

Analysis of the asset and loan portfolios of Latvian commercial banks under the circumstances of the crisis of 2008 and afterwards

Abstract

The true conditions of commercial banks in financial markets, their stability and ability to survive in crisis conditions, to service their liabilities in case of liquidation and to fulfil their functions after possible restructuring can be described by the volume of commercial bank assets as well as their quality. The quality of assets is, in turn, determined to a large extent by the quality of the loan portfolio. The aim of this article is to show the influence of the economic crisis of 2008 on the quality and volume of the loan and asset portfolios of Latvian commercial banks and to draw conclusions about the impact of these changes on the stability of commercial banks. The author analyses the dynamics of the assets and loans of Latvian commercial banks and evaluates the quality and profitability of their loan portfolios by applying the method of coefficients. The article covers the period from 1999 until 2010, including the crisis period of 2008-2009, and allows a determination of the changes and trends in Latvia's commercial banking industry. The author compares the changes in the assets of Latvian commercial banks and their quality with the changes in 1995 and 1998 and determines the differences between these processes and their results.

Keywords: *commercial banks, assets, loan portfolio, asset quality, reserves*

Introduction

In assessing the influence of the economic crisis of 2008 on the volume and the quality of the assets and loan portfolios of Latvian commercial banks, one can start by analysing two important criteria for the banking industry: assuring the quality of assets; and the profitability of those assets (the return).

Analysis of the dynamics and quality of the assets of Latvian commercial banks

Asset dynamics of Latvian commercial banks

The volume of the assets of Latvian commercial banks for the period from 1999 to 2010 is shown in Table 1. This shows the growth in the total assets of Latvian commercial banks in the period from 1999 (the year in which all the banks wrote off assets that were lost due to the Russian crisis) up to 2008. At this point, bank assets had increased 11.7 times relative to their starting value.

The 2008 crisis evidently affected commercial bank assets. In 2009, the banking sector in Latvia had lost 1 613 million lats, representing seven per cent of total assets

in 2008. This is a significant decrease in assets. Data from 2010, however, shows the positive trend of a gradual increase in assets.

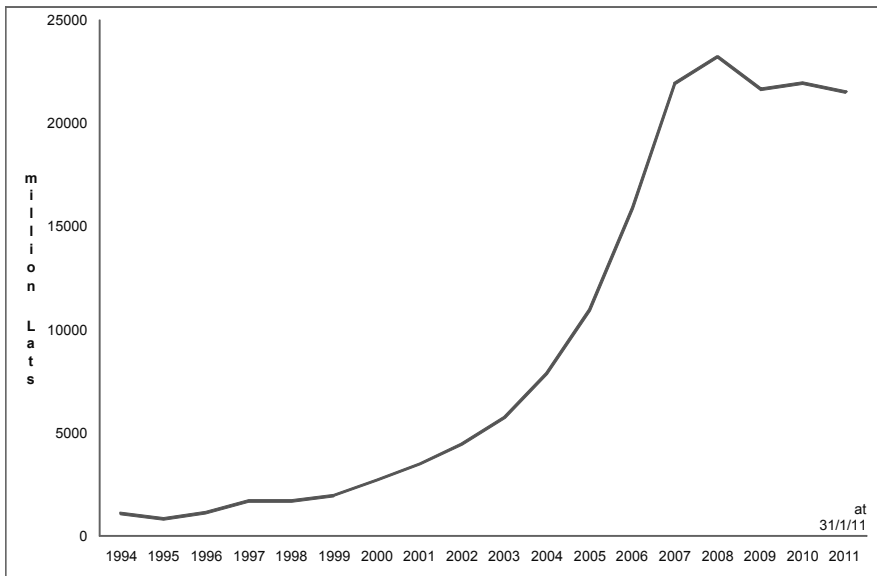
Table 1 – Latvian commercial bank assets (1999 to 2010), in million LVL

1999	2000	2001	2002	2003	2004
1 962.9	2 699.5	3 458.0	3 699.3	5 720.6	7 855.0
2005	2006	2007	2008	2009	2010
10 965.5	15 867.9	21 501.9	22 914.1	21 301.1	21 547.8

Source: http://www.ftk.lv/lv/statistika/kreditiestades/ceturksna_parskati/page2

In Figure 1, one can see both the positive dynamics of a growth in assets (from 1999 to 2008) and the decline in assets in 2008, as well as a gradual increase in assets in 2010.

Figure 1 – Dynamics of the assets of Latvian commercial bank assets, 1999 to 2010, millions of lats (year-end figures)



Source: http://www.ftk.lv/lv/statistika/kreditiestades/ceturksna_parskati/page2

In researching the assets of commercial banks, it is important to pay attention to their quality because the positive dynamics of total assets, irrespective of quality, cannot

testify to stability and growth of the banking sector, or of individual commercial banks, and may even lead to a distorted picture if the assets are of poor quality.

The assessment and analysis of the asset quality of Latvian commercial banks

For each bank, the assessment of the quality of assets is undoubtedly a very important task. Practice has shown that low asset quality is the most common reason for bank bankruptcy. Therefore, by continually assessing the quality of assets (the emphasis is put on a bank's credit operations and investments in securities), one can predict the viability of banks. In this way, it is possible to avert many problems in a timely manner.

It can be argued that asset quality is affected by the following factors:

- The characteristics of commercial bank lending and investment policies (strict or liberal, moderate or aggressive)
- the degree of diversification of loans and investments
- the quality of the bank's loan and investment portfolio, including the proportions of overdue loans, etc.
- management systems for distressed loans
- the characteristics and volume of transactions with subsidiaries and affiliates
- return on assets
- asset risk
- 'working' asset share.

In order to determine the quality of bank assets, the author uses the CAMEL¹ system, which permits external observers to classify assets according to their quality.

The bank itself, or the supervisory body, may determine the asset quality rating according to asset quality criteria. For example, the CAMEL rating for asset quality contains five possible assessments:

Rating 1 – Strong. With this rating, the share of provisions against potential losses does not exceed five per cent of capital. In addition, a small increase in provisions is possible if a bank's overall financial condition is judged as good and the bank's management is able to deal effectively with problem loans. The amount of large loans does not exceed 25 % of capital. Finally, deals concerning assets, as well as the share of risk assets and dynamics, do not attract any comment.

Rating 2 – Satisfactory. Here, provisions for potential losses do not exceed fifteen per cent of capital. The condition of the other indicators does not raise serious concerns.

Rating 3 – Almost satisfactory. Provisions for possible losses do not exceed thirty per cent of capital while the condition of the other indicators is almost satisfactory.

1 The system of evaluation for American banks (CAMEL) was developed by bank supervisors in 1978, after which time supervisors use either that or a similar method for evaluating the operations of commercial banks. At the same time, many commercial banks use it for the purposes of internal analysis. In this paper, the author will consider only two out of the five CAMEL components, i.e. those directly related to bank assets – the quality and the profitability of those assets.

Rating 4 – Critical. In this case, provisions for possible losses do not exceed fifty per cent of capital while the condition of the other indicators is critical.

Rating 5 – Poor. Here, provisions for possible losses exceed fifty per cent of capital and the situation of the other indicators is unsatisfactory.

In determining ratings, a bank may assess the quality of its assets. The quality of its assets will ultimately have an impact on the profitability of the bank, because the level of distressed loans is either already affecting the bank's profitability basis, or will do so in the near future.

The results of an analysis of asset quality for the major Latvian banks are shown in Table 2.

Table 2 – Asset quality indicator² and ratings of major Latvian banks,³ 1999 to 2010

Year	Swedbank		SEB Bank		Latvian Savings Bank		Citadel Bank		Rietumu Bank	
	% ⁴	Rating	%	Rating	%	Rating	%	Rating	%	Rating
1999	16.3	3	24.9	3	43.7	4	19.6	3	8.0	4
2000	8.8	2	11.3	2	15.1	3	8.2	2	37.9 7	4
2001	11.9	2	7.96	2	9.2	2	7.7	2	6.95	2
2002	9.9	2	6.0	2	6.2	2	8.9	2	5.5	2
2003	5.9	2	6.2	2	7.5	2	11.0	2	0.8	1
2004	5.9	2	5.3	2	1.7	1	6.9	2	0.00 3	1
2005	0.2	1	4.1	1	2.7	1	5.6	2	0.8	1
2006	2.5	1	2.6	1	2.7	1	2.7	1	0.6	1
2007	1.6	1	2.9	1	2.9	1	0.1	1	1.96	1
2008	9.5	2	13.3	2	4.3	1	2.1	1	16.7	3
2009	78.9	5	103.0	5	19.5	3	2.3	1	15.9	3
2010	24.4	3	11.6	2	1.7	1	6.3	2	8.2	2

Source: commercial banks' annual reports; author's calculations

Table 2 suggests that three of the five major Latvian banks had the largest provisions for bad loans relative to their own equity in 1999 and 2000.

2 The indicator of asset quality is the proportion between bad loan provisions and own equity.

3 The table is based on the author's own calculations based on bank annual reports.

4 Asset quality indicator, per cent.

After 2000 the situation improved; however, asset quality ratings suggest that provisions for bad loans in the immediately subsequent years were still relatively high, which adversely affects the quality of assets. Consequently, no bank achieved a rating of 1. A sound quality of assets was achieved in 2005 and this was maintained over the next three years.

The 2008 crisis lowered asset quality ratings; a lot of provisions and bad loan write-offs were made in 2009 in particular. That year, such banks as Swedbank and SEB Bank had a disappointing asset quality rating associated with a high percentage of loans in total assets. A better situation was observed in the Latvian Savings Bank and Rietumu Bank, in both of which asset quality ratings were almost satisfactory. Finally, Citadel Bank had the highest asset quality, although that is certainly related to the restructuring of Parex bank, its predecessor. In 2010, bank ratings had improved somewhat and are expected to continue to improve in 2011.

Hence, it can be concluded that the criterion of ensuring asset quality is very important for Latvian commercial banks.

Evaluating and analysing asset profitability

The level of competition in the Latvian banking industry is currently intensifying, just as much as it is in the banking industries of other countries. One of the indicators of such a situation is a decrease in the yield of financial instruments. It is possible to say that the return on assets is one of the most important criteria for improving commercial bank assets. The adaptation of the Latvian banking industry to the trend of decline in the yield of financial instruments could now be accomplished in two ways (Saksonova, 2002):

- minimising the speed of decline in returns norms – the decline in the profitability norm is an inevitable process under current circumstances so it is, first and foremost, not about a reversal of a radical trend but about mitigating the impact. This can be achieved via a reduction of relative expenditure via creating the resource base (increasing the share of own equity, or lowering the price of attracted financing),⁵ as well as with the help of a relative increase in the efficiency of asset utilisation via a quick reallocation of assets to areas in which an acceptable rate of return is assured, together with a correspondingly low level of risk
- profit maximisation: the bank has to assess the maximum potential profit from its asset operations, given its own development strategy and taking into account the limitations associated with the following:
 - the need to fulfil FCMC regulations
 - maintaining a necessary level of liquidity throughout the year
 - maintaining a necessary standard of financial stability throughout the year
 - not exceeding the upper limits of the norms for all financial risk parameters.

5 After studying the prices of the financial resources faced by Latvian commercial banks, the author has established that these are decreasing (for example, deposit rates are falling). However, rates that are too low can lead to losses in the client base.

The inevitability of the decline in the asset profitability norm determines the desire to ensure an increase in asset-generating profits. To achieve this goal, it is necessary to ensure:

- an accelerating growth rate for commercial bank assets
- an increase in the proportion of profitable assets held
- an increase in the volume of non-operating income, together with a slower growth of expenditure (including operating and non-operating expenditure). This can be achieved not only by expanding and changing the traditional structure of the use of financial instruments, but also by actively seeking new forms and methods of attracting resources, especially by diversifying profitable operations.

The question of how efficient is this second way of adaptation remains an open one – the search for new sources of revenue is associated with significant expenditure so a dispersal of resources, and their withdrawal from possible use in traditional, profitable operations, is a conceivable outcome.

Besides, there are, most often, no clear indications of how profitable the new spheres of operation are likely to be, which causes some difficulties in carrying out the necessary economic justification. Occasionally, ambitious measures are taken to ensure that there is a readiness to provide a whole series of new and progressive services that benefit the bank as well as customers whereas, in the end, it turns out that this readiness is unnecessary because of a lack of demand.

It is possible to assess the profitability of assets with the aid of the CAMEL system. The profitability of bank assets (the return) is defined as the ratio of net profits relative to the average total value of assets (the ROA ratio). It is best to evaluate and analyse this indicator for at least the previous three years. Such a time period is deployed because using data for the prior three years lowers the effects of short-term fluctuations in income which are dependent on the business cycle phase and which affect the bank's position. Thus, a longer period of observation makes the profitability criterion more stable. In monitoring income, it is important to assess whether the gains are large enough for the bank to have the opportunity to develop and, if necessary, create the full required amount of provision for bad loans.

The ROA does not always provide an adequate representation of profitability, so quantitative evaluation should be enhanced by an analysis of the quality of the profits. Otherwise, it is not possible to judge whether a bank's returns are of a regular nature or whether they are a result of large, but one-off, operations. Depending on the evaluation, the following ratings can be granted:

Rating 1 – Strong. This is granted when the net profit ratio to the average asset value (ROA) is greater than 1 % and the amount of profits used in the calculation of profitability is sufficient fully to cover the necessary expenditures of covering losses, as well as to ensure a certain growth of capital.

Rating 2 – Satisfactory. Here, ROA fluctuates between 0.75 % and 1 %. Profits may even decline, but they are of high-quality, allow for creating provisions and are sufficient for capital growth.

Rating 3 – Almost satisfactory. ROA ranges from 0.5 % to 0.75 %, although the income from such a rating is not enough to create sufficient provisions and to

accumulate the required capital (due to the bank's growth). The quality of income is a signal of future problems.

Rating 4 – Critical. ROA ranges from 0.25 % to 0.5 %. Net income dynamics for such banks vary unpredictably, with a tendency towards a decrease. This is not sufficient to generate provisions and a growth of capital.

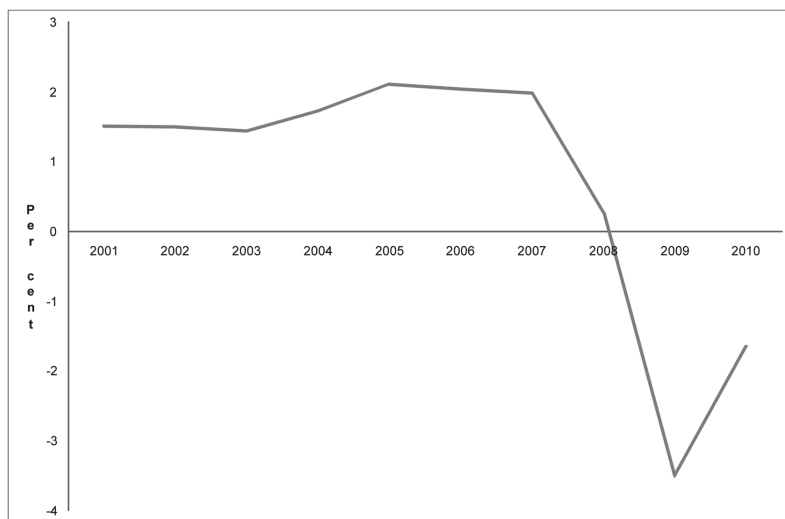
Rating 5 – Poor. ROA is lower than 0.25 %. The bank's viability is threatened and it may well be operating with losses.

Table 3 – Return on assets for Latvian commercial banks, 2001-2010

	2001	2002	2003	2004	2005
Return on assets of Latvian commercial banks	1.52	1.50	1.45	1.74	2.12
Rating	1	1	1	1	1
	2006	2007	2008	2009	2010
Return on assets of Latvian commercial banks	2.05	1.99	0.27	-3.51	-1.65
Rating	1	1	4	5	5

Source: http://www.fktk.lv/lv/statistika/kreditiestades/ceturksna_parskati/page2

Figure 2 – Return on assets for Latvian commercial banks, 2001-2010



Source: http://www.fktk.lv/lv/statistika/kreditiestades/ceturksna_parskati/page2

The coefficient of the return on assets describes how large are the profits, in Ls, for each single lat of assets.

We can see from Table 3 and Figure 2 that, in the period between 2001 and 2003, asset profitability decreased slightly (the average return on assets fluctuated around Ls 0.015 of profits for each lat in assets). After 2004, when Latvia entered the European Union, there were significant foreign capital inflows into the Latvian banking industry and rapid lending activity began. The return on assets in the banking industry increased rapidly: if, in 2004, each lat of assets ensured Ls 0.0174 of profit; then, in 2005, each lat of assets was already generating Ls 2.12 of profits.

In 2006, a slight decrease was observable – to Ls 0.0205 of profit for each lat of assets – because it was not possible to attract as many lenders as in previous years. This trend in asset profitability towards a gradual decrease was observable until 2008, when the world financial crisis also affected the Latvian financial market. Hence in 2008 and 2009, the return on assets decreased rapidly and, in 2009, each lat of assets was generating Ls 0.0351 in losses.

However, after balancing its lending policy and strictly controlling risks, the banking industry managed to increase its asset profitability in 2010 and relative to the previous year, although banks were still making losses of Ls 0.0161 for each lat of assets.

The influence of the 2008 crisis, when the return on assets and the ratings of Latvian commercial banks had declined to critical levels, is clearly visible from Table 3 and Figure 2. After evaluating these indicators together with asset quality indicators, it is possible to expect that the return on assets in the commercial banking industry will demonstrate positive dynamics in the future.

Analysis of the lending dynamics of Latvian banks, and the quality and profitability of loans

Analysis of the dynamics and quality of the loan portfolio

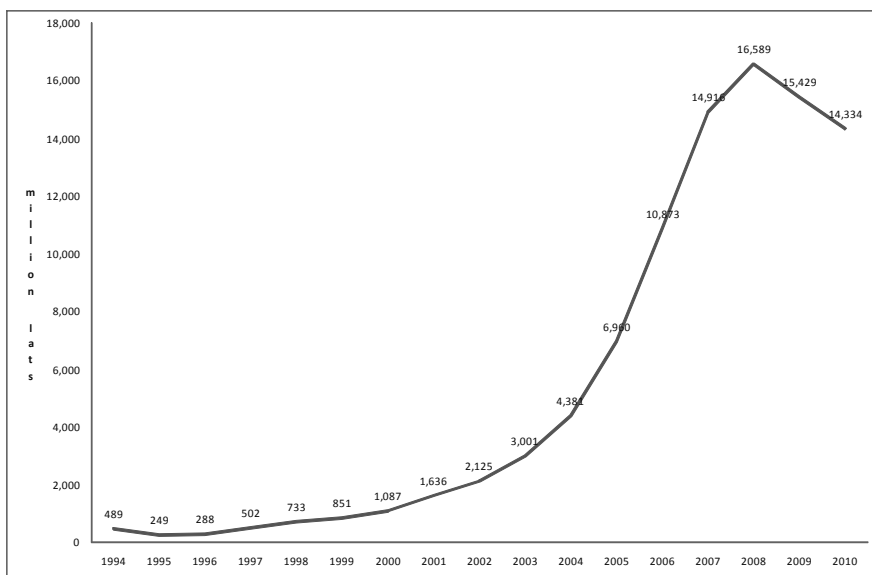
In Table 4 and Figure 3, it is possible to see the strong influence of the 2008 crisis on the loan portfolio of commercial banks. It should be noted that, whereas the Russian crisis of 1998 had also influenced the operational indicators of the Latvian banking industry, the loan portfolio in that period did not show a tendency towards a decrease. Figure 1 showed that the assets of commercial banks fell by 8.7 per cent; however, this was not at the expense of the loan portfolio since, at that time, the losses were mostly related to investments in securities. The crisis of 2008 led to a decrease in the loan portfolio by 1 160 million lats in 2009 and by a further 1 095 million lats in 2010.

The largest part of this decrease was due to mortgages, while the analysis of loan quality (see Table 5) also indicates a worsening in the loan portfolio:

Table 4 – Loans by Latvian financial institutions (incl. transit loans; 000 lats), 1994-2011

1994	1995	1996	1997	1998	1999
423 269	202 272	243 059	464 358	701 113	815 126
2000	2001	2002	2003	2004	2005
1 055 539	1 607 376	2 125 112	3 000 957	4 380 565	6 960 340
2006	2007	2008	2009	2010	2011 ⁶
10 872 855	14 916 115	16 588 865	15 429 209	14 334 188	14 184 571

Source: http://www.fktk.lv/lv/statistika/kreditiestades/ceturksna_parskati/

Figure 3 – Loans of Latvian financial institutions, millions of lats from 1994 to 2010

Source: http://www.fktk.lv/lv/statistika/kreditiestades/ceturksna_parskati/

From Table 5, we can see that, as at the end of 2009, only 74.5 per cent of loans provided had no missed payments, according to FCMC data, while this proportion was even smaller as at the end of 2010 – 73.4 per cent of the loans provided to non-banks. This is explained in that both physical and legal entities currently face difficulties with

6 Data available only for the first quarter.

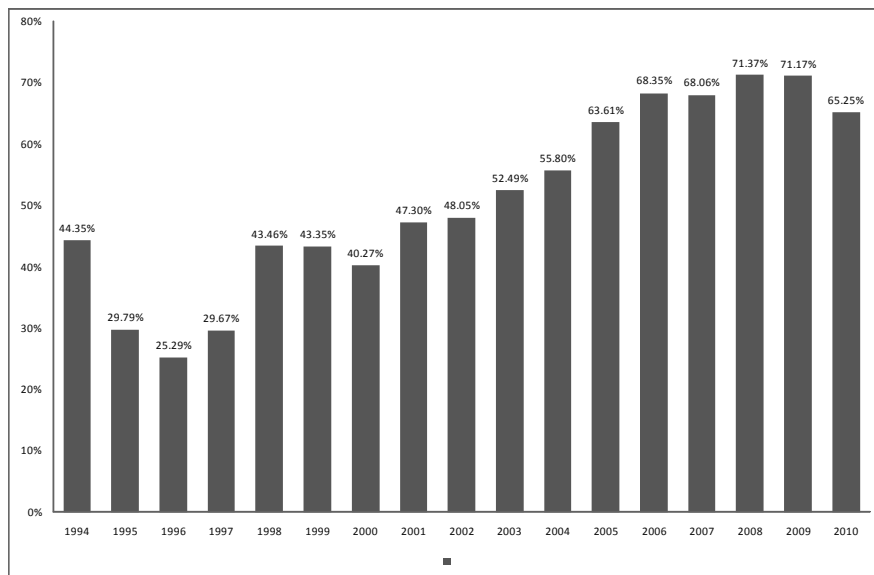
the repayment of loans and that these difficulties are not decreasing. The amount of provision for principal and interest focused on bad loans increased in 2010 compared to 2009: in 2009, the proportion of provision in bad loans was 8.6 per cent; by the end of 2010, it was already up to 11.3 per cent.

Table 5 – The quality of loans to non-banks

Classification of loans by the amount of arrears on principal or interest payments and provisions for the principal of the loan	End-2009		End-2010	
	thousand lats	%	thousand lats	%
No arrears	11 500 586	74.5	10 527 815	73.4
In arrears up to 30 days	804 483	5.2	727 433	5.1
In arrears from 30 to 91 days	604 064	3.9	356 194	2.5
In arrears from 91 to 180 days	502 245	3.3	251 544	1.8
In arrears above 180 days	2 027 721	13.1	2 471 109	17.2
Not separated	665	0.0	92	0.0
Total Loans	15 439 765	100.0	14 334 188	100.0
Provision for the principal of bad loans (per cent of loan portfolio)	1 327 889	8.6	1 624 906	11.3

Source: http://www.fktk.lv/texts_files/Bankas_ceturksnis_4_2010_L01.xls

Figure 4 – Loans (including transit loans), as percentage of total assets, to Latvian financial institutions, 1994-2010



Source: http://www.fktk.lv/lv/statistika/kreditiestades/ceturksna_parskati/

Figure 4 shows clearly that the proportion of loans in total assets rapidly increased between 1995 and 2008 – from just less than 30 per cent to more than 70 per cent. A significant decrease in the proportion of loans in 1995 relative to 1994 is a result of the consequences of the 1995 crisis in the Latvian banking sector. The 1995 crisis was also related to poor lending policies, which led to a decline in asset and loan portfolios.

Badly-designed lending policies and too high a proportion of loans in total assets, which is evidence of poorly-diversified asset portfolios, led to the high losses in banking in 2008. In 2009 and 2010, the proportion of loans in total assets was already in decline, reaching 65.25 per cent at the end of 2010. This is related to the ‘cleansing’ of the loan portfolio and a decrease in the number of new loans being issued.

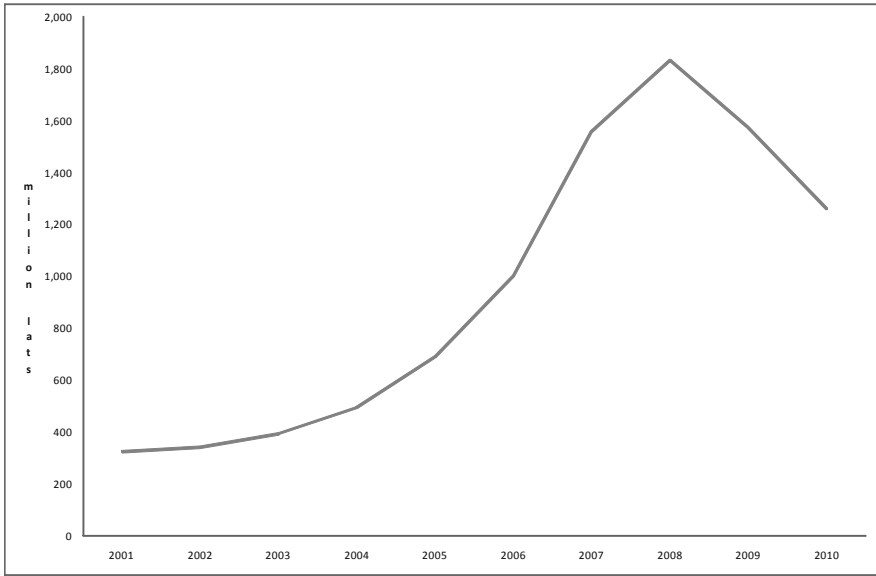
Analysis of the revenues of commercial banks

Analysis of the revenues of Latvian commercial banks (see Figure 5) also shows a rapid decline from 2008 which is, naturally, explained by the influence of the 2008 crisis.

Figure 5 shows that, between 2001 and 2004, commercial bank revenues increased steadily each year, and very rapidly thereafter up to 2008 because the economic situation in the country was favourable and there was a lending boom. In the middle of 2008, the revenues of Latvian commercial banks began to fall rapidly. The trend to-

wards decline is felt even after these events, and is likely to persist until the overall economic situation improves.

Figure 5 – Revenues of Latvian commercial banks, million lats, 2001-2010



Source: * FCMC data

http://www.fktk.lv/lv/statistika/kreditiestades/ceturksna_parskati/page2

Conclusion

This analysis has highlighted the problems in the commercial banking industry, thereby allowing the author to make the following conclusions and provide recommendations as regards how banking operations might be improved.

- in evaluating the correspondence of banking operations to the criterion of ‘ensuring asset quality’ – that is, constantly monitoring asset quality (special attention has to be paid to bank lending operations and investments in securities) – it is possible to forecast bank stability and avert many problems in a timely manner.

Assessing the quality of assets allows us:

- to determine the necessary amount of provisions
- to determine asset quality indicators
- to determine a bank’s ratings by its asset quality indicator. In determining its rating, a bank can assess its own assets as regards their correspondence with the criteria. The quality of assets affects the profitability of banking operations, because the proportion of loans in arrears has either already affected the profitability basis of the bank, or will do so in the near future.

An analysis of asset quality ratings for the five largest Latvian commercial banks shows that provisions for losses over the period between 2008 to 2010 were high, which means that asset quality has either been critical or unsatisfactory.

In 2009, the credit rating of such banks as Swedbank and SEB was unsatisfactory due to a high proportion of loans in total assets. A better situation was observed in the Latvian Savings Bank and Rietumu Bank, both of whose asset quality ratings were almost satisfactory. There has recently, during 2010, been a slight improvement in bank ratings. Hence, it is possible to conclude that achieving asset quality criteria is very important to all Latvian banks.

- when evaluating the correspondence of banking operations to the criterion of ‘ensuring asset profitability’ (or return), it is possible to outline two ways as to how Latvian commercial banks can adapt to the tendency of profitability norms to decline: either by minimising the speed of the falling profitability norm or maximising profits.

Overall, profitability in the Latvian commercial banking industry has fallen, a negative effect which has been strengthened with the influence of the 2008 crisis. Analysis shows that asset profitability ratings for Latvian commercial banks were unsatisfactory and even critical in 2009 and 2010.

The inevitability of the decline in the asset profitability norm determines the desire to ensure an increase in asset-generating profits. To achieve this goal, it is necessary to ensure:

- an accelerating growth rate for commercial bank assets
- an increase in the proportion of profitable assets
- an increase in the volume of non-operating income, together with a slower growth in expenditure (including operating and non-operating expenditure).

This can be achieved not only by expanding and changing the traditional structure of the use of financial instruments, but also by actively seeking new forms and methods of attracting resources, especially by diversifying profitable operations.

Practice shows that those Latvian commercial banks which actively correspond to these criteria are able to resolve their problems of raising the return from assets relatively successfully while, at the level of the industry, the profitability of assets is falling. This means that carrying out the previously-described measures is important to virtually all commercial banks.

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