result of the pessimistic perception of businesses as to the economic outlook, namely, a decline in production capacity utilisation, number of employed and orders, including for export, as well as some loss of competitiveness within the EU and outside. As to the manufacturing industry, in 2008 the insufficient demand turned out to be the main constraint for production. The number of respondents mentioning financial difficulties as an important factor went up. The above mentioned factors have fully replaced the shortage of labour force which was mentioned as the dominant factor in the previous year.

Construction experienced the fastest decline of confidence indicator, since, similar to manufacturing, the insufficient demand was mentioned as the main constraint. Confidence indicators turned negative for retail trade and services sectors, too (see Chart 18)[14].

Chart 18

ECONOMIC SENTIMENT INDICATOR AND ITS COMPONENTS



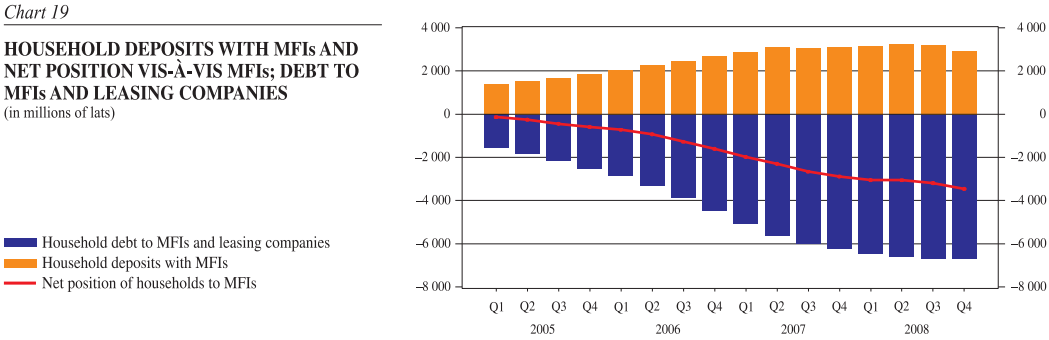
Though household debt has ceased to grow, the anticipated cut on wages and salaries both in the public and private sectors as well as a surge in housing-related costs point to an increasing financial vulnerability of households.

In 2008, total household debt[15] increased only somewhat and even decreased slightly in the fourth quarter. However, at the end of the year household savings decreased as well, therefore the negative net position[16] of households with regard to MFIs and leasing companies deteriorated further (see Chart 19) to stand at 21.3% of GDP at the end of 2008 (a 1.8 percentage point annual increase).

[14] Source: CSB. Business and consumer survey results.
[15] Household aggregated liabilities to banks, credit unions and leasing companies.
[16] Household debt to credit institutions and credit unions exceeded deposits.

Chart 19

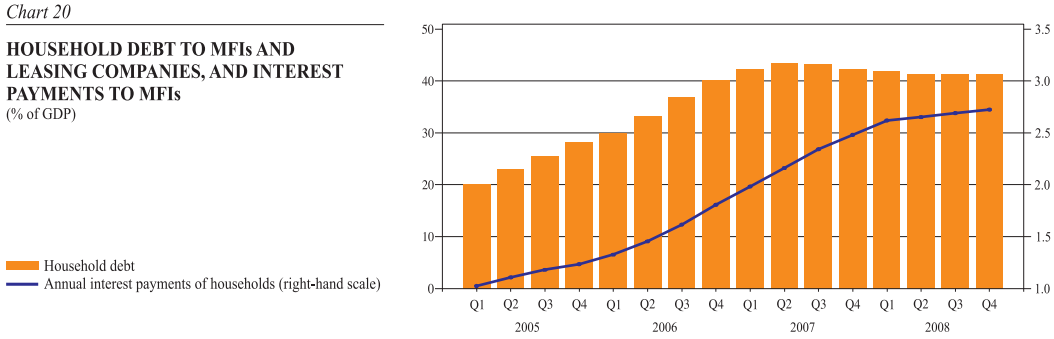
HOUSEHOLD DEPOSITS WITH MFIs AND NET POSITION VIS-À-VIS MFIs; DEBT TO MFIs AND LEASING COMPANIES
(in millions of lats)



The ratio of total household debt to MFIs and leasing companies to GDP decreased somewhat in the first half of 2008 (to 41.3%) and remained unchanged till the end of the year (see Chart 20). Despite the drastic decline of the ECB key interest rates at the end of the year, interest payments nevertheless continued to move up. In nominal terms, the increase was 20.7% year-on-year, the ratio to GDP to stand at 2.7%: however, the explanation is the lag when 3- and 6-month EURIBOR are used as base rates. Base rates are expected to go down in 2009, when total amount paid as interest is expected to decrease as well. The tightening of the lending policies practiced by banks might be a constraint to a decrease in interest payments because of higher banks' margins on new loans as well as on a part of delinquent loans where terms and conditions are being revised.

Chart 20

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



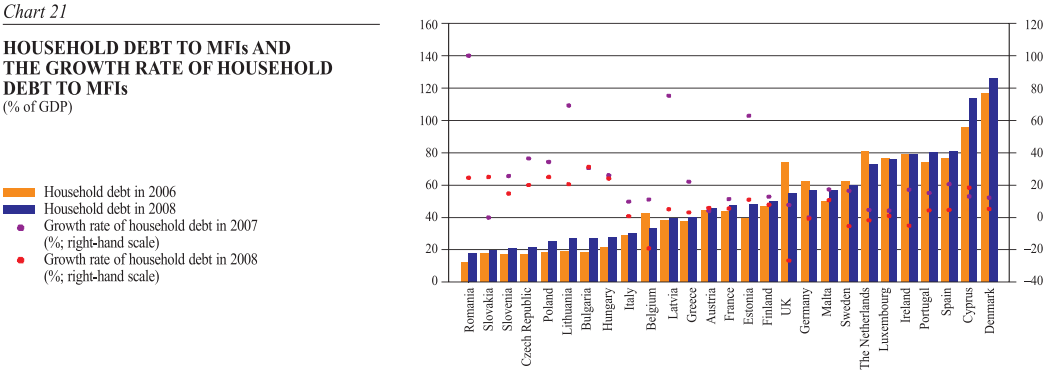
In 2008, household income continued to move up, too. An increase of gross wages and salaries by 9.6% is evidence to that, yet, a more pronounced rise of interest payments aggravated the financial vulnerability of households.

Bank loans for house purchase account for the largest part of household debt. At the end of 2008, the number of such loans reached 158.1 thousand, representing a 3.4% year-on-year increase. Despite a decline in real estate prices over the year, an average loan to a household for house purchase continued to increase and stood at 32.0 thousand lats (30.8 thousand lats at the end of 2007). The increase was on account of new loans granted for house purchase, with their average size being well above that of an identical loan already in the banks' loan portfolio. The trend changed rapidly at the end of the year when an average new loan granted for house purchase became smaller in size. This points to a probability that an average loan may also have decreased at the beginning of 2009.

The household debt-to-GDP ratio for Latvia is close to that of Greece and Austria. The ratio is somewhat higher for Estonia and considerably lower for Lithuania, albeit kept on increasing fast during 2008, though in most economies household debt increased at a very slow pace, or the growth rate was even negative (see Chart 21).

Chart 21

HOUSEHOLD DEBT TO MFIs AND THE GROWTH RATE OF HOUSEHOLD DEBT TO MFIs
(% of GDP)



Note: For some countries, the projected GDP for 2008 has been used in the debt ratio calculations.

Given the adverse developments in global financial markets late in 2008 and their impact on economic growth in Latvia, an increase in household income is not expected in a nearby future. Quite on the contrary, due to cuts in the public budget expenditure, including wages and salaries, and the anticipated cost optimisation in the private sector by reducing both wages and salaries as well as jobs, household income is likely to shrink whereas debt burden to go up. This may only add to the households' difficulties to service debt: it is evidenced by the rapidly growing payment delinquency at the end of 2008. The households who have borrowed money to buy either expensive real estate incommensurate with their income or for speculation now are in the most disadvantageous situation: as real estate prices plummeted, the chances to sell the property – even at the acquisition value (at the time when then the borrowing was made) – are visibly ebbing away. Considering the above mentioned, the overall financial vulnerability of households has aggravated, and the materialisation of credit risks is conditioned primarily by developments in employment.

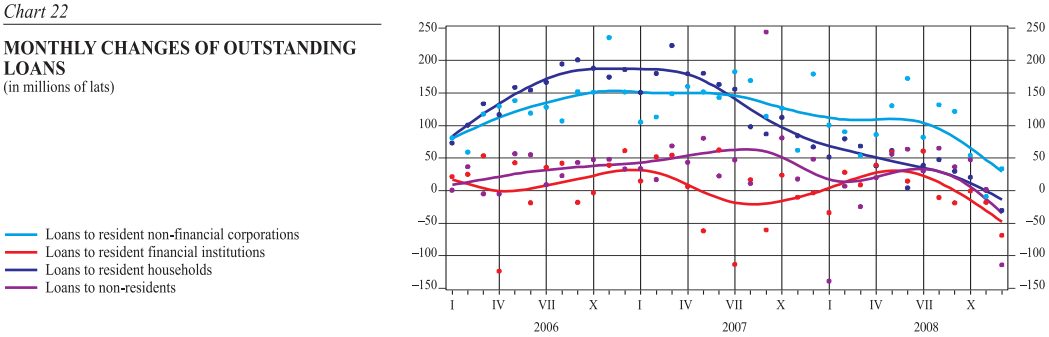
3.2 Banking Sector Loan Portfolio Shifts and Quality

At the end of 2008, prominent developments were observed in lending. In the fourth quarter, banks' aggregate loan portfolio decreased due to supply and demand factors. Given the deep recession of the national economy, the quality of banks' loan portfolio was seriously marred by delinquent payments as well as a rise in NPLs. In line with the real estate market corrections, banks became increasingly dependent on developments in this segment. A further rapid impairment of loan portfolio is anticipated.

Though the lending growth rate declined progressively over 2008, in absolute terms, the expansion of loan portfolio was nevertheless rather pronounced in the first three quarters. Banks' aggregate loan portfolio increased by 1 743 million lats {3 265 million lats} or 11.7%; of this, loans granted to resident non-MFIs went up 1 626 million lats {2 695 million lats} or 12.4%. The situation changed dramatically in the fourth quarter, with aggregate loan portfolio decreasing for the first time since 1999 (by 70.1 million lats or 0.4% quarter-on-quarter). Lending to financial institutions and non-residents dropped significantly – both in relative (by 8.8% and 3.4% respectively) and absolute (by 87 million lats and 64 million lats respectively) terms. Lending to non-financial corporations continued to grow albeit at an extremely slow pace, while lending to households contracted somewhat (see Chart 22).

Chart 22

MONTHLY CHANGES OF OUTSTANDING LOANS
(in millions of lats)

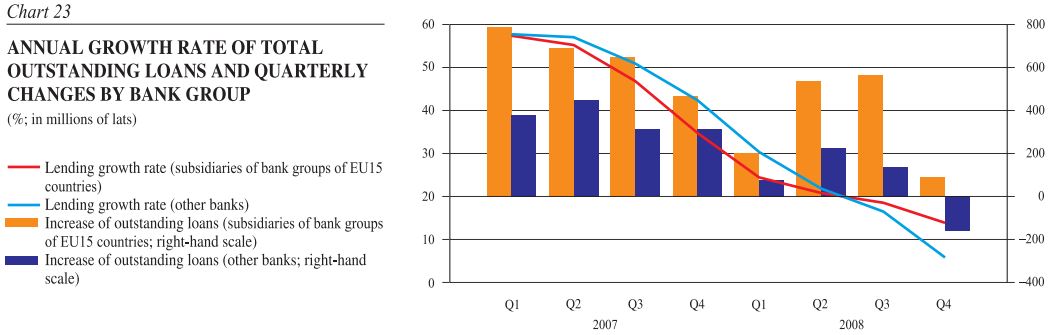


Though in 2008 lending growth rates continued to decline for all banks, the banks that are not subsidiaries of a bank group in EU15 countries experienced a faster drop. Already since early 2008 a much slower annual growth of loan portfolio was observed for these banks; in the fourth quarter, the growth was negative (see Chart 23). The banks that are part of bank groups in EU15 countries kept expanding their loan portfolios, albeit at a markedly slower rate in the last quarter of the year. The expansion was possible owing to a less expensive funding available from parent banks.

Chart 23

ANNUAL GROWTH RATE OF TOTAL OUTSTANDING LOANS AND QUARTERLY CHANGES BY BANK GROUP

(%; in millions of lats)



Banks' lending policies are the key factor determining loan supply. They became increasingly prudent on the background of developments in global financial markets that caused deterioration in availability of funding, a worsening financial position of potential borrowers and a more and more pessimistic economic outlook for Latvia. According to the Bank of Latvia bank lending survey, net tightening of lending conditions for potential borrowers was observed in 2008 (see Box 4).

Demand in loans decreased as a result of weakening external and domestic demand for goods and services, a low business and consumer confidence and growth of unemployment, having a negative impact both on business development and household purchasing power.

Box 4. Bank lending survey

In 2008, the Bank of Latvia continued conducting a survey on bank lending in order to compile information on the banking sector lending trends in 2008 and forecasts for the first half of 2009. Nine major banks took part in the survey covering the second half of 2008 (previously – 10 banks). Total amount of loans granted to resident non-financial corporations and households by those banks exceeded 85% of the overall Latvian banks' portfolio of the particular types of loans. Results of the survey broadly suggest that banks are for the most part shifting the focus from issuing new loans to servicing the existing loan portfolios and current customers as well as to risk management.

Lending standards

As in the previous survey, banks taking part in 2008 surveys have also indicated that lending standards on loans to non-financial corporations and households have been tightening in 2008 (see Chart 4.1).

Expectations regarding general economic activity, outlook for individual sectors or businesses and risk related to the underlying collateral were indicated by banks as the key factors driving the introduction of tighter lending standards to non-financial corporations. Availability of market resources and costs related to banks' capital position has also become a significant factor to an increasing number of banks (see Chart 4.2). Tighter lending standards to non-financial corporations were applied through increasing bank interest rate margins on both high risk transactions and regular loans.

Housing market outlook and economic activity expectations continued to be indicated as the key factors driving further review of standards applied to loans for house purchase, consumer credit and other loans to households. In the second half of the year banks referred to resource costs and balance sheet constraints as the key factor (see Chart 4.3). Tighter lending standards on loans for house purchase were applied through increasing bank interest rate margins, introducing stricter collateral requirements and raising commissions.

With regard to lending standards in the first half of 2009, most banks have stated that slight further tightening of lending standards to both non-financial corporations and households is going to follow.

Chart 4.1a

CHANGES IN LENDING STANDARDS TO NON-FINANCIAL CORPORATIONS
(net percentage of banks reporting tightening of the lending standards)

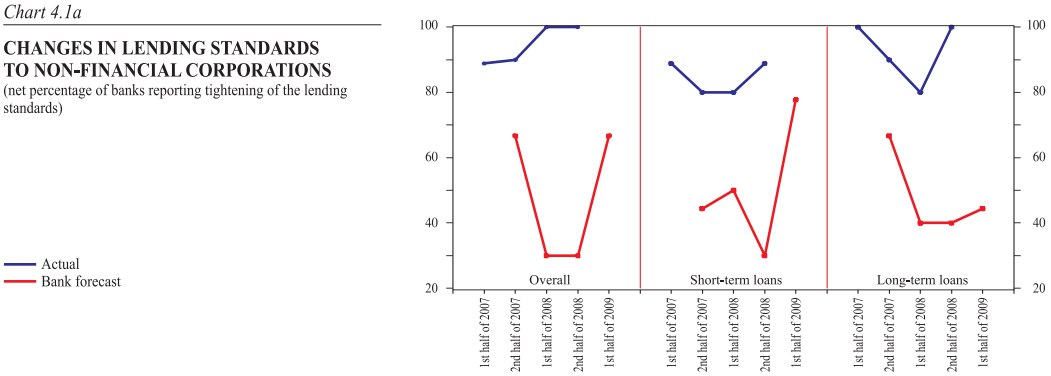


Chart 4.1b

CHANGES IN LENDING STANDARDS TO HOUSEHOLDS
(net percentage of banks reporting tightening of the lending standards)

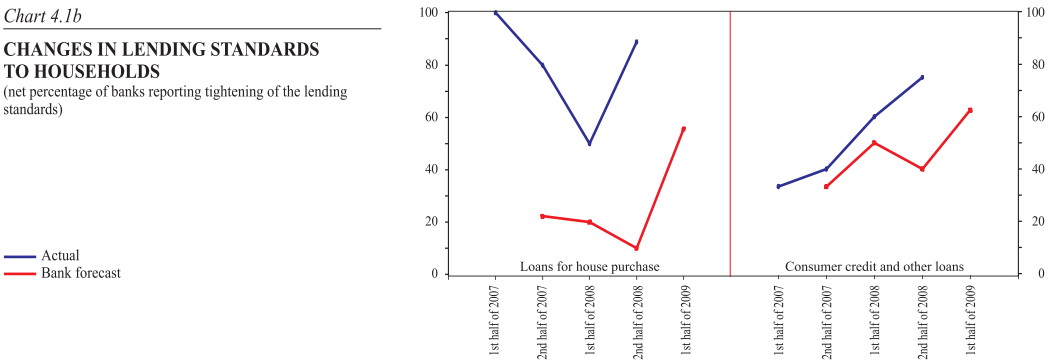
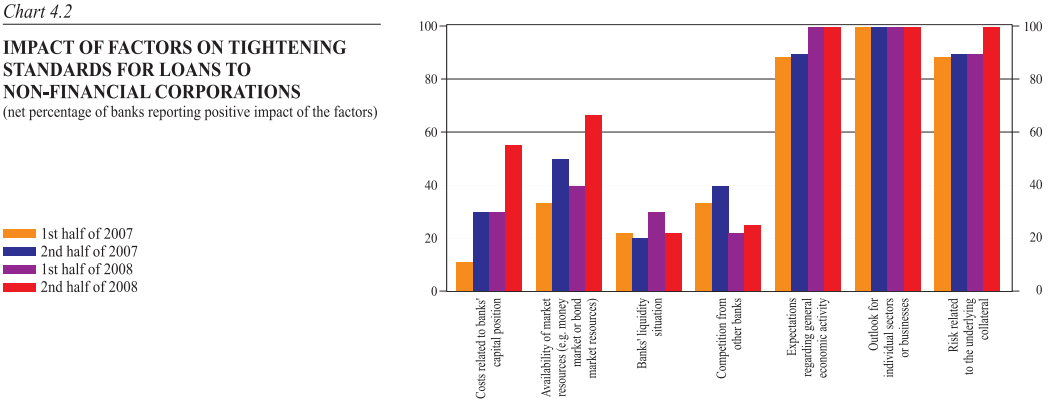


Chart 4.2

IMPACT OF FACTORS ON TIGHTENING STANDARDS FOR LOANS TO NON-FINANCIAL CORPORATIONS
(net percentage of banks reporting positive impact of the factors)



Demand for loans

In 2008, a number of banks indicated that non-financial corporations' demand for loans has decreased. Some banks, however, pointed out that the demand for short-term loans has increased in the second half of the year as corporations' internal resources have shrunk and a need arisen to restructure their debt. Moreover, bank forecasts for the first half of 2009 include a slight increase in the demand for short-term loans (see Chart 4.4).

All banks have stated that household demand for loans has decreased (with regard to loans for house purchase, all banks have stated that they have "decreased significantly"; see Chart 4.5). The decrease in demand for house purchase loans was driven by adverse housing market outlook, growing household consumption expenditure and shrinking savings. At the same time, lower household expenditure on durable goods continued to be stated as the key factor underlying the reduced demand for consumer credit. Most banks pointed out that a slight further reduction of household demand for loans is expected in the first half of 2009.

Chart 4.3a

IMPACT OF FACTORS ON TIGHTENING STANDARDS FOR LOANS TO HOUSEHOLDS
(net percentage of banks reporting positive impact of the factors on loans for house purchase)

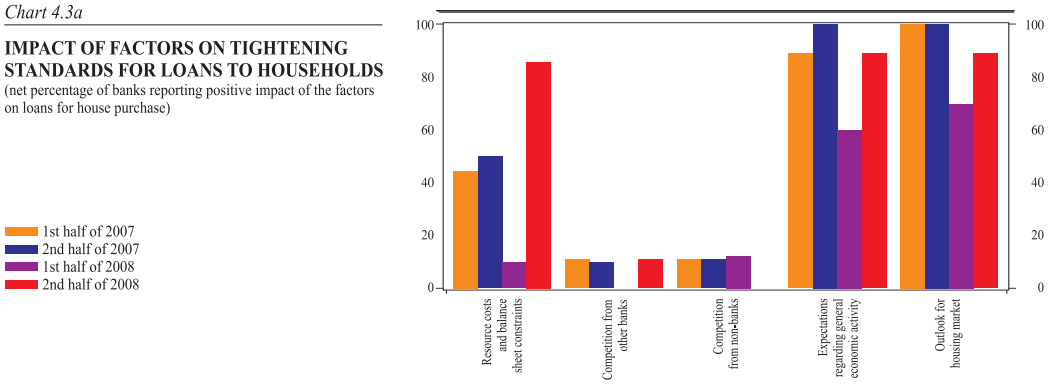


Chart 4.3b

IMPACT OF FACTORS ON TIGHTENING STANDARDS FOR LOANS TO HOUSEHOLDS
(net percentage of banks reporting positive impact of the factors on consumer credits and other loans)

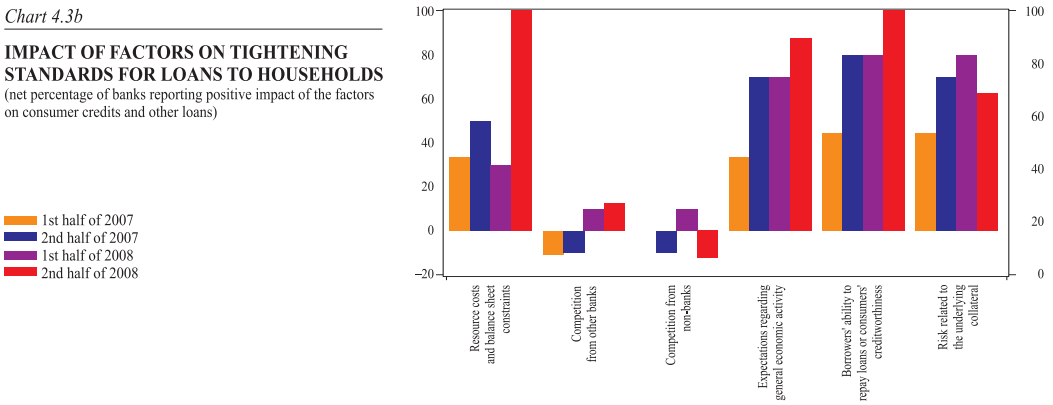


Chart 4.4

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

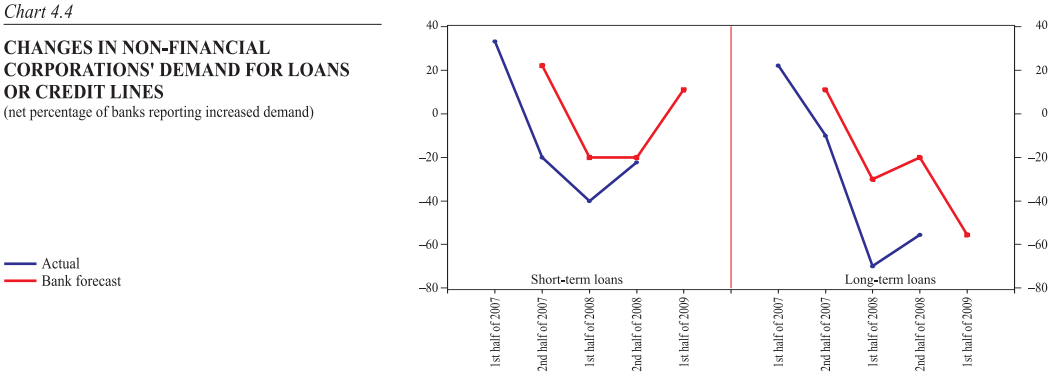
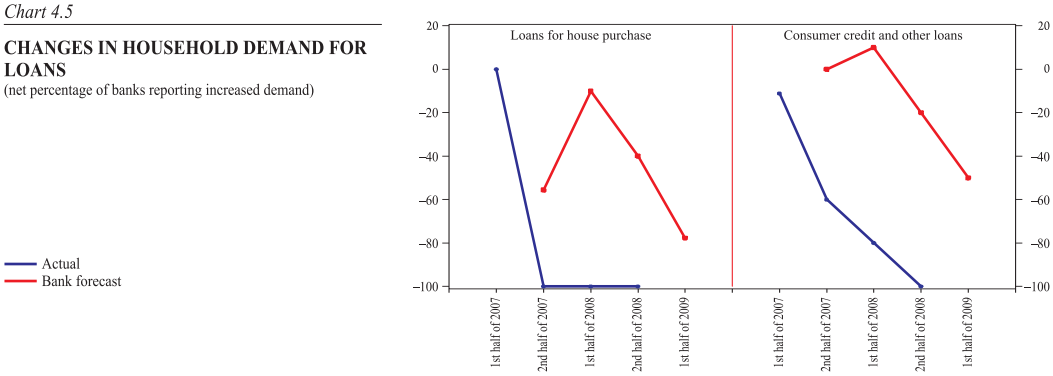


Chart 4.5

CHANGES IN HOUSEHOLD DEMAND FOR LOANS
(net percentage of banks reporting increased demand)



Borrowers' financial position

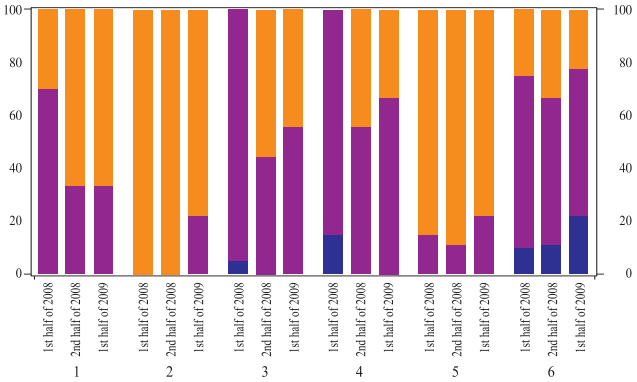
According to banks' replies, in 2008 the financial position of borrowers has deteriorated in all sectors of the national economy, in which a major part of their credit portfolios was concentrated. They are expecting further deterioration of financial indicators over the coming six months (see Chart 4.6).

Chart 4.6

BREAKDOWN OF REPLIES REGARDING ASSESSMENT OF CHANGES IN FINANCIAL POSITION OF HOUSEHOLDS AND COMPANIES IN INDIVIDUAL SECTORS
(%)

1 Households
2 Real estate activities
3 Manufacturing
4 Trade
5 Construction
6 Transport

Remained broadly unchanged/will remain broadly unchanged
Slightly deteriorated/will deteriorate
Considerably deteriorated/will deteriorate



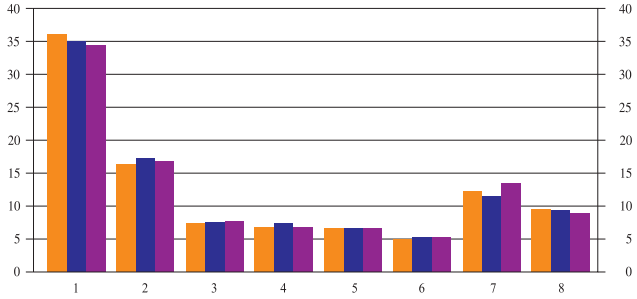
In 2008, the concentration of the banking sector loan portfolio in segments related to real estate (loans to households for house purchase, real estate activities, construction) decreased slightly following a protracted growth period (see Chart 24). Nevertheless it remains high and constitutes serious risks to banks, given the substantial drop of real estate prices and the marked deterioration of the borrowers' financial position.

Chart 24

STRUCTURE OF LOANS GRANTED TO RESIDENTS BY LENDING SEGMENT
(%)

1 Household loans for house purchase
2 Real estate activities
3 Manufacturing
4 Financial intermediation
5 Trade
6 Construction
7 Other sectors of economy
8 Other household loans

Share of segment at the end of 2007
Share of segment at the end of June 2008
Share of segment at the end of 2008

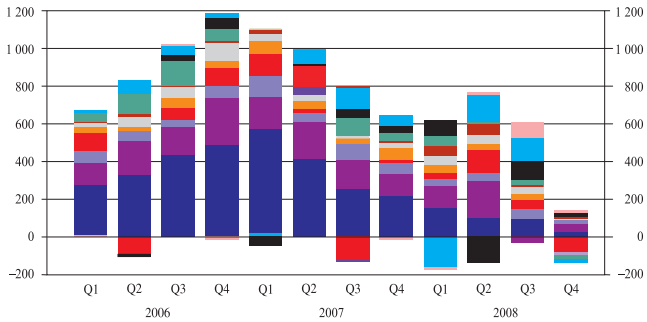


In the second half of the year, banks were much more restrained in lending to real estate developers. The third quarter was the first time after a protracted period of fast rise when loans outstanding to this sector contracted quarter-on-quarter; a small increase observed in the fourth quarter can be explained by loans granted for the finalisation of projects already in progress (see Chart 25).

Chart 25

QUARTERLY CHANGES OF RESIDENT LOAN PORTFOLIO BY MAJOR SEGMENTS
(in millions of lats)

Household loans for house purchase
Real estate activities
Manufacturing
Financial intermediation
Trade
Construction
Transport, storage and communication
Other household loans
Electricity, gas and water supply
Other non-financial corporation loans
Other loans



At the end of December, in 10 Latvian banks total outstanding loans for real estate operations, construction and household loans for house purchase represented over 30% of the banks' assets (see Chart 26). Moreover, the assets of those 10 banks constituted 65% {63%} of Latvia's banking sector assets (see Chart 27). Considering the ongoing sweeping corrections in the real estate market, the exposure of these banks to real estate market developments became more pronounced in 2008.

Chart 26

THE SHARE OF DOMESTIC LOANS GRANTED TO REAL ESTATE ACTIVITIES, CONSTRUCTION AND LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE IN BANK ASSETS
(number of banks)

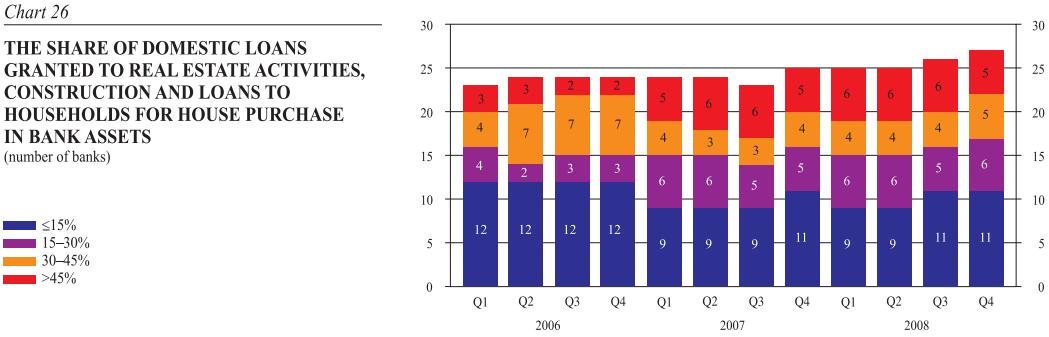
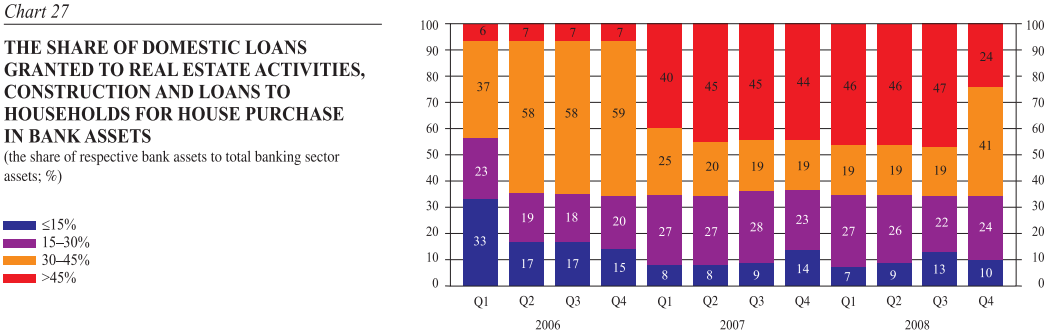


Chart 27

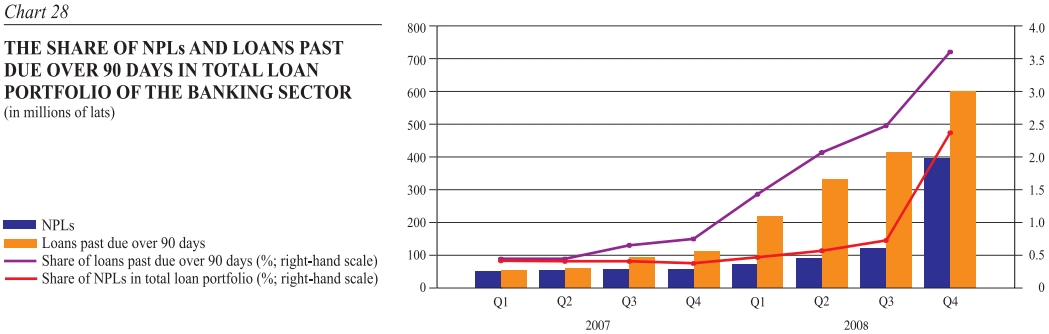
THE SHARE OF DOMESTIC LOANS GRANTED TO REAL ESTATE ACTIVITIES, CONSTRUCTION AND LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE IN BANK ASSETS
(the share of respective bank assets to total banking sector assets; %)



A visibly worse financial position of the borrowers was a constraint to their ability to honour obligations to banks on a timely basis, thus causing a considerable loss in the quality of banks' loan portfolios. Deterioration of loan quality reflects itself as an increase both in NPLs and delinquency. Loans past due over 90 days increased at a faster rate than NPLs (see Chart 28). The trend was typical for the first three quarters of 2008, when the NPLs and their share in the aggregate loan portfolio of the banking sector increased marginally. In the fourth quarter, NPLs increased rapidly, with their share in loan portfolio moving up from 0.7% to 2.4%. Loans past due over 90 days were growing fast all year long, and the trend gained momentum in the latter part of the year. Though at the end of 2008 loans past due over 90 days represented 3.6% of the banking sector loan portfolio, a further deterioration of the ratio can be expected. This is suggested by both an anticipated deepening of recession leading to a further aggravation of the financial position of borrowers and an extremely fast growth of loans past due between 31 and 90 days recorded in the fourth quarter.

Chart 28

THE SHARE OF NPLs AND LOANS PAST DUE OVER 90 DAYS IN TOTAL LOAN PORTFOLIO OF THE BANKING SECTOR
(in millions of lats)

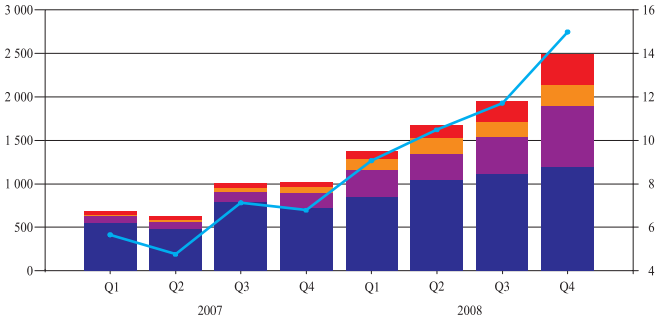


As to banks that are part of bank groups in EU15 countries, loan impairment was more moderate than for the rest of banks, with both categories nevertheless experiencing an acceleration of the tendency (see Chart 30).

Most of loans past due over 90 days concentrate in real estate-related segments and loans to households (see Chart 31). Loans for house purchase past due over 90 days stood at 239.3 million lats at the end of 2008, their number reaching 4.4 thousand or 2.8% of loans for house purchase. According to the Credit Register, the loans that were granted in the second half of 2006 and the first half of 2007 tend to be inferior as to quality. At the time when prices in real estate market hit all-time high, numerous large-size loans were granted for house purchase, and now regular payments constitute quite a problem for the borrowers (see Charts 32 and 33). With demand for apartments in new construction projects shrinking and prices falling, paying capacity in real estate activities weakened notably at the end of 2008, reflecting itself as a fast rise in

Chart 29

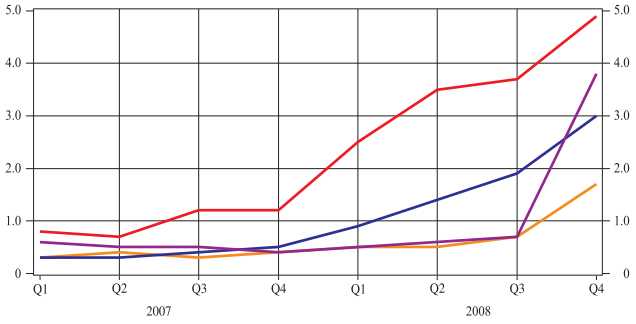
DELINQUENT LOANS AND THEIR SHARE IN TOTAL LOAN PORTFOLIO OF THE BANKING SECTOR
(in millions of lats)



Past due less than 30 days
Past due 31–90 days
Past due 91–180 days
Past due over 180 days
Share of delinquent loans in loan portfolio (%; right-hand scale)

Chart 30

THE SHARE OF NPLs AND LOANS PAST DUE OVER 90 DAYS IN TOTAL LOAN PORTFOLIO BY BANK GROUP
(% of the loan portfolio of the respective group)

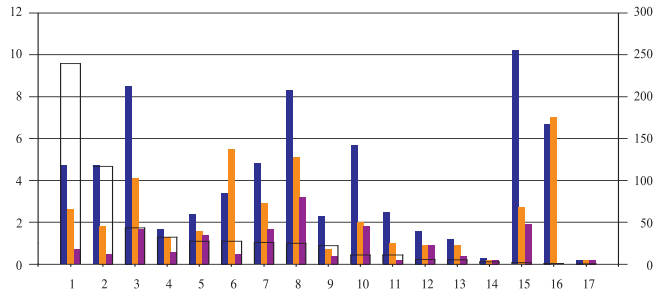


NPLs (subsidiaries of bank groups of EU15 countries)
Loans past due over 90 days (subsidiaries of bank groups of EU15 countries)
NPLs (other banks)
Loans past due over 90 days (other banks)

Chart 31

BREAKDOWN OF LOANS PAST DUE OVER 90 DAYS (OUTSTANDING AMOUNTS AND SHARE) BY MAJOR LENDING SEGMENT
(%)

1 Household loans for house purchase
2 Real estate, renting and business activities
3 Other loans to households
4 Loans to non-residents
5 Manufacturing
6 Construction
7 Household loans for purchase of consumer goods
8 Credit card and overdraft credit to households
9 Trade
10 Hotels and restaurants
11 Other sectors
12 Agriculture, hunting, and forestry
13 Transport, storage and communication
14 Financial intermediation
15 Mining and quarrying
16 Fishing
17 Electricity, gas and water supply



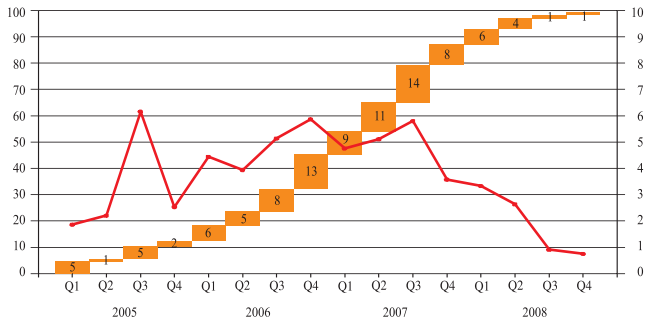
Q4 2008
Q2 2008
Q4 2007
Loans past due over 90 days (in millions of lats; right-hand scale)

delinquent payments. At the end of 2008, loans past due over 90 days represented up to 4.7% of all borrowings in the branch – up from the modest levels registered at the beginning of the year. It is expected that the most rapid increase in delinquency will be in segments related to real estate.

Nearly half (47%) of loans past due over 90 days were granted in the second half of 2006 and the first half of 2007 (see Chart 32) when real estate market was on the upswing. Loans granted in the second quarter of 2007 when the government anti-inflation plan for Latvia was not yet enforced to full extent and real estate prices were at their historical high represent the highest share in loans past due over 90 days.

Chart 32

LOANS PAST DUE OVER 90 DAYS BY TIME OF ISSUE; THEIR SHARE IN TOTAL LOANS GRANTED IN THE PERIOD
(in millions of lats)

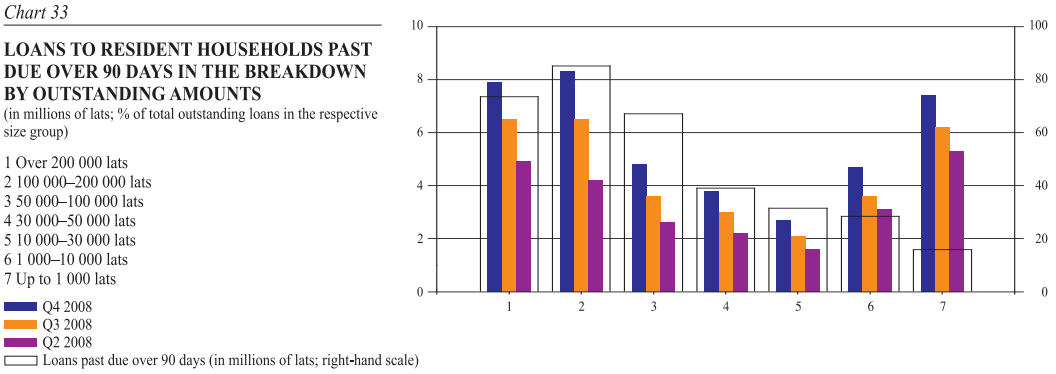


Share in all delinquent loans
Share in total loans granted in the period (%; right-hand scale)

The analysis of dependence of household loan quality on its size indicates that in the fourth quarter of 2008 the share of loans past due over 90 days increased for all size groups (see Chart 33). Large-size loans (over 100 000 lats) appear to be of the poorest quality, with loans past due over 90 days comprising 8%.

Chart 33

LOANS TO RESIDENT HOUSEHOLDS PAST DUE OVER 90 DAYS IN THE BREAKDOWN BY OUTSTANDING AMOUNTS
(in millions of lats; % of total outstanding loans in the respective size group)



The trend witnessed in 2008 when loans past due over 90 days surged much faster than NPLs imply a potential increase of expenses for provisions for loan impairment and charges as well as of losses, thus expected to dampen banks' profitability and melt away capital reserves.

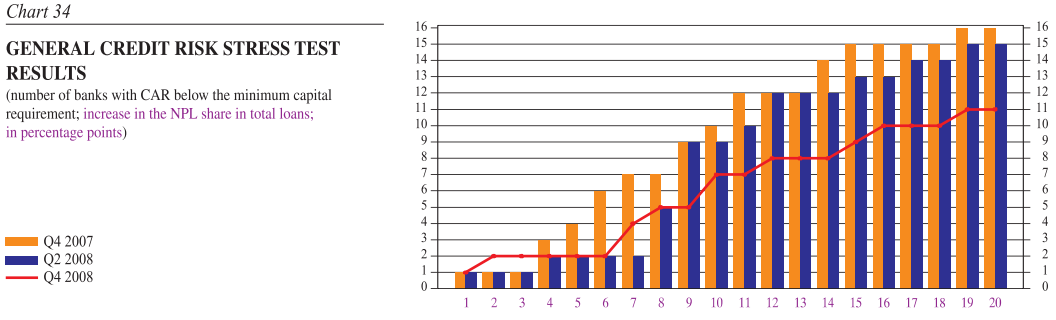
3.3 Credit Risk Shock-Absorption Capacity

In 2008, overall bank capacity to absorb credit risk shocks weakened somewhat, however, with banks being better capitalised, their sensitivity to higher credit risks in some sectors was less pronounced.

Credit risk stress test results[17] indicate that, year-on-year, the overall capacity of banks to absorb credit risk-generated shocks deteriorated at the end of 2008 (provided that the growth of the NPL share in aggregate bank loan portfolio does not exceed 3 percentage points; see Charts 34 and 35). With the share of NPLs increasing by 2–6 percentage points, two banks would fail to meet the minimum capital requirement. As to the rest of banks, a 6 percentage point increase in the share of NPLs in the loan portfolio would constitute no problem in meeting the minimum capital requirement. Taking into account that the share of NPLs in the total bank loan portfolio amounted to 2.4% at the end of 2008, it may be assumed that most of Latvian banks would have no serious problems with absorbing a potential credit risk increase resulting in the NPLs expanding 3.5 times. With a view of the tendency for NPLs to mount with an acceleration that emerged late in 2008 as well as a decrease in banks' profits, in 2009 the banking sector in Latvia is likely to face a further weakening of credit risk shock-absorption capacity.

Chart 34

GENERAL CREDIT RISK STRESS TEST RESULTS
(number of banks with CAR below the minimum capital requirement; increase in the NPL share in total loans; in percentage points)



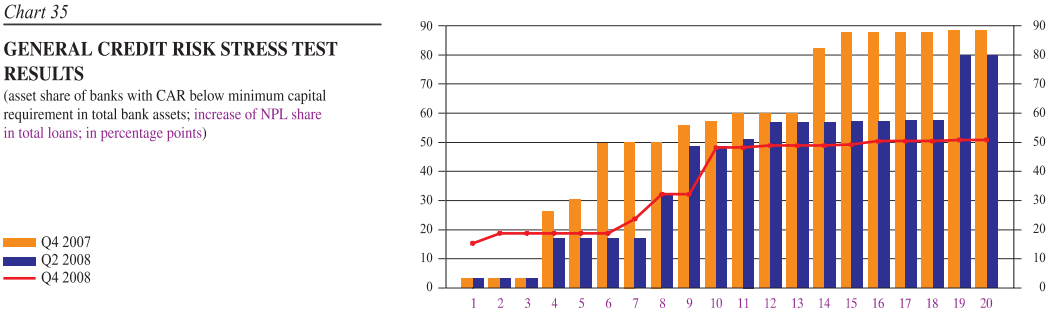
With the share of NPLs in aggregate banks' loan portfolio increasing by 8 percentage points (to 10.4%), five banks altogether representing 32.2% of total banking sector assets would fail to comply with the minimum

[17] Stress test results provide an indication of the scale of losses resulting from growing credit risk that banks would be able to absorb before their CAR falls below the minimum capital requirement. Bank losses within the meaning of the stress test are the need to accumulate additional provisions for NPLs (in compliance with the specific provision ratios established by the FCMC: 30% for substandard loans, 60% for doubtful loans and 100% for lost loans). The size of those provisions and, consequently, also the respective shares in total loans due not change as a result of rising credit risk. It is assumed that the bank profit for the reporting year is zero, and bank capital and risk weighted assets are reduced by the amount of required additional provisions. Calculations assume that the share of the three NPL categories (substandard, doubtful and lost loans) for each bank expands in proportion to the growth in NPLs simulated in the stress test.

Chart 35

GENERAL CREDIT RISK STRESS TEST RESULTS

(asset share of banks with CAR below minimum capital requirement in total bank assets; increase of NPL share in total loans; in percentage points)



capital requirement. To meet the requirement, these banks would have to increase their capital by 109.7 million lats. All in all, banks would need to channel 438.6 million lats towards provisions for doubtful debts and commitments.

Sectoral stress tests show that with the banks becoming better capitalised in 2008, bank sensitivity to domestic and real estate market shocks as well as to real estate market shocks affecting households alleviated (see Charts 36 and 37). Banks' sensitivity to potential external shock increased somewhat; as a result, at the end of 2008 two banks would have failed to meet the minimum capital requirement.

Chart 36

SECTORAL CREDIT RISK SHOCK STRESS TEST RESULTS

(number of banks with CAR below the minimum capital requirement)

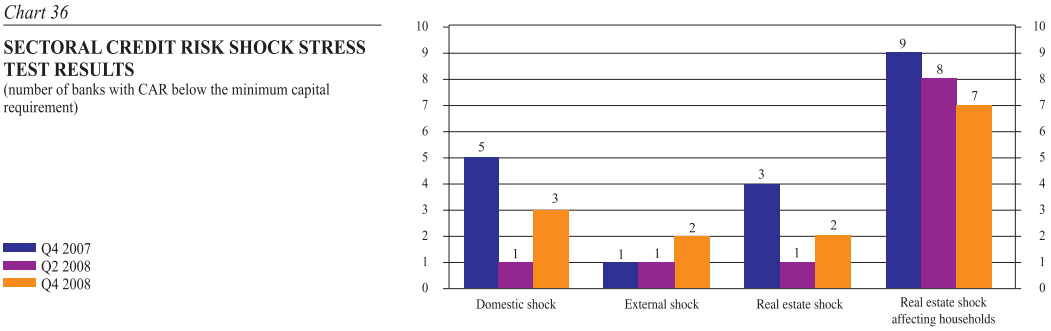


Chart 37

SECTORAL CREDIT RISK SHOCK STRESS TEST RESULTS

(asset share of banks with CAR below the minimum capital requirement in total bank assets; %)

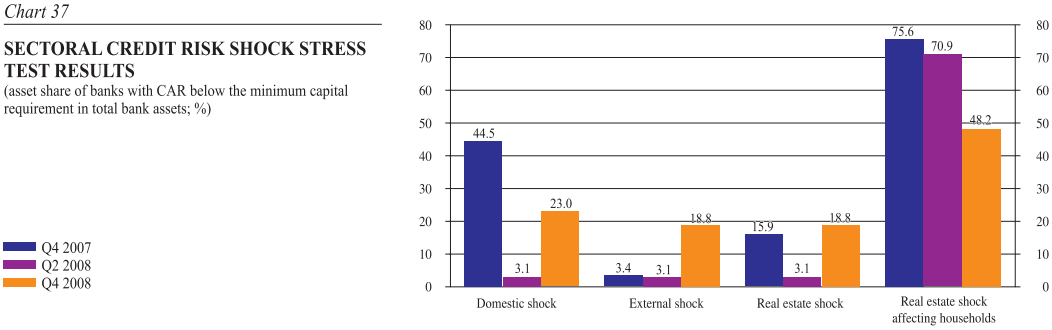


Table 1

SECTORAL CREDIT RISK SHOCKS USED IN STRESS TESTS AND THEIR PARAMETERS

Types of shock	Shock parameters
Domestic shock	20%[1] of loans to the major domestic market oriented sectors (construction, trade, real estate activities) become NPLs.
External shock	20% of loans to the major foreign market oriented sectors (manufacturing and transport, storage and communication) become NPLs.
Real estate shock	20% of loans to real estate activities become NPLs.
Real estate shock affecting households	20% of loans to real estate activities and household loans for house households purchase become NPLs.

[1] This and the other shock parameters are based on the assumption that a 20 percentage point rise in the NPL share is made up of the three NPL categories (substandard, doubtful and lost loans) in equal proportions.

The ratio of losses resulting from potential sectoral credit risk shocks to bank assets at the end of 2008 would not have exceeded 3.7% (see Chart 38). Year-on-year, the potential maximum amount of extra capital needed to meet the minimum capital requirement was smaller (see Chart 39).

Chart 38

SECTORAL CREDIT RISK SHOCK STRESS TEST RESULTS
(total bank losses; % of bank assets)

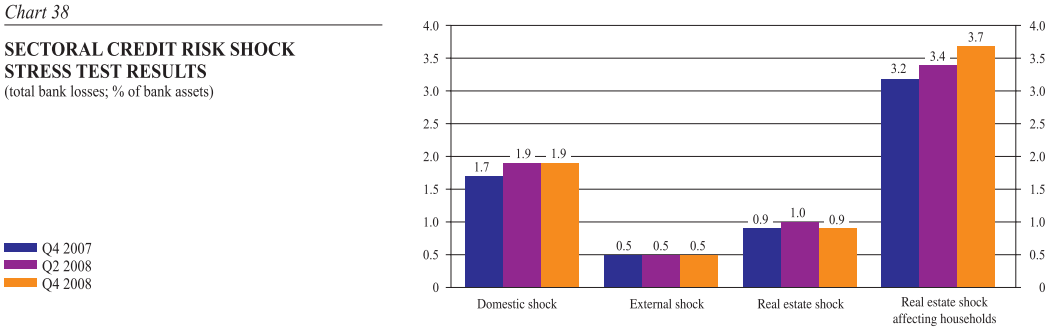
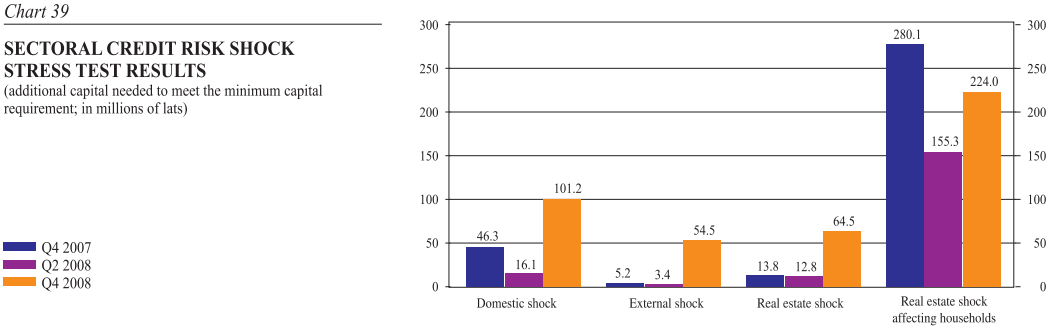


Chart 39

SECTORAL CREDIT RISK SHOCK STRESS TEST RESULTS
(additional capital needed to meet the minimum capital requirement; in millions of lats)



4. BANK LIQUIDITY AND MARKET RISKS

4.1 Liquidity Risk

With instability and tense liquidity conditions in the global financial markets persisting, deposits declining and the macroeconomic situation in Latvia deteriorating, bank liquidity risk increased, particularly in the short term.

In 2008, as the global financial turmoil continued to evolve, growing into a global financial crisis in September, the funding liquidity risk continued to increase also in Latvia. This issue became particularly topical in the fourth quarter when the global financial crisis and severe macroeconomic situation caused deposit outflow in several Latvian banks. In February 2009, Standard & Poor's and Fitch Ratings downgraded the sovereign rating assigned to Latvia from BBB– to BB+ with a negative outlook, which is a rating below investment grade. The downgrading accelerated tightening of financing conditions, having the most pronounced effect on banks borrowing in the market. In such environment, refinancing of the outstanding loans and availability of new funds become problematic. Nevertheless, the liquidity of Latvian banks to a large extent depends on the financing provided by the banks of Nordic countries to their subsidiaries and branches, and these banks have publicly confirmed their readiness to continue their operation actively in the Baltic market.

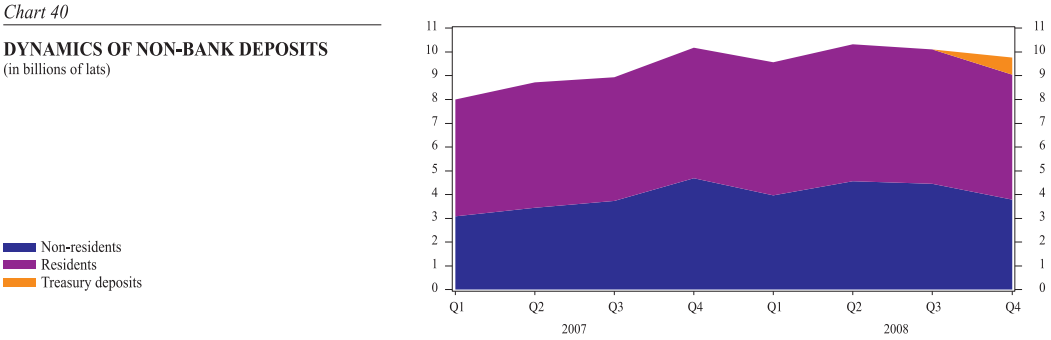
At the end of 2008, bank liquidity conditions were impaired by the deposit outflows, driven by the rapidly increasing uncertainty regarding Latvia's future economic growth, lower income growth of depositors, scarcer availability of funds for financing businesses and transfer of the accumulated provisions to loan repayment in the circumstances of deteriorating cash flows of borrowers. However, the impact of the deposit outflows on the bank liquidity conditions at the end of the year was partly lifted by the resolution of the Council of the Bank of Latvia on the reduction of the reserve ratio.

Overall, in 2008 deposits held by the banking sector shrank by 419.1 million lats (including an increase of 479.2 million lats in resident deposits and a decrease of 898.3 million lats in non-resident deposits in comparison with 2007), standing at 9 760.0 million lats at the end of the year. Deposits attracted in the first three quarters of 2008 fell by 70.8 million lats on account of a 234.4 million lats outflow of non-resident

deposits. In the fourth quarter, with the global financial crisis expanding rapidly in Europe and the uncertainty of the outlook for the domestic economic development increasing, deposit outflows from banks in the amount of 15.8% of non-resident deposits and 6.6% of resident deposits were observed (excluding deposits of the Treasury of the Republic of Latvia with the JSC "Parex banka"). The deposit outflow was offset by the funds deposited by the Treasury of the Republic of Latvia with the JSC "Parex banka", therefore the total amount of resident deposits even posted an increase (5.8%; see Chart 40).

Chart 40

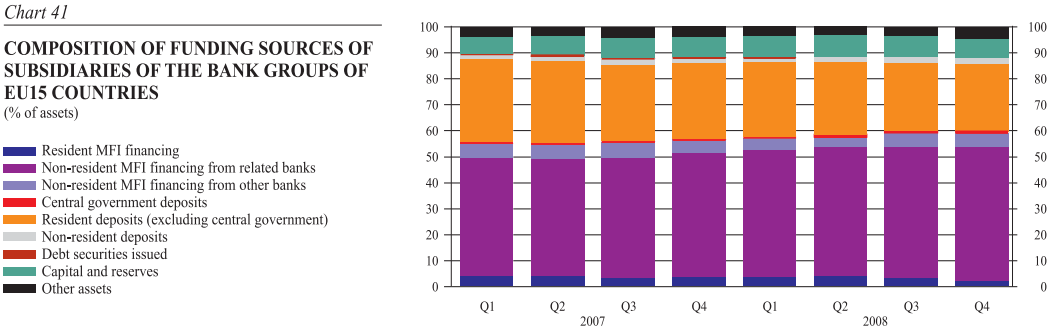
DYNAMICS OF NON-BANK DEPOSITS
(in billions of lats)



In 2008, financing for subsidiaries of bank groups of EU15 countries was mostly provided by their parent banks who continued to finance their subsidiaries and branches, with the MFI funding growing by 1 129.1 million lats in 2008 (including an increase of 223.6 million lats in the fourth quarter). Deposits of non-MFIs remained broadly unchanged (see Chart 41).

Chart 41

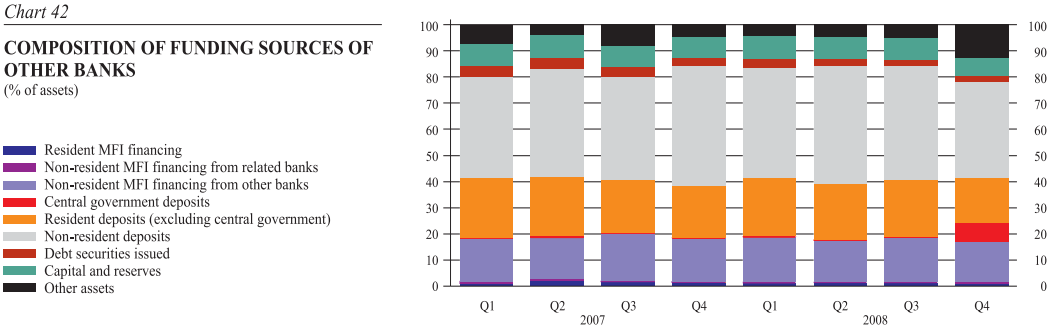
COMPOSITION OF FUNDING SOURCES OF SUBSIDIARIES OF THE BANK GROUPS OF EU15 COUNTRIES
(% of assets)



The composition of the funding sources used by other banks was dominated by non-resident deposits (see Chart 42): they shrank by 899.7 million lats over the year (including a drop of 651.2 million lats in the fourth quarter). The deposit of funds by the Treasury of the Republic of Latvia with the JSC "Parex banka" also modified the resident deposit structure. In 2008, MFI funding decreased by 166.9 million lats, partly as a result of repayment of syndicated loans.

Chart 42

COMPOSITION OF FUNDING SOURCES OF OTHER BANKS
(% of assets)

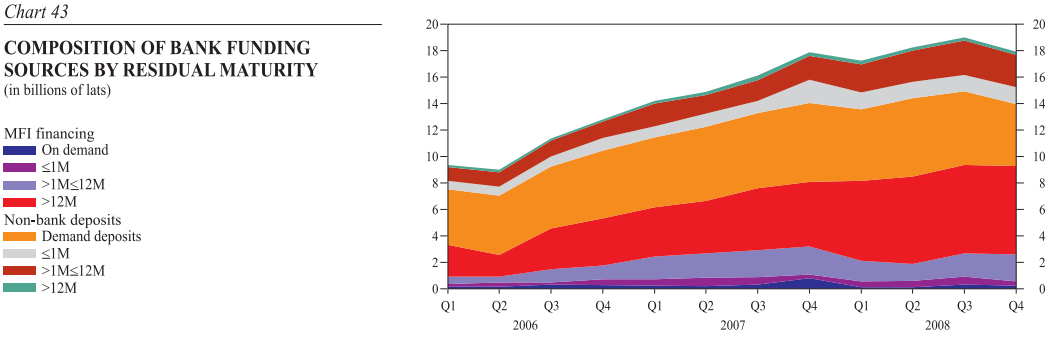


The sensitivity of the Latvian banking sector to the funding received from foreign credit institutions will continue to increase, particularly of the domestic banks who obtain their funding in the markets. Tense liquidity conditions and heightened risk perception by investors with respect to investment in emerging economies reduces the possibility for banks to refinance syndicated loans in 2009. Hence, several banks had to accumulate funds for repaying their loans, thus ceasing or limiting their lending activities.

Liquidity risk was considerably reduced by long-term funding from foreign MFIs (81.1% of total MFI financing or one third of all liabilities). For the most part, these funds have been received from parent banks and were used for financing loans granted to residents (see Chart 43).

Chart 43

COMPOSITION OF BANK FUNDING SOURCES BY RESIDUAL MATURITY
(in billions of lats)



Note: Both financing on demand and financing with residual maturity of one day.

Despite deposit outflow in the fourth quarter of 2008, the liquidity ratio[18] defined by the FCMC remained high, standing at 52.8% at the end of the year, only somewhat lower than at the end of 2007 (55.7%; see Chart 44). The comparison of liquidity ratios of the subsidiaries of bank groups of EU15 countries and other banks shows that in the previous years their levels differed notably as the business models of the two bank groups were different: the subsidiaries of the bank groups of EU15 countries allocated more funding for long-term lending. Nevertheless, in the fourth quarter the levels of the liquidity ratios of both bank groups grew more similar (see Chart 45), as the subsidiaries of the bank groups of EU15 countries started to accumulate larger liquidity reserves. The previous level of the liquidity ratio was retained due to loan portfolio reductions in almost all banks and a possibility to transfer the funds repaid by borrowers for maintaining liquidity and fulfilling liabilities, as well as an increase in MFI financing in some banks.

Chart 44

DISPERSION OF LIQUIDITY RATIO (DEFINED BY FCMC)

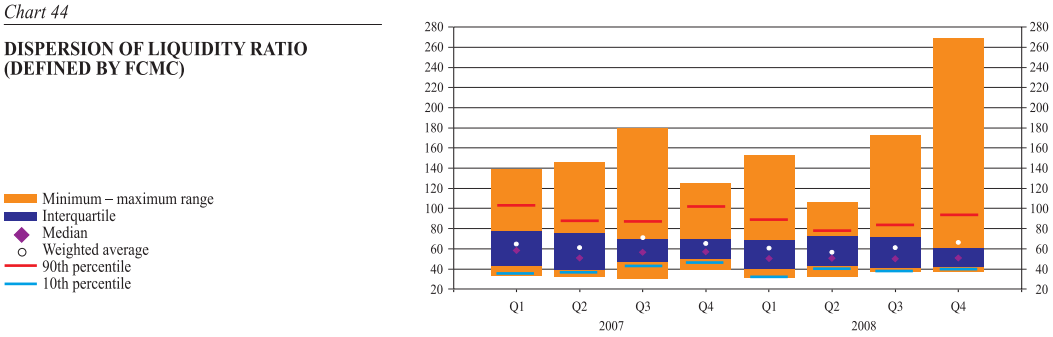
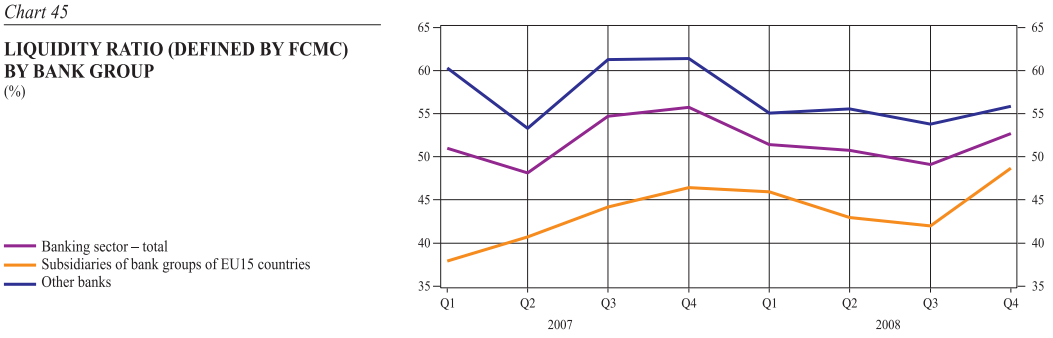


Chart 45

LIQUIDITY RATIO (DEFINED BY FCMC) BY BANK GROUP
(%)



The Bank of Latvia conducts liquidity stress tests with the purpose of obtaining a more accurate assessment of the effect of the outflows of financing on the banking sector capability to fulfil its liabilities. The results of the liquidity stress tests indicate the tolerance of the banks to the outflows of non-resident non-MFIs'

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

deposits and total (MFI and non-MFI) financing with the residual maturity of up to three months before their liquidity ratios reaching 0.

The first stress test scenario suggests the share of non-resident deposits that may flow out without causing liquidity deficit to banks, on the condition that banks do not borrow additional funds to offset the deposit outflows. According to the stress test results, all banks would be able to fulfil their liabilities, should non-resident non-MFI deposit outflows occur in the amount of 30% (see Charts 46 and 47). Should outflows of all non-resident non-MFI deposits occur, 11 Latvian banks, with 36% of total bank assets in Latvia, would default on their short-term liabilities and become illiquid.

Chart 46

LIQUIDITY STRESS TEST RESULTS IN CASE OF OUTFLOWS OF NON-RESIDENT DEPOSITS
(number of banks)

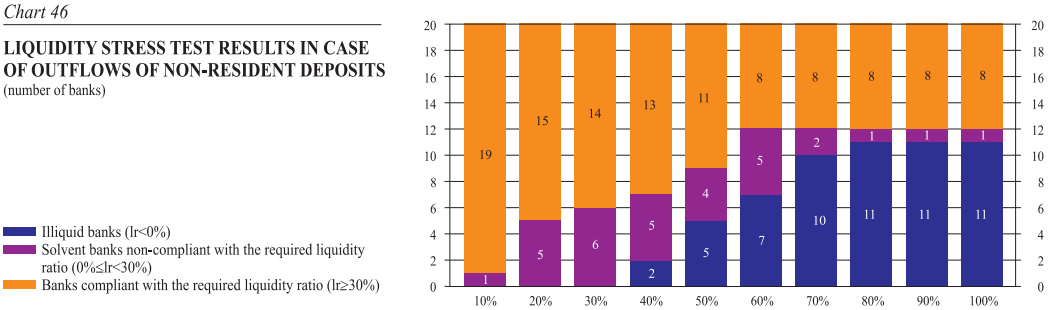
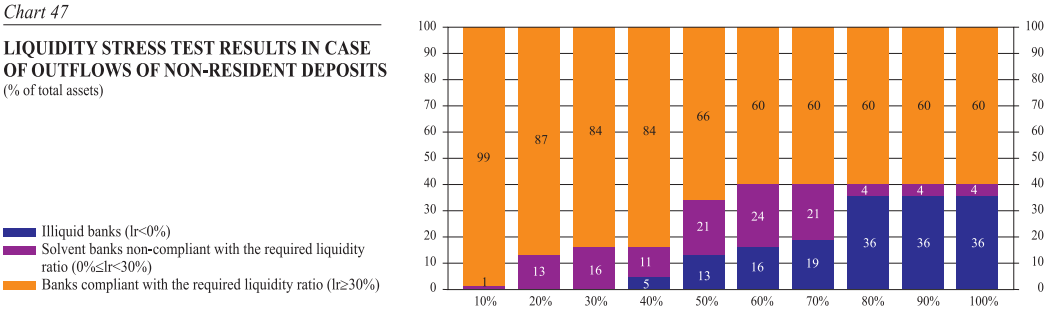


Chart 47

LIQUIDITY STRESS TEST RESULTS IN CASE OF OUTFLOWS OF NON-RESIDENT DEPOSITS
(% of total assets)



The second stress test scenario assumes an outflow of all financing with a maturity of up to three months (both deposits and MFI financing). Also in this case it is evident that banks could survive the outflow of financing at least in the amount of 30% (see Charts 48 and 49). In the event of a 50% bank asset outflow, 10 banks comprising 44.7% of total Latvian banking sector assets would need additional funds in the amount of up to 2% of the Latvian banking sector assets to restore positive liquid assets.

Chart 48

LIQUIDITY STRESS TEST RESULTS IN CASE OF OUTFLOWS OF FINANCING WITH MATURITY OF UP TO 3 MONTHS
(number of banks)

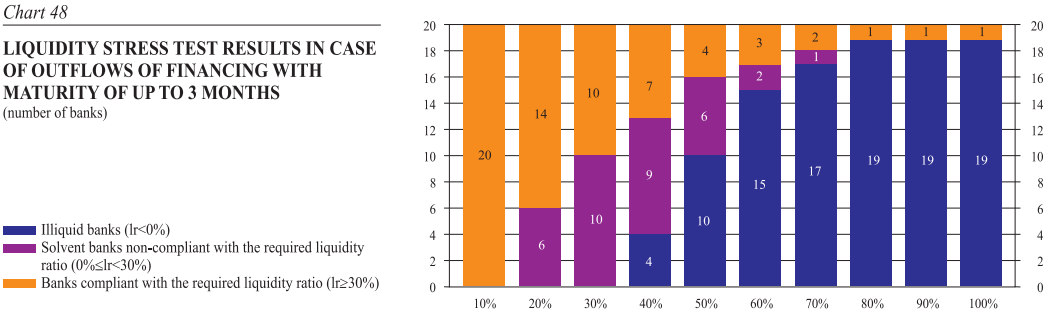
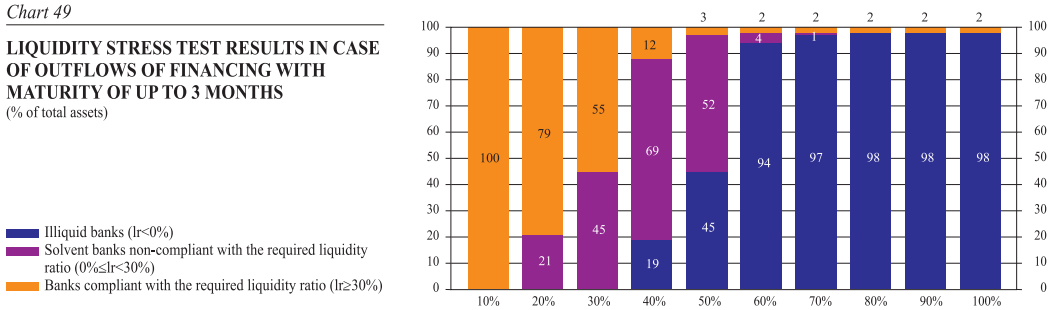


Chart 49

LIQUIDITY STRESS TEST RESULTS IN CASE OF OUTFLOWS OF FINANCING WITH MATURITY OF UP TO 3 MONTHS
(% of total assets)



Liquidity stress test results suggest that the outflow of non-resident deposits would affect the banks with no access to funding from their parent banks. The outflow of financing with a maturity of up to three months would affect banks of both categories; however, those with scarcer possibilities to borrow extra funding would incur higher risk.

4.2 Foreign Exchange Risk

In 2008, the exposure of banks to direct foreign exchange risk remained low.

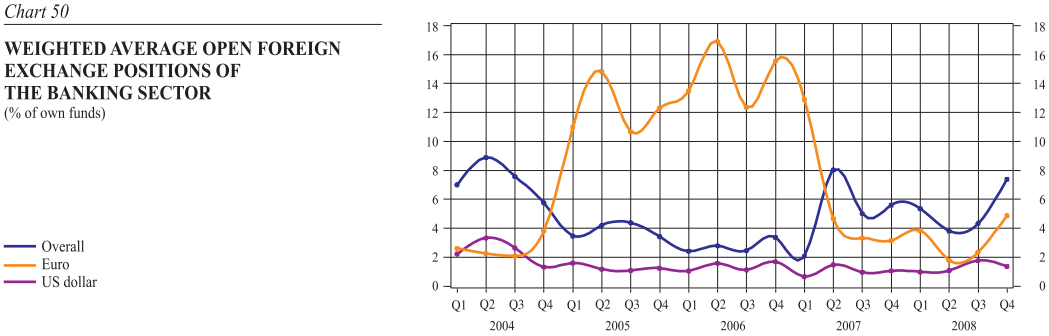
In 2008, considerable volatility of the exchange rate of the US dollar was observed in the foreign exchange market: the moderate depreciation in the first part of the year was followed by an accelerated appreciation in autumn when the global financial market turmoil was under way. Nevertheless, the exposure of the Latvian banks to direct foreign exchange risk remained limited, as the banks had been maintaining their open foreign exchange positions generally low both for the US dollar and other currencies also in 2008.

Already since early 2007, the weighted average open euro position of the banking sector has decreased notably as a result of reverting to the threshold of 10% relative to a bank's own funds for net open position in euro in May 2007[19], cancelled earlier in 2005. In 2008, the increase in the banks' open euro position was relatively small (from 3.2% relative to own funds of the banking sector at the beginning of the year to 4.9% at the end of the year). As to the US dollar, the rise in its weighted average open position of the banking sector during 2008 was even smaller (from 1.1% to 1.4%; see Chart 48).

In 2008, the overall net open foreign exchange position of the banking sector fluctuated within the range of 3.8%–7.4% relative to own funds of the banking sector (see Chart 50). The increase in the overall net foreign exchange position in the second part of 2008 was mostly on account of a rise in the euro open position, with the banks accumulating additional provisions for doubtful debts, revaluating the financial instruments held by them and due to a relatively high degree of volatility in the open positions of the US dollar and some other currencies in several banks.

Chart 50

WEIGHTED AVERAGE OPEN FOREIGN EXCHANGE POSITIONS OF THE BANKING SECTOR
(% of own funds)



Note: Calculations use the absolute values of the open foreign exchange positions. Open foreign exchange positions of individual banks are own funds-weighted. Between 1 January 2005 and May 2007, the open foreign exchange positions of the euro were excluded form the calculations of the overall open foreign exchange position due to the lats peg to the euro.

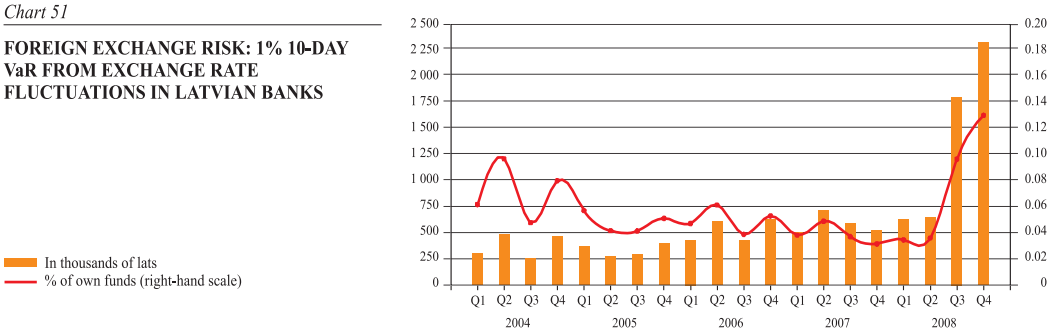
VaR[20] results also suggest that overall, despite the periodic rise in volatility in the foreign exchange market and an increase in the overall net foreign exchange position at the end of the year, exposure to direct foreign exchange risk of the banks remained low in 2008 (see Chart 51)[21]. Until the third quarter of 2008, VaR of the banking sector, as percentage of the banks' own funds, had fluctuated within the range of 0.03%–0.06% for a prolonged period of time. The rise in the value of the VaR in the second half of 2008 mostly resulted from fluctuations of the open positions of the US dollar and some other currencies in several banks.

Given the above changes in the foreign exchange market, banks' sensitivity to the US dollar exchange rate

[19] FCMC, 26 April 2007, Regulation No. 57 "Amendments to the Regulation for Calculating Capital Adequacy".
[20] VaR reflects the maximum expected losses over a certain period of time with a given probability. 1% 10 day VaR from exchange rate fluctuations means that within the next 10 days there is only a 1% probability that losses from exchange rate fluctuations will exceed the VaR. In this report, VaR was obtained based on open currency positions of individual banks at the end of each quarter. Calculations use the historical daily exchange rate changes within one year prior to the VaR evaluation date (last day of the relevant month). Since repegging the lats to the euro, VaR calculations no longer include the euro component.
[21] One should keep in mind that VaR for the Latvian banking sector is the aggregate of VaRs of individual banks. The actual aggregate VaR for the banking sector is somewhat lower, because of the lack of full positive correlation between VaRs of individual banks.

Chart 51

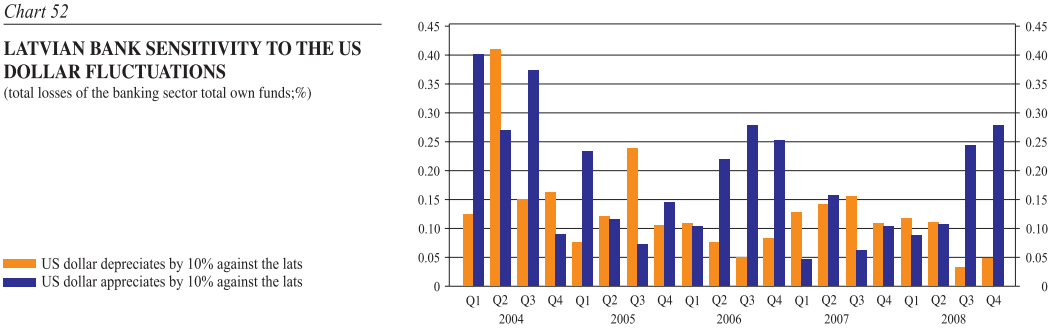
FOREIGN EXCHANGE RISK: 1% 10-DAY VaR FROM EXCHANGE RATE FLUCTUATIONS IN LATVIAN BANKS



fluctuations increased in 2008 (see Chart 52). Nevertheless, it should be noted that in the context of the relatively small open position of the US dollar, banks' sensitivity to its exchange rate fluctuations has been protractedly subdued.

Chart 52

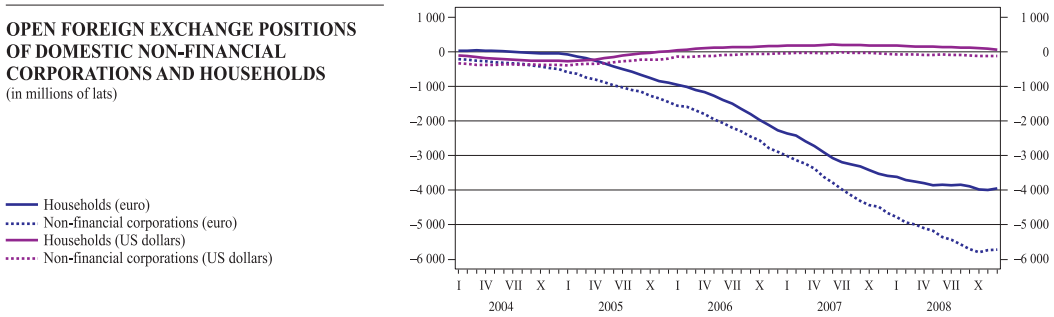
LATVIAN BANK SENSITIVITY TO THE US DOLLAR FLUCTUATIONS
(total losses of the banking sector total own funds;%)



Looking at banks' exposure to the indirect foreign exchange risk, it has to be noted that there is far less balance in the foreign exchange positions of bank clients than those of banks. During the past five years, the overall open euro position of domestic non-financial corporations and households, namely, the gap between the amounts deposited with banks and loans granted in the currency in question, has been widening constantly (see Chart 53). Despite the notable lending moderation, it increased also in 2008, by 1.4% month-on-month on average (except in the last two months when it posted a slight decrease of 0.4% and 0.5% respectively). That is why the changing share of loans granted in euro and volatility in the domestic foreign exchange market further aggravate banks' indirect (i.e. borrowers') foreign currency exposure. In late December 2008, the overall open euro position of non-financial corporations and households amounted to 9 680.5 million lats (approximately 59.6% of GDP), including a 5 724.4 million lats (35.2% of GDP) open euro position of non-financial corporations and 3 956.1 million lats (24.4% of GDP) open euro position of households.

Chart 53

OPEN FOREIGN EXCHANGE POSITIONS OF DOMESTIC NON-FINANCIAL CORPORATIONS AND HOUSEHOLDS
(in millions of lats)



Note: A sector's open foreign exchange position is the gap between the amounts deposited with Latvian banks and loans granted in the currency in question to the respective sector.

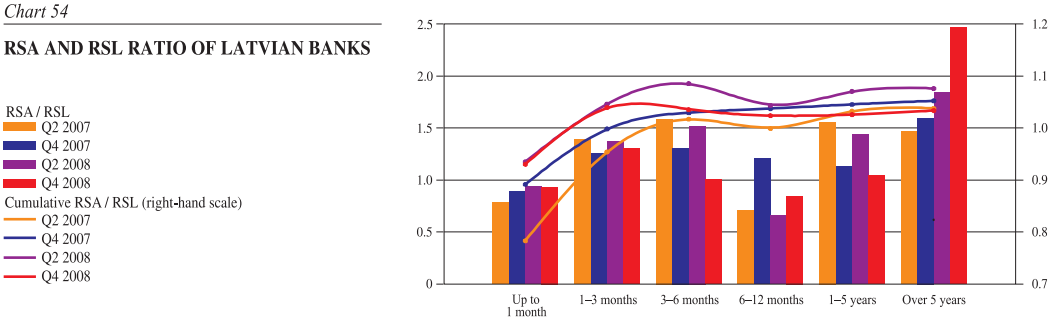
4.3 Interest Rate Risk

In 2008, the broadly balanced RSA and RSL structure and relatively low bank sensitivity towards interest rate changes continued to point to a limited exposure of Latvian banks to the interest rate risk.

Latvian banks' overall exposure to repricing risk[22], the most significant source of the banks' interest rate risk, has been low for a prolonged period. Cumulative 1-year RSA to RSL ratio, which is the key ratio for the interest rate risk management purposes, dropped from 1.04 to 1.02, implying that at the end of 2008, the Latvian banks' RSA and RSL for maturities up to one year were almost balanced (see Chart 54). The balance also improved for shorter maturities (up to one month), with cumulative RSA to RSL ratio for this time-band increasing to 0.93 {0.89}, and for medium maturities (up to five years), with the ratio falling to 1.03 {1.05}.

Chart 54

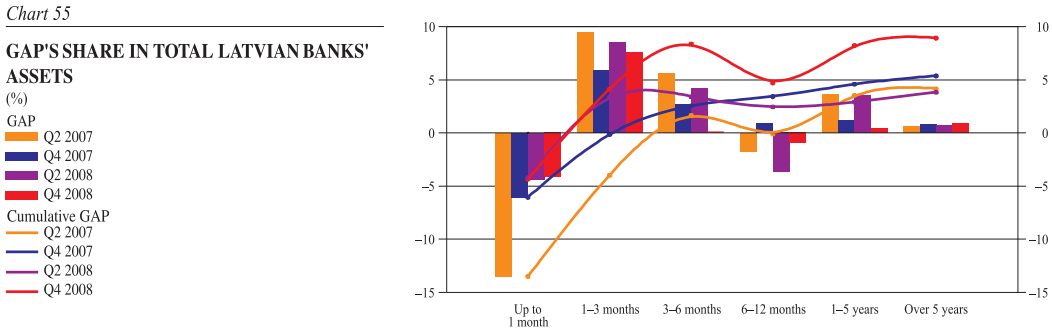
RSA AND RSL RATIO OF LATVIAN BANKS



At the end of 2008, the ratio of RSA and RSL spread, also referred to as GAP[23], to the Latvian banks' assets decreased year-on-year for some maturities and fluctuated within a range between 0.1% and 7.5% of banks' assets (see Chart 55). Hence, the ratio of cumulative 1-year GAP to banks' assets improved, falling to 2.5% {3.4%}, which implied lower banks' interest rate risk exposure.

Chart 55

GAP'S SHARE IN TOTAL LATVIAN BANKS' ASSETS



The analysis of banks' sensitivity to the impact of the potential changes in interest rates on banks' net annual income has an important role for the interest rate risk assessment. Based on the recommendations of the Basel Committee, the Committee of European Banking Supervisors (CEBS) proposes to set the standard level of unexpected parallel shift of the interest rates (parallel rate shock) at 200 basis points.[24]

The results of sensitivity analysis show that the impact of any potential interest rate changes on net annual interest income[25] of Latvian banks would still be immaterial (see Chart 56).[26] With interest rates increasing

[22] Repricing risk is the probability of suffering losses due to interest rate movements and mismatching residual maturities of assets and liabilities. Losses due to interest rate changes are incurred when the interest expenditure growth exceeds that of the interest income or the interest income falls quicker than the interest expenditure. When estimating the bank's exposure to repricing risk, only RSA and RSL are examined, and they are distributed into several time-bands depending on the time remaining to repricing, which is the residual maturity for fixed rate instruments and the time remaining to reviewing the interest rates for variable rate instruments.

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

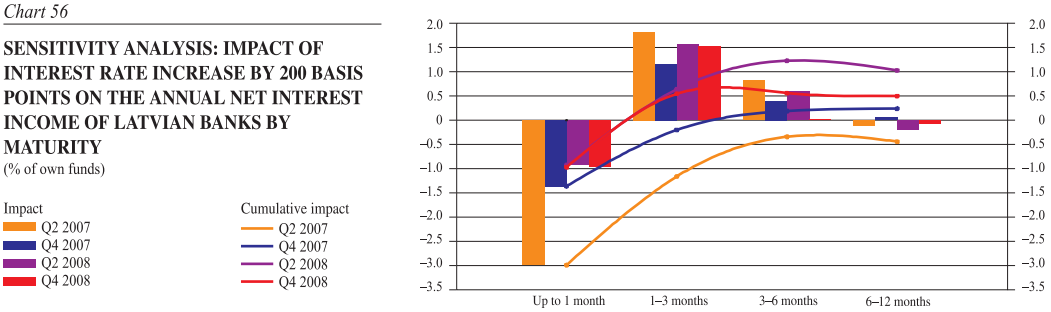
[24] *Principles for the Management and Supervision of Interest Rate Risk. Basel Committee on Banking Supervision. July 2004; Technical aspects of the management of interest rate risk arising from non-trading activities under the supervisory review process. Committee of European Banking Supervisors. October 2006.* Such parameter value for the interest rate shock has currently also been introduced by the FCMC in the *Regulations on the Management of Interest Rate Risk, Preparation of a Report on the Calculation of Economic Value Decline and of a Report on the Term Structure of Interest Rate Risk.*

[25] The impact on net annual interest income within each time-band is calculated by multiplying the time-band's GAP with the interest rate change and the ratio of this time-band characterising the part of the year when the GAP of this time-band will be active. For the purposes of calculating the ratio, it is assumed that repricing will take place in the middle of the time-band. For example, 3 to 6 month time-band ratio is calculated as follows: $(12 - 0.5 \times (3 + 6)) / 12 = 0.625$. The overall impact on the profit for the year is the aggregate effect for the first four time-bands.

[26] As the calculations are based on the GAP method, they do not take into account the interest rate impact on the bank's economic value and are based on the structure of the banks' balance sheet as at the end of 2008.

Chart 56

SENSITIVITY ANALYSIS: IMPACT OF INTEREST RATE INCREASE BY 200 BASIS POINTS ON THE ANNUAL NET INTEREST INCOME OF LATVIAN BANKS BY MATURITY
(% of own funds)



by 200 basis points (i.e. by 2 percentage points), the negative GAP in the time-band of up to one month would decrease the net interest income of Latvian banks by 1.0% of the total banks' own funds. The positive GAP in the time-band of one to tree months would increase the net interest income of banks by 1.5% of the total banks' own funds. At the same time, a relatively small positive GAP in the time-band of three to six months would have no material impact on the net interest income. All in all, the interest rate increase by 200 basis points (i.e. by 2 percentage points) would result in an increase of banks' net interest income by 0.5% (cumulative effect) of the total banks' own funds.

5. OPERATIONAL RISKS IN NBFS

Given the insignificant role of the NBFS in the financial sector of Latvia, it does not on the whole represent a material risk to the stability of the financial sector. The economic downturn, the fall in personal income and the pessimistic outlook, as well as changes in legislation, however, have an adverse impact on the development of a number of NBFS segments.

The year 2007 was characterised by rapid growth both in the economy as a whole and in financial markets and non-bank financial sector, which comprises leasing companies, insurance companies, private pension funds, investment funds, other financial intermediation and credit unions, which have a marginal role in the sector (0.24%), whereas in 2008 the situation changed dramatically. During the first half of the year, all the NBFS segments were still experiencing robust growth, albeit at a more moderate pace, and the impact of the financial crisis did not reflect in the activities of Latvia's NBFS institutions. The second half of 2008, however, brought about investment management problems. Activities of the NBFS institutions, whose principal activity was related to lending, shrunk.

The role of the NBFS in the financial sector remained relatively insignificant. The share of NBFS assets in the financial system did not exceed 15% in 2008, but in the fourth quarter, with the economic downturn expanding, the NBFS share even recorded a slight decline (to 3.8 billion lats or 14.1%).

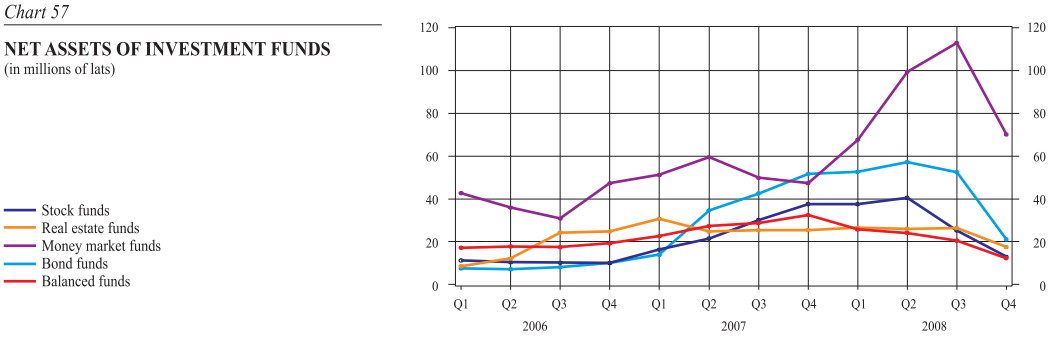
For a number of past years the major NBFS institutions (in terms of assets) were those related to lending (leasing companies and financial intermediaries, whose principal activity was related to granting loans). In 2008 they retained a predominant role in the financial sector (at the end of 2008 assets of the two sub-sectors accounted for 84% of the NBFS's total assets), but against the background of adverse changes in the economy and risk revision the assets of loan issuing institutions began to decrease in the fourth quarter. During the year, activities of leasing companies rose by 7.4%, whereas assets of other financial intermediaries increased by 18.0%. Overall, given that those institutions mainly attracted funds for their lending activities from credit institutions, credit institutions' tightening lending policy brings about a risk that activities of those institutions might shrink in the future.

Assets of both life and non-life insurance sectors continued to increase in 2008 (+19.5%) and did not contract in the fourth quarter when other NBFS segments recorded reduction. The deteriorating economic situation was, however, entailing risks also to the insurance sector. The fall in personal income and the rapid decline in real estate and car market accounted for the decrease in the level of premiums signed by insurers at the end of 2008. Shrinking personal income, closure of businesses (especially those in construction and the related sectors), as well as the transition to a strict savings regime is also leaving little hope for life insurers to increase the level of signed premiums. A slight increase of the share of insurance sector assets in the NBFS assets was recorded (to 10.4%), as the assets of other NBFS segments decreased.

Investment fund assets, which had been rapidly growing over the past few years, recorded a marked fall in 2008 (30.7%), with the share of investment fund assets in total NBFS assets also contracting accordingly (from 5.6% in late 2007 to 3.6% in late 2008; see Chart 57). The year 2008 was a challenging time for fund managers. The escalation of financial crisis in the autumn of 2008 brought about a decrease in the value of investment funds. Looking at net assets of investment funds, the most marked reduction, as could be expected, hit stock funds (their net asset value fell by 65.7%). The value of balanced and bond funds also shrunk considerably (by 62.1% and 59.2% respectively). Like before, investors continued to show most interest in money market funds (still with just two market participants). Money market fund net asset growth slowed down (48.1% in 2008).

Chart 57

NET ASSETS OF INVESTMENT FUNDS
(in millions of lats)



Developments in foreign and domestic financial markets in 2008 also brought about problems in the private pension management segment. Some pension plans suffered losses, the overall growth of private pension fund assets during the year was two times slower than previously (15.6%) and even recorded a fall in the fourth quarter. A typical feature of 2008 was the increase of passive members of the third pillar of the pension system by 32.6% – the number of people, who had made no contributions to the fund over the past 12 months but had not yet reached the retirement age, increased more rapidly than before.

Developments in the pension fund segment (in both second and third pillar) entail significant changes to the pension system. Future developments will be significantly affected by the decrease of contributions to the second pillar pension funds from 8% to 2%, as well as economic agents' pessimistic outlook. However, even though contributions to all funds (all pension fund pillars) have been shrinking, the rapid changes to the state funded pension scheme regulations might encourage growth of contributions to the third pillar of pension funds in the future.

6. FINANCIAL INFRASTRUCTURE

6.1 Payment Systems

The Bank of Latvia assessed systemic risk in the following Bank of Latvia's payment systems in 2008: the SAMS, the EKS and TARGET2-Latvija. Three indicators were applied by the Bank of Latvia to assess systemic risk: 1) the share of the payment systems in the respective payment segment; 2) concentration ratio – the share of the five largest participants in the system and 3) the netting effect ratio (the efficiency of using settlement funds in the payment systems).

The SAMS

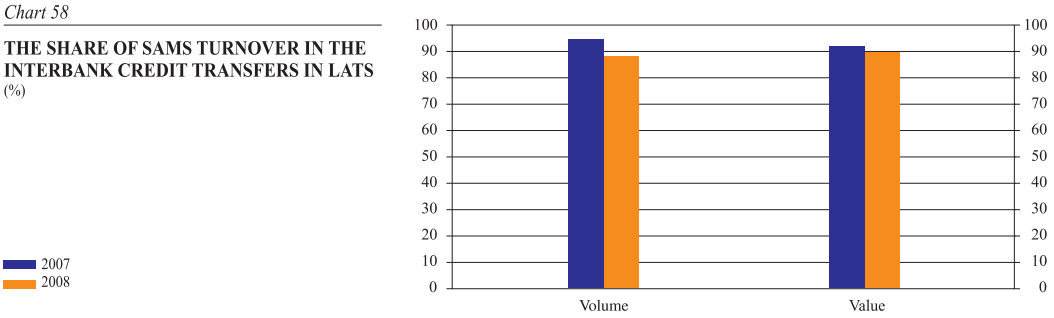
The SAMS is a large-value real time gross settlement system for payments in lats used for interbank payments, settlement of monetary operations, retail payment system and securities settlement system settlement as well as for executing urgent or large-value customer payments. Hence, the SAMS is mainly described by value ratios.

Of interbank credit transfers made in lats in 2008, the volume of interbank payments processed by the SAMS amounted to 87.3% (86.1 thousand) and their value was 88.8% (163.9 billion lats; see Chart 58). The Latvian interbank credit transfers handled via correspondent banking arrangements accounted for the residual share.

In 2008, the volume concentration ratio of the SAMS expanded somewhat year-on-year (to 70.3%; 174.7

Chart 58

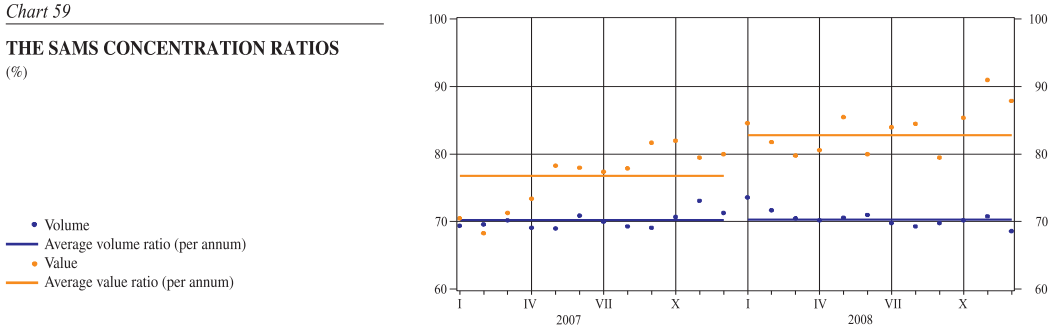
THE SHARE OF SAMS TURNOVER IN THE INTERBANK CREDIT TRANSFERS IN LATS
(%)



thousand; see Chart 59). The rise in volume of customer payments (9.3 thousand or 7.1%) mostly accounted for the above increase. The value concentration ratio of the SAMS grew from 76.8% (73.9 billion lats) in 2007 to 82.8% (150.7 billion lats) in 2008. The major contributors to the above expansion were changes in the concentration ratio observed in November and December and attributed to the changes in the interbank market resulting from global financial market turmoil. Notwithstanding the fact that the volume concentration ratio of the SAMS exceeds the limit stipulated by the ECB (80%), this development does not indicate a probability of any significant domino effect in the system, as one of the system's five largest participants is the Bank of Latvia, which is not exposed to any liquidity and credit risk.

Chart 59

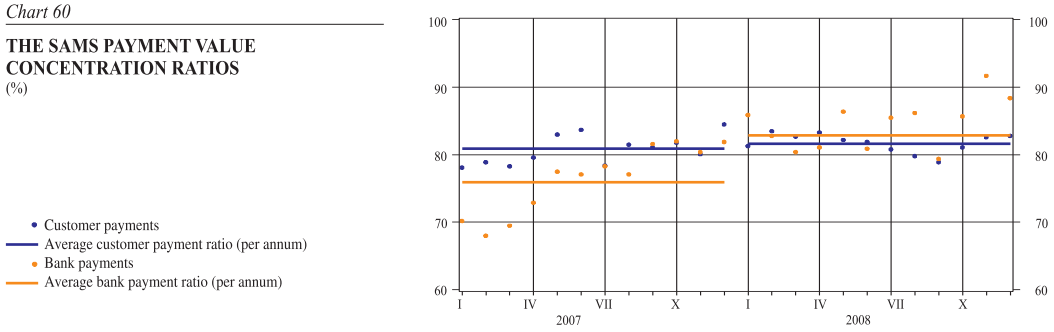
THE SAMS CONCENTRATION RATIOS
(%)



The value of interbank payments doubled in 2008 (to 163.9 billion lats), and that of customer payments rose by 20.8% (to 12.9 billion lats). The share of the two payment types was 37.9% and 62.1% in terms of volume and 92.7% and 7.3% in that of value respectively. In 2008, the value concentration ratio of bank payments (82.9%) exceeded that of the customer payments by 1.3 percentage points (81.6%; see Chart 60).

Chart 60

THE SAMS PAYMENT VALUE CONCENTRATION RATIOS
(%)



Year-on-year, interbank payments expanded by 4.0 thousand or 4.9% in terms of volume and by 82.3 billion lats or 2.0 times in that of value mainly on account of the activities of the five largest participants: the value of interbank payments executed by these banks reported a rise of 73.9 billion lats or 2.2 times. The volume of customer payments grew by 9.3 thousand or 7.1% and the value increased by 2.2 billion lats or 20.8%.

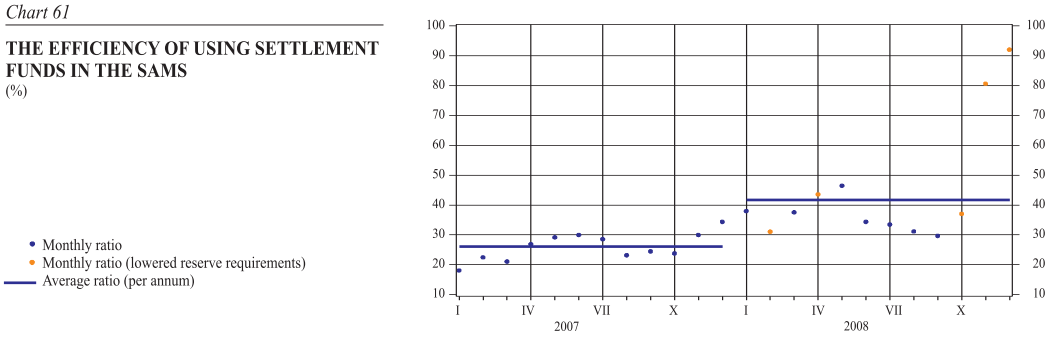
In addition to the concentration ratios, systemic risk or a probability of the so-called domino effect is influenced by the efficiency of using settlement funds in the systems, described in the gross settlement systems by the share of funds used for settlements in the accounts balance.

Bank settlement accounts with the Bank of Latvia are used for the financial market settlements in lats. The respective efficiency indicator is calculated as the ratio of bank payments sent via the SAMS to the average balance on the bank accounts with the Bank of Latvia. The monthly average balance on these accounts was influenced by the minimum reserve ratio set by the Bank of Latvia, remaining unchanged at 8% in 2007, while in 2008, due to the implementation of monetary policy the above ratio was reduced on five occasions (in February, April, October, November and December), reaching 3% for bank liabilities with a maturity of over two years and 5% for bank liabilities with a maturity of up to two years.

The decline in the minimum reserve ratio contributed to a minor rise in the average balance on the credit institution accounts with the Bank of Latvia (7.9%), while the value of payments effected in the SAMS expanded by 72.8% in 2008. This development accounted for an increase in the efficiency of the settlement fund use in the SAMS: from 26.1% in 2007 to 41.7% in 2008 (see Chart 61).

Chart 61

THE EFFICIENCY OF USING SETTLEMENT FUNDS IN THE SAMS
(%)



The three indicators of the systemic risk assessment showed that the SAMS was a system providing an efficient and safe payment environment to its participants and the entire financial system in 2008.

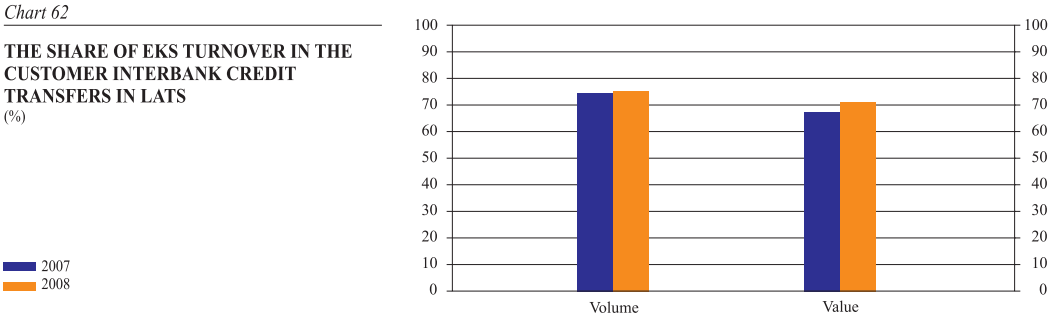
The EKS

The EKS is a net settlement system processing retail payments in lats (also in euro since 2008) and ensuring two clearing cycles daily. The EKS is used for processing retail payments; hence it is mainly described by payment volume ratios.

Of retail credit transfers made among banks in lats, 75.2% (33.2 million) and 71.0% (13.1 billion lats) were processed in the EKS in 2008 (see Chart 62). Mutual gross settlements of customer credit transfers made by some banks of Latvia accounted for the residual share. In 2007, of retail credit transfers executed among banks in lats, 74.4% and 67.4% were processed in the EKS in terms of volume and value respectively.

Chart 62

THE SHARE OF EKS TURNOVER IN THE CUSTOMER INTERBANK CREDIT TRANSFERS IN LATS
(%)

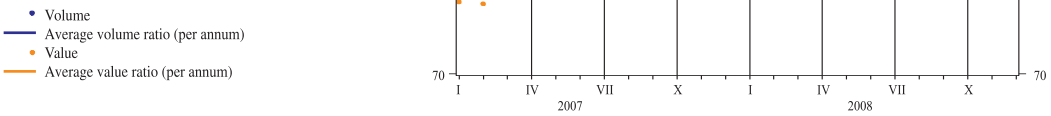


In 2008, the volume concentration ratio (78.1%) of the payments made in the EKS in lats recorded a minor rise year-on-year (76.8%; see Chart 63). The value concentration ratio of the payments effected in the EKS in lats also grew from 75.2% to 77.4% in 2008 (by 801.4 million lats). The EKS concentration ratios in 2008 were lower than the limit set by the ECB (80%) both in terms of volume and value. In 2008, the value and volume of payments executed by the system's five largest participants in lats and processed in the EKS rose by 8.6% (801.4 million lats) and 11.9% (2.8 million) respectively.

Payments made in the EKS in lats are settled in two clearing cycles, i.e. twice a day. In 2008, 64.9% of total daily payments in lats and 54.7% of the value of payments handled in both clearing cycles in lats were

Chart 63

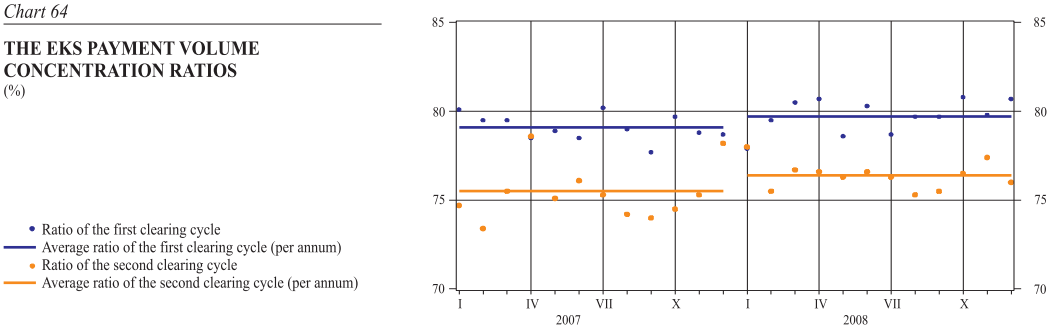
THE EKS CONCENTRATION RATIOS
(%)



processed in the first clearing cycle of the EKS. Thus, 21.6 million payments in the value of 7.1 billion lats were processed in the first clearing cycle and 11.7 million payments in the value of 5.9 billion lats were handled in the second clearing cycle. An increase was observed in both clearing cycles in the EKS as compared to 2007: in the first clearing cycle the total volume and value of payments rose by 9.2% and 3.1% respectively and in the second clearing cycle the turnover grew by 11.5% and 8.7% respectively. Overall, the volume and value of payments processed the first and second clearing cycles levelled out gradually for almost all participants settling payments in lats. The volume concentration ratios have been analysed in greater detail since the EKS is primarily described by payment volume ratios. A comparison of the payment volume concentration ratios of both clearing cycles of payments effected in lats (see Chart 64) showed that in 2008 the above ratio was by 3.3 percentage points higher in the first clearing cycle than in the second clearing cycle (79.7% and 76.4% respectively).

Chart 64

THE EKS PAYMENT VOLUME CONCENTRATION RATIOS
(%)



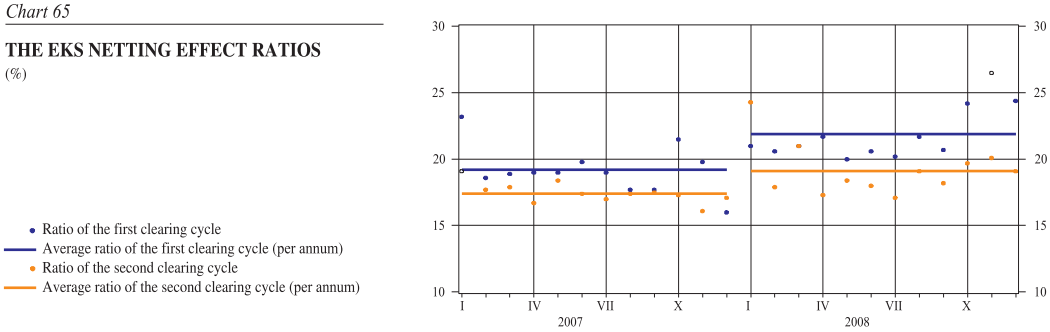
The efficiency of using settlement funds in the payment systems determines systemic risk in addition to the concentration ratios.

The efficiency of using settlement funds in the net settlement systems, including the EKS, is described by the netting effect ratio, i.e. the system participants' net debit positions as a percentage of the system's gross transactions value. According to the ECB methodology, where the system's netting effect ratio is below 10%, the system is deemed to be highly efficient – with high netting effect, i.e. the majority of transactions are mutually offset (netting) and the system participants do not need additional liquidity collateral on their accounts. In the event of settlement errors, however, the high netting effect may become a significant risk as the system participants incur additional obligations which might trigger liquidity risk and credit risk expansion in the system. Of the payments made in the EKS in lats, the netting effect ratios of the first and second clearing cycles were 21.9% and 19.1% in 2008 respectively (see Chart 65). Hence, neither a significant netting risk to the payments executed in lats, nor its expansion was identified in 2008. The value of the netting position of payments in lats grew more vigorously in the first and second clearing cycles (by 18.0% and 19.4% respectively) than the value of payments in 2008 (by 3.1% and 8.7% respectively). Thus, of payments executed in lats, the netting effect ratio of the first clearing cycle rose by 2.7 percentage points year-on-year and that of the second clearing cycle increased by 1.7 percentage points.

Since the value of the net debit position of payments executed by the EKS participants in lats was minor compared with the balance on the bank accounts with the Bank of Latvia (on average 0.4%), the netting effect created no need for additional funds in lats (liquidity risk) in the system.

Chart 65

THE EKS NETTING EFFECT RATIOS
(%)



The processing of retail payments in euro was launched in the EKS as of 2008. The above operation enables the EKS participants to settle customer payments made in euro among Latvia's banks within one day – similar to the payments executed in lats.

In 2008, 223.8 thousand payments in euro were processed in the EKS in the total amount of 1.5 billion euro, i.e. they constituted 5.6% in terms of volume and 1.3% in terms of value of all retail credit transfers conducted among banks in euro.

The volume concentration ratio of the payments made in the EKS in euro was 76.8% and the value concentration ratio amounted to 73.3% in 2008. The annual concentration ratios of the payments executed in euro are lower than the limit set by the ECB (80%), these ratios indicate, however, that the concentration of liabilities in the payments executed by the system's largest participants in euro has been high.

Payments made in the EKS in euro (similar to the settlement of payments effected in the EKS in lats) are settled in two clearing cycles, i.e. twice a day. In 2008, 56.0% of total daily payments in euro and 53.2% of the value of payments handled in both clearing cycles in euro were processed in the first clearing cycle of the EKS. Hence, of payments made in euro, most payments were processed in the first clearing cycle both in terms of volume and value. In 2008, of payments made in euro, 125.4 thousand payments in the value of 798.3 million euro were processed in the first clearing cycle and 98.4 thousand payments in the value of 701.0 million euro were handled in the second clearing cycle. The concentration ratio of the second clearing cycle exceeded that of the first clearing cycle both in terms of volume and value in 2008, pointing to a higher concentration of the system's major participants in the second clearing cycle.

Of the payments made in the EKS in euro, the netting effect ratios of the first and second clearing cycles were 28.3% and 41.8% in 2008 respectively. Thus, a significant netting risk was not identified in 2008. In the given period, the average monthly value of the netting position of payments in euro stood at 18.8 million euro in the first clearing cycle and 24.4 million euro in the second clearing cycle respectively, while the average monthly value of payments in euro amounted to 66.5 million euro in the first clearing cycle and 58.4 million euro in the second clearing cycle respectively.

Since the value of the net debit position of payments executed by the EKS participants in euro was minor in 2008 in comparison with the balance on the bank settlement accounts with the Bank of Latvia in euro (on average 8.4%), the netting effect created no need for additional funds in euro (liquidity risk) in the system.

Applying the indicators of the systemic risk assessment to the EKS operation (for payments executed in lats and euro), it was identified in 2008 that the EKS ensures an efficient and safe payment environment to its participants and the entire financial system.

TARGET2-Latvija

In November 2007, an interbank euro payment system TARGET2-Latvija, one of the 21 components in the Trans-European Automated Real-time Gross settlement Express Transfer system TARGET2, was launched. The Bank of Latvia, together with other banks of the European System of Central Banks, ensures the operation of TARGET2-Latvija.

TARGET2-Latvija is a large-value real time gross euro settlement system used for interbank payments in euro as well as for executing urgent and large-value customer payments.

Of interbank credit transfers made in euro, the volume of interbank payments processed in TARGET2-Latvija in 2008 amounted to 6.4% (21.7 thousand) and their value stood at 10.9% (62.5 billion euro). The Latvian bank credit transfers handled via correspondent banking arrangements accounted for the residual share.

The volume concentration ratio of TARGET2-Latvija was 63.1% in 2008. The value concentration ratio of TARGET2-Latvija stood at 82.6%. The volume concentration ratio of TARGET2-Latvija exceeds the limit stipulated by the ECB (80%); this development, however, does not point to a probability of any significant domino effect in the system, as one of the system's five largest participants is the Bank of Latvia, which is not exposed to any liquidity and credit risk.

The efficiency of using settlement funds in TARGET2-Latvija has been calculated as the ratio of bank payments sent via TARGET2-Latvija to the average balance on the banks' euro accounts in TARGET2-Latvija. In 2008, funds held in accounts were on average used 9.7 times in payments via TARGET2-Latvija.

TARGET2-Latvija ensured an efficient and safe payment environment to its participants and the entire financial system in 2008.

Box 5. The Bank of Latvia's report on the self assessment made by the limited liability company First Data Latvia of its local lats clearing and settlement system

"The Bank of Latvia's Payment System Policy" approved by the Bank of Latvia Council's Resolution No. 89/10 of 13 September 2001, states that responsibility for a safe and efficient functioning of clearing and retail payment systems shall be undertaken by operators of payment systems and their participants, and they shall make the operation of the systems compliant, where possible, with the document issued by the BIS Committee on Payment and Settlement Systems "Core Principles for Systemically Important Payment Systems" (hereinafter, the Core Principles) in January 2001. The above Core Principles shall be applied to the retail payment systems so as not to impair their efficiency.

In 2006, the Bank of Latvia assessed the significance of the limited liability company First Data Latvia (hereinafter, the FDL) against the ECB Guidelines "Oversight Standards for Euro Retail Payment Systems" (hereinafter, the ECB Guidelines) of June 2003, and the results were published in the Bank of Latvia Financial Stability Report (Issue No. 2, 2005). It has been concluded that given the system's small volume, the FDL is not a systemically important system and causes no financial risks to Latvia's payment system. However, in view of the fact that it can hardly be substituted in card payments and disruptions in the system's operation could impact a wide range of customers, the system is deemed to be a systemically prominent system and hence the respective oversight criteria and principles shall be applicable to the system. Pursuant to the ECB Guidelines, systemically prominent retail payment systems shall comply with the Core Principles I, II and VII–X.

The FDL conducted the self-assessment of the FDL local lats clearing and settlement system (hereinafter, the FDL system) not only against the above mandatory Core Principles, but also the Core Principle III, rating the results as follows: "fully compliant", "overall compliant", "partly compliant" and "incompliant". The self-assessment was submitted to the Bank of Latvia on 27 May 2008.

Paragraph 4.3 of "The Bank of Latvia's Payment System Policy" stipulates that the Bank of Latvia shall provide consultations to institutions ensuring operation of clearing and retail payment systems and upon request by such institutions, the Bank of Latvia may provide its opinion on the compliance of a particular payment system with the Core Principles. The Bank of Latvia reviewed the self-assessment of the FDL system executed by the FDL against the Core Principles and provided a written reply on 15 August 2008.

Core Principle I. The system should have a well-founded legal basis under all relevant jurisdictions.

The assessment given by the FDL: overall compliant.

Opinion of the Bank of Latvia. The complete document of the Core Principles stipulates an analysis of international legislation, whereas the self-assessment of the FDL only provides analysis of local lats clearing and settlement system. Only local banks participate in that system, settling payments initiated in Latvia

with payment cards issued in Latvia, therefore international legislation may have no material impact on the above.

Recommendation. Since the above assessment of the FDL ("overall compliant") is based on the fact that the analysis of international legislation has not been performed, the Bank of Latvia recommends that the FDL be evaluated as fully compliant with this Core Principle.

Core Principle II. The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.

The assessment given by the FDL: fully compliant.

Opinion of the Bank of Latvia. According to the information furnished by the FDL, the system's participants are ensured both a clear understanding of the system's impact on risks incurred through participation in the system and information about the operation of the system in standard and contingency situations. As, however, indicated by the FDL, an interbank agreement and bilateral agreements between the FDL and a participant provide for the majority of the system's regulations. The above agreements are confidential and are not available to other participants in the FDL system. The Bank of Latvia agrees to the above assessment, should all agreements incorporate a similar meaning and enable the system's participants to have a common understanding of the system's impact on each of the financial risks incurred through participation in the system.

Recommendation. Where the terms and conditions of the agreements concluded with the FDL participants differ, the Bank of Latvia recommends drafting a single document which would describe the system's impact on each of the financial risks incurred through participation in the system.

Core Principle III. The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.

The assessment given by the FDL: fully compliant.

Opinion of the Bank of Latvia. The Core Principle III shall not be applicable to the clearing and retail payment systems; hence the Bank of Latvia has not evaluated the submitted responses.

Core Principle VII. The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.

The assessment given by the FDL: partly compliant.

Opinion of the Bank of Latvia. Appropriate assessment.

Recommendation. To proceed with the enhancement of business continuity plan, informing the respective participants thereof, as well as perform testing of the business continuity plan.

Core Principle VIII. The system should provide the means of making payments which are practical for their users and efficient for the economy.

The assessment given by the FDL: fully compliant.

Opinion of the Bank of Latvia. Appropriate assessment. The FDL system is a private automated net settlement system operating on the basis of a free market, and its market share of the payments made with payment cards and processed in the FDL system has not changed rapidly in recent years, remaining close to 60% in terms of volume and value. Since alternative channels are accessible to the participants in the FDL system for sending payments made with payment cards, the above system would not be operational, if the services offered were not practical for their users and efficient for the economy.

Core Principle IX. The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.

The assessment given by the FDL: fully compliant.

Opinion of the Bank of Latvia. The assessment is not appropriate, although the FDL has defined criteria according to which a potential participant may access the FDL system. One of the criteria: currently access to the FDL system can only be granted subject to a consent given by all participants. The FDL has not specified any terms and conditions to be fulfilled for the FDL participant to refrain from giving its consent to the access by a potential participant to the FDL system.

Recommendation. Where an interbank agreement and other documents fail to state clearly the cases when the new participants can be denied an access to the system by the current participants and hence access is not granted by the latter groundlessly, the specific criteria for refusing participation in the FDL system shall be defined.

Core Principle X. The system's governance arrangements should be effective, accountable and transparent.

The assessment given by the FDL: fully compliant.

Opinion of the Bank of Latvia. Appropriate assessment.

In general, the conclusion is that the self-assessment of the FDL shall be deemed an adequate and appropriate evaluation of the system. The Bank of Latvia recommended that the assessment of Core Principle I should be rated higher, whereas that of Core Principle IX rated lower, and the Bank's recommendations for further operation of the FDL system taken into account.

6.2 Securities Settlement Systems

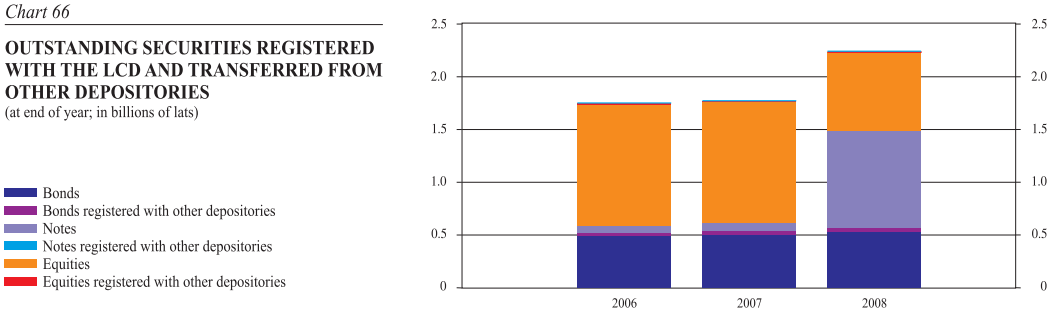
Financial market turmoil in Latvia and worldwide has not impaired operation of the VNS and DENOS, the LCD securities settlement system. In 2008, operators of securities settlement systems reported no substantial disruptions of the system's operation and smooth functioning of securities settlement systems was not jeopardised.

The compiled statistics of the securities settlements shows that the value of securities recorded in the LCD has increased significantly (see Chart 66). At the end of 2008, securities amounting to 2 223.4 million lats were recorded in DENOS, most of which were outstanding notes (919.6 million lats) posting an increase of almost 13 times year-on-year (72.1 million lats). An issue of a large amount of Latvian government securities at the end of 2008 contributed notably to a rise in outstanding securities.

The statistics for the placement of securities recorded in the DENOS and transferred from other depositories shows that at the end of 2008, securities in the value of 1 157.0 million lats were stored in other securities settlement systems, of which, 93% were transferred and recorded in the VNS and 7% were transferred to the Estonian Central Securities Depository and Central Securities Depository of Lithuania (see Chart 67).

Chart 66

OUTSTANDING SECURITIES REGISTERED WITH THE LCD AND TRANSFERRED FROM OTHER DEPOSITORIES
(at end of year; in billions of lats)



Outstanding securities transferred from the LCD and recorded in the VNS amounted to 1 075.0 million lats at the end of 2008, of which, notes were in the amount of 754.3 million lats and bonds stood at 320.7 million lats (see Chart 68).

A notable expansion of the recorded outstanding securities and the value of processed delivery instructions in the VNS was associated with banks resorting to the central bank's lending facility (see Chart 69). In the VNS, the value of processed delivery instructions related to cash settlements, i.e. the turnover of securities

Chart 67

PLACEMENT OF OUTSTANDING SECURITIES REGISTERED WITH THE LCD AND TRANSFERRED FROM OTHER DEPOSITORIES
(at end of year; in billions of lats)

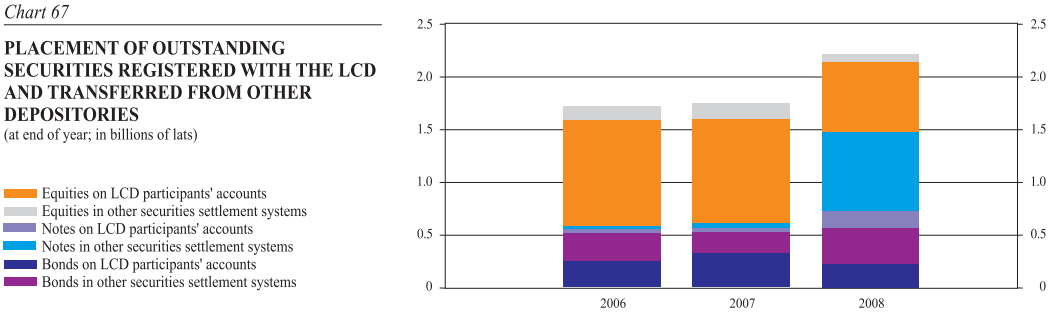


Chart 68

VALUE OF DELIVERY INSTRUCTIONS PROCESSED IN THE LCD AND THE VNS
(in billions of lats)

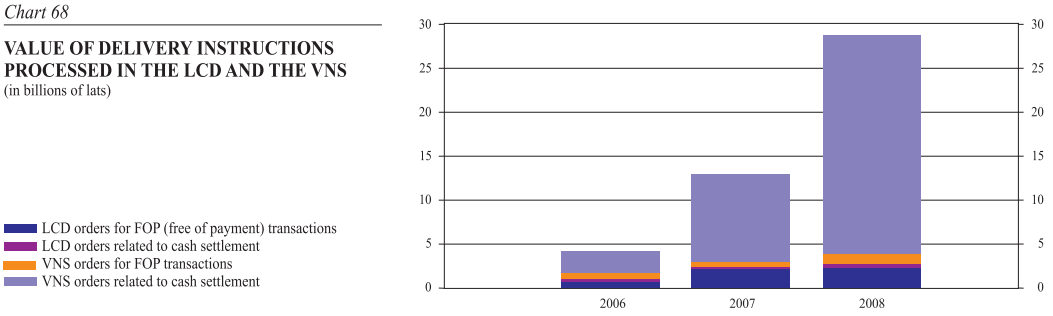
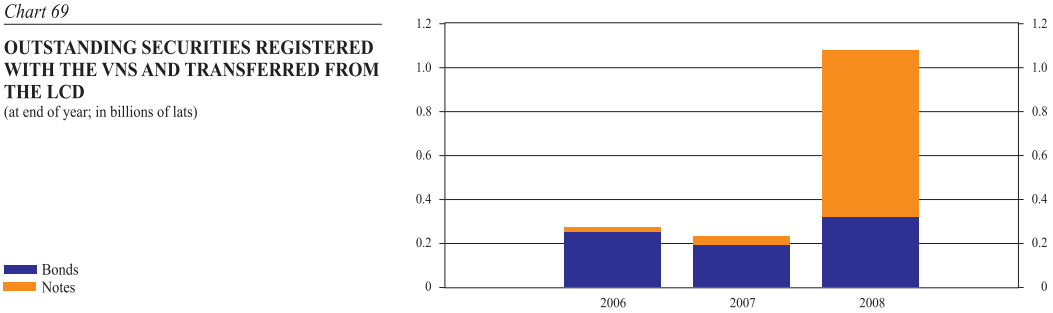


Chart 69

OUTSTANDING SECURITIES REGISTERED WITH THE VNS AND TRANSFERRED FROM THE LCD
(at end of year; in billions of lats)



in the Bank of Latvia credit operations reached 24.8 billion lats in 2008 (10 billion lats in 2007). The value of delivery instructions processed in the LCD and related to the trading done by the DENOS participants on over-the-counter market also reported a rise.

The Bank of Latvia performs oversight of the securities settlement systems. In system oversight, the Bank of Latvia cooperated with the FCMC and contributing to the cooperation the Bank of Latvia issued its opinion on the amendments to the LCD regulations prior to their approval. The Bank of Latvia also provided its evaluation to the FCMC and the LCD of the changes in the operation of settlement system proposed by the LCD.

Box 6. Integration of the single European financial market infrastructure

One of the recent key objectives within the Eurosystem is the development of an integrated European financial market. Integration is aimed at facilitating a more efficient allocation of financial resources, boosting competitiveness, reducing costs incurred by the participants, rebounding trade and ensuring transparency of service fees.

TARGET2-Securities (hereinafter, T2S) is one of the components of the financial market integration process proposed by the ECB in July 2006 in order to consolidate the fragmented infrastructure of the European securities settlement by implementing a highly secure single European settlement platform for securities and ensuring a more efficient cash settlement for transactions in securities denominated both in euro and other currencies. The central securities depositories will be participants in T2S, albeit participation in the system is voluntary. It is planned to launch the operation of T2S in 2013, and it will be integrated with

TARGET2 system, thus combining cash and securities settlements in a single shared platform. The DVP (delivery versus payment) mechanism will ensure the safety of transactions in T2S.

The ECB invited the European central depositories to offer their support and make a commitment by the end of 2008 to join T2S. Within the oversight of the securities settlement systems, the Bank of Latvia cooperated with system operators and their participants in the evaluation of T2S user requirements and expressing Latvia's opinion. The Bank of Latvia and the LCD commended the solution proposed for the T2S project in order to ensure implementation of the single shared platform for securities settlement in the EU. The LCD has expressed its readiness to participate in further stages of project development when all T2S project-related costs are clarified, in particular those attributable to central securities depositories.

Following the assessment of user requirements, including the results of public consultations and market participants' support to the T2S project, on 17 June 2008, the ECB decided on a further development of the T2S project in pursuit of a common goal.

Other significant component of the financial market integration is the "European Code of Conduct for Clearing and Settlement" (hereinafter, the Code). The Code is a voluntary agreement aimed at facilitating and improving safety and efficiency of securities clearing and settlement, especially for cross-border transactions, as well as increasing transparency of service fees and accessibility of settlement. The LCD also signed the Code on 7 November 2006.

The Code consists of three fundamental parts. The first two of them – "Price Transparency" and "Access & Interoperability" came into effect in 2007.

Under "Price Transparency" the LCD published samples of the fee calculation that allow Latvian and foreign market participants to have a better understanding of fees set by the LCD for the offered services and the procedure for calculating the above fees. At the same time, Conversion table elaborated by the European Central Securities Depositories Association (hereinafter, the ECSDA) was published on the LCD website in order to provide each participant of the European market with a simplified comparison of the procedure established for service fee calculation at the LCD and other central depositories of the European countries.

"Access & Interoperability" deals with the procedure of access to the systems and their interoperability. To ensure that market participants have an open access to the accounting and settlement at the LCD, the LCD signed the Access and Interoperability Guideline along with other participants of the ECSDA in mid-2007. The above Guideline is aimed at facilitating the selection by the market participants of their most appropriate provider of securities settlement services at each stage of the transaction chain (trade, accounting and settlement).

"Service Unbundling and Accounting Separation" took effect on 1 January 2008. Service unbundling and accounting separation are significant preconditions for further strengthening of transparency and efficiency of the European capital market. On the one hand, due to the service unbundling market participants may make a choice when purchasing a service. On the other hand, accounting separation furnishes relevant information about the service offered. Both activities are aimed at ensuring transparency of the interrelation among revenues and costs and different services and allowing participants to choose which service to purchase.

To implement requirements stipulated by the Code for the unbundling of services, all members of the ECSDA, who are the signatories of the Code, including the LCD, have agreed on the services to be unbundled from each other subject to the requirements of the Code. The above services are described in the single ECSDA "Glossary for Service Unbundling" (https://www.ecsda.com). As of 1 January 2008, the LCD has complied with the requirements stipulated by the Code for the service unbundling and accounting separation.

In order to assess compliance of each service provider with the requirements stated under "Service Unbundling and Accounting Separation", the ECSDA, the Federation of European Securities Exchanges (FESE) and the European Association of Central Counterparty Clearing Houses (EACH) published the "Terms of Reference for Auditing Compliance with Service Unbundling and Accounting Separation and Assessing General Compliance" in July 2008.

Pursuant to the above procedure, the European central securities depositories shall draft, as of 2009, a self-assessment report on compliance or incompliance with the prerequisites stated by the Code. The self-assessment shall be verified by an independent auditor.

APPENDIX. BANKING SECTOR PERFORMANCE INDICATORS

	Subsidiaries of the bank groups of EU15 countries				Other banks			
	2005	2006	2007	2008	2005	2006	2007	2008
Balance sheet items								
Number of banks and subsidiaries of foreign banks	6	7	7	9	17	17	16	18
Total assets (in millions of lats)	5 759.6	9 161.8	12 383.5	13 736.8	5 183.3	6 745.5	9 532.5	9 506.6
Share of loans in total assets (%)	81.5	81.4	81.1	83.3	43.7	50.7	51.1	54.1
Share of deposits in liabilities (%)	42.3	36.1	31.6	28.6	72.6	65.9	65.7	61.3
Share of liabilities to MFIs in liabilities	46.3	52.9	56.7	59.3	11.6	16.2	18.4	16.7
Loans to deposits ratio (%)	192.7	225.1	256.4	291.2	60.1	76.9	77.8	88.3
Assets/equity ratio (%)[1]	6.5	6.6	7.9	7.5	8.9	8.9	8.0	7.0
Profitability								
ROE (%)[2]	27.1	23.4	24.9	10.0	25.7	27.4	23.2	–4.9
ROA (%)[3]	1.6	1.4	1.7	0.7	1.9	2.1	1.6	–0.4
Expenditure to income ratio (%)[4]	44.3	42.6	37.0	41.8	55.2	51.7	54.3	62.5
Profit margin (%)[5]	52.3	52.0	61.3	27.0	44.7	53.9	46.0	–5.7
Capital adequacy								
CAR (%)	8.9	9.4	10.8	12.7	11.6	11.4	11.4	10.8
Tier 1 CAR (%)	7.4	7.7	9.5	11.8	10.7	10.6	10.3	8.9
Liquidity								
Liquidity ratio (%)[6]	37.7	40.6	46.4	48.7	62.1	59.4	62.1	56.3
Liquid assets relative to total assets (%)[7]	13.8	14.9	15.5	13.0	41.0	36.0	37.4	34.0
Asset quality								
Share of NPLs in aggregate loan portfolio (%)	0.5	0.4	0.4	1.7	1.2	0.6	0.4	3.8
Share of specific provisions for loans to non-MFIs in the loan portfolio (%)	0.6	0.5	0.5	1.5	0.9	0.6	0.4	2.9
Share of loans past due over 90 days in the loan portfolio (%)	0.9	0.3	0.5	3.0	1.4	0.8	1.2	4.9

[1] The ratio of assets to capital and reserves.
[2] Annualised profit/loss ratio to average capital and reserves of the reporting period (data of foreign bank subsidiaries are not included in the calculation of the ratio).
[3] Annualised profit/loss ratio to average assets of the reporting period.
[4] Cost-to-income ratio = (operating costs + intangible and fixed asset depreciation and disposal)/(net interest income + income from dividends + net commissions and fees + profit/loss from trades of financial instruments + financial instrument revaluation result + other ordinary income – other ordinary expenditure + adjustment for impairment of available-for-sale financial assets) x 100.
[5] Ratio of operating income to RWA.
[6] Liquid assets as stipulated by the FCMC (vault cash; claims on the Bank of Latvia and solvent credit institutions whose residual maturity does not exceed 30 days, and deposits with other maturity, if a withdrawal of deposits prior to the maturity has been stipulated in the agreement; investment in financial instruments, if their market is permanent, unrestricted) must not be less than 30% of banks' total current liabilities with residual maturity under 30 days.
[7] Liquid assets = vault cash + claims on central banks and other credit institutions + central government fixed income debt securities.