

## **BANK LENDING AND EVALUATION OF BORROWERS' CREDIT RISK IN LATVIA**

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**BANK LENDING AND EVALUATION OF BORROWERS' CREDIT RISK IN LATVIA****ABSTRACT**

The research is devoted to the topical problem connected with the necessity of the improvement of credit risk assessment technique in lending to corporate customers, suitable for the Latvian commercial banks, as well as corresponding to the international banking practice and to the recommendations of Basel II.

In the conditions of quick development of bank lending and economy the issue of the adequate credit risk assessment becomes topical. Ratings are widely admitted as borrowers credit risk complex assessment instruments. Nowadays the goal of the credit rating is the quantification of borrowers credit risk, i.e., the determination of the borrowers probability of default (PD). Direct use of foreign techniques of the PD determination for corporate borrowers is connected with the certain problems. On the one hand, mentioned techniques do not take into account peculiarity of the Latvian economy and of the commercial banks in particular. On the other hand, the necessary statistical information in Latvia is not sufficient.

The banks of the Baltic States are not large and the types of banking operations are identical, moreover a lot of Baltic enterprises have common capital or enterprises have entered another state and are cooperating closely with each other. This research offers to create a common database in order to pool historical credit risk information of all Baltic States.

**KEY WORDS:** bank internal ratings, credit risk assessment, expert systems, financial analysis, information database

## **INTRODUCTION**

Latvia has experienced a rapid economic growth during the last few years. Since year 2000 Latvia has had one of the highest GDP growth rates in Europe. The average annual GDP growth rate has been 7.3 % over the period of 2001-2003, 8.5 % in 2004, and 10.4 % in 2005. In the first half of 2006, the real GDP has increased by 11.1 % in comparison to the respective previous period. The economic growth has been achieved in sectors that are geared predominantly towards the domestic demand. The highest increase has been attained in trade (18.7 %), real estate, renting and other commerce (16.5 %), and construction (16.1 %) [Central Statistical Bureau of Latvia data, 2006].

Banks have contributed substantially to formation and development of favourable and stable business environment, which forms the basis of long-term economic growth. Latvian commercial banks invest more than a half of their resources (66.9% as to 1 September 2006) in lending operations [The Financial and Capital Market Commission data, 2006]. In the conditions of quick development of bank lending and economy the issue of the adequate credit risk assessment becomes topical. Direct use of foreign techniques of the PD determination for corporate borrowers is connected with the certain problems. On the one hand, mentioned techniques do not take into account peculiarity of the Latvian economy and of the commercial banks in particular. On the other hand, the necessary statistical information in Latvia is not sufficient.

## **PECULIARITIES AND CHALLENGES OF THE LATVIAN BANK LENDING**

Favourable economic conditions have promoted the development of banking sector. Currently, 22 commercial banks and 3 branches of foreign banks operate in Latvia. It can be

concluded from the data in Table 1 that the key performance indicators of the last years have a rising tendency for the banking sector in Latvia.

During the last years, the lending operations of the total assets of Latvia's commercial banks have significantly increased (see Table 1). The banks consider them the most profitable. In the end of the third quarter of 2006 the interest income on the loans issued to non-banks accounted for 51.1% of the aggregate income of commercial banks [The Financial and Capital Market Commission data, 2006].

When evaluating the structure of the bank loan portfolios, it has to be mentioned that approximately 50.45% of the loans have been granted to corporate customers (loans to residents excluding loans to central/local governments, households and non-profit organizations servicing households and transit loans). In comparison with the respective period of the last year, the volume of the loans granted to enterprises has increased by 47.24%. This is a positive fact as the loans to enterprises are used mainly for production, i.e., towards development of the national economy, thus, fostering economic growth.

Successful economic development, increase in domestic demand and foreign investments, and decrease of interest rates are considered to be the reasons for the rapid lending growth in Latvia. Meanwhile, competition among banks in lending intensifies. The loan products offered by banks are very similar with the main difference in interest rates that makes it to be the crucial factor in competition. As a result, a tendency of descending interest rates can be observed in the market. In the current tough competition conditions, banks offer their customers loans for very low interest rates, even granting loans with a minimal profit margin. Moreover, several banks with the access to considerable amounts of cheap financial resources (e.g. from a parent bank) offer loans to some of their customers for prices that are even lower than the resource price in the market, thus increasing their market share in the specific sector and forcing out competitors.

The decrease of loan interest rates and profit margins is not dangerous considering the upturn period in economy. However, considering the case of the diminishing pace of national economic growth, insufficient evaluation of credit risks can lead to losses and could even cause a crisis in the bank system, as can be seen from experience of other countries [see Bank Failures in Mature Economies, 2004]. Circumstances of banking crisis based on the credit risk have been similar in various countries. After a period of financial deregulation, the lending volume rose quickly, especially in the real estate financing sector. The fast growing real estate prices induced lending even more, followed by inadequate regulations. When the period of economic recession set in, the inflated real estate prices collapsed leading to numerous insolvencies and losses.

During the last years of the rapid economic growth conditions in Latvia the signals of economic over-saturation could be noticed. The current account deficit is high. The inflation has not diminished: it was 2.6% in year 2000, reached 6.2% in 2004, and 6.7% in 2005 [Central Statistical Bureau of Latvia data, 2006]. The rapid growth of lending, especially of consumer and mortgage loans, experts consider to be one of the main reasons for inflation in Latvia.

To control the further rise of inflation and the volume of issued loans, the Bank of Latvia has already applied the traditional monetary policy instruments for several times – the refinancing rate has been increased (last time in 17.11.2006 – up to 5%), as well as the minimum reserve requirement has been increased several times (see Table 2). The elevation of the minimum reserve requirement means that banks will have less resources to exploit freely, e.g., for lending.

However, the efforts of the Bank of Latvia have not been sufficiently effective and have not encouraged a decrease in lending volumes. Still, it has to be mentioned that the volume of loans in Latvia has increased from a very low initial basis and the level of lending

is significantly lower than the average indicator in the European Union. therefore, according to the expert assessment, there is a substantial borrowing potential in the country.

According to the experts of the International Monetary Fund (IMF), the traditional monetary policy instruments are ineffective for regulating the economy of Latvia. To decrease the inflation by lessening the internal demand in the conditions of the fixed exchange rate of the national currency (as of January 1, 2005 the lats (LVL) has been pegged to the euro), IMF recommends to carry out the restrictive fiscal policy and to reduce gradually the budgetary deficit.

The inflationary spiral is dangerous for the state economy due to the reason that it can decrease the competitive capacity of Latvian goods in external markets, but insufficient export will prevent the decrease of the current account deficit. In addition, inflation means decrease in the actual income of residents. In order to avoid losing their money, people invest in lasting values, the real estate historically being one of these. In case if real estate is purchased with the help of bank loans, at certain conditions it can put at risk not only the well-being of the population, but also the stability of the banking system.

However considering the experience of several European countries at the beginning of 1990, the problem of credit risk in the banking market becomes more acute in a situation of an intensive lending growth and tough competition, thus leading to a falling loan quality. One of the problems of such situation is that the credit risk of the loans issued in this period is increasing rapidly and the interest rates paid by the customers do not cover this risk any more. The situation may become even worse with a simultaneous crisis in the real estate market that would have a negative influence on loan collateral, and thus the loans secured with mortgages might gradually acquire the status of blank loans.

Considering the fact that risk is at the basis of banking business, banks seek the balance between risk and profit. In the case of rapid lending growth, the significance of

creditworthiness evaluation of existing and potential customers' increases and the improvement of the credit risk assessment and management becomes very topical.

## **THE IMPROVEMENT OF CREDIT RISK ASSESSMENT UNDER THE BASEL II FRAMEWORK**

The world faced this problem at the end of the last century with a bankruptcy wave that affected several countries. In 1997, the Basel Committee in the document "The Core Principles for Effective Banking Supervision" indicated credit risk as the main financial risk in banking. Nowadays, the problem of credit risk assessment has been raised to a new level – from an internal issue of a bank it has turned into one of the most widely discussed issues within the world banking societies.

The new recommendations of the Basel Committee "International Convergence of Capital Measurement and Capital Standards" (Basel II) are aimed at the improvement of the credit risk assessment. These recommendations allow commercial banks to determine the amount of the necessary capital based on the borrower credit risk that is determined according to the evaluation results of the external or internal ratings.

For the credit risk assessment, the Basel Committee recommends to apply one of the two broad methodologies for calculating their capital requirements for credit risk – the standardized approach and the internal rating system based approach. The standardized approach to credit risk evaluation suggests the use of assessments made by external credit assessment institutions recognised as eligible by national supervisors (e.g., international rating agencies).

The internal rating system (IRB) approach suggests eligible banks to rely on their own internal estimates of risk components. The bank's internal rating system must comply with a

number of requirements one of them being the ability to estimate the borrowers probability of default (PD).

As only few of their borrowers that have been granted with international ratings, Latvian banks have to work out internal rating systems for the assessment of borrowers credit risk and probability of default. These rating systems would allow banks to apply the single approach to the estimation of PD for all their borrowers.

For the big Latvian commercial banks that are owned by foreign banks it is possible to introduce the internal rating systems of their parent companies and use their experience. Other banks, however, are forced to develop internal rating systems by themselves. It is, of course, possible to acquire a ready system, like the rating systems offered by Standard & Poor's or Moody's, for example. These systems, unfortunately, are very expensive and it is necessary to conduct their adaptation to the local conditions.

According to Basel II, the term "rating system" comprises all the methods, processes, control and data collection and IT systems that support the assessment of credit risk, the assignment of internal risk ratings, and the quantification of default and loss estimates [International Convergence of Capital Measurement and Capital Standards, 2005].

There are several methods of estimation of default probability. One of them suggests taking into consideration not only the financial results reflecting borrower's business operations, but also indicators describing borrower's business risk, economic sector risk, as well as regional and country risk for estimation of the probability of default. Evaluation of qualitative indicators is particularly difficult within this approach.

According to another widely used approach, estimation of the default probability is based on historic data. Application of this method is limited due to the fact that default cases are relatively rare and accumulation of such statistics is feasible only for large banks or organisations. For this reason, exact application of foreign methodology for borrowers credit

risk assessment for Latvian commercial banks is inconvenient due to the short observation period. Therefore, it is possible for banks in Latvia to use the first approach for the estimation of default probability that suggests the use of borrowers' qualitative and quantitative analyses for determination of the rating.

Lately, the importance of qualitative analysis has increased in the banking practice. In scientific literature, the qualitative analysis has often been viewed as an adjusting factor of quantitative analysis that either scales down or scales up the total quantitative evaluation of an enterprise.

At present for the credit risk assessment of corporate customers local banks mainly use the fundamental analysis of the borrower's financial conditions or the so called traditional analysis. The analysis is based on the calculation of several financial ratios and partial evaluation of the branch where the specific business operates. The financial situation of borrowers and their creditworthiness are described by words. Moreover, the results of the analysis very much depend on the interpretation of the credit manager. It is connected with the fact that the borders of the ratio "norms" are not clearly defined.

The traditional borrower analysis approach has several drawbacks [Meilenstein der Bankenregulierung, 2004]:

- it does not allow for precise quantification of credit risk and determination of the default probability;
- the credit applications are rejected that would have been approved under the differentiating approach – consequently banks lose their profit potential;
- it is very requiring in terms of work and qualification of bank employees;
- the probability of losing the bank customer loyalty is increasing as the awarded loan price is inappropriate to the borrower's credit risk (see fig.1). If the

credit terms are too strict, i.e., the unified (slightly differentiated) loan interest rate offered to the customer is higher than the interest rate adjusted to the risk of the specific borrower (in fig. 1 the triangle below the dotted line) the bank risks losing borrowers with the best creditworthiness and smallest risk. Automatically the aggregate quality of the bank loan portfolio will fall as in the loan portfolio the proportion of the bad loans will increase. And vice versa, if the loan interest rate is lower than the one adjusted to the risk (in fig. 1 the triangle above the dotted line), the bank may become appealing to the customers with a relatively bad creditworthiness and as a result the structure of the bank loan portfolio will become worse. Besides, the bank will not receive an adequate pay for the assumed risk and consequently the profitability of the invested resources will suffer;

- the probability increases that borrowers with a good creditworthiness “subsidy” the borrowers with a worse creditworthiness.

To sum up the possibilities of the traditional analysis to assess the borrower’s financial situation it must be concluded that as a result of the analysis a rather subjective “yes/no” decision is made regarding the issuing or rejection of the loan that does not allow for a precise quantification of the credit risk. Due to these reasons majority of banks are starting to use other methods in their operations.

## **THE CHOICE OF APPROACHES FOR THE DESIGN OF A BANK INTERNAL RATING SYSTEM**

Quantitative assessment of the corporate borrowers’ credit risk is can be performed by using a bank internal rating system. That allows for complex assessment of the financial standing of a business with the systematized indicator that is expressed in points and refers

the company to a specific class of creditworthiness. Commercial banks have already accumulated a big experience of traditional analysis that can be successfully used to design the internal rating system of the bank.

When analyzing several publications on the issue of credit ratings assignment to borrowers, it can be concluded that the rating systems used in banks of the world are similar at their essence. Internal bank rating systems provide a reference of a borrower to a certain credit risk category according to the internal and external factors (factor groups) of credit risk and the extent of their influence upon borrower's ability to manage and repay the pledged liabilities.

The approaches used to design a bank internal rating system can be divided into three groups:

- the expert system approach;
- statistical approach;
- combined approach.

The expert system approach is based on the fundamental financial analysis of the borrower. It is based on the assessment of the quantitative and qualitative factors where the selection and weighting of the factors to be included in the rating system is conducted by experts. This approach is to be used if the bank disposes the information only regarding some default cases or some external ratings, i.e., the bank has an insufficient volume of data to create the statistical model.

In the basis of the statistical model there is the application of the statistical methods (e.g., discriminate analysis, logit/probit models, neuronal networks) for the designing of an internal rating system of the bank. With the help of these methods the statistical comparison of defaulted and non-defaulted borrowers is made with the aim to identify the factors that predict the default. As a result new standard models are created for determining the borrower

ratings. This approach can be used if there is a sufficient volume of data regarding the defaulted and non-defaulted companies. Just a small number of banks fully rely on statistical models. Such models are based on the calculation of credit ratings according to a certain formula that comprises both the quantitative factors – financial ratios, as well as some qualitative factors, which have been standardized and expressed in quantity terms, that characterize the peculiarities of the borrower branch, its credit history as well as other aspects.

Scholars Treacy and Carey, when carrying out the research of the 50 biggest banks in USA concluded that banks see four main disadvantages of using the statistical approach for assessing the borrower's credit rating [Treacy, 2000]:

- some important risk factors are subjective, for example, the borrower's management quality;
- it is difficult to obtain the data that would confirm the accuracy of assessing the models;
- the reliability of the models will become obvious only after a certain time, thus the bank may undergo a significant risk up to this time;
- the complex mutual influence determines that there must be different rating models for the assessment of the creditworthiness regarding the borrowers of different branches and geographical regions.

However, the banks that use the statistical approach for the assessment of the borrower credit rating mention the following arguments for the application of the approach:

- with the help of the models consequent ratings can be obtained;
- in a long-term the operational costs will be lowered as less staff for the determination of the rating will be needed.

The combined approach for the determination of the ratings implies a combined application of the statistical approach and the expert system. Moreover, the inclusion of the expert opinion in the determining the borrower's credit rating is limited. Based on the degree of applying the expert opinion two approaches can be singled out:

1. for the determination of the borrower's credit rating in the objective segment the statistical approach is used that is adjusted with the expert opinion in the subjective segment of assessment;
2. for the determination of the borrower's rating the statistical approach is used and only the rejected cases or the cases that fall into the grey zone are assessed individually by experts.

Thus impartial assessment of creditworthiness on the basis of the statistical methods is supplemented by the subjective opinion of the experienced experts, i.e., the adjustment of the rating is made based on the analysis of the qualitative factors as well as the branch. For example, the rating points obtained with the statistical method can be adjusted by some points depending on the credit expert opinions. The bank can also set the maximum number of points for the assessment of the qualitative parameters and thus limit the influence of subjective factors on the final rating. Theoretically for the design of a rating model the shadow-bond method can also be used. It represents the statistical method that resembles the external ratings for the assessment of the businesses that have no external rating. That is possible only if the external ratings are available for a statistically significant selection of customers. In practice in Latvia it is not possible to apply this method as the number of companies with the ratings awarded by international rating agencies is very small.

For choosing a specific approach for the determination of the borrower credit rating in a bank it is necessary to conduct the assessment of separate approaches based on their assessment accuracy, cost-efficiency and approval on the part of customers. The accuracy of

the approach used for the assessment of the borrower creditworthiness depends on several factors: the rating precision; completeness, validity and quality of the data, and the expert qualification [Kilb, 2002].

To make the decision about the possibilities of using a specific approach to design the rating system their comparative analysis can be made regarding the model accuracy (the quality of the classification). That allows determining which of the approaches provides the possibility of making the least imprecise forecast regarding the classification of the loan into the “good” or “bad” loans. For the determination of the approach accuracy the error quota (the proportion of the erroneous forecasts) is used. There are two types of errors [Boemle, 2002]:

- type  $\alpha$  errors (errors of type 1) – characterize the percentage of the customers that have later gone bankrupt although initially classified as the “good” ones;
- type  $\beta$  errors (errors of type 2) – characterize (ex post) the later solvent number of customers that had initially been classified as the “bad” ones.

The quality of the classification can be evaluated adding the errors of type 1 and type 2. Moreover the improvement of the model accuracy allows diminishing loan losses appearing as a result of the error of type 1 as well as diminishing the alternative costs at amount of the not received profit, as a result of the error of type 2.

The application of the statistical methods for the design of the internal rating system is possible only under the condition that the statistically assessable data regarding borrowers are complete, accurate, without contradictions, and in a sufficient volume. Thus the creation of a data base (the internal data base of a bank or a joint inter-bank data base) is a pre-condition for the design of the bank internal rating system by using the statistical approach.

It can be concluded that the worse the situation is in the bank regarding the availability and quality of data, the more it is necessary to use the expert system approach.

Even if the data are good it is recommended to use the combined approach and not to refuse fully from the expert knowledge as loan experts take into account the individual characteristics of specific loans and process the qualitative information aspects.

The use of the rating system creation approach based on expert knowledge consequently involves the corresponding qualification of the credit experts. The impartiality of the expert also depends on his professional and human qualification. Moreover, not only the knowledge about the branches analyzed is important, but also the knowledge about people (psychology) is necessary.

In their work experts rely on their previous experience and compare the borrowers to the ones examined before. The subjectivity of the expert opinion reduces the accuracy of the assessment therefore it is necessary to ensure the raising of the expert qualification that will reduce the number of errors in their forecasts and assessments.

The evaluation of the approaches for the determination of the borrower credit rating in banks can also be made based on their cost-efficiency. As a result of the most intensive and effective checking of the borrower's creditability the likelihood of wrong decisions decreases. If in the exit point of the evaluation there is complete information about the borrower, a perfect classification is possible without additional checking of its creditability. When conducting the comparative analysis regarding the accuracy of the rating model two types of errors are found out. When reducing type 1 errors also the costs of loan loss decrease and the less there are type 2 errors the less is the unattained profit. The decreasing of wrong classification means increased checking/control costs. The costs of type 1 errors (loan losses due to the borrower insolvency) are usually higher than the costs that have arisen due to type 2 errors (alternative costs in the extent of the unattained income). As it follows from practice, experts often have comparatively few type 1 mistakes and comparatively many type 2

mistakes. It is explained by the fact that expert assessments are generally too pessimistic and cautious.

To decrease the asymmetry of information and assess the borrower more impartially the closeness to the customer is important as well as a private contact with him. If there is no closeness and the loan examination process is impersonal the statistical approach is more useful because expert knowledge will not provide any additional benefit in this case. If the customer service is individualized for reaching a better result the bank may use expert knowledge and the closeness of experts to customers by introducing the division of labour. Thus the aggregate economic and sector analysis may be done centrally, however the credit experts may be entrusted to conduct the assessment of the borrower and regionally specific factors (for example, the borrower's management quality).

A consequent use of the internal rating system provides several advantages to the commercial banks:

- to implement a joint quantitative assessment of the credit risk;
- standardize the price determination process in lending to corporate customers;
- determine the loan price that covers the expected loss;
- exclude the situation where the borrowers with good creditworthiness subsidize the borrowers with bad creditworthiness;
- offer the borrower the loan issuing conditions that are adjusted to the customer risk profile;
- serve as a basis for designing an efficient, profit-oriented bank strategy in the area of lending;
- provide basis for efficient use of resources that, in its turn, improves the indicators of the bank cost-effectiveness;

- create a sound limit system etc.

Development and improvement of the internal rating system is a constantly current issue. Due to the fact that the design of an internal rating system in a bank is necessary not only if the bank does not already have one, but also in case if performance of the existing system is inappropriate or significant changes have taken place concerning the bank's loan portfolio.

### **THE INFORMATION DATABASE FOR THE DESIGN OF A BANK INTERNAL RATING SYSTEM**

The main difficulty by the designing of a bank internal rating system is lack of information about the borrower. This data has to be not only complete and consistent, but also at a sufficient amount to be helpful for development of a bank internal rating system using the statistical approach. According to experts, data sets containing information about roughly 500 defaults can be considered a sufficient data amount. Moreover, appropriate data is necessary not only for the design of a rating system, but also for testing.

One of solutions to simplify the process of borrower's financial standing analysis and design of the bank internal rating system is creating a database of analytical information. Such database could contain basic information on borrowers analysed by the bank, as well as current situation and possible developments of corresponding economic sectors.

The database will enable to use data of already analysed enterprises for comparison in the process of assessing the next borrowers that will allow a more impartial evaluation of potential borrowers' financial standing. To this effect, both – the internal databases of the banks and common information databases with comprehensive information on borrowers could be helpful. The use of these databases (one database could also be developed) will

enable bank specialists to set more substantiated forecasts on the probability of default of the borrower.

To evaluate borrower's financial standing and creditworthiness impartially, it is necessary to view an enterprise in the context of its business environment. The economic and financial activities of the enterprise in future depend on several internal and external factors.

All factors affecting the financial standing of an enterprise can be divided into two groups:

- factors influencing enterprise from outside (external environment);
- factors influencing enterprise from inside (internal environment).

The factors affecting the business of an enterprise are displayed in Figure 2. The business and financial standing of an enterprise are determined by its internal environment – management of the enterprise, economic activities and organisationally technical processes. The economic activities of an enterprise depend directly and indirectly on the external environment to a great extent, such as: standings of the enterprise within the economic sector, competitors, suppliers and customers, financial institutions and investors, government bodies and tax authorities, trade unions and public opinion.

The author suggests including the following information into the database:

- General information about the borrower (name, identification number, year of establishing the company, bank customer number; the economic sector of borrower's business operations; audit opinion; data on loans issued; management quality of the enterprise; credit history).
- Financial information section (data of annual reports and quarterly balance sheets, profit and loss calculation and cash flow; estimated financial ratios).
- Collateral (real estate; assets of the enterprise; warranties).
- Position of an enterprise within the economic sector.

- Description of the economic sector.
- Additional information.

Formation of the database will facilitate:

- systematising the process of borrowers' financial standing analysis;
- gathering and storing of information on financial standing of borrowers that have already been analysed by the bank;
- building up the basis for comparing the borrowers by economic sectors and years;
- simplifying the process of analysis and saving analysis time, thus providing cost reduction possibilities in future;
- providing information in an appropriate form for the user;
- making information easily accessible and purposeful for users.

At present in Latvia, it is possible to use information from different external sources for evaluation of borrowers' creditworthiness. Presence of negative information can be checked with the Register of Debtors, in the database of the Creditreform company, and in other databases. Positive information on the loans repaid in time can also be acquired, using the references from other banks to which the borrower has had credit liabilities. Starting 2007, it will be possible to obtain more comprehensive information on credit history of an enterprise (including also positive) from the Register of Debtors. Within the framework of a project by the Financial and Capital Market Commission and the Bank of Latvia, it is planned to supplement the Bank of Latvia Register of Debtors with positive information on customer's credit history as well as add the debtor information from such organizations as LMT and Tele2 (mobile network operators), Latvenergo (state owned energy supply group), Latvijas Gāze (leading gas supply company), Latvijas Pasts (Latvia Post), etc.

To deal with the issue of meeting the Basel II requirements on the development of internal rating systems it is necessary to collect a vast amount of statistical information. To facilitate a more rapid development of representative statistical information database, containing historical credit risk information on the borrowers, as well as on default cases, it would be useful to set up a Baltic inter-bank database like it has been done by some European banks.

2004 several large European banks founded the Pan-European Credit Data Consortium (PECDC) in order to pool historical credit risk information to be used for statistical research and to support Basel II Accord related activities. By the middle of 2006 18 commercial banks took part in the Pan-European Credit Data Consortium, including ABN AMRO, BNP-PARIBAS, COMMERZBANK, BARCLAYS BANK, DRESDNER BANK, RABOBANK, ROYAL BANK of SCOTLAND, SOCIETE GENERALE etc. According to the representative of PECDC, inter-bank data pooling is an accurate, reliable, and cost-effective way of creating empirical data sets required to help banks estimate Basel II risk components [Credit Data Pooling by Banks for Banks, 2006].

The creation of a similar database not only on the level of Latvian commercial banks, but also for the banks of the Baltic level would make it possible for individual banks to meet the Basel II requirements on development of internal rating systems.

Banking sector of the Baltic States consists of 50 banks, including branches of foreign financial institutions. The basic indicators of the Baltic commercial bank sector performance in the first half of 2006 are displayed in Table 3.

In the first half of 2006, a common tendency could be observed – a decline in level of return on banking capital and assets, ROE and ROA (see Fig. 3 for Latvia).

Decline in capital return can be explained with the fast capital increase process, which became necessary to comply with the capital adequacy requirement in the situation of rapid

lending growth. Return on assets decreased due to tough competition and complicated situation in finance market in the first half of 2006. Refinancing rates have increased during this period, at the same time, the banks have tried to attract as many new borrowers as possible. As it can be seen, the tendencies and challenges of lending in the Baltic States are similar.

The banks of the Baltic States are not large and the types of banking operations are identical, moreover a lot of Baltic enterprises have common capital or enterprises have entered another state and are cooperating closely with each other. To design the internal rating system in each bank of the Baltic States it is necessary to collect and accumulate the vast volume of statistical historical information, including the information on the defaults, what is not possible in relatively short period of time. The creation of the common database of historical credit risk information for all of the Baltic States, will enable accumulating the representative statistical information in rather short period time as well as beginning the productive work on the design of the bank internal rating systems.

To conclude, a timely design and implementation of rating systems will grant the Latvian commercial banks the time needed for the adjustment and improvement of applicable methods, as well as for compiling the necessary statistics for adequate credit risk assessment. The experience of foreign banks show that transition to the new Basel II standards will require prolonged (not less than 5-10 years) operational statistics of the borrowers rating evaluation system. These statistics are important for estimation of the accuracy and quality of the rating system.

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Table 1: Key Indicators of the Latvian Commercial Banks, 2003-2005

	2003	2004	2005	2003/2002	2004/2003	2005/2004
	mln. LVL	mln. LVL	mln. LVL	%	%	%
Deposits	3737,3	5094,3	6200,4	21,72	36,31	21,71
Loans	3000,9	4380,6	6960,3	41,21	45,98	58,89
Capital and reserves	482,0	629,2	833,5	25,65	30,54	32,47
Assets	5716,7	7850,1	10942,9	29,26	37,32	39,40
Profit	71,5	116,0	193,1	27,00	62,24	66,47

Table 2: Reserve Requirements for Banks According to the Regulations of the Bank of Latvia

In effect on	Minimum Reserve Requirement
24.07.2004	increased from 3% to 4%
24.11.2004	extended reserve base
24.08.2005	increased from 4% to 6%
24.12.2005	increased from 6% to 8%
24.05.2005	extended reserve base

Table 3: Key Indicators of the Baltic Banking Sector, 30.06.2006

		<b>Latvia</b>	<b>Estonia</b>	<b>Lithuania</b>
Number of banks	number	24	14	12
	% of total	48%	28%	24%
Assets	mlrd. EUR	18,5	13,7	14,9
	% of total	39,2%	29,05%	31,75%
Loans	mlrd. EUR	12,1	9,8	9,1
	% of total	30,71%	43,37%	25,91%
Profit	mlrd. EUR	151,8	107,5	90,7
	% of total	30,71%	43,37%	25,91%
ROE	%	24,00	18,98	18,55
ROA	%	1,9	1,6	1,3

Figure 1: Credit Risk Adjusted Loan Pricing And Borrowers' Potential

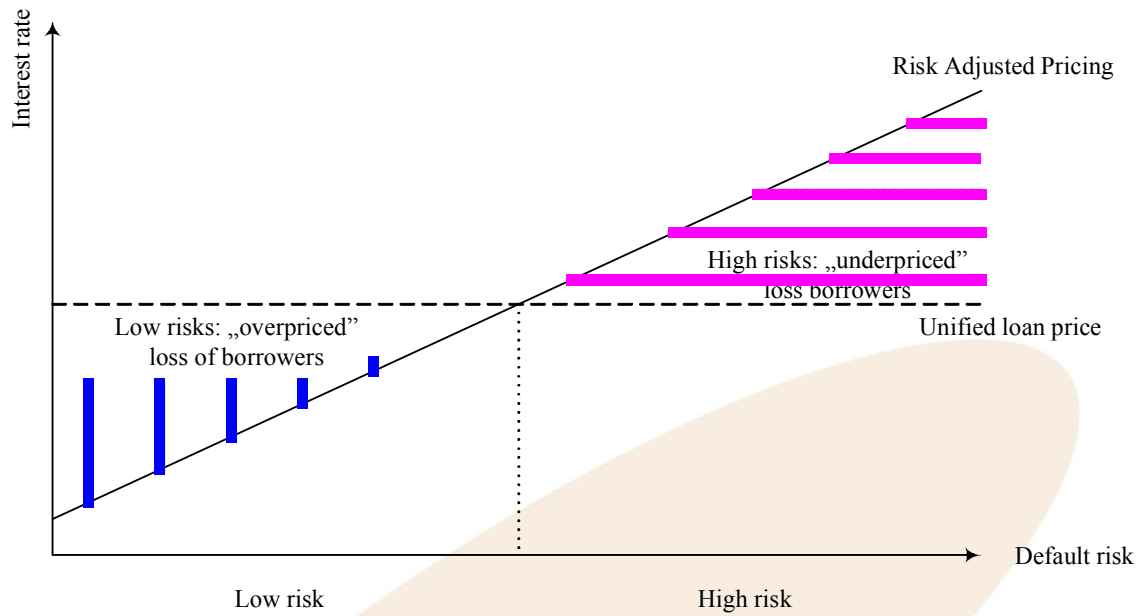


Figure 2: The impact of external environment on the position of an enterprise

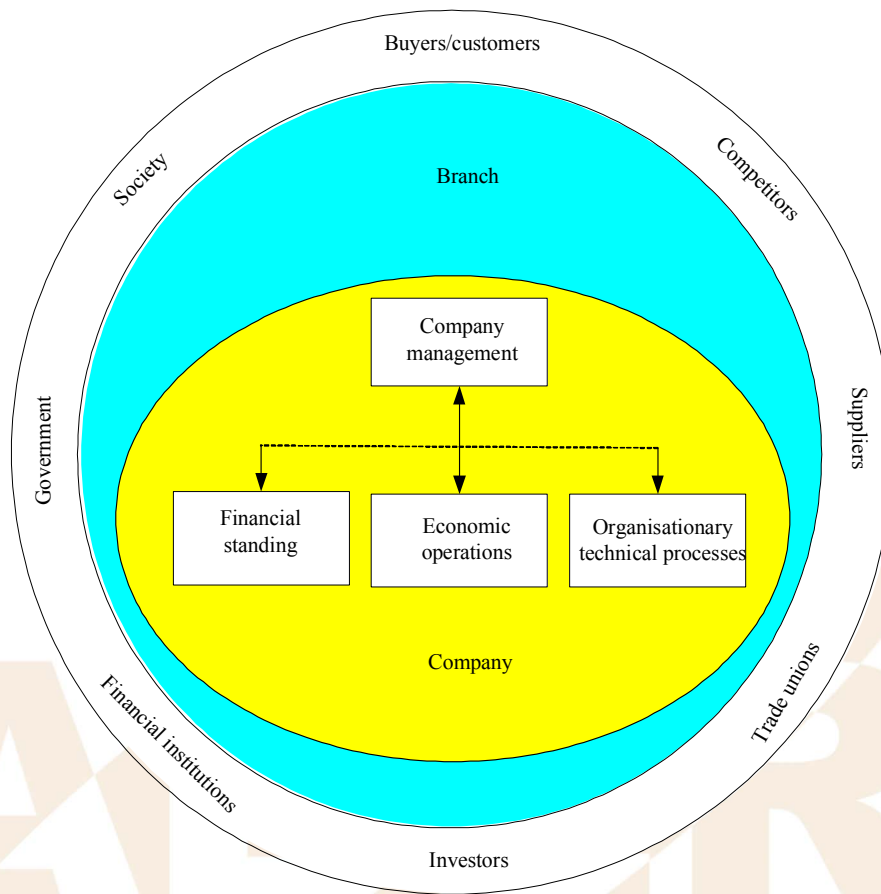
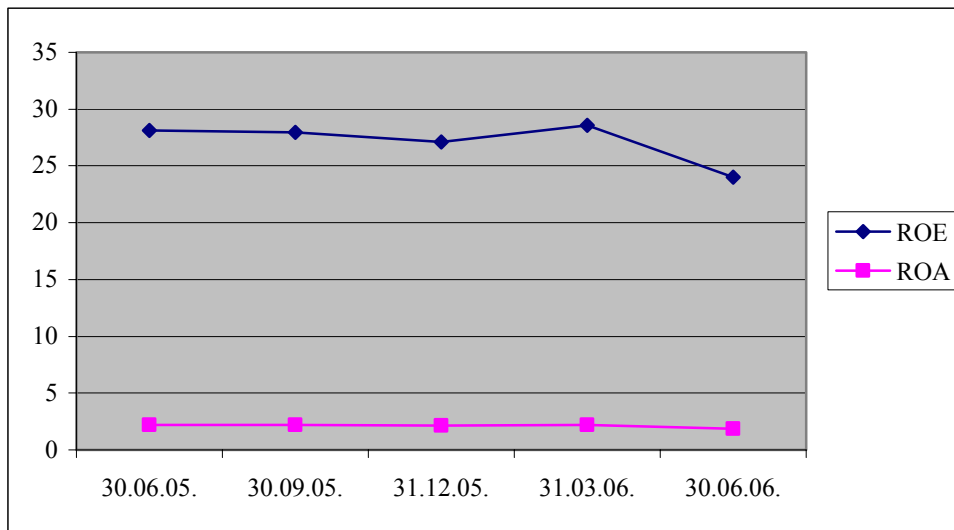


Figure 3: The Dynamics of ROE and ROA of Latvian Commercial Banks



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