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Banking Sectors in Baltic Countries

Abstract

This study examines development of the banking sectors in Estonia, Latvia, and Lithuania from 1990 onwards. While institutional and legislative developments are discussed, the main emphasis is on the development of services provided by banks.

The role of banks as intermediators of capital and as providers of a system of payments is generally seen as extremely important in achieving efficiency in market economies. Related to this view are the questions of how an economy in transition evolves successfully into a market economy as well as what effects the structure and performance of the banking sector have on the transition process. The Baltic cases provide a number of valuable insights in this regard.

Banks in Baltic countries have developed fairly quickly and all have encountered a banking crisis of some magnitude. At the moment, Baltic banks can be said to fulfill at least part of their role as intermediators of capital. Also payment systems are now fairly well developed. However, it is fairly clear that the evolution of these banking sectors have a long way to go. Further reduction in the number of banks seems likely as most banks are still small, capital requirements have been raised, supervision is becoming tighter and competition among banks is increasing.

Key words: Banking, Baltic countries, banking supervision

1 Introduction

In last six years the Baltic countries have quite successfully transformed themselves from centrally planned socialist economies into decentralized market economies. The role of banks in market economies is very important; in the intermediation of capital in the restructuring of the economy and in the implementation of viable systems of payment. Therefore it is important to examine how the Baltic banks have fullfilled these roles.

Estonia, Latvia and Lithuania's banking systems were all quite similar at the beginning of the decade, as their banking systems were all part of the Soviet banking system. This system consisted of the state bank, Gosbank, and five specialized state-owned banks. All had branches in Estonia, Latvia and Lithuania. As the political disintegration of Soviet Union accelerated and republics received (or took on) greater political and economic independence, the Baltic republics were quick to seize their opportunity. In the banking sector this can be seen in high rate of new bank openings. In fact, the first commercial bank ever in the Soviet Union, the Estonian Tartu Commercial Bank, was established in 1989. Still before independence, all Baltic republics had several commercial banks. In most cases the aforementioned Soviet banks were also made independent from their Moscow headquarters by legislation, giving rise to disagreements between the republics and central government.

When the Baltic countries became independent in 1991, banking sector development of each country began to follow divergent paths. In Estonia, and even more so in Latvia, the propagation of banks was rapid. Thanks to low minimum capital requirements, establishing a bank was quite

easy. Banks had immediate possibilities to generate substantial revenue, first from foreign exchange dealing, and later from financing trade between other parts of the former Soviet Union and West. However, once the macroeconomic environment, especially exchange rates, stabilized somewhat (or fixed to the Deutschemark in Estonia's case), banks were deprived of this "no-brainer" revenue source. The convergence of raw material prices in the former Soviet Union with world-market prices also reduced the margins on trade financing. Latvian banks were most involved in such finance, and thus were hardest hit by the shift.

Things went downhill fairly quickly in Estonia, causing a banking industry shake-out already in 1992-93. Some large banks went down simply due to bad loan portfolios, while many small banks were barred entry through higher minimum capital requirements. The result was a rash of mergers and liquidations. Nevertheless, public's trust to the banking sector as a whole seemed largely unaffected by these developments. Indeed, since 1993 those Estonian banks left standing have all fared reasonably well. It is also noteworthy that the banking crisis appears to have had almost no impact on the real economy.

In Latvia, the expansion of the banking sector continued considerably longer than in Estonia. However, at the beginning of 1995, Latvia also found itself in the midst of a severe banking crisis. Many banks were liquidated, including Latvia's largest bank, Banka Baltija. The adverse impact to the economy was felt as a large number of people lost their savings. Many Latvian banks went under because of low-quality loan portfolios, a likely result of insufficient bank management skills and the lack of competent banking supervision. The failure of Banka Baltija appears to be a case of outright fraud, further underlining the need for stronger banking regulation, especially supervision.

For a while it looked like Lithuania would escape a banking crisis, but at the end of 1995, the two largest Lithuanian banks were closed by the authorities, and the former bank managers were accused of fraud. At the moment it looks as though no large-scale deposit flight is taking place at other Lithuanian banks. Because the banks were the largest in Lithuania, the economic consequences of their difficulties may eventually prove serious.

Yet, in spite of these banking crises, the Baltic banking systems have on the whole made beneficial contributions to their economies. In approximately five years, the Baltic countries have succeeded in creating a financial infrastructure which has generally moved towards fulfilment of its primary function, i.e. the efficient intermediation of capital. In bank lending, times to maturity have become longer and the borrower base more diverse, implying that the level of lending services to the public has improved.

This study first examines banking industry development in each country as separate sections. Each section is divided in two, one part dealing with institutional and legislative developments, and the other part dealing with banking activities, especially lending and deposit-taking. Conclusions are drawn at the end of each section. The last section compares the development in the three countries, and attempts to draw some conclusions regarding similarities and differences among the three countries.

2 Banking in Latvia

2.1 Institutional and legislative developments of the Latvian banking sector

For much of the postwar period, the Latvian financial system was a part of the Soviet monobank system. During perestroika banking laws and regulations were loosened so that in 1988 it became possible to set up cooperative banks to serve the needs of cooperative enterprises. This paved way for the establishment of commercial banks. Cooperative banks, unlike specialised state banks, were allowed to offer short- and long-term credit as well as take deposits from both enterprises and individuals.

These institutional changes naturally affected the development of the Latvian banking sector. In April 1989, a branch of Vneshekonombank (Bank for Foreign Economic Affairs) was opened in Latvia, and also other specialised state banks started opening branches in Latvia. Agroprombank (Agro-Industrial Bank), Promstroibank (Industrial and Construction Bank), and Zhilsotsbank (Bank for Housing, Local Government and Social Sectors) opened several branches during the next two years. A network of Soviet savings banks was merged into Sberbank (State Savings Bank),

which had branches all over the Soviet Union, including Latvia (Kivilahti et al, 1993). The first commercial bank in Latvia, Rigas Komercbanka, was also established in 1989 (Dovladbekova & Muravskaya, 1993).

Institutional changes in the Soviet banking system continued. In summer 1991, Zhilsotsbank and Agroprombank were reorganised into joint stock companies, although the state continued to hold the majority of shares. However, the effect of these developments on actual banking services and banking competition was not as profound as originally hoped (Kivilahti et al, 1993). In Latvia (as well as all over Soviet Union), many commercial banks were set up from 1989 onwards. Most of these banks were very small, and their share of household deposits and enterprise credits was negligible. For example, in Latvia commercial banks had less than 2% of household deposits at the end of 1991 (International Monetary Fund, 1992).

As the disintegration of the Soviet Union accelerated in 1990, Soviet republics assumed a more active role in shaping economic policy and regulation. In December 1990, Latvia adopted the "Law On Stockholding Companies", which set the minimum capital requirement for a commercial bank at five million roubles (Latvijas Banka, 1994). With inflation quickly reducing the real value of this requirement, establishing a bank was cheap and straightforward. The number of banks established in Latvia ballooned. According to IMF (1992a) Latvia had a dozen commercial banks in September 1991; by the end of 1992, there were 55 commercial banks (Dovladbekova & Muravskaya, 1993). This increase can, to a large extent, be attributed to Latvia's locational advantage. As long as the prices of many commodities in the former Soviet Union still differed widely from world-market prices, large profit-taking opportunities existed by importing commodities from eg Russia to Latvia and then re-exporting them to other countries. Many Latvian banks were set up to specifically to finance such trade arrangements.

Another sign of economic independence was the establishment of a central bank, the Bank of Latvia, in July 1990. Surprisingly, the central bank turned to commercial banking in 1991. In September 1991, the Latvian Parliament decided that the Bank of Latvia would take over the Latvian branches of Gosbank as well as the specialised state banks. Only Sberbank was exempted, and thus remaining in the hands of the Government of Latvia (IMF 1992a). From December 1991, the balance sheets of the Central Bank and specialised state banks were merged. At that time, the specialised state banks had 49 branches in Latvia. The reasons for this merging of commercial and central banking activities has never been clear. IMF analysts (1992a) speculated on three possible lines of reasoning whereby: 1) if state banks had been allowed to operate independently, the development of the private commercial banking sector might be hampered, or 2) since the central bank of Latvia had been considerably involved in commercial banking activities during the interwar period, there was historical precedent for such operations, or 3) Parliament wanted to bring state banks under its indirect control as the Bank of Latvia reports to Parliament (previously the state banks were overseen by the Government).

In any case, the Bank of Latvia's extra role as a commercial bank was short-lived. In May 1992, a new law on the central bank was passed, so the Bank of Latvia started preparing for privatisation of its commercial branches. In December 1992, Parliament appointed a committee to oversee the privatization of branches. In May 1993, the 49 central bank branches involved in commercial banking were transferred to the Bank Privatization Fund of Latvia (Latvijas Banka, 1994). Eleven branches were auctioned off to functioning private commercial banks, and eight new commercial banks were formed from 15 branches. Two branches were liquidated, and the remaining branches were consolidated into a new government-owned commercial bank, Universal Bank. This privatization of the central bank's commercial banking operations allowed the Bank of Latvia to concentrate on monetary policy and banking regulation, i.e. traditional central banking activities, which could have suffered if the commercial operations of the Bank of Latvia had continued. The granting of a banking license to Universal Bank in October 1993 might be regarded as the start of a two-tier banking system in Latvia.

With the number of commercial banks continuing to rise, the Bank of Latvia tightened capital requirements for banks. As inflation had eroded most of the real value of previous capital requirements, the requirement was raised to 50 million Latvian roubles in March 1993. This effectively discouraged establishment of new banks – in 1993 only 16 new banks were granted licences. Also, other aspects of banking regulation were tightened. In July 1993, the Bank of Latvia introduced

new reporting requirements for banks and tightened supervision of day-to-day banking practices. Concentration of credits granted to one borrower was restricted to 50% of a bank's own capital, and credits granted to a single stockholder were restricted to 25% of a bank's own capital. Banks were also required to start evaluating the quality of their credit portfolios, and their open foreign currency positions were supervised. To insure compliance, on-site inspections at banks were introduced. In 1993, the Bank of Latvia revoked one bank's license because of a merger and did not renew the banking license of two banks as they had not begun their operations (Latvijas Banka, 1994).

In 1994, only one new commercial bank received a license from the central bank. This was Multibanka, the newly privatized Bank of Latvia Foreign Operations Branch (Latvijas Banka, 1995a). One foreign bank (Société Générale) received a permit to open up a branch office in Latvia, and eight Latvian banks lost their licenses. This made the number of licensed commercial banks 55 at the end of 1994, down from 61 at the end of 1993. Regulation of banks was developed further, and the minimum initial capital of new commercial banks was raised from 100,000 lats to two million lats. Existing banks are also required to meet this two million lats requirement by the time their 1997 financial statements are submitted for approval (Latvijas Banka, 1995a). The credit exposure of single large clients and bank owners was restricted as was a bank's right to own other enterprises (maximum stake 15%). Another substantial legislative reform was the introduction of loan loss provisions. Banks were required to form loan loss provisions for nonperforming loans.

These new regulations, the Bank of Latvia's tightened supervision, and most of all the gradual disappearance of profits from financing trade between the countries of former Soviet Union and West all worked to reduce the profitability of most banks. Of the 49 banks which passed their audits in 1994, only 16 made a profit. The disappearance of easy income shifted focus to bank credit portfolios, which as a rule were in poor condition. A large number of banks were declared insolvent. The highest profile insolvency involved management fraud at Latvia's largest bank, Banka Baltija. At the end of July 1995 there were 41 operational banks, with further mergers and possible insolvencies still expected (Euromoney, 1995). The authorities' response to banking difficulties have varied; small banks have generally been allowed to go under with their assets then distributed to their creditors, while in the case of the larger Banka Baltija, with its approximately 200,000 depositors, the central government made the politically expedient promise to provide financial aid to municipalities which had deposits in Banka Baltija. The government initially agreed to compensate private depositors up to 500 lats, 200 lats in cash and the rest in some form of government securities. At this time, the destiny of this compensation package is uncertain.

2.2 Development of banking activities in Latvia

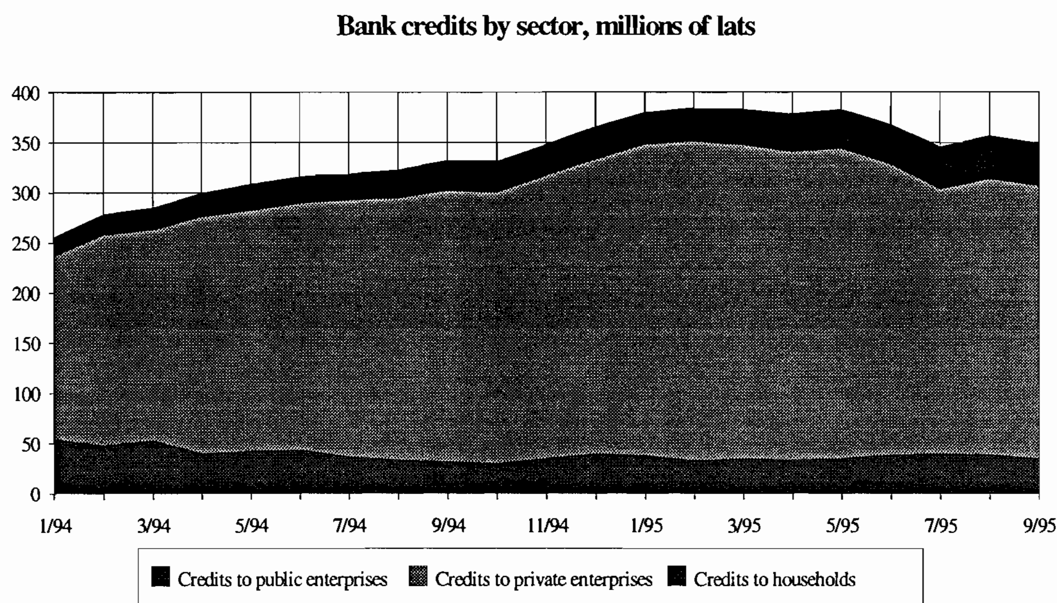
As mentioned above, many Latvian banks were established to finance trade, and possibly secure relatively cheap financing for their owners. Initially, currency operations were a considerable source of income. Partly for these reasons very few banks felt it necessary to enhance their credit facilities. Perhaps the largest reason was the lack of trained personnel.

The tendency to issue almost exclusively short-term credit started to fade during the latter half of 1994. By the end of 1994, almost a quarter of bank credits to the public had a maturity of 1 to 5 years, whereas at the beginning of 1993 such maturities were only applied to about 2% of total credits. Credits with maturities longer than five years are still virtually nonexistent. Among the many possible reasons for this lack of long-term financing in the earlier stages of transition, two obvious reasons appear. The first is caution; when banks lack personnel experienced in credit evaluation who can properly assess the risks of a long-term project, it probably is safer not to issue credit at all. Related to this is the lack of relevant financial information needed in the assessment of possible projects or companies to be financed. Financial statements of dubious quality are of little use in evaluating the ability of the borrower to repay his or her obligation. Of course, this goes back to the lack of trained personnel (accountants, auditors, etc.). Fortunately, the lack of trained personnel should only be a temporary issue, and over time this obstacle to long-term financing should be self-correcting as bankers gain experience. It is quite likely that this is happening in Latvia presently. Another problem for long-term financing in

Table 1 **The maturity structure of bank lending in Latvia**

Amounts in millions of lats	Amount of short-term lending (1-12 months)	Share of short-term lending of all lending	Amount of long-term lending (over 12 months)	Share of long-term lending of all lending
December 1993	225.9	84%	43.1	16%
December 1994	268.2	73.4%	97.1	26.6%
September 1995	240.6	68.9%	108.3	31.1%

Chart 1 **Bank credits by sector, millions of lats**



many transition countries has been the high and volatile inflation, but this macroeconomic problem is also becoming less important in Latvia.[1] Table 1 displays the nominal volumes of short and long-term credits and their share of all credits in December 1993, December 1994, and September 1995. Here one can readily observe the shift towards longer maturities.

Another shift in the lending practices of Latvian banks has been the growing share of credits to households. Although household credits accounted for little over 10% of all credits extended by banks to enterprises and households, this share has risen considerably from the beginning of 1993, when it was a mere 3%. It might also be noted that, at the moment, the growth of credits to enterprises appears to have stopped, while credits to households are still growing. Thus, the relative importance of household credits to Latvian banks will increase, even if their share of the total credit portfolio still remains small. Chart 1 plots the development of credits to private and public enterprises, and households. The majority of credits are still directed to finance trade (34.9% of all credits at the end of June 1995), but credits to eg manufacturing have risen in relative terms (Latvijas Banka, 1995b).

A noteworthy feature of bank lending in Latvia is that a majority of it is conducted in foreign currency. In 1994, approximately 60% of all credits extended to enterprises and households were denominated in foreign currencies (Latvijas Banka, 1995a). This same proportion was evident even in credits to households, which in turn shows the consequences of legally permitting the use foreign currencies in all domestic transactions as well as the continued lack of confidence on the part of the citizenry towards the lats. Both of these explanations are probably of secondary importance when compared to the fact that claims on foreign banks and enterprises make up a large portion of Latvian banks' total assets. At the beginning of 1994, these claims represented one fifth of total assets. This share grew during 1994, and the end of the year it was one third (Latvijas Banka, 1995a). In 1995, the share of claims on foreign institutions diminished somewhat, but it is still more than 25%. In June 1995, currency credits were 61.1% of all credits (Latvijas Banka, 1995b).

On the liabilities side of the banks' balance sheets, foreign currency deposits constitute a considerable portion of all deposits. At the beginning of 1993, foreign currency deposits were approximately 50% of all deposits from enterprises and households, but by the end of 1993 their share had dropped to slightly below 40% (Latvijas Banka 1994). During 1994 and the first six months of 1995, the share of foreign currency deposits of all deposits was very stable at approximately 40% despite strong growth in deposits. This share then increased somewhat during the second quarter of 1995 (Latvijas Banka 1995a and 1995b). In addition, Latvian banks have large foreign liabilities, also apparently denominated in currencies other than the lats.

One could argue on the basis of the aforementioned figures that Latvian monetary reform has not been fully successful as foreign currencies still constitute a large portion of Latvian enterprises' and households' asset portfolios, and foreign currencies (especially the US dollar) are still widely used in economic transactions. However, diversification of asset portfolios is hardly welfare reducing, and since there are no legal constraints on the use of foreign currencies in economic transactions (as is the case in Estonia), it is actually quite remarkable that economic agents have been willing to hold such a large portion of their asset portfolios in the national currency, especially as cash.

On the other hand, the popularity of lats-denominated deposits is not mysterious, given Latvia's rather high real interest rates. For example, at the beginning of 1994 banks on the average offered 22% on 1-3 month deposits, and almost 80% on deposits of more than a year. From December 1993 to December 1994 the change in consumer price index was 26.3%. This means that the ex post real interest rate on long-term lats deposits was very high. If an investor believed in the stability of the monetary policy and relatively low inflation at the beginning of 1994, high nominal interest rates would have been very tempting. However, ex post real interest on short-term deposits has been very volatile. Chart 2 displays the ex post real annualized interest rate which is calculated from month-to-month inflation and interest rates on time deposits with maturity less than

[1] For discussion on the possible reasons high and volatile inflation affects all long-term contracts adversely, see Heymann & Leijonhufvud (1995). Their book also discusses experiences in other high-inflation countries, especially countries in Latin America.

Chart 2 **Real interest rate in Latvia, annualized from monthly deposit rates**

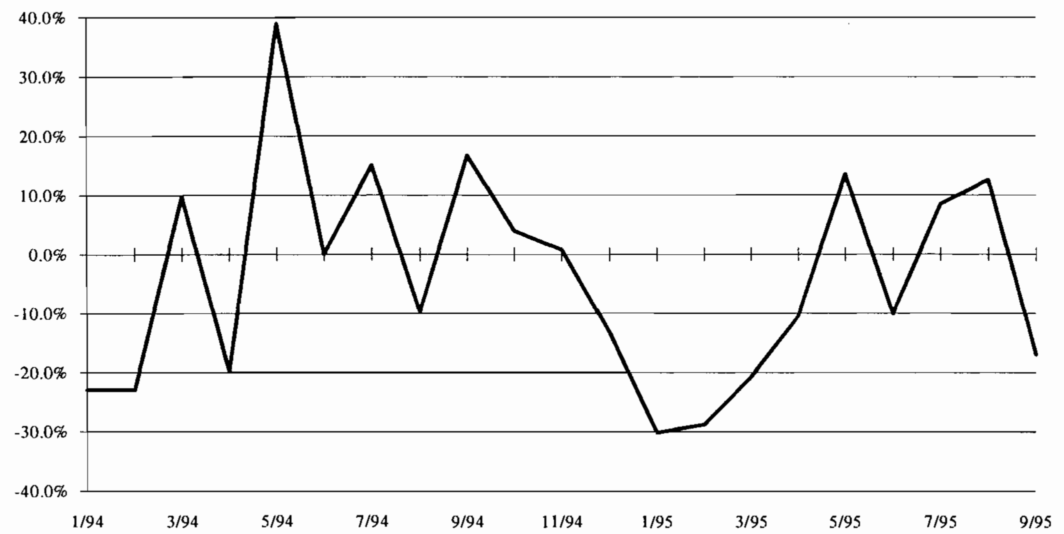
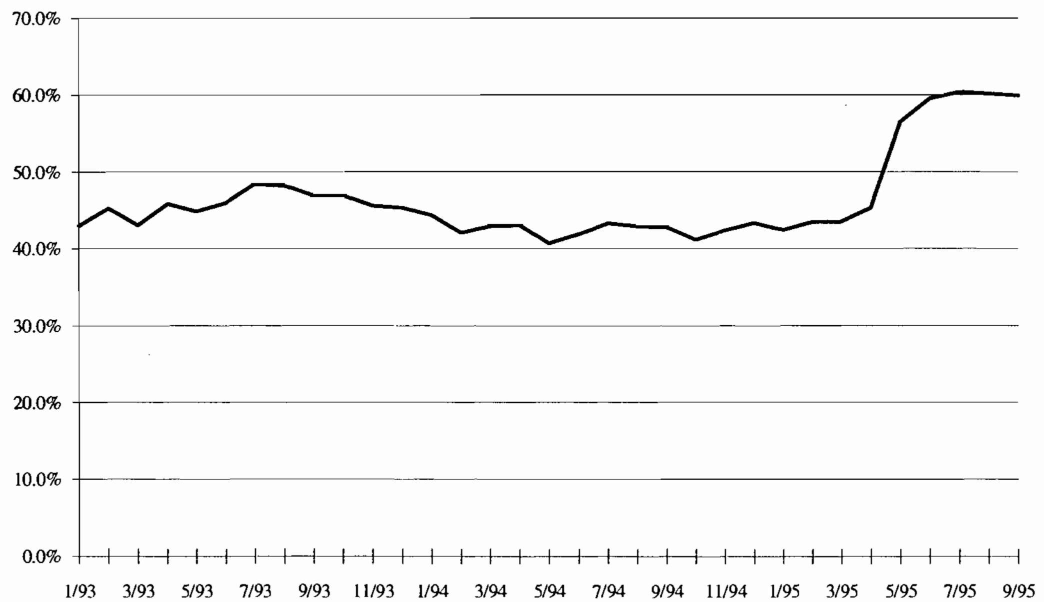


Chart 3 **Domestic cash as a share of M2**



one month. In 1994 real interest rates paid on short-term deposits were positive for most of the year, but during the first half of 1995 they turned clearly negative. Inflation has remained fairly high, but interest rates on all deposits have decreased.

Although the decrease in banking competition due to the large number of bank failures could be one reason for lower deposit rates, the fact that margins between the new short-term deposits and credits have diminished speaks against this. (One should naturally be careful when assessing the interest rate margins of many Baltic banks. As the recent experience shows, banks have often extended credit to their owners at relatively low interest rates, which naturally diminishes the observed interest rate margins. However, the trend of change in the margins is probably less influenced by this factor.) This fall in interest rate margins has been most pronounced at the shortest maturities; in 1994 the average margin between new credits and deposits of less than one month was 36.6 percentage points, but in the first six months of 1995 the average margin has decreased to 17.8 percentage points. In maturities of 1-3 months and 3-6 months the corresponding fall has been much less pronounced, from 30.9 to 24.2 and from 28.1 to 23.8 percentage points. On the surface it is quite curious that in the longer maturities interest rate margins have in fact widened, in the 6-12 months range from the average of 13% in 1994 to 21.4% in the first half of 1995 and in the maturities of over one year from -19.2% [sic] to 7.7%. There are at least two possible explanations for this: 1) only owners and other parties close to the banks' owners and/or managers have been granted long-term credit in the past and 2) statistics on long-term credits include transit credits from G-24 countries, and these may be priced differently from the "normal" long-term bank credits (if there were any). Whatever the cause, a situation where bank interest rate margins are negative for some maturities cannot be regarded as healthy. The good news is that the banking system is moving away from this situation.

2.3 Conclusions and future development of the Latvian banking system

Although the recent banking crisis in Latvia has been severe, one should not dismiss the whole banking sector reform and liberalization as a failure. Successful creation of a functioning and reasonably stabilized two-tier banking system and the banking system's growing propensity to provide long-term financing to the economy must be noted. As the intermediation of funds between the surplus and deficit sectors of the economy is the main function of the banking system, improvements in this regard are significant to overall economic development. One rough measure of the trustworthiness of the banking system as a whole is to look at the share of domestic cash of some suitable monetary aggregate. Chart 3 shows that the share of domestic currency of M1+lats time deposits has been surprisingly stable from the beginning of 1993 until May 1995. The banking crisis during the first half of 1995 did not cause people to convert their lats wealth from bank deposits to currency (the currency in circulation did not increase), but because a large portion of other components of M2 disappeared, the share of currency of M2 grew. This might be interpreted as a sign of confidence in at least part of the Latvian banks. One could also interpret this as vote of confidence in the lats as a currency.[2]

Further privatization of Latvian enterprises will, in all probability, create demand for debt financing. At the moment, at least some Latvian banks are probably already in the position to extend credit to these companies, provided these companies can be considered creditworthy. In fact, demand for credit can also be considered quite important for the banks as a source of revenue. And, as will be argued below, this could very well be the only viable source of revenue for the banking sector as a whole.

It is quite obvious that the remaining Latvian banks need relatively high interest rate margins to maintain profitability. As the quality of the failed banks' loan portfolios has been, almost without exception, quite low in the new environment of stable currency and relatively low inflation, there is reason to believe that a large share of the loan portfolios of operating banks are in practice nonperforming. The loan-loss provisions banks have accumulated so far will probably not be sufficient to cover the losses, especially if the banking su-

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[2] For a discussion of credibility of monetary institutions in the Baltic countries, see Hansson & Sachs (1994).

pervision requires banks to report their loan losses in full. There are, of course, other possible sources of income for the banks, such as foreign exchange operations and securities market. As the lats is pegged, scope for profits from currency trading is limited, meaning that banks will get what margins they can from fulfilling client orders. In 1994, the value of foreign trade of Latvia was 1,248 million lats (combined exports and imports). Even if one assumes that banks were counterparty in all these transactions and thus received a margin of, eg 0.5%, this would still only mean income of six million lats, or 0.6% of total bank assets.[3]

Securities markets in Latvia are still so underdeveloped that they probably won't have much of an impact on the results of the banks. Share market is still in very early stages of development, owning to the slow privatization process, and although the treasury bill market functions quite well, the volume is so small that its total impact on the whole banking sector is negligible. At the end of June 1995, the total volume of treasury bills outstanding was approximately 30 million lats, compared to the banking sector's total assets of approximately 1000 million lats. Clearly this market will not provide banks with substantial revenue in the near future. Thus the only viable source of revenue for Latvian banks is the interest rate margin.

3 Banking in Lithuania

3.1 Institutional and legislative developments in the Lithuanian banking sector

The financial system in Lithuania was similar to that of the other Soviet republics. Before 1988, the Soviet Republic of Lithuania had four financial institutions: Gosbank (the state bank of the Soviet Union, which also acted as central bank), Sberbank (Savings Bank, which collected deposits from households), Vneshekonombank (Bank for Foreign Economic Affairs), and Stroibank (Construction Bank). Naturally, these were branches of all-Union banks. Each had a clearly defined role in the Soviet financial system, and there was no competition among the various institutions (IMF 1993). In autumn 1988, the Soviet authorities reorganized the banking sector. In addition to Gosbank, five specialized banks were established (Kivilahti et al, 1993). All of these new specialized banks (and Gosbank) had branches in Lithuania (cf section 2.1 on the Latvian banking sector). Shortly after this reorganization of the state banking sector, establishment of private commercial banks was allowed. The first Lithuanian commercial bank was registered in January 1989 (IMF 1993).

Reforms of the banking sector continued as economic, and eventually political, independence became a widely accepted goal in Lithuania. First important step towards economic independence was the establishment of a central bank, the Bank of Lithuania, in February 1990. In the beginning the Bank of Lithuania did not have any other activities than monitoring banks; Lithuania was still a part of the rouble area which made independent monetary policy impossible. Furthermore, the political status of Lithuania was still unclear, so the central bank had no facilities for monetary policy. As a measure of bank regulation all commercial banks operating in Lithuania were registered as Lithuanian banks in December 1990. The first monetary policy act of the Bank of Lithuania was the introduction of a temporary currency, the talonas, in September 1991.

The Bank of Lithuania grew in size by merging Lithuanian branches of the specialized Soviet banks. In January 1991, the Bank of Lithuania acquired the local branches of Zhilsotsbank (Bank for Housing, Local Government and Social Sectors) and Promstroibank (Industrial and Construction Bank). In June 1991, it took over the assets and liabilities of the Lithuanian branch of Gosbank, and in December of the same year the remaining operations of Gosbank were transferred to the Bank of Lithuania. Vneshekonombank formally ceased operations in Lithuania in May 1992, as its Lithuanian branch was bankrupt (IMF 1993). The Lithuanian branches of Agroprombank (Agro-Industrial Bank) were organized into Agricultural Bank, which became the largest financial institution in Lithuania with 46 branches. Its main objective was to extend credit to the agricultural sector.

The private banking sector grew during 1989-1991, although this growth was not as fast

[3] This calculation implicitly presupposes that companies exclusively engage in either importing or exporting activity.

as in Latvia. At the end of 1991 there were 12 commercial banks in operation, but only three of them were wholly private. At this stage the share of the commercial banks of the whole banking business was quite small. In December 1991, deposits from households and enterprises in commercial banks represented only 16% of the corresponding deposits in the State Savings Bank. Even the central bank had more deposits from households and enterprises than did commercial banks. Situation was similar on the asset side of the banks' balance sheets: Commercial banks' credit to domestic companies and households was only one fifth of the corresponding credits from the Bank of Lithuania (Bank of Lithuania, 1993). (In this respect the situation of the Savings Bank was very different, as its main assets were claims on the Savings Bank of the Soviet Union.)

As was the case in Latvia, central bank's commercial banking operations were soon divested. In Lithuania this work started in the latter half of 1991. In August 1991, two central bank branches were set up as independent commercial banks, and this was followed by another branch in December 1991. In September 1992, the remaining branches of the Bank of Lithuania were organized into the State Commercial Bank of Lithuania, which, as the name implies, was a state-owned commercial bank. This could be interpreted as the real beginning of two-tier banking in Lithuania. A significant step in the reform process was the establishment of the former Vilnius branch of the Bank of Lithuania as an independent commercial bank, the Auras Bank, in December 1992 (IMF 1993). This branch had held substantial government deposits, and thus it had at least initially some advantage over other commercial banks, especially small private ones.

The growth of the banking sector continued in 1992. By the end of the year there were 20 commercial banks in Lithuania, and 27 banks altogether. Commercial banks' share of all banking activities increased clearly during 1992. Almost 30% of the total credits were extended by the commercial banks at the end of 1992. The state banks' credit portfolios, while large in size, were quite poor in quality. The State Commercial Bank had been the primary lender to state enterprises, which made its loan portfolio exceptionally shaky. The Agricultural Bank's main business was extending subsided credit to the agricultural sector (IMF 1994). This meant that the new commercial banks were likely to be the most important financing source for new private enterprises, thereby underlining the significance of a functioning financial system in the the restructuring of the transition economy.

As in other Baltic countries, the rate of establishing new Lithuanian banks slowed clearly in 1993, when only five new banks were established. During 1993, the Bank of Lithuania began to assume the duties of central bank, introducing a number of necessary instruments for monetary policy. First came a new unit of national currency, the litas, thereby permitting further creation of other instruments of monetary policy. A tender system for central bank credits was the introduced and rules for interbank lending were drafted. Also banking supervision was developed. In this area, the capital adequacy standards and their calculation were brought closer into line with international practice, and the minimum capital requirement for commercial banks was set at five million litas at the end of 1993. In addition, a schedule which required banks to have at least ECU 5 million of capital by 1998 was introduced (IMF 1994). At the end of 1993, eight banks did not fulfill their minimum capital requirement.

In 1994, the number of banks decreased to 27. However, only 22 were actually involved in banking operations. One new bank was founded during 1994, the Lithuanian Development Bank. This bank was founded by the Lithuanian government and the European Bank for Reconstruction and Development to promote economic development through extending credits to investment programmes. Operating banks opened new branches, and one merger took place (Bank of Lithuania, 1995a).

Most surviving banks succeeded in strengthening their capital base in 1994, so that by year's end 1994 only one bank was unable to meet the required minimum capital requirement. One clear incentive to bank owners to put their houses in order was a rule that banks were not allowed to distribute dividends until they met the minimum capital requirement and the minimum capital adequacy ratio. Only three Lithuanian banks were able to pay out dividends for 1994 (Bank of Lithuania 1995a).

The main development in 1994 in the area of banking supervision and regulation was the introduction of new rules on the preparation of financial statements corresponding to International Accounting Standards (IAS). Banks were also required to report their loan portfolio classifica-

tion, overdue payments, the financial situation of their largest borrowers, and the collateral for such loans (exposure). In 1994, almost all Lithuanian banks were audited by Western auditing firms, and banking supervision authorities started to hold regular meetings with bank managers, auditors, and banking supervisors (Bank of Lithuania 1995a). Thus, 1994 probably marks the year when features of the Lithuanian banking system began to approach acceptable standards. However, the fact that only three banks were able to distribute dividends to their owners after the required increase to their capital base indicates how fragile the Lithuanian banking system still was. In 1994 three commercial banks went bankrupt. Many of the surviving banks have since remained quite small. Given the low quality of their loan portfolios, they will most likely require infusions of additional capital to survive. In the end of July 1995 banks were required to have registered capital of 10 million litas. Three banks had already collapsed earlier that year, and six banks failed to come up with the required capital by the July deadline. Subsequently two of those six banks were declared bankrupt, so that by the end of October Lithuania only had 17 banks operating. 1995 ended with the closing of Lithuania's two largest commercial banks, albeit temporarily. The owners of the banks were planning a merger, but inspection by the Bank of Lithuania uncovered evidence of fraud. At the moment the fate of these banks remains unclear, but the authorities have declared that the operations of the banks will be allowed to continue in some form. Furthermore, the deposits of the banks have been guaranteed by the Lithuanian parliament. How the local banking industry bounces back from its current predicament remains to be seen. In any case, the net profits of banks dropped from 115.5 million litas in the first half of 1994 to 22.8 million litas in the first half of 1995 (Biznes & Baltija 2 November 1995).

The institutional development of the Lithuanian banking sector follows the pattern of other Baltic countries (and other transition countries as well), whereby after liberalization a large number of banks are set up. At first, most of these are profitable. Eventually, as regulation is tightened and inflation is contained, some banks fail and others are forced to merge.

3.2 Development of banking activities in Lithuania

Lithuanian commercial banks started their operations much in the same manner commercial banks in other Baltic countries, i.e. by issuing short-term credit. Most of these credits were used to finance trade, but other sectors did also receive financing. At the end of June 1995, the largest recipient of bank loans was the trade sector, and a third of outstanding short-term credits were granted to the manufacturing sector. Long-term loans went mainly to construction, manufacturing and trade (Bank of Lithuania 1995b).

The currency composition of bank loans is clearly different from the composition of Latvian bank lending. Even today, the majority of Latvian bank lending is still denominated in foreign currencies. At the end of 1992, only a quarter of Lithuanian bank loans were denominated in foreign currencies. By December 1993 it had risen to approximately 35%. This growth can at least partly be attributed to the high and volatile inflation in 1993, when the monthly inflation rate varied from 25% in April to 0.9% in August. Such volatility makes it desirable to shift borrowing and lending to foreign currencies. During 1994, the proportion of foreign currency denominated loans decreased to 32%. Yet even as the level and volatility in the inflation rate decreased clearly from 1993, it was insufficient to increase the use of domestic currency in bank lending and borrowing. This situation continued in the first half of 1995, when the share of foreign currency loans again rose to 36%.

The share of long-term credit of all the outstanding credits was approximately 15% at the end of 1992. This share decreased during 1993, and in December 1993 it was approximately 12%. Similar to other Baltic countries (and transition countries in general), were an unstable macroeconomic environment, especially in terms of inflation, which made the required return on long-term investments such as bank loans prohibitively high. Also, like other Baltic countries, reliable information on possible investment projects has been scarce. Nevertheless, the share of long-term loans is increasing in Lithuania. The popularity of long-term loans increased during 1994, so that by year's end almost 18% of outstanding loans were granted for more than 12 months. This could be interpreted as a positive consequence of successful macro-economic stabilization. At the end of June

1995 the share of long-term loans had increased to 20% of all outstanding loans.

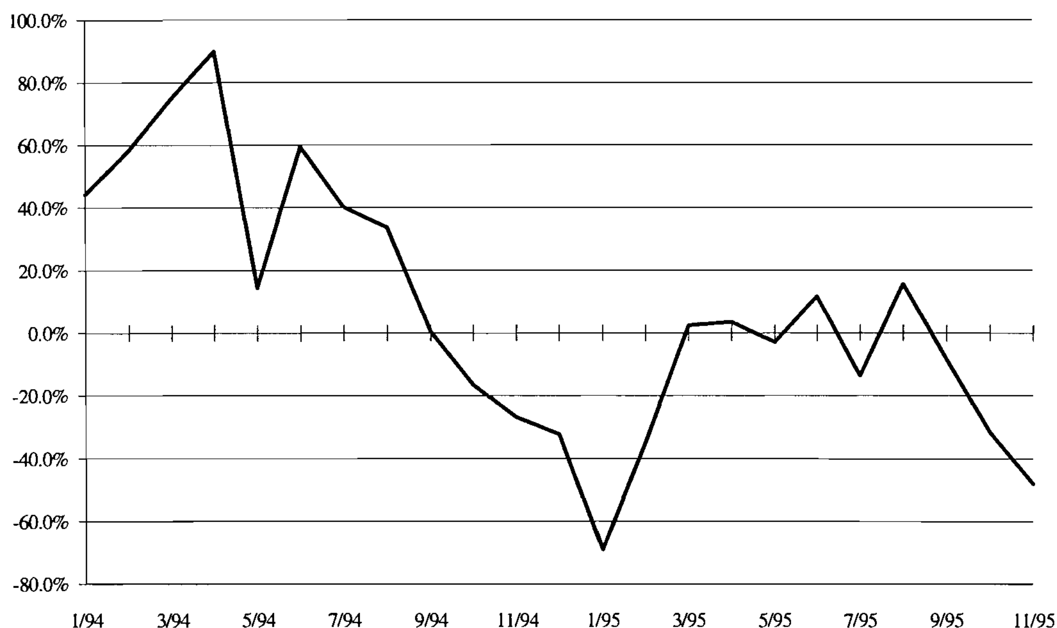
Even if the share of foreign currency lending in Lithuania has been relatively small, foreign currency deposits have formed a substantial share of Lithuanian banks' funding. At the beginning of 1993 foreign currency deposits were 54% of all deposits. At the same time almost all litas deposits were demand deposits. The share of demand deposits increased to 51% at the end of 1993, but since decreased to 35% at the end of 1994 and 34% in June 1995. Also the share of foreign currency deposits has decreased clearly, reflecting in part the larger credibility of domestic currency. The share of foreign currency deposits decreased to 37% at the end of 1993, rose to 42% during 1994, and fell back to 35% in June 1995. The falling shares of demand and foreign currency deposits have naturally meant that the share of time deposits has increased. At the beginning of 1993, time deposits were 2.5% of all deposits, rising to 12% at the end of 1993 and 23% at the end of 1994. In June 1995, time deposits represented 22% of all deposits. This increase in the share of time deposits is a clear consequence of greater macroeconomic stability, especially lower and less volatile inflation. It can also be interpreted as a sign of confidence in Lithuanian banks in general.

The shift towards litas deposits has been encouraged the substantially higher interest rates paid on them. At the beginning of 1993 interest rates on one month litas deposits were 84.1%, when the corresponding currency deposits had an interest rate of 4.0%. Even so, this was not sufficient to encourage investors to shift into litas deposits – the monthly inflation rate was running at approximately 10% and even rose to 25% during the following spring. Thus, the real interest rate was clearly negative during the first months of 1993. The nominal deposit rates on time and demand deposits fell steadily during 1994, and at the end of 1994 the interest rate on one-month deposits was 22%. The yield curve was quite flat in maturities between 1-12 months. Time deposits with maturities longer than 12 months had slightly lower interest rates. During the first six months of 1995 interest rates on short-term time deposits and demand deposits have remained at their year-end levels. However, long-term deposits' rates have risen clearly, from 17% in December 1994 to 30% in June 1995. This may be the result of larger risk premium requirements for long-term investments in litas, as the foreign currency rates in the same maturity have continued their decrease. Interest rates on foreign currency deposits have fallen across the board. For foreign currency demand deposits, the interest rate has remained fairly constant at just 2.5% since the beginning of 1993. During 1993 interest rates on foreign currency deposits were quite high in some maturities; in the 1-3 month range the average interest rate was almost 30%. Although most foreign investors probably lacked immediate access to Lithuanian bank deposit markets, yields of this magnitude on relatively riskless assets were in principle so high they could have attracted foreign capital, and thereby ensured lower yields on foreign currency deposits. However, no sizable inflow of foreign portfolio investments materialized. This leaves the interpretation that these high interest rates on foreign currency were at least partly caused by high risk premium. During 1994 and especially the first six months of 1995 the interest rates on litas and foreign currency deposits converged almost completely. The only notable difference in June 1995 was the interest rate on long-term time deposits. Foreign currency deposits had an interest rate of approximately 16% and litas deposits 30%.

During 1993, the real interest rate was volatile. The clearly negative real interest rates of the first four months months of the year were caused, at least partly, by the central bank's bank-by-bank credit ceilings, which discouraged the commercial banks from attracting deposits (IMF 1994). In May, the central bank tightened monetary policy, causing interest rates to rise sharply. In July 1993, the short-term real interest rate was approximately 200%! It was quite obvious that this kind of volatility could not continue, and Chart 4 shows the development of the annualized one-month real interest rate. During the first half of 1994 the real interest rate remained clearly positive, turning negative during the last three months of 1994. During the first half of 1995 the real interest rate paid on one-month time deposits was surprisingly stable at around zero, but turned negative during the latter part of 1995.

The development of interest rate margins has been similar in Lithuania to that of the other Baltic countries. During the first years of economic reforms, interest rate margins were very wide in short maturities. However, soon enough interest rate margins started to decrease, especially in short maturities. While the trend for interest rate margins has been decreasing, the actual path of

Chart 4 **Real interest rate in Lithuania, annualized from monthly deposit rates**



margins has been quite volatile. For the maturity of one month, the interest rate margin fluctuated between +35% and -12% during 1993. Similar fluctuations can be observed in all other maturities as well. This naturally increases the riskiness of banking operations. In addition, the persistence of negative interest rate margins, especially for maturities more than six months does not reflect well on the management of the banks. Either liabilities and assets have not been matched very well or someone (the owners) have been receiving subsidized long-term loans and/or too high yields on long-term deposits. This problem was most pronounced in 1993 when the average margin in the maturity of more than 12 months was -6.5%. In 1994 the average interest rate margin in this maturity was -2.5%. However, one must acknowledge that the relative size of the problem wasn't very large; 10% of all bank loans had maturities of 12 months or more in 1993, and less than 10% of deposits were time deposits during the same year. For maturities of less than six months, the interest rate margin decreased to approximately 10% from 20% in 1993. Loans and deposits with the maturity of 6-12 months had an average interest rate margin of 8% in 1994. This is certainly a healthier figure than the margin of approximately 1% in 1993. During 1995, interest rate margins remained more or less stable; in maturities less than 12 months the margin was approximately 10% and in longer maturities the margin was around zero.

Some possible reasons for large interest rate margins in Latvia were discussed in section 2.3. While those reasons may have had an influence in Lithuania, it is probably worthwhile to reflect on some of the special features of the Lithuanian experience. The effect of the central bank's bank-by-bank credit ceilings has already been briefly discussed. When the Bank of Lithuania restricted the volume of bank lending in the beginning of 1993, this would have caused an excess demand for loans, if the volume was small. The time series of interest rates would suggest that this indeed was the case. Loan rates rose because of the excess demand created by credit volume ceilings. This probably created a wedge between the loan rates and hypothetical market-clearing rates. (This line of reasoning presupposes that banks are necessary for financial intermediation, which probably was a reasonable first approximation in Baltic countries

at the time.) On the other hand, when the volume of bank lending is limited, banks can limit their own borrowing, i.e. deposit taking. This could have created an additional wedge between deposit rates and the hypothetical market-clearing rate. This double-wedge could very well explain a substantial part of the large interest rate margin in the first half of 1993. The interest rate margin started to decrease during the latter half of 1993, and although interest rate margins were still quite volatile during that period and in 1994, the trend was clearly towards decreased volatility. The fact that the average interest rate margins remained fairly large, approximately 10%, even as late as in June 1995 could be interpreted as the rational response of banks to their uncertain economic environment; if the volatility of earnings (and the interest rate margins) is high, then the expected or average return should also be high. Although the volatility of margins decreased during the first half of 1995, the margin varied, for example, from 14% in May to 6% in June in the maturities between three and six months. The development has been broadly similar for other maturities as well.

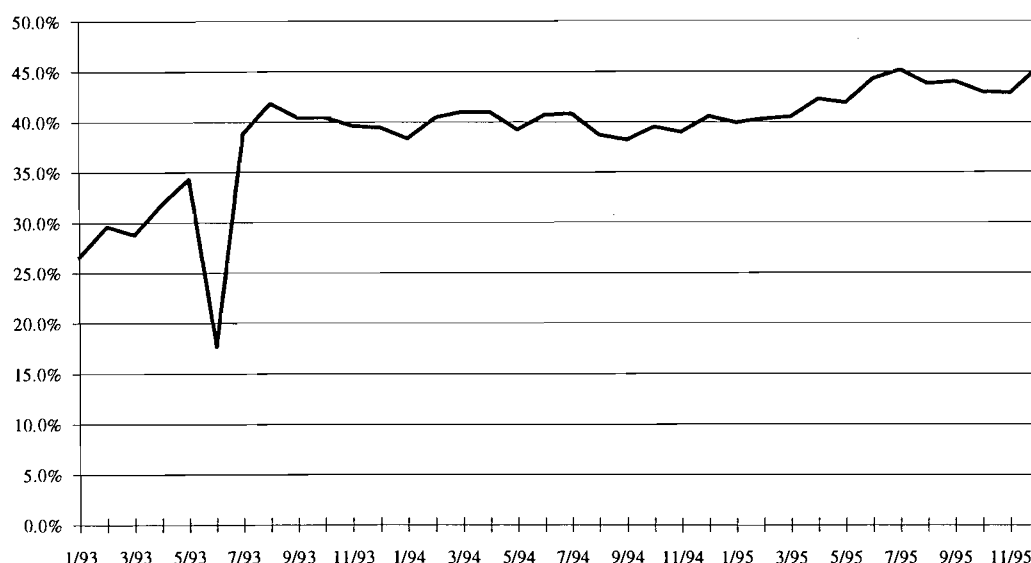
3.3 Conclusions and future development of the Lithuanian banking system

The development of the Lithuanian banking sector proceeded along a similar trajectory of development as the other Baltic countries. A two-tier banking system was made by splitting up the existing Soviet state banks and allowing new commercial banks to set up. Although Lithuanian banks have had their share of difficulties, the establishment of a fairly well functioning banking system must be noted. As the banking sector is important for the development of the economy as a whole, this is significant.

One rough measure of the ability of the banking sector to function an intermediary of funds is to track the portion of money held in currency and the portion held in deposits. The larger the share of deposits in the monetary aggregate (here a variant of M2) the more efficient and reliable the banking sector can be considered. The reasoning behind this argument is that if banks are reliable, households and enterprises will hold, ceteris paribus, more of their money in deposits, because holding currency always entails the cost of interest foregone. Also, the efficiency of the payment system is important; if payment system operates well, households and enterprises have less need for currency, as they can make their payments through the banks and thus save on transaction costs as well as minimize the losses incurred from holding non-interest paying currency. If one examines the share of currency in circulation of M2 from which the foreign currency deposits have been eliminated, two distinct phases can be discerned: Up until July 1993, the share of currency rose steadily to approximately 40%, and after this it has remained fairly stable. Chart 5 plots the time path of the series. This would suggest that Lithuanian banks have been able to retain the confidence of the public. It remains to be seen how the recent closure of the two largest Lithuanian banks will affect the public's confidence in the banking system. At the moment it seems that other banks have not suffered from large deposit flight, which may be at least partly due to the parliament's decision to guarantee the deposits in the closed banks. In the long run deposit insurance can, of course, lead to a different sort of moral hazard.

In December 1995, the Bank of Lithuania closed the two largest commercial banks. The banks were set to merge, but the special audit prior to the merger uncovered evidence of fraud in both banks. The authorities closed the banks. Five bank failures during 1995 may have prompted the authorities to be more strict in their dealings with the commercial banks. These failures have hastened the introduction of new legislation. The Bank of Lithuania has required the banks to adjust the calculation of their capital adequacy ratio to standards set by EU, the banks are required to set up their own internal auditing units, and the rules for banks' required reserves have been tightened (Bank of Lithuania 1995b). In addition, foreign investment in Lithuanian banks is now actively encouraged, and the Bank of Lithuania has created credit facilities for banks with liquidity problems. It remains to be seen if these measures are enough to prevent larger crises in the financial system.

Chart 5 **Domestic cash as a share of M2**



4 Banking in Estonia

4.1 Institutional and legislative developments in the Estonian banking sector

The early development of the Estonian banking sector followed roughly the same path as the other Baltic countries. In November 1989, a Soviet law granting the Baltics a large degree of economic autonomy was issued. This autonomy included the right to establish an independent banking sector (IMF 1992b). As has been explained in the previous sections, the Baltic countries were quick to seize the opportunity to expand their independence. Estonia acted swiftly and issued a law governing the legal basis of all banking activities in Estonia and the establishment of a central bank. The new central bank, the Bank of Estonia, was established by law in January 1990.

Again, like the other Baltic countries, Estonia had a number of Soviet state banks. Gosbank was the state bank of the Soviet Union, fulfilling the role of central bank. As the legal status of Estonia as an independent nation was not altogether clear, at least from the Soviet point of view, a conflict soon developed between the two central banks, i.e. the Bank of Estonia and the Estonian branch of Gosbank. Estonia's two central banks actually coexisted for two years, although the resolution of lines of responsibility didn't take as long. The Bank of Estonia concentrated on drafting banking legislation and granting licenses to new Estonian banks. Gosbank's Estonian branch was responsible for most central bank activities such as note issuance and provided a clearing service for payments in Estonia and between Estonia and the rest of the Soviet Union. It also had duties related to bank supervision. The Bank of Estonia, in turn, assumed responsibility for activities not normally associated with central banking as it took over the Estonian branch of Vneshekonombank (Bank for Foreign Economic Affairs) in the beginning of 1991. This acquisition brought in a substantial amount of foreign exchange operations for the Bank of Estonia. These operations included the bimonthly foreign exchange auctions. The conflict between the two central banks ended early in 1992 when the Bank of Estonia and the Estonian branch of Gosbank were merged.

The other Soviet state banks operating in Estonia from the late 1980s were Sberbank (Savings Bank, which collected deposits from the households), Promstroibank (Bank for Industry and Construction), Agroprombank (Agricultural Bank), and Zhilsotsbank (Bank for Housing, Local Government, and Social Sectors). They were established in 1989 as a part of the perestroika process, although they did not change the actual

function of the banking system. Banks continued to allocate credits according to central state plans, not, for example, according to the expected profitability of the project to be financed (Kivilahti et al 1993). In 1990, most of these Soviet banks were restructured into joint stock companies. As the political disintegration of Soviet Union continued, these banks became increasingly independent of their parent banks in Moscow. In Estonia, the branches of Promstroibank, Agroprombank and Zhiltsobank were all independent by the end of 1990 (Hirvensalo 1994). In January 1991 the Estonian government turned Promstroibank and Zhilsotsbank into joint stock companies (IMF 1992b). However, most assets of the branch of Promstroibank were transferred to a new bank, Estonian Bank of Industry and Construction already in 1990. The former Soviet Promstroibank branch was liquidated in 1993, but it had no activities during the interim period. The former Zhilsotsbank was basically transformed into the Social Bank to serve the needs of governmental organizations and municipalities, with two of its earlier branches spun off as independent commercial banks (Hirvensalo 1994). Agroprombank was first transformed into the government-owned Estonian Landbank, and then divided into small regional banks. Because of new higher capital requirements, most small banks were merged into a new bank, and the remaining regional banks and branches of the Estonian Landbank were also merged. The Estonian Savings Bank continued to be connected to the Soviet Gosbank until 1992. Most of its assets were in the Soviet Gosbank, and these assets were effectively frozen. In 1992, the Central Bank of Estonia became the owner of the Savings Bank. It guaranteed Saving Bank deposits. A third of the Savings Bank was later sold to Hansapank, an Estonian commercial bank (Hirvensalo 1994).

Estonia's first private commercial bank, indeed the Soviet Union's first commercial bank, Tartu Commercial Bank, was founded in 1989 after the new Soviet law on banking made the establishment of private banks possible (Hirvensalo 1994). The banking sector of Estonia expanded rapidly during the following years, as was the case in other Baltic countries. At the end of 1990, Estonia had 12 new commercial banks, and during 1991 and 1992, 30 new banks were established (IMF 1992b and Hirvensalo 1994). At the start of the 1990s, most commercial banks were in the hands of state enterprises or joint stock companies. Foreign ownership of banks was not allowed. The structure of bank lending was similar to that of the other Baltic countries, i.e. banks lent and borrowed on very short-term bases, granting credit mainly to enterprises. In September 1991, the new commercial banks had extended 27% of all banking sector credit. The share of commercial banks in the banking sector started to grow significantly as the Estonian branches of Soviet state banks were transformed into commercial banks. During this fast growth period, commercial banking was subject to virtually no regulation. There were practical obstacles to regulation and supervision, i.e. some banks were registered in Moscow and others in Estonia. In addition, the minimum capital requirement of five million roubles was so quickly eroded by inflation that in practice almost anyone could establish a bank.

These problems with regulation and the ease with a bank could be set up, coupled with the relatively unstable macroeconomic situation, soon led to problems. Estonia experienced a full-blown bank crisis in 1992. The actual circumstances which led to failures varied somewhat from bank to bank, but in many cases it was simply a question of too many bad loans. In the case of Tartu Commercial Bank, the role of insufficient management resources and subsequent loan portfolio problems were apparently the main causes of its failure in November 1992 (Eesti Pank 1993). Two other fairly large banks failed because most of their assets were frozen at the Vneshekonombank in Moscow – again a case of a bad loan portfolio. These two banks were merged, with additional capital from the central bank. Tartu Commercial was liquidated.

The banking crisis accelerated in 1993. At the beginning of 1993, a new minimum capital requirement of six million kroons was imposed (Eesti Pank 1993). Eight small banks could not meet the requirement, and were subsequently liquidated. In March 1993, further ten small banks were merged into a new bank, Union Bank of Estonia. Two additional banks were closed during 1993, bringing the total number of Estonian banks to 22 at the end of 1993 (Eesti Pank 1994). Within the space of just 12 months, nearly half of all Estonian banks had ceased to exist.

We can assume the remaining banks must have been chastened by these bank failures. The Bank of Estonia (1994) observed, "There was a turn in the behaviour of banks from that of speculative to that of careful. More attention was paid to

risk analysis and diversification." It might be argued that the banking crisis provided a lesson to banks (who will be more prudent in the future) and their customers (who will be more sceptical in the future). At the moment it appears that the lesson has been learned.

The restructuring of Estonian banking industry continued after the banking crisis of 1992/93, albeit at clearly slower pace. Hansapank (which had been formed from a branch of the Tartu Commercial Bank after a management buy-out) bought one third of Estonian Savings Bank in June 1993. During the autumn 1994 several foreign banks were granted the permission to open branches in Estonia. Consequently, three foreign banks were represented in Estonia at the end of 1994. In May 1995, two banks, Estonian Social Bank and NoWe Pank, lost their licences. As of September 1995, Estonia had 18 commercial The number of licensed Estonian banks then dropped to 15 as the capital requirements were again tightened at the beginning of 1996. The Finnish Merita bank now also has a branch in Tallinn.

In constitute the overwhelming majority banks, two foreign bank branches and five representative offices of foreign banks. banking legislation, the minimum capital requirement for new banks was raised to 15 million kroons in May 1993. Old banks were required to reach this level by April 1995. At the beginning of January 1996 the requirement was raised again, to 50 million kroons. Other banking legislation has been gradually been brought into line with international standards. The central bank has set standards for many aspects of banking operations including minimum solvency ratios and maximum risk concentrations etc.

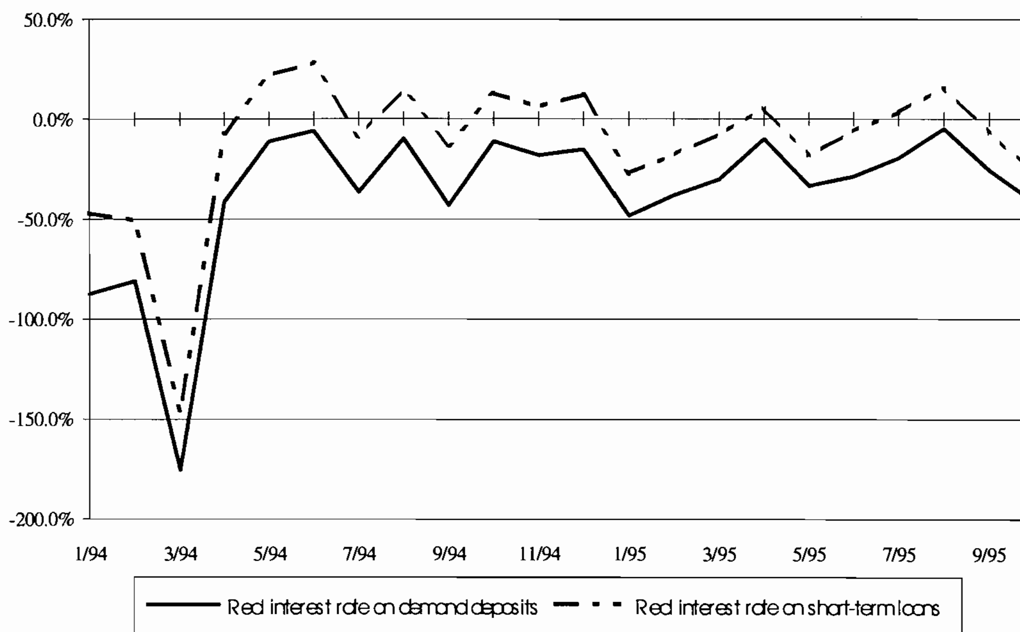
4.2 Development of banking activities in Estonia

As was noted earlier, many Estonian banks began their activities with foreign exchange operations (Hirvensalo 1994). This was especially the case during 1991 and 1992. However, the successful monetary reform of February 1992 decreased the opportunities for quick profits from dealing and speculating in foreign exchange. In addition, the sheer number of players engaged in currency operations must have begun to cut into profits even before February 1992. During 1993 and 1994 the importance of foreign exchange operations remained rather constant, if one assesses the importance of foreign exchange dealing for banks by looking at the share of foreign currency of all banks' assets. This share remained at approximately 20% during 1993, rising a few percentage points during 1994. This diminished share of foreign currency operations forced banks to look to other possible sources of revenue.

As elsewhere in the Baltics, banks in Estonia soon started issuing short-term credits to enterprises, especially to finance trade. During 1993 the share of claims on private sector of total bank assets rose from 23% to 37%. Almost all of these credits were issued to enterprises, not individual households. At the same time the share of bank claims on the government diminished clearly, from 7.6% to 4.6%. An overwhelming majority of bank lending to enterprises was in domestic currency. Here, Estonian experience differs from Latvia's. The share of foreign currency loans to private and public enterprises decreased from 11.5% in January 1993 to 7.2% in December 1993. The absolute value of foreign currency loans to enterprises remained more or less constant at 150 million kroons, but the rapid growth of kroon lending to enterprises, from 1,137 million kroons to 2,400 million kroons, explains the diminishing share of foreign currency loans. The dominance of kroon lending continued in 1994 and 1995. For example, in November 1994 banks had lent 3,818 million kroons to private and public enterprises. Approximately 180 million kroons of these loans were denominated in foreign currencies (the share of foreign currency loans enterprises was thus 4.7%). By June 1995 the relative situation had changed; all bank loans to enterprises were approximately 4,300 million kroons, approximately 500 million kroons of which was denominated in foreign currencies, i.e. 11% of all credits to enterprises were in denominated foreign currencies. This probably reflects the growing internalization of Estonian enterprise sector: foreign trade has grown, and a number of Estonian companies have been acquired by foreign investors. In this new environment it is natural that many Estonian companies need a certain amount of funding in foreign currencies.

As was noted above, public and private enterprises have been the main recipients of bank lending in the Estonian economy. At the beginning of 1993, 32% of all bank assets were claims on en-

Chart 6 **Real interest rate on demand deposits and short-term loans**



terprises. This ratio rose to 40% by year's end. It must also be noted that Estonian banks were required to hold large reserves (these reserves were 24% of all bank assets at the beginning of 1993 and 22.5% at the end of 1993), making loans to enterprises probably the most important part of bank portfolios. The relative importance of enterprise loans has continued to be large; in November 1994 their share of all bank assets was almost 44%. However, during the first half of 1995 their share of assets has diminished somewhat to 37%. The relative importance of fixed income securities in bank assets has clearly risen. In June 1995, fixed income securities were 7% of all bank assets. Even in this asset category, instruments of enterprises and other banks. Estonian banks have clearly taken the role as an intermediator of funds to the private sector, especially enterprises.

Estonian bank lending shares the common feature with the lending of other Baltic banks, i.e. it has been based on relatively short-term lending. In April 1993, 82% of all loans extended by commercial banks had maturities of 12 months or less (most were maturities of 6-12 months). Estonian banks were quicker than their Lithuanian and Latvian counterparts to provide slightly longer-term financing to enterprises, and in this respect they could be called more advanced. It very probably is beneficial for the economy as a whole if borrowers can also borrow at maturities longer than one or two months. The willingness of Estonian banks to extend longer credits also reflects the successful stabilization policies of Estonia. Greater macroeconomic stability increases both the demand and supply of bank credits. In other Baltic economies, the average maturity of bank credits has also slowly increased during the last three years, but nowhere has development been as fast as in Estonia. In December 1994, the share of short-term (under 12 months) loans had decreased to 69%. In June 1995 it was only 51%.

On the liabilities side of banks' balance sheets the major source of funds has been demand deposits.

In January 1993, demand deposits were 37.5% of all liabilities and 91% of deposits in general. During 1993 the relative importance of demand deposits increased, so that at the end of 1993 they constituted 44% of all bank liabilities. However, the amount of other deposits rose faster, and thus demand deposits represented 83% of all deposits in December 1993. The relative importance of demand deposits has decreased after 1993. In November 1994 they constituted approx-

imately 30% of banks' liabilities (or 80% of all deposits). In June 1995, the relative position of demand deposits was practically unchanged from the end of 1994.

Unlike their Baltic counterparts, Estonian banks aggressively use demand deposits in their funding, while foreign currency deposits and other liabilities play a small role. In January 1993, foreign currency liabilities were only 15% of all liabilities. During 1993 this declined to 7%. In 1994 and the first half of 1995, the share of foreign currency liabilities remained fairly stable at around 10%. This lack of foreign currency liabilities has meant that the Estonian banks have had less exposure to exchange rate-related risk. This may have been a factor in the relatively stable development of Estonian banking system after the crisis of 1992/93. (Although it makes the Estonian public's reluctance to provide banks with more time deposits slightly puzzling.)

The development of interest rates on loans has very much depended on their maturity. Loan rates have fallen clearly for the shortest maturities. In June 1993, the weighted average interest rate of loans with maturities of 1-3 months was approximately 60%. In December 1993, the corresponding interest rate was 35%, and in December 1994 23%. During the first half of 1995, the interest rate fell even further to 16%. In loans with maturities of over 12 months, development has been very different, from 16% in June 1993 to 18% in June 1995 with very little variation in between.

Because most deposits in Estonian banks are demand deposits, the interest rate margin has been quite wide. The margin between interest rates on demand deposits and loans with maturities of less than one month was 20 percentage points in June 1995. The margin has decreased from 30% where it was for the most part of 1994, but compared to other Baltic countries it is high. In longer maturities, the interest rate margin is not as high, although still higher than in Latvia and Lithuania. This higher interest rate margin might be the consequence of the small number of Estonian banks. The banking crisis of 1992/93 reduced the number of Estonian banks early in the transition process, and this has probably given the remaining banks opportunities to widen their interest rate margins. Thus, the relative stability of Estonian banking sector appears to have been bought, at least to some extent, at the cost of bank customers.

Low interest rates on deposits mean that the real interest rate on the majority of deposits has been almost constantly negative. Chart 6 plots the annualized real interest rates of demand deposits and loans with maturities of less than one month (it is implicitly assumed that the maturity of demand deposits and loans is precisely one month, but this assumption does not change any of the qualitative conclusions). As can be seen, the annualized real interest on demand deposits has been negative from the beginning of 1994. The annualized interest rate on very short-term loans has fluctuated between positive and negative. Both rates were very volatile during 1994, real interest rate on deposits ranging from -175% to -6% and on loans from almost -150% to 15%! After autumn 1994, the volatility of real interest rates has decreased drastically, and during 1995 the annualized real interest rate on both deposits and short-term loans has been negative almost constantly. This could be the result of large capital inflows into Estonia. Naturally, if these flows stop or reverse, real interest rates could rise consi-derably.

4.3 Conclusions and future development of the Estonian banking system

In many ways the Estonian banking sector has developed faster than the banking sectors in Latvia and Lithuania. This development has included a banking crisis in 1992-93. It now seems that a crisis of some sort was probably inevitable, given the Baltics' predicament – one needs to look no further than Latvia to find evidence of this. Estonian authorities handled their crisis fairly well, and since then the Estonian banking sector has made clear progress in developing its role as an effective financial intermediary. Banks channel surplus wealth (in Estonia's case, mainly demand deposits) to borrowers. Banks are now a position to extend long-term credits which are often crucial for investment projects. It might be that Estonian banks have been able to achieve this because of lack of competition, which is evidenced by relatively large interest rate margins.

At the moment it seems that most Estonian banks are in good shape. The positive macroeconomic developments in Estonia have helped banks and their clients, and, for example, the share of delinquent loans of all loans has remained at around 4% for the last 18 months (Eesti Pank 1995). The real test for the soundness of Estonian

banking system will come during the next economic downturn. Although Estonia (as many other transition countries) will likely enjoy economic growth for years to come, at some point the normal this growth will temporarily decline or even stop, and this downturn will test the strength of Estonian banking sector. In any case, given the current health of the Estonian economy, we can assume this test is not imminent.

5 Conclusions

In just over five years, the Baltic countries have succeeded in creating banking sectors that effectively intermediate capital from the economy's surplus sectors to deficit sectors. Indeed, the statistics depicting the development of credit aggregates and their maturity distribution clearly show that Baltic banking systems are approaching the level of financial intermediation found in most Western banking systems.

Naturally, numerous problems remain and Baltic banks are still unequipped to provide the range of services available for large commercial banks, eg in western Europe. Further, bank lending operations still suffer from the lack of relevant financial information concerning enterprises, which makes management of loan portfolios problematic. The lack of skilled personnel is a diminishing worry as Baltic bank managers gain experience, but serious difficulties should be anticipated, especially when banks venture outside traditional lending. To Estonia's and Latvia's credit, their recent banking crises have left no long-lasting negative impact on the development of their banking services. How the Lithuanian financial system fares after the recent closure of two largest Lithuanian banks remains to be seen.

The low quality of loan portfolios held by banks exposed two underlying weaknesses. The first would have been difficult to do much about, i.e. banks formed from former Soviet state banks usually inherited the majority of their loan portfolios from the Soviet era, so the quality of the portfolio was what it was. The second perhaps could have been affected, i.e. most new banks were simply incapable of assessing credit risks during the early stages of transition. But as long as banks could earn profits from simple businesses like foreign exchange dealing and their lending was growing briskly, the problems of bad loans could be ignored. However, once the economies successfully stabilized their currencies (Estonia introduced a currency board system in June 1992 and Latvia informally pegged its currency to IMF Special Drawing Rights in February 1994) banks lost an easy source of income, and had to rely on other revenue streams. While currency stabilization probably hastened the emergence of bank problems, another clear reason for greater rigour in the banking environment were the improvements in regulation and supervision. Banks were required to report the actual condition of their loan portfolios, and the government's had tightened supervision to enforce this. Many banks were, therefor, forced to report loan losses which wiped out all their equity.

Nevertheless, strict supervision can hardly be blamed for these losses, it merely revealed the true condition banks, which their management had earlier often been able to hide. On the other hand, there is the matter of outright fraud. Although this appears to have been the primary cause for bank failures in only a few cases, the fact that Latvia's largest bank, Banka Baltija, apparently failed because of its management's fraudulent behaviour cannot be ignored. In Lithuania, the management of Innovation and Litimpeks banks were also accused of fraud. The culprits apparently succumbed to the temptation provided by inadequate banking supervision and auditing. What is striking in these cases is the apparent ease with which some bank managers conducted criminal operations. Although there can never be absolute safeguards against malfeasance, hopefully tighter banking supervision can at least, help prevent large-scale fraud.

Finally, higher minimum capital requirements gave incentive for small banks to merge with other banks. When banking regulation tries to decrease fragility and thus the risk of bank failure, the increase of the minimum capital require ments seems like a logical step. While this has forced many small banks into mergers, and thus could be viewed as reducing competition, the number of banks still remaining in all Baltic countries can in all probability provide adequate competition in banking services.

In the future, a gradual consolidation of the Baltics' banking sector should continue. Many banks are still quite small, so if they aim to provide their customers with a wider array of banking services, they will need to increase both their size and levels of capitalization. Additional capital

enhances their ability to bear risks, which will be of advantage in an economic downturn. On the other hand, nothing prevents small banks from specializing in narrow niches.

Banking regulation is already on par with international standards. What is lacking is adequate banking supervision – from the authorities, from bank owners and from the owners' representatives (auditors etc.).

Ultimately, of course, the development of the banking sector depends very much on the economic development of the economy as a whole. At the moment, the economic outlook for Baltic countries is fairly favourable, and this is naturally reflected in the banking sector's positive expectations.

Sources

Bank of Lithuania (1993) **Bulletin of the Bank of Lithuania 1/93.** Vilnius.

Bank of Lithuania (1995a) **The Bank of Lithuania Annual Report 1994.** Vilnius.

Bank of Lithuania (1995b) **Bulletin of the Bank of Lithuania 2/95.** Vilnius.
Biznes & Baltija, 2 November 1995.

Dovladbekova, Inna - Muravskaya, Tatyana (1993) **Development of the New Bank System in Latvia**, Reform Round Table Working Paper 5; Institute of Economics, Latvian Academy of Sciences.

Eesti Pank (1993) **Eesti Pank Quarterly Review 1/93.** Tallinn.

Eesti Pank (1994) **Eesti Pank Annual Report 1993.** Tallinn.

Eesti Pank (1995) **Eesti Pank Bulletin 5/95.** Tallinn.

Euromoney, August 1995.

Hansson, Ardo H. & Sachs, Jeffrey J. (1994) **Monetary Institutions And Credible Stabilization: A Comparison of Experiences in the Baltic.** Mimeo.

Heymann, Daniel & Leijonhufvud, Axel (1995) **High Inflation**. Oxford.

Hirvensalo, Inkeri (1994) **Banking Reform in Estonia** in Lainela, Seija & Sutela, Pekka, eds., *The Baltic Economies in Transition.* Bank of Finland, Helsinki.

International Monetary Fund (1992a) **Economic Review Latvia**. Washington D.C.

International Monetary Fund (1992b) **Economic Review Estonia**. Washington D.C.

International Monetary Fund (1993) **Economic Review Lithuania**. Washington D.C.

International Monetary Fund (1994) **Economic Review Lithuania**. Washington D.C.

Kivilahti, Terhi - Kero, Jukka - Tekoniemi, Merja (1993) **Russia's Financial and Banking System** in Sutela, Pekka, ed., *The Russian Economy in Crisis and Transition*. Bank of Finland, Helsinki.

Latvijas Banka (1994) **Annual Report 1993**. Riga.

Latvijas Banka (1995a) **Annual Report 1994**. Riga.

Latvijas Banka (1995b) **Monetary Review 2/1995**. Riga.

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