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# FINANCIAL MARKET IN LATVIA



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RIGA 2003

## ABSTRACT

During the last decade Latvia made a considerable progress and has created an institutional structure and legislative framework to support a market-oriented financial system. The financial sector of Latvia comprises nearly all financial institutions typical of developed markets. The regulatory enactments of Latvia conform to all EU requirements and in some respects are even stricter. Latvia's accession to the EU will be an important turning point for the country's economy, including the financial market, and will provide higher income and wider opportunities.

**Key words:** *financial market, settlement systems, European integration*

**JEL classification codes:** *G10, G20*

The views expressed in this publication are those of the authors, who are employees of the Bank of Latvia Monetary Policy Department. Any errors and omissions are the authors' responsibility.

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ISBN 9984-676-08-0

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## INTRODUCTION

The financial sector of Latvia has undergone considerable transformation over the last decade. The principal measures in support of liberalization and adjustment of the Latvian financial system, including liberalization of financial services, cancellation of restrictions on currency exchange and administrative regulation of banks' interest rates, liberalization of capital and current accounts and opening of the market to foreign competition, were taken already in the early 1990s. Thus the basic conditions for development of the financial system in Latvia were set as early as the beginning of the transition period. Since then, the financial sector of Latvia has undergone various phases of development, including rapid evolution of the banking sector, privatization of banks, responses to the domestic banking crisis in 1995 and the 1998 financial crisis in Russia. Development of the supervision system, consolidation of the banking sector, and the inflow of foreign capital have all contributed to facilitate stability and strengthening of the financial sector.

In recent years, significance of the financial sector has been gradually increasing both in the industrialized countries and transition economies. Perhaps the most important function of the financial sector is the transfer of savings to investment. The type of utilization of savings, however, is even more essential. The main advantage of the financial sector is effective distribution of savings among the consumers of capital – enterprises and private persons using credit. Another significant function of the financial sector is to minimize economic risks, as financial intermediaries offer their customers increasingly complex instruments for minimizing and diversifying credit, currency and interest rate risks. Conventionally, development of the financial sector is largely attributed to the level of economic development of the country. On the other hand, recent studies by Western economists confirm that development of the financial market has a substantial influence upon economic development.<sup>(4)</sup> This means that the financial sector has an important role in achieving Latvia's nominal and real convergence with the European Union (EU).

This study is an analysis of the present structure of Latvia's financial sector, its instruments, participants, as well as the most important developments and changes to be expected in the coming years. Chapter I describes the structure of the financial market of Latvia and the principal sectors of the financial market – money, foreign exchange and securities markets. Chapter II presents an analysis of the functional aspects of the monetary policy transmission mechanism. Chapter III discusses Latvia's financial system in view of accession to the EU.

The work is based primarily on the data of the Bank of Latvia. Where data of other institutions are used, the source has been indicated.

## I. STRUCTURE OF FINANCIAL MARKET IN LATVIA

### Market Participants

Financial market is an integral part of the financial system that ensures transfer of resources from one market participant to another. Financial market involves three main groups of participants: final lenders, final borrowers and financial intermediaries (financial institutions and monetary financial institutions). According to the guidelines of the International Monetary Fund and the European Central Bank (ECB), monetary financial institutions and other financial institutions are central banks, credit institutions, money market funds, insurance companies, pension funds, companies engaged in financial leasing and crediting against customer's right of claim, companies financing exports and imports, pawnshops, investment funds, stock exchanges, brokerage companies, companies engaged in currency exchange, and management companies that exercise direct management and control of subsidiary undertakings involved in financial intermediation.

The main Latvian financial market participants are banks. Their assets (excluding trust assets and transit credits) constitute 90% of Latvia's financial sector assets (see Chart 1).

Chart 1

#### STRUCTURE OF MONETARY FINANCIAL INSTITUTIONS' AND FINANCIAL INSTITUTIONS' ASSETS

(excluding the central bank, depository and stock exchange; end of 2001; %)



Source: Central Statistical Bureau of Latvia, Financial and Capital Market Commission and Latvian Leasing Association.

Latvia has set up a universal banking sector. All banks are mostly operating as commercial banks, offering a wide range of traditional banking services, such as account maintenance and settlement, lending and financial leasing, asset management etc. In recent years, competition has originated some kind of specialization where banks prefer one banking business to another; however, a full range of principal services is usually available, with the exception of the smallest banks.

Latvia has witnessed rapid growth of banks (see Table 1). In the course of six years, total assets of banks have increased 4.3 times, totalling 3 440.4 million lats at the end of 2001.

Latvian banks have a significant share of foreign assets and liabilities (see Chart 2), primarily determined by the traditional economic ties with the CIS countries: Russian capital seeks safe investment opportunities, and Latvia proves to be suitable because of its macroeconomic and financial stability (low inflation, stable national currency); moreover, Latvian banks provide high quality banking services.

Table 1

**BALANCE SHEET ITEMS OF BANKS**

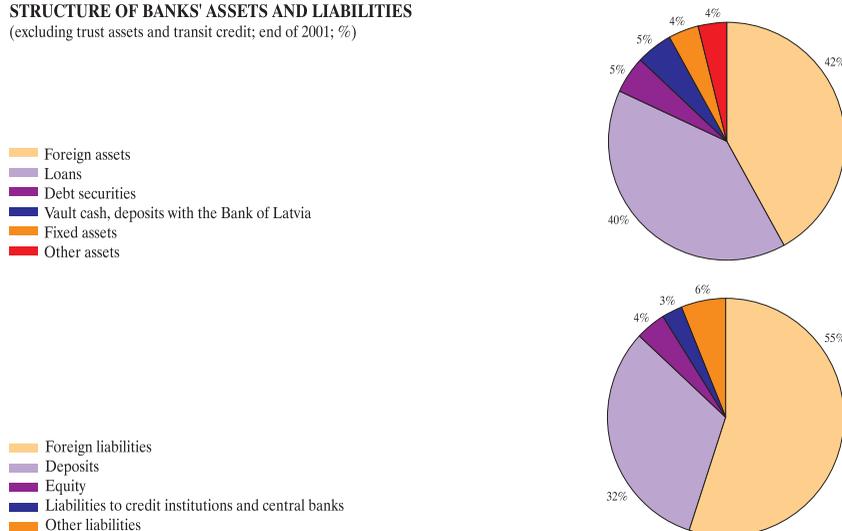
(excluding trust assets and transit credit; at end of period; in millions of lats)

	1995	1996	1997	1998	1999	2000	2001
Assets	795.9	1 116.1	1 673.2	1 671.4	1 941.8	2 678.4	3 440.4
Loans	209.7	266.5	484.1	718.2	830.2	1 066.6	1 617.6
Deposits	529.9	686.0	1 080.2	1 042.4	1 290.8	1 864.6	2 329.7
Equity	103.1	148.7	219.5	196.2	192.6	227.9	308.5
Profit	5.4	30.0	46.0	-28.4	17.9	38.3	49.6

Chart 2

**STRUCTURE OF BANKS' ASSETS AND LIABILITIES**

(excluding trust assets and transit credit; end of 2001; %)

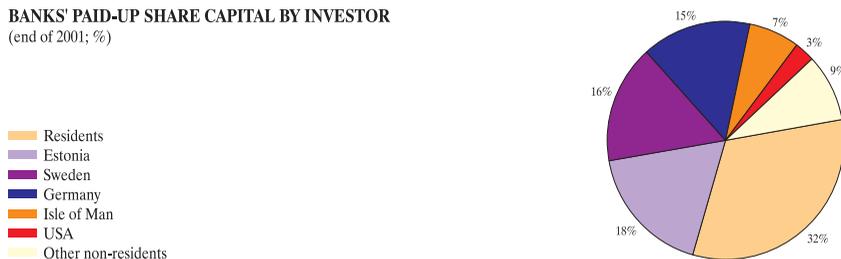


The entry of strategic foreign investors into major Latvian banks has made the sector more resilient to external shocks. At the end of 2001, non-residents owned 67.8% of banks' paid-up share capital in Latvia (see Chart 3). Foreign capital comes to the banking sector mainly from the Scandinavian countries and Germany. Twelve domestic banks are now predominantly foreign-owned, and there are five subsidiaries of foreign banks doing business in Latvia. This indicates that the national banking sector is already

a constituent part of the global financial environment. The last substantial deal was signed in the autumn of 2000, when the Swedish bank *Skandinaviska Enskilda Banken* (SEB) increased its share in the joint-stock company (JSC) *Latvijas Unibanka*, the country's second largest bank, from 50.5% to nearly 100%. SEB acquired full ownership of its subsidiaries in Lithuania and Estonia in the same period, and now is the dominant player in the Baltic banking services market.

Chart 3

**BANKS' PAID-UP SHARE CAPITAL BY INVESTOR**  
(end of 2001; %)



Source: Financial and Capital Market Commission.

Most Latvian banks are privately owned, and at the end of 2001, state holdings in the paid-up share capital of the banking sector constituted only 4.5%. The State owns the JSC *Latvijas Hipotēku un zemes banka* (Mortgage and Land Bank of Latvia) and holds a capital share in the JSC *Latvijas Krājbanka* (Savings Bank of Latvia; 32%), while the privatization process of this bank is being continued.

Banks' major sources of income are interest income on loans, and commissions for payments and other services. Structure of the income, as well as the client base, has changed since the financial crisis of Russia in 1998, and only a limited number of banks still function in the CIS market. Due to reorientation towards the EU market and reduction in the banking sector's exposure to the financial risks of Russia, Latvia is now far less vulnerable to financial shocks in its eastern neighbour. At the same time, competition for domestic clients has increased, and this encourages banks to move into new market segments, particularly by expanding financing of small- and medium-sized enterprises and private persons. Banks are shaping their strategies by defining a target client base and primary income sources.

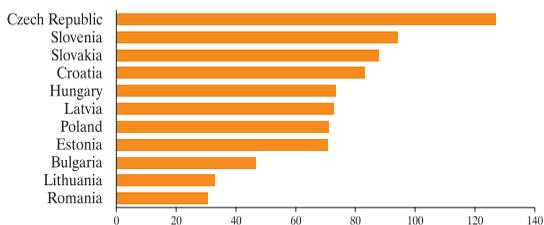
At the end of 2001, Latvian banks' assets were about 73% of the gross domestic product (GDP; see Chart 4).

Furthermore, the Latvian banks play an important role in attracting foreign investment. It is extremely important for Latvia to retain access to international capital markets to offset the external imbalance caused by the transitional period, and to make efficient use of technological and organizational possibilities related to foreign investment. A successful banking sector is therefore an essential precondition for restriction of instability risks, and its prime responsibility is to set up a favourable investment climate

that would attract foreign long-term investment. The role of banks in the attraction of foreign investment is confirmed by the fact that, at the end of 2001, banks' foreign liabilities constituted 41.0% of residents' foreign liabilities recorded in the international investment balance sheet (predominantly as demand and short-term deposits). Banks' foreign assets amounted to 55.9% of the total residents' foreign assets recorded in the international investment balance sheet (predominantly as short-term loans and bonds).

Chart 4

**BANKS' ASSETS**  
(end of 2001; % of GDP)



Source: central banks of the respective countries.

The most developed areas of the non-bank financial sector are leasing and insurance (the assets of these areas constituted 53% and 25% of the non-bank financial sector's assets, respectively). In absolute terms, leasing has been the most rapidly developing component of the non-bank financial sector of late, and has ranked second in terms of growth rate (the first being investment funds), thereby proving to be a useful vehicle for financing small- and medium-sized enterprises. Leasing and factoring services are provided both by banks and by leasing companies, which are mostly part of banking groups. Investment opportunities offered by mutual funds are becoming increasingly popular, and investment funds, as well as pension funds, are rapidly growing areas of the non-bank financial sector.

The insurance market is consolidating due to attraction of considerable foreign investment (at the end of 2001, 52% of insurance companies' paid-up share capital was foreign-owned). In 2001, total insurance gross premiums constituted about 2% of GDP. 95% of insurance premiums were generated from non-life risk insurance services.

In 1997, the Law on Pension Funds was adopted, and Latvia was among the first countries of Central and Eastern Europe that introduced the second pillar of the pension system. The introduction of state-funded pension system has significantly contributed to the development of pension funds and accrual life insurance. The future outlook for such services also seems favourable, because tax legislation promotes their development – contributions to pension funds and long-term life insurance payments are tax-deductible.

Perhaps the most significant changes in the institutional structure are related to foundation of the unified financial supervisory authority, Financial and Capital Market Commission, on July 1, 2001. The new supervisory authority took over the responsi-

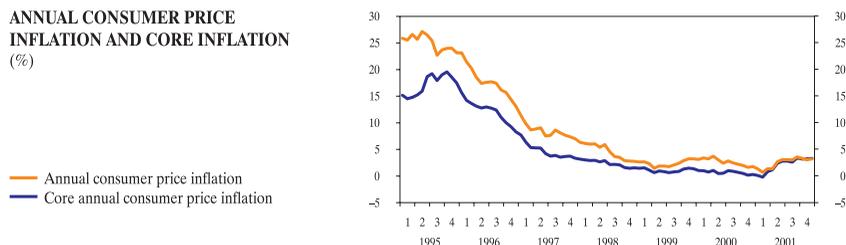
bilities of the Bank of Latvia Credit Institutions Supervision Department, Insurance Supervision Inspectorate and Securities Market Commission. The Financial and Capital Market Commission has regulatory functions, and it is an independent institution that works hard to close all remaining loopholes that are still found mostly in the small non-bank area.

## Credit Market

Macroeconomic stability has fostered favourable development of the domestic credit market. The tight monetary policy implemented by the Bank of Latvia helped to stop hyperinflation, and the Bank of Latvia managed to keep inflation under control. For several years, annual consumer price inflation in Latvia has been close to the inflation levels of the EU countries (see Chart 5).

Chart 5

**ANNUAL CONSUMER PRICE INFLATION AND CORE INFLATION (%)**

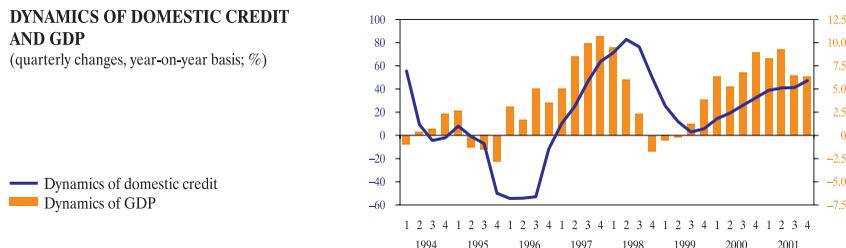


In 2001, real GDP growth was 7.7%, which is one of the highest growths among the EU accession countries. Strong economic growth has continued in 2002, and the Bank of Latvia forecasts annual GDP growth of 5.0%. In the first six months of 2002, real GDP growth was 4.4%.

Positive macroeconomic development improved credit conditions – interest rates decreased and maturity of credits grew (some banks issue credits with a maturity of 30 years). Domestic credit growth has accelerated in recent years (see Chart 6): loans to domestic enterprises and private persons amounted to 28.5% of GDP at the end of 2001 (8.7% at the end of 1995). Credits per capita have grown from 82 lats at the end

Chart 6

**DYNAMICS OF DOMESTIC CREDIT AND GDP**  
(quarterly changes, year-on-year basis; %)



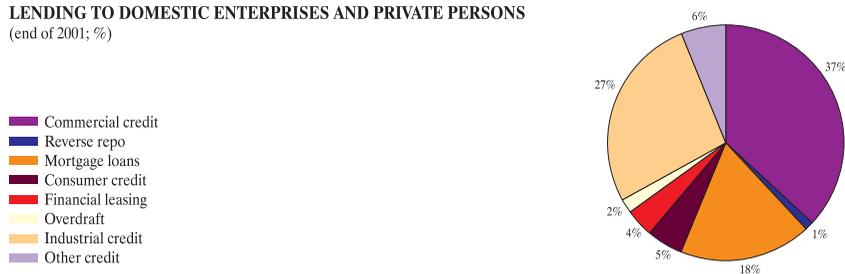
of 1995 to 578 lats at the end of 2001. There is no systemic risk to the banking sector due to the high credit growth, as the capital adequacy ratio of banks is high (14.2%), non-performing loans have decreased to 2.8% of the assets, and the loans are well provisioned.

At the end of 2001, bank lending in all currencies to domestic enterprises and private persons increased by 49.8% compared to the end of 2000. In addition, favourable trends were recorded in the maturity profile of loans. Short-term loans increased by 32.5%, while long-term loans expanded by 55.0%. As a result, the share of long-term loans increased from 77.1% to 79.7%, signifying a successful development of mortgage lending (doubled from the end of 2000 to the end of 2001).

The share of mortgage loans in the banks' domestic credit portfolio increased from 9% at the end of January 2000, to 18% at the end of December 2001, while commercial credit and industrial credit amounted to 37% and 27% of the credit to domestic enterprises and private persons, respectively (see Chart 7). Consumer credit and credit card credit still have a small share around 5%.

Chart 7

**LENDING TO DOMESTIC ENTERPRISES AND PRIVATE PERSONS**  
(end of 2001; %)



At the end of 2001, 23% of all credits granted in lats and foreign currencies (excluding transit credit) went to trade, 18% – to manufacturing, and 17% – to financial intermediation. There is, however, a clear trend toward shrinking of the trade share, as in the early 1990s the credit share to trading companies was considerably higher. Many trading companies have chosen to be foreign-owned in order to acquire sufficient financing for their operation, as foreign partners offer also other technologies, know-how and more advantageous credit conditions.

Competition among banks puts pressure also on the spread between credit and deposit interest rates: at the end of 2001, net interest margin had narrowed on average to 4% for short-term loans and deposits, and to 3% for long-term loans and deposits (see Appendix 4, Table 4.1).

Interest rates on long-term loans are decreasing: in December 2001, the weighted average interest rate on long-term loans in lats amounted to 9.8%, while the weighted

average interest rate on long-term loans in the currencies of the OECD countries dropped to 5.6%. Real interest rates were stable (around 8%). In 2001, there were several factors that did not allow interest rates to fall: firstly, increasing domestic demand for credit caused by economic growth; secondly, periodical changes in the banking sector's liquidity and relatively high interbank market rates; and thirdly, the dominant short-term funds of banks.

Rapid growth of lending activities was facilitated mainly by the substantial increase in deposits, which demonstrated reinforcement of public confidence in the banking sector. The establishment of a deposit insurance scheme, started in 1998, continued to increase this confidence.

At the end of 2001, resident deposits increased by 25% compared to the end of 2000, thus reaching the highest level in the history of Latvian banking. The share of demand deposits dropped from 60% to 59%, while time deposits increased by 28% since the end of 2000, and their share rose from 40% to 41%.

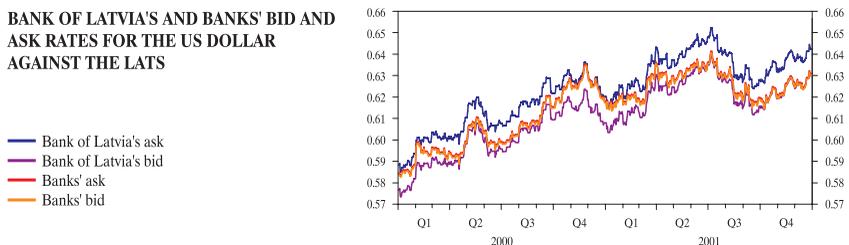
In the near future, along with macroeconomic developments and low inflation, one of the key factors contributing to decrease in interest rates in Latvia will be inflow of foreign capital into the financial sector. Banks with a high share of foreign capital already have access to less expensive financing. Besides, due to the low overall level of Latvia's net external debt (18.8% of GDP at the end of 2001; liabilities of general government, banks and enterprises constituted 13.7%, 49.3% and 37.0% of total external debt, respectively), foreign borrowing through financial intermediaries could be an effective means for reducing the costs of borrowing.

## Foreign Exchange and Money Market

Already in 1994, Latvia agreed with the International Monetary Fund to continue implementing free currency flow (without controls and external influence). The Bank of Latvia has pegged the lats to the SDR basket of currencies and keeps the exchange rate fixed by passive interventions in the foreign exchange market (see Chart 8). As no restrictions are imposed on capital flows, the exchange market became one of the most developed and liquid financial market sectors from the very beginning. In 2001,

Chart 8

**BANK OF LATVIA'S AND BANKS' BID AND ASK RATES FOR THE US DOLLAR AGAINST THE LATS**

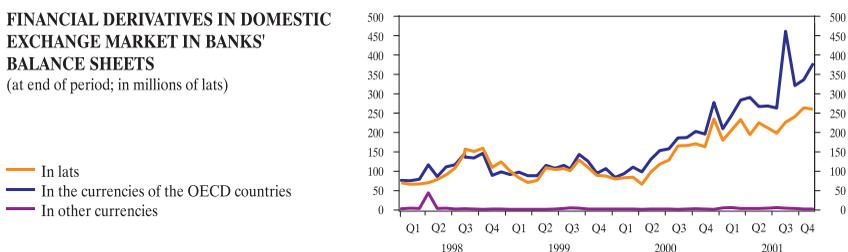


the average monthly turnover of foreign exchange transactions in Latvian banks was 9.9 billion lats (including spot transactions – 7.1 billion lats, currency swaps – 2.4 billion lats, transactions with private persons – 0.3 billion lats, forwards – 0.1 billion lats), which exceeded credit in the interbank market (see Appendix 4, Table 4.2).

Financial derivatives market is emerging at a rapid pace. Its development was facilitated in 2000 by the necessity to hedge the potential exposure of exporters, as the downward movement of the euro had a negative impact on exports. Financial derivatives of short-term maturity (currency swaps and forwards) are prevailing. At the end of 2001, banks' currency and interest forwards with residents reached 637.0 million lats (40.8% in lats), the year-on-year growth amounting to 77.8% (see Chart 9).

Chart 9

**FINANCIAL DERIVATIVES IN DOMESTIC EXCHANGE MARKET IN BANKS' BALANCE SHEETS**  
(at end of period; in millions of lats)



The interbank market lats turnover has considerably increased during the previous years; however, higher fluctuations of the domestic money market rates (on overnight loans in particular) relative to the SDR basket have also been observed. In 2001, the overnight RIGIBOR averaged 5.7% with a standard deviation of 1.3. Fluctuations of interest rates on short-term loans in lats partly result from the national currency rate peg, but they also reflect the relative thinness of the domestic market. The Bank of Latvia, however, has an important role in managing banks' liquidity so as to avoid excessive volatility in interest rates. The Bank of Latvia has a wide set of monetary instruments (repo, reverse repo, outright purchases and sales on the secondary market, currency swaps) which allow it to affect the liquidity of banks in an efficient way.

### Capital Market

Capital market consists of fixed income debt securities and share market. In Latvia, the fixed income securities market is small by international standards, yet it has developed a versatile legislative framework and adequate institutions. Latvia's fixed income securities market offers government debt securities, debt securities of joint-stock companies, mortgage bonds and other securities.

Government debt securities play a far more significant role in Latvia's debt securities market than private debt securities (see Appendix 4, Table 4.3). At the end of 2001, the amount of outstanding government securities was 258 million lats, while govern-

ment eurobonds totalled 425 million lats. In 2000, the Government started to issue 5-year bonds.

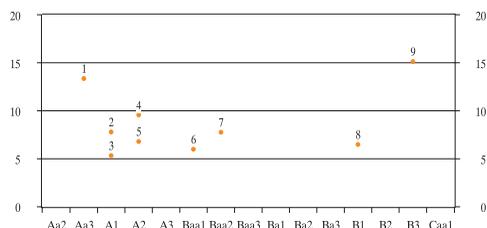
Development of Latvia's government securities market started in December 1993, and for some years no other securities were offered in the public market. Trading was mostly done at over-the-counter (OTC) market. Since 1999, government securities have been actively traded at the Riga Stock Exchange. The foreign investors' share has been up to 20% of total government securities, depending on the yields and market sentiment regarding the new emerging markets. At the end of 2001, non-residents owned 9.2% of government securities. The attractiveness of Latvian government securities is determined by the good country rating (the rating of long-term credit in the national currency: *Standard & Poors* – A–, *Fitch Ratings* – A, *Moody's Investors Service* – A2), attractive interest rate (see Chart 10), and the fact that the volume of private fixed income bonds is not large. At the end of 2001, medium- and long-term securities dominated in the government securities market (see Chart 11).

Chart 10

**COUNTRY RATING FOR LONG-TERM BONDS AND YIELD OF 5-YEAR BONDS**

(in national currency; end of 2001; %)

- |                  |             |
|------------------|-------------|
| 1 Slovenia       | 6 Lithuania |
| 2 Hungary        | 7 Slovakia  |
| 3 Czech Republic | 8 Bulgaria  |
| 4 Poland         | 9 Russia    |
| 5 Latvia         |             |



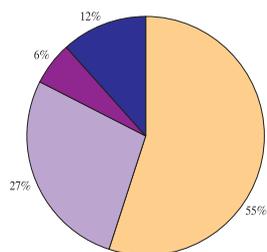
Source: Reuters and Moody's Investors Service.

Chart 11

**MATURITY PROFILE OF OUTSTANDING GOVERNMENT SECURITIES**

(end of 2001; %)

- 5-year bonds
- 3-year bonds
- 2-year bonds
- Bills



At the end of 2001, the nominal value of private debt securities registered with the Latvian Central Depository was 45.2 million lats (1.0% of GDP). Of this amount, 57% was released in public issues and 43% in closed issues. Although the volume of private debt securities is not increasing rapidly, a positive feature is the growing share of longer maturity debt securities. In 2000, the State JSC *Latvijas Hipotēku un zemes banka* issued mortgage bonds of 7-year maturity and, in 2001, mortgage bonds of 10-year maturity.

One of the basic features of Latvia's capital market is the preference that non-financial enterprises have for banks' credit over the issuance of bonds. Bond yields are usually higher than credit interest rates, therefore issue of bonds is not attractive to business companies (commercial companies). Only a few issuers (mostly banks) are able to ensure successful placement of securities. Many companies prefer attracting funds through closed issues of such debt securities that cannot be traded at the Riga Stock Exchange. There are, however, positive signs confirming future growth in the volume of public-issue private debt securities. Moreover, debt securities of longer maturity are being issued, which is a sign of stability in the market and can promote inflows of long-term investment from insurers and pension funds. End of privatization of the large state enterprises will help to accelerate development of the local bond market, because such enterprises are able to issue large volumes of liquid bonds.

Share market, the second component of capital market, plays a less significant role in Latvia at present than debt securities market. Latvia, like other EU accession countries, started with a small number of shares, all of which were offered through initial public offering. Many shares had fairly liquid trading. Gradually the number of listed companies grew. Besides those that appeared in the list through privatization programs, there were also newly established joint-stock companies. However, activity in the secondary share market gradually ceased.

At the end of 2001, the total nominal value of public-issue shares was 287 million lats, and their market capitalization was 439 million lats or 9.3% of GDP (see Appendix 4, Table 4.4). The nominal value of closed-issue shares was approximately 5 times higher than that of public-issue shares. In 2001, the monthly average turnover of shares was 8.6 million lats (19% of the Riga Stock Exchange turnover).

At the end of 2001, the shares of 63 companies were registered with the Riga Stock Exchange. The main events on the share market during recent years are related to high-growth enterprises: the Swedish SEB acquired nearly 100% shares of the JSC *Latvijas Unibanka*; the Danish *Codan* purchased shares of the insurance company *Balta*; and shares of the JSC *Latvijas Gāze* were successfully auctioned to German and Russian investors.

The privatization process has to be completed to increase turnover of shares on the Riga Stock Exchange. In particular, it concerns large joint-stock companies such as *Ventspils nafta* and *Latvijas Krājbanka*, and *Lattelekom Ltd.*

In 2002, the Finnish *HEX Group* (stock exchange and depository) acquired shares of the Riga Stock Exchange and the Latvian Central Depository. Attraction of a strategic investor will simplify the access of foreign investors to Latvia's financial market, and in the future, the *HEX Group* itself is likely to become part of a larger European Stock Exchange association.

## II. FUNCTIONING OF FINANCIAL MARKET

The new liberalized financial environment, the ongoing process of financial innovation and the development of open market operations promoted by the Bank of Latvia have changed and continue to change the ways in which monetary policy is implemented. The impressive size of the banking sector in Latvia's financial market structure indicates that it plays a decisive role in determining the influence of the monetary policy upon the real sector of Latvia's economy, and will maintain such role in the near future.

In many developing countries, in particular those with bonds, equities and real estate markets at the initial stages of development, exchange rate is probably the most important asset price affected by monetary policy. In small open economies the exchange rate channel (independently of whether the country has a fixed or a floating exchange rate regime) is becoming increasingly important.

In Latvia, which is a small economy heavily engaged in international trade, the exchange rate targeting was considered the optimum monetary policy strategy during the transition period. This approach was supported by the fact that, due to the huge structural changes in economy, money demand in Latvia is unstable and changing. At the same time, for Latvia, which heavily depends on imports (45% of GDP), the fixed exchange rate can be the main factor contributing to the overall price level in the economy through import prices. Since 1994, the Bank of Latvia has pegged the national currency to the SDR basket of currencies and is committed to keep this peg in the future. It is important to note that the composition of currency used in Latvia's foreign trade corresponds closely to that of the SDR basket of currencies. In 2001, 39% of Latvia's foreign trade transactions were carried out in US dollars and 40% in euros. Consequently, the impact of exchange rate on price stability plays a major role in Latvia at the present time.

Although interest rate channel is regarded as one of the most important channels of monetary transmission in Western economies, its influence on the economy of Latvia, especially at the beginning stages of the financial reforms, has been limited. At the initial stages of transition, the inflation rate was very high and had a significant impact on lending rates, whereas the impact of the Bank of Latvia's interest rate policy on the volume of investment and, consequently, on the aggregate demand, was greatly limited.

The combination of capital mobility and fixed exchange rate constrained the ability of the Bank of Latvia to pursue independent monetary policy, including impact on interest rates. However, since Latvian and foreign assets are not perfect substitutes, monetary policy is able to influence interest rates, at least in the short run. In this sense, deviation of Latvia's interest rates from the foreign ones will not necessarily cause immediate capital inflow.<sup>(9)</sup>

Yet, the Bank of Latvia does not pursue any specific interest rate target, but tries to smooth excessive fluctuations in money market rates, or uses interest rate policy in case of possible pressure on the exchange rate of the national currency. As a matter of fact, the two variables – exchange rate and interest rate – can react instantaneously to one another. A number of empirical studies at the Bank of Latvia explore the link between foreign exchange and money market in Latvia.

The analysis of the interbank market exchange rate (see Appendix 2) shows that the foreign exchange market reacts to the changes of interest rate spread between 3-month RIGIBOR (interest rate on loans in lats quoted in the interbank market) and 3-month LIBOR (interest rate on loans in US dollars quoted in the London interbank market) with a lag of one week. Increase in the lats interest rates above the foreign currencies interest rates attracts foreign capital to the domestic money market, raises the demand for lats and appreciation of the lats exchange rate within the Bank of Latvia's intervention corridor. On the other hand, decrease in the above-mentioned interest rate spread leads to closing of lats positions and to market pressures on the national currency and depreciation of the lats exchange rate within the Bank of Latvia's intervention corridor with a lag of 1–2 weeks.

Research shows that the role of interest rate channel is gradually becoming more important in Latvia (see Appendix 3). With the development of open market operations, the interest rate on the central bank's repo operations becomes a benchmark in the domestic money market. Changes in the central bank's interest rate are immediately transmitted to short-term lats money market lending rates of maturity up to 3 months.

The model analysed in Appendix 3 can be applied to basic analysis of monetary policy impact, interpreting changes in money market interest rates, which are not explained in the model, as monetary policy impulses. In order to obtain more accurate estimates of the monetary policy impact on lending rate dynamics, it would be necessary to expand the model by separating the Bank of Latvia's policy from other factors affecting Latvian money market developments (such as foreign capital inflows and government financial operations).

Increased share of floating interest rate credit with a rate pegged to money market interest rates will facilitate the Bank of Latvia's impact on interest rates of long-term loans and deposits, thereby encouraging domestic private persons and enterprises to make decisions on spending and investment. In the near future, however, the impact of the Bank of Latvia on the interest rates will remain rather limited due to a number of reasons:

- with foreign capital entering the financial sector, many banks are now having wide access to foreign capital markets;
- banks' lending rates depend not only on money market interest rates, but also on the credit demand by potential borrowers;

- the relatively high degree of dollarisation (the share of foreign currency component in broad money is approximately 30%) has an effect on the situation;
- despite the rapid growth in volume, loans still comprise only around 40% of banks' assets. Though this share is consistently increasing, it clearly does not meet the needs of economy. The other similar indicator (domestic credit and GDP ratio) is also at a rather low level of 25%, still being far from economy's potential needs for loans.

No statistical evidence has so far been observed regarding the influence of interest rate on inflation. Partly it may be explained by the reasons referred to, as well as by the fact that a higher aggregate demand may eventually induce higher supply of imports rather than reflect on the prices. It should be noted that, apart from traditional external and internal factors, there are several other factors affecting tradable and non-tradable prices (administratively regulated prices, income and price convergence on the EU standards, relative productivity of tradable and non-tradable sectors etc.).

### **III. FINANCIAL MARKET IN VIEW OF INTEGRATION IN THE EUROPEAN UNION**

The developments that have swept the emerging markets in recent years have left no doubt about the importance of a strong and well-regulated financial sector. The legislative framework for banking in Latvia meets all EU requirements, and in some respects Latvia's requirements are even stricter. In Latvia, practical supervision is very tight and bank inspections are more frequent than in the EU countries. The latest EU directive imposed on credit institutions in Latvia in January 2001 was a capital charge for market risks. Financial reports in conformity with International Accounting Standards and audit practices are compulsory. Annual reports are prepared in accordance with International Accounting Standards and audited by international auditing firms.

The required minimum initial capital to establish a bank is 5 million euros. Foreign banks that want to establish subsidiaries or branches in Latvia face no restrictions. The prudential requirements they have to meet are the same as those for domestic banks.

On October 24, 1995, the Credit Institution Law was adopted, with subsequent amendments over the following years. Regulatory enactments of the Financial and Capital Market Commission and the Bank of Latvia specify the requirements set by the law. The whole set of regulations used by the supervisory authority conforms to the EU standards. The regulations apply to issues related to minimum initial capital, own funds, capital adequacy, liquidity requirements, large exposures, open foreign exchange positions, loan classification and provisioning.

The Law on the Prevention of the Laundering of Proceeds Derived from Criminal Activity came into effect on June 1, 1998, and fully conforms to the respective EU directive.

It requires customer identification and record keeping on all transactions, defines suspicious transactions and obliges banks to report them to a special control authority (Service for the Prevention of the Laundering of Proceeds Derived from Criminal Activity).

The Law on Natural Person Deposit Guarantees came into effect on October 1, 1998. The guaranteed compensation for one depositor in the bank referred to by this Law covers the principal amount up to 3 000 lats. The Law sets a timetable for increasing the amount of the guaranteed compensation to the level required by the EU regulations. Currently the Law applies only to natural persons' deposits, but the amendments to the law adopted by the Parliament of Latvia apply the guaranties also to legal persons' deposits as of January 1, 2003.

In view of Latvia's integration with the EU, the banking sector should be ready to provide services meeting the efficiency level of the EU. The banking sector should be able to persist under the growing competition, which is undoubtedly going to intensify. Latvia is going to lift the requirement to obtain a banking licence in respect of banks registered in the EU member states and seeking to open a branch in Latvia, as of January 1, 2003. Pursuant to the respective amendments to the Credit Institution Law, the supervision body of the relevant EU member state will only have to inform the Latvian banking sector's supervisor, the Financial and Capital Market Commission, about the banking licence issued to the given bank in its home country.

With the emergence of a highly liquid euro market, the customer base of Latvian banks may shrink. Under such circumstances Latvian banks will benefit from the advantage of having knowledge of local business in the areas with prevailing domestic companies and of enterprises doing business with Russia.

One cannot deny that Latvian banks are very small by global standards. This aspect can be a serious obstacle for them to successfully compete in the domestic and international market, as well as to join in large and significant projects. Nevertheless, the capital of Latvian banks is growing rapidly, consolidation is going on, and now the assets of three largest banks account for 52% of total assets of the banking sector.

World economy is characterized by two main developments: globalization and use of modern information technology in business. Penetration of foreign capital into the financial sector of Latvia will facilitate the development of new technologies in Latvian banks. The leading Latvian banks provide Internet banking services in order to derive profit from Latvia's fast growing access to cyberspace. The digital banking products offered to clients since 2000 include also services to users of Internet-enabled WAP mobile phones. Latvian banks will have to invest ever more funds in the development of technologies in order to strengthen their market position. Consequently, those banks that are able to modify their technological basis in compliance with future requirements of the financial market will be the gainers.

On September 8, 2000, the new real-time gross settlement system (SAMS) was launched in Latvia. The Bank of Latvia interbank payment systems are fully automated and harmonized with the EU requirements. Banks have non-interest bearing overdraft facilities during the day against a collateral. At the end of the day debit balances are transformed into Lombard credits. Real-time gross settlement handles Latvian government securities and some private sector debt securities, which are deposited with the Bank of Latvia's Securities Settlement System.

In order to join the Economic and Monetary Union, Latvia must fulfil the Maastricht criteria and participate in the Exchange Rate Mechanism (ERM) for at least two years. To become a member of the European System of Central Banks, Latvia's monetary policy instruments and procedures must be harmonized with the ECB requirements. When comparing the Bank of Latvia's regulatory requirements and procedures with the ECB regulations (*General documentation on Eurosystem monetary policy instruments and procedures*), it is obvious that the monetary policy instruments used by the Bank of Latvia are very close to those used within the European System of Central Banks.

In Latvia, securities settlement is ensured by two securities settlement systems: DENOS (Latvian Central Depository System) and VNS (Bank of Latvia System). All public securities in Latvia must be registered with the Latvian Central Depository. VNS lists all securities registered with the Latvian Central Depository, which are used in the monetary operations of the Bank of Latvia. The two systems will be joined in the coming years, so as to implement EU standards and recommendations, as well as to optimize costs.

## CONCLUSIONS

During the last decade Latvia has made a considerable progress and has created an institutional structure and legislative framework to support a market-oriented financial system. The financial sector of Latvia comprises nearly all financial institutions typical of developed market: the system is based on banks, and there are also private pension funds, leasing companies and insurance companies. The financial market is consolidating and attracting considerable foreign investment.

Macroeconomic stability has had a favourable influence on the development of the domestic credit market. Growth rate of credit, mortgage credit in particular, has been comparatively high. At present it cannot, however, present problems for banks, as banks' capital adequacy is high, while the relative share of loans is still low in the economy.

Apart from the developments in macroeconomics and low inflation, one of the main factors to promote decrease in interest rates in Latvia in the near future will be inflows of foreign capital in the financial sector. Banks with a large share of foreign capital already have access to less expensive funding. Moreover, due to the low level of Latvia's net foreign debt, foreign borrowing by financial intermediation could be effective to reduce loan costs.

One of the distinguishing features of the Latvian financial market is the fact that enterprises are more willing to borrow from banks than attract resources from capital market by issue of securities. It can be partly attributed to higher public issue costs of enterprise securities. Only a few issuers (mostly banks) are able to ensure successful placement of securities. There are, however, positive signs confirming future growth in the volume of public-issue private debt securities. Likewise, their maturity is becoming longer, which is a sign of stability in the market and can promote inflows of long-term investment from insurers and pension funds.

The large share of the banking sector in Latvia's financial market determines the significant role of banks regarding the impact of monetary policy on the real sector of Latvian economy. At present, exchange rate is the main factor contributing to the overall price level in Latvia, despite the fact that policy-induced changes in interest rates do not affect the lats' nominal exchange rate. The new liberalized financial environment, the ongoing process of financial innovation and the development of open market operations by the Bank of Latvia have changed and continue to change the ways in which monetary policy is transmitted. The interest rate channel plays an increasingly important role in Latvia. Its influence on Latvian economy has so far been limited due to a number of factors, including the low share of loans and savings, and the access of banks and large enterprises to foreign financing.

The financial sector of Latvia has completed the restructuring and formation phase, and anticipates progress, increased effectiveness and services, as well as growing

integration with the EU financial market. Even now, the EU and USA capital accounts for a major share in the Latvian financial sector's equity capital; hence the Latvian financial sector has actually become a constituent part of the global financial market. The entry of strategically important foreign investors into major Latvian banks has made the sector more resilient to general external shocks and increased banks' dependence on the developments in the global financial market.

Accession to the EU is within Latvia's reach. Therefore, the banking sector should be ready to provide services that meet the efficiency level of the EU. The regulatory enactments of Latvia conform to all EU requirements, and in some respects Latvia's requirements are even stricter. It should be taken into account, though, that the banking sector must be able to persist under the circumstances of growing competition. After accession to the EU, Latvian banks will benefit from the knowledge of developments in the local entrepreneurship, and those banks that give special attention to provision of services to residents and are able to modify their technological basis in compliance with changes of requirements in the financial market will be winners. Accession to the EU will be an important turning point for the whole economy of Latvia, including the financial market, and will provide higher income and wider opportunities. Optimal use of them will depend exclusively on the market participants' level of knowledge and qualification.



## APPENDIXES

### Appendix 1

Table 1.1

#### THE MAIN MACROECONOMIC AND FINANCIAL INDICATORS OF THE BALTIC STATES IN 2001

	Estonia	Latvia	Lithuania
Population (million)	1.4	2.3	3.5
Real GDP growth (%)	5.0	7.6	5.9
GDP per capita (EUR)	4 525	3 572	3 907
Annual consumer price inflation (%)	5.8	2.5	1.3
Current account (% of GDP)	-6.5	-10.1	-4.8
Exports (% of GDP)	59.9	26.5	38.2
Imports (% of GDP)	77.7	46.4	53.0
State debt (% of GDP)	3.1	15.0	26.9
Banks' claims on domestic private sector (% of GDP)	26.8	26.5	11.5
Domestic private sector deposits with banks (% of GDP)	32.2	20.5	19.2
Banks' assets (% of GDP)	70.8	77.4	31.8
Banks' foreign assets (% of total assets)	23.0	47.4	19.7
Banks' foreign liabilities (% of total liabilities)	31.8	58.5	15.7
Equity market capitalization at stock exchange (% of GDP)	27.0	9.3	10.0
Bond market capitalization at stock exchange (% of GDP)	0.3	5.7	4.1
Real interest rates on long-term loans in the national currency (in December 2001; %)	5.94	6.60	6.06
M2/GDP (%)	42.2	32.5	26.5
Currency in circulation/M2 (%)	17.0	31.5	25.7

Source: Bank of Latvia, Bank of Lithuania and Bank of Estonia.

## MODELLING OF THE EXCHANGE RATE OF THE LATS IN THE INTERBANK MARKET

The major difficulties faced by econometric modelling of financial data are related to statistical properties of data. Although in practice stationarity tests do not reject the hypothesis of a unit root, from the economic point of view the interest rates could be stationary processes. On the other hand, time series with covariance stationary data, but a slowly reducing autocorrelation function, may result in misleading statistical inference (4), since the distribution of coefficient test statistics is heavily skewed. Moreover, the bank-quoted exchange rate position of the lats in the Bank of Latvia's intervention corridor could be a non-linear process, because the exchange rate of the lats has never abandoned the intervention corridor restricting the range of fluctuations.(12)

Model specification:

$$\delta e_t = c_0 + c_1 \delta r_{t-1} + c_2 \text{fxp}_{t-1} + P(L) \delta e_t + \varepsilon_t \quad (\text{II}, 1),$$

where

$\delta e$  is the spread between banks' bid and the Bank of Latvia's bid for the exchange rate of the US dollar;

$\delta r$  is the interest rate spread between the 3-month RIGIBOR (loans issued in lats in the interbank market) and the 3-month LIBOR (loans issued in US dollars in the London interbank market);

fxp is the open exchange position;

$P(L)$  is the polynomial lag operator.

All observations are weekly average values of the corresponding variables.

Table 2.1

## COEFFICIENT ESTIMATES OF THE MODEL (II, 1)

Dependent variable:  $\delta e$

Variable	Coefficient	Standard error	t-statistic	p-value
c	0.003892	0.000614	6.338174	0.0000
$\delta r(-1)$	-0.000771	0.000138	-5.567740	0.0000
fxp(-1)	-0.083685	0.014672	-5.703732	0.0000
$\delta e(-1)$	0.404896	0.113379	3.571172	0.0007
$\delta e(-2)$	0.317968	0.118572	2.681646	0.0097
$\delta e(-6)$	-0.373680	0.061084	-6.117510	0.0000
R <sup>2</sup>	0.958285	F-statistic		252.6935
Adjusted R <sup>2</sup>	0.954493	Durbin-Watson statistic		2.042699

Despite statistic difficulties that arise when using the time series of exchange rate and interest rates, the properties of the model (II, 1) – statistically independent residual values and stability of the regression equation coefficients (see Charts 2.1 and 2.2) – indicate that the model is apt for interpretation of exchange rate fluctuations.

Chart 2.1

**ACTUAL OBSERVATIONS, FITTED VALUES AND RESIDUALS OF THE MODEL (II, 1)**

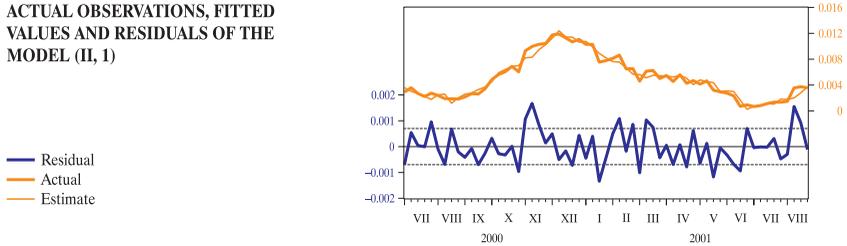
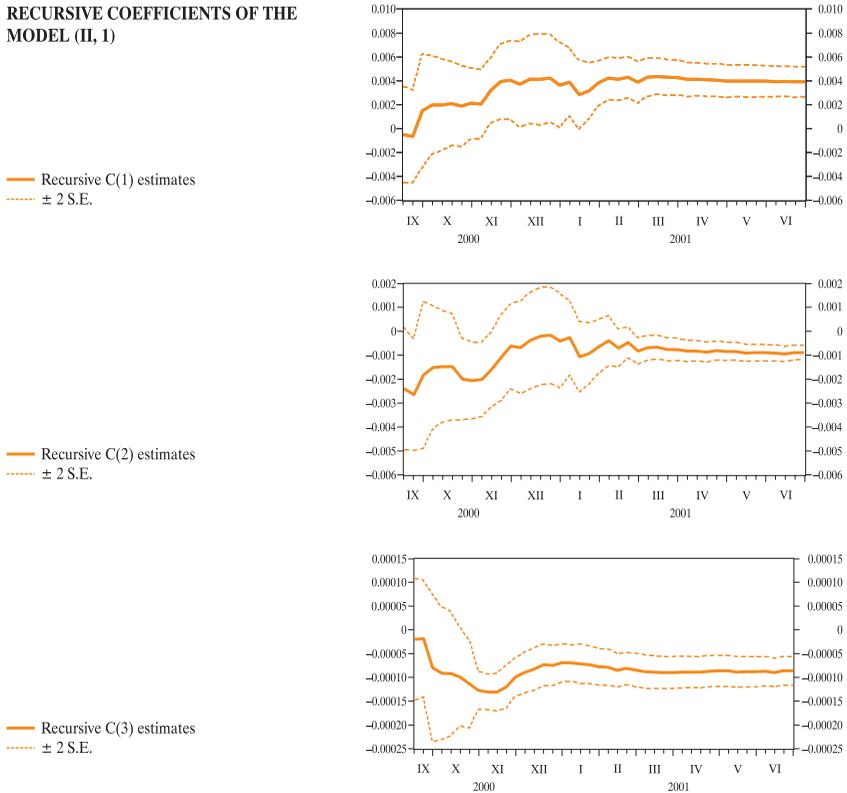
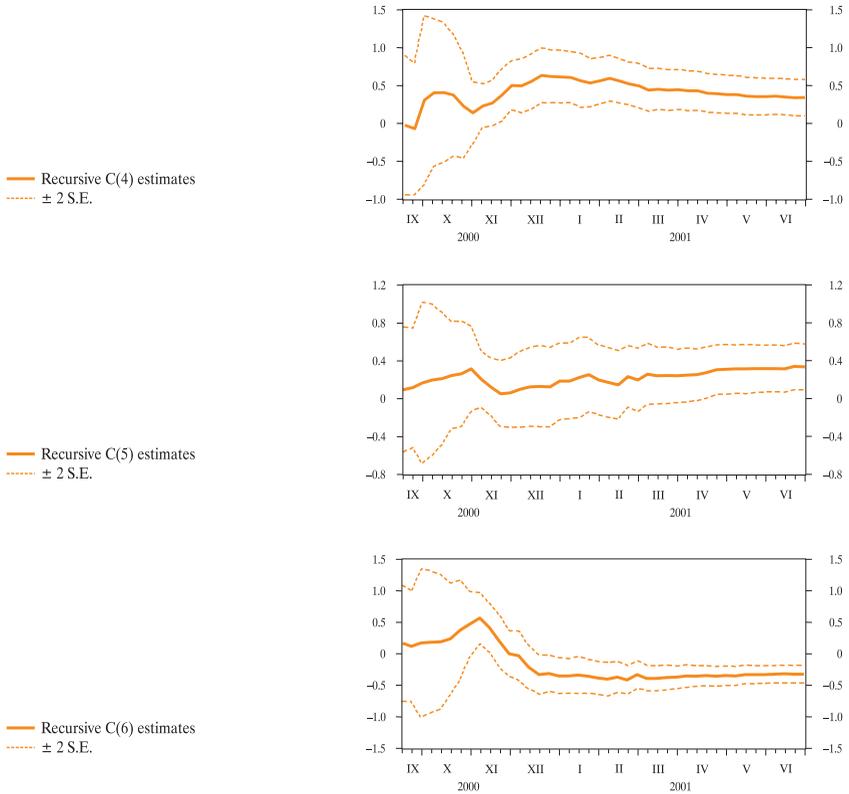


Chart 2.2

**RECURSIVE COEFFICIENTS OF THE MODEL (II, 1)**





According to the theory, both the exchange rate and interest rates are correlating indicators whose changes produce simultaneous influence upon one another. In this case, estimates of regression parameters of a single equation model, using the smaller square method, are biased and not convergent. The statistical procedure chosen for endogeneity testing of regression variables is the Hausman test.

An important point when implementing this test is the selection of such instrumental variables that are correlated with a potentially endogenous variable but uncorrelated with the residual of the base model. In the first step of the Hausman test procedure, auxiliary regression is used and the potentially endogenous variable is regressed on all exogenous variables and instruments. In the second step, the base model is re-estimated including the residual from the auxiliary regression. If the coefficient at the residual from the auxiliary regression is not statistically significant, the test does not confirm endogeneity of the relevant indicator.

As the instrument variable we have chosen the weekly average exchange rate of the US dollar set by the Bank of Latvia. The estimates of the Hausman test equations are

summarized in Tables 2.2 and 2.3. Judging from the test results, we can reject hypothesis of endogeneity of interest rates.

Table 2.2

**AUXILIARY REGRESSION OF THE HAUSMAN TEST**

Dependent variable:  $\delta r$

Variable	Coefficient	Standard error	t-statistic	p-value
c	-14.10061	9.490602	-1.485744	0.1431
fxp(-1)	-0.083903	0.009507	-8.825419	0.0000
$\delta e(-1)$	-394.6323	94.96639	-4.155495	0.0001
$\delta e(-2)$	-143.6577	110.0827	-1.304998	0.1973
$\delta e(-6)$	-12.46623	66.45487	-0.187589	0.8519
e	28.40979	14.80767	1.918587	0.0602
R <sup>2</sup>	0.907898	F-statistic	108.4328	
Adjusted R <sup>2</sup>	0.899525	Durbin-Watson statistic	0.845393	

Table 2.3

**HAUSMAN TEST EQUATION**

Dependent variable:  $\delta e$

Variable	Coefficient	Standard error	t-statistic	p-value
c	0.006644	0.002212	3.004395	0.0040
$\delta r$	-0.001444	0.000536	-2.692253	0.0094
fxp(-1)	-1.510325	0.533886	-2.828929	0.0065
$\delta e(-1)$	0.093631	0.251050	0.372956	0.7106
$\delta e(-2)$	0.241390	0.134798	1.790749	0.0789
$\delta e(-6)$	-0.409363	0.072196	-5.670139	0.0000
u	0.000684	0.000554	1.235163	0.2221
R <sup>2</sup>	0.961389	F-statistic	224.0966	
Adjusted R <sup>2</sup>	0.957099	Durbin-Watson statistic	2.078314	

To study the process of impact of money market interest rates on deposits made by and loans granted to domestic enterprises and private persons, the authors have concentrated on the interbank money market interest rates and short-term credit interest rates, and used the structural VAR (vector autoregression) methodology which is a generally accepted approach in the research of monetary transmission.(1) This methodology is widely used for identification of monetary transmission channels and estimation of the impact of monetary policy shocks on relevant economic variables.(3)

The economic theory of monetary transmission suggests that interest rates, output and prices should be modelled jointly as endogenous variables. However, in a small open economy with a fixed exchange rate the demand shocks can influence the current account rather than price dynamics, hence inflation could be treated as an exogenous factor. It can be assumed that the nature of price dynamics is largely determined by the price convergence process, whereas the decrease in credit interest rates can be partially attributed to the price stabilization and successive shrinkage of the inflation expectations. According to these assumptions the annual inflation rate is incorporated into a structural model

$$By_t = \Gamma_0 + \Gamma_1 y_{t-1} + \Gamma_2 x_t + u_t \quad (\text{III}, 1)$$

as an exogenous explanatory variable, where the components of the column vector  $y$  are the weighted average interbank money market rate  $r_M$  and the short-term lending rate on loans in lats  $r_L$  but both components of the column vector  $x$  denote the annual inflation rate. All variables are taken in logs that eliminate heteroscedasticity problems and yield a plausible value range preventing the interest rate simulations from the decline below zero level.

In order to identify residuals of the structural model (III, 1), using the VAR model

$$y_t = A_0 + A_1 y_{t-1} + A_2 x_t + e_t \quad (\text{III}, 2)$$

it was assumed that unexpected changes in short-term credit rates do not have a contemporaneous effect on the interbank money market. This assumption is implemented by imposing zero restriction on the coefficient  $\beta_{12}$  of the structural matrix  $B$ .

$$B = \begin{pmatrix} 1 & 0 \\ \beta_{21} & 1 \end{pmatrix} \quad (\text{III}, 3)$$

The money market interest rate innovations respond to different factors (interest rate policy of the central bank, government financial operations, foreign capital inflows

and external factors). Due to the major importance of monetary operations of the central bank, unexpected changes in the money market interest rates can be interpreted as monetary policy shocks, and the model can be used for a basic analysis of the monetary policy impact.

Table 3.1 summarizes the results of the lag length selection criteria. Majority of the criteria point out lag length 7, which was chosen as optimal. Other variants suggested by Schwarz and Hannan–Quinn information criteria were abandoned, as they yield too parsimonious model specification.

Table 3.1

**LAG ORDER SELECTION FOR THE VAR MODEL (III, 1)**

Endogenous variables:  $\ln(r_M)$   $\ln(r_L)$

Exogenous variables:  $C$   $\ln(\pi)$

	LR test	Akaike information criterion	Schwarz information criterion	Hannan–Quinn information criterion
0	$x^1$	0.696630	0.817487	0.745011
1	158.8310	-1.347171	<b>-1.105457<sup>2</sup></b>	-1.250409
2	12.13811	-1.413192	-1.050621	<b>-1.268048<sup>2</sup></b>
3	3.747309	-1.364161	-0.880733	-1.170636
4	3.245725	-1.309328	-0.705044	-1.067422
5	5.584699	-1.291380	-0.566239	-1.001093
6	6.088910	-1.283956	-0.437958	-0.945287
7	<b>15.96535<sup>2</sup></b>	<b>-1.438897<sup>2</sup></b>	-0.472042	-1.051847
8	0.820744	-1.350012	-0.262300	-0.914581
9	1.050861	-1.265566	-0.056998	-0.781754
10	1.528270	-1.190293	0.139133	-0.658099
11	0.366097	-1.094508	0.355774	-0.513933
12	3.621543	-1.061589	0.509550	-0.432633

<sup>1</sup> Indicator cannot be calculated.

<sup>2</sup> Optimal lag order corresponding to the criterion.

According to the VAR model estimates (see Appendix 3, Table 3.2), inflation is a statistically significant variable that justifies the assumption regarding the role of price dynamics for the credit interest rate development. (The estimates of the structural matrix are summarized in Table 3.3 of Appendix 3).

Table 3.2

**ESTIMATES OF THE UNRESTRICTED VAR MODEL (III, 2)**

		$\ln(r_M)$	$\ln(r_L)$
$\ln(r_M(-1))$		0.843967 (6.72262)	0.116285 (2.39876)
		...	...
$\ln(r_L(-1))$		-0.139992 (-0.46396)	0.303712 (2.60670)
		...	...
c		-0.843346 (-1.42004)	0.855625 (3.73104)
$\ln(\pi)$		-0.013087 (-0.18952)	<b>0.057754</b> <b>(2.16591)</b>
$R^2$	0.916667	0.957299	
Adjusted $R^2$	0.898011	0.947740	
F-statistic	49.13378	100.1376	

t-statistic indicated in ( ).

Table 3.3

**STRUCTURAL VAR ESTIMATES**

$Ae = Bu$  where  $E[uu'] = I$ .

$e1 = C(1)u1$  and  $e2 = C(2)e1 + C(3)u2$

where  $e1$  represents  $\ln(r_M)$  residuals, and  $e2$  represents  $\ln(r_L)$  residuals.

	Coefficient	Standard error	z-statistic	p-value
C(2)	0.093147	0.041133	2.264528	0.0235
C(1)	0.270268	0.020977	12.88410	0.0000
C(3)	0.101281	0.007861	12.88410	0.0000
Estimated A matrix	1.000000	0.000000		
	-0.093147	1.000000		
Estimated B matrix	0.270268	0.000000		
	0.000000	0.101281		

Chart 3.1

**TIME SERIES OF DATA IN LEVELS**

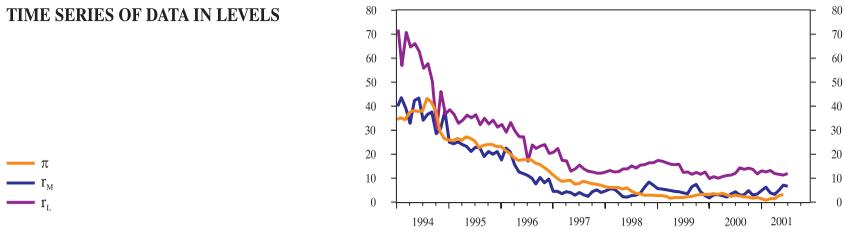
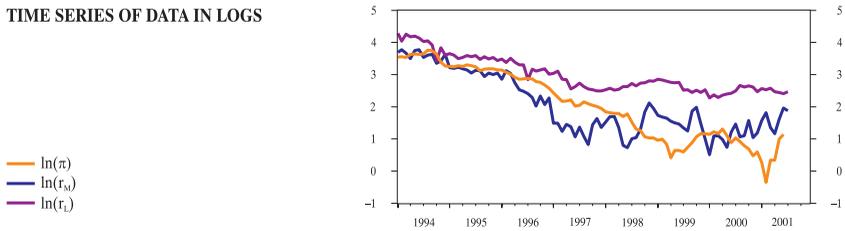


Chart 3.2

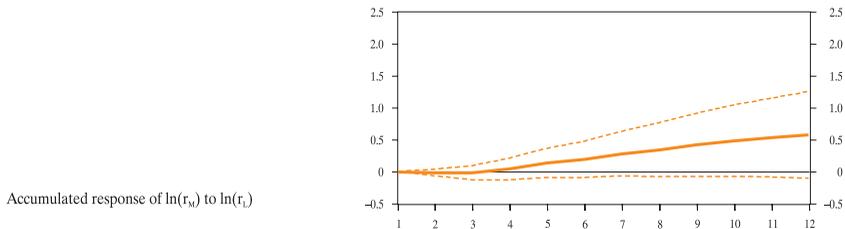
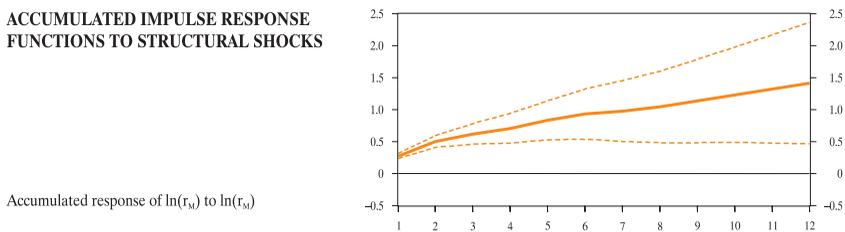
**TIME SERIES OF DATA IN LOGS**



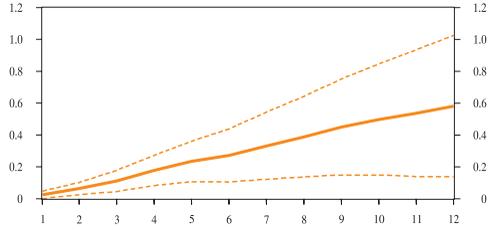
The accumulated impulse responses (see Appendix 3, Chart 3.3) trace the effects of a shock to one endogenous variable on the other variables in the VAR model. From the analysis of the impulse response functions it follows that monetary policy induces reaction of lending rates, which stabilizes approximately in one year.

Chart 3.3

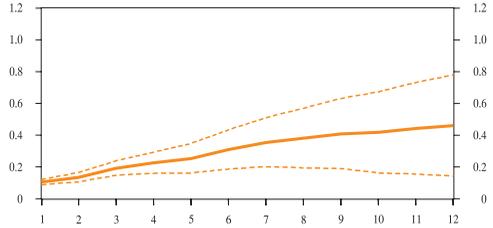
**ACCUMULATED IMPULSE RESPONSE FUNCTIONS TO STRUCTURAL SHOCKS**



Accumulated response of  $\ln(r_t)$  to  $\ln(r_m)$



Accumulated response of  $\ln(r_t)$  to  $\ln(r_l)$

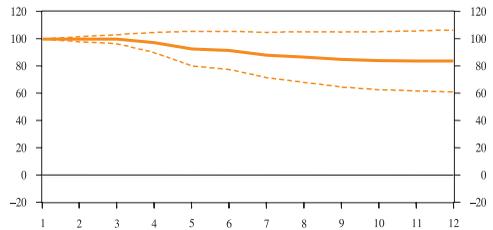


The variance decomposition (see Appendix 3, Chart 3.4) illustrates the proportion of impact from unexpected changes in the interbank money market and lending rates. According to the estimates, approximately one fourth of the lending rate forecast error could be attributed to unexpected fluctuations in the money market.

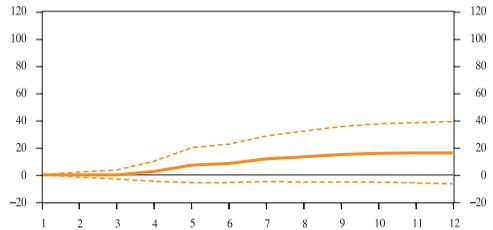
Chart 3.4

**VARIANCE DECOMPOSITION ANALYSIS**

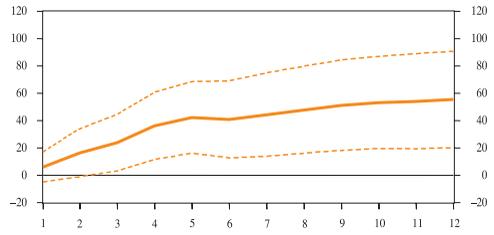
Percent of  $\ln(r_m)$  variance due to  $\ln(r_m)$



Percent of  $\ln(r_m)$  variance due to  $\ln(r_l)$



Percent of  $\ln(r_t)$  variance due to  $\ln(r_{it})$



Percent of  $\ln(r_t)$  variance due to  $\ln(r_t)$

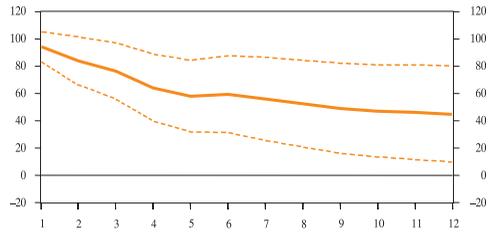


Table 4.1

**CREDIT/DEPOSIT WEIGHTED AVERAGE INTEREST RATE SPREAD**

(December 2001; in percentage points)

	Up to 1 month	1-3 months	3-6 months	6-12 months	1-5 years	Over 5 years
In lats	5.75	3.35	6.33	3.16	2.82	5.80
In the currencies of the OECD countries	6.11	4.73	5.37	2.08	2.12	-0.23

Table 4.2

**LENDING IN THE INTERBANK MARKET**

(monthly averages of 2001; in millions of lats)

Loans to domestic credit institutions		Loans to foreign credit institutions	
In lats	286	In lats	69
In the currencies of the OECD countries	87	In the currencies of the OECD countries	5 887
In other currencies	1	In other currencies	87

Table 4.3

**OUTSTANDING AMOUNT OF FIXED INCOME DEBT SECURITIES**

(end of 2001; in millions of lats)

	Central govern- ment	Monetary financial institu- tions	Non- monetary financial inter- mediaries	Non- financial enter- prises	Total	Total (% of GDP)
Short-term (up to 1 year)	30	0	8	0	38	0.8
Medium term (1-5 years)	453	5	20	0	478	10.0
Long term (over 5 years)	200	11	0	1	212	4.5

Table 4.4

**EQUITIES MARKET INDICATORS**

(end of period)

	1996	1997	1998	1999	2000	2001
Equities capitalization (in market value; in millions of lats)	84	199	226	229	348	439
Equities capitalization (in market value; % of GDP)	3.0	6.1	6.3	5.9	8	9.3
Total turnover (in millions of lats)	7	47	36	20	168	103
Number of listed equities	34	50	69	68	63	63

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