

Ernst-Moritz-Arndt-Universität Greifswald
Rechts- und Staatswissenschaftliche Fakultät
Wirtschaftswissenschaftliche Diskussionspapiere

Reformation of the Estonian Banking System

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Diskussionspapier 2/03
Februar 2003

ISSN 1437-6989

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Keywords: banks, country studies, internationalisation

JEL Category: G21, O52, F21

Abstract

Over fifteen years have passed since the beginning of the reconstruction of the transition countries' banking systems. The analysis of the development of commercial banking in Estonia and other transition countries points out several features, which are typical for the starting period of financial sector reforms. It turns out from our research that the success of the reconstruction of banking sector in certain transition countries differs substantially.

It turned out from the research that since the starting of reforms in 1988 the Estonian banking sector has passed two development periods ending with banking crisis. The first period can be named as a "wild " and the second as a "naive-optimistic" banking period. The crisis cleared the banking sector of weaker links and showed both the central bank and the management of operating banks the directions for improving banking regulations and management practices.

In our study we do not deal only with the success of the reforms of a banking sector from the aspect of the growth of assets but we also pay a lot of attention to the changes in quality. We research the extent of the growth of the banks' creditability, the stability of their working results, the conformity of services to clients' needs, the harmonization of banking regulations with the European Union's requirements and the implementation of good banking practices.

For today the transition period in Estonian banking has been actually passed. The banks operate in accordance with modern market economy patterns in every respect. But in several transition countries the reforms are quite in the starting period. The cornerstones of the Estonian banking sector reforms success have been both stable economic policy as well as reliable currency and the central bank's policy, which forces the reforms.

1. Introduction

While reconstructing their banking systems to adjust them to a market economy the transition countries have preferred commercial banking. The main purpose of commercial banks' shareholders and executive management is to increase the value of the company, which requires both a quick rise in the capacity of financial services and a high level of efficiency of the business activities. But in transition economies the macroeconomic risks are significantly higher than in countries with developed market economies. Therefore, the implementation of commercial banking in a transition economy means first of all that banks are very ambitious and subject to risks.

The risk management experience of the staff of commercial banks is short and the systems for risk management are in a forming stage. This suggests that the indicators of effectiveness of banking in a transition economy are volatile, that bank failures occur frequently and that the probability of the occurrence of a banking system crises is very high.

Development of the financial sector in transition economies has been one of the more difficult areas of reform since at the start of transition there were virtually no relevant financial institutions or markets (Fries and Taci, 2001).

The main problem is that banks in transition countries must restructure themselves, considering the needs of market economy, and join the globalization process at the same time. These two developments are to be performed at accelerated speed and in the midst of economic and financial crises. For this reason the internationalization of banking business in a transition economy has substantial differences compared to the internationalization of banking in developed countries.

After restoring independence in August 1991, Estonia chose an economic model of the transition from the command economy to the market economy. Owing to its small population of less than 1.4 million, Estonia can best achieve its goals by strengthening integration with global economy. The Estonian banking sector has been one of the first to realize the opportunities and risks involved with the global market. As retail banks must guarantee their clients and their foreign partners for international business financial service of the same quality as the international one, their efforts towards internationalization are understandable and reasonable in every respect.

Research on banking reconstruction in Estonia and other Baltic States shows that the major banks of a transition economy will reach the level of developed countries' banking in relation to the banks' trustworthiness, contemporaneity of products and standards. This is also a claim of global economy for survival, which has been realized generally by the banking of transition economies. But the disadvantage of such kind of development is the utmost concentration of banking as a result of which the competition, which is essential to guarantee a stable development and the stability of services and prices in a banking market, will disappear gradually.

For today the transition period in Estonian banking has been actually passed. The banks operate in accordance with modern market economy patterns in every respect. But in several transition countries the reforms are quite in the starting period. The cornerstones of the Estonian banking sector reforms success have been both stable economic policy as well as reliable currency and the central bank's policy, which forces the reforms.

2. The reconstruction of the Estonian banking sector

Reform of the banking system in the former USSR started in 1988. Three big all-Union state-owned banks were reorganized into a central bank and five specialized banks. In the same year, a bill was passed to allow the establishment of cooperative and commercial banks. In addition to the transition to market economy, Estonia had one more aim in reconstructing its banking system — to restore political and economic independence, and the result was that Estonia became a pioneer in the reformation of banking system in the USSR. In September 1988, the first commercial bank in the Soviet Union, Tartu Kommertspank (Tartu Commercial Bank), was founded. Shareholders of the bank were mostly state-owned enterprises all over Estonia.

As the fixed capital had to be 5 million Soviet rubles to get a permission to establish a commercial bank, it would have been difficult to raise this sum in smaller places. The Tartu Kommertspank gave several groups of shareholders a permission to establish branch offices; formally they were the branches of the Tartu Commercial Bank, but actually they were independent in their banking policies. When they were able raise the required share capital, they could become formally independent. Such actions helped to speed up the formation of an alternative to the state owned banks banking system in Estonia.

The hyperinflation in 1991 had reduced the real value of the obligatory initial capital of the commercial banks by several times. Now businessmen who had made money with intermediation of government property had an opportunity to establish their own banks to pump supplementary resources into their business through their banks. In Estonia, a boom in establishing banks was observed in the first half of 1992 when 21 new commercial banks were issued a license. Before the currency reform, the number of banks was the biggest, but the total number of commercial banks at the end of 1992 was 41. However, the banks were relatively small. The banks were also small with respect to the number of shareholders: at the end of 1992 11 banks had less than 10 shareholders and among them there were two banks that had only one shareholder.

During the central-planning system, the banking sector was doing little more than allocating funds to the various sectors and companies according to the authorities' decisions. Consequently, at the time the transformation process began, the banking sector was characterized by parameters such as:

- Competition practically zero;
- Lack of customer orientation;
- Low degree of management know-how and insufficient technical equipment;
- And last, but by no means least: a very poorly developed loan-culture and risk-awareness (Stepic, 2002).

Most of the transition countries have preferred commercial banking while reconstructing their banking systems to adjust them to a market economy. The main purpose of commercial banks shareholders and executive management is to increase the value of the company, which requires both a quick rise in the capacity of financial services and a high level of efficiency of the business activities. But in transition economies the macroeconomic risks are significantly higher than in countries with developed market economies. Therefore, the implementation of commercial banking in a transition economy means first of all that banks are very ambitious and subject to risks.

In connection with the separation from the economic area of the USSR and transition from a socialist command economy to a capitalist market economy, deep economic crises started both in Estonia and in other Baltic States. That was a period of extremely comprehensive economic reconstruction when the output declined dramatically for several years and the countries passed a period of hyperinflation. Table 1 demonstrates that in some years the volumes of gross domestic product collapsed over 10%, in 1990–1994 in Lithuania GDP declined almost 60% and prices grew about 250 times. Naturally we cannot talk about normal management of credit, interest rate and exchange rate risks in these conditions.

Table 1. GDP and inflation in the Baltics

	Estonia	Latvia	Lithuania
GDP % change in volume 1990	-6.5	2.9	-6.9
1991	-13.6	-10.4	-13.1
1992	-14.2	-34.9	-37.7
1993	-8.5	-14.9	-24.2
1994	-2.7	-0.6	1.7
GDP collapse 1990–1994 (%)	31	52	58
Output collapse 1990–1994 (%)	60	64	67
Total price increase 1990–1994 (%)	8100	4600	24600

Source: Nordic Economic Outlook & the Baltics, 1996.

The aim of maximizing profits forces the banks to look for profit opportunities also in the conditions of economic crisis and instability of currencies. As giving loans is an especially risky activity in times of economic crisis, given the privatisation process and large bankruptcy risks, the banks found in 1992, before the currency reform, that even more profitable than lending is speculation with currency. We can see from Table 2 that in the first half-year of 1992, income from currency exchange (exchange rate margins and exchange fees) accounted for 91% of total income of Estonian commercial banks.

Table 2. Income and expenses of Estonian commercial banks in 1992 (mill. kroons)

	1992 total	1992	
		I half-year	II half-year
Total income	1492	605	887
incl.: Interest income	454	32	422
Exchange rate margin	677	460	217
Commission income	352	92	260
other fees	9	21	-12
Total costs	1399	572	827
incl.: Interest expense	85	11	74
Management costs	165	19	146
Exchange rate margin	702	461	241
Commission expenses	249	17	232
other expenses	198	64	134
Profit of the financial year	93	33	60
Receipt expenses (%)	93.8	94.5	93.2

Source: Bank of Estonia, authors' calculations.

Table 2 also shows that the banks had corrected their strategy for earning profits in the second half of the year 1992. The share of currency exchange fees increased significantly in comparison with exchange rate margins. The reason for this was the currency reform that started on June 20, 1992, which established as the legal tender the Estonian kroon with a fixed exchange rate. As the exchange rate against the Deutschmark was stable (8:1), the currency risk remained only with respect to the currencies that weren't pegged to the Deutschmark. Also, thanks to the fixed exchange rate, inflation quickly started to decline. However, income and turnover from currency exchange declined significantly after the currency reform. This had to be compensated and the solution was found in activating the credit activities. As the economic crisis had reached its worst point in 1992, this was a very risky activity. Therefore, the interest rate was high. For some banks, the turn from currency exchange business to granting loans was too abrupt; they became illiquid and left the market. Unfortunately, these included some banks that were especially trustworthy in the eyes of the public. As the system of deposit insurance hadn't been launched and due to the principles of the currency board agreement, the financial possibilities of the Bank of Estonia to restructure the banks were extremely limited, many people and firms partially or completely lost their savings.

Also the cause of the 1998 Russian economic and financial crisis is considered by some researchers to be the negative attitude of banks toward lending to industrial corporations and their continuing focus on foreign currency dealings and securities investment (Satoshi, 2001). The interest rate on loans has continued to decline also in the following years (except the setback in 1998), because the inflation rate has also decreased and the competition among banks has forced them to concentrate more on the growth of their loan portfolios rather than maximizing the interest rates. We can see from Table 3 that in the period 1994–2000, the loan portfolio grew 8 times, but due to the decrease of interest rates, net interest increased only 3.3 times.

Table 3. Dynamics of Estonian commercial banks' loan portfolio, interest rates and the consumer price index

Year	Loan portfolio		Interest rate (%)	Consumer price index (%)
	bill. kroons	Growth compared to 1994		
1994	4.28	...	21.4	47.7
1995	6.73	1.57	15.9	29.0
1996	12.10	2.83	13.7	23.1
1997	21.30	4.98	17.8	11.2
1998	23.90	5.58	16.5	8.2
1999	26.70	6.24	8.6	3.3
2000	34.20	7.99	8.4	4.0

Source: Listra, 2001.

Whereas in 1992, interest income accounted for 30.4% of commercial banks' operating income, then from that time onwards their share in income has increased, being as a rule above 60%.

Most of Estonian banks had quite ambitious growth strategies. Growth was achieved by introducing new ideas, by cheaper service or by cheaply acquiring competitors during banking crises. Already the researchers analysing the Finnish banking crisis discovered the fact that a banking sector that grows faster than the overall economy will in the long run end up in a banking crisis. The economists analysing the Japanese banking crisis came up with

two reasons for this: deregulation and excess power of the banking sector. These were the reasons why they did not pay very much attention on risk management and regulative measures (Kanaya and Woo, 2001). Apparently, this was also the case in Estonia: rapid growth in several years led to excess capacity of banking and also to underestimation of risk management in 1997. The banking crisis in 1998 brought the banking back to the ground from the clouds (Table 4).

Table 4. Growth indicators of commercial banks in Estonia

Year	Number of operating banks*	Total by the end of the year, bill. EEK		Per bank, bill. EEK		GDP (current prices, bill. EEK)	Banks assets, % of GDP
		assets	share capital	assets	share capital		
1992	41	5.2	0.5	0.13	0.01	14.3	36.4
1993	22	6.4	0.4	0.29	0.02	21.8	29.4
1994	24	10.1	0.6	0.42	0.03	29.9	33.8
1995	18	14.9	1.1	0.83	0.06	40.9	36.4
1996	13	21.9	1.4	1.68	0.11	52.4	41.8
1997	11	38.8	2.4	3.53	0.22	64.0	60.6
1998	6	41.0	6.1	6.83	1.02	73.5	55.8
1999	7	47.1	6.3	6.73	0.90	76.3	61.7
2000	7	57.8	5.9	8.26	0.84	87.2	66.3
2001	7	68.4	6.1	9.77	0.87	96.6	70.8
2002	7	81.7	6.2	11.67	0.89	106.3**	76.9

* incl. branches of foreign banks

** forecast of Bank of Estonia in December 2002

Source: Bank of Estonia.

Comparing the years 1997 and 1998, it can be seen that in 1997, the banks earned ca 200 mill. kroons of net interest income more than administrative expenses and that commission income also gave a positive outcome of ca 500 millions. But profit was significantly larger than 750 millions, being close to 1.1 billion. Therefore, the year 1997 was good with respect to other income. These were the new securities market services and the banks' own financial investments. But in 1998, when the net interest income was 300 millions higher than administrative expenses and the positive balance of commission income was even larger than the year before, the loss amounted to 0.5 billions. The reason for this was that other sources of profit, especially from business activities and securities markets, which the banks were engaged in without worrying about the future, trusting their own gut feeling and the experts' rosy predictions, brought loss in that year, as they are much more risky and volatile than the basic activities. Of course, it may turn out that one wins big with these, but it may turn out otherwise — which happened to several Estonian banks in 1998. Thus, the lesson of the 1992 banking crisis hadn't been learnt sufficiently.

We can see from the banks' consolidated balance sheet that whereas by the end of 1993, securities accounted for ca 1% of the balance sheet total of commercial banks, then in the period 1994–1997, their share increased explosively, reaching 21% by the end of 1997. It has been more restrained at the level between 14–17% in the following years, due to the sobering stock market crash in the autumn of 1997 and the 1998 Russian economic and financial crisis.

We can see from Table 5 that in the middle of the year 1997, the banks' share portfolio was bigger than equity capital by ca 40%. Together with bonds, the banks' share portfolio

accounted for 16.2% of assets, at the same time when equity capital accounted for only 9%. As the equity capital included share premiums, it is clear that in case of stock market crash, the banks' equity capital wouldn't have been sufficient to completely cover the taken security risks.

Table 5. Securitization of Estonian commercial banks as of June 30, 1997 (mill. kroons)

Bank	Total equity	incl. share capital	Total share portfolio	of this		Security portfolio, % of assets
				shares in affiliated undertakings	shares in associated undertakings	
Tallinna Äripank	44.1	50.5	6.6	–	1.7	8.4
Eesti Krediidipank	79.6	47.6	35.2	15.3	1.4	13.9
Eesti Maapank	143.3	123.2	179.2	13.3	5.0	20.1
ERA Pank	63.0	43.6	43.1	22.1	1.6	7.1
Eesti Ühispank	480.6	296.8	448.1	22.7	39.5	13.6
EVEA Pank	75.0	55.0	20.4	18.2	–	9.0
Eesti Foreksbank	167.4	41.2	353.9	45.8	0.6	25.1
Hansapank	817.8	382.4	361.2	160.1	6.1	15.5
Eesti Hoiupank	423.1	165.0	232.1	57.3	8.6	16.6
INKO Balti Pank	46.1	55.1	6.5	1.6	–	19.9
Eesti Innovatsioonipank	59.8	52.8	61.5	0.5	5.3	27.5
Tallinna Pank	189.6	96.0	340.2	161.3	2.1	21.7
Investeerimispank	169.2	132.6	53.0	14.9	2.5	18.0
Total	2758.7	1541.8	2147	553.1	74.4	16.2

Source: Bank of Estonia Bulletin.

But looking at the structure of the banks' share portfolios, it is seen that a quarter of these were shares of the affiliated undertakings. Thus, banks had invested $\frac{1}{3}$ of the equity further into affiliated undertakings, which were not only financial companies but many belonged to the production sector. Thus, the general attitude was that the economic growth would continue and that there is no danger of crisis. Some banks took especially large risks in the stock market. Thus, the share portfolio of Eesti Foreksbank accounted for 215% of its equity and in case of Tallinna Pank, 179%. But the share portfolio was bigger than equity capital also in Eesti Maapank and Eesti Innovatsioonipank.

The inflated securities portfolios guaranteed the banks high growth rates in balance sheet totals as well as profits. As the securities market went uphill, it allured the banks to take more risks, as this favorable state of the market also increased the price of bank's own shares in the market. From table 6, we can see that in 1997, prices of the shares of the banks that took more risks grew especially fast.

Table 6. Share price dynamics of Estonian banking sector in Tallinn Stock Exchange, 1997 (EEK)

Bank	31.12.1996	Highest price 1997	Lowest price after stock market crash	Change in price due to stock market crash	31.12.1997
Hansapank	161	257	70	177	140
Eesti Ühispank	29	179	61	118	59
Eesti Hoiupank	69	315	70	245	166
Tallinna Pank	56	143	35	108	40
Eesti Foreksbank	122	285	40	245	115
EVEA Pank	27	33	13	20	16

Source: Sinu Kroon, 1999.

In the beginning of 1997 the index of Tallinn Stock Exchange (TALSE) was equal to 160 points and it rose rapidly, reaching 493 points by the end of August 1997. The nominal share price was 10 kroons. However, the share prices of banking sector reached already 200–300 kroons. It is clear that the banks were pushing the market as the five banks that were listed in the main list (EVEA was listed in the secondary list) gave 60% of the market capitalization. Riding on the market bubble, the banks forgot that global capital flows combined with instantaneous world-wide communications have increased the threat of international contagion in financial markets of global panics and of world-wide swings from irrational exuberance to groundless despondency (Transition report 2001).

The affiliated undertakings of banks were to a quite large extent securities and real estate intermediation-oriented. The stock market crash influenced significantly the revenues of above-mentioned institutions, due to which the revenue of financial investments in 1998 was negative. The banks had holdings in many other fields as well: trading, hotels, transport, production. But these also faced problems following the Russian economic and monetary crisis. The developments described above suggest that the banks rushed into securities market and entrepreneurial activities with high hopes for the future positive developments. However, the year 1998 was groundbreaking: the banks merged or were merged and got strategic investors who paid already sufficient attention to risk management and guaranteed adequate speed and level for the development of banking systems. Thus we have reached a new era where there is probably enough time and willingness to introduce and put into practice essential risk management schemes that must accompany implementation of new services and enlargement.

After 1998, the profits in Estonian banking sector have stabilized. Nevertheless, this cannot be said about the individual commercial banks. The profitability indicators of the banks are very different analogously to the differences between transition countries (Table 7).

Table 7. Financial ratios of Estonian commercial banks by the end of September 2002

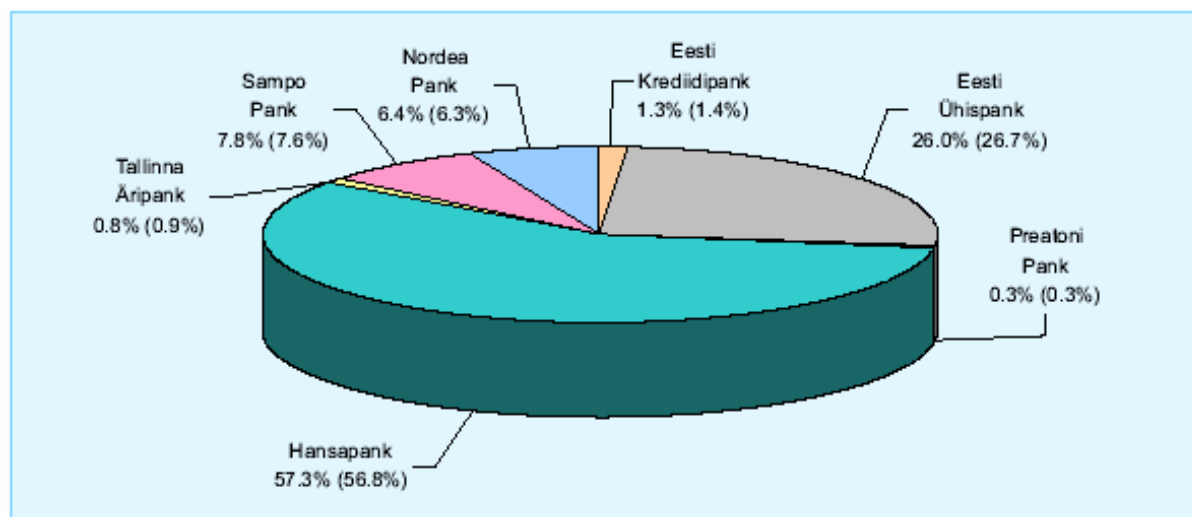
	Return on equity (ROE)	Equity multiplier (EM)	Profit margin (PM)	Asset utilisation (AU)	Net interest margin (NIM)	Earnings per share (EPS)	Spread
Eesti Krediidipank	2.76%	12.55	9.33%	2.35%	1.38%	0.27	1.50%
Eesti Ühispank	4.68%	8.66	23.72%	2.28%	0.99%	5.96	0.97%
Hansapank	7.00%	5.15	44.63%	2.97%	1.00%	7.34	0.96%
Sampo Pank	14.80%	13.15	14.30%	8.10%	2.90%		3.20%
Preatoni Pank	0.36%	1.63	2.35%	9.37%	5.19%	0.03	3.78%
Tallinna Äripanga AS	1.44%	5.50	13.48%	1.94%	0.90%	0.15	0.83%

Source: Bank of Estonia.

To summarize, the weak regulations and supervision allowed the banks to take high risk, which in case of success resulted also in high profitability. This is another reason behind the previously presented statistics that showed the profitability of banks to be higher in transition countries than in developed countries. The decline in profitability, however, can be explained by the gradual increase of the efficiency of regulations and supervision. Because there were very few regulations in the transition banking, there was also no need for offshore banking.

The number of banks in Estonia did not change in last three years; there are still six operating commercial banks. The only branch of a foreign credit institution in is Nordea Bank in Finland Plc Estonian Branch. At the end of 2002, over 85% of the share capital of banks belonged to foreign owners. No significant changes occurred in the division of banking market in Estonia. The share of Hansapank and Eesti Ühispank amounted to 83% of the sector's total assets. Considerable competition to the two leading banks in several fields of activity was offered by Sampo Pank and the branch of Nordea with both strengthened their positions, providing a more personal approach to the clients (see Figure 1).

Figure 1. Banks' market shares in Estonia as of end of 2001 (in brackets as of end of 2000)

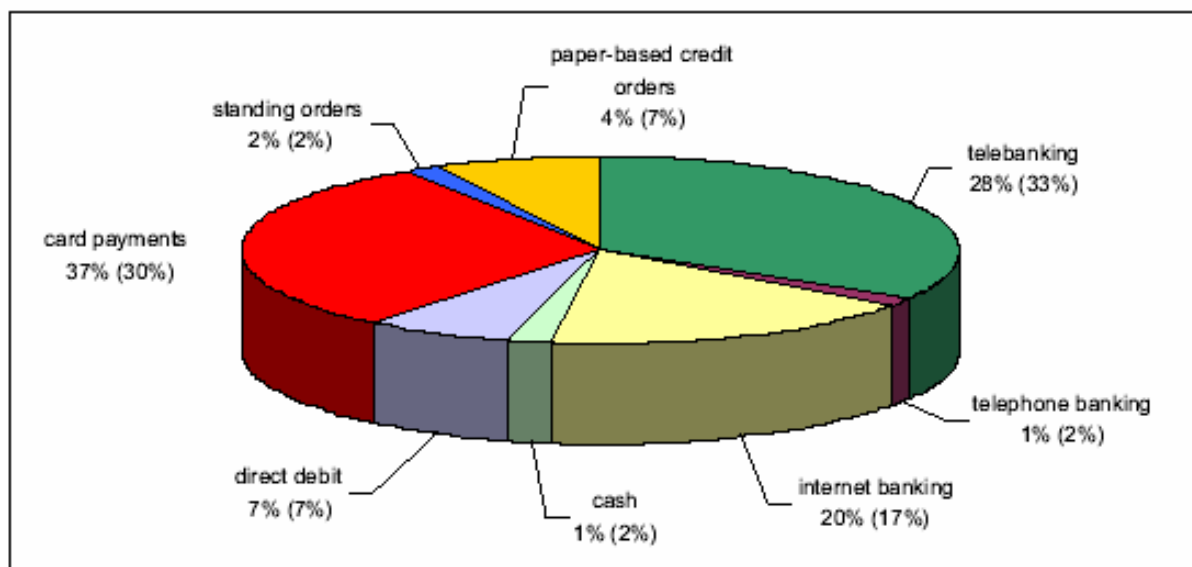


Source: Bank of Estonia

Estonian banks aim to quickly introduce up-to-date banking services in order to be successful in the banking market.

The history of Estonian electronic banking is shorter than ten years, but during this time, plastic money has become a method of payment accepted equally with paper notes and Internet banks have become the most used service on the Internet (Figure 2).

Figure 2. Structure of payment instruments in Estonian Banking sector in the 4th quarter of 2001 (in gaps 4th quarter of 2000).



Source: Bank of Estonia.

The pioneers of electronic banking in Estonia were small banks that have since ceased to exist. The first automated teller machine was brought to Estonia in 1994 by Keila Pank, predecessor of the late Maapank; a year later, Forekspank, a distant predecessor of Sampo Pank, started to offer Internet banking services. Tallinna Pank set up the first payment machine in 1996. By May of the same year, the ten commercial banks active at that time had issued a total of 200,000 bank cards.

The current bigger players went along with innovations in 1995 when Hansapank and Ühispank set up their first ATM-s. Hansapank's Internet bank started operation in the end of June, 1997. Ühispank's U-Net was introduced to the public on June 10, 1998 and already in the same year, the number of its users grew tenfold. After that, the number of Internet bank users has increased at a 10% monthly growth rate.

In the three years that is the usual time period of acceptance of innovations, the Internet banks became the most widespread channel of payments of kommunaal and phone bills. Three years ago, about one half of the bank transactions were made in bank offices, while now this figure is infinitesimal.

Yet we think that bank offices will never become totally non-existent, because not all people are prepared to give up cash transactions and personal advice in bank offices. Ühispank has retained 60 of its offices in county centres and Hansapank about 100. In addition, Ühispank has connected offices in smaller communities with Internet connections in post offices.

These days, salaries and other incomes are transferred on the bank account, from where it is convenient to make various payments for rent, phone, electricity, water, insurance. Such a

personal account used to be free of charge before, whereas currently the fee for account-related services is continually increasing. At the same time, having a bank account is a necessary prerequisite in investing one's money and getting loans.

It pays to spend time on planning the payments operations, this helps to save time. Bank operations should be made in the bank with the most favourable terms. For regular payments, fixed or direct orders should be used. One can also make the payments efficiently in post offices, where water, sewerage, gas and electricity payments are free of charge.

Electronic (cash or payments machines, over the Internet or phone) bank transactions are cheaper or even free, services fees are usually charged for the same services in bank offices. Electronic payments have the following advantages: there are no services fees, they save time, one avoids the tedious waiting time, it is also possible to make transactions after the bank offices are closed. Still, one must be prepared to face a number of inconveniences, such as phone and ATM failures, indirect costs etc.

Possibilities offered by Internet banks have continually expanded. While in the year 1999, electronic loan taking, investment banking and insurance were dreams, these services are all available today in the Internet banks. Last year was the third in which one could report one's incomes to the Tax Board via Internet banks, 29,093 people presented their personal income returns via hansa.net and 6,792 via U-Net. The banks don't charge services fees for income returns and do not benefit from it. Also, the returns are not archived in the bank, but they go directly to the Tax Board.

Analysis of the development of commercial banking in Estonia and other transition economies points out several features, which are typical to the starting period of commercial banking in the transition countries.

First. Assets of the banks grow much faster than GDP. The main reasons are the high inflation rate and the expansive development strategy of banks. The number of operating banks is decreasing constantly; therefore the growth rates of the assets of major banks are significantly higher than that of the average.

Second. A transition economy selects quickly and in quite a rough way the very limited number of prosperous banks and displaces a great bulk of weaker banks from the market, which remained in the major banks' way and were not ready to take sufficiently high risks or were unsuccessful in their risk management. Only the most ambitious business plans can be successfully realized.

Research on banking reconstruction in Estonia and other Baltic States shows that the major banks of transition economy will reach the level of developed countries' banking in relation to the banks' trustworthiness, novelty of products and standards (see also Appendix 1). This is also a claim of global economy for survival, which has been realized generally by the banking of transition economies.

3. Development of risk management in the banking of a transition economy

The main task of the management of a commercial bank is to increase the wealth of the bank's owners. Therefore, for the banks listed in the stock market, it is very important to

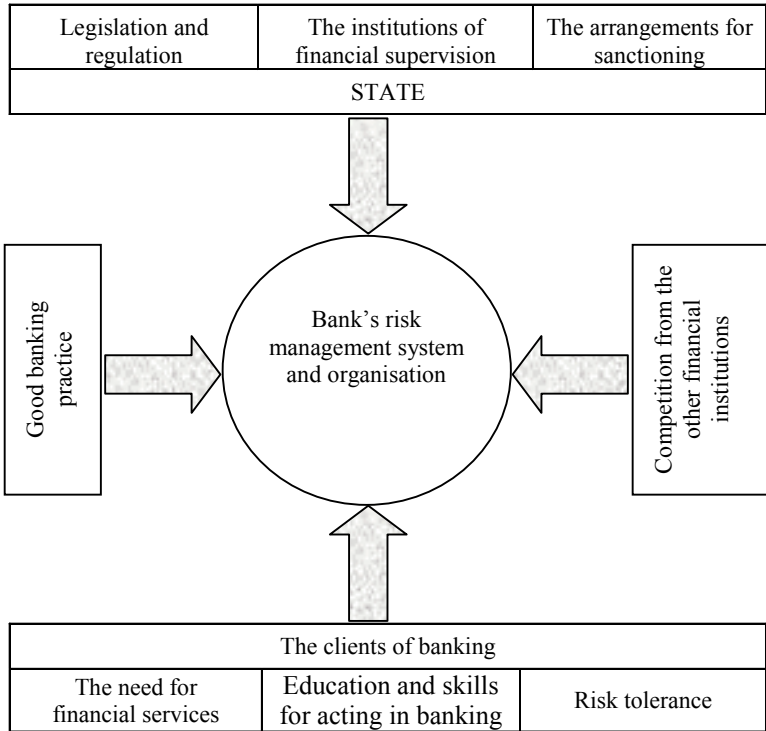
increase their share price, whereas banks not listed in the market have to address only the task of increasing their profit.

As the main goal of a bank is to increase its market value, the success of a particular bank is largely dependent on other banks' failure. Thus, the management of the bank might be tempted to improve their image with "boasting" or by spreading negative information they possess about other banks. For avoiding this kind of problems, developed countries follow good banking practice, which would eliminate the possibility of such actions. In addition, the managements of the banks have a great temptation of moral hazard. This is mainly caused by the significantly higher financial leverage in banks than in production enterprises. In real sector, the share of equity capital in collaterals is always over 50% but in banking, capital adequacy is around 10%. Thus, relative to the "initial investment" (shareholders equity), the speculative risk in banking may, in case of success, generate quite big profits.

Developments in information technology, the proliferation of financial markets, the blurring distinction between banking and non-banking financial institutions and the continuous barrage of new product innovations have fundamentally changed the landscape of financial services (Boot, 2001). Therefore the banks continually have to confront new risks and also new temptations.

The above reasoning clearly shows that the society cannot accept that banks develop and implement risk management systems by themselves. It is important that there exist supervision of these systems on behalf of the state and market.

Figure 3. The risk management framework in banking



Source: Created by the author.

Figure 3 illustrates the principle of risk management in banking. The state must lay down legal framework for banking, establish public institutions for financial supervision and guarantee that corrective measures are employed. To protect depositors and ensure the trustworthiness of the monetary system, the legal framework must secure fair competition in the market and prevent excessive risk taking.

The tasks of the state are not confined to the above; its initiatives must include establishing the good banking practice and guaranteeing sufficient competition. Thus state authorities have to make sure that there are enough participants in the market and that the financial market is transparent.

It is in the banks' own interest to build up reliable risk management systems and to improve them continuously, as the market develops or deficiencies occur. It is also necessary to have shareholders supervision, internal audit, rules for transaction as well as the orientation of the training of personnel and motivation systems towards raising the quality of the risk management.

The investigation of banking crises in different countries has in most cases led to the finding that risk management systems didn't conform to the needs. For example Caprio and Klingebiel (1996) present three reasons why banking crises have occurred:

- 1) large macroeconomic shocks (hyperinflation and economic recession),
- 2) missing and inaccurate legislation (loans, collaterals),
- 3) big mistakes made by banks in risk management (excessive optimism).

The main reasons behind Nordic banking crises in 1990s were the rapid growth of credit volume and liberalization of banking legislation in 1980s (Koskenkylä, 1995). Already the two above-mentioned studies show that the success of individual banks and banking as a whole depend upon system of risk management and upon the actions taken by the banks in risk management.

Analysis of banking crises in developed and transition countries shows that the crisis roots in transition countries are the same. Due to a deep economic crisis, caused by reconstructions in economy, a credit risk is one of the releasers of a banking crisis in a transition economy. Whereas a banking market is in a stage of formation, the state is the only real rescuer of the banks and depositors in trouble, and the policy of re-capitalising weak banks has led to the re-nationalisation of banks along with increased financial risks to the governments (Borish, Long and Noël, 1995).

Risk management in the countries of transition economy is incomparably more difficult than that in the banking sectors of the countries of developed market economy. It is caused both by a higher risk level, quick changes in risks' structure and too short experience in risk management. But in the whole world the risk management in banks and other credit institutions has become much more complicated compared to early years. One should only remind of the impact of the crisis, started in East Asia in autumn 1997, on the banking sectors. The economic situation that has changed and the coming events have brought great interchanges into the line of banking risks in developed countries, and also the new unknown risks. The Centre for the Study of Financial Innovation gives the TOP 20 of banking risks. The TOP shows that main fear is that the level of risk management cannot keep pace with the development of new risks. The topical second position in the line in 2000 is held by risks connected with the turn of the millennium (computer programmes), the impacts of

introducing EMU are on the fourth place. The experts do not consider the well-known risks (i.e. changes in interest rate and tax policy) especially dangerous for banks. In the new study the top of risk is entirely different (Table 8). But for the transition countries, which came from different type of economic and banking systems, all the risks are new at first and therefore they are more dangerous for a banking sector. Here lies a great danger of the outbreaks of banking crises in those countries.

Table 8. Banking Banana skins

Activities	2002	2000
Credit risk	1	3
Macroeconomics	2	8
Stock Exchange Markets	3	1
Complex financial instruments	4	10
Carrying out of activities	5	–
National legislation	6	27
Insurance	7	–
Emerging markets	8	12
Banking surplus capacity	9	6
International legislation	10	14
Money laundering	11	26
...
E-commerce	25	2
Mergers fever	26	7
...
New actors concurrence	30	9

Source: Centre for the Study of Financial Innovation, Banana skins, 2002

Regarding the above-mentioned observations one may look at the article “How to go bust in the Baltics” from a new aspect (the article was published in The Economist at the beginning of 1996, and stated that the reason of the banking crises in the Baltics was caused by ignoring the main banking principles). It is logical that by the time the crises stroke in the Baltics the economic and financial stability in those countries had not formed yet, it was not really possible to live in accordance with well-known banking principles. But surely the industrial countries' (Japan, South Korea, USA, European welfare states) banks are following the banking principles. Then what makes the occurrence of the last years' crisis situation in these states possible? The answer can be only one: the crises do not come from ignoring important banking principles but from inability to manage the new risks.

In transition countries, risk management systems have to be rebuilt because the old system (in banking as a whole as well as in individual banks) was suitable to the needs of the command economy. As the banks as well as firms were owned by the state, possibilities and even the needs of risk management were different: for enterprises there was no danger of bankruptcy and the state banks were authorized to make more prescriptions to the enterprises. In addition to the problems with the launch of new risk management systems, the participants were didn't have a clear vision of the path that should be taken that would also take into account the peculiarities of transition countries. From here arises the task for scientists as well as for practitioners to expand and deepen the research concerning the risk management in banking and paying special attention to new risks and peculiarities of transition countries. For example, a study of lending risks in Bulgarian banks showed that problems exist with

evaluation of clients' creditworthiness and potential projects due to the difficulties with getting true information from lenders. There were also difficulties with observing the payment behaviour of clients and with legislation regulating the collection of bad loans (Koford and Tschoegl, 1997). Appendix 1 shows that the share of bad loans in the loan portfolio in the year 2001 was 1,5% in Estonia, but in many transition countries the ratio was near a quarter (Yugoslavia, Macedonia and Slovakia).

As the transition countries' banking sectors have by now passed one or several periods of crisis, it is clear that these were caused by macroeconomic shocks and deficiencies in legislation as well as mistakes in banking risk management. This is the conclusion made by Hansson and Tombak in analyzing banking crises in Baltics. They bring out four common reasons for the crisis:

- 1) unexpected changes in the macroeconomic environment;
- 2) inadequate enforcement of existing prudential regulations;
- 3) abuse by "insiders" and
- 4) reckless expansion of assets and/or credits (Hansson and Tombak, 1996).

4. Development of risk management in Estonian banking

The reconstruction of banking in Estonia began in 1988 with the establishment of Tartu Kommertspank. Its founders were several state enterprises over Estonia and the head of the first commercial bank became Ants Veetõusme, who at the same time continued to work as the head of Tartu department of Eesti Sotsiaalpank. Tartu Kommertspank searched his market niche and found it in crediting the projects (with higher lending interest rate) for which state banks did not give loans. The second main activity was foreign currency transactions. There was an acute necessity for the latter because in the USSR most of the foreign currency that was earned from the exports had to be sold at a low exchange rate to Vneshekonombank. Tartu Kommertspank made its foreign currency transactions abroad and did not bring it into the USSR (correspondent accounts were in foreign banks) so it could pass unfavorable currency conversion.

The example of Tartu Kommertspank shows that a commercial bank was needed for bypassing the tax system and the prescriptions for credit risk management. The success and usefulness of Tartu Kommertspank were the signals for founding of the other commercial banks in Estonia. The most remarkable example is Ehitus- ja Tööstuspank (Construction and Industry Bank) that was not given by Moscow under the subordination of Estonia. The management of the bank founded aside the old bank a new one: Tööstuse ja Ehituse Kommertspank. The most valuable part of the old bank (personnel, clientele, accounts) was transferred to the new one, the old one was left only with a large and bad loan portfolio.

As inflation since 1991 accelerated, the capital necessary for founding a commercial bank (5 million roubles) could also be handled by the branches of Tartu Kommertspank and they started to separate from the main bank as independent commercial banks. The same happened to the branches of Agrotööstuspank's in counties, which registered themselves also as independent banks. The central bank was re-established in Estonia in January 1990. The central bank was interested in granting the banking licenses in order to increase its influence and authority. The Banking Act that was accepted in December of 1989 was so general that banks were free to decide on how to plan their development. The old regulation of banking did not suite to the market economy and it was also rejected because it had been designed in Moscow, at the same time the central bank had not launched a new banking supervision, too.

It was preoccupied with the preparation of currency reform instead. So the banking in Estonia developed from 1988 until the middle of 1991 without necessary risk management. Formally, some of the former banking regulation was in force but there was no surveillance and compliance monitoring. The reconstruction of Estonian banking has already been described in more detail (Sõrg, 1995) and therefore we finish the paragraph with a conclusion that commercial banks emerged so fast that official risk management systems could not be launched in time. Another reason for the missing official system was the too optimistic attitude towards the self-regulatory power of market economy.

In addition to the legal regulations that could not be implemented in time for objective reasons, there were problems with disobedience to the regulation already in force. For example, liquidity ratios for banks were established already in 1990, but in the summer of 1992, many Estonian commercial banks, including big banks and banks trusted by public (e.g. Tartu Kommertspank, Balti Ühispank), were in fact illiquid. For this reason, they delayed the clients' money transfers. There were cases of outright fraud. When receiving a payment notice from a client, the banks reduced the money balance of the client's account and issued a document about the transfer. But as there was not enough money on the bank's clearing account in the Bank of Estonia, actual transfer occurred a lot later. In the beginning, money transfers were delayed for 3–4 days, by November 1992 the delays grew already over a month and the delays got ever longer. This was the way to ruin, because the clientele began to understand the “anatomy” of the delays and started transferring their money into more solvent banks. The central bank could not react swiftly on liquidity problems, because there were neither regulations nor financial instruments for helping the banks or for making prescriptions to restore the solvency of banks with short-term liquidity problems. There were also no rules for placing a moratorium on the activities of banks with long-term solvency problems. Naturally, there were also no trained moratorium administrators or committees. For this reason, the decreeing of the first moratorium was delayed until November 17, 1992, when the moratorium was placed to three main banks (Tartu Kommertspank, Põhja-Eesti Aktsiapank ja Balti Ühispank) because of insolvency. Tartu Kommertspank went bankrupt but two others whose liquidity problems were partly caused by the freezing of foreign currency reserves in Russian Vneshekonompank (that also went bankrupt), were merged with Põhja-Eesti Pank and rehabilitated with financial aid from the government and the central bank.

List of *Disappearance of banks from Estonian banking market 1990–2002* (Appendix 5), shows that very often the reason behind abolishing the banking license was the inability to fulfil the minimum capital requirements. In addition to the minimum capital requirement, much higher requirements on equity capital and its growth were established. For example, since April 1, 2001, the share capital of a bank had to be at least 15 million kroons instead of the previous requirement of 6 million kroons and since January 1, 1996, the bank's equity capital had to be already 50 million kroons. Clearly, such growth rates of compulsory equity capital requirement did not support normal development and were too extreme. This forced some banks to merge hastily and against their free will. A sad example is the case of Eesti Maapank where three smaller banks merged with Virumaa Kommertspank (the name of the new bank became Eesti Maapank). They tried to solve the financial problems resulting from the merger during the stock market boom in 1996–1997, but too high risks were taken and on June 28, 1998, the Bank of Estonia cancelled Eesti Maapank's license and the bank went bankrupt.

In many cases, the lack of banking regulations or the delayed enforcement of these regulations had its reasons: the inability to foresee certain problems or the inability to swiftly

develop necessary regulations. In some cases, however, the resistance and the lobbying by the banks caused the delay. Thus, international accounting standards were accepted in Estonia only in 1994 and the internal audit units were created in 1995.

To summarize, the weak regulations and supervision allowed the banks to take high risk, which in case of success resulted also in high profitability. This is another reason behind the presented statistics (Table 9) that showed the profitability of banks to be higher in transition countries than in developed countries. The decline in profitability, however, can be explained by the gradual increase of the efficiency of regulations and supervision. Because there were very few regulations in the transition banking, there was also no need for offshore banking.

Table 9. Average ratio of net income before taxes to total assets of banks in transition economies, 1993–97 (in per cent)

Country	1993	1994	1995	1996	1997*	Country average 93–97
Belarus	5.7	4.6	3.1	0.1	p.a.	3.4
Bulgaria	0.2	1.8	1.2	4.5	16	4.7
Croatia	3.5	-0.5	-2.5	0.7	1.2	0.2
Czech Republic	0.5	1.0	0.8	-0.4	0.6	0.5
Estonia	4.1	0.8	2.5	2.9	3.0	2.7
Hungary	-5.2	1.3	1.6	1.7	0.6	0.0
Kazakhstan	0.0	2.8	3.6	5.1	2.8	2.9
Latvia	4.5	1.5	1.0	3.6	3.4	2.8
Lithuania	7.2	-2.6	-2.1	-1.1	0.3	0.3
Macedonia	7.9	-0.6	2.6	2.2	1.7	2.6
Poland	2.9	1.4	3.3	3.5	1.7	2.6
Romania	5.9	4.2	5.0	-1.6	9.1	4.5
Russia	2.9	2.5	1.5	6.2	1.7	3.0
Slovak Republic	2.1	1.4	1.2	0.1	1.6	1.3
Slovenia	1.7	0.5	1.2	1.3	0.4	1.0
Ukraine	13.6	13.6	9.4	8.2	2.6	9.5
Annual average	3.6	2.1	2.1	2.2	3.1	2.6

* Based on incomplete data.

Source: Transition Report, 1998

In experts' opinion, the development and enforcement of banking regulations is most advanced in Hungary and Estonia from among transition countries. This has been supported by the completion of the privatization process in banking (Nord, 2000).

In Estonia, the first commercial banks were established in 1988–1989. Although the Soviet law system was still in force, the authority of these regulations was relatively low because of Estonia's struggle towards independence. Also, Soviet laws did not suit very well with a market economy. These were the two major reasons why Estonian banks had to “reinvent the wheel”– to develop their own techniques for risk management. The third reason was definitely the lack of experience and know-how in commercial banks. Sometimes the banks even avoided hiring of people with banking experience because they were considered to be too conservative.

Most of the banks had quite ambitious growth strategies. Growth, was achieved by introducing new ideas, by cheaper service or by cheaply acquiring competitors during banking crises. Hansapank was lucky because they grew mainly during crises. After the first banking crisis in 1993, Hansapank's assets grew from 379 million kroons in the beginning of the year to 988 million kroons in the end of the year. This means that Hansapank's assets grew 2.6 times within one year. The second banking crisis in 1998 gave Hansapank the opportunity to acquire Eesti Hoiupank (Estonian Savings Bank) and this granted them 50% of the banking market. Eesti Hoiupank also planned to become Estonia's largest bank (several other banks had the same plan as well), but the biggest issue of shares in the Baltic states fell into the period of stock market crisis and the management of the bank took the risk of buying half of the emission by themselves. For this purpose, a loan was taken from the Daiwa bank, which was unlawfully guaranteed by Eesti Hoiupank. This kind of activity would not have been permitted neither by law nor by risk management principles.

In April 1993, the Bank of Estonia, scared by the striking banking crisis, announced a stabilization period in banking, during the period the issuance of new banking licenses was frozen and for the existing banks, which held the licenses, the central bank established a schedule of gradual rise in the minimum stock equity capital until ECU 5 mill. (see also Appendix 6).

The schedule of raising stock equity capital left the small commercial banks some hope to survive, but due to the crash of Eesti Sotsiaalpank (Social Bank of Estonia) in 1994, which was the biggest bank in the country, the Board of the Bank of Estonia hardened the prudential regulations for banks on 2 September 1994 and passed extra requirements on equity capital.

Thus, by January 1, 1996 the equity capital of a bank whose stock capital was EEK 15 mill, had to be EEK 50 mill. The requirements on the growth of equity capital forced the small banks to merge at the end of 1995 and at the beginning of 1996.

Bank mergers gave a great push to the rise in total assets of the banking sector. Table 4 demonstrates that since 1994 assets have increased in accelerating rate. At the same time in 1997 the growth was even 76.8%, and in previous two years the growth rate was ca 50% a year. Due to such a rapid growth the Estonian banks became the biggest banks by total assets in the Baltics.

Another direction of the commercial banks activities was to absorb into non-banking business. For instance, at the end of 1997 Eesti Maapank, whose share capital had to be recruited by the Estonian Rural Credit Fund, owned seven subordinate establishments and related companies, which dealt with leasing and investing, and with anything else but banking: hotels, processing agricultural products, broadcasting etc. In many countries in continental Europe, control and finance are institution-based; banks and other financial institutions are major shareholders in nonfinancial corporations and perform an active role in supervising and managing them (Pradhan, 1995). It appears that Estonia is not exceptional.

In 1998, the banking sector of Estonia ended a fiscal year in a loss of 0.5 bill. kroons (Table 10). The reasons are not hidden in traditional bank services (depositing, lending, and transactions) but in new and risky financing business. Therefore the following opinion about the banking crisis in Finland will be suitable for Estonia: "In general, the banks responded to the banking crisis by going back to basics, returning from new businesses to old alternatives, rationalizing operations and cutting costs." (Tainio, 1995).

Table 10. Profitability indicators of Estonian commercial banks

	1994	1995	1996	1997	1998	1999	2000	2001
Total assets at the end of a year; billion EEK	10.1	14.9	21.9	38.8	41.0	47.1	57.8	68.4
Annual profit; million EEK	68.7	288.5	517.4	963.1	-498.5	637	625.1	1685.4
Equity multiplier, %	11.7	12.6	10.4	10.7	8.4	6.3	7.1	7.8
Return on equity, ROE; %	5.7	30.5	30.6	34.9	-10.1	9.2	8.4	20.9
Return on assets %, ROA, %	0.5	2.4	2.9	3.3	-1.2	1.5	1.2	2.7
Profit margin, %	0	0.2	0.2	0.2	-0.1	0.1	0.1	0.2
Assets utilisation, %	15.9	15.6	18.2	20.1	11.5	12.0	11.1	11.4
Earnings per share, %	8.6	40.4	47.9	74.3	-29.8	31.6	29.5	n.a.

Source: Bank of Estonia

The main reasons of the banking crisis in Estonia in 1998–1999 were excessive financial risks taken by the banks primarily in the stock exchange. The burst of a market bubble on the Tallinn Stock Exchange, caused by the impact of the financial crisis in the East Asia, started a chain of negative results:

- a) banks were not able to realize their stock issues to the estimated extent and prices;
- b) stock portfolios, whose profitability had been raised by financial leverage, began to produce losses;
- c) liquidity of banks was decreasing as the short-time resources, borrowed from the Western market, had been given out as long-time loans, and it became more and more difficult and expensive to provide new resources;
- d) the lop-sided expansion of banks towards the East (especially after the burst of financial wreck in autumn of 1998 in Russia) raised credit risks and produced losses through subsidiaries;
- e) depositors lost trust in banks and began to withdraw their money from banks.
- f) The polls showed that in the opinion of 25% of the questioned people the reliability of banks had declined, 34% of the people had stopped saving at all and 28% were keeping their savings only at home (EKI test 1998, 1999).

Consequently, some of the reasons for the banking crisis in 1998–1999 were similar to those of the first crisis, i.e. management faults, consisting in underestimating risks and excessive optimism concerning the developments of market. The new key reasons were the impacts from international markets:

- a) international stock market crisis;
- b) financial crisis in Russia;
- c) appreciation of loan resources in international markets and hard terms.

When the economic environment changed in the autumn of 1997, the excessive expansion of securities and loan portfolios, lop-sided orientation towards the Russian market, lending short-time cheap foreign resources as long-time credits, and the other mistakes of the same type began to generate losses to the extent of previous big profits. The top management of Eesti Hoiupank and Tallinna Pank realized almost at the last moment to offer their banks for mergers with stronger banks. But smaller banks, Eesti Maapank, Foreksbank, Eesti Investeerimispank (Investment Bank of Estonia), EVEA Pank and ERA-Pank, did not feel the real dangers or did not find buyers and their actions were too late. Eesti Investeerimispank and Foreksbank were saved by the support of the central bank, but the rest were added to the list of the failed banks in Estonia.

The essential difference of the banking crisis in 1998–1999 compared to the first one was the fact that the Swedish banks SE Banken and Swedbank were involved in the rescue process of the two major banks of Estonia, Hansapank and Eesti Ühispank. Those banks had just merged with weaker banks and now their shares in the banking market of Estonia were 50% and 30%, respectively. They had also been evaluated by international rating agencies. As they were not able to carry on business independently any longer, the owners and managers had to look for strategic investors. The troubles had lowered the prices, so the international banking found it the right time to come to help. The small banks of Estonia also looked desperately for partners, but as their market share was small and they did not have international ratings, they were not able to draw international interest.

In conclusion, it can be said that the main difference between the two banking crises in Estonia was the fact that the first crisis was a local occasion but the second crisis was of international nature, where the impelling forces came from outside and the normal situation was restored also by foreign support.

Table 10 shows that the profitability of the banks in 1999 and 2000 has remained stable, boom started in 2001. Besides the mentioned investments of capital in the Estonian banking, the Swedish major banks have increased their shareholding in the Hansapank and the Eesti Ühispank. Besides, Optiva Pank was recapitalized by the central bank and then sold to the Sampo-Leonia affiliated group in June 2000.

Estonian banks have by now learnt the lessons of two crises. These crises filtered out the banks with worse risk management systems and only the best survived. The crises taught both big and small banks that it is not secure to rely on help from the central bank. The small banks also learnt that even foreign investors aren't interested in their fate.

The mergers of banks and bankrupts enabled the banks' employees to see the sad consequences of underestimating risks and the bank owners and the management, to leave only the most professional on the payroll. Therefore, it can be said that Estonian banks' personnel is now sufficiently professional to act in case of future financial shocks.

The central bank of Estonia has been much criticized for the untimely recognition of the last banking crisis and late and inadequate measures. This lesson has been learnt. One result of this is the unification of financial supervision institutions (banking, insurance, securities market). The leading banks also have their foreign strategic owners who supervise proper functioning of risk management systems in Estonian banks. All this allows to claim that there is no danger of a banking crisis due to factors internal to Estonia. Also, the ability of Estonian banking sector to resist foreign shocks is significantly better than in 1997–1998. Therefore, the likelihood of a banking crisis in Estonia due to external factors is also quite small.

Ten years have passed since the beginning of the reconstruction of transition countries' banking systems. Therefore, risk management experience of the staff of commercial banks is short and the systems for risk management are in a developing stage. This suggests that the indicators of efficiency of banking in a transition economy are volatile, that bank failures occur frequently and that the probability of the occurrence of a banking system crises is very high.

5. Expansion of foreign banks into Estonia

Bank of Estonia did not allow before the currency reform in 1992 any foreign share in Estonian commercial banks. But the new regulations of the issuance of banking licences after the currency reform did not impose such restrictions. Therefore on 26 August 1992 Ameerika-Balti Ühispank (American Bank of the Baltics), whose sole proprietor was an USA businessman, received a licence as well as INKO Balti Pank (INKO Baltic Bank) on 29 September 1994, which was the subsidiary bank of the Ukrainian INKO Bank. But the Board of BOE did not approve all applications. For example, the representatives of the Austrian Doonau Bank had to return bare-handed. In September 1994 Merita Bank established a branch in Tallinn. As the first two banks, created on the basis of foreign capital, did not find their place in Estonia and had lost their licences by now, then the branch of Merita-Nordbanken (now Nordea) after a long period of quiet growth has begun to apply an expansion strategy and wishes to increase its market share in Estonia.

In spite of some unsuccessful foreign banks the “open doors” policy of BOE was undoubtedly a right strategy, because the positive aspects of the coming of foreign banks balance up the possible negative ones. The policy of the central bank of India, that allows only 20% of foreign capital shares in an Indian bank, is a warning example. The Economist stated in its January copy this year that one of the main reasons for the poor situation in Indian banking is untrustworthiness to foreign banks (India’s ..., 2001).

Experts are on the opinion that in transition countries it is necessary to allow the foreign capital to enter the banking sector. Thus the journal “Business Central Europe” criticizes Hungary for protectionism. Hungary has decided to sell after refining the balance of Postabank, which is in difficulties, to a strategic investor, a local bank OTP. The market share of the merged bank would form 50% of the banking market in Hungary. The journal calls it a wrong direction and considers that the right decision would have been a sale of the bank to a foreign strategic investor (Serényi, 2000/2001).

The major foreign banks have always been waiting for a suitable moment to come to Estonia. Schleswig-Holsten Landesbank, based on the German capital, started a bit too early and met in autumn 1997 the resistance of the management of Eesti Investeerimispank to the wish to acquire 60% of the shares of the Estonian bank. The resistance was justified by the necessity to continue the activities as an investment bank and not to turn to a retail bank. But this idea was not realized. In June 2000 Optiva Pank, which was established by the merger of Eesti Investeerimispank and Forekspank, and had received financial injections from the central bank, was acquired in favourable conditions by Sampo Finance Ltd, a joint company owned by the Finnish banking and insurance company Sampo-Leonia and the Estonian Kaleva Mutual Insurance Company. The new owners turned Optiva Pank to Sampo Pank that offers both insurance and banking services.

The foreign banks got an opportunity to acquire shares in Estonian banks because the local banks turned to quoted companies. Hansapank was the first one to reach the foreign stock exchanges in 1994. The banks also faced a need to raise foreign capital in connection with the schedule of the growth of share capital and equity capital prescribed by the central bank. By the end of 1995 foreigners (foreign banks ownership formed 29.2% and 5.7% were the clients of foreign banks) held 35% of the share capital of Estonian banks.

The Swedish major banks (Swedbank and SEB) managed to wait their time. They bought from the stock exchange the cheapened shares of the Estonian major banks and in 1998 they were able to acquire without resistance an essential share of the share capital of Hansapank and Eesti Ühispank that were facing financial difficulties.

The question why the Nordic banks are especially active in the Baltics has its own logic. The Baltic region is geographically ideal for Nordic banks in their expansion spree. Decisive action can be observed in Estonia, which banking sector is the most advanced Baltic State as far as the banking sector is concerned (Tiusanen & Jumpponen, 2000).

Banking research in Lithuania and Romania also showed that the main reason for foreign banks' entry into Lithuania banking market has been their strategy of searching for new business opportunities (Dubauskas, 2002; Florescu, 2002).

By the end of 1998, the share capital of Eesti Ühispank and Hansapank were on the hands of foreign credit institutions respectively 68.4% and 64.9% and the foreign share in the share capital of Estonian banks had increased to 57.8%. By the end of 2001, 85.7% of the shares of Estonian commercial banks were in the ownership of non-residents (Table 11).

Table 11. Shareholders of the Estonian commercial banks (%)

Shareholders	31.12.98	21.12.99	31.12.00	31.12.01
Eesti Pank (Bank of Estonia)	13.1	11.4	0.0	0.0
Local governments	0.4	0.3	0.0	0.0
Non-resident credit institutions	45.5	52.6	67.0	63.3
Other non-resident legal bodies	9.5	9.0	16.7	22.3
Resident credit institutions	1.5	4.6	0.6	0.5
Other resident legal bodies	20.8	10.5	6.2	5.1
Resident private individuals	8.4	10.8	9.1	8.5
Non-resident private individuals	0.5	0.7	0.2	0.1
Other shareholders	0.3	0.1	0.2	0.2

Source: Data of Bank of Estonia.

Foreign banks came to other transition countries the same way as in Estonia – when the local banks are in difficulties. For example, the analysis of the Croatian banking proves that during the period of the third banking crises (1999–2000) the share of private capital in the banking sector increased to 90%, most of it was a foreign share (Barisitz, 2000).

At the end of 1996 there was made a survey of the main banks, which had invested in CEE (Konopielko, 1999). The survey showed that the main motivation for entry in CEE banking market according to factor's level of importance (1 – not important at all; 2 – not important; 3 – important; 4 – very important) was the following: the first rank got supporting client base (3.46 points) and the second was looking for new business opportunities (3.32 points).

The mentioned survey showed that the entry strategies were different for different transition countries. Table 12 shows that in the Czech Republic and in Poland the preferred entry strategies were similar. For the Hungarian banking sector, as the most mature, it is necessary to adopt a more aggressive strategy, characterized by the willingness to search for new business as well as an expectation of a relatively short period of investment return.

Table 12. Prevailing elements of entry strategies* and country characteristics

	Poland	Czech Republic	Hungary
Reason for entry	Follow client	Follow client	Search for new opportunities
Method	Subsidiary	Branch	Take-over
Activity	Corporate financing	Corporate financing	Corporate financing
Branching	Underbranched	Overbranched	Overbranched
Profit growth expectation	Yes	Yes	Yes
Period of investment**	3.12 years	3 years	2,5 years

* Table lists highest rated or dominant answers for each question in the survey.

** Period of investment return is given as an average of answers.

Source: Konopielko, 1999.

Vice Governor of the Bank of Estonia Mrs. Helo Meigas concluded that with the entry of Swedish banks, the maturity structure in Estonian banking improved, creating sufficient buffers. The share capital of Estonian commercial banks increased and the capital adequacy of banks improved from 12.4% to 17% (Meigas, 1999).

6. Conclusions

Estonian commercial banks were established 10–15 years ago. 7 banks have remained from more than 50 licensed banks, the rest had not been able to continue in the conditions of economic crises independently or have failed. Taking too high risks has also played a role in this process.

The analysis of the development of commercial banking in Estonia points out several features, which are typical of the starting period of commercial banking in transition countries.

First. The assets of the banks grow much faster than GDP. The main reasons are the high inflation rate and the expanding development strategy of banks. The number of operating banks is decreasing constantly, therefore the growth rates of the assets of major banks are significantly higher than that of the average.

A rapidly growing bank requires the development of a management system, and the new products and services need the existence of relevant risk management systems. But the development of these systems cannot keep pace with the needs. Hence the imminence of bank failures and the strong probability of a banking system crisis in a transition economy leading to a high banking concentration and on the other hand high risks for depositors.

Second. In all stages of a transition period banks may have a high effectiveness due to taking high risks by the rapid growth of their market shares, a quick implementation of new products and skilful exploitation of the peculiarities of a transition economy. But due to the volatility of the macroenvironment and the differences in the level of risk management the productivity of different banks is very different and the profitability is very volatile. The profitability of basic banking services is more stable and uniform, but that of new products and participation in non-financial businesses is more unstable.

Third. A transition economy selects quickly in quite a rough way the very limited number of prosperous banks and displaces a great bulk of weaker banks from the market, which remained in the major banks' way and were not ready to take sufficiently high risks or were unsuccessful in their risk management. Only the top ambitious business plans can be successfully realized.

Fourth. Banking sector on a transition country is opened to the invasion of foreign banks due to the openness of the economy and taken excessive risks. After banking crises the major commercial banks go over to the ownership of foreign banks. Local shareholders hold only banks that have a marginal share in the market.

From year 1992 foreign banks started to entry into Estonia. Among them the most successful have been Nordic banks (Finnish and Swedish). Important foreign actors in Estonian banks are SE Banken and Swedbank. Our empirical study showed that although competitor following aspect has been quite strong among Swedish banks, the main was the customer following strategy.

The internationalization experience of Estonian banks shows that the process is inevitable and useful at the same time for such small country as Estonia. Researches show that international banks help to pump foreign investments into the target country not for supporting banking sector only but also for the development of entrepreneurship. Estonian good results in engaging foreign investments speak for it. In addition to financial side, the foreign ownership also rises the trustworthiness and innovativity of a banking sector and therefore they create preconditions for the development of economy and acceleration of transition processes in Estonia. In experts' opinions Estonia is the most "westernized" country of the three Baltic Republics (Kožimiński and Yip, 2000). It can be experienced also by using the services of Estonian banks.

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Appendix 1. Financial institutions in transition countries in 2001

	Number of banks (of which foreign owned)	Asset share of state-owned banks (in per cent)	Non-performing loans (in per cent of GDP)	Domestic credit to private sector (in per cent of GDP)	EBRD index of banking sector reform*
Albania	13(12)	59,2	6,9	4,0	2,3
Armenia	30(13)	n.a.	6,0	6,3	2,3
Azerbaijan	53(5)	n.a.	n.a.	n.a.	2,3
Belarus	29(9)	53,2	11,9	n.a.	1,0
Bosnia and Herzegovina	n.a.	8,9	7,0	2,2	2,3
Bulgaria	35(26)	19,9	7,9	14,6	3,0
Croatia	43(24)	5,7	15,0	34,2	3,3
Czech Republic	38(26)	3,8	13,7	24,5	3,7
Estonia	7(4)	0,0	1,5	27,8	3,7
FR Yugoslavia	n.a.	68,0	24,4	6,0	1,0
FYR Macedonia	21(8)	1,3	24,7	12,5	3,0
Georgia	27(7)	0,0	8,5	7,0	2,3
Hungary	41(31)	9,0	3,1	30,6	4,0
Kazakhstan	44(15)	3,5	2,1	14,9	2,7
Kyrgyzstan	20(5)	16,0	13,8	2,1	2,3
Latvia	23(10)	3,2	3,1	31,8	3,3
Lithuania	14(4)	12,2	7,4	11,5	3,0
Moldova	19(10)	10,2	9,9	14,8	2,3
Poland	64(46)	24,4	20,1	18,4	3,3
Romania	33(24)	45,4	3,4	8,0	2,7
Russia	1319(35)	n.a.	12,1	14,6	1,7
Slovak Republic	19(12)	4,9	24,3	27,6	3,3
Slovenia	24(5)	48,4	9,2	40,4	3,3
Tajikistan	17(3)	4,8	12,5	13,6	1,0
Turkmenistan	13(4)	96,5	0,3	1,9	1,0
Ukraine	152(16)	11,8	n.a.	12,0	2,0
Uzbekistan	n.a.	n.a.	n.a.	n.a.	1,7

Source: EBRD, 2002.

* The transition index scores from 1 to 4 with a 0,3 decimal points added or subtracted for + and – ratings that were first introduced in 1997.

Appendix 2. Euromoney country risk ratings in transition countries

Ranking		Country	Total score	Credit ratings	Access to bank finance	Access to short term finance	Access to capital markets
March 2002	Sept 2001		100	10	5	5	5
33	31	Slovenia	73,82	6,88	5,00	4,00	5,00
36	35	Hungary	70,17	6,67	5,00	3,50	4,00
38	42	Czech Republic	68,48	5,83	5,00	3,33	3,33
41	48	Poland	65,81	5,63	2,42	3,33	5,00
45	49	Estonia	63,46	6,04	3,22	2,44	3,00
46	58	Slovak Republic	62,54	4,17	5,00	2,22	3,00
52	64	Latvia	58,30	5,00	2,65	2,39	3,00
58	59	Croatia	55,80	4,38	3,10	2,39	3,25
62	66	Lithuania	54,42	4,17	1,68	2,22	2,50
70	76	Kazakhstan	47,85	3,13	2,40	2,21	2,50
74	74	Bulgaria	45,64	1,88	1,09	1,75	2,00
79	82	Romania	43,53	1,25	1,33	2,31	2,00
95	111	Azerbaijan	37,04	1,88	0,04	2,22	2,00
98	94	Russia	35,90	2,08	0,05	1,79	0,00

Source: Euromoney. March 2002.

Appendix 3. EBRD rating of banking sector reform

Country	1992	1994	1996	1998	2000	2001
Azerbaijan	1,0	1,0	2,0	2,0	2,0	2,3
Belarus	1,0	1,0	1,0	1,0	1,0	1,0
Bosnia and Herzegovina	1,0	1,0	1,0	2,3	2,3	2,3
Bulgaria	1,7	2,0	2,0	2,7	3,0	3,0
Croatia	1,0	2,7	2,7	2,7	3,3	3,3
Czech Republic	3,0	3,0	3,0	3,0	3,3	3,7
Estonia	2,0	3,0	3,0	3,3	3,7	3,7
FR Yugoslavia	1,0	1,0	1,0	1,0	1,0	1,0
FYR Macedonia	1,0	2,0	3,0	3,0	3,0	3,0
Georgia	1,0	1,0	2,0	2,3	2,3	2,3
Hungary	2,0	3,0	3,0	4,0	4,0	4,0
Kazakhstan	1,0	1,0	2,0	2,3	2,3	2,7
Kyrgyzstan	1,0	2,0	2,0	2,7	2,3	2,3
Latvia	2,0	3,0	3,0	2,7	3,0	3,3
Lithuania	1,0	2,0	3,0	3,0	3,0	3,0
Moldova	1,0	2,0	2,0	2,3	2,3	2,3
Poland	2,0	3,0	3,0	3,3	3,3	3,3
Romania	1,0	2,0	3,0	2,3	2,7	2,7
Russia	1,0	1,7	3,0	1,7	1,7	1,7
Slovak Republic	2,7	2,7	2,7	2,7	3,0	3,3
Slovenia	2,0	3,0	3,0	3,0	3,3	3,3
Tajikistan	1,0	1,0	1,0	1,0	1,0	1,0
Turkmenistan	1,0	1,0	1,0	1,0	1,0	1,0
Ukraine	1,0	1,0	2,0	2,0	2,0	2,0
Uzbekistan	1,0	1,0	1,7	1,7	1,7	1,7

* The transition indicators scores from 1 to 4 with a 0,3 decimal points added or subtracted for + and – ratings that were first introduced.

Source: Transition Report 2002

Appendix 4. Some Indicators of the Estonian Financial Sector Development

Indicator	1996	1997	1998	1999	2000	2001
Number of commercial banks	13	11	6	7	7	7
Number of private banks	12	11	5	6	7	7
Number of foreign banks	1	1	2	2	4	4
Concentration index C3, %	58.8	69.7	93	92.4	91.1	93
Concentration index C5, %	74.7	83.4	99.4	98.9	98.8	95.1
Banks' total assets, EUR m	1 467	2 594	2 620	3 008	3 695	4 372
Total assets/GDP, %	43.8	63.4	55.7	61.7	67.7	71.8
Foreign ownership in share capital, %	33.4	44.2	60.7	61.6	83.6	85.9
Major foreign ownership in total assets, %	2.6	2.3	90.2	89.8	97.4	97.5
Private credit by banks, EUR m	788	1362	1527	1704	2189	2601
Private credits by banks/GDP, %	24	33	33	35	40	43
Leasing and factoring portfolio, EUR m	110	315	399	433	644	893
Leasing and factoring/GDP, %	3	8	8	9	12	15
Debt market capitalisation, EUR m	150	258	235	204	231	279
Debt market capitalisation/GDP, %	4	6	5	4	4	5
Stock market capitalisation, EUR m	508	837	531	1913	2095	1999
Stock market capitalisation/GDP, %	15	20	11	39.8	38.4	32.8
Insurance gross collected premiums, EUR m	53	70	81	83	98	112
Gross collected premiums/GDP, %	1.6	1.7	1.7	1.7	1.8	1.8
Investment funds' assets, EUR m	31	97	23	73	95	193
Investment funds' assets/GDP, %	0.9	2.4	0.5	1.5	1.7	3.2
Total financial assets, EUR m	1 318	2 458	2 912	5 550	6 727	7 748
Total financial assets/GDP, %	39	60	62	115	123	127
Total private credit, EUR m			1883	2084	2754	3347
Total private credit/GDP, %			40	43	50	55
GDP, EUR m	3349	4110	4685	4813	5458	6089

Source: Bank of Estonia, 2001, p. 5–12

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Appendix 5. Banks that have ceased to operate on the Estonian market 1990–2002

	Bank	Date of issuing the licence	Date of withdrawal of the licence	Reasons and results of withdrawal of the licence
1.	Estonian Branch of the Social Bank of the USSR			05.03.90 liquidated according to the decision of Government of the Estonian SSR
2.	Estonian Branch of the Agricultural Bank of the USSR			05.03.90 liquidated according to the decision of Government of the Estonian SSR
3.	Tallinn Branch of the Vneshekonombank of the USSR			01.01.91 merged to Eesti Pank
4.	Estonian Branch of the Gosbank of the USSR			01.01.92 merged to Eesti Pank
5.	Estonian Branch the Savings Bank of the USSR			14.04.92 reorganised into the state-owned shareholders' bank Eesti Hoiupank according to the Board of Eesti Pank decision
6.	Saaremaa Aktsiapank	06.11.91	18.06.92	Had not started operating
7.	Pärnu Linnapank	23.12.91	18.06.92	Had not started operating
8.	Eesti Kirdepank	04.03.92	18.06.92	Had not started operating
9.	Eesti Kommertspank	16.08.91	19.06.92	Had not started operating
10.	Balti Krediidipank	27.02.92	01.07.92	Had not started operating
11.	Rahvusvaheline Kliiringupank	04.03.92	01.07.92	Had not started operating
12.	Tartu Kommertspank	13.02.92	19.12.92	17.11.92 moratorium declared; 19.12.92 compulsory liquidation started; 21.09.94 declared bankrupt
13.	Lõuna-Eesti Arengupank	21.06.91	26.01.93	Did not fulfil the minimum capital requirement; 17.05.93 declared bankrupt
14.	Lääne-Eesti Pank	15.01.91	26.01.93	Did not fulfil the minimum capital requirement; 24.03.94 declared bankrupt
15.	Tallinna Maapank	18.09.91	26.01.93	Did not fulfil the minimum capital requirement; acquired by Keila Pank
16.	EKE Pank	04.11.91	26.01.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
17.	Pärnu Kommertspank	08.10.91	26.01.93	Did not fulfil the minimum capital requirement; 17.03.93 declared bankrupt
18.	Otepää Ühispank	27.06.91	26.01.93	Did not fulfil the minimum capital requirement; 14.04.93 declared bankrupt
19.	Viimsi Pank	31.07.91	26.01.93	Did not fulfil the minimum capital requirement; acquired by EVEA Pank
20.	Balti Ühispank	29.08.91	08.02.93	18.11.92 moratorium declared; 08.02.93 moratorium terminated; 16.03.93 merged (together with Põhja-Eesti Aktsiapank) to Põhja-Eesti Pank
21.	Rapla Maapank	16.03.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
22.	Võru Maapank	16.03.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
23.	Pärnu Maapank	16.03.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
24.	Valga Maapank	30.03.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
25.	Haapsalu Maapank	30.03.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
26.	Paide Maapank	29.04.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
27.	Tartu Maapank	01.06.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
28.	Harju Maapank	17.06.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank

	Bank	Date of issuing the licence	Date of withdrawal of the licence	Reasons and results of withdrawal of the licence
29.	Nordpank	29.04.92	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
30.	Viljandi Kommertspank	28.06.91	01.03.93	Did not fulfil the minimum capital requirement; merged to Eesti Ühispank
31.	Revalia Pank	08.03.91	07.03.93	26.01.93 moratorium declared; 07.03.93 compulsory liquidation started; 11.04.94 declared bankrupt (bankruptcy estate sold to Ukrainian INKO Bank).
32.	Põhja-Eesti Aktsiapank	01.07.92	16.03.93	17.11.92 moratorium declared; 22.01.93 moratorium terminated; 04.02.93 licence renewed; 16.03.93 merged (together with Balti Ühispank) to Põhja-Eesti Pank
33.	Narva Pank	19.08.91	24.11.93	27.07.93 moratorium declared; 14.12.93 declared bankrupt (bankruptcy estate sold to Eesti Tööstuse Arengu Pank (Esttexpank))
34.	Estonian Branch of the Bank for Industry and Construction of the USSR			05.04.94 liquidated according to the decree of Ministry of Finance (government's confirmation 21.06.94)
35.	Eesti Tööstuse Arengu Pank (Esttexpank)	02.08.91	17.11.94	Acquired by Eesti Sotsiaalpank
36.	Eesti Sotsiaalpank	22.01.91	09.05.95	15.08.94 moratorium declared; 21.09.94 moratorium terminated; after withdrawal of the licence reorganised into ESB Finantskontori AS (an institution for collecting problem loans)
37.	NoWe Pank	30.03.92	09.05.95	Did not follow the required levels of prudential ratios; 31.05.95 shareholders decided on voluntary liquidation
38.	Rahvapank (Põlva Maapank)	27.04.92	20.11.95	Acquired by Virumaa Kommertspank
39.	Keila Pank	19.06.91	11.12.95	Did not fulfil the minimum capital requirement; acquired by Virumaa Kommertspank
40.	Raepank	16.03.93	28.12.95	Did not fulfil the minimum capital requirement; acquired by Eesti Foreksbank
41.	Eesti Maapank	22.01.91	02.01.96	Did not fulfil the minimum capital requirement; acquired by Virumaa Kommertspank (shareholders decided on renaming the bank to Eesti Maapank starting from 22.10.96)
42.	Ameerika Balti Pank	26.08.92	09.01.96	Did not fulfil the minimum capital requirement; decided on voluntary liquidation
43.	Eesti Tööstuse ja Ehituse Kommertspank	26.11.90	02.09.96	Acquired by Eesti Hoiupank
44.	Põhja-Eesti Pank	16.03.93	05.01.97	Acquired by Eesti Ühispank
45.	INKO Balti Pank	29.09.94	02.09.97	Shareholders decided on voluntary liquidation. 06.01.99 declared bankrupt
46.	Eesti Innovatsioonipank	19.06.91	10.09.97	Licence withdrawn by the Board of Eesti Pank Decision No 10-4 /09.09.97) on the force of Clauses 5 and 7 of Article 19 of the Law on Credit Institutions. 12.01.99 court's order on compulsory liquidation
47.	Eesti Maapank (Virumaa Kommertspank)	22.11.90	29.06.98	Permanently insolvent; licence withdrawn by the Board of Eesti Pank (Decision No 8-1 /28.06.98). 24.08.98 declared bankrupt

	Bank	Date of issuing the licence	Date of withdrawal of the licence	Reasons and results of withdrawal of the licence
48.	Eesti Hoiupank	11.03.92	14.07.98	Acquired by Hansapank (acquisition registered in the Commercial Register on 20.07.98)
49.	Tallinna Pank	08.01.92	14.07.98	Acquired by Eesti Ühispank (acquisition registered in the Commercial Register on 29.07.98)
50.	EVEA Pank	31.07.91	01.10.98	Permanently insolvent; licence withdrawn by the Board of Eesti Pank Decision No 11-1/01.10.98. 05.02.1999 declared bankrupt
51.	ERA Pank	03.01.91	07.04.99	Moratorium 07.10.98-06.04.99. Licence withdrawn by the Board of Eesti Pank (Decision No 3-2/06.04.99). 07.06.1999 declared bankrupt
52.	Eesti Investeerimispank	17.06.92	02.12.98	Acquired by Eesti Foreksbank (permission of Eesti Pank 02.12.98, acquisition registered in the Commercial Register on 18.12.98)
53.	Eesti Foreksbank	30.06.92	20.01.99	From 21.01.99 bank's business name is AS Optiva Pank
54.	Optiva Pank	21.01.99	28.12.00	From 29.12.00 bank's business name is AS Sampo Pank

Source: Bank of Estonia

Appendix 6. Legal and Regulatory Framework for Banking Supervision Estonia

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	COMMENTS
Central bank as the supervisory authority	0	1	1	1	1	1	1	1	1	1	1	
Authority of supervisory agency to exercise												
Binding corrective order	0	0	0	0	1	1	1	1	1	1	1	Limited possibilities for issuing orders effective with June 8,1992 amendments to the 1989 banking act
Removal of managers	0	0	0	0	1	1	1	1	1	1	1	
Conservatorship	0	0	0	0	1	1	1	1	1	1	1	Moratorium from 1992, special administration by supervisor 1995*
Withdrawal of license	0	1	1	1	1	1	1	1	1	1	1	
Liquidation	0	1	1	1	1	1	1	1	1	1	1	
Forced merger	0	0	0	0	0	0	0	0	0	0	0	
Bank licensing		1	1	1	1	1	1	1	1	1	1	
minimum capital	0	0	n.a.	n.a.	n.a.	EEK 15 million	EEK 25 million	EEK 50 million	EEK 60 million	EEK 75 million	EUR 5 million	Eur 5 million from 1 July 1999
fit and proper requirement	0	0	0	0	0	0	1	1	1	1	1	
Feasible business plan	0	0	0	0	0	0	1	1	1	1	1	
Prudential regulations												
Capital adequacy ratio (in percent)	0	0	0	0	8%	8%	8%	8%	10%	10%	10%	Soviet Gosbank ratio of own funds to liabilities 1/20 -1992-mid93
Risk weighted c/a ratio	0	0	0	0	1	1	1	1	1	1	1	
Liquidity ratios	0	1	1	1	1	1	1	1	1	0	0	No unified ratio of liquidity, but BOE can set individual ratios for different banks
Maximum exposure to single borrower (percent of capital)	0	0	0		50%	25%	25%	25%	25%	25%	25%	Soviet Gosbank ratio of 100% 1992-mid93
Related party lending limits (percent of capital)	0	0	0	0	0	25%	25%	25%	25%	25%	25%	
Consolidated supervision	0	0	0	0	0	0	1	1	1	1	1	
Open forex position limits	0	1	1	1	1	1	1	1	1	1	1	
Limits on equity holdings in nonfinancial enterprises (percent of capital)	0	0	0	0	0	0	60%	60%	60%	60%	60%	
Loan classification and provisioning	0	0		0	0	0	0	0	0	0	0	Requirements set only for annual reports since 1995
Internal control/audit	0	0	0	0	0	0	1	1	1	1	1	
Suspension of interest accrual on overdue loans	0	0	0	0	0	0	1	1	1	1	1	
Accounting and legal framework												
Internationally accepted accounting standards	0	0	0	0	0	1	1	1	1	1	1	From 1994 for banks, from 1 January 1995 for other enterprises

Commercial banking law	0	1	1	1	1	1	1	1	1	1	1	Credit Institution Act effective from January 1995, prior to that - Banking Act of 1989
Central bank law	0	1	1	1	1	1	1	1	1	1	1	Bank of Estonia Act effective from 18 June 1993, prior to that date - the 1989 banking act
Civil code	1	1	1	1	1	1	1	1	1	1	1	
Property rights	1	1	1	1	1	1	1	1	1	1	1	Part of civil code
Law on contracts	1	1	1	1	1	1	1	1	1	1	1	Part of civil code
Law on collateral	1	1	1	1	1	1	1	1	1	1	1	Part of civil code
Law on loan collection												
Bankruptcy law	0	0	0	1	1	1	1	1	1	1	1	Bankruptcy Act effective from 1 September 1992
Separate provisions for banks***	0	0	0	0	0	0	1	1	1	1	1	The Bankruptcy act stipulates separate provisions under Credit Institution Act**
Money laundering law	0	0	0	0	0	0	1	1	1	1	1	A special chapter in Credit Institution Act effective from 1995, Money Laundering Act effective from 1 July 1999

* 20 January 1995 - First version of the Credit Institution Act takes effect

**1 July 1999 - New version of the Credit Institution Act takes effect

*** Deposit Guarantee Fund Act effective from 1 July 1999

maximum level of guarantee:

initially EEK 20 000;
 EEK 40 000 from 2000;
 EEK 100 000 from 2004;
 EEK 200 000 from 2007;
 EEK 313 000 from 2010

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