BASEL II:
PROBLEMS AND PROSPECTS OF USAGE IN NATIONAL BANKING SYSTEMS

Monograph

Under the editorship
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Sumy
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In the collaborative monograph features of development of bank systems of the different countries are considered. The characteristic is given system of regulation and supervision of bank activity. Features of introduction of requirements Basel II in bank systems of the different countries are opened.

For specialists of the financial and banking system, researchers, postgraduates, lecturers and students of finance and economics.

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INTRODUCTION

The situation of the last years is characterized by macroeconomic instability in the national economies both in countries with the high level of market economy development and countries where market relations are on the stage of formation; and on the global scale is mostly determined by the condition of the financial sector. Considering that in the structure of the financial sector banks in particular occupy a significant place, the level of the banking system stability considerably influences the level of the financial system stability.

The instability of the banking systems in many countries was connected to the influence of the following objective factors:

- fast-moving development of technologies, computerization of bank business and development of on-line settlements;
- accelerated liberalization of the capital movement and noticeable reduction of protectionism level in banking systems;
- rapid growth of financial innovations, especially concerning the derivatives use;
- appearance of powerful financial intermediaries on the global scale – financial conglomerates as a form of convergent-integrative cooperation between banking and non-banking financial intermediaries.

The consequences of such instability can be reflected in the slowing down of economic growth, in the decrease of efficiency in the functioning of financial intermediaries, banks in particular, and the reduction of trust to financial institutions.

The necessity in the creation of a bank supervision institute has risen because of the special social importance and responsibility of banks for the development of the national economy. In practice the supervision and regulation of the banking activity are one of the basic conditions and factors providing financial stability as banks acting as potential instability risk carriers of the national financial system are at the same time considered an instrument of its stabilization.

Indeed, regardless of the selected model of the supervision functions' realization the purpose and tasks of the banking activity regulation bodies historically have undergone no essential changes and ensure the stability of the banking system, as well as the creation of conditions for its effective functioning and as a result, protection of investors', creditors' and clients' interests.

On the whole, the supervision system of the financial markets activity for many years had two multi-directed vectors of development. On the one hand, financial systems of different countries were very different and, as a result, the structure of the banking activity's supervision system differed significantly, including the content and the character of supervisory bodies' responsibilities. On the other hand, the functioning of national banking systems during the last decades has been under considerable influence of integrative processes. Consequently it led to the necessity to solve the legislative problems in different countries and the creation of unified common banking regulation and supervision rules on the global market. It is often claimed that the striving for the creation of the common capital market is one of the main reasons for banking legislation unification. It is also an expression of the tendency in the development of the system of supervision over financial markets towards unified rules of supervision of banking, share market and insurance services market activity.

The Committee on Banking Supervision plays a crucial role in the regulation of the banking activity. The necessity to ensure the stability of the banking system in the biggest countries of the world as well as the global banking system led in 1974 to the creation of the Committee on Banking Supervision by central banks and supervision authorities of the leading industrial states. The Committee usually meets at the Bank for International Settlements (BIS), which is situated in Basel, Switzerland. One of the main tasks of the Basel Committee is harmonization of the world practice of banking business regulation aimed at overcoming the differences between national practices, liquidating in such a way the main reason of regulative arbitrage.

The acceptance of the International Convergence of Capital Measurement and Capital Standards (1988 Basel Capital Accord), more known as Basel I, in 1988 by leaders of ten central banks of economically developed countries became the first step to the harmonization of international banking regulation. In due course this agreement was endorsed in more than 100 countries of the world. Actually it demonstrates the expediency and the necessity of using the generally acknowledged institutional limitations for banking activity regulation and it has really helped increase the stability of financial and banking system.

The 1988 Basel Accord contained three main postulates: firstly, bank capital consists of the core capital and supplementary capital; secondly, banks have to maintain the amount of capital, sufficient to cover the credit risk; thirdly, at all times the target standard ratio of capital to weighted risk assets should be set at 8 per cent.

The adoption of the Capital Accord became the turning point in the banking supervision development. With the appearance of this document the banking regulation bodies received the first international standard they could compare with. From the very beginning the Capital Accord concerned only banks that operated internationally and it became compulsory for the member countries of the Basel Committee. Due to the relative simplicity of Basel I methods and approaches, it had been implemented partially in almost 130 countries of the world by 2004. As a matter of fact it applied to all banks without consideration of their international activities.

At the same time a significant increase in the dependence of a national banking system on the influence of external global factors, the possibility of substantial cash flows from one part of the world to another, the diversification of financial services and the creation of absolutely new banking products, uncontrolled capital movement between separate structural subdivisions of the powerful integrated financial intermediaries and the appearance of new risks led to discrepancy of the Basel Capital Accord to changes which became evident in the structure of the banking capital and in the character of international economical relations.

The necessity of eliminating the disadvantages of Basel I made the Basel Committee on Banking Supervision to commence work on the new edition of the Capital Accord.

The rapid development of the international monetary system triggered the necessity of changes in the above mentioned document. In 1996 some amendments to Basel I were made. They dealt with the requirements to the market risks definition and provided an opportunity for banks to use their own Value-at-Risk models within the established parameters.

The constant monitoring of the national banking system's development made it possible to offer the proposals concerning the improvement of the First Basel Accord in order to maximally approach it to the practical needs of the banking activity.

The project of the Basel Agreement's new edition was published in June 1999. This document was actively studied and discussed during almost one and a half years. It is evidenced by more than 200 comments and remarks received by the Basel Committee. After all these remarks had been taken into consideration the improved version of the document was proposed in January 2001, and in the end of 2001 (after additional adjustments) the first variant of the new Basel Agreement was published.

Basel II was accepted in June 2004. In November 2005 the Basel Committee presented the corrected and supplemented version of the *International Convergence of Capital Assessment and Capital Standards: A Revised Framework*.

The Basel Committee did not change the previous editions of the Capital Accord, but made capital calculation more complex and added new elements in this process, making the capital assessment process more sensitive to risks. It helps improve the risk management practices in banks and increases the transparency of their activity.

This agreement states that, in fact, there is no universal method of capital calculation for all countries. Therefore, it gives certain freedom to different countries connected with the Basel's II requirements implementation. The Committee expects its members to move forward with the appropriate adoption procedures in their countries in the nearest time. Speaking of the terms of Basel's implementation, the World Bank and the International Monetary Fund suggest for every country to solve this problem independently, taking into consideration the priorities and abilities of the national authorities on banking supervision.

However, the period for implementation of the Basel's II standards for Europe was determined as a year-end 2007, in Russia it was decided to implement these procedures not earlier than 2008-2009, in Ukraine this term was prolonged to 2016. Today there is a significant discrepancy in national banking systems concerning the new Capital Accord implementation. At the same time many experts claim that financial crises occurred in the conditions when banks were adhering to the Basel's requirements. But these requirements could not adequately take into account all types of banking risks in the modern conditions of credit intermediation. As a result of the imperfection of the existing mechanisms the risks of banks were not properly revealed and quantitatively defined in due time. With the attention of supervising authorities focused on liquidity, the increasing changes in banking risks and market risk increases were not adequately analyzed. Considering all this we can come to the conclusion that now there is a need in accelerated implementation of the new agreement on capital requirements – Basel II.

That is why today we have an urgent need to investigate the implementation of the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" in national banking systems.

The monograph studies the problems of the Basel's implementation in the economically developed countries (by using the examples of Germany), as well as in countries, which are making the first steps in implementing the requirements of this agreement. In our opinion, the participation of authors from the countries with different levels of the Basel implementation makes the monograph more interesting and gives an opportunity for some comparisons.

We express our gratitude to our colleagues who have taken part in this international project:

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THE GERMAN BANKING SYSTEM: STRUCTURE, REGULATION, AND BASEL II IMPLEMENTATION

1. INTRODUCTION

Banking supervision represents a crucial factor in ensuring the stability of a financial system. Prior to Basel II, capital requirements were limited to a ranking of exposures using only a small number of different risk weights. Consequently, capital requirements did not reflect the actual default risk of individual borrowers and, therefore, in many cases banks had to hold the same capital for a high-quality borrower as for a low-quality borrower. This led to an insufficient reflection of actual credit risk. To overcome these drawbacks, Basel II has been under development since 1999.

The new Basel capital accord consists of three pillars and was – after several preliminary versions – published in 2004, introducing credit ratingoriented and, therefore, more risk sensitive capital requirements. Pillar I of Basel II contains both standard and advanced techniques for measuring credit, operational and market risks. However, only capital requirements are not sufficient to ensure a sound functioning of the financial system. Accordingly, two further pillars were added, the supervisory review process (pillar II) and market discipline (pillar III). The former encourages banks to establish an efficient risk management system to assess their capital adequacy whereas the letter contains public disclosure requirements, which allow market participants to assess the risk profile of a bank.

The Basel Committee regulations constituted a foundation for the respective European Union (EU) directives, which were published in 2006. Thus, all EU members will implement the new regulatory framework.

In order to create a legal basis for the Basel II implementation in Germany, the new regulations were transferred into German law, taking into account special features of the German banking system. As a result, all banks in Germany are obliged to follow the Basel II requirements since January 1, 2007.

The main purpose of this paper is to provide an overview of the Basel II implementation process in Germany. In order to enlighten all aspects, it is essential to describe the general structure of the German banking system and the major trends in its development in the past decade. Sections 2 and 3 are constructed to fulfill this task. Section 4 outlines the main supervisory institutions authorized to implement the regulatory rules in Germany as well as legislative acts serving as a legal basis for the application of the Basel II regulations in Germany. Section 5 highlights the current situation with the application of the Basel II framework by German banks. Finally, section 6 summarizes our results.

2. STRUCTURE OF THE GERMAN BANKING SYSTEM

Banks play a leading role in the German financial system, which is often described as bank-based. In contrast to the Anglo-American market-based system, in which firms obtain funds mainly through the capital market, the key sources of financing in Germany are bank loans, which account for more than 70 percent in the financial system's liabilities.[2] This reflects the fact that middle sized enterprises with only limited access to the capital market generate the largest share of Germany's GDP.[3]

The banking system of Germany is dominated by universal banks, which are permitted to engage into a wide range of banking activities. Specialized banks account for only three percent of all banks in Germany and are predominantly comprised of mortgage banks, building associations, and investment companies. The German banking system is frequently characterized as having a large number of banks, compared with other European countries.[4] In 2008, the German central bank listed 1,981 banks in Germany.[5]

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[2] See Vitols (2005).

[3] See Herrmann (2005).

[4] Koeter et al. (2006) compare the German, Italian, French and US banking systems and conclude that the German banking system shows significantly more banks than France and Italy. However, the US have more banks both in absolute values and per capita.

[5] All statistical data in this paper is taken from the periodical publications of the German Central Bank.

Depending on their legal form, universal banks are further classified into commercial, savings and mutual cooperative banks. This categorization is a characteristic feature of the German banking system and is often referred to as the three-pillar structure. Savings banks are banks which are owned by the federal, state or local municipalities, whereas mutual cooperative and commercial banks are privately owned. Mutual cooperative banks represent the largest sector comprising 60 percent of all banks in Germany at the end of 2008. In contrast, commercial banks and savings banks constitute only 14 and 23 percent, respectively.

However, in order to obtain a better insight into the market structure, the amount of assets per banking sector should also be considered. The savings banks sector shows the largest share of total assets, accounting for 35 percent of total assets in the German banking system. This significant amount is a remarkable feature of the German banking structure. The commercial banks group, despite having the lowest number of banks among all three sectors, accounts for almost 30 percent of total assets compared to the cooperative banks sector with the largest number of banks and only 12 percent share in total assets of the whole banking industry. Due to the large number of banks and the fact that none of the groups has a significant market share, the German banking system is frequently described as having a highly fragmented structure. Figure 1 reflects the structure of the German banking system.

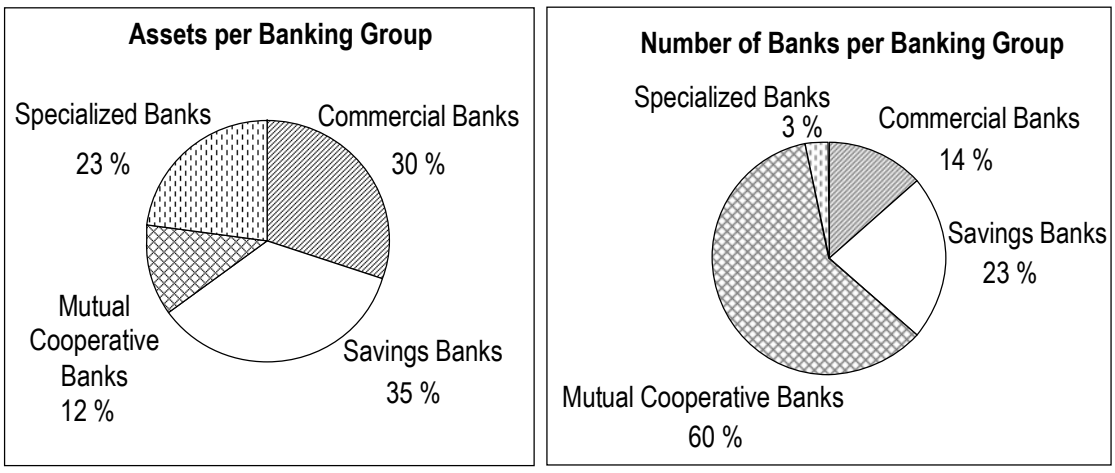

Figure 1. Number of Banks and Assets per Banking Group, 2007

2.1. Commercial Banks

Within the group of commercial banks, three categories are distinguished, so called big banks, regional banks, and branches of foreign banks. Four big commercial banks include Deutsche Bank, Commerzbank,

HypoVereinsbank (HVB), and Postbank.[6] Whereas HVB and Postbank have emerged as big banks only in the late 20th century, Deutsche Bank and Commerzbank traditionally constitute the core of German commercial banking.

The origin of Deutsche Bank and Commerzbank dates back to the 19th century. Both banks were established in 1870, however, they were split up into smaller banks after the Second World War. After the foundation of the Federal Republic of Germany, both banks were united again into single banks. Postbank, a former part of the German postal service, and HVB, a merger between two Bavarian banks, have joined the category of big banks in 2004 and 1999, respectively. The four big commercial banks constitute around 19 percent of total assets in the German banking industry (see table 1).

Table 1

Total Assets of Commercial Banks

		Banks total	Commercial banks	Big Commercial banks	Regional commercial banks	Foreign Commercial banks
1987	N	4,468	314	6	157	59
	TA	1,917	420	166	218	36
	MS	100	22	9	11	2
1992	N	4,407	336	4	196	56
	TA	3,043	741	284	418	39
	MS	100	24	9	14	1
1997	N	3,414	326	3	187	77
	TA	4,658	1,128	454	593	81
	MS	100	25	10	13	2
2002	N	2,365	273	4	186	83
	TA	6,452	1,830	1,056	655	109
	MS	100	28	16	10	2
2007	N	2,016	260	5	159	96
	TA	7,626	2,257	1,404	690	163
	MS	100	30	19	9	2

N – number of banks, TA – total assets in billions of euro, MS – market share.

[6] Before its acquisition by the Commerzbank in 2008, Dresdner Bank also belonged to the category of big commercial banks.

Although the number of commercial banks varied during the past years, their market share increased gradually, from 22 percent in 1987 to 30 percent in 2007. This increase in the market share primarily stems from the big commercial banks.

The second and third group of commercial banks include regional banks and branches of foreign banks. The former mainly operate on a regional level and account for around nine percent of total assets, whereas the latter do not play a significant role in the German banking industry with their market share of two percent in 2007.

2.2. Savings Banks

Savings banks emerged in the beginning of the 19th century with the aim of making savings accounts accessible for poor people. Savings banks became very widespread and amounted to around 2,700 banks in the beginning of the 20th century. After the German reunification, savings banks have experienced a consolidation wave. As depicted in table 2, the number of banks shrank from 736 in 1992 to 538 in 2002. The market share, however, did not change substantially within this period, being only two percent lower than in 1987.

Table 2

Total Assets of Savings Banks

		Banks Total	Savings Banks	Local Savings Banks	Central Savings Banks
1987	N	4,468	598	586	12
	TA	1,917	716	301	415
	MS	100	37	15	22
1992	N	4,407	736	723	13
	TA	3,043	1,110	491	619
	MS	100	36	16	20
1997	N	3,414	611	598	13
	TA	4,658	1,717	852	865
	MS	100	37	18	19
2002	N	2,365	538	520	14
	TA	6,452	2,322	1,324	998
	MS	100	36	21	15
2007	N	2,016	458	446	12
	TA	7,626	2,632	1,587	1,045
	MS	100	35	21	14

N – number of banks, TA – total assets in billions of euro, MS – market share.

The savings banks pillar of the German banking system has a two-tier structure, including local savings banks and their central institutions, state banks. The former are organized according to the regional principle, i.e. each bank is only allowed to operate in some particular region. Consequently, local savings banks do not compete with each other, but with the commercial banks and the mutual cooperative banks. State banks, in contrast, are not subject to such restrictions and operate on both interregional and international levels. Hence, state banks compete with big commercial banks.[7]

Both local savings and state banks are companies under public law. State savings banks are owned by the state where they are located, by other state banks, and by regional savings banks. Despite the fact that savings banks are owned by regional authorities, these authorities do not have a direct influence on the business strategy, which is defined by the management.

Both categories of savings banks aim at providing services to the public sector. Local savings banks lend to private households and enterprises and fund themselves through deposits of non-banks. State savings banks serve as banks for their states and as clearing institutions for their local savings banks. In 2007, there existed 458 local savings banks and 12 central savings banks.[8] In sum, they comprise 35 percent of total assets of the German banking industry, constituting the most significant sector. Although savings banks operate according to economic principles, profit maximization is not stated as their primary business objective.

2.3. Mutual Cooperative Banks

The first credit cooperatives were founded at the end of the 19th century with the goal of satisfying the financial needs of German farmers and craftsmen. As commercial banks mainly focused on serving large companies and savings banks concentrated on long-term mortgage loans, two networks of credit cooperatives, Raiffeisenbanken[9] and Volksbanken, were created. Although they originally provided credits only to their members, mutual cooperative banks have become universal banks in the 20th century.

The organizational structure of this pillar is very similar to that of savings banks and is composed of regional cooperative banks and their head institutions. In 2007, the German Central Bank listed 1,232 local cooperative

[7] See Hackethal/Schmidt (2005).

[8] According to the preliminary data of the German Central Bank for 2008, local savings banks and central savings banks amounted to 438 and 10 banks, respectively.

[9] Named after Friedrich Raiffeisen (1818-1888), who pioneered rural credit unions.

banks and two central institutions, WGZ Bank and DZ Bank. As depicted in table 3, the market share of cooperative banks decreased slightly over the past two decades and accounted for 12 percent of the total assets in 2007, as opposed to 17 percent in 1987.

Table 3

Total Assets of Mutual Cooperative Banks

		Banks Total	Mutual Cooperative Banks	Local Cooperative Banks	Central Cooperative Banks
1987	N	4,468	3,487	7	3,480
	TA	1,917	327	239	88
	MS	100	17	12	5
1992	N	4,407	2,922	4	2,918
	TA	3,043	458	355	103
	MS	100	15	12	3
1997	N	3,414	2,424	4	2,420
	TA	4,658	673	498	178
	MS	100	15	11	4
2002	N	2,365	1,491	2	1,489
	TA	6,452	759	560	199
	MS	100	12	9	3
2007	N	2,016	1,234	2	1,232
	TA	7,626	895	632	263
	MS	100	12	8	4

N – number of banks, TA – total assets in billions of euro, MS – market share.

3. DEVELOPMENT OF THE GERMAN BANKING SYSTEM IN THE PAST DECADE

A remarkable feature in the development of the German banking sector is the significant decline in the number of banks. During the past two decades the number of banks has dropped by almost 45 percent, from 4,468 in 1989 to 2,016 in 2007. However, this decline was not of the same degree for every pillar. Whereas savings and commercial banks experienced a moderate decrease in the number of banks, the number of banks of the cooperative sector has declined dramatically.[10] Figure 2 gives an overview of the consolidation process among German banks.

[10] See Gischer/Reichling/Stiehle (2007) for a comparable study with a focus on corporate governance differences.

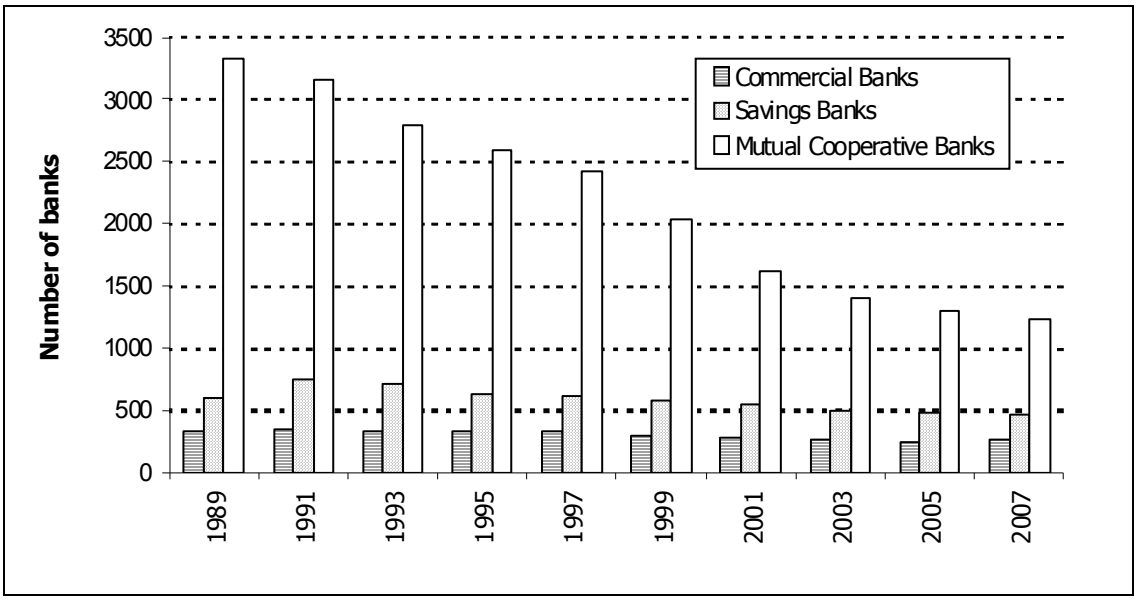

Figure 2. Number of Banks per Banking Group, 1987–2007

Furthermore, not only the number of banks has decreased. The performance of German banks also encountered changes in the past two decades. There are several key indicators which are commonly employed in bank performance analysis. Among them are such measures as the cost-income ratio, which reflects the ratio of administrative expenses to net income. Figure 3 reports the cost-income ratio per every sector as well as for the banking industry as a whole.

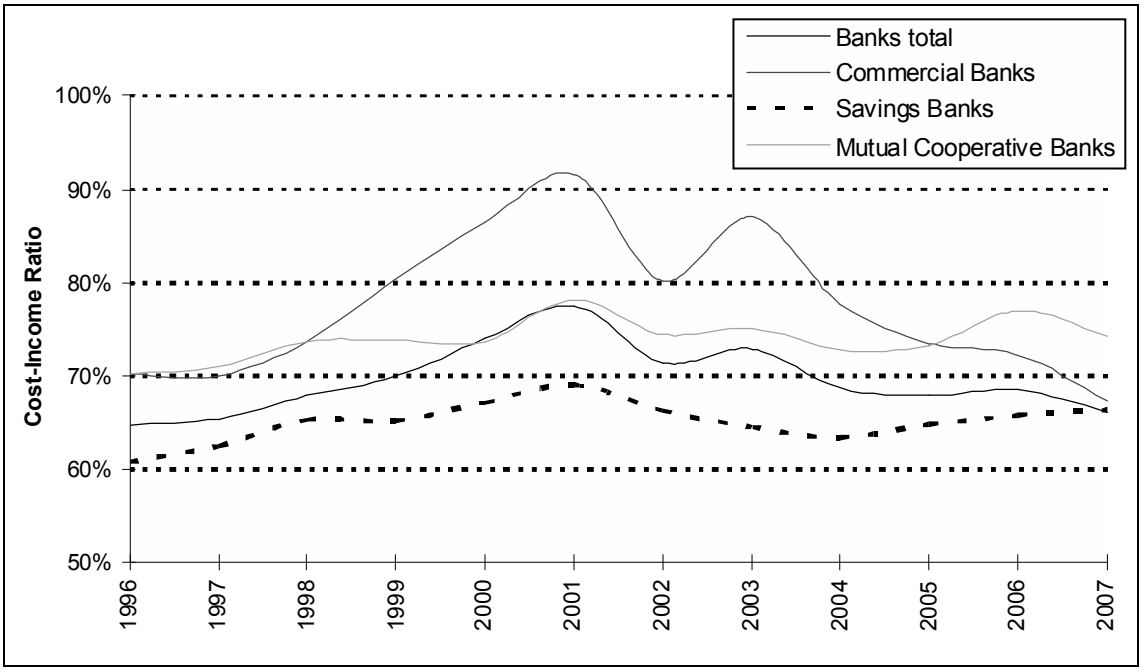

Figure 3. Cost-Income Ratio for Different Banking Groups

The target for this indicator is usually set on the level of 60 percent.[11] It is apparent from figure 3 that all three sectors faced an increase in the cost-income ratio during the past decade, reaching its peak in 2001 with an average cost-income ratio of 77.5 percent. After that, the cost-income ratio began to decrease and constituted 66.2 percent in 2007, which is only 1.5 points higher than the level of 1996.

The commercial banks sector showed an inferior performance, being above the banking industry average. In 2001, the cost-income ratio of this group amounted to 91.6 percent. In contrast, savings banks revealed the best performance according to this indicator, which fluctuated in the range of 60 to 70 percent for this banking sector. Having managed to reduce the cost-income ratio in the beginning of the 21st century, the savings banks group exhibited a slight increase in the ratio during the past several years. In 2007, commercial and savings banks reached approximately the same cost-income ratio.

Another important performance indicator is the share of non-interest income to interest income. This ratio reflects the relative significance of alternative income sources. Figure 4 demonstrates an average increase in the share of non-interest income to interest income for all banking sectors in the past decade.

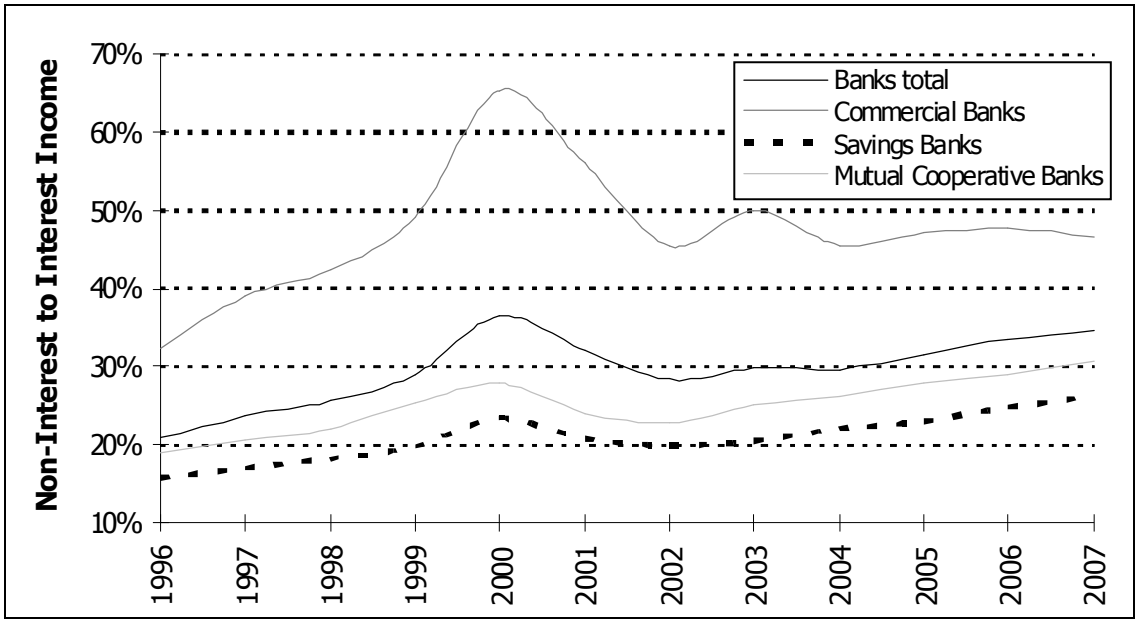

Figure 4. Non-Interest Income to Interest Income for Different Banking Groups

[11] It is common to use 0,6 as a target ratio; however, there is no theoretical foundation for this figure.

However, the commercial banks sector exhibits the highest ratio compared with the savings and cooperative banks sector, which reflects the shift of commercial banks from traditional loan-granting and deposit-taking activities towards fee-based activities, such as asset management and investment banking. This is not surprising considering the diminishing interest rate margins observed in the past decade. Figure 5 depicts the interest rate margin for every sector, which is measured as the ratio of net interest income to total assets.

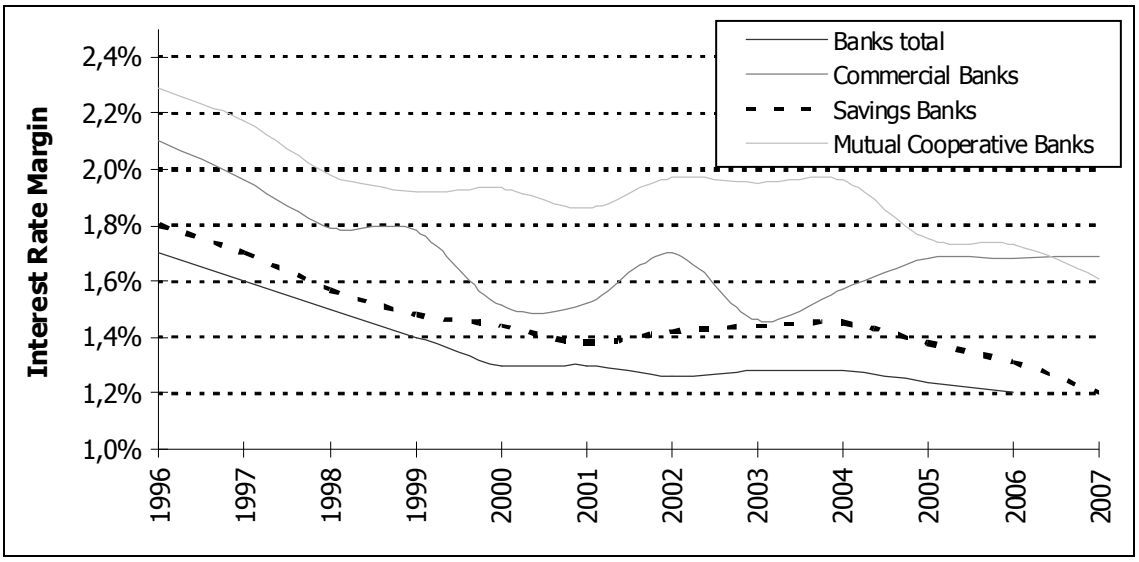

Figure 5. Interest Rate Margin

It is evident that the decrease in the interest rate spread was severe across all sectors. In the commercial banks sector the margin declined from 2.1 percent in 1996 to 1.5 percent at the end of 1990s, and then increased again to 1.7 percent at the end of 2007.

In sum, the German banking system has faced several tendencies in the past decade, such as consolidation of banks and declining performance according to commonly applied measures.

4. BANKING SUPERVISION IN GERMANY

A prerequisite of Basel II implementation is the existence of the appropriate legal basis as well as authorities which have supervisory functions. This section starts with a historical review of banking regulation in Germany. Furthermore, it gives an overview of the German financial supervisory authorities and their main functions. Finally, the transfer of Basel II regulations into German law is presented.

4.1. Development of Banking Regulation in Germany

Banking regulation and supervision in Germany was firstly established as a response to the banking crisis of 1929-1930. Prior to 1931, there was no general regulation of the German banking industry. Only some particular banking groups, namely savings banks and mortgage banks were subject to regulation by state governments and federal government, respectively. The Emergency Decree of 1931 was primarily targeted at overcoming the crisis at that time and preventing future crises. Savings banks were excluded from this decree and were under the old regulatory rules.[12]

Only in 1935, with the enforcement of the German Banking Act all banks were incorporated. The Supervisory Agency set up at the German Central Bank served as a regulatory authority until 1939, when it was dissolved and its functions were transferred to the Ministry of Economics. From 1949 and until the enactment of the Banking Act[13] in 1962, banking supervision had a decentralized character and was exercised by the respective state governments. In 1962, a new supervisory institution was created, the Federal Banking Supervisory Office (FBSO). It was an independent authority reporting to the Federal Minister of Economics (since 1972 to the Federal Minister of Finance).[14]

With the extension of banking business activities, the necessity of regulatory adjustments has become apparent. While the first amendment to the Banking Act did not introduce significant changes, the second amendment of 1976 fairly strengthened the power of the FBSO via the permission to perform inspections without any special reasons. Additionally, the amount of losses which led to a closure of a bank by the FBSO was determined. The second amendment of the Banking Act was a response to the failure of Bankhaus Herstatt in 1974, which revealed gaps in the existing regulation.[15]

According to the third amendment, which came into force in 1985, supervision was allowed on the basis of a consolidated balance sheet of a group of banks. This regulation targeted at the prevention of building up credit pyramids, which were formed by banks through their subsidiaries without any increase in the capital base of the mother institution. There were five further revisions of the Banking Act, which were primarily devoted to the incorporation of EU directives. Thus, legal conditions for the freedom of banking operations were created. This facilitated the intensification and harmonization of banking regulation within the EU.

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[12] See Hackethal/Schmidt (2005).

[13] Banking Act is a legal basis for the supervision of the banking business and financial services in Germany.

[14] See Neus (2007).

[15] See Bundesanstalt für Finanzdienstleistungsaufsicht (2009).

4.2. Supervisory Authorities

Whereas supervisory responsibilities are concentrated in the hands of a single institution in most other countries, banking supervision in Germany is exercised by two regulatory authorities, namely the Federal Financial Supervisory Authority (FFSA) and the German Central Bank.[16] The FFSA resulted from a merger of the FBSO, the Federal Supervisory Office for Insurance Enterprises, and the Federal Supervisory Office for Securities Trading. This happened after the enforcement of an act introducing the integration of all the supervisory institutions in 2002.

The status of the FFSA as a supervisory authority is legally determined in section six of the Banking Act. According to that section, the FFSA shares the supervision with the German Central Bank. The main duties and responsibilities of the FFSA are:[17]

- issuing general rules, such as principles and regulations;
- ongoing supervision;
- prudential auditing;
- international cooperation in the field of banking supervision.

The responsibilities of the FFSA, on the other hand, include:

- licensing, monitoring and closing of banks;
- issuing general instructions for carrying out banking businesses, for providing financial services and for limiting risks.

The supervisory authorities do not intervene into the business operations of individual banks. However, banks have to comply with minimum quantitative and qualitative requirements and are obliged to open their books to the regulators. When a bank is being established, it has to confirm having enough initial capital in its disposal.[18] Upon the setting up of the bank, ongoing monitoring by the supervisory authorities, both onsite and offsite, is implemented. This comprises the examination of the banks' annual reports and balance sheets as well as auditors' reports. In addition, banks have to report large exposures and loans exceeding 1.5 million Euros. Based on this information, the German Central Bank creates a risk profile of the respective bank and directs it to the FFSA. The intensity of supervision depends on the type of business operations performed by a particular bank.[19]

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[16] The German expression of the German Central Bank and the FFSA is Deutsche Bundesbank and Bundesanstalt für Finanzdienstleistungsaufsicht, respectively.

[17] See Deutsche Bundesbank (2009).

[18] For example, the required initial capital amounts to 730,000 Euros and 5,000,000 Euros for deposit-taking banks and investment banks, respectively (see Bundesanstalt für Finanzdienstleistungsaufsicht (2009)).

[19] See Bundesanstalt für Finanzdienstleistungsaufsicht (2009).

According to the Banking Act (paragraph 45), the FFSA possesses a number of tools in case that a bank fails to meet the regulatory requirements:

- prohibition or limitation of withdrawals or distribution of profits by proprietors;
- prohibition or limitation of granting loans;
- instructing the bank to implement measures for reducing its risk exposure;
- temporary freezing the payments of the bank;
- closing the bank for business with customers.

The responsibilities of the FFSA and the German Central Bank are separated in the "Guidelines on Carrying out and Ensuring the Quality of the Ongoing Monitoring of Credit and Financial Services Institutions by the German Central Bank" of February 21, 2008.

4.3. The Basel II Regulations in National Law

One of the key objectives of Basel II is to adjust the regulatory capital requirements for banks to match the actual risks they face. Although the recommendations of the Basel Committee are not obligatory, they served as a ground for EU directives. Consequently, the Basel II framework was transformed into European law by the Banking Directive and the Capital Adequacy Directive.[20] In turn, these regulations were incorporated into German law through amendments to the Banking Act, the Solvency Regulation, and the "Minimum requirements for Risk Management" (MaRisk). Whereas pillar I and III of Basel II are reflected in the Solvency Regulation, pillar II is represented by the MaRisk. Figure 6 reflects this structure.

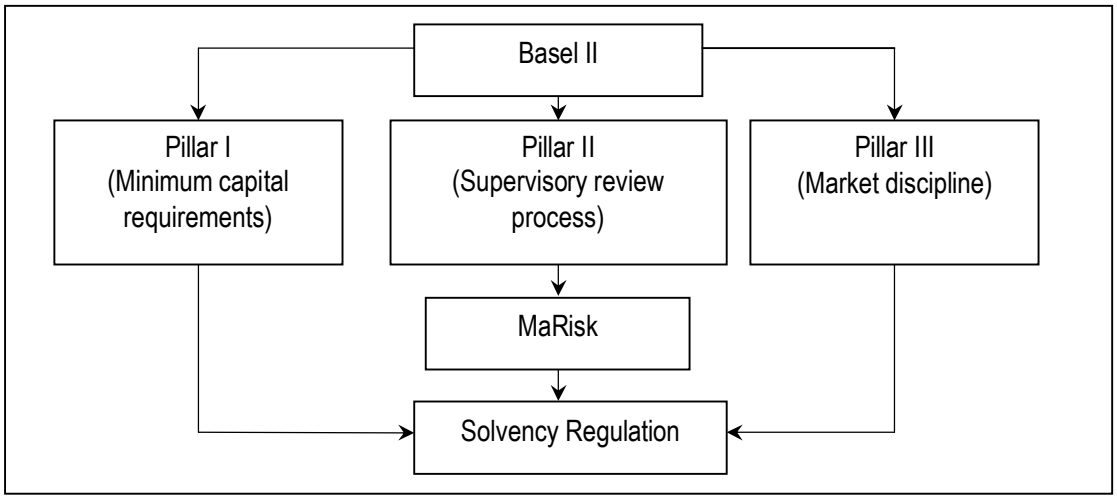

Figure 6. Basel II in German Law

[20] Directive 2006/48/EC and 2006/49/EC of June 14, 2006.

With the amendments to the Banking Act, the European Directives mentioned above were implemented. At the same time, the legal basis for the Solvency Regulation and the MaRisk was created. It is worth noting that section 10c of the Banking Act includes an exceptional rule for banks belonging to the same group. According to this rule, under certain conditions, banks are permitted to apply a zero risk weight to loans within a group of banks. Risk weights are used to determine the riskiness of bank's loan portfolios. In any case, this regulation is tailored to the cooperative and savings banks groups.

4.3.1. Solvency Regulation

The new Solvency Regulation replaces Principle I of the Banking Act, which was previously in force. While Principle I included only one approach to determine the credit risk regulatory capital charge, the Solvency Regulation embodies two alternative techniques, in particular the Standard Approach and the Internal Ratings-Based Approach (IRBA).

In the framework of the Standard Approach, banks are allowed to determine risk weights on the basis of external credit ratings. Such external evaluations can only be used from rating agency approved by the supervisor. At the same time, it is still possible to apply uniform fixed risk weights, which is especially relevant for unrated loans.

The IRBA provides an opportunity to apply internal rating procedures and is separated into two sub-approaches, the Foundation Approach and the Standardized Approach. Under the latter approach, a bank has to estimate the borrower's probability of default (PD), loss given default (LGD), and the credit conversion factors (CCF), which are necessary for the exposure at default (EAD) calculation. In contrast, the Foundation Approach requires only the PD estimation, as banks can apply supervisory values for the other risk parameters. Hence, the implementation of the IRBA by a particular bank has to be approved by the supervisor.

Another distinction of the Solvency Regulation is that operational risk is for the first time explicitly recognized. In the preceding Principle I regulation, operational risk was classified as other risks. As specified in the Solvency Regulation, banks can choose among three different techniques to determine the capital charge for operational risk, namely the Basic Indicator Approach (BIA), the Standardized Approach (SA), and the Advanced Measurement Approach (AMA).

Under the BIA, the capital charge is determined based on the weighted average gross income of a bank over the past three years, which serves as an operational risk indicator. The SA requires this indicator to be broken into eight business lines determined in the Solvency Regulation and multiplied

by weights of the business lines, which range from 12 to 18 percent. In contrast, in the AMA a bank can calculate the capital requirements for operational risk using an internal model. This method requires a prior approval of the FFSA. Another opportunity laid down by the Solvency Regulation is the partial use of the AMA, i.e. the bank may use the AMA to calculate the capital charge for only a part of the bank. In order to facilitate the application of the Solvency Regulation, the FFSA provides guidelines and interpretations of the Solvency Regulation's requirements.

The Solvency Regulation also incorporates the new disclosure requirements of pillar III of Basel II, according to which banks have to publish all necessary information either annually or semiannually, depending on the bank's type. This information includes capital structure, capital adequacy, and information on market, credit and operational risk as well as risk management procedures. In case of banking groups, disclosure requirements are applicable to the top of the group. In addition, banks are not required to disclose legally protected or confidential information. However, in the two latter cases banks are obliged to publish more general information about the facts that they are not able to disclose.

4.3.2. Minimum Requirements for Risk Management

Qualitative requirements of the second pillar of Basel II are reflected in the MaRisk, providing a regulatory framework for the new qualitative supervisory system in Germany. The MaRisk reflect section 25a of the Banking Act which requires an adequate risk management system. The MaRisk were published in 2005 and replaced the old regulations, which established qualitative requirements for the risk management in single business units, namely the "Minimum Requirements for the Trading Activities of Credit Institutions" (MaH), the "Minimum Requirements for the Internal Audits of Credit Institutions" (MaIR), and the "Minimum Requirements for the Credit Business of Credit Institutions" (MaK). Figure 7 represents this development.

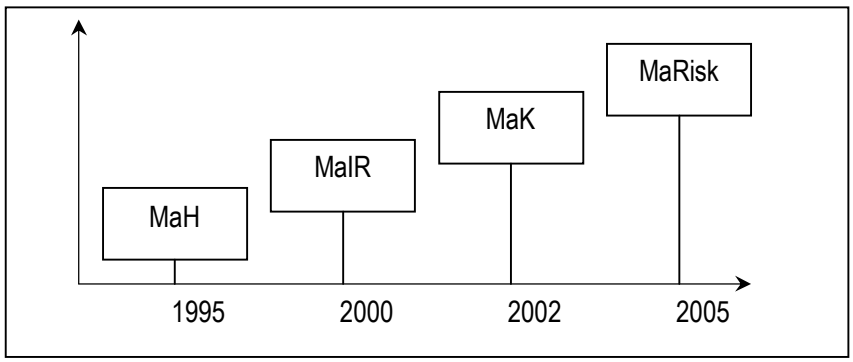

Figure 7. Development of the Minimum Requirements

The MaRisk contains comprehensive requirements for the management of various risks, such as requirements for the internal control system, internal audit, organizational guidelines, etc. Although the MaRisk are largely based on the previous three minimum requirements, adjustments have been made in order to bring the new regulation in accordance with the second pillar of Basel II. In contrast to the previous minimum requirements, the MaRisk also incorporate interest rate risk, liquidity risk, and operational risk.

Two fundamental elements of the MaRisk are the Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP). The former requires banks to have adequate risk management, measurement and control processes while the letter represents the criteria for the supervisory evaluation of these processes. The ICAAP and the SREP together constitute the Supervisory Review Process (SRP), which is demonstrated in figure 8.

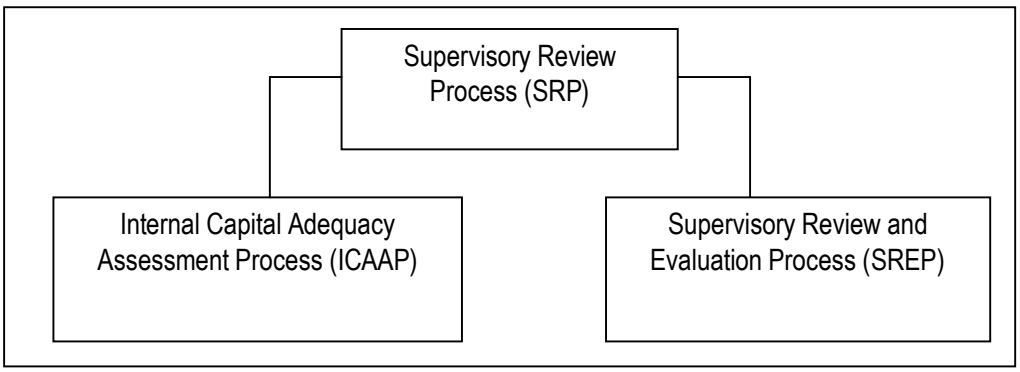

Figure 8. Components of the Supervisory Review Process

Great importance is given to stress tests, which have to be performed by banks that have chosen advanced approaches such as the IRBA and the AMA. However, a simplified implementation of the MaRisk is possible, depending on the size of the bank, its risk profile and its transactions volume. The intensity and frequency of the supervisory review is also executed in proportion to these factors. This rule is referred to as a double proportionality principle and aims at protecting smaller banks.

In sum, the Basel II rules were incorporated into the Solvency Regulation and the MaRisk. In addition, the Solvency Regulation and the MaRisk are also adjusted in order to take into account the special structure of the German banking system. To achieve this goal, the German regulations contain some simplifications as well as special rules and exceptions, especially for the savings and cooperative banks groups and smaller banks.

5. IMPLEMENTATION STATUS OF BASEL II IN GERMANY

Since January 1, 2007, banks in Germany have to determine their minimum capital requirements in accordance with the Solvency Regulation. However, in order to facilitate the transition to the new regulations a so-called temporary regulation was introduced in 2007. This temporary regulation offered banks an opportunity to determine their regulatory capital charge either according to Principle I or under the Solvency Regulation. Actually, most banks in Germany took advantage of this temporary regulation and calculated their minimum capital requirements according to Principle I. Table 4 indicates that only 37 banks out of 2,016 had implemented the Basel II requirements in 2007.[21]

Table 4

Approaches to Credit Risk Measurement by Sector, 2007–2009

	2007		2008		January 2009	
Total Number of Banks	2,016	100 %	1,980	100 %	1,981	100 %
Credit Risk						
Standard Approach	21	1 %	1,939	98 %	1,929	97 %
IRBA	16	1 %	41	2 %	52	3 %
Principle I	1,979	98 %	–	–	–	–
Operational Risk						
BIA	22	1 %	1,953	98 %	1,901	95 %
SA	15	1 %	17	1 %	70	4 %
AMA	–	–	10	1 %	10	1 %

From these 37 banks, 21 have chosen the Standard Approach and further 16 banks based their calculations of credit risk capital on the Foundation IRBA. As for the operational risk capital requirements, in 2007 22 banks used the BIA, while 15 banks applied the SA. The usage of the most sophisticated techniques, both for credit and operational risks, is only permitted since January 1, 2008.

5.1. Regulatory Capital Requirements for Credit Risk

On January 1, 2008, 41 banks were permitted to use the IRBA to determine their capital requirements for credit risk, which constitutes two percent of all German banks. The remaining 1,939 banks used the Standard

[21] Table 4 is based on yearly reports of the FFSA in 2007 and 2008 as well as the January 2009 report of the German Central Bank.

Approach in 2008. Therefore, only a small amount of banks decided to apply more advanced techniques. Among these 41 banks, 15 belong to the commercial banking group, 11 banks are specialized banks, and 11 further banks are savings banks whereas four belong to the cooperative banks sector. Among the banks applying the IRBA roughly a half used the Advanced IRBA; the rest committed themselves to the standard version of the IRBA.[22]

On January 1, 2009, the number of banks applying the IRBA increased slightly and amounted to 52 banks, constituting three percent of the banks in Germany. Out of these banks, 20 use the advanced version of the IRBA. Seven further banks have applied for a permission to use the IRBA. Figure 9 shows that commercial banks have a leading position in applying the IRBA;[23] they constitute 44 percent of all banks using this approach.

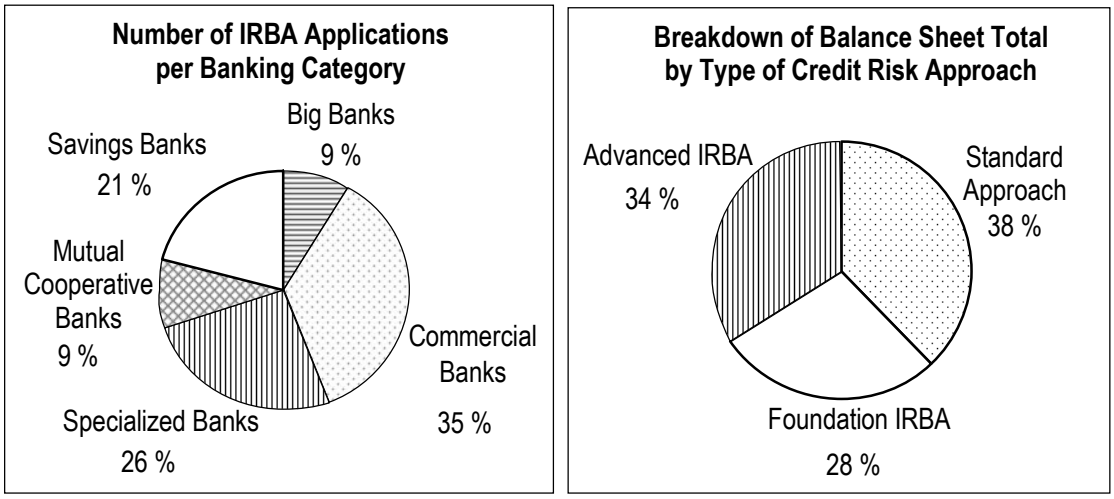

Figure 9. Implementation of Credit Risk Measurement Techniques

Interestingly, banks applying the IRBA account for 62 percent of total assets in the German banking system (see figure 9). Therefore, the IRBA is mainly chosen by large banks. Banks implementing the IRBA are either large universal banks or small and medium-sized specialized banks. The former possess sufficient resources and long data histories to implement internal ratings-based approaches. Specialized banks, such as mortgage banks, building and loan associations, consumer credit banks, and specialized lending banks, by contrast, only require a small number of internal rating systems in order to cover the whole range of their operations.[24]

[22] See Bundesanstalt für Finanzdienstleistungsaufsicht (2008).
[23] These figures are taken from the January 2009 report of the German Central Bank.
[24] See Deutsche Bundesbank (2009).

Small and medium-sized universal banks prefer to use the less sophisticated Standard Approach.

Hence, despite the fact that Quantitative Impact Studies (QIS), which were conducted to assess the impact of Basel II on the banks' capital requirements, revealed that the use of the advanced methods would be especially beneficial for small and medium-sized banks,[25] these banks prefer to use the Standard Approach. It is worth mentioning that there is a possibility of partial use of the IRBA, according to which the banks can implement the rating systems on a step-by-step basis within a period of five years. Actually, the average implementation period in case of the partial use constitutes three years.

Although the number of rating systems submitted for approval ranges from one to 50, the most common methods are expert systems, simulation models, and credit scoring systems.[26] The latter use quantitative and qualitative data in order to assign a score to a borrower, which reflects his creditworthiness. The most popular statistical tools employed are discriminate analysis and probability models.[27] Scoring systems are primarily used in retail business and for small and medium-sized enterprises. Expert systems are applied to evaluate the credit risk of large corporate borrowers. Finally, simulation methods are employed for specialized lending and project finance. In practice, a mixture of all three methods is also used.[28]

5.2. Model Validation Techniques

Whichever of the aforementioned internal ratings-based methods is applied to model the credit risk, it has to be of high quality to ensure the correct reflection of the bank's credit risk exposure. Various validation techniques were developed to evaluate the quality of internal rating models. Basel II devotes special attention to the validation issue; banks applying for IRBA implementation have to convince the supervisor in the appropriateness of their models. One way of validating the rating model is to measure its discriminative power, i.e. the ability to distinguish between defaulters and non-defaulters. The most popular validation techniques include the Cumulative Accuracy Profile (CAP) and the Receiver Operating Characteristic (ROC).[29]

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[25] See Deutsche Bundesbank (2006).

[26] See Deutsche Bundesbank (2009).

[27] These models include the linear probability model, the logit model, and the probit model.

[28] See Deutsche Bundesbank (2009).

[29] This subsection is based on Beinert/Reichling/Vogt (2007).

5.2.1. Receiver Operating Characteristic

Consider a rating model in which a borrower is classified as a potential defaulter if his rating score exceeds a certain cutoff value and as a potential non-defaulter otherwise. Two types of error are possible in this case, namely the defaulter is incorrectly identified as a non-defaulter and a non-defaulter is incorrectly classified as a defaulter (see table 5).

Table 5

Contingency Table

		Observation in $t = 1$	
		Default	**Non-default**
Forecast in $t = 0$	Default	A	B
	Non-default	C	D

The percentage of defaulters which were correctly classified as defaulters is referred to as the hit rate (HR) whereas the percentage of non-defaulters which were incorrectly indentified as defaulters is called the false alarm rate (FAR):

$$HR = \frac{A}{A+C} \text{ and } \text{FAR} \equiv \frac{B}{B+D}. \qquad (1)$$

The ROC curve is obtained by plotting the hit rate versus the false alarm rate for different cut-off values s, as shown is figure 10.

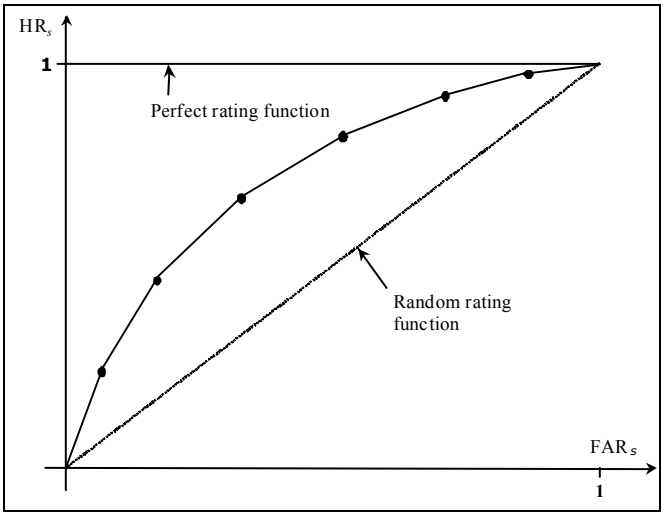

Figure 10. Receiver Operating Characteristic

The area below the ROC curve (bold line in figure 10) is called the area under curve (AUC). The greater this area, the better is the rating model. Alternatively, the closer the ROC curve to the perfect rating function

(thin line), the more accurately the model can distinguish between defaulters and non-defaulters. A AUC value of 0,5 (dotted line) corresponds to a model without discriminative power while a AUC value of one characterizes a perfect model. Within the ROC framework, it is important that debtors with weak creditworthiness receive worse ratings than those with strong creditworthiness.

5.2.2. Cumulative Accuracy Profile

Another popular validation technique is the cumulative accuracy profile. In order to obtain the CAP curve, borrowers are ordered by their credit score, from the riskiest to the safest. Subsequently, the fraction of debtors with the worst ratings (WR) is plotted against the hit rates. By repeating this procedure for every rating category *s*, the CAP curve is constructed, which is depicted in figure 11.

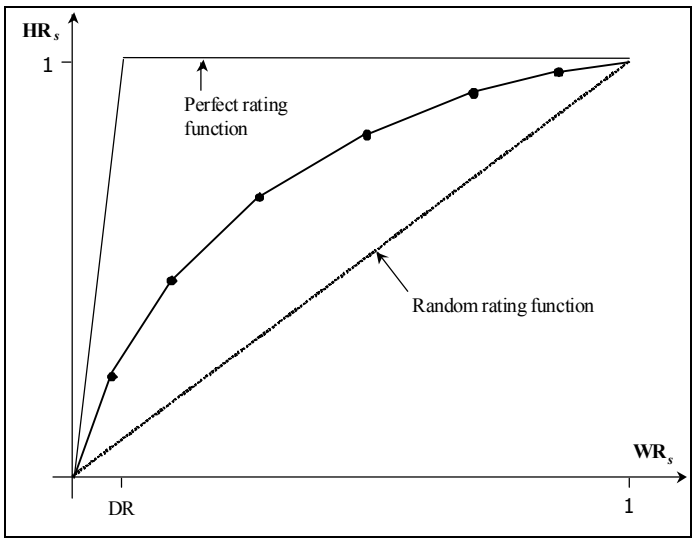

Figure 11. Cumulative Accuracy Profile

The straight dotted line below the CAP curve in figure 11 represents a rating system with random assignment of credit scores whereas the CAP curve of a rating system with perfect predicting power (thin line) is determined by the default rate (DR) of the portfolio. Actual rating functions will typically lie between these two extreme cases.

The predictive power of a rating system is summarized by the accuracy ratio (AR). This ratio is determined as the ratio of the area between the CAP curve of the rating function under validation and the random CAP curve to the area between the perfect and the random CAP curves.[30] The closer the AR value to one, the better is the rating model.

[30] See Sobehart/Keenan/Stein (2003) and Engelmann/Hayden/Tasche (2003).

5.2.3. Stochastic Tendency

Stochastic tendency can also be used in order to assess whether the hit rate and false alarm rate distributions differ from each other. In a discrete framework, the false alarm rate distribution tends to be stochastically larger than the hit rate distribution, if the relative effect (RE) exceeds 0.5:

$$RE \equiv \sum_s \frac{HR_s + HR_{s-1}}{2} \cdot \left(FAR_s - FAR_{s-1} \right) > \frac{1}{2} \quad \text{where} \quad HR_0 \quad FAR_0 \equiv 0. \quad (2)$$

With a RE above 0.5, companies remaining solvent in the tendency were placed into good rating classes and insolvent debtors tended to be positioned into bad rating classes. Relative effect and area under curve, both add up the products of false alarm rate per rating class and cumulative hit rate. Therefore, both concepts compute the area under the ROC curve.

Now, let S^d and S^{nd} denote the rating of debtors who have become insolvent and remained solvent, respectively. Then, in a probabilistic interpretation, the hit rates and the false alarm rates are:

$$HR_s = Prob\,(S^d \le s) \quad \text{and} \quad FAR_s \quad Prob\,(S^{nd} \le s)\,. \quad (3)$$

In case of independent ratings, this yields the following interpretation of the relative effect and the area under curve, respectively:[31]

$$RE = AUC \quad Prob\left(S^d < S^{nd} \right) + \frac{1}{2} \cdot Prob\left(S^d = S^{nd} \right). \quad (4)$$

The area under curve corresponds to the probability that an insolvent company received a worse rating than a debtor who remained solvent (where the probability of equal ratings is weighted by a half). Note, that the relative effect does not react to a transformation that preserves order.[32] Therefore, relative effect, area under curve, and accuracy ratio are appropriate for ordinal rating scores. Irrespective of whether the rating function provides scorings or default probabilities, these measures come to a consistent result as long as the estimated default probability increases with an inferior rating score.

As an intermediate result, we get that the area under the ROC curve equals the relative effect of stochastic tendency. Both terms are in a linear relationship with the accuracy ratio. Therefore, these measures of discriminative power produce identical results.

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[31] See Bamber (1975).
[32] See Bamber (1975).

5.3. Regulatory Capital Requirements for Operational Risk

At the beginning of 2008, 98 percent of the banks in Germany determined the operational risk capital requirements according to the BIA. Only 17 banks committed themselves to the more advanced SA and even a smaller number of banks received the permission to apply the most challenging AMA.

At the beginning of 2009, already 70 banks applied the SA, accounting for more than three percent of the German banks. The situation with the AMA did not change; still only ten banks calculate their operational risk capital requirements according to this method. Among the banks applying the AMA, six belong to the commercial banks group and one to the specialized banks. The savings banks sector is represented by two banks whereas the cooperative banks sector by only one bank. The AMA banks account for 46 percent of the balance sheet total of all banks, the SA banks for 24 percent and the banks applying the BIA cover 30 percent of the balance sheet total. Although the Solvency Regulation permits the application of the AMA to a part of the bank, most of the banks implementing the AMA do not take advantage of the partial use opportunity.

Thus, the AMA is not widespread in Germany, being used by less than one percent of the banks. This can be explained by several difficulties connected with measuring operational risk. One problem is data scarcity. Operational risk loss events occur very seldom within one particular bank. Consequently, the banks' internal data on operational losses contain only a few observations. The Solvency Regulation allows banks to supplement their internal data with external data sources and scenario analysis. External data, obtained from other banks, may, however, not be comparable to a bank's own loss potential. Therefore, banks must decide how relevant another bank's loss is to its own internal operations.

The most commonly used advanced approach to measure operational risk is the Loss Distribution Approach (LDA), which consists of three basic components. At first, a loss frequency distribution has to be estimated, in order to model the number of losses that may take place within a given period. The frequency of losses is described by a discrete distribution. The second step requires an estimation of a loss severity distribution for modeling a money amount of individual losses that occur within some certain time period. Loss severity is described by a continuous distribution. Currently, there is no consensus regarding the shape of the loss severity distribution.

Finally, one has to combine the loss severity and the loss frequency distribution in order to obtain an aggregate loss distribution. All German

banks applying the LDA use the Poisson distribution for modeling the loss frequency. As for the loss severity, several distributional assumptions are used and the distribution which fits the data the best is chosen. Two banks additionally use an empirical distribution for modeling loss severity. The aggregate loss distribution is obtained using the copula approach.

The statistical validation of the operational risk measurement model remains a difficult task, as the existing data is insufficient for this purpose. Consequently, all banks applying the AMA employ not only statistical analysis but also qualitative methods and expert opinions for model validation.

6. SUMMARY

The banking system of Germany is a universal banking system with a three-pillar structure, including commercial, savings and mutual cooperative banks. The letter two sectors can be further separated into regional banks and their central institutions whereas the commercial banking group comprises big banks, regional banks, and the branches of foreign banks. The cooperative sector is the largest sector by the number of banks, whereas the savings banks sector is the most significant by the amount of assets.

All three banking groups have experienced a decline in the number of banks. The number of banks in Germany has decreased by more than 45 percent in the past two decades. The decline was especially pronounced in the cooperative pillar. Another feature of the German banking system's development is the diminishing performance according to key performance indicators.

On its way towards Basel II implementation, Germany had several favorable features that facilitated the transformation process. One of these features is the existence of two supervisory authorities, the German Central Bank and the Federal Financial Supervisory Authority (FFSA). Although regulatory functions of the German Central Bank and the FFSA are strictly separated, there is a continuous cooperation between these institutions in order to facilitate the supervision. The duties of the German Central Bank and the FFSA are regulated by the Banking Act.

Another prerequisite for a successful implementation of the new Basel accord was the transformation of the new regulations into German law. This task was accomplished through the amendments to the Banking Act, Solvency Regulation, and the "Minimum Requirements for Risk Management" (MaRisk). Whereas pillar I and III of Basel II are reflected in the Solvency Regulation, Pillar II is represented by the MaRisk. The fact that

the MaRisk were already published in 2005 also contributed to the easier implementation of Basel II, as German banks had sufficient time to adapt their risk management systems to the new requirements. Although the Basel II regulations were completely transformed into national law, several adjustments were made in order to take into account the special structure of the German banking system and to protect small and medium-sized banks.

Since January, 2007, all banks in Germany are obliged to determine their minimum capital requirement in accordance with the new regulations. The application of the most sophisticated approaches is only permitted since January 2008 and requires a supervisory approval. However, only relatively few banks have chosen the sophisticated Internal Ratings Based Approach (IRBA) and the Advanced Measurement Approach (AMA) to measure their credit and operational risk capital requirements. In January 2009, only three percent of all German banks applied the IRBA; less than one percent has committed themselves to the AMA.

This is not surprising, as there is no commonly accepted technique for the internal estimation of operational risk. Moreover, the practical estimation of operational risk losses as well as the model validation face the challenge of limited data availability. Consequently, the advanced approaches are predominantly used by large and internationally active banks. For small and medium-sized banks the effort necessary to apply these approaches outweighs the benefits of using them. Therefore, this category of banks applies the less demanding techniques for determining their minimum regulatory capital.

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THE BASEL II ACCORD AND BANKING SUPERVISION IN HONG KONG

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I. INTRODUCTION

On January 1, 2007 Hong Kong became one of the first jurisdictions to implement the new international standard for capital and risk management commonly known as Basel II, which is structured around three pillars: capital adequacy, official supervisory review process and market discipline. More specifically, Pillar I is a relatively formulaic, model-based approach that sets out the minimum capital requirement for a bank's operational risk, credit risk and market risk; Pillar II requires banks to have sound internal processes to assess the adequacy of their capital based on a thorough evaluation of risks, and also it grants official supervisory agencies the discretionary power to scrutinize and discipline banks by requiring banks to hold capital above the regulatory minimum based on supervisory review and assessment of banks' riskiness; and Pillar III complements the other two pillars through market discipline and transparency by requiring banks to make public disclosure of information about their risk profiles, capital adequacy and risk management (see Basel Committee 2004 for details). Hong Kong has now adopted the Internal-Ratings Based (IRB) approaches under Basel II.[12] The foundation approach became effective in 2007 whereas the advanced approach was introduced in 2008. Hong Kong is also one of the banking systems with the highest proportion of banks using the Internal-Ratings Based (IRB) approach.

[1] It is not the place here to give a detailed account of the IRB approach. For theoretical and technical details as well as criticisms, see for example Vorotto (2008) and Bank and Lawrenz (2003). Details about how the IRB approach as applied in Hong Kong can be found in the Supervisory Policy Manual of the Hong Kong Monetary Authority (2008).

There are several reasons why Hong Kong is as an interesting and important case study of banking regulation within the Basel framework. First of all, Basel II is primarily designed by regulators of industrial countries. It is interesting to examine whether the recommended "best practices" are also appropriate for other emerging or less developing countries. Since the introduction of the 1988 Basel Capital Accord, Hong Kong has always been one of the world leaders in implementing the international practices as recommended by the Basel Committee of Banking Supervision and the Core Principles of Effective Banking supervision. For instance, banks in Hong Kong already attained the minimum capital adequacy ratio of 8 % by 1989, three years earlier than Basel Committee's target of 1992; and as early as 1994 Hong Kong introduced a directive on risk management of financial derivatives based on Basel Committee's recommendations. Is the regulatory framework recommended by the Basel Committee a main factor contributing to the rise of Hong Kong as an international financial center?

Second, Hong Kong has had the highest rating of economic freedom in the world for 12 years in a row (Gwartney et al. 2008). Even though banking regulation was significantly strengthened and enhanced after a severe banking crisis in the mid-1980s (see Jao 1989 for details), the Hong Kong Government had remained relatively less involved in the business of money and banking when compared with other countries until recent years. For instance, a central bank was not set up until 1993 and a financial safety net was virtually absent until the launch of the Deposit Protection Scheme in 2006. Against this background, a couple of interesting questions related to Basel II and its Pillar III in particular, are: How effective and efficient is market discipline in maintaining banking stability? To what extent will the banking system be more stable and efficient if market discipline and direct government supervision work together?

Third, the current Basel II framework focuses on micro-prudential supervision, with a predominant view that the soundness of individual financial institutions will promote stability of the entire financial system. Recently some economists emphasize the importance of a macro-prudential framework for financial supervision and regulation (e.g. Boris 2005, Laidler 2005) because macroeconomic instability, such as price instability, can lead to financial instability or even trigger a financial crisis. Hong Kong's monetary experience under its current linked exchange rate system – a variant of currency board system – can potentially offer insights about the relationship between banking stability and macroeconomic stability.

Last but not least, ample empirical evidence indicates that financial development plays a crucial role in promoting economic growth (e.g. Levine 1997). Hong Kong's economic growth and financial development over

the last three decades or so have been phenomenal. Is regulated banking more conducive to promotion of banking stability and financial development than laissez-faire or free banking?

These are some of the main questions this chapter will address. I hope Hong Kong's experience can shed light on these banking issues and offer some lessons for other countries.

This chapter is organized as follows. The next section gives a brief overview of the structure of Hong Kong's banking industry and a description of the latest approach to banking regulation and supervision. This is followed by Section III, which evaluates the performance of the banking system with reference to selected financial and economic indicators. The penultimate section discusses some potential regulatory problems confronted by Hong Kong in the foreseeable future before this chapter concludes.

II. THE HONG KONG BANKING SYSTEM AND ITS REGULATORY FRAMEWORK

Hong Kong's current financial regulatory regime is based on an institutional approach with functional characteristics. A financial institution's legal status, i.e., whether it is a bank, an insurance company or a stock broker, determines which regulator is mainly and directly responsible for overseeing the institution's activity. Four key regulators were established based on the main product lines or functions of financial intermediaries. The central bank – namely the Hong Kong Monetary Authority (HKMA) – is responsible for the regulation and supervision of traditional banking business. The Securities and Futures Commission (SFC) is responsible for the regulation of trading in securities and futures as well as related activities like initial public offerings. The insurance industry is regulated by the Insurance Authority. Finally, the Mandatory Provident Fund Scheme Authority regulates privately managed provident schemes whose objective is to ensure the provision of retirement for Hong Kong's workforce.

Most banking groups in Hong Kong are financial conglomerates or supermarkets that provide various financial services like banking, securities and insurance. Therefore financial conglomerates – such as HSBC or the Bank of China Group – are in practice subject to various regulators' supervision. There is division of labor among the regulators, however. The HKMA signed memoranda of understanding with the SFC and the Insurance Authority in 2002 and 2003 respectively. Accordingly if, for example, a bank carries on securities and futures business by itself, then the HKMA will be the front line supervisor of this bank (as it is legally incorporated as a bank); but at the same time the bank has to register with the SFC and

comply with its regulations. The SFC has the power to disqualify a bank from carrying out securities and futures business. On the other hand, if a bank sets up a subsidiary to conduct securities and futures business, then the SFC will be the front line supervisor of that subsidiary. Similar arrangements also apply to the case of banks' insurance business. The objective is to allow division of labor, avoid duplication of regulatory activities and raise the efficiency in regulation.

Because of limited space and, more importantly, the pivotal role of banks and the important size of the banking sector relative to the whole financial system, we focus here on the regulation and supervision of licensed banks. Though well recognized, it should be reiterated that the efficiency and stability of the banking industry rely on not only banking regulation but also coordination between the various regulators. We shall return to this issue later in this chapter.

Since 1981 the Hong Kong banking system has been operating under a three-tier system, under which depository institutions or authorized institutions (AIs) are classified into three categories: licensed banks, restricted licence banks and deposit-taking companies. Licensed banks are legally required to have both registered and paid-up capital of at least HK$150 million. Moreover, each licensed bank has to meet the minimum size requirements of HK$3 billion in customer deposits and HK$4 billion in total assets. Only licensed banks can operate current and savings accounts, and also collect and pay cheques. They can accept deposits of any size and maturity from the public, and are allowed to carry out both retail and wholesale banking businesses. By contrast, restricted licence banks are subject to a lower capital requirement – at least $100 million in both registered and paid-up capital. They are allowed to accept deposits in amounts of HK$500,000 or above without restriction in maturity. They are mainly engaged in wholesale and investment banking. The capital requirement for deposit-taking companies is the lowest among all AIs – only a paid-up capital of HK$2.5 million. However, they are allowed only to take a deposit of at least HK$100,000 and with an original term to maturity of at least three months.

At the end of 2008, there were 145 licensed banks, 27 restricted licence banks and 28 deposit-taking companies. In addition, 71 foreign banks had local representative offices. The three categories of AIs together operated a network of over 1,300 branches, and their total customer deposits and total assets were respectively HK$5,904 billion and HK$10,705 billion. The lion shares were held by licensed banks. Because of their importance, the focus of this chapter is on the regulation of licensed banks.

The Banking Ordinance provides the legal basis for banking regulation and supervision in Hong Kong. The regulatory framework consists of

(i) the central bank, i.e., the HKMA, (ii) the advisory committees – the Exchange Fund Advisory Committee, the Banking Advisory Committee and the Deposit-taking Companies Advisory Committee – that advise the Government on banking and monetary issues, and (iii) the Hong Kong Association of Banks (HKAB), a statutory body which sets the rules and standards for banking practices and to exchange views with the Government for the future development of the industry, among many other functions.

Hong Kong did not have a central bank before April 1, 1993 when the HKMA was set up by merging the Office of the Exchange Fund with the Office of the Commissioner of Banking of the Government. The HKMA does not enjoy monopoly over the supply of money like its counterparts in other countries. Banknotes in Hong Kong are issued by three private commercial banks, namely the Hong Kong Banking Corporation (more commonly known as HSBC internationally), the Standard Chartered Bank and the Bank of China. The main objectives and central banking functions of the HKMA are: (i) to maintain the stability of the Hong Kong dollar, within the framework of the linked exchange rate system, through sound management of the Exchange Fund, monetary policy operations and other measures deemed necessary; (ii) to promote the safety and stability of the banking system through the regulation of banking business and the business of taking deposits, and the supervision of authorized institutions; and (iii) to enhance the efficiency, integrity and development of the financial system, particularly payment and settlement arrangements.

As far as the second objective is concerned, the main supervisory objectives of the HKMA are (i) to provide a measure of protection to depositors and (ii) to promote the stability and effective functioning of the banking system through the regulation and supervision of authorized institutions (AIs) and their businesses.

The HKMA's approach to banking supervision has gone through several phases over the years. In 2000 the HKMA started to switch from a capital-based approach to a risk-based supervisory approach that emphasizes the importance of identification and management of risk. The risk-based approach follows closely the Basel's supervisory framework and emphasizes the assessment and management of various types of risk. It was applied to medium and small local banks first in 2001, and then to large local banks and foreign banks in the next year. In principle, the HKMA follows this risk-based approach to monitor and assess the safety and soundness of AIs on a continuing basis. Continuous supervision is implemented through the following techniques:

(i) On-site examinations: The HKMA assesses at first hand how AIs are managed and controlled by periodically conducting on-site examinations, which can range from an investigation of a specific area to a comprehensive

review of an AI's operations. The objective is to assess an AI's asset quality, its risk management practices on major business lines and risk areas. The frequency of on-site examinations ranges from one to three years, depending on an AI's CAMEL rating.[2]

(ii) Off-site reviews: To achieve continuous supervision and to supplement on-site examinations, the HKMA conducts off-site analyses of AIs' financial conditions, management quality, and risk exposures based on their statistics regularly submitted.

(iii) Prudential meetings: A prudential meeting between the HKMA and an AI's senior management is held at least once a year to enable the HKMA to understand an AI's management, current business situation and prospects, to clarify specific issues and to discuss prudential concerns.

(iv) External audit: External auditors play an important role in the supervisory process because the Banking Ordinance requires them to certify the compliance of AIs' banking returns. The HKMA holds annual tripartite discussions with AIs and their external auditors on issues like the annual audit, adequacy of provisions and compliance with the Banking Ordinance and matters of prudential concern.

(v) Information exchange with other supervisors: the HKMA maintains regular contacts with other local and overseas supervisors and it has the legal authority under the Banking Ordinance to disclose information to them so as to assist their supervisory functions. Sharing of information has become increasingly important against the backdrop of globalization of financial services and financial conglomerates.

In practice, the process of this risk-based supervisory approach consists of six key steps: (i) understanding the AI, which provides a concise portrait of an AI's structure and financial position, (ii) assessing the AI's overall risk profile, (iii) planning supervisory work, (iv) defining examination activities, (v) performing risk-focused, on-site examination, reporting the findings and review the CAMEL rating, and (vi) conducting continuing off-site supervision including supervisory actions. These steps are carried out on a current basis in a continuing cycle and complemented by pre- and

[2] CAMEL is the acronym for Capital adequacy, Asset quality, Management, Earnings and Liquidity – the five components of a bank's condition that are assessed by bank regulators. After a bank examination, the regulator assigns a CAMEL rating as a summary measure of the bank's overall condition. In 1997 the CAMEL rating was extended to the CAMELS rating by including the sixth component – Sensitivity to market risk. The CAMEL or CAMELS ratings are confidential – known only to the bank's senior management and the regulators – and never released to the public even on a lagged basis. In its official documents, the HKMA states that the CAMEL rating system is used. However, a CAMELS rating system may in fact be used in practice if the sixth component is already factored in the CAMEL rating.

post-on-site visitations, prudential interviews, annual tripartite meetings and annual meetings with the board of directors at appropriate phases of the supervisory cycle.

The risk assessment process of this risk-based supervisory approach incorporates an AI's risk profile into the CAMEL rating system. The HKMA identifies eight types of inherent risks: credit, interest rate, market, liquidity, operational, reputation, legal and strategic risks. An AI's level of risk in each of the inherent risk by business activity, the direction of risk, the adequacy of existing risk management systems and the impact of external risk factors are assessed and a risk-matrix method is applied to determine the AI's overall risk profile. Based on the risk assessment exercise, a risk management rating is assigned and factored into the AI's CAMEL rating. The rating scale ranges from one to five, where a score of one denotes the effectiveness of the AI in managing risk and a score of five indicates a critical absence of effective risk management practices. The latter requires immediate and close supervisory attention.

The risk-based supervisory approach and the CAMEL rating system are complimentary to each other. In accordance with the Banking Ordinance, all AIs have to maintain adequate liquidity and capital adequacy, to submit to the HKMA on the required financial information, and to comply with other provisions of the Ordinance. In particular, the Banking (Amendment) Ordinance enacted in July 2005, which stipulates the Capital Rules and Disclosure Rules, provides the legal basis for the HKMA to implement Basel II.

The capital adequacy framework in Hong Kong is in line with the requirements of Basel II as set out under Pillar I. All locally incorporated AIs are required to maintain a minimum capital adequacy ratio (CAR) of 8 % calculated in accordance with the Capital Rules. The ratio is based on an AI's capital base to a value representing the AI's exposure to credit risk, market risk and operational risk. The Capital Rules set out in detail the different calculation approaches that can be adopted. Moreover, in line with Pillar II of Basel II the HKMA is empowered to require a licensed bank to maintain a CAR up to 12 %, and up to 16 % for a restricted licence bank or a deposit-taking company.

Besides CAR, AIs are required to maintain a statutory liquid ratio of 25 % in accordance with the amendment to the Banking Ordinance in 1986. An AI has to hold liquefiable assets (currency notes and coins, gold, etc) against its qualifying liabilities (basically all liabilities due within a month). To meet the developments in international standards and best practices over the years, the HKMA has released supervisory policy guidelines (the latest one released in 2004) so as to strengthen the effectiveness of AIs' liquidity

risk management. In addition, the HKMA also acts as lender of last resort by providing liquidity to the banking system through the discount window arrangements introduced in September 1998 after the Asian Currency Crisis to replace the Liquidity Adjustment Facility established in 1992 (see Greenwood 2008 for details).

As in other developed countries, the HKMA's role as lender of last resort is one of the two key components of a financial safety net to supplement the Basel regulatory framework. But unlike other countries, Hong Kong did not have the other component – an explicit deposit insurance scheme – until a couple of years ago. A Deposit Protection Scheme was launched in September 2006 as an additional measure to provide protection to depositors. Another objective is, of course, to maintain banking stability, because small depositors may not have incentives to run on their banks when their deposits are guaranteed (e.g. Diamond and Dybvig 1983). Under the original scheme, both Hong Kong dollar and foreign currency deposits held at an AI, are covered up to a maximum of HK$100,000 if the AI fails.[3] To alleviate the notorious moral hazard problem associated with deposit insurance, the premium is risk-rated and based on an AI's CAMEL rating. The more favorable the CAMEL rating, the lower is the premium. However, as a temporary measure to boost confidence in the local banking system against the financial tsunami, the DPS, with backing from the Exchange Fund, started in October 2008 to guarantee full repayment of all customer deposits held at all AIs except certain deposits (see footnote 3) until the end of 2010.

Before the end of the interest rate cartel in July 2001, the Hong Kong Association of Banks played an important role in determining the levels of deposit interest rates governed by the Interest Rate Agreements among banks. Another important role that remains is to represent the views of the banking industry, to provide advice to as well as to assist the Government in the development of policy. Although banking licenses are granted by the HKMA, a licensed bank cannot operate in without being a member of the HKAB; and it is therefore subject to the rules set by the HKAB.

All in all, banking regulation in Hong Kong is based on the synergy of government regulation by the HKMA on the one hand and self-regulation led by the HKAB as well as the banking professionals in the various advisory committees on the other.

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[3] However, deposits with an original term to maturity of more than five years, structured deposits, secured deposits, bearer instruments, and offshore deposits are not protected. So are other financial instruments like bonds, stocks, mutual funds, insurance policies, etc.

III. PERFORMANCE OF THE BANKING SYSTEM

For systematic exposition, we first evaluate the performance of the banking system based on the CAMEL framework, and then assess the overall stability over the last decade or so. Table 1 shows some key indicators for measuring bank performance since 2002, the year when the risk-based approach become effectively applied to all banks.

In terms of capital adequacy, banks in Hong Kong are well known to be among the most capitalized in the world as reflected by their high capital-asset ratios. As Table 1 indicates, the CAR for the banking industry as a whole has been almost twice the minimum required ratio of 8 % throughout the years since 2002. Since Basel II became effective in 2007, the CAR has dropped slightly to 13.4 % in 2007 and 13.8 % as at the end of September 2008. But the decline is mainly due to the more stringent approaches to calculating the CAR rather than an erosion of the banks' capital base. Against the financial tsunami, many leading banks in developed countries required capital injections from their governments in order to stay afloat. After repeated refusals to accept government capital injection, HSBC Holdings, the parent company of the largest bank in Hong Kong, finally launched in March 2009 a £12.5 billion rights issue, the largest in the financial history of both Hong Kong and Britain, so as to bring its Tier I core capital ratio from 8.5 % at end-2008 to 9.8 %. The rights issue was partly driven by the bank's substantial loss in its US business and partly by the pressure and need to keep up with the Joneses – to have a capital adequacy ratio in line with the leading international banks. While the local banks' results for 2008 are the worst in many years, they still outperform most leading banks in the world. In particular, HSBC is the only leading international bank that did not require capital injection from government in the financial tsunami. All in all, Hong Kong banks' domestic operations remain solid and their capital is strong and adequate.

Until the recent financial meltdown, Hong Kong banks' asset quality had remained high and in fact improved over the years up to the end of 2007. For the retail banks – all the locally incorporated banks and a number of large foreign banks which have a branch network and are active in retail banking – about 98 % of total loans were regarded as pass loans. Special mention loans were only 1.57 %, down significantly from 6.5 % at end-2003. Loans that are classified as substandard, doubtful or loss were only 0.85 % of total bank loans, all substantially lower than they were at end-2002. Loans over due for more than three months were 0.36 %, whereas rescheduled loans were a meager 0.2 % of total loans. The latest available

data reveal deteriorated asset quality as reflected by a decline in the percentage of pass loans and almost across-the board increases in those proxies from 2007 to the end of September 2008. Fortunately, the two main types of retail loans remain in good quality. The residential mortgage delinquency ratio remained low at 0.05 % and rescheduled mortgage loan ratio was 0.14 %, both compare favorably with the corresponding figures for 2002. Similarly, the delinquency ratio and charge-off ratio for credit card lending were 0.31 % and 0.69 % respectively, down from their peaks of 1.28 % and 3.78 % in 2002. All the above figures suggest that the retail banks were in pretty good shape, at least up to the outbreak of the financial tsunami. However, how bank asset quality will deteriorate as a result of the worst financial crisis since the Great Depression remains to be seen. In particular, it is uncertain if there would be a second or third wave of the financial tsunami.

Banks' asset quality reflects largely their management quality. Among the components of the CAMEL rating, management quality is the most difficult, if not impossible, to quantify. Traditionally local banks were more prudent and circumspective in their credit and investment policies. Modern bank management skills that emphasize profit growth and target, the scientific illusion of modern risk management techniques, fierce competition and globalization seem to have driven local banks towards more aggressive and risky lending and investment strategies than before. Needless to say, they are not immune from the latest financial tsunami. Fortunately, none of them has gone under because of the ordeal. However, the banks' latest report cards reveal that their risk management is far from perfect (to be discussed in the next paragraph). There is room for improvements in not only risk control but also internal control. For example, the former vice chairman of the Bank of China in Hong Kong was removed from his post in 2003 and later charged with financial crime. More recently in June 2008, the Bank of East Asia (BEA), the fifth largest bank in Hong Kong, disclosed a trading loss of HK$93 million due to unauthorized manipulation in equity derivatives trades by a trader; luckily it was not Nicholas Leeson this time, and BEA avoided the fate that befell Barings in 1995. While these are isolated events and banks in Hong Kong are well managed by international standards, the importance of good bank management and corporate governance in maintaining Hong Kong's status as an international financial center should not be overlooked.

Over the years 2004-7, banks were highly profitable because of improvements in asset quality and higher operational efficiency. At the end of 2007, bad debt charge dropped to a meager 0.04 % of total assets, down from 0.24 % at end-2002. But the figure climbed up noticeably to 0.16 %

as at the end of September 2008. Apparently, bank profits for the year 2008 were adversely affected because of the recent financial tsunami. For example, BEA's profits plunged by 99 % last year, whereas the two largest local banks – Hong Kong Banking Corporations and Hang Seng Bank – also registered decreases of 70 and 23 % respectively. However, their performance still compares favorably with most leading banks in the world. Indeed, banks in Hong Kong had maintained high profitability over the years, even during the Asian Currency Crisis. Return on assets was on an upward trend and averaged to 1.24 % in 2007 (table 1). Like other banking systems, profit margin from traditional banking continues to narrow. Over the last decade or so, there is a trend of narrowing net interest margin, which can be attributed to fierce competition among banks as well as interest rate deregulation. Since July 1964, deposit rates were administered by the HKAB (then known as the Exchange Banks Association) to avert the interest-rate war among banks in the late 1950s and early 1960s. To enhance the efficiency of the banking system and to promote fair competition among banks, the interest-rate cartel was gradually phased off starting October 1994 and finally completely abolished with effect from July 1, 2001. Interest rates are now determined by market forces. One impact of the interest rate deregulation is higher interest rate volatility, particularly when hot money moves in and out of Hong Kong amid speculation of appreciation of the Renminbi (Chinese Yuan) or reform of the linked exchange rate system. Despite higher interest rate risk, local banks have not reported to suffer from significant losses due to maturity mismatching in their assets and liabilities. To offset the adverse impact of narrowing net interest margin on profitability, banks now rely more on non-interest income as a source of revenue. The ratio of non-interest income to total operating income has risen from about 33 % in 2002 to over 50 % in 2007. Overall, banks continue to operate efficiently. The cost-income ratio, defined as operating expenses as a percentage of total operating income, has been maintained at around 45 % over the last few years.

Besides CAR, the liquidity of the banking system remains high most of the time. Over the years the liquidity ratio remained above 40 %, much higher than the statutory ratio of 25 %. Alternatively, the high liquidity is reflected by the low loan-deposit ratio, which declined from 63 % in 2002 to 54 % in 2008. This is largely because of local banks' prudent lending policies and partly because of weakened loan demand from the local economy, particularly in 2008. In recent years liquidity risk is not an area of grave concern for most banks, especially after the discount window arrangements were set up in 1998. The banking system is flooded with loanable funds, as reflected by the abnormally low deposit rates. For example,

the saving deposit rate offered by HSBC stood at 0.01 % as at the end of 2008, whereas the prime lending rate was 5 %. In fact, banks are more concerned about how to apply their sources of funds to maintain profit growth.

In sum, Hong Kong banks' performance is quite impressive in terms of the CAMEL rating, at least up to the third quarter of 2008. The year 2009 is expected to be an extremely difficult year for banks as the local economy is expected to decline by 2-3 % in terms of real GDP, the first recession in a decade. It is unsurprising that banks' asset quality and profitability are both positively related to the business cycle. Empirical evidence indicates that the higher the real GDP growth rate, the higher is bank profitability (Jiang et al. 2003, Wong et al. 2007). Indeed, the impressive performance of banks over the last few years can be partly attributed to a highly favorable macroeconomic environment since 2004 – sustained high real GDP growth, a declining unemployment rate, low inflation, balance-of-payments surpluses, and low volatilities in interest rates and the exchange rate (see Table 2 for the key macroeconomic indicators).

The coexistence of impressive bank performance and macroeconomic conditions reinforces the view recognized long ago that macroeconomic stability, price stability in particular, contributes to sound banking and is essential for financial stability (e.g., Schwartz 1988, Goldstein and Turner 1996). It also lends some support to the argument for a macro-prudential framework for banking financial supervision and regulation (Boris 2005, Laidler 2005). Simply put, the current Basel framework that focuses on micro-prudential supervision – with emphasis on the soundness of individual financial institutions – is insufficient to ensure systemic stability if macroeconomic stability is absent.

The stability of the Hong Kong banking system can, therefore, also be partly attributed to the stability of the monetary system. Since its inception in October 1983, the linked exchange rate system has by and large been successful in maintaining a stable macroeconomic environment for Hong Kong most of the time and has endured difficult periods such as the Tianman Square incident in 1989 and the Asian Financial Crisis of 1997-1998 (see, for example, Greenwood 2008 for details). Of course, the linked exchange rate system alone is inadequate to maintain banking stability. For instance, during 1982-1986 Hong Kong had one of its worst banking crises in its history, with failures and government takeovers of several local banks and deposit-taking companies. The crisis was due to a number of factors, like political instability, lax banking regulation, and unconstrained money supply growth (see Jao 1989 for details). While the linked exchange rate system succeeded in finding an anchor for the local currency, it is hard to imagine that it could avert a crisis whose seeds were sown a few years ago.

An aftermath of the crisis was the enactment of the Banking Ordinance of 1986, which became fully effective on September 1, 1988. The Ordinance strengthened the regulatory framework of the three-tier banking system and, more importantly, stipulated the minimum liquidity ratio and a minimum capital adequacy ratio of 8 %. Other international practices recommended by the Basel Committee were also adopted and enforced in subsequent years. The banking system has been quite stable for most of the time since the adoption of the Basel framework of banking supervision and the linked exchange rate system. This is particularly the case when compared with earlier banking development in the previous two decades.[4] From this perspective, it can be argued that the stricter banking regulation has contributed to banking stability, because there has never been any systemic banking crisis in subsequent years (Leuven and Valencia 2008). Even the Asian Currency Crisis did not cause any bank or AI to fall through.[5] In fact, the last bank failure in Hong Kong was the collapse of the Bank of Credit and Commerce International (BCCI) in 1991.[6]

Nonetheless, the collapse of BCCI triggered runs on Dao Heng Bank, Citibank and Standard Chartered Bank. Most people, particularly regulators, view bank runs as signs of banking instability, because bank runs are socially costly. More recently, there was a run on the BEA in September 2008 shortly after the outbreak of the financial tsunami. Therefore, as far as bank runs are concerned, the banking system is not entirely immune from instability despite the implementation of the Basel regulatory framework.

However, the latest run on BEA, however, may not necessarily be bad at all. On the contrary, it can be interpreted as a sign reflecting the fundamental soundness and stability of the Hong Kong banking system. First of all, the run was not contagious as it had not spread to other healthy banks and triggered a systemic panic. Instead, it can be viewed as an efficient run that exercises strong market discipline for enhancing overall banking stability in the longer run. One can say that unfounded malicious rumors were the culprits causing the run on BEA and also point the finger at rogue speculators. But the run was not entirely baseless. In fact, BEA had loans

[4] In its evolution into an international financial center, Hong Kong was occasionally hit by financial crises. Besides the banking crisis of 1982-1986, another system-wide banking crisis occurred in 1965 (see Jao 1974 for details), which led to the enactment of the Banking Ordinance of 1964. Prior to this regulatory reform, the Hong Kong banking system was highly unregulated, if not a pure free banking system (see, for example, Chu 1996).

[5] A large investment bank, Peregrine, and a handful of stock brokerage firms did go bankrupt. However, they were not subject to the supervision within the Basel framework like banks.

[6] BCCI's business in Hong Kong was solvent, although its overseas parent failed.

to Lehman Brothers and AIG, not to mention its losses from trading in derivatives and structured products. Apparently depositors, even small depositors, are not necessarily as naïve and totally uninformed as most regulators would have us believe.[7] Although bank runs are socially costly as they interrupt financial intermediation, the potential of bank runs has a social benefit as it provides incentives for prudential and good banking practices. Therefore, as long as they are runs on individual banks but not on the entire banking system, bank runs exercise market discipline to promote long run stability (Kaufman 1996).

All in all, both the Basel framework of banking supervision and the linked exchange rate system have contributed to maintaining and promoting banking stability. Nevertheless, the Hong Kong banking system has not been totally tranquil as bank runs did occur occasionally. From the perspective of efficient bank runs, these can be viewed as signs of market discipline in work rather than genuine instability. After all, banking crises and runs are not phenomena unique to free markets (Selgin 1994).

IV. SOME POTENTIAL PROBLEMS

Despite its track records in terms of stability, the Hong Kong banking system remains vulnerable to certain potential problems or risks.

First of all, the recent financial tsunami reveals that the Basel supervisory framework cannot fully guarantee financial stability. Ironically, the financial tsunami started to raise its ugly head in the year when Hong Kong adopted the Basel II framework. While some commentators and economists have pointed the finger at financial liberalization over the last two decades as a cause for the latest financial meltdown, it is undeniable that the U.S. financial system is one of the most heavily regulated in the world and the U.S. regulators are pioneers in not only adopting the Basel II framework but also introducing many other financial regulations, such as the well-known Sarbanes-Oxley Act in 2002, that have significant impacts worldwide. Yet the U.S. banking system was ironically the source of the recent financial storm that swept through financial markets all over the world. Needless to say, Hong Kong is not immune from the recent financial turmoil, as reflected by the reported losses of some local banks. Although Hong Kong still fares quite well when compared with most other countries, recent developments in the local financial sector has aroused grave concerns.

[7] Information asymmetry does not necessarily lead to market failure and hence can justify banking regulation (e.g. Chu 1999). Some economists may go even further to argue that banking crises are evidence of excessive risk-taking rather than imperfect information.

Take the case of Lehman Brothers' structured products – callable credit-linked notes (also commonly known as mini-bonds in Hong Kong) – as an example for illustration. These high risk products were widely marketed by banks and brokers to a broad range of the general public. A total of 19 local banks have marketed HK$12.7 billion worth of mini-bonds to some 34,000 investors since 2002. After the collapse of the Lehman Brothers in September 2008, the HKMA and the SFC received a record volume of complaints about banks misrepresenting these financial products as low risk alternatives to deposits when in fact the mini-bonds were not traditional bonds but rather high risk structured products or financial derivatives. Even bankers who sold these products find it difficult to assess the underlying value and risk, not to mention small investors. Regulators fare no better. This incident discloses several issues of concern.

First, those value-at-risk models or other models commonly used by financial institutions in risk management often fail to assess the risk exposures accurately and in a timely manner. Most, if not all, models developed in the modern finance literature is based on measurable risk with parametric probability distributions rather than genuine, non-measurable uncertainty in the Knightian sense (Knight 1922). Even if "risks" are quantifiable, these models are subject to the celebrated Lucas critique (Lucas 1976) or Goodhart's Law (Goodhart 1984) because of constantly and rapidly changing financial and economic conditions.[8] For example, BEA reported a plunge in its profit for 2008 by 99 % because of substantial write-offs due to its holdings of collateral debt obligations and structured investment vehicles. The bank is definitely not alone in miscalculating risk. While finance has evolved into a highly quantitative and seemingly scientific discipline after WWII, it is still far from perfect in making accurate predictions like other natural sciences. Ironically, Long Term Capital Management (LTCM) went under despite the presence of a couple of Nobel laureates in economics in its senior management. The limitations of the risk assessment techniques and models suggest that Pillar II may not live up to expectations.

Second, it has long been recognized that regulators' financial expertise fails to catch up with the rapid pace of financial innovations in the marketplace. Consequently, there are time lags for regulators to recognize potential or actual problems and to formulate and implement appropriate preventive or remedial measures. In the mini-bonds case, for example, their high risk was unrecognized for years until the collapse of the Lehman Brothers, even though the HKMA defended its position by claiming that it had given

[8] Both the Lucas critique and Goodhart's Law make the observation that previously estimated statistical relationships tend to be unstable and collapse because of regime changes or because pressure is put upon such relationships for control purposes.

out warnings beforehand. Similarly, the Chief Executive of the HKMA was recently criticized for either failing to effectively monitoring HSBC and misjudging the bank's fundamentals or misleading the general public by saying at a Legislative Council meeting that market prices (of HSBC shares) might not mirror fundamentals (Mingpao, March 4 2009).

The mini-bonds incident has also brought up a closely related issue – how should financial institutions be regulated and who should be held responsible and accountable? Under the current institutional based regulatory regime, AIs are directly regulated by the HKMA but they are also subject to the regulations of SFC. The mini-bonds debacle suggests a lack of coordination between the HKMA and the SFC in supervising AIs' securities operations and also a grey area in the supervision. As an aftermath of the mini-bond debacle, three approaches are recommended to the Hong Kong Government: (i) the adoption of an Integrated Approach, i.e., one single universal regulator responsible for supervising all financial institutions, (ii) a Twin Peaks Approach (Taylor 1995),[9] and (iii) to refine the current regulatory structure so as to cater for market development (SFC 2008). A review of the current regulatory regime is needed in order to maintain Hong Kong's status as an international financial center. And it is better late than never.

Not only the responsibilities of the regulators are somewhat imprecisely defined, as the mini-bonds debacle reveals, but there is also to some extent a lack of transparency in that certain parts of the investigation report are not disclosed to the general public. The Hong Kong Government's rationale for doing so is to maintain the stability of the financial system and to protect the public interests. But the public interest argument can sometimes be an excuse or political expediency for regulators to promote their self interests (e.g. Kane 1990, Boot and Thakor 1993). The lack of transparency also existed in the private sector. For instance, HSBC failed to issue an earnings warning in a timely manner against a backdrop of poor performance for 2008. To be fair, the regulatory authorities have over the years followed international best practices to pursue plans to raise transparency about their policies and requirements of public disclosure. But the latest

[9] The Twin Peak Approach argues that the traditional institutional approach to financial regulation is no longer optimal, because it is more difficult to distinguish between banking, securities and insurance businesses nowadays than before as a result of financial innovations. This approach advocates the establishments of two independent regulatory agencies – one responsible for prudential regulation so as to maintain systemic stability, and the other for protection of consumers. However, there are at least two problems under this approach. First, should all financial institutions be supervised by one single regulator? Second, should the central bank be responsible for prudential regulation? See Goodhart and Schoenmaker (1995) for details.

events seemingly contradict the spirit of Pillar III that underscores the crucial role of market discipline and transparency. Political factors may hinder the effectiveness and efficiency of the Basel II framework.

It can be argued that full information disclosure can be suboptimal. For example, banks' CAMEL ratings are not disclosed to the public because regulators fear that such information would trigger depositors to run on banks with poor ratings, thus jeopardizing banking stability. Given an extremely high degree of uncertainty because of the financial tsunami, the selective public disclosure of information at the discretion of the regulator authorities can be justified on grounds that the public would lose confidence in the financial system and act inappropriately if they misinterpreted the disclosed information.

Undoubtedly, banking is a business of trust. In view of the turbulence in the international financial markets following the financial tsunami, the DPS extends full deposit coverage until the end of 2010 so as to reinforce depositors' confidence in placing deposits with banks well before doubts develop. Historical evidence indicates that deposit insurance has a therapeutic effect in ending financial crises and restoring depositors' confidence (e.g. Friedman and Schwartz 1963). Nonetheless, it also tend to have a destabilizing effect in the long run as it gives rise to increased moral hazard and lures banks toward excessive risk taking (Chu 2003). Even though the regulatory authorities claims that the moral hazard problem can be reduced by proper design of the protection scheme, effective banking supervision, better corporate governance and high levels of financial disclosure by banks, the temporary measure did arouse some concerns.

The moral hazard problem is associated with not only explicit deposit insurance scheme but also the regulator's policy stance regarding the broad issue of rules versus discretion (e.g. Barro and Gordon 1983), also known as rules versus authority in the earlier literature (Simons 1936). The discretionary, temporary measure of full deposit coverage may be interpreted, whether correctly or not, as the regulatory authorities' reluctance to allow any banking instability or bank failure, especially if a bank is too big to fail (e.g. Mishkin 2006). Even later when the full deposit coverage expires in 2010, banks may still have perverse incentives to take excessive risk if they expect the HKMA to offer implicit deposit insurance or to bail out banks in financial distress.

Of course, economists and policymakers in favour of discretion or authority would argue that the financial tsunami is such an extraordinary event that extraordinary measures may be required to boost the confidence of the general public and that it would be overly rigid to adhere to rules as the consequences could be disastrous. This argument has some merit. Nonetheless, it does not settle the controversial issue of time inconsistency

in the implementation of monetary and banking policies, not to mention the more crucial and perennial problem of how to make regulators accountable or who regulate the regulator. By law, the Chief Executive of the HKMA is appointed by the Financial Secretary of the Government. But there are no explicit rules and formal procedures governing the appointment and terms of appointment of the Chief Executive. The current Chief Executive, Mr. Joseph Yam, has been in office since the HKMA was set up in 1993. His retirement in September 2009 may cast uncertainties about the possibility of monetary and banking instability due to a regime change.

One of the main concerns is whether the new Chief Executive will continue to commit to the current linked exchange rate regime, which has undeniably contributed to monetary and banking stability. However, the Hong Kong dollar had been subject to several speculative attacks when there were outbreaks of major economic or political events domestically or internationally. These include, among others, the 1987 stock market crash, the Gulf War in 1990, and notably the Asian Currency Crisis during which the overnight interest rate soared to a record high of 300 % in October 1997 and triggered the most severe economic downturn in Hong Kong's postwar history (see Greenwood 2008 for details). Indeed, it has already been pointed out a decade ago that the current linked exchange rate system may no longer be optimal for the local economy because of Hong Kong's increasing economic and political ties with China (Jao 1998). Although skyrocketing interest rates and high volatilities are unlikely to recur after the introduction of the Liquidity Adjustment Facility in 1998, reform of the current linked exchange rate system to maintain a stable external value of the Hong Kong dollar and, more importantly, a stable macroeconomic environment on the one hand and a smooth integration with China on the other remains an unfinished business.

As a small open economy with high degrees of capital mobility, Hong Kong will continue to be subject to shocks from international markets in the years to come. In fact, the lackluster performance of the local banks in 2008 is to a large extent due to adverse developments in international financial markets, the US market in particular. Following the financial tsunami, a U-turn is expected which will reverse the global trend of financial liberalization in the previous two decades to tighter financial regulation. Nevertheless, financial globalization will remain. As an international financial center, Hong Kong should strengthen its communication and cooperation with other banking regulators in the world, especially the China Banking Regulatory Commission. This is not only a lesson that regulators should learn from the financial tsunami but also an urgent problem to be tackled in order to rebuild the international financial architecture.

V. CONCLUSION

This chapter has examined the experience of Hong Kong in implementing the Basel Accord of banking supervision. Because of limited space, the coverage here is by no means exhaustive and it is also not possible to give an in-depth analysis of each of the topics covered. Furthermore, a new regulatory regime may take years before its full impact falls on the entire banking system. As Basel II has been enforced in Hong Kong since 2007 only, it may be premature at this stage to give a thorough assessment of its effectiveness and efficiency in maintaining and promoting banking stability. In particular, the regulatory impact is to some extent distorted by an extraordinary event – the financial tsunami – which is not under the control of the regulators in Hong Kong. Nonetheless, Hong Kong has evolved from a relatively free banking system into a regulated banking system that consistently follows the Basel framework, from the mainly capital-based Basel I in the 1988, to a risk-based approach when the New Millennium began, and finally to Basel II in 2007. Therefore, there are still some lessons from Hong Kong's experience that may be valuable to economists, regulators and policymakers in other countries.

First of all, although the Basel regulatory framework was designed by regulators of industrial countries, Hong Kong's experience indicates that it can also be successfully adopted by emerging economies or newly industrialized countries. Of course, it should be emphasized that there is no one-size-fits-all regulatory regime. For example, there is a global trend for countries to follow the "best practice" as recommended by the International Monetary Fund to establish explicit deposit insurance schemes. But empirical evidence indicates that deposit insurance tends to be destabilizing for countries with weak institutional environments but stabilizing for countries with strong institutional environments (Demirgüç-Kunt and Detragiache 2002). Therefore, the so-called "best practices" as recommended by the Basel Committee are not necessarily the best for some countries.

After the implementation of the Basel Accord in 1988, the Hong Kong banking system has become more stable than before as there have been less bank failures and no systemic banking crisis. But the stability is not due to banking regulation alone. Hong Kong's linked exchange rate system that has provided a stable macroeconomic environment and the rise of China as a major world economic power have also been contributing factors. By the same token, the strong regulatory framework and well-capitalized banks have contributed positively to Hong Kong's rise as an international financial center. But it is hard to imagine how Hong Kong would have succeeded without the other contributing factors like macroeconomic stability, political stability, the China factor, a high degree of economic freedom, etc

(see Jao 1997 for details). Hong Kong's experience after the introduction of the linked exchange rate system also highlights the importance of a macro-prudential framework in maintaining banking stability. The current Basel framework that emphasizes micro-prudential supervision may be inadequate in promoting banking stability. The micro-prudential and macro-prudential approaches are complements.

To be sure, the micro-prudential framework did contribute to banking stability in Hong Kong. Apparently banks in Hong Kong did quite satisfactorily to weather the financial tsunami and they did not need any capital injections from the government, thanks to their strong capital bases in conformity with the capital adequacy requirements under both Basel I and II. However, there is no room for complacency. The mere existence of capital adequacy ratios and risk measurement and management techniques do not cause financial crises to extinct. On the contrary, they might have been the culprits of the recent financial tsunami when they misled bankers and regulators to have a scientific illusion and hence believe that all risks were completely under control.

Banking stability cannot rely on government regulations alone. A banking system is unlikely to remain stable if it stands on only two pillars – Pillars I and II – of the Basel II framework. The banking system is equally, if not more, unlikely to be stable if it stands on the third pillar only because market failures do occur from time to time. However, Hong Kong's evolution into an international financial centre, its financial deepening and miraculous economic growth, particularly during the 1970s and 1980s, can be attributed to spontaneous market forces more than governmental design. Its success is by no means costless – efficiency was gained at the cost of financial instability.

From the point of view of society, there is a tradeoff between financial efficiency and stability. Market plays a vital role in promoting both financial efficiency and stability. A banking system is more likely to be stable if it stands on all three pillars of the Basel II framework. And more importantly, all three pillars should have more or less the same height and strength. If one pillar becomes disproportionately shorter or weaker, it will rock or even topple the banking system.

Last but not least, Hong Kong's recent experience suggests that three strong pillars are needed for the local banking system to withstand the financial tsunami or similar external shocks. But they may not be sufficient. Given financial globalization, banking systems in the world are tied to each other and do not stand alone on their own. When one of them collapses, there are negative spillover effects on the others. Better communication and cooperation among regulators at the international level are needed for the success of Basel II.

How the Hong Kong banking system would be further adversely impacted by the recent financial tsunami remains uncertain at the time of writing. What is certain is that there is room for the HKMA to enhance its supervisory framework (see Carse 2008 for details). The reform issues have not been addressed here because of limited space. Similarly, the issues raised in this chapter may not have been dealt with thoroughly or even remain unanswered. There is no pretense here – regulatory issues are always controversial. Therefore, I do not want to conclude whether Hong Kong is a successful case of the implementation of the Basel II framework. In fact, based on cross-country empirical evidence, Barth et al (2006) have already argued convincingly that following Basel II may not be the optimal strategy for countries with weak institutional environments. It suffices here, I hope, if Hong Kong's experience can offer some lessons or provide some food for thought for economists and policymakers who are involved in banking regulation and reform.

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Appendix 1

Table 1

Performance of the Hong Kong Banking System, 2002-2008

Year	2008	2007	2006	2005	2004	2003	2002
Capital Adequacy							
Car	13.8*	13.4	15.0	14.9	15.4	15.3	15.7
Asset Quality (As A % Of Total Loans)							
Pass Loans	96.57	97.59	96.65	95.97	93.76	89.53	88.87
Special Mention	2.19	1.57	2.24	2.66	3.99	6.53	6.09
Classified Loans	1.24	0.85	1.11	1.38	2.36	3.93	5.04
– Substandard	0.50	0.34	0.44	0.58	0.98	1.42	1.86
– Doubtful	0.67	0.45	0.55	0.55	0.88	1.74	1.97
– Loss	0.07	0.06	0.12	0.25	0.40	0.77	1.21
Loans Overdue	0.49	0.36	0.54	0.68	1.05	2.04	2.77
Rescheduled Loans	0.19	0.20	0.26	0.23	0.44	0.83	0.61
By Major Type:							
Mortgage Loans							
– Delinquency Ratio	0.05	0.11	0.20	0.19	0.38	0.86	1.06
– Rescheduled	0.14	0.20	0.26	0.35	0.47	0.52	0.46
Credit Card Loans							
– Delinquency Ratio	0.35	0.36	0.39	0.39	0.46	0.94	1.28
– Charge-Off	0.77	0.68	0.78	0.68	0.94	2.05	3.78
Earnings / Operation Efficiency							
Return On Assets (After Tax)	n.a.	1.24	1.01	0.97	0.97	0.81	0.81
Bad Debt Charge/Ave. Total Assets	0.16 *	0.04	0.03	0.01	0.01	0.24	0.24
Net Interest Margin	1.84	1.31	1.29	1.18	1.18	1.41	1.52
Non-Interest Income/ Total Operating Income	n.a.	52.1	46.7	45.7	44.4	37.1	32.6
Cost Income Ratio	45.2	46.6	50.8	50.4	48.7	45.8	46.3
Liquidity							
Liquidity Ratio*	45.0	51.0	47.7	45.9	43.7	46.2	46.9
Loan-To-Deposit	54.2	50.5	51.9	56.8	55.8	57.1	62.6

Sources: 1. Hong Kong Monetary Authority.
2. Census and Statistics Department, Government of Hong Kong SAR.
3. KPMG Banking Survey Report 2007.

Notes: 1. All figures are in percentage (%).
2. *: figures at the end of September.
3. n.a.: figures not yet available.

Table 2

Selected Macroeconomic Indicators, 1998-2008

Year	2008	2007	2006	2005	2004	2003	2002
Real gdp growth	2.5	6.4	7.0	7.1	8.5	3.0	1.8
Unemployment	3.4	4.0	4.8	5.6	6.8	7.9	7.3
Inflation	4.3	2.0	2.0	1.0	–0.4	–2.6	–3.0
Balance of payments/gdp	11.9*	7.1	3.2	0.8	2.0	0.6	–1.5
Interest rates							
– Prime rate	5.0	6.85	7.75	7.64	5.0	5.0	5.0
– 6-month hibor	1.48	3.40	3.88	4.31	0.53	0.19	1.47
Money supply growth							
– M1	4.7	25.4	13.1	–10.3	17.2	39.8	14.6
– M3	2.7	20.6	15.5	5.2	8.6	8.3	–0.9
Effective exchange rate index	87.1	91.9	96.1	97.4	98.3	100.7	104.0

Source: Census and Statistics Department, Government of Hong Kong SAR.

Notes: 1. All figures are in percentage (%), except the Effective Exchange Rate Index.
2. *: figure at the end of September 2008.

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BASEL II: PROBLEMS AND USAGE IN NATIONAL BANKING SYSTEMS PERSPECTIVES – THE CASE OF SLOVENIA

1. INTRODUCTION

In the last decade Slovenian banking sector was facing several challenges. One of the most important milestones for the whole national economy was the adaptation of euro in 2007. The transition to and exchange of currency proceeded smoothly whilst households and economy adjusted quickly to the new currency. There were some cases of prices being "rounded up", particularly in the service and catering sectors (Banka Slovenije 2008b).

Slovenian banks experienced the euro adaptation process from different point of view. In adjusting their computer operational systems banks were supported by the Bank Association of Slovenia and Banka Slovenije. With the euro implementation, banks have faced further changes. They had to properly adjust liquidity risk management and liquidity policy and foreign currencies management since domestic entities still had an important part of their financial assets in foreign currencies even thou the relative share of savings had been improving on behalf to Slovenian tolar. Additionally, also monetary policy instruments have changed. Slovenian banks had to learn and adapt to new instruments and procedures, which had been another challenge. On the other hand there were benefits; it was easier for banks to manage foreign exchange risk, since the greater part of banks debts is now in domestic currency.

In what follows, we will give a detailed description of the banking sector in Slovenia. First, the main characteristics of the banking system will be described by analyzing the payment, deposit and credit functions of the banking system. In the next chapter, the features of the bank control realization will be given, where we will provide information on most important institutions in the banking sector. Chapter four is dedicated to the indicators

of the banking system's development. Chapters five and six are devoted to the introduction and implementation peculiarities of Basel II. Concluding remarks and comments on the current financial crisis are given in the final chapter.

2. CHARACTERISTICS OF THE BANKING SYSTEM

Slovenian banks are a fundamental part of its national economy. Banks provide a broad range of services to wide range of customers. Three major functions of banking are: the payments, deposit and credit function. Throughout our examination we will discover how well are these three functions provided by Slovenian banks and understand the current state of the banking sector in Slovenia.

2.1. The payment function of the Slovenian banking system

The payment function in Slovenia is performed through the combination of payment systems, where cooperation of central bank, commercial banks and some other entities is essential. A core task for payment systems is to facilitate the settlement of monetary liabilities arising from the business activities of entities in markets for goods and in financial markets. Users of payment systems expect their payments to be carried out securely, quickly and efficiently, allowing debtors to settle their liabilities to creditors via the systems. In the widest sense, payment systems consist of the institutions, rules, procedures, instruments and technology that facilitate the transfer of money to the widest range of users. The main elements within this are the banking services and the infrastructure of the banking system – the commercial banks, the central bank and the links between them. The current payments framework in Slovenia is defined by the Payment Transactions Act (PTA; Official Gazette of the Republic of Slovenia No 30/2002), which defines the basic features of domestic and cross-border payment operations, as well as the minimum conditions for payment service providers in Slovenia (Banka Slovenije 2008c).

In Slovenia, there have been several reforms of payment system in the last years. The current payment system solution derives from the two pillar system. In his first version it was introduced in 1998. For processing urgent and large-value transfers there was Slovenian Inter-Bank Payment System (SIBPS), while for small-value there was introduced Giro Clearing system (a payment system with settlement on a multilateral net basis). Both systems were operated by Banka Slovenije. The evolution of payment system

was in the following period dominated by further integration processes to the EU and the Eurosystem.

Up to now the first pillar of the payment system is the system for processing large-value payments. After the adoption of euro on 01.01.2007, SIBPS system ceased to operate and was replaced with TARGET. The national connection to this system was implemented via "Fallback solution" – RTGSplus system (Real Time Gross Settlement system), with the help of Deutsche Bundesbank. Besides being hosted in the German RTGS system as a core processing Banka Slovenije also operated its proprietary home accounting module (PHAM), mainly for the settlement of ancillary systems and of standing facility transactions after TARGET closed at the day-end. This solution didn't exist for long, since on 19.11.2007 Slovenia with the first group of countries mitigated to TARGET2 and TARGET2-Slovenia system started operating. TARGET2-Slovenia is part of TARGET2 multiplicity of payment systems. As already SIBPS and RTGSplus also TARGET2-Slovenia provides real-time gross settlement for payments in euro, with settlement in central bank money. In the TARGET2-Slovenia system also net claims and obligations arrised from ancillary systems are settled where Banka Slovenije acts as a settlement agent (ECB 2007).

The second pillar of the payment system in Slovenia provides processing of small-value payments – Giro clearing system which is a multilateral net payment system. This is an electronic payment system that allows for the execution of small-value credit payment orders between the participants themselves and the execution of small-value credit payment orders (up to EUR 50,000) as part of the payment services provided by participants for their customers. The settlement of the net positions of the Giro Clearing system participants is performed in TARGET2 via settlements accounts in TARGET2 system (PM account), which is a prerequisite for the participation in Giro clearing system. Payment orders are processed in the Giro Clearing system on the principle of multilateral clearing. The basis for the settlement is the calculation of mutual net claims and net liabilities. The system collects batches of small-value credit payments every hour. Each collection is followed by payment processing, i.e. net positions are calculated and participants are informed accordingly. There are five settlement cycles every two hours between 8 am and 4:30 pm on every working day, except on a Slovenian national or TARGET holiday. The information sent to the participant in-between helps them to manage their liquidity exposure to ensure that they can settle their net positions at the following settlement cut-off. At the fifth settlement cut-off, participants are debited/credited within the settlement process. Those with a multilateral net debit position are directly debited by Banka Slovenije, which acts as a settlement agent.

After debiting all debtors, Banka Slovenije credits the settlement accounts of all participants with a net credit position (ECB 2007 and Banka Slovenije 2008c).

For the processing of non-cash payment, there are several solutions in place. For credit transfers, which are still the dominant form of non-cash payments, are used payment orders. They are presented electronically or in paper form and are used in particular by legal entities and investors to settle their contractual financial obligations. Cheques and direct debit are in Slovenia rarely used. But there are various types of payment cards, which have still significant growth in the use, debit credit, retailer or prepaid cards. Debit cards issued by credit institutions can be used at ATMs and POS terminals. The most widely used card with a debit function in Slovenia is the co-branded BA/Maestro card. Credit cards (such as Eurocard, MasterCard, Visa, American Express, Diners Club) are issued by many bank or other non-bank contractors to the principal and are widely accepted. There are several retailer card issued by non-credit institutions and are generally used for making payments on the premises of the issuer. Processing and clearing of ATM/POS transactions, payment cards and processing of other standardized payment instruments (special payment orders, special paper-based debit orders, direct debits, direct credits and standing orders) is done by the company Bankart. It was founded in December 1997 and is owned by the banks. Bankart's functions are agreed upon among the banks, in areas where common interest prevails over competition (ECB 2007 and Banka Slovenije 2008c).

Slovenia as a Eurosystem member is participating in the Single Euro Payments Area (SEPA) project, which will become reality when all euro payments in the euro area are treated as domestic payments, and when the current differentiation between national and cross-border payments will fully disappear. The SEPA national implementation plan was prepared by the Bank Association of Slovenia, while Banka Slovenije helped to establish the needed organizational framework (ECB 2006).

2.2. The deposit function of the Slovenian banking system

Bank's costumers deposit their money in the bank, since this is a safe way to store money and at the same time earn interest on it and even being able to withdrawn the money under specified conditions. For less (or no) interest costumers can withdraw money almost any time anywhere in the country or even internationally. Providing described services banks fulfill what we call 'the deposit function' to the national economy. Accepting deposits from the public is in Slovenia under the Law on Banking (Official

gazette of RS, No. 131/06) allowed only to banks and savings banks with license from the Banka Slovenije. Accepting deposits from the public means accepting deposits from uninformed persons which is defined as a natural or legal person who does not possess the appropriate professional knowledge and experience required for evaluating risks connected with payment of deposits. An uninformed person shall be deemed to be any natural or legal person unless the recipient of payment proves otherwise (Law on Banking RS 2006).

Accepting deposits gives banks an important role in the economy because of their involvement in the payments system, their role as intermediaries between depositors and borrowers, and their function as agents for the transmission of monetary policy. By the nature of their business, banks are exposed to liquidity and solvency problems, among others, because they transform short-term liquid deposits into longer-term, less-liquid loans and investments. The risk is expected to be properly managed so that the potential for depositors to suffer losses are minimized. However, it is not impossible for banks to fail. The need to mitigate contagion risks, lead countries to establish financial safety nets. Current financial crisis has literally reminded on the importance of deposits guarantees in the modern economies. A financial safety net usually includes prudential regulation and supervision, a lender of last resort and deposit insurance.

In Slovenia a guaranteed deposit of an individual depositor is the net balance of the deposit on the day when the bankruptcy proceedings for a bank were initiated. The full net amount is guaranteed from November 2008 until 31 December 2010 as a response to the decreased trust in the banking system. Before that period the maximum amount of a guaranteed deposit was limited at 22.000 euro. Net balance of an individual depositor's deposit is the balance of all his deposits reduced for all liabilities to the bank. Guaranteed are only deposits which are based on one of the following: a contract on managing a transaction account, a savings deposit, a money deposit, a certificate of deposit or bills provided that they are issued as registered securities. In the event of a merger of two or more banks, the banks participating in the merger are obliged; within five working days of the date the entry of the merger in the register is published, to notify their depositors that the sum of their deposits may exceed the amount of the guaranteed deposit due to the merger (Banka Slovenije 2008c and FSF 2001).

Banks and the Republic of Slovenia guarantee to repay guaranteed deposits held in a bank for which bankruptcy proceedings were initiated. Assets required to repay guaranteed deposits in a bank for which bankruptcy proceedings were initiated shall be paid by other banks and branches included in the deposit guarantee scheme in the Republic of Slovenia as well as by the Republic of Slovenia (Banka Slovenije 2008c).

2.3. The credit function of the Slovenian banking system

Third function of banking is its credit function, which means that the banking system provides credit to economic subjects, such as households, micro, small and medium enterprises, corporates, banks and securities firms, sovereigns and public sector entities and others. From the perspective of national economy credit is essential as source of financing both investment and consumption. Throughout the world loans are the most important sources external financing for business (Mishkin 2007). The same is true for Slovenia. Loans are the prevailing method of corporate financing and display a rising trend. In 2007 the proportion of current corporate financing accounted for 71 % by loans. Alongside the predominant role of banks in credit financing, recently the increased business-to-business financing was encouraged by high economic growth. While loans and trade credits are prevalent among current corporate financing, in the breakdown of corporate financial resources, prevalent is equity, which accounted for 51 % of the total in 2007. Changes in the breakdown of corporate financial resources are defined more by stocks value changes than by actual transactions in equity (Banka Slovenije 2008a).

While accepting deposit from the public is under the under the Law on Banking (Official gazette of RS, No. 131/06) allowed only to banks and savings banks with license from the Banka Slovenije, giving credit may be performed by non-banks, too despite the definition of lending as banking services in the law. Slovenian banks grand credit to all usual categories in the national economy, households, micro, small and medium enterprises, corporates, banks and securities firms, sovereigns and public sector entities and others. Slovenia's level of market concentration is significantly higher than the euro area average, however the gap is diminishing. Measuring the market concentration in bank operations with non-banking sectors by Herfindahl-Hirschman index shows a decline from 1.393 in 2003 to 1.152 in 2008 for loans to non-banking sectors (Banka Slovenije 2008b).

Following the usual risk management theories in aspect of diminishing loss in case of debtor default, also in Slovenian banks mostly use collateral to secure credit to corporate and business. The form and quality of collateral, as the property that is pledged to the lender to guarantee payment in the event that the borrower should be unable to meet the payments, affects the quality of the credit portfolio, and thus banks' exposure to credit risk. There is uncollateralized (unsecured) debt in the Slovenian banking as well, mostly in form of extremely low-value consumer credit or special cases in the business lending. In 2007 the proportion of unsecured loans amounted 26.2 % for corporate loans and 4.5 % for housing loans to households (consumer credit is here not included) (Banka Slovenije 2008a).

In Slovenia the loan-to-value ratio for the required collateral is based on credit rating (debtors' probability of default – PD) for corporate sector, while for households the ratio is likely to be fixed. The average loan-to-value ratio for corporate loans secured by real estate amounted 81.4 % in 2007 (63.3 in 2006) and for loans secured by securities 88.7 in 2007 (86.7 in 2006). For household loans for non-housing and housing purposes the average loan-to-ratio fluctuated between 50 and 60 for real estate as collateral while for securities as collateral the ratio was 69.5 for non-housing loans and 93 for housing loans (Banka Slovenije 2008a).

Among newly approved loans in 2007 45.6 % of all new loans to non-banking sectors is unsecured. The use of real estate as collateral follows a decreasing trend and amounted 19.3 % in 2007, while the use of securities as collateral for newly approved loans was increasing sharply and amounted 14.3 % in the beginning of 2008. A small part of new loans to non-banking sectors is secured by insurers companies, which amounted 2.4 % in 2007 (Banka Slovenije 2008a). Insurance companies were playing an important role in the history of Slovenian banking sectors, since they insured a large proportion of loans in the past. Among loans to households the greater part of collateral is real estate. Using securities as collateral for both corporate and household's loans exposes banks to credit risk in greater manner, since the value of such collateral is much more volatile than other forms of collateral and the purpose of such credit was often speculative investment in further securities.

Slovenian banking sector recorded in the last years' period extremely high credit demand growth from both households and business, which was driven by high economic growth. The annual growth rate of household loans amounted in 2003 8 %, and reached in 2007 stabilization of year-on-year growth at 27 %. Financial crises affected Slovenian banking sector in credit growth as well, so the annual growth rate in 2008 for loans to households diminished. Lending to corporate sector has been growing with high annual growth rates as well and reached at year-end 2007 year-to-year growth rate of 35.9 %. However, the gradual slowdown was noticed in corporate lending in 2008 as well (Banka Slovenije 2008a).

The sharp increase of loans in Slovenian banks was in smaller part a result of mergers and acquisitions activity, in connection with the ownerships consolidation in the Slovenian economy, which is actively taking place in the last few years' period. The annual growth rate for OFIs and selected non-financial corporations assumed to be involved in M&A activities in reached in 2007 for other financial corporations about 50 % and for non-financial corporation almost 150 % (Banka Slovenije 2008a).

3. FEATURES OF THE BANK CONTROL REALIZATION

Banking sector is one of the most regulated sectors of the economy. The main institution providing the regulation, supervision and governance over the Slovenian banking sector is the national central bank – Banka Slovenije. In some particular issues the competences share other institutions for governing and overseeing financial markets, such as the Ministry of Finance (MF) or the Securities Market Agency (SMA). There is several institutions cooperation among each other in banking sector issues of Slovenia. Besides already mentioned central bank, MF and SMA, there are Bank Association of Slovenia, the Agency for Public Legal Records and Public Services, the Tax Office and the Competition Protection Office. We will examine some of them and their role in the banking sector further.

3.1. Central bank of Slovenia – Banka Slovenije

Banka Slovenije was established as the national central bank by the Law on the Bank of Slovenia, adopted on 25.06.91. It is independent and it is autonomous in disposal of its own assets. Banka Slovenije and the members of its decision-making bodies are independent and are not bound to any decisions, positions or instructions of state agencies or any other bodies, nor shall they seek their instructions or guidelines and must answer directly to the Slovenian parliament. Banka Slovenije is a member of the ESCB and from the introduction of euro on 01.01.2007 member of the Eurosystem. Slovenian legislation had to be changed according to those memberships. In 2002 was adopted a new Law on Banka Slovenije, which introduced the necessary changes owing to the Banka Slovenije's ESCB entry. Further changes to the Law were introduced in 2006 due to adopting the euro and joining the Eurosystem (Banka Slovenije 2008c).

3.1.1. Banka Slovenije's objectives

Banka Slovenije performs the single monetary policy of the Eurosystem in accordance with the decentralization of the Eurosystem's monetary policy implementation, co-manages the official foreign reserves of the Member States in accordance with the Treaty on establishing the European Community. Besides objectives, which are closely related to the Eurosystem membership, Banka Slovenije performs several other objectives. Among others it promotes the smooth operation of payment systems, strives to ensure financial stability with supervision, guidance and role as "lender of the last resort". Based on the legislation, which defines the Banka Slovenije's

lending for needs not related to the implementation of monetary policy, the Banka Slovenije may act as a lender of last resort (Banka Slovenije 2008b).

Banka Slovenije is also authorized to perform other tasks defined in legislation: it may hold accounts and perform payment services for qualified institutions (state bodies, public entities, participants in the money market, other financial institutions, the KDD (and stockbrokers) and is explicitly authorized to perform oversight functions for payment and settlement systems. On the basis of the Law on Banka Slovenije, Banka Slovenije administers financial and fiscal matters for the state through the single Treasury account which is held with Banka Slovenije but kept separate from Banka Slovenije's own financial assets (Banka Slovenije 2008c). For this analysis the most important objective of Banka Slovenije is banking supervision.

3.1.2. Banking supervision by the central bank

This right (and obligation) is given to Banka Slovenije under the Law on Banking (Official gazette of RS, No. 131/06). When supervising Slovenian banks, the central bank takes into account all other regulations, administrative rules and guidance set out by EC, CEBS, BCBS or IMF. All needed information regarding the texts of laws, regulations, administrative rules and general guidance adopted in the field of prudential regulation and supervision which are relevant to credit institutions in Slovenia is published. Supervisory disclosure as a comprehensive policy of transparency aims to make information related to prudential supervision available in a timely manner to all interested parties, including credit institutions, investment firms, market participants and banks consumers.

With its supervision Banka Slovenije attempts to improve financial stability domestically and in that way contributes financial stability internationally. Banka Slovenije is in charge of licensing any new and existing company, which is a bank (uses the term "bank") and provides banking services. Bank's customers can recognize the central bank's permission by the green sticker on the front door of every branch. Banks and savings banks in Slovenia are granted authorizations to provide banking services, mutually recognized services and additional financial services. Banking services mean accepting of deposits from the public and lending for the banks' own account. A bank may only be organized as a public limited company or European public limited company (Law on Banking RS 2006).

Besides proving the lowest amount of a bank's initial capital (which is 5.000.000 euro) licensing process includes also the review of the banking organization's ownership structure, directors and senior management, its operating plan and internal controls, projected financial condition etc. A bank

may opt for a two-tier management system including a management board and a supervisory board or a one-tier management system with a board of directors. Members of the bank's management board may only be appoint persons having appropriate professional qualifications and possessing the characteristics and experience necessary for managing the bank's operations and who have not been convicted, by a final judgment (Law on Banking RS 2006).

Banka Slovenije also issues authorizations to obtain a qualifying holding in the capital of a bank, authorization to conclude a shareholders agreement and authorization to hold office as a member of a bank's management board. The decision to issue or reject authorization is taken by the members of the Governing Board of the Bank of Slovenia based on the opinions of the License Commission and the Commission of the Governing Board of the Bank of Slovenia for the Preparation of Opinions for the Issue of Authorization to Hold Office as a Member of a Bank's Management Board (Banka Slovenije 2008b).

The banking supervision aims to determine whether banks operate in line with the risk management rules, whether banks have adequate organizational structures, strategies, processes and mechanisms in place to be able to meet all required criteria and administrative and other rules laid down in Slovenian legislative. The main goal of the supervision process performed by the Banka Slovenije is assessment of risks to which the bank is or might be exposed in its operations and assessment of the financial position and risks to which the bank is or might be exposed as a result of its relations with other persons within a banking group. Banka Slovenije can gather this estimation through regular and narrow both, on-site and off-site supervision. Supervisors have regular contact with bank's management and thorough understanding of the institution's current operations. Banka Slovenije determines the frequency and details of verification and assessment of individual banks by taking into consideration the size and importance of the bank within the system as well as the characteristics, volume and intricacy of transactions performed by the bank, and by observing the principle of proportionality.

However, the verification and assessment of individual banks is at least once a year. Under the Law on Banking (Official gazette of RS, No. 131/06) Banka Slovenije may when it is necessary for the attainment of the purpose of bank supervision, request appropriate reports and information from and perform a operational auditing for the following persons: who have close links with the bank, to which the bank has transferred a major part of its business processes and holders of qualifying holdings in the bank.

Banking supervisors examines whether requirements on minimum capital adequacy for a bank are met. We devote to the topic of minimum capital requirements another chapter (Basel II). Through the supervisory system the central bank tries to check up on a bank's policies, practices and procedures related to the granting of loans and making of investments, the ongoing management of the loan and investment portfolios, practices and procedures in place, including strict "know-your-customer" rules, that promote high ethical and professional standards in the financial sector and prevent the bank being used, intentionally or unintentionally, by criminal elements with one single goal, this is to be able better assessing the overall risk of a bank business.

The Bank of Slovenia may impose on the bank the following supervision measures: recommendation and admonishment, order to eliminate a violation, additional measures for implementing risk management rules, withdrawal of authorization or permission, appointment of special administration, institution of liquidation, decision on grounds for bankruptcy (Law on Banking RS 2006).

For better banking supervision Banka Slovenije cooperates with the other two Slovenian supervisory institutions (the Securities Market Agency and the Insurance Supervision Agency) in the form of an exchange of information between the institutions. The rules on mutual cooperation between supervisory bodies regulate the cooperation between the names institutions. Supervisory institutions are required to inform the relevant supervisory institution if they identify any infringements that fall under the auspices of other institutions (Banka Slovenije 2008b).

3.2. The Bank Association of Slovenia

The Bank Association of Slovenia (BAS) was founded by commercial banks and savings banks. It was established to make the banking business more efficient in areas where cooperation between banks is beneficial to both, banks and costumers, meaning promotion of the business activities pursued by the members, the improvement of the results of the banking activity, and the pursuit of good practice and business ethics. It is not the objective of the Association to make profit for its own account (BAS 2009).

The primary objectives of the BAS are to advocate the common interests of its members in relation to the state and financial authorities; performing numerous tasks for the benefit of its members which are important for their banking operations, suggesting the uniformity, modernization, organization, working technology and standardization of all financial operations conducted by its members, providing financial and legal consulting engages experts on behalf of its members, formulating projects in the area

of research and development of financial operations and banking, organizing professional training of banking personnel, organizing information and publishing activities(BAS 2008).

The association's bodies include annual general meeting, supervisory board, and the managing director. The association has standing boards and committees. The supervisory board may also appoint ad hoc boards and committees. Within the framework of the BAS, there is the court of honor responsible for the development, implementation and strengthening of good practice and code of conduct (BAS 2008).

BAS is running (or has conducted) several important projects, such as the assistance in the euro adaptation, Basel II – working groups, IFRS (international financial reporting standards), SISBON (Slovenian Credit Bureau) or SEPA (Single Euro Payments Area).

3.3. Securities Market Agency

The Slovenian Securities Market Agency issues authorizations and approvals, conducts supervision and exercises its other powers and responsibilities set out by the Market in Financial Instruments Act. It has the authority to issue licenses to investment firms (brokerage companies and banks providing investment services in the securities field), investment funds and management companies, the Ljubljana Stock Exchange (LJSE) and the KDD. It also authorizes securities issuers within the context of public offerings of securities and, under the Takeovers Act, authorizes participants other than securities issuers to buy the securities offered. The SMA supervises securities market operations and market participants (ECB 2007).

4. INDICATORS OF THE BANKING SYSTEM'S DEVELOPMENT

After becoming an independent country in 1991, Slovenian banking sector developed importunately, made big changes, from ownership changes up to permanent adaptations to market conditions in a transitional economy. All changes were supported by the central bank, which lead her independent money policy with own currency.

Banking sector in Slovenia accounts for over 72 % of the total assets in the composition of Slovenian's financial system total. The remaining 28 % share non-monetary financial institutions: insurance companies, pension funds, investment funds, leasing companies, brokerage houses, management companies and others. Among non-monetary financial institutions the greater importance share insurance companies (8.3 % of total assets of

Slovenian financial system) and leasing companies (8.6 % of total assets of Slovenian financial system). Comparing to the euro area (57 %), this proportion is much higher in Slovenia and demonstrated the important role of banks in the Slovenian financial system compared to the euro area. Despite their increasing role, institutional investors are only slowly graining importance in the optimization of the structure of financial assets and savings. Slovenian financial system (without the central bank) listed financial assets at the year-end 2007 177 % of GDP, which is only 40 % of the euro area financial system depth. The larger proportion of it hold monetary financial institutions (banks and saving banks), that is over 125 % of Slovenian GDP. At the year-end 2007 banks had total assets of EUR 42.2 billion (Banka Slovenije 2008a and 2008b).

In the last few years, Slovenian banking system grew remarkably. Year-on-year growth in total assets of the banking sector rose from slyly over 2 % in the beginning of 2004 with the continued growing trend to over 25 % in the year-end 2007. Banks obtain the majority of resources on the interbank market, primary at foreign banks, since the growth of credit demand could not had been covered with deposits growth only (Banka Slovenije 2008b).

Slovenian banking sectors consists of 24 banks and 3 savings banks, which are granted authorization by the central bank – Banka Slovenije, to provide banking services, mutually recognized services and additional financial services (see Table 1). Beside that there are several branches of EEA state's credit institutions, 3 representative offices of credit institutions and some EEA state's special financial institutions serving banking activities in Slovenia. Banks remain by far the most important financial intermediaries, while the proportion of savings banks, branches and representatives is negligible. The market share of banks in the field of banking services was at the year-end 2007 99.4 %, measured by total assets. Slovenian banks and savings banks together traditionally dominate the Slovenian financial system since Slovenia is still a very bank-oriented economy.

Despite the predominating role of banks in the Slovenian financial system, the lag to other EMU countries is most significant in the banking sector, which is decreasing. The reasons for the gap may not only be relative high market concentration but can be found in the insufficient development of the financial sector and shallowness of the domestic financial market, as other possibilities for financing are rather limited. The bigger gap in housing loans is primarily the consequence of less developed banking products in this area in the past, the privatization of housing and its financing in the past, and an underdeveloped institutional framework, where gradual improvement has been seen only in recent years (Bednas et al. 2008).

Table 1

Total assets, growth rate and market shares of banks in Slovenia

Bank	Total assets (EUR 000)	Nominal growth 2007/2006 in %	Market share 31.12.2007 (%)
Nova Ljubljanska banka d.d., Ljubljana	12,945,034	24.28	30.7
Nova Kreditna banka Maribor d.d., Maribor	4,218,792	14.98	10.0
Abanka Vipa d.d.	3,439,008	20.17	8.2
Banka Celje d.d.	2,305,449	17.64	5,5
SKB banka d.d.	2,295,677	10.08	5,4
Banka Koper d.d., Koper	2,239,211	20.09	5.3
UniCredit Banka Slovenija d.d.	2,132,695	–2.50	5.1
Hypo Alpe-Adria-Bank d.d.	1,906,206	68.30	4.5
Gorenjska banka d.d., Kranj	1,732,976	16.14	4.1
Raiffeisen banka d.d.	1,259,559	31,51	3.0
SID banka d.d., Ljubljana	1,248,711	0.00	3.0
Probanka d.d.	1,041,857	29.47	2.5
Banka Sparkasse d.d.	886,628	23.39	2.1
Deželna banka Slovenije d.d.	756,905	24.12	1.8
Factor banka d.d.	630,760	20.01	1.5
Poštna banka Slovenije d.d., NKBM Banking Group	629,309	10.85	1.5
Volksbank-Ljudska banka d.d.	618,324	27.55	1.5
Bawag banka d.d.	596,297	54.92	1.4
NLB Banka Domžale d.d.*	451,177	4.59	1.1
NLB Koroška banka d.d.*	364,453	3.19	0.9
NLB Banka Zasavje d.d.*	257,012	1.00	0.6
BKS bank AG, bank branch	196,194	100.37	0.5
Zveza bank, Ljubljana branch	22,776	94.16	0.1
RCI Banque Societe Anonyme, bank branch	22,709	0.00	0.1
Total	42,194,719	24.58	100.0

Note: * Banks becoming part of Nova Ljubljanska banka d.d., Ljubljana as of 1 January 2008.

Source: Bank of Slovenia. Slovenian banking sector was traditionally dominated by state-owned banks. This structure is changing due to the privatization process (see Table 2). At the year-end 2007, central government owned 15,1 % of the banking sector by equity and 18.6 by total assets. Other domestic persons participate in the ownership structure of the banking system with 47.2 % measured by equity or 39.8 % measured by total assets. The remaining part in the ownership structure hold non-residents (Banka Slovenije 2008b).

Table 2

Ownership structure of the Slovenian banking sector (% of equity)

	31.12.2005	31.12.2006	31.12.007
Non-residents (over 50 % control)	19.4	27.7	26.7
Non-residents (under 50 % control)	15.5	10.0	11.0
Central government	18.2	17.9	15.1
Other domestic entities	46.9	44.4	47.2

Source: Bank of Slovenia.

Extensive growth in total assets of the Slovenian banking sector in last few years was accompanied by growth of the average return on equity from 12.6 % in 2002 to 16.3 % in 2007, while gross income per average assets has diminished from 5.3 % in 2002 to 3.8 % in 2007. On the other hand, the interest margin has reduced from 3.4 % in 2002 to 2.2 % and non-interest margin has reduced as well, from 1.83 % in 2002 to 1.64 % in 2007. Banks have succeeded to reduce operating costs, from 3.2 % in 2002 to 2.0 % in 2007 measured per average assets. Capital adequacy ratio was pending since 2003 between 11.2 down to 10.5 up to 11,8 and amounted in 2007-end 11.2. With the beginning of 2008, banks implemented Basel II, which may slyly change the ratio (Banka Slovenije 2008b).

Table 3

Performance indicators of banks in percentages

(%)	2005	2006	2007
ROA	1.00	1.25	1.36
ROE	12.72	15.07	16.28
CIR	61.74	57.76	52.72
Interest margin per interest-bearing assets	2.62	2.37	2.31
Interest margin per total assets	2.42	2.19	2.15
Non-interest margin per?	1.60	1.67	1.64
Gross income to average assets ratio	4.02	3.86	3.79

Source: Bank of Slovenia.

Profitability of banks in the Slovenian banking system has increased in recent years (see Table 3). However, the current financial crises will probably have a large impact on the performance of the banking sector. We believe that not only the negative trends on the global and domestic financial markets, but also financing of management buyouts will be reflected in the performance indicators for the years 2008 and 2009.

5. NECESSITY OF BASEL'S II REQUIREMENTS INTRODUCTION IN THE BANKING ACTIVITY

The current financial market turmoil has exposed glaring weaknesses in how financial institutions are supervised and regulated. One of the issues which are currently heavily discussed is the implementation of Basel II rules, which are believed to be supportive in the process of stabilizing the financial and especially banking sector. Slovenia adopted New Capital Accord (Basel II) through EU Directives 2006/48/EC and 2006/49/EC. As an EU member state Slovenia implemented Capital Requirements Directive (CRD) into national legislation. Slovenian banks are going to implement new capital requirements most lately on 01.01.2008 like banks in other countries.

The revised international capital accord based on a more prominent role for credit ratings means another step in improving banking and risk management quality. Not only the banks internal risk tools will improve but also recently rating agencies have expanded their coverage to other debt products and have introduced variants or refinements of their traditional products. In some cases, such as ratings on structured debt, the concept of credit rating is essentially the same as before, although the debt product may be more complex (Jagric et al. 2008).

Even though implementation of the Basel II framework continues to move forward around the globe there are some differences between the original Accord and national legislations. The same is true for Slovenia. Basel II was primarily not written having small banks or small national banking markets in mind. Into the Slovenian banking sector there have been entered foreign banks. Like in many developing countries (Powell 2004) this has increased competition, efficiency and improved financial stability. These "internationally active" banks are precisely the ones that will be implementing the more advanced approaches of Basel II on a worldwide, consolidated basis. For Slovenian banking sector this was true as well (Jagric et al. 2008).

We can broadly conclude that deviations from the official Accord are small. Mainly they appeared as a consequence of deviations between EU Directive and the official Accord. Changes from the original Accord appeared due to specifics of the European banking sector. In the EU the main concern about the Basel II implementation is that no bank should suffer on the competitiveness due to Basel II. Differences in sizes between banks in the EU are huge. Basel II could set banks of different sizes into different favorable position. Hakenes and Schnabel (2005) discuss that the

implementation of the IRB approach requires large initial investments in risk management technologies, which may deter small banks from choosing the IRB approach. In that case, only large banks profit from the reduction in capital requirements (and hence marginal costs) for safe loans in the IRB approach.

The need for differences in Slovenian legislation compared to the Accord is much greater in the IRB approach then in the standardized approach. The reason might be that banks are not yet experienced enough in the sophisticated quantitative risk measure required in the IRB approach. However, this is just a transitional problem. Banks are mostly aware of that and are not trying to simplify the regulation but rather to learn about the modern risk management techniques and their benefits and could in few years improve competitiveness in this sense, too.

6. IMPLEMENTATION PECULIARITIES

Implementation process of Basel II standards began in Slovenia far before 2008 when banks began to fully comply with the new Capital framework known as Basel II. Impacts of Basel II on Slovenian banking sector were estimated by the Bank of Slovenia and The Bank Association in 2003. Slovenian Quantitative Impact Study (SiQIS) relies on data from September 2003. Unluckily the study was made before banks had all the necessary knowledge and available data about Basel II. SiQIS therefore implied only the simplest approaches, which are the standardized approach for credit risk and simple approach for the operational risk. In the SiQIS Slovenian banks estimated that only 1 % of Slovenian companies in banks portfolios have an appropriate external credit rating which is needed for the standardized approach. The main problem for conducting the study was the huge data gap in banks. Banks mostly started with additional data gathering after 2003. Upon the results of the three scenarios, the Bank of Slovenia tried to identify which national discretions would be the most appropriate for the Slovenian banking sector. According to SiQIS capital requirements for Slovenian banks would raise on average if taking those simple approaches. There could be an interest in the bank to implement IRB in the future and gain reductions in capital requirements.

When Bank of Slovenia published draft legislation in 2006 Slovenian banks actively took part in the creation of the said legislation within the Bank Association of Slovenia by participating in the making of comments and observations related to the decisions of the Bank of Slovenia. Some comments by the banks were implemented into the new legislation while for some questions the Bank of Slovenia only gave explanations. Slovenian

banks mostly had also comments about what would be more appropriate for the Slovenian market; however the Bank of Slovenia is obligated to implement CRD at minimum. As an EU member state Slovenia could not decide upon a cost/benefit analysis of Basel II con-sequences on her national banking sector (Jagric et al. 2008). Banka Slovenije began the systematic monitoring of the preparations of banks and savings banks for the introduction of Basel II rules in 2007. An internal methodology of the central bank was drawn up before the examinations of banks and savings banks were conducted (Banka Slovenije 2008a).

In 2007 we tried to estimate implications of Basel II on the Slovenian banking sector upon our own survey. We have seen that Slovenian banks actively prepared for Basel II implementation in the time, when the survey was done. We believe that the results reflect the implications of the real Basel II for the banks. We received answers to our questionnaire from 8 banks, which is a small number. We estimate that some banks, especially very small ones, weren't ready to give answers since they don't want to disclose any information about the internal risk management strategies. However, banks which answered have together a market share of about 71 %. Therefore the answers to our questionnaire, despite the small number of banks, are considered to be representative enough to form statements about the Slovenian market (Jagric et al. 2008).

We tried to gain a general impression whether Basel II has positive or negative implications on the Slovenian banking sector overall. For sure there are great implications of Basel II and they will continue to be in the near future. In our survey banks in 75 % estimate the impact of Basel II as positive. The rest estimates it as negative or both. As a positive effect, the banks listed, among others: increased transparency, improved risk management practices, bigger impact of bank on capital requirements, increased objectivity at business decisions, stimulation of research, development and adaptation of most sophisticated modern risk management techniques. Based on the comments provided by the Slovenian banks we can list further positive effect, which are expected to appear in the near future: dynamic portfolio management and forward looking risk assessment, greater use of hedging and derivatives, and an increased use of risk-based performance measures and risk-based pricing (Jagric et al. 2008).

On the other hand there are negative effects reported by Slovenian banks as well. All Slovenian banks face extremely high costs associated with Basel II implementation, economies of scale could not yet appear as time horizon is too short for now and all banks are relatively small when comparing to banks in other EU economies. Smaller banks need more time in order to estimate if advanced approaches pay off at all and if so, to properly develop

and implement them. Besides direct costs, the banks in our survey report high opportunity costs. Slovenian banks don't have highly trained experts in analytical and risk management departments which would work exclusively on Basel II implementation. Additionally, there are only a small number of candidates on the labor market with proper knowledge and experience that could jump into risk management teams of banks right ahead (Jagric et al. 2008).

For positive effects to become a reality there is still much work to be done across a broad range of areas. In most of the Slovenian banks the knowledge of sophisticated advanced risk management techniques was very poor before Basel II. In our survey 62 % of banks estimate current knowledge of sophisticated risk management techniques in Slovenian banking area as bad, given the score 2, on the scale from 1 to 4, taking 1 as the worst and 4 as the best. Other banks estimated it with score 1 (25 %) or with score 3 (13 %). In Slovenian banks the work and development of risk management techniques was mostly an always postponed task. Now, with Basel II banks have an outside push to improve their internal risk policies and thereby the level of understanding full risks, which occur in banking. All of the banks, which answered to our questionnaire, have already separated and independent risk management unit or department, where employees devote themselves to risk management tasks only (Jagric et al. 2008).

Before preparation projects for Basel II and final Basel II implementation, 25 % of banks have been already using (some) advanced risk management techniques. Banks which have already been using advanced techniques report that Basel II doesn't represent an important change in their internal risk management policy. Banks which have not been using advanced techniques before or used them only in part, would in 83 % develop them in the future. Even if Basel II didn't have the chance of using advanced risk management techniques for estimating regulatory capital requirements the banks would probably develop some advanced tools of risk management because of their internal needs (in 66 %). In the beginning Slovenian banks will first implement more simple approaches, like standardized approach for the credit risk and go for more sophisticated, like IRB, later on (Jagric et al. 2008).

Seventy-five percent of banks which responded in our survey consider high implementation costs of Basel II projects as an investment in the business improvement and competitiveness and fulfillment of regulatory requirement at the same time and not only as unnecessary costs, which are caused to the banks by the regulator. Other 25 % of banks see costs of implementing Basel II as unnecessary costs, which are caused to the banks by the regulator. 87 % of banks report that Basel II did/or will in the near future cause important changes in the daily business practice. Estimated 62 %

of the banks report that the Basel II requires a change in the business policy for the groups of clients (Credit lending policy, prizing etc.). In those banks business policy is expected to be changed in the near future. 38 % of banks named Small and Medium Enterprises (SME's) portfolio. Capital directive treats this portfolio more favorable in new regulative compared to the old one. Banks noticed this business opportunity very soon and therefore already today change their business policy on SME's. Other banks didn't give answers to this question or they do not expect any important changes in business policy (Jagric 2008).

Taking market risk measures in consideration we can conclude upon a discussion with Slovenian banks representatives that Value at Risk is the most popular method among banks. However, full implementation of Value at Risk concepts into daily business practice is still in their infancy. In our survey 38 % of banks answered that there are or will be changes in their trading book strategy due to Basel II (Jagric 2008). Tools for operational risk are not yet well developed. Upon information given by the banks on the Risk management conference in October 2007 under Slovenian banking association, banks started with data gathering for operational risks only few years ago (mostly in 2004 and 2005). Banks will also at operational risk go for more simple approaches (like basic indicator approach) in the beginning and continue with more sophisticated in the future.

Half of Slovenian banks estimate the cooperation of Bank of Slovenia with banks in the field of implementation of Basel II up to now as good (with score 3 on the scale from 1 to 4, where 4 is the best). The other half estimates the cooperation as bad (25 %) or very bad (25 %) up to now. Slovenian banks in 62 % do not expect the current regulation to change importantly. According to the Bank of Slovenia, the Slovenian capital regulation will change in the near future. Like other regulators around the globe also Bank of Slovenia still has much to do to finalize standards and approaches for the review and supervision of the new regulation framework (Jagric et al. 2008).

The beginning activities were focused on examining the introduction of Basel II rules in the area of credit, market and operational risks. Banka Slovenije determined that banks and savings banks appropriately organized activities for the introduction of new capital requirements and that project leaders received adequate support from the management boards of banks and savings banks. In most bank preparations were mainly focused on the implementation of regulations on the calculation and reporting of capital requirements for specific risks, while until 2007 banks and savings banks did not devote sufficient attention to the second and third Basel II pillars (Banka Slovenije 2008a).

Banka Slovenije recommended that banks begin carrying out the necessary activities for the timely and effective implementation of Internal Capital Adequacy Assessment Process (ICAAP). Activities relating to the calculation and reporting of capital requirements were assessed to be the most complex part of the project in terms of the extent of work, the content of requirements, the interdependence of tasks, the creation of software solutions and the requisite quality of data. In Slovenia most banks reported peculiriatities regarding staff limitations and a high level of dependence on external suppliers in this area. Banka Slovenije therefore evaluated project risk exposure and issued recommendations for its mitigation (Banka Slovenije 2008a).

Banks did not encounter significant difficulties while implementing the calculation and reporting of capital requirements for market risks. However, the first calculations and reports were performed manually. Banka Slovenije therefore recommended that they ensure the appropriate information support for this process. In addition to activities for implementing the calculation and reporting of capital requirements for operational risk, preparations in this area were sufficiently dynamic, and banks gradually established additional conditions for improving the operational risk management process. Banka Slovenije issued the appropriate recommendations to banks with the additional responsibility of implementing requirements on a consolidated basis. In addition to providing feedback to individual banks, banks were also sent a report on collective findings following the first round of examinations (Banka Slovenije 2008a).

In the second round of examinations in 2007 Banka Slovenije in addition to an evaluation of the general progress of activities for the implementation of the Basel II and verification of the implementation of previous recommendations, the status of activities of banks and savings banks regarding the first pillar of the Basel II (calculation of the minimum capital requirement) was rechecked. Additional attention was given to verifying the status of activities in the second pillar (Internal Capital Adequacy Assessment Process) and the third pillar (disclosure). Following examinations, banks were provided feedback in the form of a letter, which included Banka Slovenije's key findings and recommendations (Banka Slovenije 2008a).

The examinations of banks and savings banks indicated that the implementation of the calculation of capital requirements for credit risk using the standardized approach and reporting on new forms was completed. The calculation of capital requirements and reporting for operational risk was also implemented. Banka Slovenije evidented sufficient progress in the process of establishing a new operational risk management system at

banks. Activities for the implementation of the second and third pillars, which were mostly in line with internal plans, were carried out at most banks in the end of 2007 (Banka Slovenije 2008a).

Several banks under majority foreign ownership have decided to begin using advanced approaches (IRB and/or AMA) in the near future for the calculation of capital requirements. These banks are included in a joint decision-making process and are a part of a joint application, which the parent bank submits to its supervisor. In such cases, the Banka Slovenije is included in the process of issuing a joint decision as host supervisor. In 2007, the Bank of Slovenia received two applications from banks under foreign ownership for authorization to use advance approaches to calculate capital requirements for credit (IRB) and operational (AMA) risk. One bank is expected to use advanced approaches to a limited extent already in 2008 (Banka Slovenije 2008a).

7. GENERAL CONCLUSIONS

The Slovene banking sector is dominated by a few large, state-owned banks and has low profitability by regional standards. Its performance will be increasingly tested by deepening EU financial integration and capital market development. Based on the analysis of the performance of the banking sector in Slovenia, we believe that Slovene banks are among less efficient banks in Europe. These results may have been influenced by market concentration and ownership. As state banks are the least efficient, privatization and other measures to increase banks efficiency could have important benefits.

As an important characteristic of the Slovenian banking sector is also the fact that Slovene banks are highly depended on foreign funding to finance credit – mostly on loans from EU banks. At the same time, to boost profits, banks increased their exposure into regions with wider margins, such as the rest of former Yugoslavia. This type of the expansion of cross-border lending and borrowing made Slovene banks more vulnerable to interest rate and funding risks, while lending in riskier countries raised credit and currency risks.

Since the Slovene capital markets are dominated by the banks, they remain less developed than their EU peers, and financial market integration with the EU is only starting. The supply of investment instruments and the investor base are narrow, while infrastructure is gradually being integrated with EU markets. Deeper capital markets and greater financial integration with the EU would foster growth and financial stability by providing financing alternatives for companies, especially for SMEs, new or leveraged

domestic enterprises, and would help diversify risks and accumulate pension savings.

Currently the most important issue is the financial crisis, which is already turned into a recession in Slovenia and also around the globe. The current events will shape the future characteristics of the banking sector in Slovenia. An important role in this process plays the government, which introduced a new legal framework in order to restore confidence in the financial markets and to ensure stability of the Slovenian banking sector. This includes, in particular, amendments to the Public Finance Act and to the Banking Act.

An amendment to the Banking Act has been adopted that amends the system of guaranteed deposits in order to provide unlimited guaranteed deposits. Amendments to the Public Finance Act foresee provision of guarantees for refinancing of domestic credit institutions (mainly banks and saving institutions). Additionally, borrowing from the state will also be allowed for financing of capital investments and approving of loans to credit institutions as well as to insurance companies, re-insurance companies and pension funds with seat in Slovenia. Also, the state can purchase bad claims from financial institutions.

Current financial crisis comes in time of implementation of what is known as Basel II in Slovenia. As it stands, Basel II requires banks to set aside more capital for higher-risk exposures. But now there are calls to make the rules even tougher. After all, why didn't the rules soften the fallout from the current market turmoil? And the several-year-old controversy over whether the rules would offer a panacea for financial crises, or instead exacerbate them, is once again front and center. The critical question turns out to be: Are the new rules and the actions taken by the government enough to stabilize and to provide a sound financial system in Slovenia?

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THE STAGE OF BASEL II IMPLEMENTATION IN THE TURKISH REPUBLIC OF NORTHERN CYPRUS (TRNC)

ABSTRACT

As is known, leading financial and banking actors of the world started to implement Basel II accord so as to optimize the setting of minimum capital requirements. In any case, TRNC has no two ways about it except putting into practice parallel to international developments. It is worthwhile to express that TRNC partially implemented Basel II. However, the vital deficient elements of this implementation are: 1) currently Basel I accord is applied to quantify credit risk; 2) supervisory review of sector is not systematic and 3) disclosure standards are not enough to create effective market discipline. Therefore, necessary measures should be taken to eliminate these deficiencies.

1. INTRODUCTION

Implementation of Basel II is expected by 2008 in many of the over 100 countries currently using the Basel I accord. One of the major improvements in Basel II is the closer linkage between capital requirements and the way banks manage their actual risk. Basel II should make the financial system safer by encouraging continuing improvement in risk-measurement and risk-management practices at the largest banks. Basel II also provide supervisors with a more conceptually consistent and more transparent framework for evaluating systematic risk in the banking system, particularly through credit cycles (ADFIMI 2007, pp. 12, 53). In other words, the new Accord's main aim is to introduce a more comprehensive and risk-sensitive treatment of banking risks to ensure that regulatory capital bears a closer relationship to credit risk. In particular, the setting of minimum capital requirements will be based on an update of the current

risk-weighting approach including the use of banks' internal risk ratings and external credit risk assessments (Casu et. al. 2006, p. 185).

TRNC as an internationally non-recognized can link to foreign markets through Turkey. Therefore, TRNC's banking sector as other sectors are highly dependent on Turkey's financial system. Furthermore, the efforts of TRNC persist in going on finding a comprehensive and integrated solution to Cyprus Problem. In this regard, TRNC's banking sector has to revise its structure and functioning according to either European Union (EU) or Turkey. However, both options amount to the same thing, since they eventually aim to apply Basel II standards as cited below.

The new EU directive (Document 12890/05 of 18th October 2005), which is based on the directive proposal (COM(2004)486) issued by the European Commission on 14th July 2004, was approved by the European Parliament on 28th September 2005 and by the Council on 11th October 2005. It is known as "CRD" ("Capital Requirements Directive") and forms the legally binding framework for national regulatory legislation for all credit institutions and securities issuers in the EU Member States. The Member States are obligated to implement the CRD as part of their national law (Trotz 2006). In June 2006, the European Commission published the two directives (2006/48/EC, 2006/49/EC) that transpose the new capital requirements (Basel II) into European law in the Official Journal of the European Union. After the implementation of these new regulations throughout the EU, member states are to apply the directives from January 1, 2007 (www.erstegroup).

The Turkish Banking Regulation and Supervision Agency (BRSA) established a forum for cooperation and discussion of Basel II implementation in March 2003. The Steering Committee on Basel II consists of representatives from the BRSA and banks. In September 2003 a Road Map for the Transition to the New Basel Capital Accord (Basel II) was adopted. BRSA, together with the World Bank, has organized a workshop on the implementation of risk-based capital in Turkey for February 2005 (Nikolov 2004). Turkey's Banking Regulation and Supervision Agency, or BDDK, said it was postponing introduction of the Basel II international banking rules because the global credit crunch had exposed shortcomings in the arrangement. Turkey had been due to adopt the rules in January 2009 (Aktan 2008, p. 1418).

As can be understood above, no matter what happens TRNC should adopt the Basel II rules without further loss of time. Therefore, the stage of Basel II implementation in the TRNC will be examined in this study.

2. CHARACTERISTICS AND MAIN INDICATORS OF TRNC BANKING SYSTEM

The legal tender in the TRNC is the Turkish Lira. Because of the use of another country's currency, the TRNC Central Bank has little control over monetary policy. In effect, the only monetary control instrument available to it is the reserve requirement. There is no money market in the TRNC, the TRNC Central Bank has tried several times to start an interbank money market, organized within itself, but these attempts have never come to operation. The absence of an interbank money market has meant that the fallout effect of banks becoming insolvent has not directly affected the healthy banks. Due to an absence of any money and capital market, the banks are the only conduits for financial intermediation. The TRNC banking sector is not under any strain from financial disintermediation, as is the case in developed economies. Traditionally the banks in TRNC have offered depositors limited choice in the type of savings accounts. However, as the depositors become more financially aware, through the economy pages of daily newspapers (local and from Turkey), the demand for other types of financial instruments is being satisfied. This demand is for Turkish Securities and for Turkish Treasury Bonds. Banks operating in the TRNC as branches of mainland Turkish banks have an advantage here, since they are integrated into the Turkish banking sector, and thereby have access to the money and capital markets of Turkey. Hence, this service began to be provided through these branches as a reaction to depositor demand. Reacting to this demand local TRNC banks also began to offer these services, though on a much lower level, since they cannot enter the money and capital markets directly, and must go through their correspondent banks. Internationally non-recognized position of TRNC has caused some problems to the banking sector; chief among these is the absence of foreign direct investment. Other practical difficulties include the exclusion of TRNC banks from worldwide organizations such as SWIFT (a secure electronic fund transfer and communication system among international banks) and the card payment companies VISA and MASTERCARD. The prospect of a solution to the Cyprus Problem presents the TRNC banking sector with opportunities and threats. The economy is expected to grow sharply; this will create increasing demand for banking services. The opportunity here is that local TRNC banks will pick up most of the increasing business. There is a perceived threat that strongly capitalized Greek-Cypriot banks will dominate the banking sector in a unified state, however, due to the nature of the industry and the emphasis

on personal relationships, it is believed that the Turkish-Cypriot banks will lose business to the Greek-Cypriot banks.

As of the beginning of 2009, there are 1 public bank, 16 private banks and 7 foreign branch banks, totaling to 24 banks operating in TRNC (www.kktcmb.trnc.net).

2.1. Economic Importance of Banking Sector in TRNC

Main indicators of the banking system's development of the TRNC for the last 5 years will be examined in this study. Because of the statistical limitation, financial institutions consisting of banking sector will be taken as a base for analyzing economic importance of TRNC banking sector.

As shown in Table 1, within 5 years financial institutions developed 31 percent while GNP developed 27 percent. From 2004 to 2008, sectoral value of financial institutions increased form 414,9 4 million TL (in 1977 prices) to 543,4 million TL (in 1977 prices).

Table 1

Sectoral Developments in Gross National Product (GNP)
(1977 Prices Million TL)

Sectors	2004	2005	2006	2007	2008
1. Agriculture	1.147,2	1.179,5	1.141,7	1.146,5	965,8
1.1. Vegetable	657,4	618,1	579,3	580,0	414,5
1.2. Livestock	412,0	463,2	489,6	478,1	462,7
1.3. Forestry	26,1	31,1	21,2	24,9	23,3
1.4. Fishing	51,7	67,1	51,6	63,5	65,3
2. Industry	1.282,4	1.364,7	1.638,4	1.624,4	1.535,3
2.1. Quarrying	39,2	43,5	64,1	64,8	62,9
2.2. Manufacturing	1.028,0	1.080,9	1.313,3	1.274,7	1.168,2
2.3. Electricity – Water	215,2	240,3	261,0	284,9	304,2
3. Construction	1.068,9	1.271,0	2.136,9	2.227,3	2.211,2
4. Trade-Tourism	2.004,8	2.420,9	2.650,7	2.578,9	2.441,7
4.1. Wholesale and Retail Trade	1.618,5	2.021,9	2.296,6	2.199,8	2.033,4
4.2. Hotels and Restaurants	386,3	399,0	354,1	379,1	408,3
5. Transport-Communication	1.303,3	1.487,8	1.478,0	1.425,0	1.429,8
6. Financial Institutions	414,9	432,4	470,7	500,5	543,4
7. Ownership Of Dwellings	508,9	526,0	631,8	660,6	678,3
8. Business and Personal Services	1.074,9	1.280,0	1.440,2	1.534,7	1.611,6
9. Public Services	1.592,8	1.700,8	1.741,0	1.884,0	2.005,2
10. Import Duties	1.043,2	1.353,1	1.344,5	1.509,5	1.417,3
11. GDP	11.441,3	13.016,2	14.673,9	15.091,3	14.839,6
12. Net Factor Income From Abroad	298,3	310,8	416,8	219,5	184,9
GNP	11.739,6	13.327,0	15.090,7	15.310,8	15.024,5

Source: TRNC State Planning Organization.

When analyzed at current prices, from 2004 to 2008 the share of the financial institutions in GDP has not changed even though it decreased to 6.4 % in 2005 and increased to 7.6 % again in 2008 (Table 2).

Table 2

Sectoral Distribution of Gross Domestic Product
(Current Prices, %)

Sectors	2004	2005	2006	2007	2008
1. Agriculture	9,1	7,0	6,3	6,3	5,3
1.1. Vegetable	5,5	3,7	3,2	3,5	2,6
1.2. Livestock	3,1	2,8	2,7	2,4	2,4
1.3. Forestry	0,0	0,0	0,0	..	..
1.4. Fishing	0,4	0,4	0,3	0,3	0,3
2. Industry	9,4	9,2	9,5	9,4	10,0
2.1. Quarrying	0,5	0,6	1,0	1,1	1,1
2.2. Manufacturing	4,8	4,8	4,5	4,4	3,8
2.3. Electricity – Water	4,0	3,8	3,9	3,9	5,1
3. Construction	4,3	5,4	7,9	7,9	7,8
4. Trade-Tourism	15,9	17,6	15,5	13,7	12,4
4.1. Wholesale and Retail Trade	10,8	12,1	11,4	9,5	8,5
4.2. Hotels and Restaurants	5,2	5,6	4,1	4,2	3,9
5. Transport-Communication	10,5	10,7	11,0	11,6	12,2
6. Financial Institutions	7,6	6,4	6,5	6,7	7,6
7. Ownership Of Dwellings	2,5	2,3	3,0	3,1	3,1
8. Business and Personal Services	9,2	10,0	11,1	10,7	10,6
9. Public Services	20,8	20,5	20,3	21,8	22,7
10. Import Duties	10,7	11,0	9,1	8,8	8,1
GDP	100,0	100,0	100,0	100,0	100,0

Source: TRNC State Planning Organization.

As seen from Table 3 (Real Growth Rates), from the negative growth rate of –0.3 % in 2004 it rose to 8.9 % in 2006 and decreased to 8.6 % in 2008. For the first three years, real growth rate of financial institutions have been lower than that of GNP while for the last two years, real growth rate of financial institutions have been higher than that of GNP.

Table 3

Real Growth Rates of Sectoral Value Added (%)

Sectors	2004	2005	2006	2007	2008
1. Agriculture	8,5	2,8	–3,2	0,4	–15,8
1.1. Vegetable	9,4	–6,0	–6,3	0,1	–28,5
1.2. Livestock	6,0	12,4	5,7	–2,3	–3,2
1.3. Forestry	99,2	19,2	–31,8	17,5	–6,4
1.4. Fishing	–5,5	29,8	–23,1	23,1	2,8
2. Industry	10,6	6,4	20,1	-0,9	–5,5
2.1. Quarrying	8,6	11,0	47,4	1,1	–3,0
2.2. Manufacturing	10,2	5,1	21,5	–2,9	–8,4
2.3. Electricity – Water	13,3	11,7	8,6	9,2	6,8
3. Construction	5,3	18,9	68,1	4,2	–0,7
4. Trade-Tourism	25,5	20,8	9,5	–2,7	–5,3
4.1. Wholesale and Retail Trade	27,1	24,9	13,6	–4,2	–7,6
4.2. Hotels and Restaurants	18,9	3,3	–11,3	7,1	7,7
5. Transport-Communication	8,8	14,2	–0,7	–3,6	0,3
6. Financial Institutions	–0,3	4,2	8,9	6,3	8,6
7. Ownership Of Dwellings	2,4	3,4	20,1	4,6	2,7
8. Business and Personal Services	26,0	19,1	12,5	6,6	5,0
9. Public Services	5,2	6,8	2,4	8,2	6,4
10. Import Duties	46,8	29,7	–0,6	12,3	–6,1
11. GDP	14,2	13,8	12,7	2,8	–1,7
12. Net Factor Income From Abroad	88,5	7,4	34,1	–47,3	–15,8
GNP	15,4	13,5	13,2	1,5	–1,9

Source: TRNC State Planning Organization.

When analyzed between the years of 2004 and 2007 both the employment and its share in the economy decreased from 3.9 % (3.403 people) in 2004 to 3.5 % (3.142 people) in 2007.

Table 4

Sectoral Distribution of Working Population

Sectors	2004	%	2005	%	2006	%	2007	%
1. Agriculture, Forestry, Hunting, Fishing	7.278	8,4	4.681	5,5	4.378	4,8	3.170	3,5
2. Mining, Quarrying	114	0,1	144	0,2	113	0,1	115	0,1
3. Manufacturing	9.490	10,9	8.440	9,9	8.006	8,7	7.679	8,5
4. Electricity, Gas, Water	607	0,7	641	0,7	644	0,7	1.103	1,2
5. Construction, Public Works	8.079	9,3	8.375	9,8	9.590	10,4	9.664	10,8
6. Wholesale-Retail Trade	14.130	16,3	14.563	17,0	16.757	18,3	17.340	19,3
7. Restaurants, Hotels	5.039	5,8	4.942	5,8	5.755	6,3	5.493	6,1
8. Transport, Communication, Storage	5.289	6,1	5.378	6,3	5.250	5,7	5.017	5,6
9. Financial Institutions	3.403	3,9	3.044	3,5	3.541	3,9	3.142	3,5
10. Property Renting	3,595	4,1	4.261	5,0	3.319	3,6	4.120	4,6
11. Public Administration	13.309	15,3	14.346	16,8	14.969	16,3	14.344	16,0
12. Educational Services	8.576	9,9	9.120	10,6	9.743	10,6	9.479	10,6
13. Health Services	2.545	2,9	2.470	2,9	2.931	3,2	3.013	3,4
14. Other Community Services	5.460	6,3	5.178	6,0	6.821	7,4	6.108	6,8
Total	86.914	100,0	85.583	100,0	91.815	100,0	89.787	100,0

Source: TRNC State Planning Organization.

2.2. Basic Structure of Banking Sector in TRNC

The main statistics of TRNC Banking Sector and the figures of Gross Domestic Product (GDP) are shown in Table 5.

Table 5

Basic Banking Statistics of TRNC (New Turkish Liras)

	2004	2005	2006	2007	2008
Loans	1.172.537.569	1.569.924.603	2.321.298.754	2.734.718.246	3.431.095.820,00
Assets	3.639.972.252	4.217.990.575	5.575.744.912	5.944.161.316	6.770.322.163,58
Deposits	3.228.713.962	3.632.739.927	4.681.269.785	4.937.348.215	5.563.202.311,63
Equity	195.652.976	271.985.036	338.878.754	567.608.322	656.651.931,24
GDP	2.456.744.085,7	3.070.380.966,6	3.988.099.705,5	4.604.292.065,9	5.093.947.185,8

Source: TRNC State Planning Organization – TRNC Central Bank.

By making use of the data in Table 5, it is possible to analyze the structure of banking sector in relation to GDP as seen in Figure 1. When compared to year of 2004, both total assets and total deposits relative to GDP decreased in 2008. On the other hand, for the same period the ratio of total loans to GDP increased. This increase can be interpreted in two ways. One of them is the positive effect on the efficiency of financial intermediation. The other one is the negative effect on the credit risk of the sector.

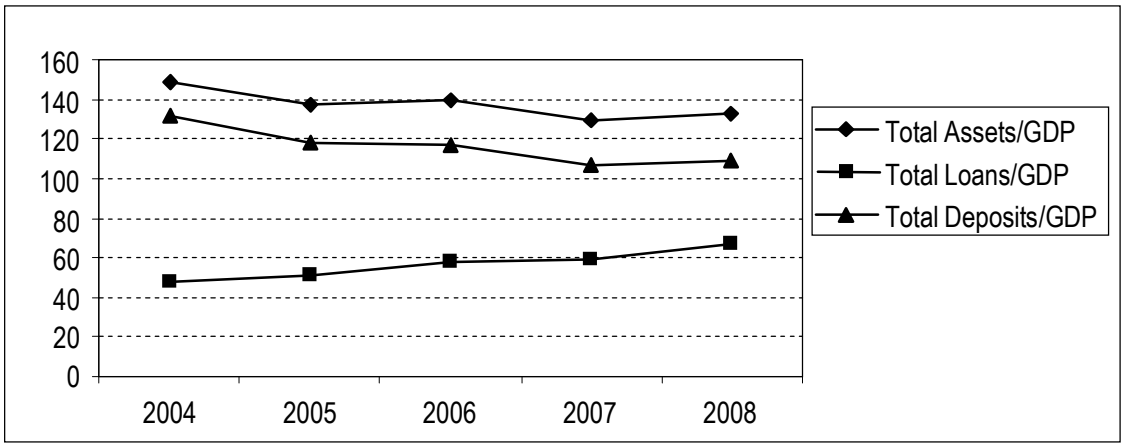

Figure 1. Relative Structure of TRNC Banking Sector to GDP

Regarding the structure of Balance Sheet of TRNC banking sector, the relevant ratios in percentages for the period between 2004 and 2008 can be examined in Figure 2. The importance of deposits in financing assets declined in this period. The ratio of total loans within total assets increased parallel to the rise of the ratio of total loans to total deposits. Finally, the increase in the ratio of total equity to total assets shows that the sector strengthened its capital structure so as to reduce fragility and its exposure to crisis.

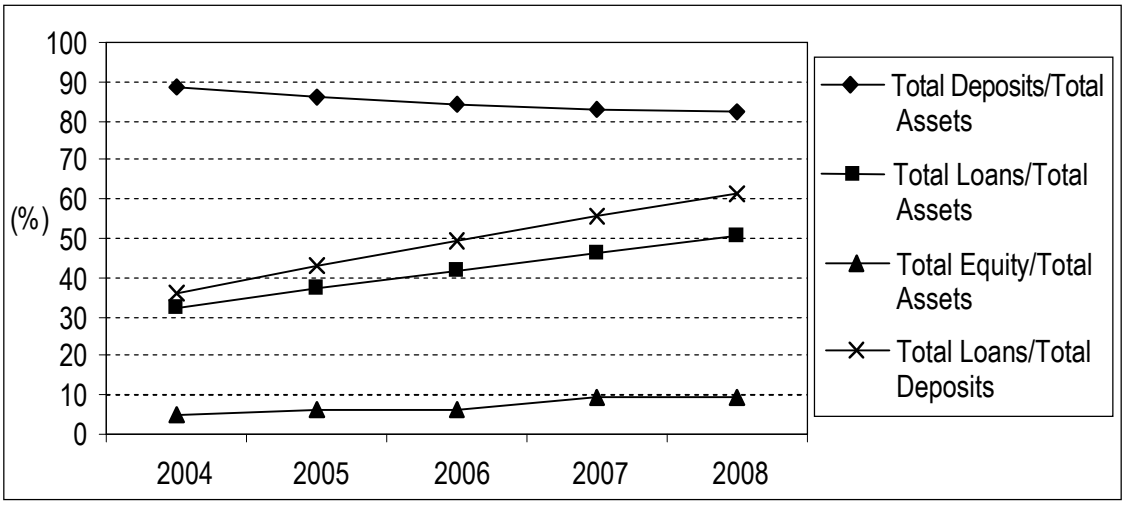

Figure 2. Relevant Ratios of Balance Sheet of TRNC Banking Sector

3. THE REGULATORY AND SUPERVISORY STRUCTURE OF TRNC BANKING SYSTEM

In TRNC, Central Bank is authorized to exercise regulatory and supervisory power. The Law on Central Bank and Banking Law are referred in this respect.

According to the Law on the Central Bank of TRNC numbered as 41/2001, the objective of the Central Bank is to implement the monetary-credit policies that can facilitate the economic development, and regulate and supervise the banking system, in line with the development plans and annual programmes. In order to attain this primary objective, carry out all the transactions required for the regulation and supervision of the monetary and banking system of the Turkish Republic of Northern Cyprus. The Central Bank shall be commissioned and empowered: to make and implement regulations with respect to the duties and powers entrusted to it by the present Law and legislations, and to supervise, with the establishments and organizations that are subject to the said regulations, whether or not there exists compliance with all these regulations and whether or not the information supplied to it are accurate. The Central Bank carries out and exercises the duties and powers entrusted to it by the present law under its own responsibility and in an independent manner. Within the framework of development plans and annual programmes under such plans, the Central Bank shall regulate the conditions of volume, position, nature and provision of the credits and meet the overall need for the liquidity, in such a way as to help for the attainment of the economic objectives and goals within the credit system. When it deems necessary, the Central Bank shall be empowered to supervise, through its inspectors, with the relevant banks, as to whether or not these credits are used for their intended purposes. In accord with the goals of a stable economy and a satisfactory rate of growth, the Central Bank may take decisions on the investments of the banks in terms of quality and quantity and adjust the distribution of various credit types in accordance with the sectors and subject matters. The Central Bank shall monitor, examine and inspect the financial positions of the banks. It shall take the necessary measures and/or initiate investigation about the issues it may find out. The Central Bank shall inspect the compliance of all the transactions of the banks and other institutions established to give credits, with the present Law, the Banks Law, Stamp Law, Monetary and Foreign Exchange Affairs Law, Foreign Trade (Regulation and Inspection) Law, as well as the statutory

decrees in force and other relevant laws and the provisions of Rules and Regulations, Bye-Laws, Decisions, Announcements and Decrees; it takes the necessary measures and/or launches the investigation. The banks and institutions to be inspected shall be required to supply in time and completely, all kinds of information and documents to the persons entrusted with the duty of inspection.

The issues regarding the power to control banks and strengthening the financial structure are specified in the Banking Law numbered as 39/2001. The implementation of this law together with the provisions of other Laws related to banks and control on every kind of banking transaction, determining and analyzing the relation and balance among assets, receivables, own funds, liabilities, profit and loss statements, and all other factors affecting financial structure, shall directly be carried out on behalf of the Central Bank by the Central Bank inspectors. The Central Bank is empowered to request all the information it deems necessary, regarding the provisions of this Law and other Laws, to examine all of the accounting books, recordings and documents of the banks, while these banks are obliged to submit in these information and to make ready those books, recordings and documents for being examined. The qualification required for the auditing institutions that will conduct auditing with the banks independently, and with the authorization given by the Ministry in charge of financial affairs and the control of the independent audit reports, shall be determined by the Central bank through an official notification. The Central Bank and independent auditing institutions are responsible for the losses they give to the third persons because of the operations they carried out according to this Law. As a result of the audit conducted, if any transaction is found to be contradictory to this Law, to the arrangements made and resolutions given based on this Law, to the banking principles and practices that would jeopardize a bank' s operating in a safe manner, on the condition of the punishment procedures to be initiated against responsible people of the bank being preserved, the Central Bank shall warn the relevant bank for correcting the transactions in question, to do it on time that will be specified, and taking the necessary measures to avoid their repetition. Bank has to take the necessary measures requested by the Central Bank and notify the measures taken to the Central Bank within a specified time period. In case that bank fails to take the requested measures and repeats the transactions that might jeopardize its operating in a safe manner, then depending upon the nature and importance of the transactions, the Central Bank shall be empowered to take the necessary measures.

4. ASSESSMENT OF BASEL II IMPLEMENTATION IN TRNC BANKING SYSTEM

Without giving tongue to the implementation of Basel II, TRNC banking sector is taking steps adopt it. However, it is lacking vital elements in this regard. According to the written notice of TRNC Central Bank dated as August 9 of 2008, the details of market risk and operational risk suitable to Pillar 1 of Basel II accord had been introduced. However, contrary to the main aim of Basel II in order to introduce a more comprehensive and risk-sensitive treatment of banking risks to ensure that regulatory capital bears a closer relationship to credit risk, Basel I accord is still applied to handle credit risk in setting minimum capital requirements.

As it is declared by the authorities of Central Bank, even though Central Bank has the capacity of effective supervisory review suitable to Pillar 2 of Basel II accord, it is not applied systematically.

The third pillar of Basel II accord is partially implemented in TRNC. According to Banking Law, banks are obliged to send, their annual balance sheets and profit and loss statements, which include the signatures of the president or the deputy president of the board of directors and that have been approved by an independent auditing firm, within a month, following their approval by the general assembly, in any case, within the first four months of the consecutive year, to the Central Bank. Also, these balance sheets and profit and loss statements are to be announced in at least two of the local newspapers. However, capital adequacy tables attached to statement which are essential for market participants to make better risk assessments are not provided by publicly announcing them.

5. CONCLUSION

TRNC as an internationally non-recognized country has two alternative gates that can be opened to global world. The first one is the case of being economically integrated with Turkey. Second one is becoming the full member of EU after the solution of Cyprus Problem. As pointed out above, both alternatives have common direction since both EU and Turkey opted to schedule the adoption of Basel II accord. Therefore, under all circumstances the Central Bank as the regulatory and supervisory body of TRNC should take necessary measures for the implementation of Basel II accord. Specially, these measures should consider the three essential pillars of Basel II. Such that, better credit risk treatment and quantifying risk sensitivity and the minimum capital charges associated with these risks

of Pillar 1; making qualitative judgments on the ability of each bank to measure and manage its own risk of Pillar 2; and enhancing effective market discipline facilitated by introducing high disclosure standards with regard to bank capital of Pillar 3 should be kept in adopting Basel II. The deficiencies of these Pillars should be eliminated in TRNC in order not to encounter any problem for the harmonization of standards of capital adequacy in an international context.

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I. THE CHARACTERITIC OF THE BANKING SYSTEM OF KAZAKHSTAN: FOUNDATION STAGES AND MODERN STRUCTURE

The structure of the banking system of a country is determined by two factors – economic and legal. As on any other market, the number of sellers depends on the demand for their commodity. The demand for banking services influences both the number and the size of banks. Besides, the regulation of the credit relations by the state has a considerable influence on the composition of the banking system. Some legislative acts limit creation of new banks, others, by influencing the organization of banking, determine their structure.

The present structure of the banking system of Kazakhstan was formed under the influence of many factors: firstly, the historical peculiarities of the territorial development of the economy of Kazakhstan, secondly, operating banking institutions, which remained from the times of the Soviet Union in the process of transformation of the Kazakh economy from the centralized command to the market economy, thirdly, the need in banks of economic subjects, the state of the money circulation in the country, fourthly, banking legislative base.

The establishment of the banking systems of Kazakhstan dates back far into the history and is related to the USSR and Russia before the revolution. The new phenomenon in the international trade of the second half of XV-XVIII centuries was the establishment of trade relations between the Central Asia and Russia through Kazakh steppes and Turkmen cities. The trade with Russia became an important factor in the development of the economy. In the beginning of the 90ies of the XVI century Russia tried to establish political relations with the Kazakh khanates. Trade and diplomatic relations between Russia and Central Asia through Kazakhstan grew deeper in XVII-XVIII centuries. The Russian state received cotton, raw silk, jewels, and oriental weapons from the Central Asia. Besides, the Chinese

goods came to Russia through Central Asia. In its turn, Russia exported wool, satin, mirrors, fur and silver to Kazakhstan and Central Asia [1, p. 78-80].

The colonial policy of Russia at the end of XIX – to the beginning of XX century was directed to the east, including Kazakhstan. The regions played a role of agrarian and raw materials appendages of the industrial center. The colonization of these districts was conducted by mastering the unused lands and capturing the lands belonging to the local population by peasants migrating from the European part of Russia, by introduction of extended production of agricultural goods and raw materials mostly for selling in the central regions of Russia, development of mineral deposits, penetration of industrial, trade and banking capital [1, p. 76].

From the middle of the XIX century the commodity and money relations penetrated to the steppe auls. The natural economy received the characteristics of the monetary economy, and the money trade came to the forefront. The trade was conducted through the so-called "exchange courts", founded in fortresses on the borders in the XVIII century. The new forms of trade appeared gradually, becoming more widespread with time. First of all, these are trade fairs, secondly, the system of agencies, which penetrated to the remotest corners of Kazakh steppes. The development of trade required the expansion of money settlements, which affected the economic development of Kazakh auls and were instrumental in the changes of the production character.

Gradually Russia extended its interests in colonies by building railways. From 1890 till 1909 their network on the territories of Kazakhstan grew 11,8 times, with the general growth rate in the Russian empire being 2,3 times. The first industrial enterprises appeared in Karagandi, Stepoviku and other cities. From the beginning of the xx century foreign and Russian capital appeared and monopolized all the riches of region. In 1916 there were 10 mining societies operating on the territory of Kazakhstan with their fixed capital reaching 59,5 millions rubles. Of these societies 3 were English with a board of directors in London with the fixed capital 20 millions rubles, 2 societies with the capital of 30 millions had a mixed ownership. Others were 5 joint-stock companies with fixed capital of 9,6 millions rubles. The total sum of the nominal capital of joint-stock companies, founded in the industrial branch of Kazakhstan, amounted to 110 millions rubles in the beginning of the XX century. More than 3/4 belonged to the foreign capital and only about 1/4 belonged to the Russian capital.

Therefore, the penetration of the Russian and foreign capital into Kazakhstan, the development of the "free" land, expansion of sales territories, development of trade and industry and development of raw material deposits

were instrumental in creating the credit network, which helped the growth and penetration of the banking capital in Kazakhstan.

The State Bank of the Russian empire was created on 31 May 1860. From that time, the building of the credit system started in Kazakhstan. In November 1864 the first Orenburzkiy public` bank was founded, which till 1890 was among the ten biggest banks in Russia. The fixed capital of the bank in 1914 (bank's 50-year anniversary) amounted to almost 500 thousands rubles.

The second city public bank was opened on March 18, 1871 in the town of Petropavlovsk in the Akmolinsk province. As of January 1895 its fixed capital was 94 672 rubles. Then the following banks were founded: Semipalatinskiy (1907), Vernenskiy (1912), Pavlodarskiy (1913), Ust'-kamenogorskiy and Zaysanskiy, which began their operations in 1914. As of July 1, 1912, 6 branches of the State Bank were functioning in Kazakhstan and 4 more in the Russian border areas – in Astrakhan, Tashkent, Tobol'sk and Chelyabinsk.

In addition, 18 branches of joint stock banks, 12 mutual credit societies, 8 city public banks, 345 credit and savings societies served practically all the territory of Kazakhstan. In those districts, where there were no branches of the State Bank, operations were carried out by treasuries. Annually, starting from 1880, a temporary branch was opened (from May, 25 – till June, 15) in the settlement of Kuyandi of the Semipalatinsk province for serving the needs of the fair organized there.

Table 1

State institutions serving the territory of Kazakhstan (as of July 1, 1912)

№	Names of branches	Dates when they were opened	Treasuries	Districts and regions	Public chambers supervising the treasuries
1	Astrakhansky, II	15.06.1884	Astrakhansky	Astrakhansky	Astrakhansky
			Epotaevsky	-«-	-«-
			Kirghiz	-«-	-«-
			Krasnojarsk	-«-	-«-
			Mikolaivske	-«-	-«-
			Carevske	-«-	-«-
			Chornojarsk	-«-	-«-
2	Vernsky III	31.10.1911	Vernsky	Semirechinsky	Omsk
3	Omsk, III	09.12.1895	Akmolinsk	Akmolinsk	Omsk
			Atbasarsk	-«-	-«-
			Djarkentsk	Semirechinsky	-«-
			Zajsanske	Semipalatensk	-«-
			Karkalinske	-«-	-«-

Table 1 continued

№	Names of branches	Dates when they were opened	Treasuries	Districts and regions	Public chambers supervising the treasuries
			Kokchetavske	Akmolinsk	-«-
			Kopalske	Semirechinsky	-«-
			Lepsninske	-«-	-«-
			Omsk	Akmolinsk	-«-
			Pavlodarsk	Semipalatensk	-«-
			Pushpekske	Semirechinsky	-«-
			Prezevalske	-«-	-«-
			Ust' kamenogorskiy	Semipalatensk	-«-
4	Orenburz'kiy, II	24.10.1866	Akpobinske	Tyrgayske	Orenburz'kiy
			Verhne-Yralske	Orenburz'kiy	-«-
			Orenburz'kiy	-«-	-«-
			Orske	-«-	-«-
			Temirske	Ural'ska	-«-
			(Emba)		
5	Petropavlivske III	02.03.1881	Petropavlivske	Akmolins'ka	Omsk
6	Semipalatenske III	23.03.1887	Semipalatensk	Semipalatensk	Omsk
7	Tashkents'ke, I	10.05.1875	Akylie-Atuns'ke	Surdarjnska	Turcestants'koj
			Kazalins'ke	-«-	-«-
			Perovs'ke	-«-	-«-
			Tashkents'ke	-«-	-«-
			Turcestants'ke	-«-	-«-
			Chimkents'ke	-«-	-«-
8	Tobol'sk, III	11.04.1894	Berezivs'ke	Tobols'ka	Tobols'koj
			Ishims'ke		
			Kyrgans'ke		
			Tars'ke		
			Tobols'ke		
			Tyruns'ke		
			Tukashins'ke		
			Jalytirivs'ke		
9	Tobols'ke, III	03.09.1876	Tobols'ke	Tobols'ka	Orenburz'kiy
			Gurjivske		
			Lbishenske		
10	Chelabinsk, III	05.07.1893	Chelabinske	Orenburz'kiy	Orenburz'kiy
			Kystanajske		
			Murs'ke		
			Trojc'ke		

Source: Yutish of v.m., Tadzhiyakov of b.sh., Nazarov V.k. Jars of Kazakhstan are on the border of ages:

Monograph. – ALMAT'I, 2007. [1, p. 86].

The operations carried out by these branches were determined by the Council of the State Bank in accordance with the economic peculiarities of the region. The branch had a credit and savings committee, the basic task of which was determining the size of a loan for persons or institutions, as well as the assessment of the authenticity of the bills of exchange and mortgages. A credit and savings committee consisted of branch manager, an inspector and invited persons (experienced specialists in trade, industry and agriculture). Moreover, the meetings of the committee were attended by tax inspectors, arbitrators, village heads, etc. While entering into their positions they promised to "to do their best in all affairs they would have to deal with" and also pledged to keep banking secrets. The branch of the State Bank in Kazakhstan actively served its economy. The State Bank institutions serviced mostly commercial and industrial costumers with credit and savings operations.

Specific establishments, which provided small volume credits in Kazakhstan, were the so-called "Kirghiz cash lending desks" which appeared in the steppe region as early as the 70ies of the XIX century. A bit later district cash lending desks appeared in the South part of Kazakhstan – in the Semirichenskiy and Sirdarinskiy provinces.

The Kirghiz cash lending desks were created at provincial administrations which supervised their operations. The cash lending desks gave loans to the Kazakh population of the Akmolinskoy, Semipalatinskoy, Ural and Turgayskoy provinces to meet their "vital economic and domestic needs". Their floating capitals consisted of the special facilities of the ministry of internal affairs, different offerings and special household fees charged on the whole Kazakh population, as well as an income from their operations. At the beginning of the XX century savings banks developed significantly on the territory of Kazakhstan, and by January 1, 1914 there were already 173 of them, including central ones – 39, postal – 96, district – 38.

In October 1917 the banking system was destroyed, money circulation disorganized, credit operations halted. By the decision of the State Bank of the Russian Soviet Socialist Republic of February 23, 1922 the Kirghiz office was created in Orenburg, which in 1925 was renamed into the Kazakh regional office of the State Bank and transferred to Kizil-Orda – the new capital of the Kazakh Soviet Socialist Republic.

In 1922-1925 the process of commercial banks' formation took place in Kazakhstan: the Commercial and Industrial Bank, Agricultural bank, Central Commercial Bank and savings banks were created. As a result of the credit reform conducted in 1930-1932 the banking system for the planned economy was founded. The development of the national economy of Kazakhstan called forth the necessity to expand the network of the Kazakh office of the State Bank. If, in 1930 there were 14 district branches and in 1931 5 regional offices and 113 branches, in 1945 there were already 15 regional offices and 207 branches.

In Kazakhstan, as in other republics, republican branches of all banks were founded. The principle of banking centralization, subordination of banking institutions to the higher banking authorities, impermissibility of establishing some local rules was strictly maintained.

The last bank reform in the USSR was conducted in 1987-1988. As a result, on the basis of the State Bank and Budbank of the USSR new banks were created: Prombudbank, Agroprombank and Zhilsocbank. On the basis of the system of savings banks which used to be a part of the State Bank of the USSR, a Savings Bank was founded, and on the basis of Zovnishtorgbanka Zovnishekonombank (foreign trade bank) was founded. The state bank of the USSR was proclaimed the central bank of the country.

This reform was the first step in the development of the banking system based on the new principles of the two-tier system. At that time the idea of bank specialization brought in disarray in the work of the banking system, it did not get rid of monopolization, did not change the credit mechanism. It became more cumbersome, more costly to maintain, had a huge bureaucratic apparatus at the top level. The role of the State Bank of the USSR became considerably weaker, because it had lost the management levers and its influence on the activities of the created specialized banks.

Starting from 1989 the first commercial, co-operative and private banks began to appear. In the same year such commercial banks as Interinvestbank, Kramdsbank and others were created in Kazakhstan.

After Kazakhstan declared sovereignty (in December 1990), creation of the country's own banking system meeting the requirements of the market economy began. In January in 1991 the Law was adopted "On banks and bank activity in Kazakhstan", that was in essence the beginning of a banking reform and creation of the two-tier banking system. The republican State Bank was transformed into the National Bank of the Republic of Kazakhstan with regional offices and branches that became the basis of the first level of the banking system.

Specialized banks were transformed into the joint-stock commercial banks, in particular: Prombudbank – into Turanbank, Agroprombank – into Agroprombank of the Republic of Kazakhstan, Zovnishekonombank into Alembank, and Savings Bank into the Savings Bank of the Republic of Kazakhstan. These banks together with co-operative and commercial private banks formed the basis of the second level of the banking system.

The number of banks began to increase sharply. In July 1993 the Association of banks was founded. From 1992 to the end of 1993 this is an important stage in the formation of the country's banking system, because in these years Kazakhstan managed to carry out the money reform, which resulted into the introduction of the national currency (tenge) in November, 1993.

The main characteristics of the banking system in this period: the National Bank assumes the functions of a central bank, extensive formation and development of commercial banks. Powerful extensively intensive (quantitative and high-quality) development of the banking system began exactly with introduction of own national currency. Introduction of national currency required from the National bank active measures on support of its stability and firmness.

With the purpose of increasing the liquidity of banks' shareholder capital, in September 1994 stricter requirements were introduced concerning the formation of authorized funds of the second level banks. Restrictions were imposed on the authorized fund payments with non-money facilities, a new order of making reserves was introduced, which stipulated the unfreezing of resources deposited by commercial banks at the National Bank. The payment was set at 25 per cent of the refunding rate. Banks were allowed to make alternative reservations, which proved to be more profitable.

As of 1 January 1995 there were 184 banks in Kazakhstan, 25 of them had a general currency license and according to the size of their authorized funds were the biggest banks in the country. Only 8 banks had an authorized fund bigger than 5 million dollars.

In 1995 two laws were made, which are the basis of the banking legislation in Kazakhstan: the Law "On the National Bank of the Republic Kazakhstan" (March 30, 1995, Number 2155) and the Law "On banks and banking activity in the Republic Kazakhstan" (August 31, 1995, Number 2444). The first law clearly defines the status, legal framework of activity, accountability, tasks, functions and powers of the National Bank of Kazakhstan, is a central bank of the country and the highest level of the banking system.

The second Law contains the concepts of bank's status, banking system, bank transactions, legal framework of activity, bank foundation, reorganization, liquidation, realization and adjustment of the banking activity, the rules of accounting and audit of the banks of the second level.

After the implementation of these laws the reduction of banks began aimed at increasing the reliability of the banking system of the country. The reduction in the number of banks was achieved by the strict requirements of the National Bank to authorized capital and by other methods for the strengthening of competition between banks. The main task of the National bank was the improvement of the activity of all banks and the formation of a group of banks (10-15 banks), which could approach the international standards.

The National Bank actively used the followings classical monetary instruments:

- adjusting the volumes of credit refunding;
- adjusting the level refunding rates;
- the use of the mechanism of obligatory reserves;

- operations with state securities;
- interventions of the National Bank on the currency market.

During the period 1993-1995 there was a permanent tendency towards decline in the network of banking institutions. At the end of 1995, there were 130 banks of the second level (1,036,0 branches), which had a license of the National Bank to conduct banking operations – a 1/3 decline since January 1, 1994.

The worsening of the financial state of industrial enterprises in the republic influenced the banking performance (growth of the unreturned credits) that led to the closing of some unprofitable branches. Some banks lost a competition in the new economic environment and were forced to limit or halt the activity.

At the end of 1995 62 banks were in the process of liquidation, although in the end only 6 were liquidated. In some cases the procedure of liquidation of banks lasted several years. Similar problems existed in Russia, where in 1995 315 banks had to be liquidated, but in reality only 6 ceased to exist. It should be noted that today the mechanism of liquidation of banks is substantially improved and the procedure of liquidation is considerably shorter.

The National Bank, as an organ of state control, made considerable efforts, to direct the changes which took place in the banking sector. Some processes were not so uncontrollable any more, for example, the mergers of banks, which were assisted by the National Bank. Some banks, in accordance with the legislation, went though sanations and conservation as in the case of Agroprombank. An attempt to renew its activity through its redemption by new investors appeared unsuccessful, and, the new "Nauriz Bank" created on its basis in 2001 became bankrupt and forcefully liquidated in 2005.

Since 1995 the National Bank influenced the mergers of banks. The first example of a merger was the biggest bank "Alembank", which for a short period of time was under the temporary administration of the National Bank and afterwards – in 1996 – it merged with "Turanbank". On the basis of these two large banks the new "Bankturanalem" bank was founded (called AT BTA bank now). Moreover, in 1997 the process of a merger involved such banks as "Zulbudbank" and "Kredsocbank".

One of the main tasks of the National Bank was the adoption by banks of the international standards in accordance with the requirements of the Basel Committee as well as the international standards of accounting and financial reporting. Within the framework of the bank reform the medium-term program of banks' transition to the international standards of accounting was developed. The reformation of the banking system's accounting, which began in 1995 and which provides a single methodological policy

in the sphere of accounting and reporting in banks and other credit institutions of the Republic Kazakhstan is almost completed.

During the duration of the program the introduction of the international accounting and reporting standards in the system of the National bank and banks of the second level was accomplished that allows to form the new information, which has an important value for the statistics of the financial market, balance of payments, tax-budget statistics, national payments.

These information is successfully used for the analysis, planning and control over the monetary policy, the implementation of normative positions, and also making decisions on the concrete use of financial instruments. These activities go hand in hand with the creation of the proper regulations, training and retraining of personnel. Regulations were also developed for carrying out the internal and external audit of the banking activity based on the new system of accounting and international standards.

In 1998 the National bank of Kazakhstan accepted a decision "About the transition of banks of the second level to the international standards". In accordance with this decision 30 banks of the second level had to introduce the international standards by the end of 2000. In this period all banks in Kazakhstan adopted the international standards. Work continues to improvement the automation of accounting in the banks of the second level.

An important event for the banking system of Kazakhstan was the creation of the system of insurance (guarantees) of deposits in the banks of the second level. The country has the system of obligatory collective guaranteeing of deposits since 1999. The target of the obligatory guaranteeing of deposits is an obligation of banks to return the deposits of physical persons in the case of banks' forced liquidation of deposits of physical persons in tenge and foreign currency.

The operating normative legal acts of the Republic Kazakhstan, namely the Laws of the Republic Kazakhstan: "on banks and banking activity in the Republic Kazakhstan", "On the state control and supervision of the financial market and financial organizations", "On the obligatory guaranteeing of deposits, placed with the banks of the second level of the Republic Kazakhstan" define the legal framework for the functioning of the system of obligatory guaranteeing of deposits, rights and duties of participants.

In particular, the law defines the objects of the obligatory collective guaranteeing, order and terms of payment of compensation on deposits of physical persons, relations between banks and their depositors. Normative acts determine the powers of organizations which carry out the obligatory guaranteeing of deposits, such as the "Kazakhstan fund of guaranteeing the payments to physical persons", participation of banks in the system of guaranteeing of deposits, order of formation and compensations, payments above-mentioned fund, and also compulsory participating in the system

of obligatory guaranteeing of deposits for all banks of the second level, which have a license to accept deposits, opening bank accounts of physical persons.

The basic principles of functioning of the system of obligatory guaranteeing of deposits are:

1) compulsory participation of banks, which accept deposits, open bank accounts of physical persons, in the system of obligatory guaranteeing of deposits;
2) transparency of the system of obligatory guaranteeing of deposits;
3) lowering of risks related to the functioning of the system of obligatory guaranteeing of deposits;
4) the formation of a special reserve for guaranteed compensation.

In the case of the forced liquidation of a bank the institution, which guarantees the payments of deposits pays to depositors the sum remaining on the deposit. At this moment the maximal sum of compensation is at the level of 5 million tenge. The members of the system of collective insurance of deposits of physical persons are deposit banks of the second level.

Bank reform foresees the improvement of the system of bank supervision and principles of regulation of the bank activity. For this purpose the decree of the President of the National Bank was issued in 2003, which founded a new division – the Agency of the National Bank on the regulation and supervision of the financial market and financial organizations, that is, a basic regulation organ, which together with the National Bank maintains the stability of all the banking system.

In July, 2004 the Law of the National Bank was accepted "On credit bureaus and formation of credit histories in the Republic Kazakhstan". In accordance with this law specialized organizations were created, which were instrumental in the reduction of credit risks of banks of the second level. From January 1, 2006 "the First credit bureau" began to function. Its shareholders were 7 large banks and financial corporation "Astana – Finance".

As of 01.01.2009 the credit bureau signed 92 agreements about the provision of information and credit reports including: 37 – with the banks of the second level, 24 – with organizations, which carry out different types of banking operations, 32 – with other persons on the basis of agreements on the provision of information (leasing companies, micro-loan establishments). As of 01.01.2009 there were 3 348 207 credit histories in the database the credit bureau, including 3 318 578 credit histories on physical persons and 29 629 on legal entities.

Therefore, till the beginning of 2007 the Kazakh banking system underwent the reformation and transformation to the international standards to the new stage of banking development. In accordance with the long-term development conception of the financial sector of Kazakhstan the strategic

tasks were determined with orientation towards the standards of the European Union.

In the banking system of Kazakhstan it is possible to define non-branch banks and multi-branch banks, which have branches and banking groups. Non-branch banks are the banks, which concentrate all types of banking services in one office. As of 01.01.2009 there were 10 small banks with their assets amounting to 24,2 billion tenge, and the share in the banking system – 1,6 per cent. All these banks are located in Almata. Their clients are large corporate structures and their affiliated companies and firms for the serving of which theses banks were actually opened.

Other 27 domestic and foreign banks subsidiaries have the branches, cash desks and representative offices in the country's regions. Ten large and middle banks can be attributed to banking groups which make the consolidated reports, and accordingly, are subject to consolidated control and supervision as well as affiliated pension, insurance companies and pawn shops.

Tables 2 shows the results of the bank reform in the country in an institutional aspect.

It should be noted that in Kazakhstan, apart for 37 banks of the second level there is also the "Bank of Development of Kazakhstan", which functions in accordance with the Law of the Republic Kazakhstan of April 25, 2001 "On the Bank of Development of Kazakhstan". In essence this bank is the specialized state investement bank.

Table 2

Structure of Banking System

Structure of Banking System	01.01.1994	01.01.2001	01.01.2009
Number of second level banks	204	48	37
Including banks with 100 per cent of state capital	1	1	1
Banks with foreign capital	–	–	7
Branches of foreign banks			31
Branches abroad	–	–	14
Bank of development of Kazakhstan	–	–	1
Intergovernmental bank	–	–	1
Branches of banks of the second level	724	418	379
Cash desks	223	815	2 167
Fund of insurance of mortgage credit	–	–	1
Credit bureau	–	–	1
Banks in the system of deposits insurance	–	39	35
Association of banks	–	1	1

Source: Statistical bulletin of Nbrk. – 2009 // www.nationalbank.kz. but report of AFN RK // www.afn.kz.

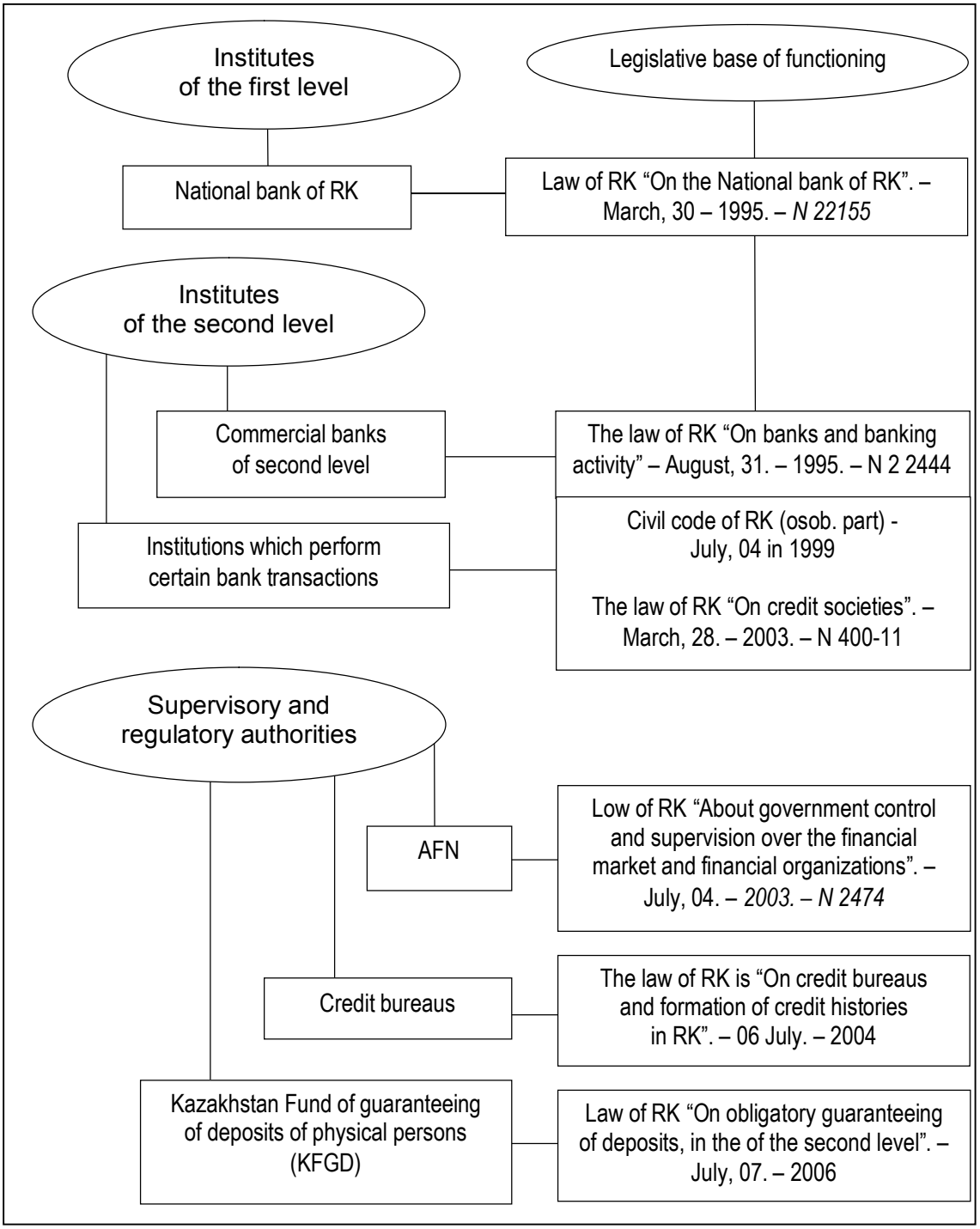

Figure 1. A chart of construction and legal provision of the banking system in Kazakhstan

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II. FEATURES OF ORGANIZATION AND REALIZATION OF THE BANKING SUPERVISION IN THE REPUBLIC KAZAKHSTAN

2.1. The Role of the National bank of Kazakhstan in the creation and development of banking regulation and supervision

The Republic Kazakhstan got sovereignty in 1991 and it needed the formation of the independent banking system and proper model of bank supervision and regulation. However this was accompanied with certain difficulties and problems. One of the basic problems was the absence of the national currency. National currency was entered only 2 years after the independence – on November 15, 1993 and almost in an emergency. Till this period on the territory of Kazakhstan the Russian ruble was in circulation, which was issued by the Central bank of Russia. It should be noted that Kazakhstan always was ready to remain in the unique economic space of the countries of the CIS, where the collective currency would be the Russian ruble. On the part of the government of Kazakhstan it was a wise and far-sighted move, as the economy of countries of the CIS was interdependent with deep economic connections between enterprises.

The disparity in the level of development of the banking system to the changeable requirements of the economic situation, poorly conducted bank reform of 1986 (still as part of the USSR resulted in such phenomena as too big bank apparatus, when in the place of one state bank 6 specialized banks were created. Exactly in this period from 1986 to 1990 in the banking systems of the countries of the CIS, including Kazakhstan, some negative tendencies were apparent:

- inability of banks to make timely payments, that generated such phenomenon as “barter settlements” which in essence were commodity, but not money settlements. Therefore, the banks did not complete perform their major function – mediator in payments;

- appearance of barter settlements allowed many taxpayers to avoid tax payment which resulted in the deficit of the budget. Exactly in this period the social tension grew in society, because salaries and pensions were not paid;
- the boom of creation of commercial banks and the boom of crediting was in the beginning of 90ies, which resulted in the bankruptcy of banks and enterprises;
- the absence of the proper legislatively base promoted financial abuse not only in the financial and bank sphere but also in the real sector of the economy;
- insufficient number of bank employees with the proper education and market experience also contributed to the non-effective work of banks of the second level;
- insufficient technical equipment of banks also played a role in the non-effective work of banks of the second level;
- insufficient implementation by the National bank of RK of its functions, first of all the regulation of the banking activity and the monetary policy led to negative phenomena in the banking system.

Why did the introduction of the national currency take a place in an emergency situation?

In May 1993, the Government of RK signed an agreement with the Government of Russia that Kazakhstan remains in ruble space. But in August, 1993 the Government of Russia violated the agreement, and introduced the money of the new standard, which were in circulation only on the territory of the Russian Federation. So the division of the money systems of the two countries – Russia and Kazakhstan – took place.

From August till September 1993 a huge amount of old rubles came into circulation to the Republic Kazakhstan. It almost destroyed the consumer market of the country with very high inflation. Therefore November 15, 1993 a decision was made about the introduction of the national currency, although time was not adequate, because the fiscal year was ending.

As a result, rubles of the standard of 1961-1992 in the amount of 950,6 billion were withdrawn from the circulation. Taking into account the cash of the National bank of RK, the amount of rubles in the republic was 1,2 trln. rubles. [1, p. 532]. At once, the population and enterprises lost all savings. During the introduction of the national currency – tenge the exchange rate against the US dollar was set at 4,65 tenge for 1 US dollar. But by the end of 1994 the exchange rate exceeded 60 tenge for a 1 US dollar. This year became the year of the worst hyperinflation in the republic.

From the beginning the function of banking supervision and regulation was performed by the main bank of the country – the National Bank

of RK, which it executed till 2004, when the Agency on financial supervision (AFN RK) of RK was created which supervised the financial market of the country.

It should be noted that the first normative and legal documents, the Law "On banks and banking activity of the Kazakh Republic" of December 7, 1990 and the decision of the Supreme Council of Kazakhstan of June 20, 1991 "About the Charter of the National Bank of the Republic Kazakhstan", which became the basis for the creation of the two-tier banking system and transmission of the national state bank into the property of republic and transformation of it into the central bank of the country were no longer meeting the new requirements.

One of the main reasons was a circumstance that these laws were too general, did not clearly define the function of the central bank and banks of the second level and their legal status. The status of the National Bank RK as was not clearly defined too. It did not provide for the independent Central bank with concrete rights especially in the area of control and supervision over the activity of banks of the second level.

Subsequent development of market relations stipulated the necessity of reformation of the banking system and making changes to the banking laws. The Law "On the National bank of RK" was accepted on April 13, 1993 in accordance with which the National state bank of Kazakhstan changed its name and became the National Bank of RK. Therefore, the legal status of the National Bank RK and its independence from executive branches were established. From now on the National Bank of RK was accountable only to the Supreme Council and the President of RK. In accordance with Law "On the National Bank of RK" the National Bank began to carry out the supervising and regulating functions by licensing banks and supervising their activities.

The National Bank was authorized to set the procedures of the licensing of banks, issue instructions, directives, and also form of reporting obligatory for the implementation by all banks and their clients, and to conduct the control the activity of banks. In order to provide the financial stability of banks of the second level and defense of interests of depositors a set of obligatory economic norms was established: minimal amounts of reserve funds, the correlation of assets and liabilities, risks for one borrower, and maximal risks for institutions and shareholders of bank. The National Bank of RK received the right to limit credit investments and change the interest rates on the operations of banks in exceptional cases. However, in 1993, in spite of the used measures of the National Bank it did not succeed in stabilizing the situation in the banking sector. 90 per cent of banks in this time were not following the set norms, which testified to their low level of stability.

That year the number of banks grew from 155 to 204. During 1993 the National Bank of RK once or twice changed the rate of refunding toward an increase – from 65 per cent to 240 per cent, with the minimum obligatory reserves at 20 per cent, if a bank gave long-term credits this norm went down to 10 per cent.

The financial durability of banks of the second level in a period from 1992 to 1998 was in a poor condition. In spite of the rapid growth of banks of the second level in this period, the size of their funds was insignificant. Up to 1995 banks of the second level could not exist without receiving the facilities from the state credit fund. Moreover, banks of the second level generated uncontrolled emission, which was instrumental in the growth of inflation, misbalance of the economy and with the fall in productions, because banks had debit balances on their correspondent accounts.

However, it is necessary to point out that the laws accepted in 1993 did not meet the international standards of banking activity. Therefore, new laws were accepted in 1995 "On the National Bank of the Republic Kazakhstan", "On banks and banking activity in the Republic Kazakhstan". These laws are working to this day. Numerous changes have been entered into them, but from the beginning the principles of activity, the legal status, the role and position of the National Bank and commercial banks were defined, with hard requirements to the creation and control of the activity of banks. These laws meet the international standards of banking activity and international banking supervision.

The improvement of the banking supervision by the National Bank of RK, in particular, the requirements to the increase of the capital of banks resulted in the reduction of their number from 184 to 130, especially at the cost of small and middle banks in 1995. As a result of the harsh requirements to the level of capitalization of banks, in the period from 1992 till February 2007 their number was reduced by 220 banks, as seen on the table 3.

It is necessary to note that in 1992 there were only 155 banks, in 1993 – 204 banks, in 1994 – 184 banks, in 1995 – 130 banks, in 1999 – 101 banks, in 1997 – 82 banks with the further reduction in the number of banks till 2009 to 37 banks.

Therefore, it can be pointed out that quantitative change in the banking system RK grew into qualitative one, as the market also required bigger banks, capable to provide a broad range of banking operations, banking services and products. In conditions of banking competition there were also mergers and takeovers of the banks. On the other hand, certainly, changes of the structure of the banking system led to the reinforcement of the banking supervision.

Table 3

Track record of the changes in the number banks, which licenses were called back

Years	The total number of the licenses repealed	Including							
		For the delay of the activity's beginning	For defective work	For merging with other bank	In connection with transformation in branch	On Government decision	On decision of the court	In connection with transformation	In connection with voluntary liquidation
1992	7	2	2	–	3	–	–	–	–
1993	14	4	7	–	3	–	–	–	–
1994	33	8	16	–	9	–	–	–	–
1995	54		42	1	8	–	–	–	–
1996	31	–	28	3	–	–	–	–	–
1997	24	–	15	6	–	–	–	–	1
1998	14	1	3	2	–	1	1	3	3
1999	18	–	7	7	–	1	1	1	
2000	8	–	5	1	–	–	–	1	1
2001	6	–	3	1	–	–	–	2	–
2002	6	–	3	–	–	–	–	3	–
2003		–	–	2	–	–	–	1	–
2005	1	–	1	–	–	–	–	–	–
2006	1	–	1	–	–	–	–	–	–

2.2. Tasks, goals and principles of the Kazakh Agency for the regulation and control of the financial market and financial organizations

In July 4, 2003 the Law "On government regulations and control of the financial market and financial organization" was made and the common banking supervisor authority – The Agency of the Republic Kazakhstan for regulation and control of financial market and financial organizations (AFC RK) created.

The Purpose of the state control over the financial market and financial organization government is:

- to ensure the stability of the financial market and financial organizations' activity;

- to ensure the corresponding level of protection of the interests of the financial services' consumers;
- the creation of equal conditions for the competition on the financial market.

The tasks of the financial market and financial organization state regulation and control task consist in the following:

- establishment of standards for financial organizations, creation of stimuli for the improvement of the corporative management of financial organizations;
- the financial market's and financial organizations' monitoring to ensure the stability of the financial system;
- focusing the resources of supervision on the areas of the financial market, which are in danger of risks in order to maintain the overall financial stability;
- stimulation of the introduction of modern technologies, ensuring the fullness and accessibility of information for consumers about the activity of financial organizations and financial facilities, which they provide.

The Principles of the state regulation and control of the financial market and financial organizations are:

- an efficient use of resource and instruments of the regulation;
- the transparency of the activity of financial organizations and financial control;
- stimulation of the management of financial organizations based on risk estimation;
- complex measure for the protection of consumers' interests by supporting the development of the new financial instruments and services, as well as the introduction of modern technologies on the financial market;
- responsibility of financial organizations.

The creation of the common supervision authority, which realizes the control on the consolidated basis was a significant progress for Kazakhstan, since earlier there were several supervisors, such as: the Department of the insurance control at the Ministry of Finance; The Department of the banking control at the National Bank; The Committee on securities (the control over broker companies). The Pension funds were also supervised by the separate Committee.

The supervision of the financial groups could be conducted at different times since they were realized by different departments. The financial organizations could show good results by lending the resources in the subsidiary companies. In other words, there existed the effect of "connected bottles".

But since 2004 with the creation of the single supervisor all the divisions of financial groups were checked simultaneously making impossible the double count.

There are several consultative organs with the participating of the representatives of the National Bank of the Republic Kazakhstan (as state organ, which realizes the functions of the regulator of the financial market) and representatives of the financial business for the development of decisions on the vital questions and problem of the financial sector.

The Agency of the Republic Kazakhstan for regulation and control of financial market and financial organizations (AFC RK) solves the problems emerging on the financial market, and synchronizes its actions with the National Bank of the Republic Kazakhstan, which allows to raise the efficiency of its actions. The interaction with the representatives of the business is important and for the solving of problems facing the market participants.

The Agency of the Republic Kazakhstan for regulation and control of financial market and financial organizations (AFC RK) has founded the Technical Committee, Consultative Council, Experts Council. The Purpose of the Technical committee is to ensure the stable functioning of the financial market and financial organizations and to maintain the trust of the general public to the financial system.

In 2008 the Technical Committee of the Agency held 6 meetings. They focuses on the following questions: development of actions during the growing risks on the financial market, introduction of instruments for the estimation of the financial stability of the banking sector, introduction of practices of early response, analysis of the results of independent stress-testing of financial organizations; the improvement to methodologies of the Agency for stress testing of both separate banks and banking system as a whole; the improvement of the procedures for the monitoring of the financial condition of bank conglomerates; the estimation of the methodologies of the Agency and how they correspond to the standards and principles of international organizations regulating financial markets (Basel Committee, IOSCO, IAIS, IOSP).

Based on the work of the Technical committee the Agency designed the corresponding documents, including normative ones, which are directed towards the improvement of the supervisor of the financial market and financial organizations.

The Consultative Council is a consultative organ of The Agency of the Republic Kazakhstan for regulation and control of financial market and financial organizations (AFC RK). The task of the Council is the provision

of coordinated actions for the improvement of the legislation of the Republics Kazakhstan in the sphere of financial market's regulation.

Accordingly to the Law of the Republic Kazakhstan of January 31, 2006 "On private enterprises" the Agency of the Republic Kazakhstan for regulation and control of financial market and financial organizations (AFC RK) realizes its function of the Expert Council. The Expert Council is a consultative organ, which considers the projects of the normative and legal acts, designed by The Agency of the Republic Kazakhstan for regulation and control of financial market and financial organizations (AFC RK). All projects of the normative and legal acts pass the obligatory expert analysis.

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III. ANALYSIS OF DEVELOPMENT OF THE BANKING SYSTEM OF KAZAKHSTAN

Considering the process of the formation and developments of the modern banks in Kazakhstan, we should indicate the following important stages:

1) 1988-1993 (the introduction of the national currency);
2) 1994-2002 (the improvement of the functioning of banks and the banking system as a whole);
3) 2003 – an August 2007 (the period of the growing);
4) September 2007 – till present period (the crisis period).

The Period 2003 – an August 2007 was the period of more or less stable growing of the banks and development of their activity. It was the most interesting period for researchers studying the banks in Kazakhstan and the market of financial and banking services. The Transformation of banking from the command model to the market model occurred in rather favorable business environment, by improving the traditional services of the banks and generating a new range of innovative products. The Evolution of the development of the banking institutions is presented in table 4.

Table 4

Data on the banks of the second level

Factors	1994	2004
Total number of banks of the second level, of them:	184	36
state	4	1
With participation of foreign capital	8	15
subsidiaries	5	10
Branches:	1 042	385
on the territory of Kazakhstan	1 042	384
foreign	–	1
licenses called back during the year	33	–

Source: www.nationalbank.kz.

According to the table 4, since 1994 the process of optimization of banks began in Kazakhstan, which was characterized by the significant reductions of their number down to 2005. During these 10 years the number of banks decreased from 184 to 36, i.e. decreased by more than 5 times. For 2005-2008 the quantitative factors of the banking system did not change much. As of 01.01.2009 in Kazakhstan there were 37 banks of the second level, including 35 banks in Almaty, 34 branches and 372 additional bank buildings.

Table 5

The Structure of the banking sector of the Republic Kazakhstan

Factors	01.01.08	01.01.09
Amount of the banks second level, including.:	35	37
- banks with 100 per cent state participation in authorized capital	1	1
Second level banks branch amount	352	379
Amount of the additional premises of the second level banks	2 029	2 167
Number of banks' offices abroad	17	14
Number of foreign banks in the Republic Kazakhstan	26	31
Number of banks participating in the system of obligatory insurance of deposits of physical persons	33	35
Number of banks, which are licensed to carry out custody activity	10	1

Source: Bank sector current condition on 1 January 2009 //www.afn.kz.

If we compare the list of banks of 01.01.2004 with that of 01.01.2009, we can see that the overwhelming majority of banks is functioning as successful and developed institutions.

Since 2004 the banking system of Kazakhstan experienced some positive shifts in the growing of the resource base and an aggressively active policy in lending. The Period since 2004 can be considered "the period of growth" for the banking business, which for different reasons was discontinued in August 2007. From this date the pre-crisis stage (till August 2007) began, which led to the full-blown crisis having an impact on the national banking system.

The development model of the banking system was formed under the influence of the world financial market, which offered available and unlimited resources. This way for obtaining maximum profits through cheap external loans, which were used for lending the real estate market and individual consumption, was chosen by the domestic banks in the beginning of 2000. This led to negative consequences such as the disbalancing of the economy and the banking system and deep involvement in risky operations.

Table 6

Data about the banks of the second level in the Republic Kazakhstan as of 01.01.2009

Name of the bank	Volume of assets	Liabilities	Own capital
1. JC “BTA Bank”	2 915	2 497	416
2. JC “KAZKOMERCBANK”	2 335	2 139	196
3. JC “Public Bank Kazakhstan”	1 620	1 449	171
4. JC “Alliance Bank”	1 036	877	159
5. JC “ATFBANK”	991	915	76
6. JC “Bank CentrKredit”	946	850	96
7. JC “Nurbank”	298	253	45
8. JC “BTA BANK” – JC “TEMIRBANK”	288	235	53
9. JC “Eurasian Bank”	271	246	25
10. JC “Kaspi BANK”	253	223	c
11. JC DB “RB (Kazakhstan)”	163	144	19
12. JC “CESNABANK”	140	124	16
13. DB JC “Sberbank”	97	63	C4
14. JC “Citybank Kazakhstan”	95	83	12
15. DB JC “HSBC BANK KAZAKHSTAN”	89	80	9
16. JC “Kazinvestbank”	68	58	10
17. JC “Housebuildingsberbank Kazakhstan”	60	43	17
18. JC “EKSIMBANK KAZAKHSTAN”	51	38	13
19. JC DB “CHINA BANK in KAZAKHSTAN”	35	31	4
20. JC “DB “ALPHA-BANK”	29,8	22	7,8
21. JC “DeltaBank”	25	20	5,8
22. JC “Home Credit Bank”	16	10,2	5,8
23. JC “Bank Positive Kazakhstan”	13,8	8,9	4,9
24. JC “Bank “Astana-finans”	6,6	4,7	1,9
25. JC “SB “LARIBA-BANK”	6,6	2,1	4,2
26. JC “DB “KZI BANK”	6	3,4	2,9
27. JC “TPBK”	5,9	3,5	2,4
28. JC “METROKOMBANK”	5,7	4,0	1,7
29. JC “Shinhan Bank Kazakhstan”	5,1	0,04	5,1

Table 6 continued

Name of the bank	Volume of assets	Liabilities	Own capital
30. JC DB "T AIB KAZAKH BANK"	2,9	0,6	2,3
31. JC "Danabank"	2,9	1,4	1,5
32. JC "Canim-Bank"	2, 8	0,7	2,1
33. JC "Masterbank"	2,8	0,7	2,1
34. JC "Zaman-Bank"	2,3	0,2	2,1
35. JC "Express Bank"	2	0,2	1,8
36. JC DB "NB Pakistan" in Kazakhstan	1,9	0,9	1,0
37. JC "Kazinkombank"	I,6	0,1	1,5

The Source: Information about banksof the second level //www.afn.kz.

The following table shows the dynamics of the banking sector for the period 2001-2008.

Table 7

The role of the banking sector in the economy of Kazakhstan

Factors	2003	2004	2005	2006	2007	2008	2009
GNP, bln. tenge	3 747,2	4 612	5 870	7 453	10 139,5	12 849,8	15 907
Ratio of banks' assets to GNP, per cent	30,6	36,3	45,8	60,6	87,5	90,9	74,7
Ratio of the loan portfolio of banks to GNP, per cent	19,1	23,6	30,9	41,1	59,1	69	58,1
Ratio of the ownership capital of banks to GNP, per cent	4,3	5,1	5,9	7,9	11,5	15,2	12,3
Ratio of deposits of banks to GNP, per cent	18,6	21,3	27,4	33,9	46,5	53,5	43,2

The Source: AFN RK Current condition of the bank sector on 01.01.2009/www.afn.kz.

As can be seen from table 7, the growth of GNP was accompanied by the growth of the banking sector before 2008, which is seen from the indicators of the activity of banks of the second level. Here we can notice the breach of the trend growth during 2008, which is explained by the reduction in the banking activity, which began since September 2007 as a consequence of liquidity crisis.

Beginning from 2002 banks in Kazakhstan were developing at high rates. We see that from table 8.

Table 8

Indicators of banks of the second level in Kazakhstan

Years	Number of banks	Assets		Ownership capital		Loans to the economy	
		Volume mln. tenge	Growth, per cent	Volume mln. tenge	Growth, per cent	Volume mln. tenge	Growth, per cent
2002	38	1 144 965	100	161 211	100	717 358	100
2003	36	1 677 883	146,5	223 510	64,4	1 086 621	151,4
2004	36	2 687 479	160,1	346 816	155,2	1 812 912	166,8
2005	35	4 515 139	168	587 184	169,5	3 062 011	168,9
2006	34	8 872 032	196,4	879 508	149,8	5 991 768	195,6
2007	35	11 684 628	131,7	1 425 124	162	8 868 306	148
2008	37	11 899 316	101,8	1 458 352	102,3	9 238 400	104,1
2008 to 2002	–	–	1 039,2	–	904,6	–	1 287,8

As of 01.01.2009 the assets of the banking sector as seen from table 8, amounted to 11 889 bln. tenge. The decline in the growth of assets are conditioned by the reduction in lending.

Table 9

Credit investments in general assets of banks of the second level

Years	Assets mln tenge	Credits mln tenge	Weight of Credit, per cent
2002/38	1 144 965	717 358	62,6
2003/36	1 677 883	1 086 621	64,8
2004/36	2 687 479	1 812 912	67,5
2005/35	4 515 139	3 062 011	67,8
2006/34	8 872 032	5 991 768	67,5
2007/35	11 684 628	8 868 306	75,9
2008/37	11 899 316	9 238 400	77,6

It Is Formed as of Stat. report NFRRK. – №. – 2008. – p. 44. 26.

According to the data of table 9, the assets of banks in Kazakhstan are full of credits, as the most profitable types of bank investment – in different years their volume was from 62,6 per cent to 77,6 per cent.

Table 10

The structure of credits of banks of the second level

Years	Short-term credits	Long-term credits	Credits in national currency	Credits in foreign exchange
2002	43	57	32	68
2003	38	62	45	55
2004	34	66	48	52
2005	34	66	48	52
2006	27	73	52	48
2007	20	80	57	43
2008	20	80	56	44

It Is Calculated for: Stat. report NFRRK №. – 2008. – p. 44, 45 and AFN/ www.afn.kz.

According to the data on table 10 we can make a conclusion that banks in Kazakhstan give credits for the period of more than one year. Moreover, during the period under investigation this correlation changed in favor of long-term loans. This situation can be explained by the development of mortgage loans with maturity exceeding 5 years. As to the currency in which loans are given we can see that for the period 2002-2008, there is a trend of the growing share of credits in the national currency – tenge.

Table 11

The structure of credits of banks of the second level

Years	Particle credit BDR non-banking juridical persons	Particle credit BDR physical persons
2002	91,3	8,7
2003	87,5	12,5
2004	79,5	20,5
2005	74,2	25,8
2006	67,3	32,7
2007	64,5	35,5
2008	68,7	31,3

It Is Calculated given AFN/ www.afn.kz.

According to the table 11 the lending to physical persons for the considered period increased significantly. The development of the "retail" lending to the population by banks of the second level grew from 8,7 per

cent in 2002 to 31,3 per cent (3,5 time growth). This became possible due to the development of such consumer credits as: auto credit, on urgent necessities credits, express-credits (the lien), as well as on buying of homes (mortgage). At the same time we see that the data shows that the greatest importance for banks is credits to legal persons i.e. corporative lending.

As can be seen from table 12, trade, construction and industry are the biggest consumers of credits. During the period under investigation the share of these areas in crediting was growing. The smaller share belongs to agricultural credits, besides, in the last years it has been steadily diminishing – from 11,4 per cent in 2002 to 3, and 4 per cent in 2008. The absence of interest to this area by banks is explained by stereotype thinking that agriculture is a high-risk area for crediting.

Table 12

Second level banks credit structure for different branches of the economy

Areas of the economy	2002	2003	2004	2005	2006	2007	2008
Industry	34,3	28,0	19,5	16,9	11,1	9,7	10,2
Agriculture	11,4	12,0	8,4	6,3	4,4	3,6	3,4
Construction	6,4	7,7	10,7	12,1	13,9	17,2	19,6
Transport	3,0	3,2	3,8	3,7	2,3	1,9	2,1
Communication	1,9	0,8	1,3	0,8	0,7	0,5	0,6
Trade	29,4	28,3	26,9	24,6	23,3	21,3	22,8
Other branches	13,6	20,0	29,4	35,5	44,3	45,8	41,3
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0

It Is Calculated : Stat. report NFRRK. – № 1. – 2005, 2007, 2008. – № 12. – 2008.

The events of August 2007 had a negative influence upon the liquidity of the Kazakh banks, resulted in the outflow of deposits of physical and legal persons, reduction of the volume and quality of the loan portfolios both for individual banks and the banking system. All this became the consequence of the crisis of financing and led to the collapse of the banking market in the republic.

According to the data of table 13, the quality of the loan portfolio of the Kazakh banks grew worse in 2007, when the share of standard credits fell to 39,7 per cent, but the share of doubtful grew to 58,8 per cent. In 2008 due to the loan portfolio growth the share of standard credits increased, together with an increase of hopeless credits (from 131,4 bln. tenge to 402,2 bln. tenge) that has resulted in the growth of their specific value in the structure of the loan portfolio – from 1,5 per cent to 4,4 per cent.

Table 13

Dynamics of the quality of loan portfolios

Categories of the credit	2004	2005	2006	2007	2008
Standard	56,2	58,2	52,7	39,7	43
Doubtful	40,9	39,6	45,7	58,8	52,6
Doubtful 1 category – full and timely payment	31,9	32,3	38,9	44,5	24,2
Doubtful 2 category – delay or incomplete payment	1,4	1,1	1,8	6,5	6,5
Doubtful 3 category – under well-timed and full payment of the payments	5,2	4,2	3,6	6	17,1
Doubtful 4 category – delay or incomplete payment	1	0,9	0,6	0,6	2,2
Doubtful 5 category	1,4	1,1	0,8	1,2	2,6
Hopeless	2,9	2,2	1,6	1,5	4,4
Total loan portfolio	100,0	100,0	100,0	100,0	100,0

It is formed as of report AFN: the Current condition of the bank sector on 1 January 2007, on 1 January 2009 // www.afn.kz.

The loan portfolio quality deterioration is a negative factor, which reflects the situation in the country. According to the requirements of the supervision authority banks are obliged to create the corresponding provisions (provisions are the reserves to cover possible losses from the credit activity. There are general provisions and special provisions – as requested by the Agency on regulation and control of the financial market and financial organizations – AFN).

Table 14

The size of provisions on credit portfolios formed by Kazakh banks

Indicator	2004	2005	2006	2007	2008
Provision bln. tenge	121,3	171,9	299,1	521,70	1 025,60
Provision in percent to loan portfolio, per cent	6,7	5,6	5	5,9	11,1

It Is Formed for: Statistical bullet NBRK. – 1-2005. – p. 238 and Report AFN about Fin.stability/www.afp.kz.

With the low rate of growth of credit portfolios and significant rate of growth in provisions, in 2008 there was an increase in the level of reserves in credit portfolios. The data of table 14 confirms that banks enlarge their own provisions in connection with the deteriorating quality of credit portfolios according to the requirements of the regulating body (the Agency on regulation and control of the financial market and financial organizations – AFN) that was particularly noticeable in 2008, when due to the growing hopeless credits and various categories of doubtful loans (tabl. 13) the amount of provisions

increased nearly twofold – from 521,7 bln. tenge to 1 025,6 bln. tenge and amounted to 11,1 per cent of the loan portfolios of banks.

The data of the table 15 indicate that with the eruption of the crisis the hopeless credits in the loan portfolios of banks increased in all areas, while the most risky areas were the construction industry, where the hopeless credits increased from 1,6 to 6 per cent – (more than 3,5 time increase), agriculture and trade – (two time increase).

Table 15

The quality of the loan portfolio of the second level banks (branches of the economy)

Areas of the economy	Standard		Doubtful		Hopeless	
	2008	2009	2008	2009	2008	2009
Construction	25,2	33,4	73,2	60,6	1,6	6
Trade	39,9	50,5	58,6	46	1,5	3,5
Industry	51	50,9	46,3	44,8	2,7	4,3
Agriculture	44,7	65,8	52,8	29,2	2,5	5
Transport	71,4	70,9	26,3	26,1	2,3	3
Communication	54,1	37,3	45,5	62	0,4	0,7
Other areas	43,8	50,8	55,5	46,4	0,7	2,8

The Source: Report AFN for 2008 // www.afn.kz.

Many problems of banks, which grew worth during the crisis, were connected with the peculiarities of the resource base formation. We shall look at the dynamics of bank resources in the period from 2003 till now (tab. 16).

Table 16

Indicators of the banking system of Kazakhstan

Years	Ownership capital	Authorized capital	Total liabilities	Total assets
2002/38	161 211	76 986	1 010 421	1 144 965
2003/36	223 510	100 369	1 492 519	1 677 883
2004/36	346 816	161 350	2 416 167	2 687 479
2005/35	587 184	244 676	4 073 368	4 515 139
2006/34	1 168 581	593 568,	8 001 635	8 872 032
2007/35	1 781 803	940 209	10 256 669	11 683 413
2008/37	1 953 867	1 017 684	10 440 964	11 899 316

It Is Formed for: Stat.report.NBRK. – 1-2006, p. 141, 142, 12.-2008. – p. 147, www.nationalbank.kz.

Let's have a look at the growth of bank resources.

Table 17

Dynamics of the main indicators of the banks of the second level

In per cent to the previous year

Years	Ownership capital	Authorized capital	Total liabilities	Total assets
2003	38,6	30,3	47,7	46,5
2004	55,2	60,7	61,9	60,2
2005	69,3	51,6	68,6	68,0
2006	99,0	142,6	96,4	96,5
2007	52,5	58,4	28,2	31,7
2008	9,7	8,2	1,8	1,8

It is calculated for given table. 16.

The ownership capital of banks is a factor, which defines the capital basis of the bank, and it is the main financial factor which is used as a basis for the payments, analysis and estimation of the regulative standard. Its major part is the authorized capital. This is confirmed by the data below (table 18).

Table 18

The relationship between the ownership and authorized capital for the banks of the second level in Kazakhstan

Years	Ownership capital mln. tenge	Authorized capital mln tenge	Share of the authorized capital in the ownership capital, per cent
2002/35	161 211	76 986	48
2003/34	223 510	100 369	45
2004/35	346 816	161 350	47
2005/34	587 184	244 676	42
2006/33	1 168 581	593 568	51
2007/35	1 781 803	940 209	53
2008/37	1 953 867	1 017 684	52

According to the data in table 18, the share of the authorized capital presents half of the ownership capital while the growth of its volume occurs proportionally to the increase the ownership capital, which provides the proportional dynamics of its weight. In Kazakhstan the sufficiency of the ownership capital is evaluated by two coefficients: k1 and k2, best value of which is 0,06 and 0,12, and for the bank, which is part of the banking holding, these factors are set at 0,05 and 0,10 accordingly.

The indicators of the ownership capital adequacy in the banking sector are presented in table 19.

An important issue for the Kazakh banks is the concentration of capital and its increase due to the demands by the regulator to increase the minimum authorized and ownership capital. According to the Kazakh legislation in April 1995 the requirements to the minimum authorized capital for banks were 500 thousand USA dollars undertaking transactions in tenge and 1,5 mln. USA dollar for undertaking transactions in foreign currencies.

Table 19

Indicators of the adequacy of the ownership capital of banks of the second level

Indicators of adequacy of the ownership capital	01.01.05	01.01.06	01.01.07	01.01.08	01.01.09
Relation of the ownership capital of the first level to total asset (k1)	0,08	0,09	0,09	0,11	0,12
Relation of the ownership capital to assets and non-balance liabilities, taking into account a degree of the risk (k2)	0,16	0,15	0,15	0,14	0,15
Relation of ownership capital to loan portfolio	0,19	0,19	0,20	0,20	0,21
Relation of the ownership capital to the provisions of the loan portfolio	2,86	0,40	3,91	3,41	1,90
Relation of the ownership capital to doubtful credits	0,47	0,48	0,43	0,34	0,40
Relation of the ownership capital to hopeless credits	6,68	8,54	12,43	13,55	4,84

Formed for: the Current condition of the bank sector 1 January 2006, 1 January 2007, and January 2009 //www.afn.kz.

Since December 5, 1998 the minimum size of the authorized capital was set in the amount of 300 mln. tenge for the newly created banks and 100 mln. tenge for the existing banks.

In order to increase the requirements to the minimums of the authorized and ownership capital of the second level banks aimed at increasing the capitalization of the banking sector of the republic and its competitiveness with the view towards the future entering of Kazakhstan in the World Trade Organization, on September 2, 2008 the Agency on the regulation of the financial market and financial organizations made a resolution № 140 “On the minimums of the authorized and ownership capital of the second level banks”, which is foresees:

- an increase in the minimum of authorized and ownership capital for the newly created banks up to 5 bln. tenge;

- a phased increase of the minimum size of the ownership capital for the existing banks: since 1 July, 2009 – to 5 bln tenge, since 1 July, 2011 – to 10 bln. tenge; for banks, located outside of city Astana and Almaty – to 3 bln. and 5 bln. tenge, accordingly.

As a result of the increased requirements to the minimum rates of the authorized and ownership capital of the second level banks, taking into account the current capitalization of the banking sector till July 1, 2009 15 banks will have to increase their ownership capital and by July 1, 2011 18 banks will have to do it.

According to the certain sources, in the developed countries of the world a minimum authorized capital is from 4 to 22, 6 mln. US dollars, in particular in USA this indicator stands at 5-10 mln. US dollars, in Japan – 10,3 mln. US dollars, in Russia – 5 mln. Euro [5, p. 9]. For comparison: the scheduled minimum amount of the authorized capital for Kazakh banks is 5 bln. tenge before the devaluations of 2009 which is 41,6 mln. US dollars, and 33,3 mln. US dollars after the devaluation. The increase of the ownership capital and the maintenance of its adequacy are the most important problems for commercial banks, as, by solving them, the bank realizes the defense, regulation and insurance function of the ownership capital, which helps the development of the banking activity and guarantees safety for creditor and depositors. The bigger the size of the ownership capital, the more possibilities a bank has for the attraction of resource and their distribution in the form of credits and different investments.

As can be seen from the second level of banks activity review, the most favourable situation for the development of the deposit and, accordingly, the credit markets was in 2001. The deposits of residents into the banking system grew by 50 per cent and amounted to 13,7 per cent of the GNP. The legal persons' deposits grew by 25,1 per cent and till the end of 2001 amounted to 253,1 bln. tenge. The additional resources for the banking sector were attracted with the assistance of a campaign of legalizations of the residents' capital, which helped legalize 480 mln. USA dollars. According to the estimation of the National Bank, about 60 per cent of the legalized recourses were deposited in banks. As a result, during 2001 the deposits of the population grew twofold, however the interest rates on deposits were reduced.

The average rate of profits for physical persons from the deposits in tenge fell from 15,6 per cent to 12, and 8 per cent, from deposit in foreign currency – from 8,6 per cent to 7, and 3 per cent. Such reduction led to the decrease of the interest rates on credit, in particular, the average interest rate on credits to legal persons fell from 18,8 per cent to 15,4 per cent annual, to physical persons – from 27 to 24,5 per cent. Such tendency did not

change in the following 2002: the renewal of the resource base and the growth of the credit potential due to internal savings, continued. During 2002 the deposits of residents in the banking system grew to 35,6 per cent and amounted to 16,1 per cent of the GNP.

In 2002 there was a reduction of interest rates for time deposits of physical persons in tenge – from 12.8 to 11.0 per cent; in foreign currencies – from 7.3 to 6 per cent. Together with the lowering of the refinancing rate this led to the reduction of the average credit rates. The average interest rate on loans in tenge to legal persons fell from 15 to 14 per cent; in foreign currency – from 13.1 to 12 per cent. Similarly, interest rates on loans to individuals decreased. The situation with the deposits for the period from 2003 to 2009 is shown in tables 20 and 21.

As seen from the data on table 20, during the last 5 years the deposits kept increasing steadily, in some years the growth rates were very high. Some slowdown took place 2007-2008, which was characterized by the crisis that undermined the confidence in banks and led to the increase of negative sentiments among investors and creditors.

Table 20

Deposits of the second level banks in Kazakhstan

(end of period)

Indicators	2004		2005		2006		2007		2008	
	Tenge, billion	Per cent to 2003	Tenge, billion	Per cent to 2004	Tenge, billion	Per cent to 2005	Tenge, billion	Per cent to 2006	Tenge, billion	Per cent to 2007
Total deposits – including:	1 039	153	1 401	135	2 629	188	3 895	148	4 588	118
Deposits of legal persons	605	173	822	136	1 591	194	2 447	153	3 088	126
Deposits of individuals	434	131	579	133	1 038	180	1 448	139	1 500	104

Calculated by: Stat.byuleten NBRK. – № 1. – 2007.; Current state of the banking sector on January 1, 2009-AVN.

Typically, with the lowering of interest rates on deposits there is the lowering of interest rates on credits, as confirmed by the data of table 21. The only exception is the relationship between the rates on deposits and loans in foreign currency. With the reduction of the rates on deposits in 2007-2008 from 4.5 to 3.6 per the interest rate on loans in foreign currency

increased from 11.9 to 13.4 per cent. Such situation can be explained on the one hand, by the desire of banks to encourage tenge deposits and, on the other hand, by the rise in foreign currency loans because of the shortage of resources.

Table 21

Average commission rates on deposits and loans of bank of the second level

for the period, %

Indicators	2003	2004	2005	2006	2007	2008
Deposits in national currency	4,2	3,6	3,5	4,2	5,5	5,6
Loans in local currency:	16,1	15,3	14,8	14,8	14,7	16,6
– Legal persons	15,6	14,4	13,7	13,0	13,5	16,1
– Physical persons	24,3	20,9	19,7	19,6	17,5	19,4
Deposits in foreign currency	2,1	2,1	3,4	3,9	4,5	3,6
Loans in foreign currency:	11,6	11,0	11,2	11,2	11,9	13,4
– Legal persons	11,0	10,2	10,4	10,6	11,3	13,2
– Physical persons	17,2	15,1	14,8	13,7	14,4	15,7

Compiled by Stat.byuleten NBRK. – № 5(162). – 2008. – stor. 94, 35; № 12. – 2008. – stor. 103, 43.

The analysis of the performance of banks in Kazakhstan shows that the conducted interest rate policy has some positive results which are reflected in the profits.

Table 22

Revenues of the banking sector

Figures in billion tenge	01.01.2005	01.01.2006	(+;–), %	01.01.2007	(+;–), %	01.01.2008	(+;–), %	01.01. 2009	(+;–), %
Revenues related to payments	212,6	342,1	60,9	620,1	81,2	1 243,4	100,5	1,459,9	17,4
Expenditures related to the payment of remuneration	93,9	180,1	91,8	337,2	86,8	656,1	94,6	789,3	20,3
Net income related to the remuneration	118,7	162,0	36,5	282,9	74,8	587,3	105,9	670,6	14,2
Income not related to the remuneration	110,6	151,1	36,6	287,3	80,0	550,5	91,6	1471	2,7
Expenditures not related to the payment of remuneration	191,3	229,8	20,1	442,5	85,7	875,6	97,9	2,114,5	2,4

Table 22 continued

Figures in billion tenge	01.01.2005	01.01.2006	(+; –), %	01.01.2007	(+; –), %	01.01.2008	(+; –), %	01.01.2009	(+; –), %
Net income (loss) not connected with the receipt of renumeratin	–80,7	–78,7	–2,5	–155,2	97,2	–325,2	109,5	–643,5	2
Contingencies	1,0	–0,6	–	–0,2	60,0	0,4		0,0	
Net income before income tax	39,0	82,6	111,8	127,5	54,4	262,5	105,9	27,1	–89,7
Charges after paying income tax	7,3	9,3	27,4	25,6	169,5	45,6	78,1	16,4	–64,0
Net profit after income tax	31,7	73,3	131,2	101,9	39,4	216,9	112,8	10,7	–95,1

Compiled and designed by: Current state of the banking sector on January 1, 2006, January 1, 2007, January 1, 2009 // www.afn.kz.

The data in Table 22 indicate that the earnings of banks associated with compensations for the period 2005-2007 grew rapidly – from 60.9 per cent to 100.5 % per cent a year along with the growth of taxes associated with rewards payment – from 86.8 to 94.6 per cent. All this led to high profits of the banking sector: in 2006 – 101.9 billion tenge, in 2007 – 216.9 billion tenge. In 2008 the situation changed towards the sharp decline in profits – including the income tax the revenue fell by 95.1 per cent. As it is noted in the special report, in times of the financial crisis the main task of banks became to ensure the optimal level of liquidity, capital adequacy, the formation of additional provisions. In 2008 in the structure of income 50.2 per cent belonged to the income not associated with the payment of remuneration (1 471 billion tenge), and in the structure of expenditures 72.8 per cent were the costs not associated with the payment of remuneration (2 114.5 billion. tenge), which in 2008 rose 2.4 times mainly due to the increased provisions in 2008 to 1 307,5 billion tenge [3, p. 32].

Since 2009 the impact of the negative trends in the banking activity manifested themselves in the lowering of profits and consequently had an impact on the final result. The total earnings of banks of the second level (as of March 1, 2009) amounted to 1 305 billion tenge. The total expenditures – 1 568.7 billion tenge (excluding income tax, which amounted to 1.7 billion tenge). Net loss of banks in March 1, 2009 amounted to 265.4 billion tenge. As we can see, the situation in the banking sector in the recent years was quite positive, which made it possible to maintain the efficiency indicators of the banking activities at a high level up to 2008. The inevitability of the

negative scenario in the crisis period was evident from the early 2008 and by the end of this period the indicators of ROA and ROE fell sharply in connection with the reduction of profitability. The deterioration of the loan portfolios forced banks to create provisions, which explains the increase (more than 4.5 times) of the ratio of expenditures for the establishment of reserves to total assets – from 2.42 to 11.09.

Table 23

Aggregate indicators of profitability of the banking sector

Indicators	2005	2006	2007	2008	2009
The ratio of net income before the payment of income tax to total assets (ROA)	1,45	1,8	1,4	2,55	0,23
The ratio of net income before income tax to the equity on the balance sheet (ROE)	11,26	14,1	10,9	22,87	1,88
The ratio of income related to the receipt of remuneration (interest) to total assets	7,91	7,6	7,0	12,10	12,39
The ratio of income related to the receipt of remuneration (interest) on loans to total loan portfolio	10,13	9,9	9,2	15,24	14,64
The ratio of net income from dealing operations to the net income before income tax	28,21	23,5	29,6	30,82	3,5
The ratio of expenses related to the payment of remuneration (interest) to total liabilities	3,89	4,4	4,2	7,19	7,63
The ratio of expenditure for the establishment of reserves to total assets	2,71	1,7	1,8	2,42	11,09

Compiled by: Current state of the banking sector on January 1, 2006, January 1, 2007, January 1, 2009 // www.afn.kz.

The deepening of the crisis is caused by the significant dependence of Kazakh banks from foreign borrowing, which led to the deep liquidity crisis, significantly increasing their impact on the situation in the banking sector. Since 2005, the leadership of the National Bank was concerned about the progressive increase in risks of the financial system and possible future threats to financial stability and focused their attention on these issues in collaboration with other government agencies.

Table 24

Commitment to non-residents in total liabilities of banks second level

Indicators	2003	2004	2005	2006	2007	2008
The share of commitments to non-residents in total liabilities	27,6	38,3	41,0	50,7	51,6	44,7

Source: AVN.

The instability on the global markets caused the decline in external liabilities, which in the recent years were the main source for the growth in the banking sector since the beginning of 2007 both in absolute and in relative terms, which, on the one hand, is positive as it reduces the vulnerability of the banking system to external shocks while, on the other hand, it exacerbates the shortage of liquidity in conditions of a narrow domestic financial market. However, despite the decline in the share of foreign liabilities in the total liabilities of the banking sector, the level of foreign borrowings remains high and constitutes a significant part of total liabilities of banks of the second level – 44.7 per cent. However, in the structure of external liabilities of the banking sector due to objective reasons significant changes were not observed.

Despite the liquidity problems, the Kazakh banks are coping with the payments on foreign loans, using the support of the National Bank in refinancing on the foreign markets. According to the National Bank of Kazakhstan during 2009 the second-level banks had to pay on the external liabilities the amount of 1 320 billion tenge (11 billion dollars).

In 2008, as in the previous year of the crisis, an active work was carried out aimed at cooperation between the Government of the Republic of Kazakhstan, the Agency on Banking Supervision and the National Bank of Kazakhstan in the framework of the Memorandum on financial stability signed in spring 2007, which outlined the principles of the state support and procedures for the use of other instruments of state regulation to ensure the financial stability.

In addition to general operating measures to ensure the financial stability in the country, the Government of the Republic of Kazakhstan and financial regulators introduced several additional measures to stabilize the economy and the financial sector of Kazakhstan, because in conditions of systemic instability in the financial market the prudential measures did not provide the full effect to ensure the financial stability. In this regard, a significant role is given to the measures of fiscal and monetary nature. In particular, during 2007, the National Bank of Kazakhstan two times reduced the standards of the minimum reserve requirements (in 2007 for the interior liabilities the reduction was from 6 per cent to 5 per cent, for other commitments – from 8 to 7 per cent and later by the end of year from 5 to 2 per cent of domestic commitments, and from 7 to 3 per cent – of other liabilities), and in July 2008 the official refinancing rate was reduced from 11 to 10.5 per cent. From June 2009 the refinancing rate was set at 8.5 per cent.

On November 25, 2008 the Joint Action Plan of the Government of the Republic of Kazakhstan, the National Bank of Kazakhstan and the Agency of the Republic of Kazakhstan for the regulation and supervision of

financial markets and financial institutions aimed at stabilizing the economy and the financial sector in the period 2009-2010 was adopted, which defined a set of measures to reduce the impact of the global crisis on the socio-economic situation in Kazakhstan and provide the necessary basis for the future quality economic growth. The source of financial support of the Plan is the National Fund of Kazakhstan in the amount of $10 billion. USA.

The plan includes the following activities:

1) stabilization of the financial sector;
2) development of housing;
3) support to small and medium business;
4) development of agriculture;
5) implementation of infrastructure and breakthrough projects.

In addition, the plan included the solution of the problem of creating the Fund of stress assets and measures for the support of the level of liquidity of the banking sector by the National Bank of Kazakhstan. The Fund of stress assets was created but the real work has not begun because of the remaining undeveloped assessment procedures for the purchasing of problem assets.

As regards the improvement of the legal framework of the banking and financial sectors it is necessary to outline the developed and signed by the Head of State in October 23, 2008 the Law of Kazakhstan № 72-IV "On Amendments and additions to some legislative acts of the Republic of Kazakhstan on the stability of the financial system." The development and adoption of the regulation called the "Financial stability law" is aimed at the strengthening of the regulator's approaches on preventive supervision. In particular, one of the innovations of this law is the introduction of the mechanism of the operative recovery of troubled banks.

For an early response to problems emerging in banks, which manifested themselves in the breach of prudential standards and other compulsory rules and regulations, the law provides the rules for the acquisition by the Government of the Republic of Kazakhstan of these banks' shares. This mechanism must protect the interests of the creditors of banks and other financial institutions and ensure their stability as well as the prevention of the systemic risks.

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IV. RESULTS OF SURVEILLANCE FOR BANKING SECTOR IN THE REPUBLIC OF KAZAKHSTAN AT THE PRESENT STAGE

4.1. Overall rating of AVN LCD

Agency activities in the banking sector was focused on the adequate and operational measures to limit the risks identified as a result of the global financial crisis, in particular, there were leveling measures of liquidity and refinancing risks, strengthening the capital base for banks stable functioning during periods of stress, further reducing dependence banking sector from external wholesale funding. In connection with the fact that the banking sector is the largest segment of the financial market, from which depends the condition of all state financial system, the system of indicators to assess the financial stability of the banking system is developed. In order to monitor and analyze the financial stability of the banking system in Kazakhstan indicators that reflect the risks are selected to which at this time subjected the domestic banking system. So, for financial stability analysis groups of coefficients of capital, asset quality, credit, market risk, profitability and liquidity are used.

In order to create conditions for implementation of traffic safety securitization agreements, extending the effective use of bank capital, as well as easing the cost of financing Agency Board in April 2008 the resolution was adopted, which determines the order of calculation of capital adequacy ratio for banks implementing securitization agreements. Decision on bank and bank-originator that participates in the securitization agreement and holds positions in such agreements, provided the possibility of using the framework approach to securitization – approach to the calculation of equity capital under Basel II, in which securitization assets may be excluded from the calculation of assets of originator weighted by the level of credit risk.

Also, to create conditions for implementation of safety contracts in July 2008 the resolution was adopted, which determines the order of classification and a provision for securitization assets on which the bank has no

written confirmation of the authorized body to use the framework approach of securitization.

The global financial crisis demonstrated the need to strengthen banks' capital in the world, which is especially important in conditions of decline in the quality of credit portfolio of banks in Kazakhstan.

As it was already mentioned in the previous section, as a result of increased requirements for minimum size of charter capital and its own capital, taking into account the current capitalization of the banking sector to July 1, 2009 and on July 1, 2011 individual banks will need to bring into compliance with the requirements specified amount of equity of its own capital. Otherwise, do not exclude the possibility mergers, acquisitions, as well as run out of banks from the market or changes in other organizational and legal forms.

Since October 2008 more stringent requirements for equity capital adequacy ratio of banks were imposed to increase financial stability of the banking sector of the country and protect the interests of banks depositors. Thus, the value of capital adequacy ratio of the bank shall be not less than k1 – 0,06 and k2 – 0,12, for a bank that has a great party – the individual, the values of the coefficients should not be less than k1 – 0,07 and k2 – 0,14, for a bank to which a bank holding company or parent bank has a rating, determined in accordance with legislative requirements, k1 – not less than 0,05 and k2 – 0,010. Thus, for the bank, more than 50 percent of the stock placed by state-owned data values of the coefficients is not less than k1 – 0,06 and k2 – 0,12.

By this resolution, in accordance with the recommendations of Bazel Committee on Banking Supervision, at the first level of capital calculation privileged actions included – it is put into effect from January 1, 2010. In addition, a coefficient of capitalization of banks to liabilities to non-residents (k9) of 4 to 3 is revised in order to avoid increasing the risks associated with the formation of external funds and to encourage their own capital.

In December 2008 the resolution was adopted, which stipulates that the order decision on buying its own bonds and buying bonds issued by affiliated organizations of the bank's which liabilities are guaranteed by the bank is adopted by the Board of Directors of the Bank in accordance with internal policy of management operations on buying and selling financial instruments and price risk.

In connection with the further capitalization of the four system banks by the state represented by the JSC "National Welfare Fund" Samruk Kasina (further NWF "Samruk Kazina") Agency Board in December 2008 it was decided that includes the calculation of the maximum amount of risk for one provider exception affiliates associated with the bank with a special

relationship that is affiliated as a result of indirect ownership of twenty five and more percent of voting shares of JSC "FNB" Samruk-Kasina".

In connection with the further capitalization of the four state banks in the system represented by the JSC "National Welfare Fund" Samruk Kasinoa Agency Board in December 2008 it was decided to include the calculation of the maximum amount of risk on one borrower excluding affiliates associated with the bank a special relationship that is affiliated as a result of indirect ownership of twenty five and more percent of voting shares of JSC "Samruk-Rasina".

4.2. Distance control in 2008

As a result of regulatory reporting in the remote surveillance in 2008 141-carry status and status-283 reviews was drafted, which assessed the degree of financial stability of each bank and by classification of banks by the degree of financial stability at the aggregate index of financial stability (AIFS).

Table 25

Classification of banks by the degree of financial stability for 01.01.2009

The index	The index assessment of financial stability					
	Stable	Normal Stable (moderate level of risk)	Satisfactory (with a tendency to creased risk)	Satisfactory (excessively high risks)	Unstable	Critical
	from 1 to 1,5	from 1,5 to 2	from 2 to 2,5	from 2,5 to 3	from 3 to 3,5	over 3,5
Amount	3	18	13	2	1	0

Table 26

Group Dynamics in the index structure AIFS from 01.01.2009 till 01.04.2009, the

№	Index of financial stability	01.01.2009	01.02.2009	01.03.2009	01.04.2009
1	Index of capitalization	1,00	1,00	1,50	2,00
2	Index of quality loan portfolio	3,78	3,78	3,78	4,00
3	Index of credit risk	3,00	3,00	3,00	3,00
4	Market risk index	2,20	2,20	2,60	2,20
5	Index of performance	4,00	4,00	4,00	4,00
6	Liquidity Index	2,38	2,25	2,00	2,00
Composed index of financial stability		2,73	2,70	2,81	2,87

As to 01.04.2009. indicator composite index of financial stability (AIFS) was 2.87, changed in comparison to the previous month to 0.06 points. One of the main factors of these changes is the devaluation of the tenge in February 2009.

In general, the dynamics AYFU is characterized by the deterioration factors of stability. In comparison with the 01.01.2009 the deterioration largely due to the change in the groups of indices:

- Index capitalization of 1.0 to 2.0;
- Index as a loan portfolio of 3.8 to 4.0.

Value of composite index on 01.04.2009, the bank evaluates the financial condition of the second level as satisfactory, with extremely high risk.

Table 27

Modified on 01.01.2009 in the index points to the previous period

№	Indices of Financial Stability	01.01.2009	01.02.2009	01.03.2009	01.04.2009
1	Index capitalization	0,00	0,00	0,50	0,50
2	Index of quality loan portfolio	0,78	0,00	0,00	0,22
3	Index of credit risk	0,00	0,00	0,00	0,00
4	Index of market risk	0,00	0,00	0,40	–0,40
5	Index performance	0,00	0,00	0,00	0,00
6	Liquidity Index	0,38	–0,13	–0,25	0,00
Composite index of financial stability		0,20	–0,03	0,11	0,05

In 2008 in a world liquidity crisis the stability of Kazakh banking system is succumbed to challenge that demanded the use of operational measures, including through remote supervision, to ensure timely response to the possible deterioration of the Agency for the financial performance.

Particular attention is paid to the operational monitoring of financial performance. Thus, in connection with the deteriorating quality of loans', analyzed data on loan portfolio, increase arrears, and a passage on the loans.

AVN in order to assess the impact of Kazakhstan's banks, depending heavily on external borrowing, the deterioration of liquidity in global capital markets, carried out regular monitoring of the flow of their funds, Gap-position and amount of external obligations, taking into account maturities and other liquidity, inflow or outflow indicators, deposits of approved budgets, and conducted the study conducted by banks stress-testing. In addition, information about the banks of the Agreement on the issue of bank loans concluded with the National Bank of Kazakhstan was reviewed weekly and which provides short-term liquidity to banks through reverse repurchase transactions and currency swap transactions.

To strengthen control over the activity since the beginning of 2008 at the legislative level, there was established the right of the Agency to appoint a representative to make direct observations and information about the Agency's current situation, analysis of financial reporting system, risk management and operations conducted by him and agreements. The representative of the Agency has the right to participate as an observer at the general meeting of shareholders, meetings of the bank and participate in permanently or temporarily working committees of the bank without intervention traffic safety operations.

In 2008, the Agency's observers were sent to 8 BDR (JSC "BTA Bank" JSC Kazkommertsbank JSC, National Bank of Kazakhstan, JSC "Alliance Bank" JSC ATFBank, SC"KASPI BANK", JSC Eurasian Bank JSC, Danabank). In order to obtain clarification on the BDR activities, carried out regularly, according to the approved schedule meetings with the leadership of BDR, which identified the problematic aspects of BDR and ways of their decision to continue, particularly regarding asset quality and liquidity of BDR.

AVN made changes in how these status continuation in part of stress testing to identify weaknesses in the bank's activity and assess the ability of the bank's capital to compensate for possible large losses under different scenarios of further developments and the adoption of the Agency timely action to prevent adverse effects by possible recommendations issuing bank, in its decision concerning the activities of limited impact and / or sanctions.

As part of monitoring the shareholders of banks and review of documents submitted for the grant or refusal to issue consent for the acquisition of the status of a large bank holding member 31 resolution adopted by shareholders of the bank 21 including 4 newly banks:

- 8 orders of losing status in the participant / bank holding company;
- 10 granting approval for the purchase of the status of large bank holding member;
- 13 of conferring the status of bank holding company.

In addition, in 2008, there were adopted 11 decisions on issuing permits for the creation or acquisition of a subsidiary and a significant part in the authorized capital of organizations.

4.3. Inspection supervision in 2008

In 2008, inspection carried out mainly on planned basis (9 scheduled and 5 unscheduled inspections). Thus, the greatest densities of inspections made routine comprehensive examination (7 of 9 planned inspections), the main issues were – checking the quality of assets and contingent liabilities,

capital adequacy, liability structure and traffic safety assessment of current liquidity. Also, during inspections, special attention was paid to such key indicators as the equity structure, credit traffic safety activities (including the practice of granting loans, the quality of loans, the formation of passage for doubtful and bad loans), indicators of profitability, solvency, valuation of managerial structure, risk management, balanced requirements and obligations. Total assets of BDR, which were tested under routine inspections in 2008, amounted to 5 685.1 billion tenge, against 3 009.8 billion tenge in 2007. Thus, the total loan portfolio of BDR, which were audited in 2008 as part of scheduled inspections amounted to 3 900.0 billion tenge (in 2007 – 1 801.3 billion tenge), one test was reached 2 540,1 billion tenge (in 2007 – 1 050.3 billion tenge), while the average check was covered 75.9 % of the loan portfolio (in 2007 – 74.3 %).

4.4. Steering Response

In 2008, the Agency after the results of distance control on violations of requirements of legislation against 22 banks were used limited measures of influence on 41 violations of banking laws, including those caused by the 20 letters of commitment signed by 1 written agreement made by the 9 written warnings and 11 written vacant. Sanctions as the imposition of fines were imposed against 2 banks. The total amount of administrative penalties amounted to 292 thousand tenge.

Thus, the number of banks has committed violations of banking legislation with 18 in 2007 rose to 22 in 2008; the grounds for the application of limited measures of influence have decreased from 45 to 41, the grounds for sanctions in the form of fines – from 7 to 2, respectively. Thus, the most frequent reasons for use of the limited impact of the measures were non-prudential regulation (29 % of the total impact of the measures), non-compliance with minimum capital reserve (20 %), absence of apply in a timely annual financial statements (10 %) and violations requirements for publication of financial statements (10 %). In general, in comparison with 2007 the total number of limited measures and sanctions applied to traffic safety as a result of complex and random inspections fell by 20 %.

In 2008, after inspections by the Agency were used by 10 banks in 18 violations of banking laws limited measures of influence. In particular, due to 3 letters of commitment signed by 2 written agreement made in writing 6 and 7 written warnings given. In addition, 4 banks of 7 violations of legislation were brought to administrative responsibility by collecting administrative fines. The total amount of administrative penalties amounted to 2.9 million tenge [3].

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V. INTRODUCTION BASEL-II: NECESSITY, FEATURES, DEGREE OF RESPONSIBILITY, FIRST RESULTS

In the Republic of Kazakhstan planned and successfully carried out work with the introduction of Basel-II . If their first introduction to the Republic of Kazakhstan was accompanied by difficulties and differed, in the last 2-3 years this process has accelerated and improved in different directions, including the legislative framework.

In order to assess the supervisory and regulatory practices AVN according to generally accepted international standards was held in 2008, according to self-assessment methodology to fundamental principles of the Basel Committee on Banking Supervision, IOSCO, IAIS and IOPS. A similar assessment of the IMF with the World Bank was held in Kazakhstan in 2000 and 2004. Compliance with the basic principles for effective banking supervision by the Basel Committee in 2004 is given in Table 28 [6].

Columns marked 1-2-3-4 show the degree of conformity, where 1 = full compliance, 2 = line significantly, 3 = material non-compliance, 4 = non-compliance, the value of X – rating has not changed in comparison with 2000, the line with exponent H + – changes towards improvement in comparison with 2000. As seen from the data table 28 the banking system of Kazakhstan "responsible" in 2004, 5 principles of the Basel Committee, responsible to a great extent "–16 principles" of material does not meet "–9 principles" contradiction "–no. Accordingly, in 2000 these numbers have the following values – 4, 8, 15, 3.

However, should note that since the last assessment of legislative and regulatory framework of regulation and supervision of financial institutions has changed for better.

Table 28

Conformity to the principles of Basel-II

	Main criteria			
	1	2	3	4
1.1. The purpose of the regulator		X +	X	
1.2. Independence of supervisory authority and adequate resources			X	
1.3. Legislation	X			
1.4. Powers and Application		X +	X	
1.5. Legal protection of staff supervision	X			
1.6. Information Exchange		X +	X	
2. Permitted activities	X			
3. Criteria for licensing		X		
4. Ownership		X +	X	
5. Investment criteria		X +	X	
6. Capital Adequacy			X	
7. Credit policy		X		
8. Evaluation of loan portfolio		X		
9. Portfolio concentration limits			X	
10. Lending parties related to the Bank a special relationship		X +	X	
11. Country risk		X +		X
12. Market risk			X	
13. Other risks			X	
14. Internal control and audit		X		
15. Money laundering			X +	X
16. Remote and contact monitoring	X			
17. Contacts with the Bank	X +	X		
18. Solo and consolidated information		X +	X	
19. Means of independent evaluation of supervisory information	X			
20. Consolidated supervision			X +	X
21. Accounting Standards		X		
22. Sanction		X +	X	
23. Global consolidated supervision			X	
24. Cooperation with supervisory authorities of the host country			X	
25. Supervision of banks with foreign participation		X		

In the IMF document "Quality of financial sector regulation and supervision in the World" (August 2008) was a comparative analysis of quality control for sectors in different countries. On average across all countries, the level of implementation of recommendations of international standards for banking and insurance supervision 67 %, to regulate the securities market – 71 %. It revealed the results of the average level of self-respect of international standards indicate that the practice of oversight agencies with international principles of banking supervision at an average of 65 % in insurance sector to 62 % of the stock market by 55 %. Taking into consideration the comparative analysis of the IMF, the level of regulation and supervision in Kazakhstan comparable with the countries of Southeast Asia, where the average level of compliance with international standards is no less than 60 %.

As a result of the end of 2008 self-assessment by the Agency concluded that the 25 key basic principles of the domestic banking system meet the 24 principles of supervision; material does not meet 1 of the principles in the prevention of money laundering.

The system of banking supervision was significantly improved after the previous evaluation of the joint mission of the IMF and World Bank in 2004.

The main activities that contribute improving the quality of banking supervision are:

- the introduction of regulation of banking conglomerates to limit the risks that may affect the bank and related others conglomerate, increasing requirements for the acquisition of the status of a great party bank and bank holding company, including transparency of ownership structure of large party and a bank holding company, restrictions investment bank and bank holding company (the Law of the Republic of Kazakhstan dated December 23, 2005 "On making amendments and addenda to some legislative acts of the Republic of Kazakhstan on licensing and consolidated supervision"). In general, these measures are aimed at ensuring the stability of the banking sector and financial system of Kazakhstan as a whole;
- gradual improvement of regulations, including in prudential regulation of banks, risk management systems in them, viewing the mechanism of classification of assets and contingent liabilities, consolidated supervision, taking into account the standards of the European Union and further implementation of international standards for oversight of the Basel Committee on Banking Supervision;
- approach to regulation of the banking sector of Kazakhstan to international standards and handled the transition of the banking system of Kazakhstan to the new general capital adequacy of the Basel Committee on

Banking Supervision International Convergence rate of capital and capital standards" (International Convergence of Capital Measurement and Capital Standards) (Basel II);

- strengthening the powers of the Agency's regulation of financial institutions, including traffic safety (Law of Kazakhstan on February 19, 2007 "On making amendments and addenda to some legislative acts of the Republic of Kazakhstan on the protection of minority investors");
- improving the supervisory capacity of the Agency, including, in part to increase its strength;
- improvement of mechanisms for preventive detection of risks in the financial system, the introduction of criminal responsibility of members of large financial institutions would bring the organization to the state that led to its forced liquidation, and expansion of the competence of the authorized body in the event that shareholders of financial institutions to improve the financial requirements of (the law on financial stability).

In the absence of legally enshrined system of counteraction to legalization (laundering) of proceeds obtained illegally, the principle of "money laundering" in the country substantially not in compliance. At this time the bill in this direction is under consideration of Parliament Mazhilis country. In our view, the adoption of this law will help improve the assessment of conformity to this principle.

It should be noted that the current self-assessment in the principles of consolidated supervision shows a significant improvement in its methodology. This is confirmed by experts from the IMF and World Bank in a report in 2008, which marks the achievement of the implementation of consolidated supervision, including the availability of a separate unit responsible for the supervision of banking conglomerate, which is derived regulatory reporting allows comprehensive assessment of risks at the conglomerate, set prudential norms on a consolidated basis. Also, international experts praised the Agency's desire to increase transparency structure owners Kazakh financial institutions and identify the final shareholder of financial institutions.

Meanwhile, work on improving legislation and supervisory practice based on international standards of regulation and supervision continue to light the complex realities of the world economy and directions for further development of the banking sector, embodied in policy documents for future development of the domestic financial sector and economy as a whole. In particular, it will address the following issues: improving the capitalization of banks and strengthen risk-management systems that provide both the formation of provision adequate level by banks to cover potential losses, and continuation of credit the real economy.

CONCLUSIONS

In the organization of banking supervision and regulation in Kazakhstan in recent years there have been significant changes.

Firstly, there was no legislative and regulatory framework that clearly defined the powers, the status of the National Bank of Kazakhstan as bank supervisor. Creation of the only authorized body for the regulation and supervision of financial markets and financial institutions in 2004 has become significant progress, because now supervision is carried out on a consolidated basis and for all financial markets, not just for the banking sector. The long-term program on improving banking supervision and regulation and Policy Action Plan for growth risks in the financial market was accepted.

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BASEL II. INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS: "A REVISED FRAMEWORK" CASE OF THE CZECH REPUBLIC

1. The characteristic of the Czech banking System

Czech bank system includes one central bank of issues i.e. Česká Národní Banka (CNB), and 54 commercial credit institutions. From that, 28 commercial banks operate as universal banks, 9 banks as specialized ones[1] and 17 as Credit Unions. Foreign capital is engaged in 91 % of all the banks.

Biggest of those banks do create their own financial groups (mother bank, insurance company, savings bank, investment fund etc.).

2. Main Indicators of the banking system´s development

The number of commercial banks has stabilized during the last 5 years. Their commercial activities are rising in volume permanently.

Table 1

Balance sheet statement of the Czech Banking sector

Bill. CZK, at the end of year

assets	2006	2007	2008
total	3 151	3 750	4 044
Financial assets held for trading	234	284	335
Loans and receivables	1 845	2 215	2 471
Liabilities and equity			
Financial liabilities held for trading	75	101	216
Deposits and similar liabilities	2 762	3 156	3 357

[1] 5 Building savings banks, 2 mortgage banks, 1 export bank and 1 development and guarantee bank.

Obviously, we can see a conservative character of the Czech banks financial and business policy.

Client deposits remain the biggest source of financing for bank loans. At the end of 2007 and 2008, they were 1,3 times higher than client loans, which, in turn, is more than two times the average in the original EU member countries. The large volume of client deposits provides domestic banks with protection against any rapid drying up of market liquidity and at the same time ensures stable and relatively low-cost funds compared to other forms of external financing. However, deposit growth has been lower than credit growth in the Czech Republic for several years and this trend is likely to continue. As a result, the share of deposits in bank funds will decrease in the future and banks will have to respond with changes in balance-sheet liquidity management. Tests of banks' balance-sheet liquidity indicate that the banking sector is resilient enough to deposit outflows and some other hypothetical changes in the financial market. However, for the extreme variant of pressures on balance sheet liquidity, only institutions with a strong deposit base are naturally resilient.

Table 2

Selected stability indicators

Financial soundness of banks	2005	2006	2007	2008[2]
Capital adequacy (%)	11,9	11,4	11,5	12,3
Tier 1 capital adequacy (%)	11,3	10,0	10,3	11,6
Non performing loans (% of the total)	4,1	3,6	2,7	2,8
ROA (%)	1,4	1,2	1,3	1,4
ROE (%)	25,2	22,5	24,5	26,0

The rise in lending also means a rise in credit risk exposure.[3] The ratio of default loans to total loans was 2.7 % at the end of 2007 down by 0.9 percentage point from a year earlier. This ratio decreased in all sectors of the economy. This was due mainly to the favorable economic environment. The high rate of growth of loans is probably currently resulting in a

[2] As at the March 2008.

[3] In its dominant form, credit risk is the risk of default on a loan or part thereof, or of default on contract leading to delayed repayments. This risk is usually a subject of ratings by external institutions.

slight overvaluation of their quality, as expressed by the percentage of default loans.[4]

While global financial institutions were significantly affected by the credit crisis, the Czech financial system remained fairly isolated from the global turbulence. Major international banking groups were forced to admit large losses related directly or indirectly to a decline in prices of risky assets, especially bonds backed by defaulting US mortgages. Czech financial institutions held a minimum amount of such risky assets, mainly because of the strong focus of banks and other financial institutions in the Czech Republic on the traditional (conservative) business model on the as yet unsaturated Czech market. This focus is reinforced by the prevailing foreign ownership of domestic financial institutions, as foreign owners let their subsidiaries in new EU Member States generate income mainly from dynamically developing retail banking, while administration of securities and derivatives portfolios is typically concentrated in parent institutions or branches in financial centers (London and New York). The stability of the domestic banking sector in times of financial market turbulence has also been fostered by banks' high balance-sheet liquidity, the prevailing financing of credit expansion with primary deposits and thus minimum dependence on funds from foreign markets or parent companies. Moreover, domestic financial institutions do not belong to the global financial groups that have been hardest hit by the crisis.

The available analyses indicate that the Czech financial sector (and in particular the banking sector) is not exposed to the risk of a crisis similar to the one that hit the US subprime mortgage segment. This is due to very conservative loan-to-value ratios, traditionally higher required debtor creditworthiness, the traditional method of interest rate fixation, less use of external mortgage underwriters and the absence of significant credit securitisation. Nevertheless, it is vital to constantly monitor this area and assess any signs of increasing risks in a timely manner.

3. Features of the bank control realization

The Czech National Bank (CNB) shall be the central bank of the Czech Republic and the authority performing financial market supervision. CNB supervises the activities of entities operating on the financial market, analyzes

[4] A default loan is defined by CNB Decree No. 123/2007 Coll., on prudential rules for banks, credit unions and investment firms, as exposure to a debtor in default. A debtor is in default at the moment when it is probable that he will not repay his obligations in a proper and timely manner, without the creditor proceeding to satisfaction of the claim from the collateral, or when at least one repayment (the amount of which is deemed by the creditor to be significant) is more than 90 days past due. The term default loan is essentially equivalent to the former term non-performing loan, which was used in last year's Report.

the evolution of the financial system, sees to the sound operation and development of the financial market in the Czech Republic, and contributes to the stability of its financial system as a whole.

The Czech National Bank shall set forth:

a) in a provision promulgated in the Bulletin of the Czech National Bank the prudential rules for banks, foreign bank branches, credit unions, electronic money institutions1a) and branches of foreign electronic money institutions operating in the Czech Republic under the single license;
b) in a decree the prudential rules for other money market participants and the terms and conditions under which transactions may be performed on the money market.

CNB regulates and supervises modern Czech banking system through its special department. Its main activities:

Licensing. A bank may not carry on business activities other than those permitted in its license. This shall not apply to activities carried on for another entity, provided that they are associated with safeguarding its operation and the operation of other banks, financial institutions and ancillary banking services undertakings over which the bank exercises control.

Banks shall mean legal entities having their registered offices in the Czech Republic, founded as joint-stock companies, which accept deposits from the public, and provide loans, and which have been granted a banking license.

Decisions concerning the granting of a license shall be made by the Czech National Bank.

For the license to be granted, the following conditions must be met:

a) the capital and other funds of the bank must be of transparent and unexceptionable origin, sufficient amount and appropriate structure;
b) the capital must be paid up in full;
c) persons having a qualifying holding (Article 17a(4)) in the bank must be competent to exercise shareholder rights in the bank's business activities;
d) the persons who, on the basis of a contract of employment or other contract, are nominated for executive managerial positions in the bank with which are associated the powers and responsibilities laid down in the Articles of Association (hereinafter referred to as "bank officers") must have sufficient competence, trustworthiness and experience;
e) the bank must have in place the technical and organizational prerequisites for pursuing its proposed activities and a functional and effective management and control system;

f) the bank must have a programme of operations proceeding from its proposed strategy of activities and based on realistic economic calculations;
g) any group of entities having close links with the bank must be transparent;
h) the close links within the group referred to in subparagraph g) must not impede the exercise of banking supervision;
i) in the state within whose territory the group referred to in subparagraph g) has close links, there must be no legal or factual impediment to the exercise of banking supervision;
j) the registered office of the future bank must be within the territory of the Czech Republic.

The license shall cease to be valid on the day:

a) on which a decision to withdraw the license becomes effective;
b) on which the bank is wound up, where it is wound up and liquidated;
c) from which, in accordance with a decision adopted by the General Meeting, an existing bank will cease to carry on any activity for which a license is required;
d) on which the bank is expunged from the Companies Register, where it is wound up without being liquidated.

The minimum capital of a bank shall be CZK 500,000,000 and must comprise pecuniary contributions in at least this amount.

Required minimum reserves. The required minimum reserves may not exceed 30 per cent of the total liabilities of an institution required to hold reserves, net of its liabilities owed to other such institutions. Where a bank, a foreign bank branch or a credit union fails to maintain the required minimum reserves, the CNB may charge it interest at double the effective Lombard rate on the amount of the required minimum reserves which the bank fails to provide.

Open market operations: The Czech National Bank may purchase from banks or sell to them: a) bills of exchange maturing within six months of the date of their purchase by the Czech National Bank and bearing at least two signatures, of which at least one shall be on behalf of the bank; b) government bonds or other securities underwritten by the Government; these, however, the Czech National Bank may buy and hold for a period of not more than one year.

Supervision shall include:

a) decisions on license and permit applications and prior approvals pursuant to special legal;
b) rules;
c) inspection of adherence to the conditions stipulated in licenses and permits;

d) inspection of adherence to laws, insofar as the Czech National Bank has the power to conduct such inspections under this Act or special legal rules, and inspection of adherence to the decrees and provisions issued by the Czech National Bank;
e) collection of the information needed to perform supervision pursuant to special legal rules and its enforcement, and verification of whether it is true, complete and up-to-date;
f) the imposition of remedial measures and penalties pursuant to this Act or a special legal rule;
g) proceedings regarding administrative offences.

Rules of the prudential, sound and responsible lending and capital adequacy requirements (see later)

Central Register of Credits (CRC). The Register contains information on the loan and similar receivables of banks from clients, and identification data on these clients. Transfer of information into the register is mandatory for banks. The bank is responsible for ensuring that the information entered into the register is correct, complete and up to date. Operator is the CNB.

4. Basel II: First pillar´s implementation – minimal capital requirements

The intensive preparations for the implementation of Basel II and the actual changeover to the new prudential rules in several banks on 1 July 2007 were a significant challenge for the banking sector in 2007. The remainder of the sector took this step in January 2008. Owing to the gradual changeover to Basel II, there was a slight increase in capital adequacy. This reflects the fact that banks made use of the possibility of more accurately assessing the risks they undertake. As expected, this led to a decline in capital charges and more efficient use of capital.

Information about implementation of the Basel II approach as of the end of the 2007[5].

Credit risk. Own funds requirements credit risk of total own funds requirements: 89,16 %.

From that by approach: Basel I: 57,09 %, SA 8,60 %, FIRB 34,31 %, AIRB 0.00 %.

Operational risk: Own funds requirements operational risk of total own funds requirements: 5,39 %.

[5] As a majority of banks calculated own funds requirements for credit risk under Basel I in the year 2007, it is not possible to provide the required breaking down distribution banks by asset class through the whole banking sector.

From that by approach: BIA 0,92 %, SA 99,08 %, AMA 0,0 %.

Market risk: Own funds requirements market risk of total own funds requirements: 5,01 %.

From that by approach: SA 89,80 %, VaR 10,40 %.

The probability of default (PD) and loss given default (LGD) are important indicators under Basel II. Based on data from the five Czech banks that introduced the Basel II IRB approach in mid-2007, the average LGD was around 42 %. This parameter was the same for exposures to both the corporate sector and the household sector. If this value and the average default rate based on aggregated data from credit registers were applied to exposures to households and corporations for the whole banking sector in 2007, the aggregate capital charge for the whole banking sector under the Basel II IRB approach could be calculated. The baseline scenario based on the CNB's official macroeconomic forecast implies a slight rise in the default rate for both corporations and households.

According to stress tests, the financial sector is currently resilient to the market, credit and some specific risks to which it is exposed. However, an extreme macroeconomic scenario with significant adverse impacts on interest rates, the exchange rate and GDP growth would necessitate capital injections to ensure compliance with the regulatory limits and maintain sufficient capital adequacy in financial institutions. The aggregate banking sector stability indicator confirms a continuing process of capital optimisation in the banking sector, with unchanged resilience to the main risks.

5. Basel II: Second pillar's implementation – supervising procedure

The basic prudential rules are laid down directly in the Act on Banks, e.g. the requirement to have an adequate governance, the requirement to maintain capital adequacy, limits on the bank´s qualifying holdings in other entities, a prohibition of preferential trading with persons having close personal and proprietary links with the bank ("persons having a special relation to the bank"), and the requirement for "Chinese walls" between the bank´s lending and investment transactions. These rules are further specified in a series of CNB provisions and decrees.

Supervisory actions on 2007: on-site inspections: 7, overall assessments performed (SREP): 0.

The supervision and regulation of the whole financial market and financial industry was integrated under CNB from 2006.[6]

[6] Banks, Insurance industry, Investment and Pensions Funds, Credit Unions, capital market and exchange market.

CNB shall perform supervision of:

a) banks, foreign bank branches, credit unions, electronic money institutions, branches of foreign electronic money institutions and other entities issuing electronic money pursuant to special legal rules, and of the sound operation of the banking system;
b) investment firms, securities issuers, the central depository, other entities keeping a register of investment instruments, investment companies, investment funds, settlement system operators, organizers of investment instrument markets and other persons specified in special legal rules governing capital market undertakings;
c) insurance corporations, reinsurance corporations, pension funds and other entities active in;
d) insurance and private pension schemes pursuant to special legal rules;
e) the safe, sound and efficient operation of payment systems pursuant to a special legal rules;
f) the activities of other entities that have a license pursuant to special legal rules.

Financial Market Committee. The Committee shall be established as an advisory body to the Bank Board for the area of financial market supervision. The Committee shall monitor and discuss:

a) general frameworks, strategies and approaches to financial market supervision;
b) significant new trends on the financial market and in the supervision or regulation thereof;
c) systemic national and international issues regarding the financial market and the performance of supervision thereof.

The Committee shall be entitled to submit to the Bank Board opinions and recommendations in the areas of supervision across financial market. In such cases, the Chairman shall be entitled to participate in the discussion of the Committee's opinion or recommendation in the Bank Board. The Committee shall also be entitled to submit similar opinions and recommendations to the Ministry of Finance.

6. Basel II: Third pillar´s implementation – market discipline

Discloser of the information:

Like all joint-stock companies in the Czech Republic, banks are required to publish every year an annual report containing, among other things, their financial statements and external auditor´s report. As from

2002, banks are also required to have their internal risk management systems audited. In addition, they must provide clear information on their premises for clients or potential clients about their terms and conditions for accepting deposits (including related information on deposit insurance) and for providing credits and other banking services. Banks are also required to introduce effective mechanisms for dealing with client complaints and to inform clients about these mechanisms.

Banks shall also disclose on the website basic information on itself, its shareholder structure, the structure of the consolidated group to which it belongs, and on its activities and financial situation. Some of the banks shall also disclose information on compliance with the prudential rules.

Promotion of market discipline:

Consistency between information disclosed and risk management: The CNB will focus on ensuring that the information disclosed by supervised entities faithfully reflects their financial condition and their financial risk measurement and management practices.

Market efficiency and reduction of the likelihood of market abuse: CNB strives to ensure that the information disclosed by those required to do so supports the efficient operation of the financial market, thereby reducing the likelihood of market manipulation and mitigating the risk of abuse of insider information.

Cooperation with domestic stakeholders:

Self-regulation: CNB supports self-regulation via professional associations of regulated entities wherever it is appropriate to do so as regards performing the tasks of financial market supervision. Being aware that in most cases self-regulation requires an appropriate legal framework, CNB works in cooperation with the Ministry of Finance of the Czech Republic and other central government authorities to prepare relevant laws.

Co-regulation: CNB, in line with European trends, supports the planned transfer of some supervisory authority powers in certain areas to professional associations of market participants, while simultaneously supervising the performance of this transferred responsibility.

Author's note: Resource of all dates: CNB statistic.

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SOME ASPECTS OF BASEL II IN THE BANKING SECTOR CZECH REPUBLIC

1. THE BANKING SECTOR IN THE CZECH REPUBLIC

1.1. Characterization and structure of the banking sector in the Czech Republic

In the financial sector of the Czech Republic for its modern development was a short set of changes was a period of expansion and crisis.

The banking system of the Czech Republic and consists of two levels of the central bank – Czech National Bank and 37 commercial banks. The banking sector in the Czech Republic has a constant number of commercial banks (37 banks in 2006), while their ownership structure changes, due to the continuously progressive process of concentration of capital (banks fusion), as well as the emergence of new branches of foreign banks.

This is the typical structure of the financial system of universal banks that used in Central Europe, based on universal banking. It is a large financial groups, which are often led by banking institutions, to build lasting relationships between the bank and the client. These financial groups that include both universal banks and specialized banking institutions such as building savings banks, mortgage banks and other investment companies, insurance companies, pension funds, leasing and factoring companies, etc., are able to offer its clients a wide range of financial products in one place or through electronic distribution channels. In most cases, these financial groups are in the hands of European owners such as UniCredit, Societe Generale, KBC, Erste, Raiffeisen, and Citi and GE.

1.1.1. Universal banks

The Czech banking sector is characterized by high concentration of banking in several subjects. Has a dominating position of the large universal

banks (judging by ballansovoy cost more than 150 billion kronor). This group several years is the so-called "Big Four" that includes:

- Czechoslovak Commercial Bank, AU (ČSOB);
- Czech Savings Bank, AU (Česká Spořitelna);
- Commercial Bank, AU (Komerční banka);
- Young Republic Bank, AU (UniCredit Bank).

With the growth of their capital and the process of merger is to strengthen the sector and medium-sized banks (with balance cost from 50 to 150 billion crowns), these banks are Citibank, Raiffeisen Bank, Mortgage Bank, GE Money Bank. Achieved greater stability and Sub of small banks, in addition to CR were created new branches of foreign banks.

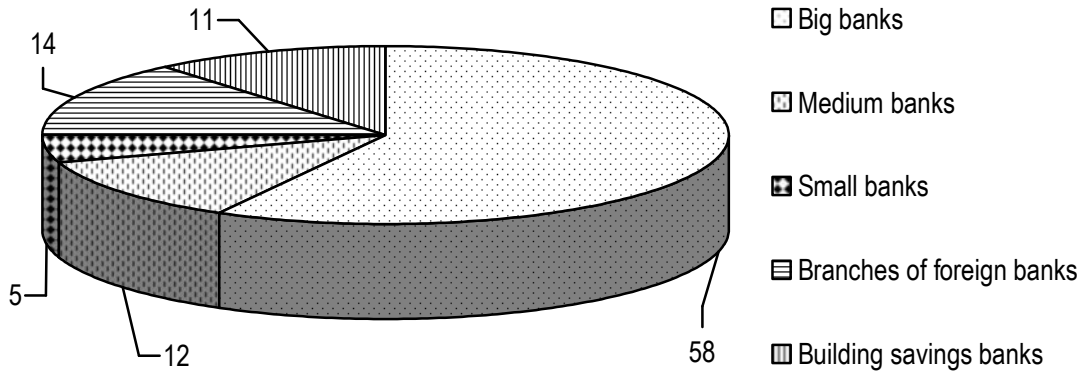

Figure 1. The share of individual groups of banks in balance value of the banking sector in 2008, %

Source: own development according to http://www.ChNB.cz.

1.1.2. Specialized banks

An integral part of the Czech financial sector are specialized types of banking institutions that specialize in providing specific banking products.

This specialized banks with full or partial state ownership, such as:

A) Cheshsko-Moravskyy Bank Guarantee and Development – CMZRB.

CMZRB bank owned by 72 % in the state, and 18 % owned by private banks. This bank specializes in supporting small and medium-sized businesses in the form of lax safeguards (for loans to other banks, with capital contributions) to provide concessional loans ("Start", "The Market", "Progress, Innovation"), providing assessments (Market – obtaining a certificate of quality), and previously provided subsidies for interest rates.

Also provides support to owners of prefabricated buildings in their reconstruction (panel), providing soft loans for projects in water supply (for sewage water treatment plant potable water, etc.) serves as financial manager of funds, provided the Czech Republic for EU funding infrastructure (the main highway) and sells short-term program of financial support in case of emergency (eg lykvydatsiya damage after flooding in 1997, 2002, etc.).

B) The Czech Export Bank – CHEB.

This bank is working closely with export guarantee and insurance company – EGAP (both companies fully (100 %) state-owned), which aims to support exports.

CHEB provides soft loans to suppliers (export credit) and consumer loans (Import Credit), and loan refinancing (other banks) with a maturity of 2 to 10 years in 50 % of goods exports of Czech origin, in addition to outstanding bank guarantees, quality made contract and refund. Also provides short-term export credits on a commercial basis.

EGAP – provides insurance for all products ЧЭВ and export financing from other banks of long-term commercial and political risk.

C) Other private banks that specialize primarily to finance housing projects, such as:

1. Building savings banks. Their number declined after the merger of 6 to 5 banks:

- Cheshsko-moravskyy Building Savings AU (fynysovaya group ČSOB);
- Building the Czech savings bank Sberbank AU (Financial Group ČS);
- Blue Pyramid Building Savings AU (Financial Group KB);
- Raiffeisen Building Savings Bank (financial groups RFB, in 2008 had merged with Hypo construction Sberbank);
- Wüstenrot Construction Bank SA.

Building savings bank is a private bank specializing in financing housing needs, ie, admit the contributions of participants of construction savings (in the Czech Republic such contributions are the highest proportion (penetratsyya) on the construction market economies in Europe – about 6 million participants building savings) of special loans for housing needs of the participants after the establishment of certain evaluation points and achieve a certain level of savings, providing a special credit under the gap in payments to the amount of target, a large state agency for assistance (amounting to 15 % of annual savings of up to 20 thousand CZK and during the mandatory period of 6 years).

2. Mortgage bank. This is the 2 banks that spetsializuyutsya on mortgages:

- Mortgage bank, (formerly Cheshskomoravskyy Mortgage Bank);
- Wustenrot mortgage bank;
- and other universal banks, but which received a license from the CSL to issue mortgage bonds (HZL), for example:
- Česká spořitelna, a.s. Czech Savings Bank, AU;
- Československá obchodní banka, a.s. Cheshskoslovatskyy Commercial Bank, AU;
- GE Capital bank, a.s. GE Capital bank, a.s.;

- UniCredit Bank CR, a.s.;
- Komercni banka, a.s.;
- Raiffeisenbank, a.s.;
- LBBW Bank CZ, a.s.;
- Volksbank CZ, a.s.

Mortgage banks are private banks and specialized in issuing trust and earmarked for mortgage loans (U.S. mortgages) secured by collateral assets. For their activities, these banks receive long-term sources mainly through the issuance of mortgage bonds, which must receive special permission from the CSL.

3. Cooperative banks. The activities of these institutions is governed by a separate law on savings and credit cooperatives. Their clients are members of cooperatives who have voluntarily joined themselves elect their governing bodies and have the right to vote, according to the number of shares. They take membership dues, provide loans, make payments, offer leasing services, etc. From April 2006 to their control is the Czech National Bank. In 2008, the Czech Republic were 17 cooperative banks.

1.2. Regulation of the banking sector in the Czech Republic

One of the biggest changes in today's financial sector development in the Czech Republic can be considered the integration of supervision over financial markets. The responsibility for the state of financial markets took the Czech National Bank from 01.04.2006 year. Thus association held four existing regulators, which were:

- Cheshskyy National Bank for the banking sector (universal banks and building savings banks);
- Ministry of Finance for insurance companies and pension funds (later ÚDPF-Office oversight of pension funds) the Securities Commission in the capital markets;
- Office for Supervision of cooperative banks, cooperative savings bank sector.

High efficiency and oversight CSL with monitoring can contribute to the effective functioning of financial markets and ensure its stability.

The main document regulating the activities of commercial banks is the "Law on Banks" № 21/1992.

Czech National Bank as the bank accounts of banks makes banks clearing house, bank regulation and supervision.

Czech National Bank provides banking regulation by:

- provision of banking licenses;
- Control payment relations and monetary circulation;
- establish rules deliberately control the banks;

- the bank suddenly yadu;
- identify measures to eliminate shortcomings in the activities of banks and financial institutions subject to banking suddenly yadu;
- the functions of "lender of last resort" for commercial banks;
- formation of the Synopsis of the banking sector.

Transfer of payments between banks in the Czech Republic provides clearing (settlement) Center of the Czech National Bank (hereinafter CC). Each bank has its account in kronovyy KC CSL through which sends or receives payments on the contrary according to the contract. Conducting settlement between the bank and KC carried out only in CZK, based on the input files according to rules and schedules determined interbank transactions. The accounts of all banks located in the center, which provides services to the following conditions:

- Gross settlement in real time;
- Mandatory direct involvement of commercial banks;
- Direct relationship between the central part of each bank and clearing house CSL;
- The calculation is carried out through the accounts of interbank payments;
- Bezvidklychnist operations taken by a clearing house;
- Not allowed in the accounts have debit balances;
- CSL provides credit for overcoming (double the discount rate);
- Uncovered payments to impossible;
- Implementation of various agreements only in the crowns of the CR;
- Loan overnight from side CSL.

1.3. The main indicators for the banking sector in the CR

Ballansova cost of the banking system is growing, and in 2008 of more than 4 billion kronor.

Complex expression of the strength of the banking sector is capital adequacy, which characterizes the quality of bank capital structure and risk of its activities. Capital adequacy in the banking sector is consistently high for several years, for example, during 2000 to 2003 the average ranged mainly from 14 to 16 %. This is almost twice exceeded the legal limit – 8 %, which all banks operating in the Czech Republic easily accomplished. Since 2004, Capital adequacy, however, slightly decreased and approached the average of banks in countries with developed economies in recent years can again see a slight increase at the end of 2008 ranged within 12.33 %.

In the field of banking regulation of banking supervision on a consolidated basis has begun to happen in 2003. This is due to the fact that a crucial role in financial groups, banks play (at least 80 % of the total cost ballansovoyi), while their stability can affect other members of the group

although a limited degree. From Bohemia to the EU accession was held gradual harmonization of regulation and EU directives.

The reason for reducing the total credits in 2003 was primarily a low credit activity of some banks as a result of increased requirements in the provision of new loans due to high credit risk that is stored in the Czech economy. Reduction of credit activity was mainly in the large banks, other groups of banks, especially branches of foreign banks, continuously demonstrate growth in loans. Since 2004, this trend is changing and the total emission credit banking sector is growing again and its share in total bank assets in 2004 exceeded 40 %. With historically low interest rates in the period 2004-2007 years the mortgage loans increased rapidly. At the same time expanded network of products and services to enterprises, and growth of consumer loans provided to citizens.

With the global financial crisis in the future we can expect stagnation or decline credit issues, which, however, in the Czech banking sector will have long-term.

The most important source of income for banks, as in the past, so probably will remain in future loans. Credit is also a major source of funding for businesses. Mortgage loans and savings bank building is also a major source of financing construction of houses and apartments in Bohemia. Due to the strong entry of banks in providing loans to citizens, particularly consumer loans with high interest margin began to positively change the trend increase margins of the banking sector. At the beginning of 90 years, the interest rate is about 5-6 %, and by 2003 the interest margin decreased to 2.03 %, while in 2008 was 3.01 %.

A problem of the Czech banking sector, but not so great as before, a quality credit portfolio and credit risk. You can see positive trends in the development of classified loans. Reduction of their share in the first place was due to the ongoing process of transfer of certain assets of the major Czech banks in bank consolidation (from 01.09.2001, in Czech consolidation agency – withdrew picture). The quality of loans in subsequent years continued to improve, and the structure of loan portfolio for 2000-2004 years was the movement, most significantly reduced classified loans to almost 20 % in 2001 to 5.2 % in 2007 and 6.3 % in 2008. Loans that are under threat, comparable with the average value in the EU. Significant impact on improving the efficiency of credit activity and improve the quality of loan portfolio made information exchange banks in the functioning of banking and bank credit registers (index debtors):

- Banking Client Information Register (BCIR) used by the overwhelming majority of banks in the market information on creditworthiness, integrity and morality billing clients – individuals. It contains information only on credit transactions and tracks customer surplus. The database provides

information to banks, not only about the current state of the client's indebtedness, but his status for the past 4 years. Referred to therein such as overdraft loans, credit cards, consumer and mortgage loans;

- Registry nonbank customer information (RNCI) is a database of credit, which provides its clients with leasing companies and companies that provide loans with installment payments. Again, in general, indicate credit capacity, integrity and morality billing clients – individuals.

Both registries BCIR and RNCI were united in the National Register of client information CCB (Czech Credit Bureau).

- register SOLUS managed to protect the Association of Leasing and loans to consumers, collect only negative information about debtors. It includes only those borrowers who do not fulfill their commitments regarding the members of the association. Access to them are banks, leasing companies, companies that offer payments in installments, etc.;
- Central register of credits (CRU) collects information about the credit obligations of individuals and entities, and provides real-time exchange of information between participants CRU. Participants CRU are all banks and branches of foreign banks operating in the Czech Republic. Assurances of this project and further development of the CRU is the Czech National Bank.

Another important part of income is bank charges and commissions which the bank receives for its services from clients. First of all bank charges in 2007 were to significantly increasing trend and their amount was the subject of discussion among experts and the public, resulting in a felt pressure on their reduction.

Continued moderate growth in the initial assessments in the banking sector and limited effective demand for risky loans forced banks acceptable razmeschuvaty its resources in other assets. This applies primarily government securities, assets in the accounts at the central bank, treasury bills and government CHNV and loans to other banks. Banks are focusing increasing financial resources to other banks, especially abroad. Free liabilities of banks invest mainly in bonds and derivatives transactions with securities. In this area, however, involved only a limited group of banks, especially some medium-sized banks and large branches of foreign banks. Banks are targeted mainly at the regular term agreements with interest and currency instruments.

As a result of the global financial crisis in 2008, some banks face difficulties in obtaining high fees because demand from subjects who traded on the interbank money markets, has dropped almost in the whole world, which is not avoided and Slovakia, but the banks on the Czech market belong to those resourced adequately.

Initially the new century for the banking and financial sector characterized the process of changing the structure clear accumulation of Czech households, particularly deviations from bank deposits in the form of traditional products like term deposits, savings accounts, current deposits in foreign currency in favor of alternative forms of savings. Until the new deposit forms are primarily the most rapidly growing investments in mutual funds, building savings, which constitute over 20 % of Czech households' savings, life insurance, pension insurance, stagniruyuschaya today direct investments in securities.

Since 2000 a large part of the financial situation of the banking sector in the Czech Republic fully improved, resulting in profits was to achieve in the whole area after several years of continuous losses. This was despite the low interest rates and some reduction in interest margins.

In the first years of 21th century was characterized by the growth of profitability of the banking sector, productivity and quality of loan portfolios, was also a significant reduction in classified loans in bank assets, which led to lower adjustments and thus reduced costs. As for return on equity ROE (capital according to the formula Tier 1), Czech banking with its 33 % in 2008, belongs to one of the most profitable in the world. At the same time grew and return on assets (ROA) of the industry, especially for large banks, and exceeded 1,3 %. The bulk of the profits in the banking activities are primarily interest income, which remained almost the same level through low interest rates and strengthening competition.

Search internal reserves of banks and the optimal approach to customers has led to lower operating costs and to optimize their network of branches. After the initial decline in the number of branches, gradually began to increase the number of customer service in banks, especially in the period from 2003 to 2005, and in this connection mention Renaissance branch network, in 2008 there were 1994 bank location in the Czech Republic.

Observed and a slight decrease in the number of employees in the banking sector (from 39,720 in 2001 to 37,540 in 2005), which was the result of growth in net profit per employee. With this measure in particular is concerned, and strengthening the concentration in the banking sector, which shows a strong group of medium-sized banks. This contributes to one side of the growing activity of these banks, but on the other – the merger of banks. In 2006 and 2007, in connection with the revival of the banking network and the associated increase in the number of bank employees in the banking sector in 2007 was again 41,207 employees in 2008 due to financial crisis we see repeated reduction to 39,003 employees in banking sector.

Since the beginning of a new century is the continuing significant growth in profitability of the Czech banking sector from about 17 billion

kronor in 2001 to almost 47 billion crowns in 2007 and more than 45.5 billion crowns in 2008.

Progress has been made in improving the legal framework for commercial banks – is the law on bankruptcy, personal executioner, pozasudovi auctions, etc., which contributed to a more expedited resolution of issues with problem loans. On the improvement of banking activities were directed continuing efforts by the Czech Banking Association, whose members are banks, operating in the Czech Republic.

Effects of the global financial crisis in 2008 are shown on the profitability of banks operating on the Czech market is very selective. In general, however, be noted that these banks in comparison with a number of banks operating in neighboring countries, is very stable (it relates to the fact that they were financially very difficult process of consolidation and stabilization), sufficient capitalization and in most cases have the necessary amount of initial assessments.

The banking market in the Czech Republic, compared with the situation in the banking and financial sectors in many countries has not been directly affected by the financial crisis, showed good resistance to problems associated with the global financial crisis and confirmed its further development in all segments. Some banks in 2008 showed a significant reduction in income, which was caused by a loss of foreign investment (CSOB). Other banks, however, achieved extremely high incomes (Czech Savings 15.8 billion kroons of net profit; Commercial Bank 13.2 billion crowns, UniCredit Bank Bank CR 4.9 billion crowns, etc.). However pryvyazanist and dominant market share of foreign entities owned banks started to manifest in the economic results of the banks or moving their liquidity at the parent bank.

The reason for the satisfactory condition of banks in the Czech Republic in comparison with developed economies are primarily:

- most of exposure to relatively less risky banking products;
- a small proportion and range of products offered by investment banking due to less development money market and capital market;
- minimum participation of domestic banks in structured investment instruments;
- high liquidity of the domestic banking sector, which reduces the dependence of domestic banks on loans to international rynku1;
- low debts people and companies in comparison with other countries;
- long-term stabilization of the banking sector due to compliance with the rules carefully and cautiously business banks and stabilize the structure of ownership in domestic banks since the previous massive complex financial consolidation and stabilization of the banking sector (about 200 billion crowns).

Table 1

Some indicators of banking sector in CR before 31.12.2007 and until 31.12.2008 billion kroons

Bank	Balance sheet		Total net profit		The initial fee		Non-bank loans to customers	
	2007	2008	2007	2008	2007	2008	2007	2008
ČSOB	925,4	824,5	10,87	1,0	562,0	525,2	391,7	393,6
Česká spořitelna	814,1	862,2	12,38	15,8	591,6	646,0	418,4	461,4
Komerční banka	661,8	699,0	10,17	13,2	540,8	554,6	304,5	364,0
UniCredit Bank	268,9	278	3,24	4,9	166,1	149,0	153,28	173,3

Source: Top finance – special monthly issue of Banking and weekly Ekonom summary of the financial market and capital market in the CR – 2007, 2008, did Šeflová – 2009.

Important role in stabilizing the whole banking sector played in the CR and Czech National Bank. Its monetary policy has earned a high reputation and market participants to consider themselves capable of communication by the bank in Central and Eastern Europe. The Bank is working closely with the European Central Bank and plays a crucial role in implementing the requirements of Basel II, as a qualitatively new approach to risk assessment, as well as introducing a new oversight over all financial markets the CR.

2. SOME ASPECTS OF BASEL II

2.1. Terms and condition of the rules of Basel II in the Czech Banking

Preparation for implementation of new European regulations in accordance with the concept of Basel II in the Czech Republic took a long time and adaptation of Czech legislation with the new requirements was completed by 01.07.2007, the date of entry into force of the Law № 120/2007 collections and relevant Decree of the Czech National Bank number 123/2007 CSL as a regulator of the Czech banking sector.

Banks, however, were able to transition to the end of 2007 freely choose to use old and new rules according to their state of readiness.

In particular, the large banking groups from the very beginning were interested in implementing modern approaches that were compared with predictions based on a survey conducted in 2005, much unexpected. In implementing the advanced approaches banks saw a significant opportunity to save capital and general improvement of assessment methods and risk management that are usually managed on a consolidated basis (based on the

entire management group of companies, management is usually performed by a person having the greatest effect, based on the proportion Property group), as well as a disadvantage in a competitive market and to better present themselves. Most were developed more advanced methods to develop models designed to overcome the classical problems of lack of data on credit risk, which represented the beginning of a major obstacle to wide application of advanced approaches.

Basel II introduced innovative approaches to national regulators in a new type of claiming procedures. Directive 2006/48/EC, which implements Basel II in the EU financial and banking groups, simplifies the whole process of filing a special approach. Home supervisors filed an application group, and he in turn holds the consolidated supervision of a group at the EU level. This body has oversight as the highest authority for decision making. Makes the final decision (approval / denial of non-standard approach), also designed to provide information and consultation with guest supervisors who supervise over individual members of groups in other countries. This procedure, in terms of control of a shift of powers.

Development of this procedure in the Czech legislation was preceded by extensive discussion. Accompanied by a certain percentage of mistrust and the first practical steps for its implementation. By a process of approval has been logged many subjects, the lowest four (usually banks in host country – guest oversight body – the parent bank – the parent bank oversight authority), which must collaborate effectively so that their decision will be issued within six months from the date of application (if the application is complete). In addition, there were concerns the extent to which domestic supervisors will take any comments and views of the Czech National Bank (CHNV), which is almost exclusively the purview guest supervisors.

The condition for success is mainly high-quality training that always precedes the approval procedure and is often referred to as the so-called "preliminary examination" and more qualified staff supervision, and the ability to negotiate with all sides of the actors involved. In the Czech Republic go to the new rules and use a non-standard approach has helped the joint project on the introduction of Basel II, which collaborated in the Czech Banking Association, the Czech National Bank, as the regulator responsible for implementation and the Chamber of Auditors of the Czech Republic (as a professional body of first-class experts).

Regulated entities in the Czech Republic realized the need to communicate with the Czech National Bank from the outset and carried out the preliminary test, which usually begins six months before filing for approval of a special approach. This allows this entity to receive the provisional

opinion of supervisors, as well as the time eliminate the alleged deficiencies so that the statement was perceived positively.

Complicated ownership structure of European banking system, as well as duties and responsibilities arising from the position of parent and subsidiary companies, is causing some slow processes of implementation of the rules of Basel II.

Some problems caused small differences in individual countries Instructions concerning particular applications of national interruptions (eg, differences in the definition and use of software).

Experience of the Czech National Bank in the process of implementing Basel II in collaboration with other regulatory authorities, that a party guest who primarily control group model is very positive, and all his important remarks on group models were fully accepted.

2.2. The complexity of the new Basel II rules on the basis of three main pillars

Basel II is a review of the original agreement on capital adequacy of Basel I. The new concept is a reaction to the rapid development of financial markets. Its purpose is to:

- improve the safety and stability of financial system;
- implementation of more accurate and sensitive risk management rules and the calculation of regulatory capital;
- convergence of regulatory capital requirements with risk measurement.

The main method of achieving these objectives is detailed approach to measuring risk, depending on the bank's risk profile and a more accurate procedure for quantification of regulatory capital of each bank.

The new Basel agreement (Basel II) based on 3 main pillars shown in the following scheme:

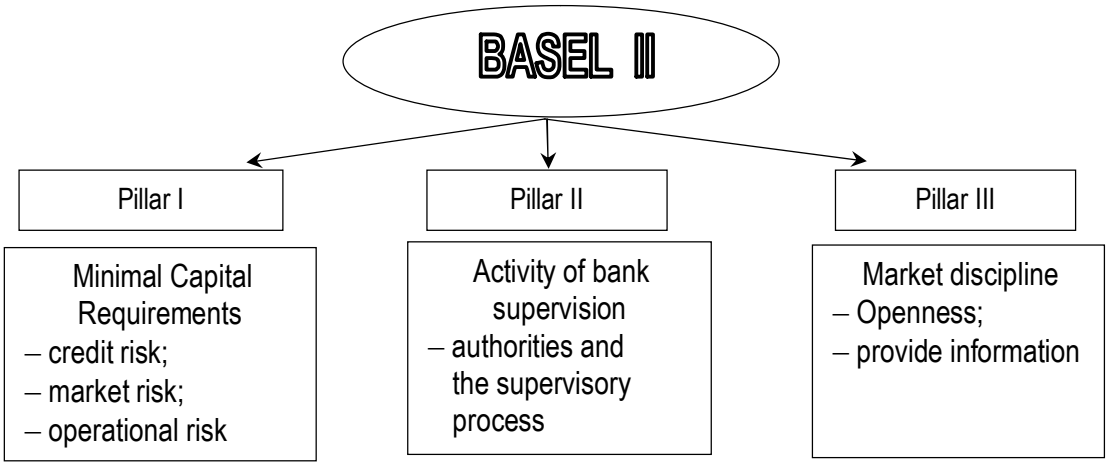

Figure 2. Three pillars of the new concept of Basel II
Source: own graphic design.

Pillar I to establish capital requirements for credit, market and operational risk. Capital requirements for market risk is the concept of Basel I practically unchanged. Introduction to capital requirements for operational risk is completely new. The focus of the first column is credit risk, where the significant changes. The main part of the first pillar is concluded in the establishment of minimum capital requirements based on three main elements: the definition of regulatory capital, the definition of weighted assets subject to risk and establishing a minimum ratio of capital and assets. At the same time take into account the internal ranking system and its components, rating models and processes. Another integral part of the first column are the minimum requirements of the regulator – CHNV quality models for assessing risk. It is about quality requirements for models, content which is a prerequisite for approval by the regulator and further legitimate use. Models of risk assessment should include all important areas, should be accurate, must be approved by an independent person (ie control) and should vykorystovuvaatysya in the daily activities of the bank. Accuracy parameters of these models should always be based on historical data. According to Basel II Pillar I provides flexible capabilities that actors can choose to assess risk and determine capital requirements.

Pillar II defines the evaluation process (ie, rights and responsibilities) capital adequacy of the national bank regulator. In the Czech Republic as a regulator Czech National Bank, which has a lot of information law, regulatory and sanktsiynyh powers.

The objective of banking supervision is not only to ensure compliance with the adequacy of the banks commitment to the amount of bank capital to cover the bank transferred the risks, but also one of the most important tasks of surveillance is to monitor the reliability and predicting the effectiveness of internal bank risk measurement methods and, therefore, ultimately it encourage banks to implement more sophisticated risk management technologies.

The bank must have at its disposal relevant internal processes that will allow him to assess the adequacy of its capital due to the risk that the bank is formed. Regulator may require a larger capital at a higher amount than the official calculation of Bank if the bank identified the need for capital does not meet its risk profile. The second pillar is based on the assumption that a subject with a higher perception of risk is potentially vulnerable and should be better secured capital. Limit capital adequacy of 8 % remains in podalshoomu absolute minimum, depending on the risk profile of the bank, however, the adequacy of bank capital to achieve higher performance.

Pillar III of Basel II concept is aimed in particular at issues of transparency and disclosure by banks. This element is the addition of I and

II posts. Market discipline means the disclosure of key risk indicators. Each bank is obliged to inform and document how to evaluate its risk, as its risk profile looks like in detail and how their own capital in proportion to the risk must be taken in reserve, and that its economic performance, structure, activities, etc. This requires transporentnist in the medium term and should be in the economic changes. Credit institutions are obliged to introduce modern systems of risk management, in other words they are constantly becoming more perfect and refine. Loan portfolio, managed by modern methods and the risk of which is obvious to an observer, will eventually rated by the market, because so shareholders and customers have a better idea of the risk profile of the bank. All this creates pressure on the disciplined management of banks.

Table 2 shows the main differences between the rules of Basel I and Basel II. The main difference is primarily in the framework of Basel II advanced the implementation of operational risk, changing risk value of credit risk depending ryzykovosti client expansion of the definition, etc.

Table 2

Results comparing the main differences between Basel I Basel II

Basel I	Basel II
Bank supervision is directed on conformity of the capital	3 pillars: minimum capital requirements, activity of banking supervision, market discipline
Capital requirements set depending on credit and market risk	Capital requirements set depending on the credit, market and operational risk
The only way to determine capital requirements	More methods for determining capital requirements, depending on individual risk
Risk weight, and accordingly the amount of capital requirements for credit risk depends on the client, and does not depend on the real passing of risk	Risk weight, and accordingly the amount of capital requirements for credit risk depends on the type ryzykovosti client that standardized methods comes from an external rating, and methods of ICR (integrated customer rating) of the internal rating established client bank
The minimum size of support	Significant expansion of established software
Ability to implement their own risk measurement models to calculate capital requirements for market risk only	Ability to implement their own models for measuring risk calculation capital requirements even for credit and operational risk
Banks were not motivated to better manage risk	Banks are motivated to better manage risk, because both can achieve lower capital requirements
Lower costs related to administrative settlement capital needs	Significantly higher administrative costs associated with calculating the need for capital

Source: Management of commercial banks, Vlasta Kashparov a call. 2006, stor. 89.

Due to the fact that Basel II compared to Basel I make changes especially in relationship to credit risk, and in the calculation of capital adequacy, to determine the new capital requirements for operational risk, and thus changes with respect to market risks is not significant, must focus primarily on credit and operational risks. This credit risk significantly affects the overall scale of capital requirements.

2.3. Capital requirements based on credit and operational risks

Capital requirements determined by the amount of capital allocated to cover the appropriate type of risk: credit, market and operational.

$$Cap\ bank = Cap\ DO + Cap\ P + Cap\ O \quad (1)$$

Cap bank – the need for bank capital
Cap DO – the need for capital for credit risk
Cap P – the need for capital to market risk
CaP O – the need for capital for operational risk

Approaches to individual banks, settlement risk on capital requirements in Basel II may be quite different.

The advantage of the new Basel II rules are flexible (fleksybilnist) in the choice of methods of calculating capital requirements and can thus set the capital requirements directly on the level of individual banks according to their risk profile. Each bank can decide which of the approaches allowed by the rules of Basel II to elect to calculate capital requirements. The Bank itself can always choose between standard methods or they can choose methods that are based on more advanced models of their own (non-standard methods). Their use must be agreed upon by the national regulator, in the case of the Czech Republic is the Czech National Bank.

Admittedly, most of the large Czech banks using the progressive method, their own models (all the "Big Four banks").

2.3.1. Capital requirement for credit risk

In connection with the development of financial markets and the increasing number of banking products undergo significant changes and innovations that lead to increased credit risk, which is practically on the main banking risks. For this reason it was necessary to amend the existing Basel I rules so as to achieve more efficient use of capital and provide risk reduction in the provision of credit.

To determine the credit risk is the quantitative risk assessment, ie determining the possible loss of credit transactions. Based on quantitative assessment of possible losses the bank decides on the implementation of operations, the amount of interest and method of its provision, creation of reserves or adjustments of positions as well as the following methods for monitoring them.

Striving to each bank is to minimize credit risks at the level of individual transactions with customers. The result of the process of assessing the credit risk is to identify customers' credit rating (average indicators of quality legal, financial and economic characteristics of the client, which is an important indicator of its ability and readiness to fulfill obligations to the bank) and the inclusion of credit transactions in a rating category (as rated course process for determining the creditworthiness of the client and his expressions through clearly-scale).

According to those who create the rating assessment, there are two main forms rating:

- external ratings – set by external rating agencies;
- internal ratings – set by the Bank.

External and internal ratings expressed by the scale. Some positions in case of external evaluations, usually expressed using letters (AAA, BB etc.), but can be expressed by other signs. Each position is then a measure of investment risk. After determining the position of the internal rating of the bank usually uses a combination of methods (eg, expert assessment of internal specialists in the field of mathematics or statistical methods).

Similarly, using different methods, can calculate the capital requirements concerning operational risk. Possible approaches to the selection method of calculating capital requirements with respect to credit risk are listed in Table 3, the arrow indicates the increasing complexity of the methods applied.

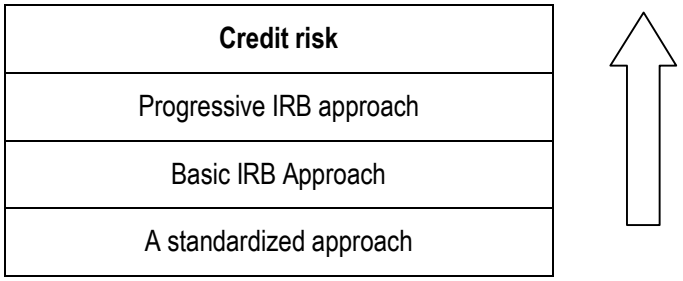

Figure 3. Methods of measuring risk to determine capital requirements for credit risk

Source: Pelikanova Allen, the impact of Basel II on the segment of branded clients, thesis, BIVS, 2009.

A standardized method is the simplest way to determine capital requirements regarding credit risk. For standard methods typical of the level of risk in the process of determining the risk-weighted assets, comes with a rating determined by external rating agency (eg, Standard & Poor's, Fitch Rating, etc.) and / or export agencies. Rating assessment of these institutions approves the national regulator responsible for the recognition of such agencies. National regulator will list agencies whose ratings can be used to determine the level of risk assets. According to the concept of Basel II must meet six criteria:

- Objectivity – the methodology should be clear, systematic and proven historical experience (must be current revision);
- independence;
- transparency;
- publications;
- the adequacy of sources – the adequacy of sources of information, methodologies, information technologies, processes, etc.
- the trust.

Calculation of capital requirements for credit risk using standardized methods can be put as follows:

- the distribution of exposures to advance certain categories (eg categories of exhibits to the States and their central banks, exposures to banks category, the category of exposures to companies, etc.);
- division stands on risk classes based on external rating;
- determine the level of risk according to risk classes;
- calculation of weighted assets at risk as part of the amount of exposures in individual risk classes and determine the level of risk;
- calculation of capital requirements for credit risk will be a multiple of 0,08 and coefficient-weighted assets at risk.

With the aim of establishing risk weights under exposure to 1-th step are divided into several categories. For example, the proposed risk weights for exposures to corporate customers, ie enterprises in the table number 4 is fixed depending on the external credit rating.

Table 3

The level of risk exposure to companies

Credit rating	AAA to AA–	A+ to A–	BBB+ to BB–	Below BB–	without rating
Risk weight, %	20	50	100	150	100

Source: Management of commercial banks, Vlasta Kashparov a call. 2006, stor. 87.

The borrower who does not have an external credit rating, receiving a single risky weight 100 % (equivalent to a capital requirement of 8 %).

Calculation of capital requirements to cover credit risk in accordance with the standard approach is to:

Cap in accordance with the standardized approach = Loan amount x *weight* x *risky capital adequacy (8 %) (2)*

IRB (Internal Rating Based) approach to credit risk to banks, which are able to statistically measure the risks specific funding to support its capital to adequately regulate according to their individual risks. Bank uses to assess credit risks of their borrowers' internal ratings, but only in the performance of clear methodological and reporting requirements set by national regulatory authorities. In the system of internal rating methods bank must divide its assets into five classes:

- debts of enterprises;
- debts States;
- debts of banks;
- debts of small ones;
- investment in shares.

For each of these asset classes should distinguish between three main elements for IRB (Internal Rating Based) approach:

- risk components – estimates of risk characteristics of the bank or regulator;
- risk weight function – a way by which risk components are transformed into risk-weighted assets and capital requirements;
- minimum requirements – requirements that a bank must meet in order to use the IRB (Internal Rating Based) approach to specific classes of assets.

Features of the risks to which IRB methods are:

- default probability (Probability of Default, PD) – the likelihood that the borrower will not fulfill its obligations during this period. To what extent is the likelihood that a borrower in the next 12 months will cease to pay (insolvency extend the payments over 90 days, etc.);
- exposition at default (Exposure at Default, EAD) – the total number of assets that subject to risk if the borrower does not fulfill its obligations. What will be the predictable amount of repayment in case of insolvency of the client;
- the level of default losses (Loss Given Default, LGD) – the share of unprofitable assets in the case comes crashing expressed in %, LGD = 1 – profitability, where profitability is restored portion of the total amount of exposure if the borrower stops paying the debt . How long will the

alleged damage to a large bank in the event of nonpayment by the borrower;

- term of payment (Maturity, M) – usually nominal, measured in years.

Scope of IRB method is defined by unpredictable and predictable damages. At this level estimated probability of default or other elements of risk according to the chosen level approach. Probability of failures will serve as an important entry in the risk weight function, or feature requests to the capital, schematically shown in Figure 4.

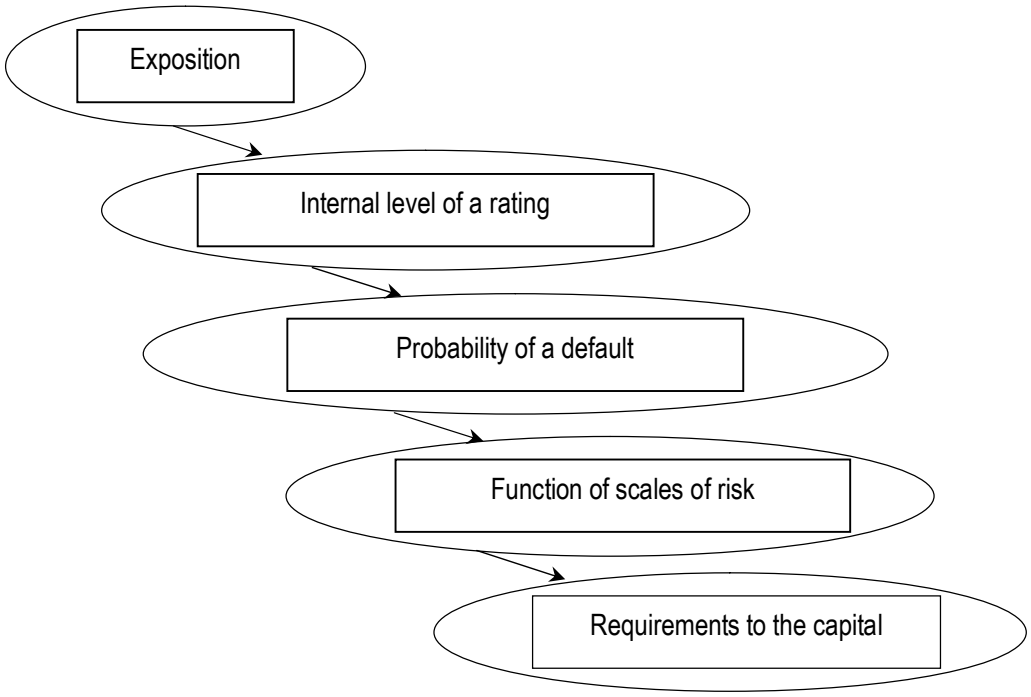

Figure 4. Main stages in the IRB approach

Source: Management of commercial banks, Vlasta Kasparov, etc. .., 2006, pp. 88, create your own scheme

IRB – basic approach. In the primary internal ratings bank may use its own assessment only if the likelihood of damage to the client (PD), and other risk characteristics will provide the regulator.

IRB – a progressive approach. In the progressive approach, internal rating of the bank will be assessed on the basis of their own risk assessment of all properties for setting risk weights.

Customer segmentation

Basel II provides a classification of customers into five classes:

- small customers – individuals, entrepreneurs and small businesses with obligations to the bank of less than 1 million euros;
- firm customers – medium and large enterprises and specialized finan cing;

- financial institutions – primarily banks;
- state;
- shareholders.

Each client must be in accordance with Basel II is included in the correct segment. This is due to the fact that the loans in the category of "small customer", should be kept in reserve in less capital than for corporate loans. The reason is the lower risk that is due to a higher degree of diversification and lower the volume of lending.

Under certain conditions and assumptions, banks have to consider SMEs as a commitment at a rate below 1 million in respect of capital compliance as an individual, and thus may be for loans for small and medium-sized enterprises hold lower capital reserves.

2.3.2. Capital requirement for operational risks

In terms of operational risk to its inclusion in the calculation of capital adequacy under Basel II, banks, especially lately, investing significant resources.

With the rapid development of the banking market has recently held a major change in the nature of operational risk. The most important factors include the significant growth of the importance of banking information systems (banks depend on electronic communications, expanded use of electronic banking services as the dominant mode of communication and distribution of products between the bank and client), putting more and more products, etc. Operational risk, therefore, begins to pose a significant risk profile of banks.

Unlike credit risk it is difficult to measure. Basel II defines only the basic framework that gives banks more autonomy rien and not hinder their initiative in developing their own models. It defines three methods of calculating capital requirements for operational risks, which are listed in Table 5 and differ from one another complexity calculations, an arrow points to the increasing complexity of the methods used.

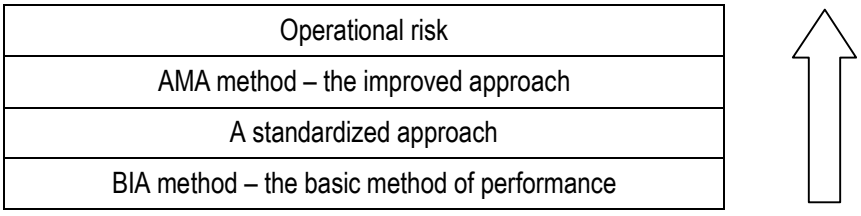

Figure 5. Methods for calculating capital requirements for operational risks

Source: Pelikanova Allen, the impact of Basel II in the segment of corporate clients, Thesis, BIVS, 2009.

Select the method that the bank will use depends not only on the decisions of bank management. Using more advanced methods endorses regulator and banks must meet minimum requirements established for the method. These requirements and multi-use so that the banks are the most complex methods could be used for quality control operational risks. Parameters of individual methods defined so that the banks were motivated to use more sophisticated methods. Capital requirement is the highest in the simplest method, and decreases with increasing complexity of the method used.

BIA (Basic Indicator Approach) model – the basic method of performance

This method is intended primarily for small banks that perform simpler operations and are less well-developed operational risk management system. Is suitable for banks, whose capital savings when moving to a standardized method to exceed the costs of implementation of standardized methods.

Calculation of capital requirements for operational risk using the BIA model Basel II defines as follows:

$$KBIA = GI \cdot \alpha, \tag{2}$$

where

KBIA is a requirement of capital for operational risk;

GI is the gross income of the bank (total income = (+) Interest income (–) spending on interest, (+) income from fees and commissions, (–) spending on fees and commissions (+) and profit or loss from financial activities, (+) Income from shares and portions, (+) other operating income);

α is the fixed percentage set regulator.

For the calculation of total capital using the average gross income during the previous three years.

A standardized approach

This method is more complicated than basic indicators by BIA. Better reflects the real risk of the bank. Using this method, the bank divides its activities into eight business lines. Each business lines set capital requirements on the same principle as in the basic method. For some business lines set by various factors. These factors differ for each activity so that the level indicator display their risk.

Table 4

Distribution of commercial banks to business lines

Business Line	Processes	The coefficient β, %
Corporate Finance	Underwriting instrument financial services related to underwriting, investment consulting	18
Trading & Sales	The positions that open up at their own expense, to serve market-maker	18
Retail Banking	Retail banking service	12
Commercial Banking	Banking entities	15
Payment & Settlement	Make payments and accounts, loans, financial leasing, guarantees, commitments	12
Agency Services & Custody	Agent Services	18
Asset Management	Asset Management	15
Retail Brokerage	Manage a portfolio, shares in collective investment funds	12

Source: Management of commercial banks, Vlasta Kasparov, etc. .., P. 142.

Capital requirement is determined by multiplying the rate and gross income for this business line.

Total capital requirements are the sum of the requirements of individual business lines:

$$KSTA = sum\ (GI_{1-8} \cdot \beta_{1-8}), \qquad (3)$$

where

KSTA – capital requirements for operational risk

GI – bank's gross income for each business line

AMA model – improved method

The Bank may, with the use of this method to influence the amount of capital requirements. Out of the assumption that based on historical loss distribution can predict the distribution function of losses. Subsequently provided the expected and unexpected losses from operational risks. In this model should apply to the distribution of individual business lines. To increase the sensitivity to risk than the eight business lines used seven types of damage to the operational risk set forth in the table number 5.

Table 5

Type of loss

Event Type	Definition of losses
Internal fraud	Damages caused by the behavior whose purpose is fraud, unlawful appropriation of property-treatment laws, internal regulations, standards, one of the stakeholders
External fraud	Damages caused by the action of others, the intent of which is fraud, unlawful appropriation of property, or law-treatment
Labor Relations and Safety	Damages caused by actions that are in the section of the law, agreements relating to employment and health and safety, damages, put the health and discrimination
Customers banking products, business practices	Damages caused by unintentional behavior that led to failure to pay obligations to the client, including compensation for breach of trust or inappropriate treatment, or for any damages caused by or form the basis of product
Damage to tangible assets	Damages caused by a violation or breakdown of the system
Failed Systems	Damage to property catastrophe or other disaster
Management processes, delivery, transaction	Damages caused by failure in the processing of transactions and the management processes, meat balls associated with relationships with suppliers and contractors

Source: Management of commercial banks, Kasparov Vlasta, 2006.

By combining business lines and there is some type of damage matrix. For each combination of business line and type of damage is calculated demand for capital. The total demand for capital for operational risk is calculated as the sum of capital requirements for each combination of business line and type of damage. This method could reflect the risk of the bank as the best.

Table 6

Comparison of 3 methods for calculations of capital requirements for operational risk

Parameter	BIA	A standardized approach	AMA
Consent supervisors using the method	usually not necessary	usually not necessary	Always required
Requirements for operational risk management	basic requirements	basic requirements for the additional + + and TSA	basic requirements + + quantitative requirements for the AMA
The process of calculating capital requirements	determined by the Czech national Bank	determined by the Czech national Bank	forming financial institutions using quantitative requirements for the AMA
The division of business lines	No	Yes	Yes
Ability to reduce capital requirements for the amount of insurance	No	No	Yes, under certain conditions

Source: Hrdynova Lyutsyya, Risk management in banks, thesis, BIVS, 2009.

2.4. Evaluation results of the new rules of Basel II in the Czech Republic

In 2007, Basel II passed only 6 banks and only 5 banks introduced IRB method (an advanced approach for calculating capital for credit risk) and 7 banks brought the method of Ama (advanced approach for calculating capital for operational risk). This means that the application has been in two-thirds of the banking sector (relative to the carrying amounts). Mainly this was primarily due to the fact that the new Basel II rules allow banks to choose their own method of risk assessment in connection with their activities. If the bank decides to use in the calculation of credit risk more sophisticated methods, such as their own, may use an individual approach to risk assessment for individual clients and different ways of support. This makes it possible to reduce capital requirements, interdependent of capital under which each bank must follow. The Bank, however, must have a sufficient number of relevant data about their customers, their financial situation, and have other information regarding, for example, economic development firm, the market changes or additional funding requirements. Such an individual approach to risk assessment must be approved by the regulatory body – CSL and simultaneously requires a complex approach to risk management primarily in the banks themselves.

In the first year after implementation of Basel II were in the Czech banking sector, some unexpected developments in the region of 1-th column. Initial quantitative indicators for the first component in the banking sector in the Czech Republic show that the total capital requirements after the introduction of new rules was reduced, especially under the influence of reducing capital requirements for credit risk, which will not exceed the recently imposed requirement for operational risk. According to information of the Czech National Bank can talk about reducing the average capital requirements of Basel II rules for 20 % compared with the rules of Basel I.

In addition to the application of individual approach, endorsed by the Czech National Bank to reduce capital requirements spryala and the possibility of greater use of methods to reduce credit risk, which can be taken into account to determine capital requirements for credit risks on a specific agreement. Especially extended control the amount of information on real estate which is software that belongs to third parties, for nonresidential real estate in the country where the local regulator recognizes (in the case of regulated persons who will use the approach IRB), and certain personal property and selected debt.

Despite the lower capital requirements, are not a trend decline in the capital itself.

Regarding the structure of capital requirements for credit risk, which is the most important part of banking risks, and even after the introduction of new rules is a significant advantage. Its share to 31.07.2007 was about 95 %, resulting in the introduction of new capital requirements under Basel II was reduced to approximately 85-90 %.

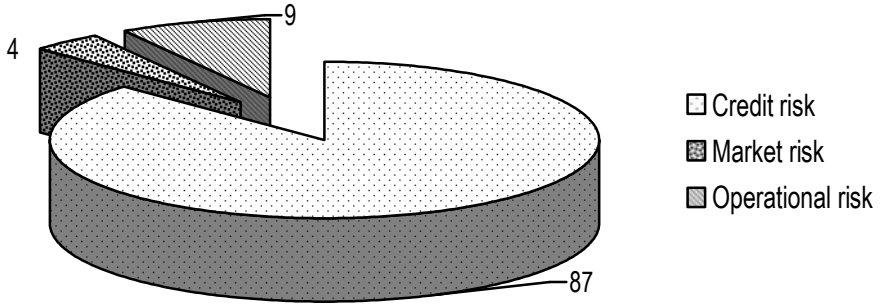

Figure 6. Estimated share of capital requirements for individual risks in the total capital requirements after the implementation of Basel II on banks in the Czech Republic

Source: Own processing.

Capital requirement for operational risk is predicted from 2005 should be about 8 %, but by the end of 2008 the amount of this indicator was about 10 %. Furthermore approach Ama, the capital requirements based on the revenue figure, so a bank with higher income have higher capital requirements for operational risk that can be considered as a specific negative impact of this indicator. Small and medium-sized banks may have capital requirements amounting to only 5 % or 8-9 %, the big banks – about 11 %.

In this regard, a clear disadvantage of this index, which does not directly depend on the size of operational risk, but used the absence of other, more simple conventional alternatives.

Summing up on the methods used to quantify the main banking risks under the new concept of Basel II, can be summarized that:

- each asset (exposure) is given its own risky weight;
- the higher the risk, the more risky weight;
- risk assets expressed by so-called risk-weighted assets, which are equal to the product of weight risky assets and their value;
- capital requirements are 8 % of risk weighted assets;
- for risk assessment can use statistical methods using historical data instead of expert and intuitive assessments of how it is done so far;
- banks can choose which method of calculating capital requirements will be used (standard or extended, or custom).

In accordance with the pole II subjects of banking services in the Czech market under the decree shall inform CSL Czech National Bank

once a year to 30 June on the internal system of capital formation. There is a large variety of approaches ranging from simple, as a rule, external evaluation methods to complex mathematical approaches based on simulation. Certain shortcomings of all models is the lack of established practice and experience of proven steps. So, today is not so important "current numeric index, as the search for a specific bank better quantitative results taken risks or effects of potential future risks.

The aim of Pillar III, which is to increase market transparency and strengthening market discipline, which is described in detail in the Decree of the CSL. It defines the content, form, structure, frequency and timing of the data bank. Banks must publish information about themselves, shareholders, the structure of the consolidated units to conduct activities on the financial situation in the form of financial statements (the so-called "old data"), data on compliance with foresight, his moves – on the equity, adequacy of capital , the amount of capital requirements, the risk management approach. These data are published or on an individual basis (in the banks without a single European license) or on a consolidated basis, ie, data published ranking bank in the group or holding. The fact that the obligation to inform a central, ie, data published by the bank, ranking in the ownership structure, and only the language of their country, often makes it impossible to implement effectively the implementation of this component.

The concept of Pillar III is disadvantageous for small and less important players of the banking market, that there should publish full information about themselves on an individual basis, but it is not always effective. Conversely, if banks want to contribute to the high level of market transparency, can on its own initiative to voluntarily publish more information than necessary.

In terms of overall evaluation shows that implementation of Basel II for financial market stability and his health is certainly progress, especially in the field of risk management, and ultimately in a more efficient calculation of capital adequacy.

According Ludek Niedermaier, member of the CSL, the concept of Basel II is very suitable for the conditions "standard of development in the banking sector because almost solely based on retrospective statistical data. During the global financial crisis, however, is often more important to the regulator of the banking sector "stress tests" with the same set of parameters to evaluate several options for future economic development (from "moderately pessimistic, pessimistic and overly pessimistic).

The next step can be assumed that Basel II will promote more rapid development of modern management methods, to strengthen the centralization of risk management at the bank or financial group, thus strengthening the role of consolidated supervision.

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BANK CAPITAL ADEQUACY DEPENDENCE ON THE CUSTOMER RATING, IRB APPROACH TO CREDIT RISK

Basel II is the second of the Basel Accords, which are recommendations on banking laws and regulation issued by the Basel Committee on Banking Supervision. The purpose of Basel II is to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of risks banks face. These rules mean that the greater risk to which the bank is exposed, the greater the amount of capital the bank needs to hold to safeguard its solvency and overall economic stability. Risk is defined as a phenomenon that creates potential volatility in the economic cash flows of the bank. In the Czech Republic there is an act legislative called Vyhláška 123/2007Sb which is nationally recognized.

Basel II uses three pillars concept:

1. Minimum capital requirements (individual risk profile).

   Credit risk: Standard Approach, Internal Rating-Based Approach, Advanced IRB.

   Operational risk: basic indicator approach BIA, standardized STA and Advanced measurement approach AMA.

   Market risk: Value at Risk VaR approach.

   (Other risks are not considered fully quantifiable at this stage).
2. Supervisory review process – regulatory response to the first pillar (individual limits of capital adequacy according to risk profile).
3. Market discipline – increase of disclosures that the bank must made to allow the market to have a better imagination of the overall risk position of the bank.

The Basel II aims at:

- capital allocation is more risk sensitive;
- economic and regulatory capital are more close;
- separation of operational risk from credit risk.

Risk can be measured along two dimensions:

1. Expected loss – average loss expected from a portfolio. In the case of credit risk, expected losses are reflected in loan rates and fees. Because such losses are intended to be covered by operating earnings, they are reported in required loan-loss provisions on a bank's P&L.
2. Unexpected loss creates the need for economic capital.

Probability distribution of the percentage gross loss on the loan portfolio is given on the Figure 1 (see Vasicek).

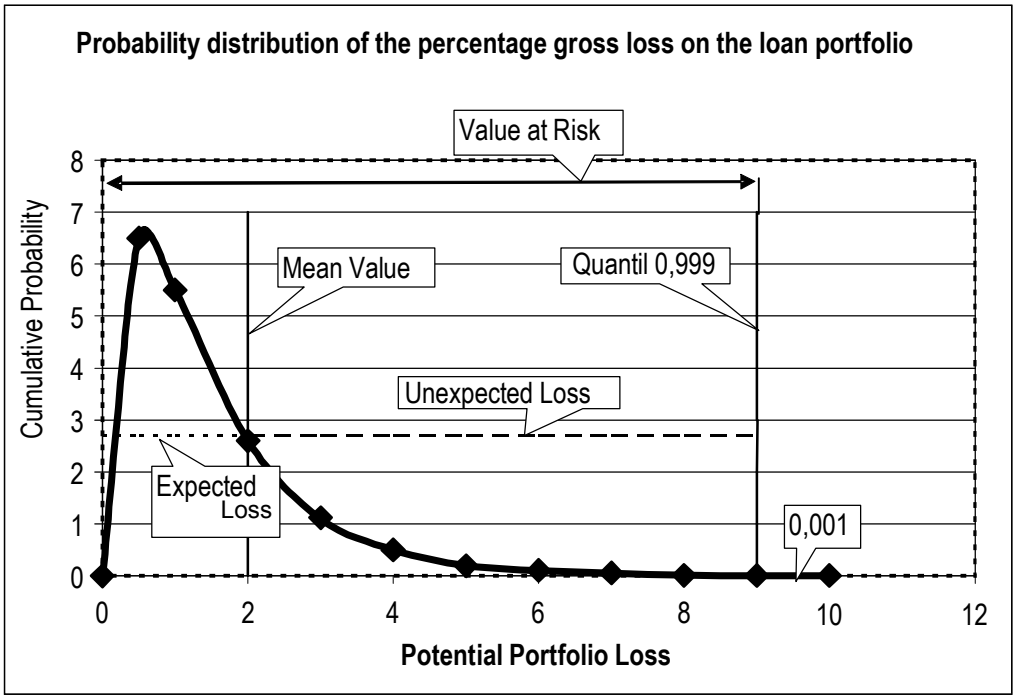

Figure 1

Calculation of minimum capital requirements for credit, market and operational risk.

The capital ratio is calculated using the definition of regulatory capital and risk-weighted assets The total capital ratio must be no lower than 8 %.

$$Kp = \frac{Tier\ 1 + Tier\ 2 + Tier\ 3}{RWA + 12{,}5\ (KPm + KPo)} > 8\ \%,$$

Where

Tier 1, Tier 2, Tier 3 – regulatory capital;

RWA – risk weighted assets;

KPm, *KPo* – capital requirements for market and operational risk.

Internal Ratings-Based Approach to credit risk. Banks that have received supervisory approval to use the IRB approach may rely on their own internal estimates of risk components in determining the capital required for a given exposure. The risk components include measures of the probability of default PD, loss given default LGD, the exposure at default EAD and effective maturity M. In some cases, banks may be required to use a supervisory value as opposed to an internal estimate for one or more of the risk components.

The IRB approach is based on measures of unexpected losses UL and expected losses EL The risk-weight functions produce capital requirement for the UL portion. Expected losses are treated separately using eligible provisions and reserves.

Formula for derivation of risk – weighted assets:

The derivation of risk-weighted assets is dependent on estimates of the PD, LGD, EAD and, in some cases, effective maturity M for a given exposure. Throughout this article PD and LGD are measured as decimals, and EAD is measured as currency. For exposures not in default, the formula for calculating risk-weighted assets is:

$$\text{Correlation } R = 0{,}12 \cdot (1 - EXP(-50 \cdot PD)) / (1 - EXP - 50)) + \\ + 0{,}24 \cdot [1 - (1 - EXP(-50 \cdot PD)) / (1 - EXP(-50))].$$

$$\text{Maturity adjustment } b = (0{,}11852 - 0{,}05478 \cdot \ln(PD))\text{^}2.$$

$$\text{Capital requirement } K = [LGD \cdot N[(1 - R)\text{^}-0{,}5 \cdot G(PD) + \\ + (R / (1 - R))\text{^}0{,}5 \cdot G(0{,}999)] - PD \cdot LGD] \times \\ \times [(1 + (M - 2{,}5) \cdot b) \cdot 12{,}5 \cdot 1{,}06] / (1 - 1{,}5 \cdot b).$$

$$\text{Risk-weighted assets } RWA = K \cdot 12{,}5 \cdot EAD,$$

Where:

ln denotes the natural logarithm.

$N(x)$ denotes the cumulative distribution function for a standard normal random variable (i.e. the probability that a normal random variable with mean zero and variance of one is less than or equal to (x).

$G(z)$ denotes the inverse cumulative distribution function for a standard normal random variable (i.e. the value of x such that $N(x) = z$).

Note: The normal cumulative distribution function and the inverse of the normal cumulative distribution function are, for example, available in Excel as functions NORMSDIST and NORMSINV.

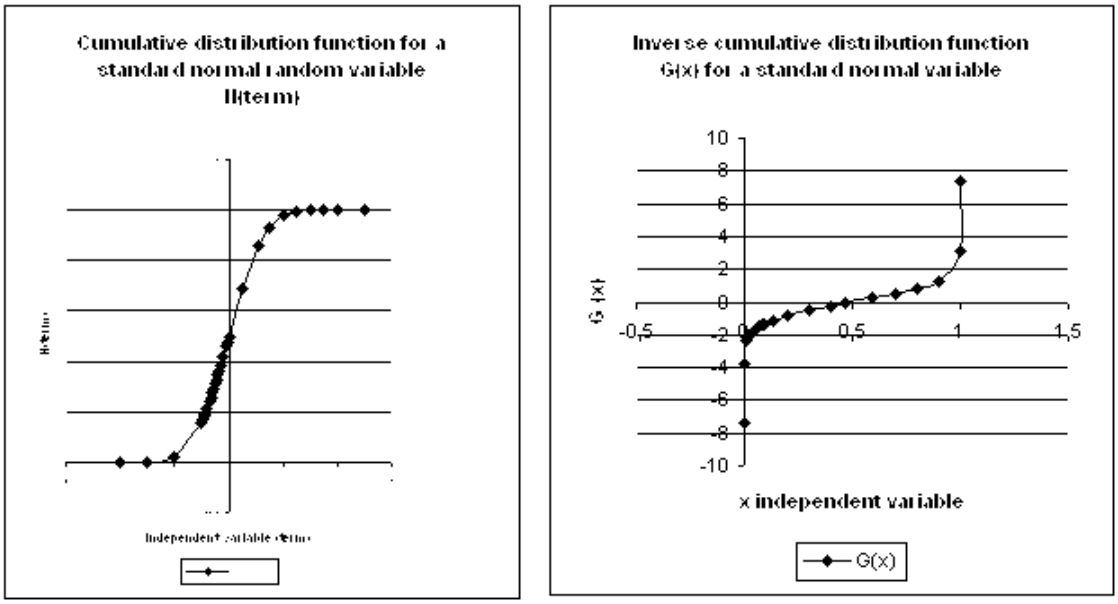

Figure 2

PD probability of default, for corporate and bank exposures, the PD is greater of the one-year PD associated with the internal borrower grade to which that exposure is assigned, or 0,03 %.

According to the global crisis influence there is a table showing the situation of a credit portfolio of a Czech Bank as follows (see Knaifl):

Rating	IQ	HQ	MQ	SQ	CA	DF	US
PD %	0	2	4	8	13	47	59

Where IQ denotes the best rating (investment quality), all the others marked with Q are high, medium and satisfactory rated, the rest denotes wrong position.

LGD loss given default, there are two approaches for deriving this estimate: a foundation approach and an advanced approach.

EAD exposure at default, all exposures are measured gross of specific provisions or partial write-offs.

M effective maturity, for banks using the foundation approach for corporate exposures, effective maturity will be mostly 2,5 years. M is defined as minimum one year, no greater than 5 years.

The formula is the conditional probability distribution of the portfolio loss given by the state of the economy, as measured by the market increase or decline in terms of its standard deviation.

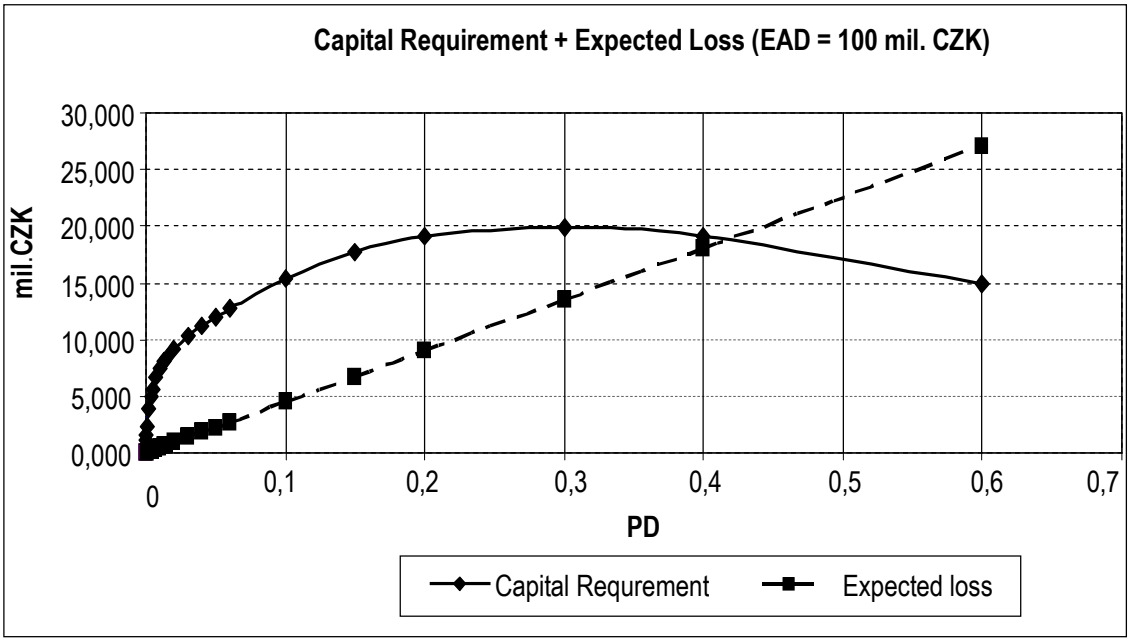

Figure 3

Figure 3 shows that Basel II requirement on:

- the sum of provisions (reserves) + regulatory capital increases with the level of PD (decreasing customer rating);
- mean value of probability distribution of loss moves in direction of higher portfolio losses, the expected loss (for PD > 0.4 in our case) – overrides the unexpected one. Because of greater provisions (reserves) the requirements have devastating effect on bank profit.

Criticism of Basel II. Czech Banks follow the Basel II requirements since year 2007 and there are no problems concerning credit, market and operational risks. But hundreds of banks have collapsed worldwide. How it is possible that banks could circumvent the safeguards implemented under Basel II that were designed to reduce risk?

Basel II left far too many loopholes for judgment to be exercised in the setting of parameters and hence determining capital adequacy (special purpose investment vehicles off the balance sheets that were undercapitalized, etc.) There is limited definition of risk that enabled institutions to limit their own risk management emphasis to what was required by the term of Basel II. But the new kinds of risks proved crucial – esp. liquidity risk.

Basel II didn't cause the crisis; but it enabled the crisis to be as bad as it is because of what was not dealt with, overlooked or deliberately excluded.

Weaknesses of Basel I:

1. Basel II advantages the larger banks because of more sophisticated measures and methods required. Less sophisticated measures are simpler to calculate, but they are lower risk sensitive.
2. Improved risk sensitivity means that banks are more willing to lend to higher risk borrowers, just with higher prices.
3. Basel II leads to a more pronounced business cycle. The credit models use typically a one year time horizon. During a downturn in the business cycle, banks would need to reduce lending as their models forecast increased losses, increasing the magnitude of the downturn.

Regulators should be aware of this risk and can be expected to include it in their assessment of the bank models used.

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BANKING SYSTEM OF UKRAINE: THE CREATION AND FURTHER DEVELOPMENT

Since the country became independent great changes occurred in the economy of Ukraine. It also refers to the banking system. However after disintegration (decomposition) of the USSR and its common financial system, it was necessary to build financial relations not just from the start but to transform them in the direction of market reforms. Taking into account the existing situation, it is necessary to stress that considerable changes took place exactly in the banking system of Ukraine, which is an integral part of market infrastructure, where the mechanisms of cash flows redistribution between the business entities are formed. The banking system development on one hand greatly influences the increase of country's economic

potential, and on the other hand the country's development directly connected with the banking system functioning.

In consequence with the global tendencies the banking system development was forming from stage to stage. As a fact till 1991 the banking system of Ukraine was a state property. From this moment on the privatization process was actively increasing. At the same time the basis for this process was prepared in advance.

At the end of 80s the government of the USSR made the decision about the decentralization of the country's economy management. It was envisaged to change of the banking system organizing structure, banks role increase, strengthening of their influence on the national economy development, transformation of credit into a real economical lever. Till 1987 the banking system consisted of three banks, in particular, the State Bank of the USSR, the Construction Bank of the USSR, the Bank of External Trade of the USSR, The State Labor Savings-Banks of the USSR.

In the process of banking system reorganization the following chanches should be made:

- the creation of two-level banking system (the central emission bank and state specialized banks which will directly serve the national economy);
- the transfer of specialized banks on complete cost accounting and self-financing;
- forms and methods improvement of credit relations between companies of different national economy branches [1].

This reorganization was made with the help of directive methods and it hasn't led to great changes in the process of forming credit relation. At the same time "new economical course" which started in the country, objectively required the prolongation of banking system reformation. During 1989-1991 nearly sixty Ukrainian banks were registered in Moscow. They were created on the principle of companies branch service as corporations or cooperative banks (the "Montazhspetsbank" – the Ministry of Assemblage and Specialized Building Works of the Ukrainian SSR, the "Ukrbudbank" – the Ministry of Construction of the Ukrainian SSR, the "Shlyahbank" – the Ministry of Road Building and Operation of the Ukrainian SSR, the "Lisbank" – the Ministry of the Timber Industry of the Ukrainian SSR etc.).

To some extent it assisted the dependence reduction of some economy branches from the state credit policy. The branch offices of Moscow banks were also working: the Incombank, the East Investment Bank. All new formed banks were established according to branch or regional characteristics and they were registered in the Soviet Union registration book of the State Bank of the USSR.

In Moscow also were registered banks created on the basis of the State Bank of the USSR institutions as Ukrainian commercial banks. They

continued to work with the status of state banks (on the basis of the Republican ZhitloCotsBank was created the UkrSotsBank, the AgroPromBank – Joint-stock Industrial bank "Ukraine", out of PromBudBank – the PromInvestBank was formed).

During 1991-1995 the independent banking and monetary systems of Ukraine have been maintained. On the basis of the Ukrainian Republican Bank of the State Bank of the USSR by the resolution of Verkhovna Rada's of Ukraine from 20.03.91 "On the procedure of enabling the Law of Ukraine "On Banks and Banking Activity", the National Bank of Ukraine with the net of regional departments has been created.

We should stress that in October the re-registration of commercial banks, which have been registered by the State Bank of the USSR has begun. The most important innovations, which were introduced by the Law "On banks and bank activity", became:

- the declaration of two-level organization as the main principle of banking system establishment;
- the declaration of the independent status of the National Bank of Ukraine under direct subordination to the Verkhovna Rada;
- giving the right to create commercial banks on the incorporated basis and the right for privatization and commercialization of operating state banks, except Savings Bank;
- granting to commercial banks the wide range of rights in order to serve legal and physical entities on the principles of competition, equal access to credit resources, mutual partnership relations with clients;
- giving the National Bank the right to carry out the control and supervision over the commercial banks activity on behalf of the state;
- releasing the state from the responsibility of banks obligations, and banks – from the responsibility of state obligations.

Accepting the Law "On banks and bank activity" played a crucial role in the own Ukrainian new, market type banking system establishment.

In 1991 only the foundation of the National Bank of Ukraine functioning as the central bank of the state has been made. This time the bank did not have a proper structure. The banking system was at the very beginning of its development. The National Bank did not also have its own legislative base.

Exactly on this stage begins the work on the organization of the external and internal calculations, credit support of economy, creation of the mechanism of monetary regulation and banking supervision, implementation the practice of interbank calculations on the correspondent base, the organization of the cooperation with international and european financial-credit institutes such as the International Monetary Fund, the World Bank, the European Bank for Reconstruction and Development.

In 1992 the reformation of the monetary system of Ukraine started. According to the reform the only legal way of payment on the territory of Ukraine was ukrainian karbovanets, which was represented in the turnover by the coupon of the National Bank of Ukraine.

It is necessary to emphasize that in this period serious inflationary processes occurred in the country. The inflation in 1993 was more than 10 000 %. Many experts believe that the main reasons of this situation were the imbalance in the banking system and legal entities of real sector of economy development, the delay with the introduction into the turnover of a strong national currency, and also sufficient credit amounts directed to financing the governmental needs.

In 1992 the work under the official currency reserve of the National Bank of Ukraine started and in 1993 the first intervention on the currency market was carried out.

The process of the banking system formation was characterized by the extremely rapid growth of banks net and reduction of their assets and capital in dollar equivalent as a result of money devaluation.

During 1996-1999 the monetary reform was completed and the implementation of market principles of monetary-credit market regulation of the country was finalized.

In spring of 1996 the strong national monetary unit – grivna was introduced by means of non-confiscate type of monetary reform.

The improvement of macroeconomic situation in the country preceded the *carrying* of this reform. Appreciably it has been achieved owing to the more consecutive steps use in the direction of market mechanisms, including the use of the non inflationary sources of the state budget deficit covering on the basis of the state securities sale and the currency market liberalization.

The main tasks of monetary reform were:

- the substitution of the temporary monetary unit, the ukrainian karbovanets for the national currency – grivna;
- changing of the prices scale;
- the creation of the stable monetary system and transforming money into crucial stimulating factor of economic and social development.

This envisaged the strengthening of financial stability *forth* before the monetary reform, the calculation acceleration, the withdrawal of excessive cash in banking system, providing the stability of national currency, rate regarding the foreign currencies and price stability as the basis of economic development [5].

On this stage we observe the registration of foreign banks offices and banks with a share of foreign capital, the selling and re-selling of commercial banks took place and also the new bank registration continued.

Among the peculiarities of banking sector development in 1998 there should be mentioned:

- the influence of the deformed structure and direction of financial flows on the character of income which banks received;
- the concentration of banks capital;
- diversification of banking activity aiming at the extending of attendant services spectrum in all spheres;
- strengthening of competition in the banking sphere, in the first place between national and foreign banks;
- the segmentation of the banking services devided according to the branch, functional and regional characteristics;
- the orientation on the active participation of banks in the process of substitution on the basis of the merger of banking, industrial and financial capitals [1].

At the same time during 1998-1999 great efforts in the banking system regulation were directed to the prevention of destabilization on the monetary-credit market in consequence with Asian financial crisis and crisis spread in the Russian Federation, having saved the banking system of Ukraine and assisted of its further development. In particular, the National Bank of Ukraine set the lower capital limit at the level of 3 million euros. But the majority of banks were not able to carry out the mentioned requirements. The main direction of banks activity in this period became the support of their financial stability.

During the period from 2000 till 2007 in banking sector as well as in the economy of the country on the whole an essential economic increase occurred, the price stability grew, the level of inflation gradually reduced. The policy of maintenance and increasing the currency amount reserves was actively introduced. Owing to the National Bank's of Ukraine activity in 2004 the banking crisis was prevented, which could appear as a result of the political and economical situation in the country, connected with the Presidential Elections of Ukraine.

During this period the National Bank of Ukraine worked out legislative documents regulating its relations with banks during monetary – credit market regulation in all segments – credit, currency and stock. These documents included the resolutions on formation the compulsory reserves by banks, on interest policy, on the liquidity regulation of the banks of Ukraine, on the activity regulation of the banks of Ukraine, the Plan of accounting account of the National Bank and commercial banks etc [5].

On this stage the foreign capital activity in financial sector on the whole and banking sector, in particular, essentially increased. The number of banks with the participation of foreign capital grew noticeably. At this time powerful international financial conglomerates appeared. Gradually

they commence their activity in the insurance sector as well as in the investment sphere. It is necessary to mention that banking institutions in comparison with non-banking institutions developed with more rapid rates and excelled them in the assets amount.

On the modern stage, beginning from the second part of 2008, the banking sector as well as the economy of Ukraine are in crisis. The global financial crises made a sufficient impact on the banking system of Ukraine and demonstrated those serious problems and structural imbalance which were not noticeable in the conditions of the economic growth.

Before the crisis in the conditions of fast-moving growth, banks credited actively. But, as a result, the amount of credits given by Ukrainian banks exceeded money accumulated on the deposits in 2,24 times, besides the dollar credits were given in 2,8 times more than the amount currency resources on deposits.

The disproportion between assets and liabilities occurred in predominance of short-term obligations in the structure of resources base and long-term obligations in the assets structure [6].

Obviously, the two-level banking system has been formed in Ukraine. The first level of it includes the central bank, which is the National Bank of Ukraine and the second level – commercial banks.

The main indexes of banking system development of Ukraine

In Ukraine the banking system plays the main role in the enterprises activity financing. More experts claim that on the modern stage the bank-centred model of financial market is forming. It means that the role of banking system in the economy of the country is really prominent. It is confirmed by the amount of banking institutions assets in more than 10 times exceed the total assets of non-banking financial-credit institutions (insurance companies, non-state pension funds, institutions of mutual investment, credit unions etc).

Analyzing the peculiarities of national banking system development during the period from 2000 till 2008, we can summarize the positive quantitative and qualitative changes on the whole.

The quantity of banks was not essentially changing during analyzed period. Besides the amount of total assets grew substantial, in more than 24 times. Eventually the banking system is considered exceptionally as the credit oriented as far as during the analyzed period the amount of credit portfolio constantly extended and its specific weight increased from 60 % in 2000 to 81 % in 2008. During analyzed period the obligations considerably grew, in more than 26 times. At the same time banks also increased the amount of equity capital.

Table 1

The main indexes of banking system development of Ukraine during the period from 2000 till 2008 (on the information of the National bank of Ukraine)

Indexes	2000	2001	2002	2003	2004	2005	2006	2007	2008
Quantity of registered banks	195	189	182	179	181	186	193	198	198
Gross assets, bln. UAH	39,9	50,9	67,8	105,5	141,5	223,0	353,1	619,0	973,3
Credit portfolio, bln. UAH	23,6	32,1	46,7	73,4	97,2	156,4	269,7	485,5	792,4
Specific weight of credit portfolio in assets, %	59	63	69	70	69	70	76	78	81
Equity capital of banks, bln. UAH	6,5	7,9	10,0	12,9	18,4	25,4	42,6	69,6	119,3
Obligations of banks, bln. UAH	30,6	39,7	53,9	87,3	115,9	188,4	297,6	529,8	806,8
Net profit, bln. UAH	–0,03	0,5	0,7	0,8	1,3	2,2	4,1	6,6	7,3

The key indexes of banking system development of the country, which in some way characterize its competitiveness in the global financial system, are the correlation of main indexes of banking system activity with the amount of the gross domestic product (diagram 1). During the period from 2000 to 2007 the banking system of Ukraine demonstrated the stable growth practically in all indexes.

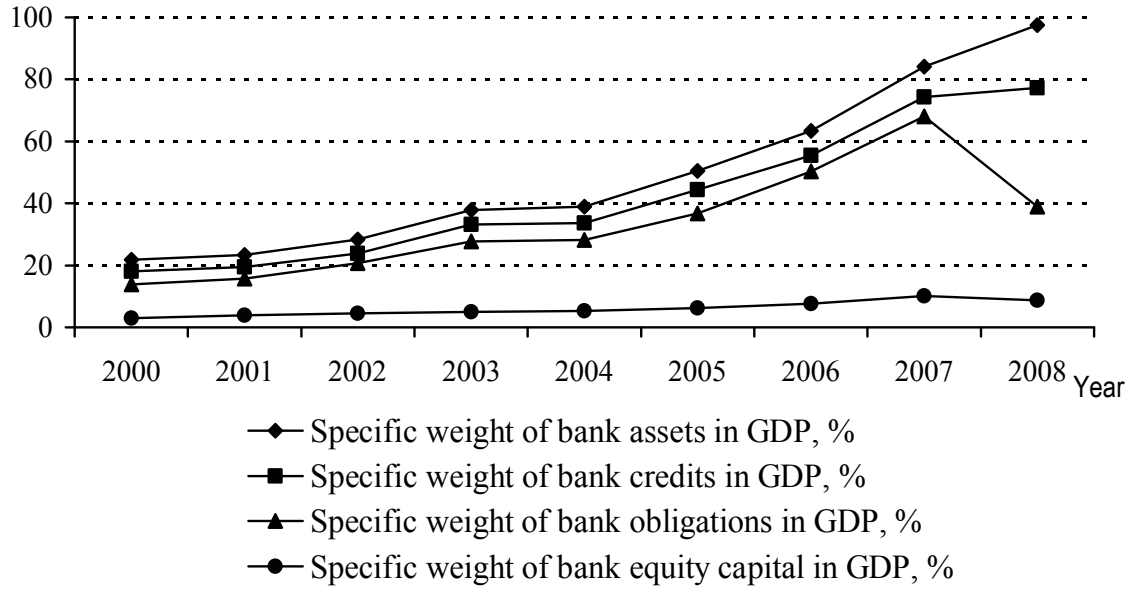

Figure 1. The dynamics of specific weight of main indexes of banks activity in GDP during 2000-2008 (according to the National banks of Ukraine)

The global financial crisis made a considerable impact on the condition of the banking system, specifically a noticeable decrease of active operations was observed. Taking into account the indexes mentioned above, in particular the specific weight of credit portfolio in total assets, their reduction had negative consequences for the economy development of the country on the whole. The specific weight of bank credits in gross domestic product abruptly declined, other indexes also reduced.

Thus, in such a case the temporary free financial resources accumulate on deposits and transform into credit resources for business entities. During 2000-2008 the dynamics of credit and deposit amounts were essentially increasing (Figure 2).

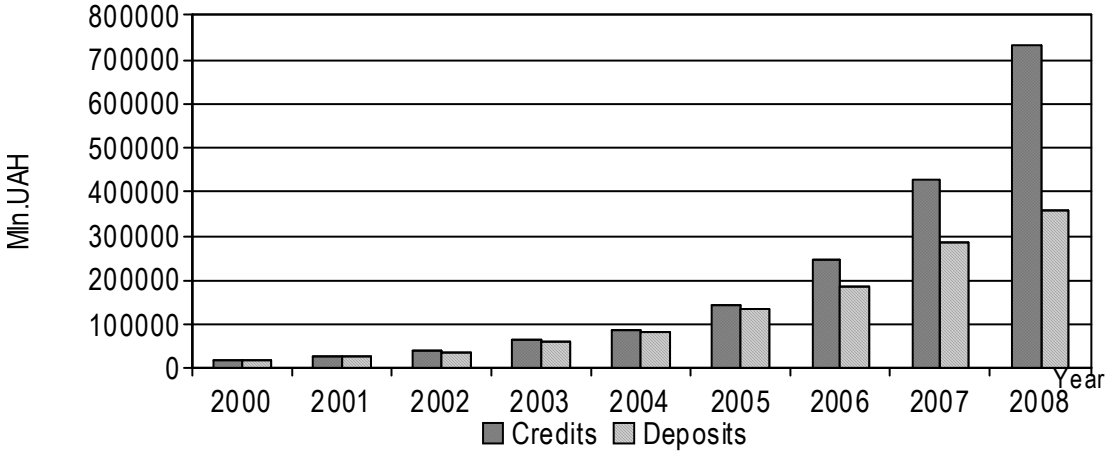

Figure 2. The dynamics of credit and deposit amounts of banks of Ukraine

The noticeable fact is that amounts of deposits are lower than the amounts of credits. It means that temporary free financial recourses are not sufficient to cover the requirements of the economy of the country. Thus, if during the period from 2000 to 2005 this deference was within the figures of 4,3 to 10,3 % , then in 2006 the deference between deposit and credit amounts constituted 25 %, in 2007 the amount of credits exceeded the amount of deposits in 1,5 times, and in 2008 the discrepancy was more than in two times.

Speaking about the structure of deposits, it is necessary to emphasize that during the analyzed period the specific weight of time deposits was gradually increasing from 40 % in 2000 to 67 % in 2007. Taking into consideration the data given on the diagram 3, during analyzed period the specific weight of time deposits in national currency as well as in foreign currency was gradually rising. It meant that banking institutions had a strong basis for the realization of credit operations at a longer period of time.

Speaking about the correlation of deposits in national and foreign currency, the specific weight of deposits in national currency exceeded the specific weight of deposits in foreign currency during all the period. At the same time there is no stability in the dynamics of this correlation, as long as during the period from 2000 till 2003 the specific gravity of national currency was noticeable growing, in 2004 the specific weight of foreign currency greatly increased and than in 2006 the same situation was observed.

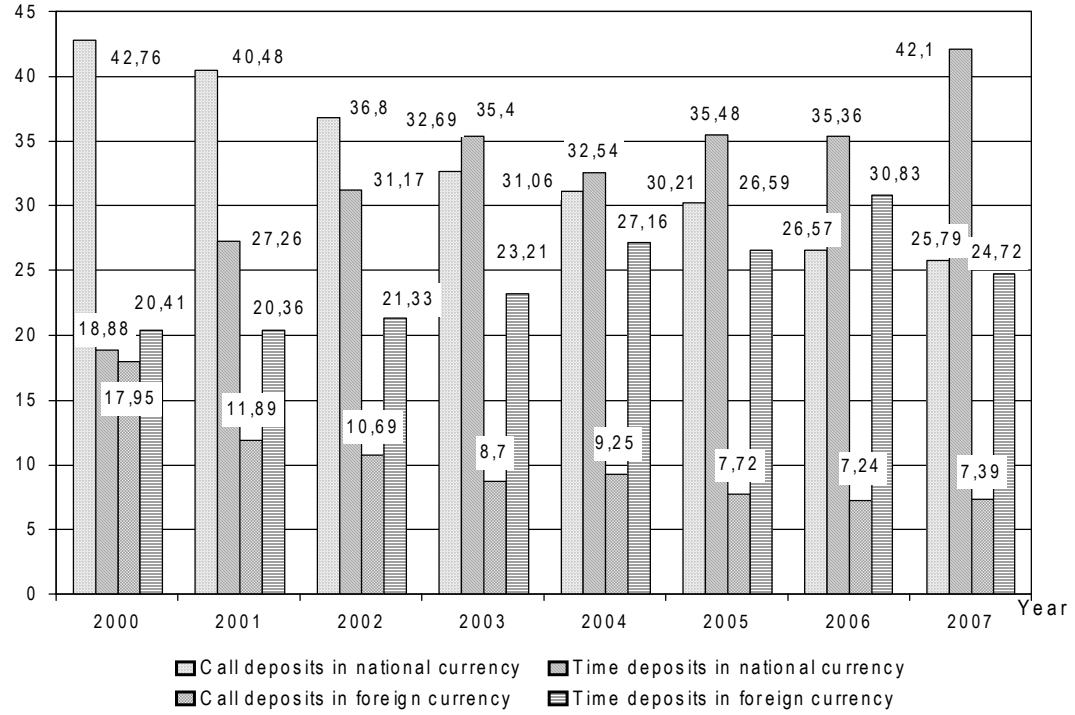

Figure 3. The structure of deposits on times of repayment and on kinds of currencies

It is necessary to stress the existence of connection between political events, taking place in the country, and the level of distrust to the national currency. In 2004 the Presidential elections occurred in the country and in 2006 the elections to the Verkhovna Rada took place. It means that the political situation has a great influence on the economy.

In general, in 2008 the deposit market demonstrated positive tendencies in its development, compared with 2007 it had the growth in 27 %, but it was considerably less than in previous period (table 2). The increase was observed in the first part of 2008, but in the second part of this year the abrupt reduction started under the influence of the global financial crisis. It is also necessary to mention the significant growth of the specific weight of deposits in foreign currency in this period. If in 2007 this index made 32,1 %, then in 2008 it was – 43,9 %.

Table 2

The main indexes of deposit market development in 2008 (according to the National Bank of Ukraine)

Indexes	Billion UAH	Specific weight, %	Increase, billion UAH
Deposits, total including	359,7	100,0	75,8
On the kinds of currencies			
In national currency	201,8	56,1	9,5
In foreign currency	157,9	43,9	66,3
On times of repayment			
Call deposits	107,6	29,9	14,2
Short-term deposits	92,9	25,8	32,3
Long-term deposits	159,2	44,3	29,3

During last time the deposits of physical entities exceed the deposits of business entities and form the considerably positive dynamics (diagram 4). If in 2000-2001 the deposits of business entities were prevailing accordingly for 76,4 and 26,4 %, but beginning from 2002 deposits of physical entities gradually began to surpass. Gradually the difference between the amounts of physical entities' deposits and business entities noticeably increased and by the end of 2008 it makes more than 1,5 times.

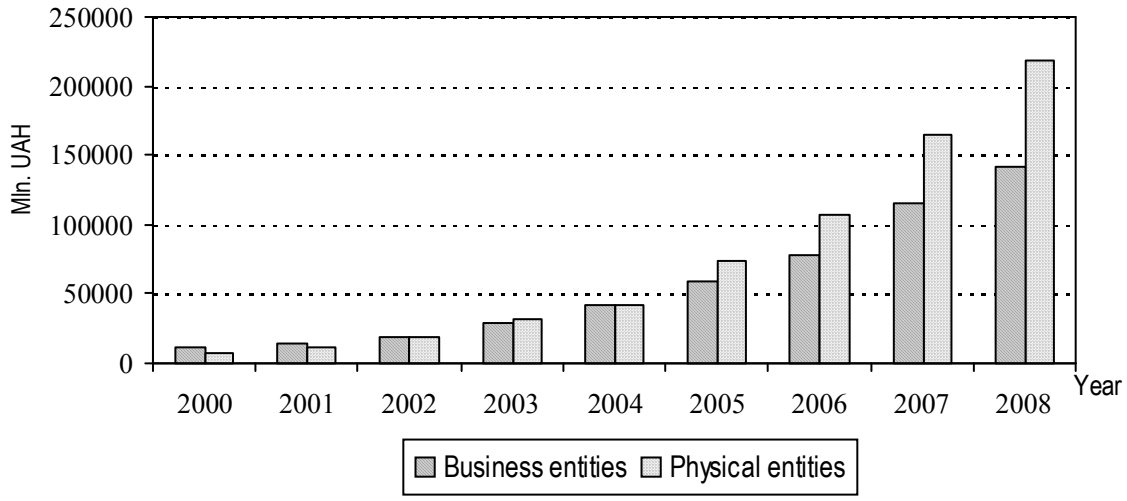

Figure 4. Dynamics of deposits of business entities and physical entities

As a matter of fact, on the monetary market a normal situation from the point of view of financial resources re-distribution began to be formed, in particular the financial resources are directed by physical entities – householders into the economy of the country. The vital importance for

insuring of liquidity and profitability of banking institutions has the correlation between deposit and credit portfolios of commercial banks. The positive changes in recourse base forming, price decrease on credit money of commercial banks made a considerable influence on the credit market of Ukraine.

The amounts of crediting were sufficiently growing from year to year, more over beginning from 2004, the total amount of long-term credits exceeded the amount of short-term ones. First of all, the long-term credits raised due to natural persons crediting, that is explained considerable by rates of mortgage credit increase during last years. But at the same time the crediting amounts of investment activity of business entities grew [5]. In some way it testifies that gradually business entities paid more attention to the process of reconstruction and modernization of fixed assets, as long as the special purpose of long-term crediting is first of all the considerable renewal of fixed assets and extended reproduction of activity.

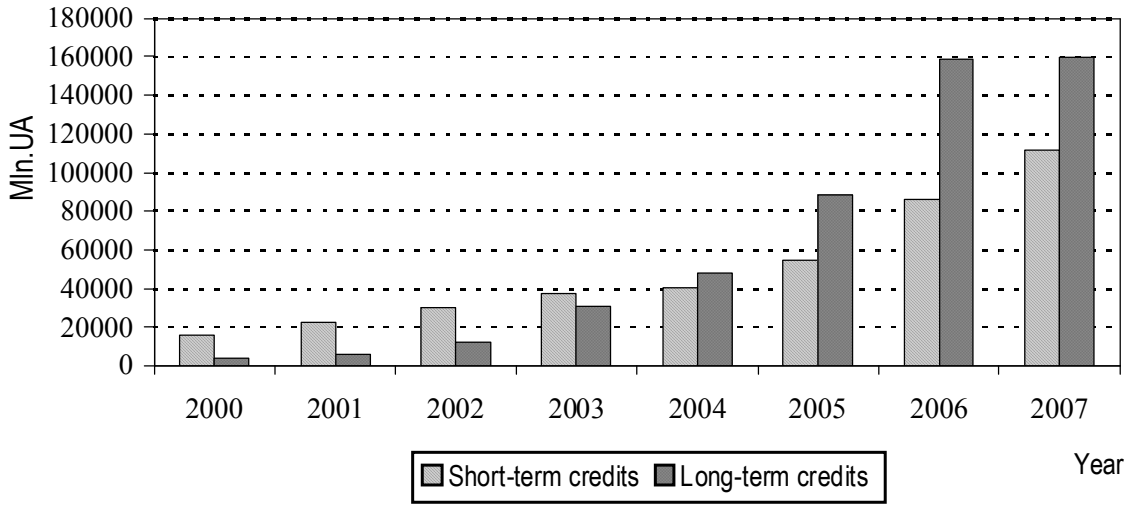

Figure 5. The dynamics of short-term and long-term crediting of business entities

If we take into consideration the structure of credits according to different classification characteristics, we will have such a situation (table 3). During 2000-2006 according to the National Bank of Ukraine the biggest part of credits given in national currency, but in 2006 the correlation between credits given in national currency and credits, given in foreign currency became nearly 1 to 1. The indexes change during 2007 and 2008 was unstable, as long as the specific weight of credits in national currency rapidly extended, but in 2008 it sank down noticeably and made the lowest exponent during all analyzed period.

Table 3

The structure of credits, given for the economy of Ukraine, %

Index	Year								
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Credits, in total	100	100	100	100	100	100	100	100	100
– in national currency	53,5	55,5	58	58,3	57,8	56,7	50,5	58,5	40,9
– in foreign currency	46,5	44,5	42	41,7	42,2	43,3	49,5	41,5	59,1
Short-term credits, in total	82,1	78,3	71,7	55	45,8	38,2	35,1	41,2	30,2
– in national currency	45,1	45,8	44,3	36,5	30,3	27,5	24,5	29,5	–
– in foreign currency	37	32,6	27,3	18,5	15,5	10,7	10,6	11,7	–
Long-term credits, in total	17,9	21,7	28,3	45	54,2	61,8	64,9	58,8	69,8
– in national currency	8,4	9,8	13,7	21,9	27,5	29,1	26	29,0	–
– in foreign currency	9,5	11,9	14,6	23,2	26,7	32,6	38,9	29,8	–

The redistribution of credit investments in favour of credits in foreign currency was caused, firstly, by the lower level of interest rates for credits in foreign currency compared with the credits in national currency in the condition of stability of exchange rate UAH to USD, secondly, by the acceleration of deposits increase in foreign currency in the internal market and active money borrowing of banks on the international financial market and also by the activisation of importers, which formed the demand for credits in foreign currency, thirdly, the existence of inflationary expectations and fourthly, the growth of banks with the share of foreign capital. It is necessary to stress that first of all credits were given for solving problems connected with current activity of business entities but not for investment needs.

The considerable wear of fixed assets practically in all sectors of economy demonstrates that in the near future great changes will not occurred in recourse and energy saving in the manufacture process and this will further promote the decrease of the level of competitiveness of national economy on the global market. But if the enterprises of real sector use more effectively the possibilities of capital market, the situation will considerably improve.

In the condition of the evident increase of deposit amounts as well as amounts of credits, given to the economy of the country, during 2000-2007 a gradual reduction of interest rates was observed. It means that grivna becomes cheaper and business entities receive more opportunities to use inexpensive capital for financing of their activity (figure 6).

In 2008 under the influence of the global financial crisis first during the last 10 years there was a growth of all indexes. Firstly, the discount rate of the National Bank of Ukraine was risen from 8 to 12 %, secondly, the credit rate in national currency grew from 14,4 to 17,8 %, the rate in foreign currency slightly increased. It is necessary to mention that banks also raised the deposit rate in national currency.

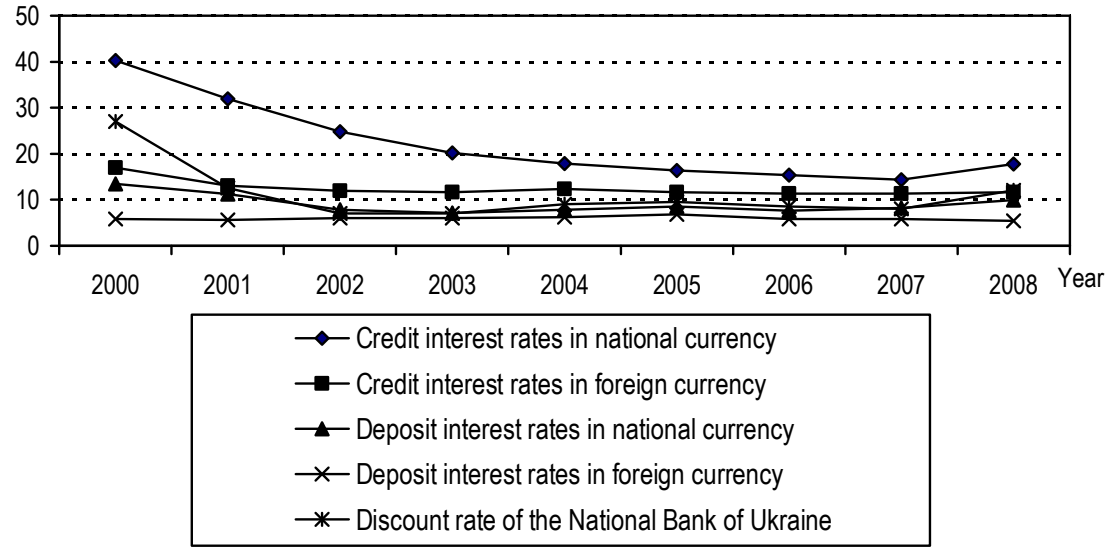

Figure 6. The dynamics of interest rates for credits, deposits and the discount rate of the National bank of Ukraine

During the analyzed period the effectiveness of the banking system functioning in the years before crisis considerably grew and practically approached to the level of industry developed countries. Yearly the increase of banks profit during 2001-2007 was characterised with rapid rates. At the same time the growth of the return on assets index was observed till 2006, in 2007 this index sank down to some extend and in 2008 approached to nearly zero in banking system on the whole. As a matter of fact a lot of banks finished the year with a loss.

Taking into account the situation when during the first part of 2008 the economy of Ukraine still worked with growth indexes and rapid decrease in economy and the crisis in banking system showed up at the end of the third quarter, that is why the indexes of 2008 did not demonstrate completely the negative consequences, they reflected more vividly during 2009, though the increase rates of main indexes considerably became slower. We should stress that an important reason for growth rates reduction of banks liabilities is the decrease of UAH exchange rate compared with the main currencies and also mass withdrawal of deposits by natural persons in autumn 2008, not taking into consideration the resolution of the National Bank of Ukraine concerning the prohibition of deposits withdraw ahead of time.

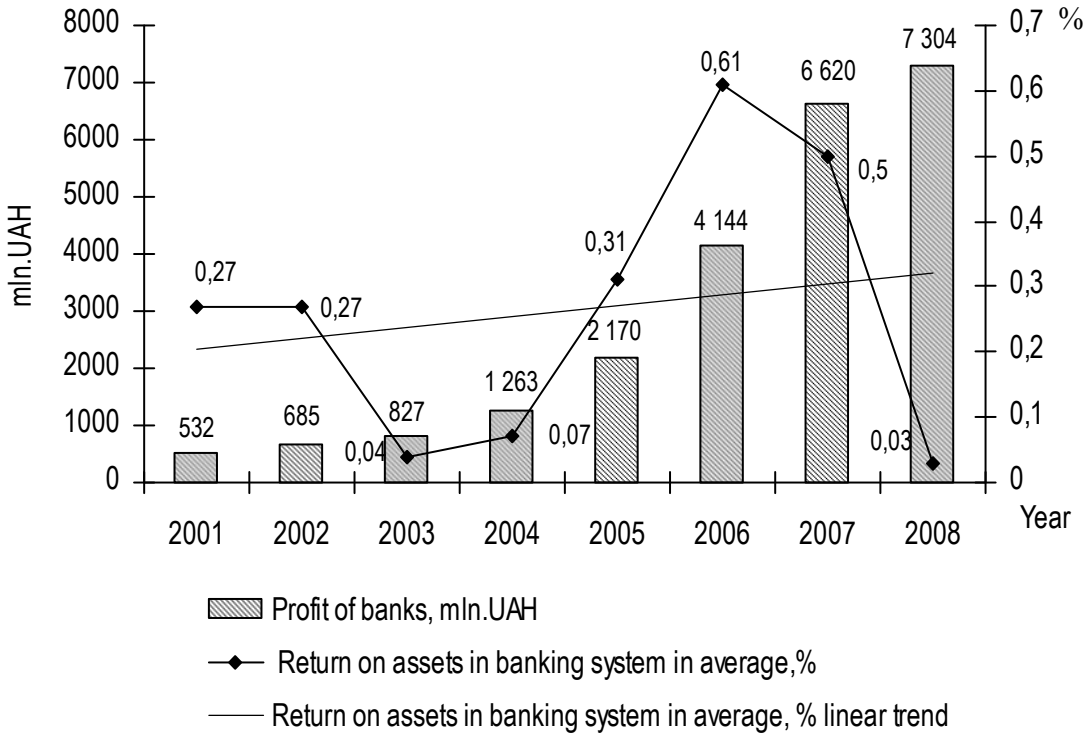

Figure 7. Dynamics of profitability indexes of banking system of Ukraine

It is necessary to emphasize that after the spreading of crisis in the economy of the country, the position of Ukrainian banking system became worse in the international ratings. Then, in June 2008 the international agency Standard & Poor's reduced the credit rating of our country, which has not been changed from May 2005, from (BB–) to (B+), and in October 2008 – to (B). In July 2008 this agency appraised the part of problem total assets of banks of Ukraine as 35-50 % , although according to the National Bank of Ukraine the amount of problem credits was 1,5 % [7].

Table 4

Dynamics of main capitalization indexes of banking system of Ukraine

Index	Year							
	2001	2002	2003	2004	2005	2006	2007	2008
Total assets of banking system, mln. UAH	50 785	67 773,5	100 234,4	134 347,9	213 878	340 179,3	599 396,1	926 086,5
Pace of assets increase	1,2739	1,3345	1,4790	1,3403	1,5920	1,5905	1,7620	1,5450
Core capital, mln. UAN	4 575,0	5 998,1	8 116,1	11 648,3	16 144,4	26 266,2	42, 872,6	82 454,2

Table 4 continued

Index	Year							
	2001	2002	2003	2004	2005	2006	2007	2008
Race of core capital increase	1,2483	1,3111	1,3531	1,4352	1,3860	1,6270	1,6322	1,9232
Equity capital, mln. UAH	7 915,0	9 983,4	12 881,9	18 421,4	25 450,9	42 566,1	69 578,3	119 263,1
Pace of equity capital increase	1,2164	1,2613	1,2903	1,4300	1,3816	1,6725	1,6346	1,7141
Regulatory capital, mln. UAH	8 025	10 099	13 274	18 188	26 373	41 148	72 265	123 066
Pace of regulatory capital increase	1,5589	1,2584	1,3144	1,3702	1,4500	1,5602	1,7562	1,7030
Standard of regulatory capital adequacy (not less 8 %)	20,69	18,39	15,11	16,81	14,95	14,19	13,92	14,01

During analyzed period till 2007 the pace of credits amount increase was the similar to the pace of problem credits growth (diagram 8). Besides the specific weight of problem credits in the total credit amount demonstrated another tendency, till 2007 it gradually decreased. Needless to say that the year of 2008 became the most important when on one hand the pace of credit giving out became slower and on the other hand the pace of problem credits forming rapidly increased. The specific weight of problem credits began to grow in the total amount of credits, more over this index increased approximately in two times during the year. We should mention that this tendency was intensified in some extend also in 2009.

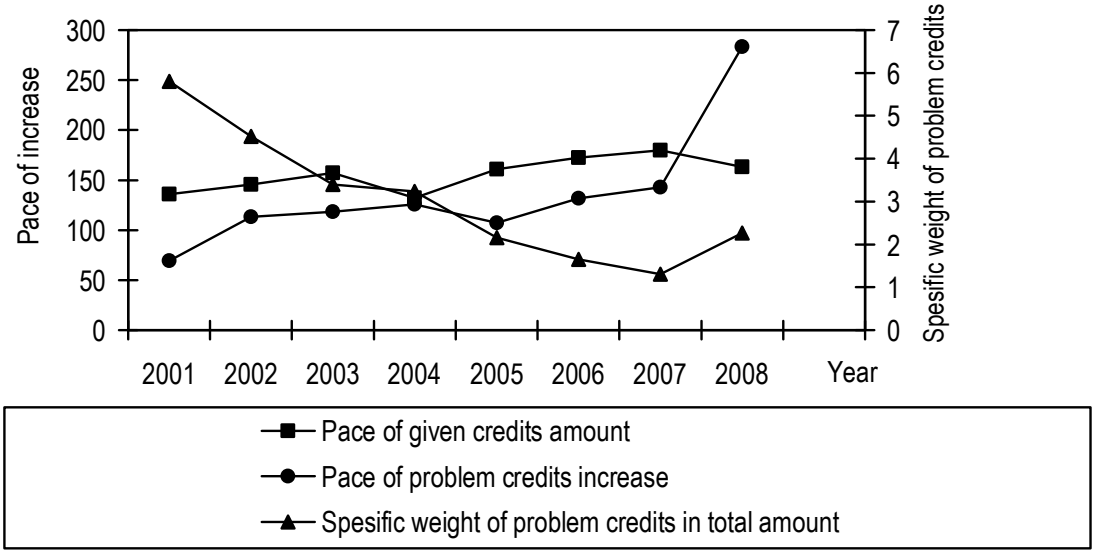

Figure 8. Dynamics of problem credits indexes in Ukraine, %

Many experts believe that the main macro indicator, which is used in order to measure of banks capitalization on macro level, is the correlation of regulatory capital to GDP. The minimum level of this correlation, which allows to ensure the ability (efficiency) of banking system, is within 5-6 % to GDP. The made analyze of the level of banking system of Ukraine capitalization during the period 2000-2008, the result of which is given in the table 5, proves (demonstrates) that according to this criterion the banking sector capitalization exceeded the minimum level. ……. The mentioned indicator began to exceed minimum level only beginning from 2004. It was stipulated by following factors:

- mass inflow of the foreign banking capital in Ukraine with the international requirements (demands) to the level of capitalization;
- active increase (accumulation) of capital by Ukrainian banks, which did not have external recourses;
- forecasting of credit expansion in further years.

Table 5

Macroeconomic indicators of capitalization level of banking system of Ukraine in 2000-2008

Index		Year								
		2000	2001	2002	2003	2004	2005	2006	2007	2008
GDP, mln. UAH		170 070	204 190	225 810	267 344	345 113	441 452	544 153	720 731	949 864
Regulatory capital of banking system	mln. UAH	5 148	8 025	10 099	13 274	18 188	26 373	41 148	72 265	123 066
	% to GDP	3,03	3,93	4,47	4,97	5,27	5,97	7,56	10,03	12,96
Adequacy of regulatory capital (H2), %		15,53	20,69	18,01	15,11	16,81	14,95	14,19	13,92	14,01

Rather high profitability of banking business in Ukraine became one of the main reasons of impetuous penetration (spread) of foreign capital on national banking market, which is necessary to admit as the most important tendency of last years in the dynamic development of modern banking system of Ukraine. It is one of the reflections of the economic processes globalization, which has positive aspects as well as negative ones.

Table 6

The indexes of foreign capital presence in banking system of Ukraine

Index	Year							
	2001	2002	2003	2004	2005	2006	2007	2008
Quantity of operating banks	152	157	158	160	165	170	175	178
Including with the share of foreign capital	21	20	19	19	23	35	47	53
Among them with 100 % foreign capital	6	7	7	7	9	13	17	17
Specific weight of foreign capital in banks core capital, %	12,5	13,7	11,3	9,6	19,5	27,6	35,0	41,1

The inflow of foreign capital in the banking system of Ukraine began from the middle of 90th years of XX century. But the active development of this process was observed from 2005. During last 4 years the specific weight of foreign capital in banks core capital grew in two times. The increase of specific weight of banks with foreign capital in Ukraine enhanced the competitiveness in banking sector, increased the banking system capitalization, made national banks to reduce the unproductive expenses, and improved the level of corporative management in the banking sector. At the same time it should be mentioned that the expected growth of price competitiveness in consequence with considerable inflow of foreign capital, which is associated with inexpensive and long-term financial recourses, in the national banking system did not occur (has not occurred). The foreign financial groups, working on the market of Ukraine, do not sink down interest rates, as long as there is no sense to decrease their own profits. More over taking into account that the penetration (spread) of foreign banks in Ukraine occurred through buying of regional (local) banks and high interest rates give an opportunity to return investments in short period [9].

The main countries of foreign capital origin in banking system of Ukraine are, first of all, Cyprus, Austria, the Russian Federation, which in 2008 took (held) consequently first, second and third position. As for the last country, it is necessary to emphasize that in 2008 compared with 2007 its specific weight increased in more than 1,5 times. Besides, the capital of following countries as Kazakhstan, Ireland, United Kingdom, Luxembourg, the USA, Georgia, Turkey, Canada, Switzerland, Virgin Islands, Latvia, Finland, Iceland, Bahamas, Slovakia, Cayman Islands, Lithuania and Slovenia is represented in the banking system of Ukraine.

Table 7

The foreign capital origin of the banking system of Ukraine, % (according to the National Bank of Ukraine)

Country origin of proprietor	Year	
	2007	2008
Cyprus	7,15	7,10
Austria	7,15	5,97
Russian Federation	3,42	5,45
France	4,41	3,77
Hungary	1,53	2,95
Netherlands	2,90	2,78
Greek	0,12	2,2
Sweden	2,14	2,17
Poland	2,78	1,88
Germany	0,21	1,51
Italy	–	1,41
Others	3,39	2,88
Total	35,2	41,14

We should mentioned that among banks with the share of foreign capital, are also represented the integrated financial intermediaries, which the international financial conglomerates are. In consequence with this fact the foreign capital inflow considerably (evidently) increased not only in the banking sector but also in insurance and investment spheres. The specific weight, controlling in the banking sector by the international financial conglomerates, is also gradually rising. It is necessary to stress that on the national financial market came not only powerful financial conglomerates – the international financial leaders, but strong regional financial conglomerates, first of all from the countries of the European Union.

Under the direct control of the financial conglomerates are banks with different amounts of assets, among them the most powerful banks of first group "Raiffeisen Bank AVAL" and "UkrSibbank" as well as medium-size banks and even small. From the point of view of their proprietors functioning – financial conglomerates, the amounts of their activity are not very significant, as far as if to compare the assets amount of the largest national bank, which is under their control, it makes less than 1 % from total assets of financial conglomerate and as for other banking institutes this index is considerably less.

As a matter of fact all banks are under sole (exclusive) control of their proprietors and their part in core capital makes approximately 100 %. More

over during the financial crisis, for example the proprietor of the "UkrSibbank" financial conglomerate "BNP Paribas S.A" increased its part in core capital from 51 to 81,4 %. To determine the real quantity of banks, which are included in the composition (compound) of financial conglomerates, is difficult as long as to check the structure of conglomerates is rather problematical. Sometimes the reason is rather complete structure of existing (existent) relations but sometimes groups conceal the information specially from regulative bodies (authorities), being anxious only about their commercial interests.

Entering internationally active (operated) banks in the banking system of Ukraine demands to bring the banking regulation and supervision in correspondence with international standards as quick as possible.

Establishment and development of banking supervision in Ukraine

Actually, the implementation of banking supervision took place concurrently with the establishment of the National Bank of Ukraine. With the adoption of the Law of Ukraine "On banks and banking" of 20.03.91 No 827-XII the regulatory basis for banking regulation and supervision was established, specifically, banks' activities legislative basis was determined, as well as the main regulations of their establishment.

The first document that laid the foundation of the prudential regulation was the Regulation "On economic norms of commercial banks' activities regulation" of 21.12.93 No 114. The Regulation establishes economic norms, binding for all commercial banks: minimal statutory capital; balance liquidity indexes; the bank's solvency; binding reserve assets in the NBU; maximum risk rate per one borrower. Obviously, from today's point of view these indexes are not enough to execute effective banking regulation and supervision, and correspondingly, in 1995 it lost force. It was succeeded by more detailed document the Instruction No 10 "On the regulation procedure and commercial banks' activities analysis" (The Resolution of the NBU of 30.12.96 No 343, lost force), that in contradistinction to the previous one, introduced the new procedure of binding economic norms (their list was enlarged to 21 indexes) and assessment activity indexes' estimation. But in 1997 the specified Instruction No 10 was submitted in a new wording that took into consideration international accounting and reporting norms. But in 1998 the Instruction No 10 lost force and was succeeded by the following document with the similar title but in a new wording (the Resolution of the NBU No 14 of 14.04.98). It should be mentioned that the first documents that had been elaborated to implement banking regulation and supervision lost force nowadays. Changes of the economic situation in the country in general, the intensive development of the banking system, its gradual integration into the world economic community contributed to it. But from the very beginning while establishing

norms they tried to take into consideration the Basel Committee on Banking Supervision requirements at most.

In 1997 the Regulation "On the banking supervisory system structure of the National Bank of Ukraine and its powers as to the adequate reaction to breaches of commercial banks' activities" (the Resolution of the NBU of 17.11.97 No 380) was adopted. It established the structural basis of banking supervisory system of the NBU and it was defined that banking supervisory system is vertically coordinated, it functions as an integrated part of central apparatus and regional directorates of the NBU. The system of banking supervision at a corresponding department level of banking supervision of the NBU consists of departments and the Board (according to the sphere of activity), namely:

- the Department of Banks' Registration and Licensing – banks' registration and licensing of banking activity;
- Off-Site Banking Supervision Department – economic analysis, working out of banking regulation standards;
- Bank On-Site Examination Department – banks' examination;
- the Department on Problem Banks – supervision over problem banks which in the established procedure got the total rating "boundary" (4) or "unsatisfactory" (5);
- Banking Regulation and Supervision Directorate – coordination of information as regards banking supervision.

To take measures as regards the future development, stabilization and improvement of Ukrainian banking system reliability, implementation of coordinated, adjusted and consistent policy of banking supervision, timely respond to the changes in banking system, the improved Regulation on the Commission on banks' activities supervision and regulation of the National Bank of Ukraine was passed (the Resolution of the NBU of 09.11.98 No 470).

The Commission on banks' activities supervision and regulation of the National Bank of Ukraine is the body established to implement coordinated, adjusted and consistent policy as to the banking supervision in Ukraine, that will facilitate Ukrainian banks' successful operations, reliable protection of investors' and creditors' interests, forecast and timely respond to the changes in banking system of Ukraine.

Realizing that to provide banking system stability it is necessary to implement complex assessment of banking institutions' activities, in 1998 the National Bank of Ukraine passed the corresponding resolutions "The Resolution on bank on-site examination planning" and "The Resolution on the procedure of commercial banks' assessment and application of complex rating assessment according to the CAMEL system", which regulated bank on-site examination procedure and allowed the banking supervision department specialists to perform the analysis under the CAMEL system.

An important moment in the development of the banking system of Ukraine and banking supervision was the adoption of the new Laws of Ukraine in 1999 "On the National Bank of Ukraine" (of 20.05.99 No 679-XIV) "On banks and banking" (of 07.12.2000 No 2121-III) which facilitated sorting out some issues as to compliance of domestic banking legislation with European standards including banking regulation and supervision. Having passed above-mentioned acts a number of regulations regarding banking supervision were passed during 2001. They are: the regulation "On the procedure of issue to banks banking licenses, written permissions and licenses to carry out separate operations" (of 17.07.2001 No 275) (instead of the resolution No 181); The Regulation on bank on-site examination (the Resolution of the NBU of 17.07.2001 No 276); The instruction on banking regulation procedure in Ukraine (the Resolution of 28.08.2001 No 368), that in contradistinction to the previous instruction of 1998 included 13 binding norms of commercial banks' activities, the analysis of which enabled to comprise main aspects of banking; regulations "On application of influential measures by the National Bank of Ukraine for breach of banking legislation" of 28.08.2001 No 369.

In 2002 the National Bank of Ukraine introduced the regulation "On the procedure of rating assessment according to the rating system CAMELS" (of 08.05.2002 No 171) that allowed to carry out banking supervision based upon the system of risk assessment on all main activities.

In 2003 the International Monetary Fund and the World Bank inspected the state of banking supervision in Ukraine in conformity with the core principles of the effective banking supervision. Specifically it was assessed that from 30 principles (the 1st is divided into 6 partials) 22 principles are observed in Ukraine, the rest 8 are declared not to meet the requirements.

It was stated in the letter of the NBU of 30.12.2004 No 42-412/4010-13749 that to bring the banking system of Ukraine closer to international standards and to increase stability of the banking system every effort is made to introduce Basel I. Correspondingly, for that period of time the regulatory basis of banking regulation in Ukraine on capital assessment was based on Basel I as regards the restrictions as to the components of regulatory capital and the process of assets weighing on weight ratios according to their basic potential credit risk. Moreover, this document stated that as far as the banking system of Ukraine is the part of international banking community and it strives to attain transparency and openness, the National Bank of Ukraine considers it to be essential to start the preparatory procedure on Basel II implementation. By the decision of the NBU and taking into account the condition of the national banking system, complete implementation of the requirements of Basel II system will have to be fulfilled by 2016.

Basel Capital Accord is a powerful and complex project the successful implementation of which requires special preparation of both supervisory bodies and banking institutions. The implementation of Basel II into the banking practice is connected with large expenditures. Experts estimate the expenditures related to the implementation of Basel II into the activity of banking institutions in the limits from €60 mln to €130 mln. That's why the Basel Committee permitted national supervisory bodies to determine the necessity and to set the terms of Basel II implementation, to choose approaches to risk assessment according to the real readiness of the banking system. The implementation of the Basel Committee recommendations in Ukraine is one of the success factors, the element of competitiveness and recognition of the banking system, as far as Basel Capital Accord contains modern approaches to banking regulation and supervision, the core objective of which is to provide the bank's capital adequacy and to improve risk management system that will contribute to the stability of the banking system. An effective use of the approaches recommended by Basel Capital Accord is the necessary condition to improve banking regulation quality. Together with the indisputable advantages of the core principles of Basel Capital Accord there are some problems connected with the provision for implementation of its conditions. Even the use of the simplified Basel II approaches in domestic banking practice requires thorough and prolonged preparation, since:

- there are not enough rating agencies in Ukraine which could rate all borrowers. Moreover, customers have to be ready to disclose the information on their financial condition and to bear some extra expenses to pay for these agencies' services;
- because of the application of the new methodology on bank capital adequacy assessment, decrease of banks' capital volume and adequacy can take place, and as a consequence, the restriction for banks as to active increase of assets. Because of this enterprises-borrowers for whom stringent demands on solvency are brought in will be damaged first;
- the necessity for the banks to get international rating, that also requires considerable expenses;
- to provide risk assessment banks have to use complex economic and mathematical models, taken as a basis for estimation recommended by the Basel Committee and, correspondingly, have at their disposal adequate software and hardware to develop which one needs time and should be ready to bear expenses;
- strengthening of the requirements on risk assessment, the necessity of internal risk management system development will lead to the expenditures on staff qualifications improvement, attraction of external specialized establishments' services, reorganization of papers circulation;
- there is not enough data necessary for credit risk assessment;

- the third component-basis "Market discipline" requires free access of all participants of the market to the qualitative and quantitative information on capital volume, structure, risks taken, system of risk management;
- the necessity to work out at the national level methodological documents which will regulate the process of Ukraine's entering "Basel II" system.

According to Anatoliy Shapoval's, the first deputy of the Head of the NBU, point of view, it is reasonable to implement the system "Basel II" in three stages which can be characterized as the strengthening of banking supervisory structure; implementation and strengthening of the 3 components; transition from the Agreement 1988 to the system "Basel II".

The implementation of Basel II requirements is closely connected with the necessity to reform the structure of national banking supervision authorities as it envisages banking regulation and supervision quality increase, and the improvement of risk management.

The second stage of implementation of Basel II envisages the improvement of capital base. The task of banking supervision is in the transition to new principles orientated towards maximum risk estimation that needs the bank's skills in risk management quality assessment and its ability to assess risk rate tendency. At the same time banks should be reminded about their responsibility for the development of their own methods of assessment of their demand for capital and the strategy of capital rate maintenance according to the principles of the second component.

As regards the principles of the market discipline according to the third Basel II component, banking supervisory authorities have to advantage to provide the basic level of information disclosure based on negotiations with banks, investors and other users of financial information, their information demands [12].

In 2007 a Joint Mission of the International Monetary Fund and the World Bank performed an assessment of Ukraine's compliance with the Core Principles of Effective Banking Supervision, elaborated by the Basel Committee on Banking Supervision in the framework of the Financial Sector Assessment Programme. According to the results of their work it was ascertained that Ukraine completely or predominantly complies with 25 out of 30 principles of the Basel Committee (considering that the first principle has 6 constituents to be assessed separately). Moreover, it was stated that some positive changes in the organization of banking supervision were taking place:

- strengthening of the regulatory basis for the prudential regulation, namely (increase of the regulatory capital adequacy norm, establishment of more stringent economic norms that regulate credit transactions with related persons, more demanding requirements for the formation of provisions for credit transactions (principles 6-17);

- informing banks about the detailed requirements for the risk management system, and incorporation of the risk management system during supervision (principles 7-16, 19, 20);
- establishment of the legislative and regulatory basis pursuant to the counteraction to money laundering and terrorism financing, which meets the international standards (principle 18) [13].

At the beginning of 2008 the structure of the Supervisory Board of the NBU was improved. It consists of Bank On-Site Examination Department, Off-Site Banking Supervision Department, Department of Methodology and Regulatory Basis for Banking Regulation and Supervision, Restructuring and Banks' Activities Revocation Department, and Legal Provision for Banking Supervision Administration and Supervision Quality Control Department. It enabled to concentrate all necessary departments in one Board to centralize regulatory and supervisory functions and to avoid authority duplication.

The NBU gradually carries out the implementation of individual Basel II Agreement regulations. In 2004 the NBU passed Methodic Instructions on banks' examination "Risk assessment system". In 2007 the NBU passed Methodic Recommendations as to the improvement of corporate management in the banks of Ukraine. At the end of 2007 the NBU made amendments to the structure of regulatory capital adequacy norms assessment that envisages market risk estimation.

If we have a look at the norms' conduct during 2008, it becomes obvious that the crisis that developed in Ukraine in the middle of 2008 reflected in economic norms (table 8). Specifically, growth of the norm H8 – large credit risks norm is obvious. Norms H11 (securities investment norm, separately for every institution) and H12 (total investment norm) decreased dramatically, especially the last one, which in comparison with the beginning of the year reduced nearly twice.

At the same time the considerable growth of the norm H13 (general open currency position norm) took place, which at the beginning of the period was 7 %, but at the end rose up to 10,5 %. Such conduct was, first of all, connected with currency rates sharp fluctuations exactly during the second part of 2008.

According to the decision of the Commission on Banking Supervision and Regulation of the National Bank of Ukraine of 21 December 2007, for 2008 margins of regulatory capital and assets for some separate groups of banks were established: group I (regulatory capital is more than 1 000 mln. UAH, assets are more than 10 000 mln. UAH), group II (regulatory capital is more than 300 mln. UAH, assets are more than 3 000 mln. UAH), group III (regulatory capital is more than 100 mln. UAH, assets are more than 1 000 mln. UAH), group IV (regulatory capital is less than 100 mln. UAH, assets are less than 1 000 mln. UAH).

Table 8

Dynamics of economic norms' adherence by Ukrainian banks during 2008 (according to the NBU data)

Norm	By the state on											
	01.01	01.02	01.03	01.04	01.05	01.06	01.07	01.08	01.09	01.10	01.11	01.12
H1 Minimum regulatory capital norm (ths. UAH)	72 264 704	74 001 013	78 345 993	82 479 630	824 057 264	85 981 443	88 965 422	92 675 064	95 853 930	96 954 523	1 000 987 992	107 362 256
H2 Regulatory capital adequacy norm (not less than 10 %)	13.92	13.97	13.25	13.29	13.34	13.49	13.40	13.67	13.74	13.61	13.16	13.08
H4 Instant liquidity norm (not less than 20 %)	53.60	57.80	52.67	51.57	51.32	51.60	54.25	54.93	55.14	54.06	50.20	58.38
H5 Current liquidity norm (not less than 40 %)	75.31	74.22	72.10	71.39	72.00	73.10	71.41	77.81	79.27	79.34	72.41	76.99
H6 Short-term liquidity norm (not less than 20 %)	39.93	39.67	37.06	36.32	36.41	37.38	38.03	38.04	38 072	37.58	32.38	32.73
H7 Maximum credit risk per one contractor norm (not more than 25 %)	22.56	22.75	22.35	22.61	22.03	21.77	21.86	21.86	21.82	22.18	22.41	23.33
H8 Large credit risks norm (not more than 8-times amount of regulatory capital)	171.06	161.01	158.59	151.33	155.03	146.97	154.15	148.56	150.51	162.36	169.87	170.69

Table 8 continued

Norm	By the state on											
	01.01	01.02	01.03	01.04	01.05	01.06	01.07	01.08	01.09	01.10	01.11	01.12
H9 Norm of maximum credit volume and guarantees granted to one insider (not more than 5 %)	2.01	2.01	1.96	1.98	2.11	2.22	2.19	1.83	1.84	1.81	1.81	1.55
H10 Norm of maximum total credit volume, guarantees granted to insiders (not more than 30 %)	6.84	6.59	6.25	6.26	6.96	6.89	7.10	6.16	6.14	6.14	7.09	6.79
H11 Securities investment norm, individually for each institution (not more than 15 %)	0.58	0.53	0.44	0.38	0.40	0.41	0.42	0.42	0.45	0.40	0.30	0.23
H12 Total investment norm (not more than 60 %)	9.05	8.00	7.97	7.44	7.72	7.58	7.38	7.51	7.42	7.24	6.87	5.91
H13 General open currency position norm (not more than 30 %)	7.0297	7.4082	6.7835	7.6930	8.3136	8.1802	7.7191	7.6844	7.8524	7.0912	8.3292	10.4398
H13-1 General long-term open currency position norm (not more than 20 %)	4.2474	4.8686	4.7655	5.6300	6.3313	6.5022	6.1280	6.0739	6.7511	5.6259	6.5309	8.2593
H13-2 General short-term open currency position norm (not more than 10 %)	2.7953	2.5755	2.0800	2.0672	1.9773	1.6945	1.6533	1.6301	1.1516	1.5099	1.8345	2.2400

According to the data from the table 9 we can draw the conclusion that assets, capital and liabilities are concentrated in banks of group I to the utmost, that covers 18 out of 182 banks operating by the state on the end of 2008.

Table 9

Group	Assets		Own capital		Liabilities	
	2007	2008	2007	2008	2007	2008
Group I	67,8	68,0	57,2	62,9	65,8	68,7
Group II	17,2	16,6	16,8	16,3	17,2	16,7
Group III	10,2	7,3	12,9	9,3	9,9	7,1
Group IV	7,8	8,1	13,1	11,5	7,1	7,5

According to the Constitution and the Article 6 of the Law "On the National Bank of Ukraine" [14] the main function of the NBU is to ensure the stability of the monetary unit of Ukraine. It is also stated in this article that to perform its main function the National Bank contributes to the provision for banking system stability. Stability of the national currency and the banking system can be reached only under the condition of formation of effective mechanisms of banking risks' assessment, monitoring and minimization. So, it is reasonable to consider the majority of the functions of the National Bank of Ukraine defined by the Article 7 of the Law of Ukraine "On the National Bank of Ukraine" from the point of view of risk management.

On the other hand, all three "pillars" (components) envisaged by Basel II are based on the assessment and taking into consideration different risks during banking. Within the framework of the first component "Minimum capital requirements" the bank's capital adequacy is considered in the aspect of its meeting the requirements of market risk, operational risk and credit risk. The second component "Supervisory review" establishes the requirements as to capital adequacy provision for all bank's risks, and the set of approaches to stimulate the elaboration and implementation of improved methods of monitoring and risk management. The third component "Market discipline" supplements the first two components in the aspect of requirements elaboration as to information disclosure which will enable market participants to assess main data on bank capital use and its risk rate.

Taking into account above-mentioned ideas, we can make the following conclusions. Firstly, it is reasonable to consider banking regulation and supervision as one of the most important functions of the NBU from the point of view of banking system risk management. The formation of effective

banking regulation and supervision based on risks is envisaged by the second Basel II component. Secondly, the observance of market discipline (the third Basel II component) is stimulated by information disclosure as to processes and the risk assessment results in banking report.

The effective realization of the NBU functions can be organized only on conditions of adequate software system formation. This system is based on banking reporting submitted to the NBU. It is necessary to underline that a part of this reporting has to be disclosed for market participants who can enter into the economic relationship with the bank. The Law of Ukraine "On the National Bank of Ukraine" and "On banks and banking" can be named as the core legislative documents specifying the conceptual basis of banking reporting formation.

Powers of the NBU as to the regulation of the procedure for drafting and disclosing the banking reporting is defined by the articles 7, 41, 57, 67, and 68 of the Law "On the National Bank of Ukraine". Specifically, this law defines that the NBU establishes binding for all banks norms and rules of accounting and reporting, organizes the formation and methodologically provides monetary and banking statistical information system. To execute its functions the National Bank of Ukraine has the right to get free of charge from banks and other legal entities as to which the NBU executes the supervision, the information about their activity and the clarification as far as the received information and transactions performed. The National Bank of Ukraine is also entitled to get free of charge all the necessary information from state bodies, local authorities and entities of all forms of property.

To execute regulatory and supervisory functions the NBU defines reporting forms (including a consolidated reporting) and establishes drafting and reporting procedures which are binding for carrying out by all entities, including:

1) banks located on the territory of Ukraine (residents and non-residents), banking associations – to draft monetary and banking statistics;
2) all entities (residents and non-residents) – to draft the balance and to execute currency control.

The information given by banks and other entities is not a subject for divulgence with the exceptions envisaged by the legislation of Ukraine. To provide publicity on banking the National Bank of Ukraine publishes in official printed editions and offers in electronic form on the official site:

1) annual and quarterly balance sheets of the National Bank of Ukraine;
2) monthly statistical bulletin;
3) current banking information, information on monetary statistics that does not belong to state or banking secrecy.

The requirements as to banking reporting are also given in the articles 68-70 of the Law of Ukraine "On banks and banking" [15]. The article 69 records the bank's duties as to financial and statistical reporting to the NBU regarding the bank's activities, transactions, liquidity, solvency, profitability and the information of the bank's affiliated individuals to assess the bank's financial condition. For banks the National Bank of Ukraine establishes:

1) reporting forms and drafting methods;
2) regularity and reporting terms;
3) explanatory note structure;
4) minimum information to be disclosed;
5) consolidated reporting drafting methods.

In some cases the National Bank of Ukraine is entitled to demand single or temporary reporting. Every owner of a significant participation in a bank, who is a legal entity, must submit to the National Bank of Ukraine an annual reporting on their activities. The National Bank of Ukraine has the right to demand from the owners of significant participation in a bank other periodical reporting or information to exercise the supervision over safety and stability of the bank financial condition.

Banks' financial reporting submitted to the National Bank of Ukraine have to be checked by the auditor who has the certificate of the National Bank of Ukraine for bank audit. The details of the law standards as to the annual banks' financial reporting audit are provided in the regulation "On the procedure of banks' submission to the National Bank of Ukraine audit reports on the results of the annual financial reporting audit" [16].

The article 70 of the Law of Ukraine "On banks and banking" regulates the procedure of financial reporting publication. The bank has to publish quarterly and annual financial reporting in official printed editions of the higher legislative and executive bodies of Ukraine. The bank has to publish quarterly reporting within a month following a reporting quarter, and an annual (confirmed by an external auditor) not later than 1 June following the reporting year.

According to above-analysed legislation norms, the core types of banks' reporting which can be used by the NBU to implement banking supervision based on risks, are banks' statistical, financial and operating reporting. The comparative analysis of mentioned types of reporting is given in the table 10. It is necessary to underline that from the point of view of practical implementation of the recommendations, envisaged by the third Basel II component, the most important is commercial banks' reporting publicity level. In this aspect the financial reporting gets special weight as it is fully public.

Let's analyse in more details types of reporting given in the table 1. If there is a necessity to get additional data to ensure the effectiveness of operating decision making, the NBU introduces forms of operating reporting. In the majority of cases such necessity arises on the formation of non-standard circumstances of the banking system functioning, which in the majority of cases are stipulated by exogenous factors: public and political strain, the development of the microeconomic crisis phenomenon, etc. The procedure for drafting and submission of operating reporting forms is regulated by separate letters of the National Bank.

Table 10

The comparative analysis of commercial bank's types of reporting

Classification feature	Type of reporting		
	Financial	Statistical	Operating
Aim of drafting	The reflection of the bank's financial condition and the results of its activities	The formation of proper statistical indexes and the NBU regulatory and supervisory functions performance	Receiving of the operating information as to current bank's and (or) banking system condition
Regularity of reporting	Quarterly; annual	Daily; weekly; decadal; fortnightly; monthly; quarterly; six monthly; annual	On inquiry
Users' main categories	Shareholders, the NBU, contractors and the bank's customers, other users	As to banking transactions – the NBU, the IMF and other users. As to the economic transactions – State Committee on Statistics	Subdivisions of the NBU
Rate of publicity	Fully public	Partly public in the aggregated condition	Not public
The way of submission	By E-mail and on paper carriers	Chiefly by E-mail, on paper carriers in particular cases	Not regulated
Reporting subjects	The bank's balance subdivisions; legal entities; mother bank	The bank's balance subdivisions; banks-corporate bodies	Bank's subdivisions; banks-corporate bodies

The methods of financial reporting formation are defined by the instruction "On the procedure of drafting and disclosing the financial reporting by the banks of Ukraine" [17]. This instruction is elaborated according to accounting and financial reporting (ISA and ISFR) international standards. More than 40 international standards on accounting and reporting have been elaborated by the Committee on International Accounting Standards. The procedure for the banks' financial reporting is regulated directly by ISA 1, ISA 32, ISA 39, and ISFR 7.

From the point of view of formation of methodological basis of banking supervision on risks, the most important is the regulation ISFR 7 "Financial instruments: disclosure of information" (is used since 2007). This document defines the requirements as to the disclosure of quantitative and qualitative information as to risk management on financial instruments [18]. The norm envisages the disclosure of the information in financial reporting as to the following types of risks: credit risk, market risk (includes currency risk, interest rate risk and other price risk) and liquidity risk. Mentioned risk classification complies with the approaches defined in Basel II to a considerable extent.

In Appendix I the structure of the financial reporting of the commercial banks of Ukraine is given and the possibility of its use for the bank risk analysis is specified. Any information given in quarterly, annual or consolidated financial reporting can be used for banks' risk assessment, specifically, capital adequacy assessment according to Basel II requirements. But, for banks' activities risks assessment on quarterly basis core elements of financial reporting are a quarterly balance sheet and a note "separate indexes of the bank's activities".

A quarterly balance sheet comprises more detailed articles in comparison with an annual balance sheet. The main sectors of information detailed elaboration in a quarterly balance sheet are the disclosure of the information as to the reserves on active transactions, the characteristics of currency transactions, detailed elaboration of credit and deposit portfolio structure. Mentioned directions of information disclosure enable to assess the bank's credit and currency risks. In the note "Separate indexes of the bank's activities" the bank gives capital economic norms, liquidity, credit risk, methods and norm indexes of which are established by the instruction "On the procedure of banking regulation in Ukraine" [19]. The structure of the credit portfolio according to the risk rate is defined and owners of the significant participation (legal entities or individuals, having participation in the authorized capital of the bank which is more than 10 %) are named.

In the Appendix 2 a note is given "The bank's activities separate indexes" of one of the Ukrainian banks that belongs to group of the biggest. Analysing its content we can make a conclusion that the bank performs all economic norms set by the NBU, but it has serious problems with the quality of the credit portfolio: "standard" credit operations (characterized by minimum credit risk) account for nearly 3 milliard UAH or 15,8 % of the credit portfolio, on the other hand, credit operations classified as "desperate" (that is the possibility of their redemption by the borrower approaches zero) make up more than 6 milliard UAH or 32,5 % of credit portfolio. As a result the bank had to form a reserve for credit risks in the amount

of 6,2 milliard UAH that is nearly one third of the credit portfolio. Large amount of reserves caused unprofitability of that banking institution's activity according to the results of the IV quarter 2009.

In an annual bank financial reporting for risk assessment the information from notes and the chapter "the general information on the bank's activity" is usually used. The general information on the bank's activity discloses mostly the qualitative aspects of risk management:

1) the structure of the bank's risk management system;
2) functions and accountability of risk management service;
3) the list of risks (risk subgroups) identified by the bank in its activity and the bank's strategy as to such risks management;
4) availability of plans in case of crisis.

The characteristics of the bank's solvency is also given based on the ratio use established by the instruction "On the procedure of banks' activities regulation in Ukraine". Banks also have to give some other information as to risk management, disclosure of which is envisaged by international standards of financial reporting.

As it was mentioned above, the core information as to the risk management is given in notes to the bank's annual financial reporting (appendix 3). The largest group (from 4 to 27) is represented by notes which give the content of the bank's annual balance sheet items in details. Notes from 5 to 10 inclusively and the note 15 characterize banks' monetary funds investments into diverse financial assets (first of all credits and securities). These notes disclose the information as to the credit quality of financial assets and the amount of reserves formed to provide credit risk. Notes from 18 to 25 give the structure of bank's financial assert sources in details and can be used during the bank's liquidity analysis. The notes 26 and 27 characterize the structure and the sources of bank's equity formation. It is reasonable to use the last two notes for the assessment of the bank's capital adequacy according to Basel II requirements.

Notes 28-35 give in details the content of items of annual reporting on financial results. Specifically the note 28 characterizes the structure of interest rate profit and loss and must be taken into consideration during the bank's interest rate risk analysis.

Notes 36-46 disclose the information (first of all as to risk) that is not given in financial reporting but is binding for disclosure. From the point of view of completeness and the level of elaboration of the information as to the bank's risk assessment, the most important is the content of the note 37 "Financial risk management". In this note the bank describes objectives, policy, methods and the results on core risk management: credit risk, currency risk, interest rate risk, geographical risk, liquidity risk.

Let's consider in details the peculiarities of analytical data presented in this note as to risks, assessment of which is envisaged by Basel II. In the aspect of market risk analysis the bank's currency and interest rate risk assessment is chiefly done. In the framework of currency risk analysis the structure of the bank's assets and liabilities taken from the aspect of main currencies is specified and the bank's currency position is given. The assessment of possible changes of financial result and own capital as a result of exchange rates potential changes is also envisaged.

In the aspect of interest rate risk analysis assets and liabilities are shown on balance value according to the dates of interest rate revision. The analysis of the bank's responsivity to interest rate risk is also given: it is estimated how the potential changes of market rates will influence the bank's profit. Moreover, average-weighed interest rates taken from the aspect of the bank's main assets constituents and liabilities are also given.

Some indexes from the note 37 of one of Ukrainian banks that belongs to the group of the largest are given in the table 11 and the appendix 4. They illustrate the possibility of this note's use for the assessment of currency and interest rate risk influence on the bank's financial result and equity.

Table 11

The change of the financial result and equity as a result of possible exchange rates changes

(thd. UAH)

Line	Title of the item	On the reporting date, 2008		On the reporting date, 2007	
		influence on profit/(loss)	influence on equity	influence on profit/(loss)	influence on equity
1	Strengthening of the US dollar by 5 %	(923)	(923)	(1 694)	(1 694)
2	Weakening of the US dollar by 5 %	923	923	1 694	1 694
3	Strengthening of the euro by 5 %	41	41	(31)	(31)
4	Weakening of the euro by 5 %	(41)	(41)	31	31
5	Strengthening of the pound sterling by 5 %	10	10	14	14
6	Weakening of the pound sterling by 5 %	(10)	(10)	(14)	(14)
7	Strengthening of other currencies	69	69	248	248
8	Weakening of other currencies	(69)	(69)	(248)	(248)

Taking into consideration data presented in the table 11 we can draw a conclusion that by the state on 31.12.2008 this bank had a short currency position on the US dollar and a long position on other currencies. In an absolute value the largest was currency position on US dollar. As a result, if there is a scenario of US dollar strengthening relative to hryvna by 5 %, the bank will get loss in the amount of 923 thd. UAH that will also lead to decrease of its capital. If there is strengthening of other currencies relative to hryvna, insignificant positive influence on the financial result and bank capital will be observed. If there is a realization of the opposite scenario (currency weakening relative to hryvna) the reverse consequences will be observed. The table also presents the assessment of currency risk influence on the bank's financial condition by the state on the previous reporting date.

The appendix 4 gives the assessment of interest rate risk based on the analysis of responsivity to interest rate changes: instruments' and portfolios' market value changes as a result of general change of the profit curve on a certain quantity of basic points. According to the methods of this bank, scenarios are considered that envisage the shift of the curve by 1 per cent point (+/–100 basic points). Assessments include interest rate risk on all bank's positions for instruments with fixed and floating interest rate. Separate analysis of financial instruments in hryvna, euro and US dollars is provided for during the calculation process.

If there is a realization of market interest rate increase by 1 per cent point (+100 basic points) scenario, negative influence on income and capital on instruments within 1 year (appendix 4, table 4.1) will be observed. But this negative influence will be compensated by the profit gained by the bank on instruments within the term of more than 1 year. As a result, the bank will get the profit of 3,516,0 thd. UAH, if there is a realization of this scenario. Positive influence of rate increase is caused by the superiority of interest rate assets over interest rate liabilities. If there is a realization of an opposite scenario (–100 basic points), the bank will get loss of 3 516 thd. UAH, that will lead to the corresponding equity decrease (appendix 4, table 4.2). So users of the financial reporting can assess directly the influence of currency and interest rate risk on the bank capital, that corresponds to Basel II approaches.

We have considered the peculiarities of information disclosure as to risks in the bank's financial reporting. Further on we will analyse forms of banks' statistical reporting which are used by the NBU for supervision based on risks that is envisaged by the second component of Basel II. Analysed above law norms as to banks' statistical reporting are specified by rules "Organization of statistical reporting submitted to the National Bank

of Ukraine" [20]. This document specifies forms of statistical reporting and the order of its filling in and regulates drafting periodicity and ways of submitting of statistical reporting forms to the National Bank of Ukraine.

The developers of statistical reporting forms are structural subdivisions (departments chiefly) of the central body of the National Bank of Ukraine, which annually by 1 March and 1 September submit to the Department on Statistics and Reporting propositions on the introduction of new forms and the change of the operating forms of statistical reporting. According to the organizational structure of the NBU, the issues on banking regulation and supervision are dealt by: the Department of Regulatory and Methodological Provision for Banking Regulation and Supervision; the Department of Off-Site Banking Supervision and Bank On-Site Examination Department.

By the Regulation "On the department of regulatory and methodological provision for banking regulation and supervision of the NBU" [21] three main tasks of this department are specified. Firstly, the development and improvement of the methodological base on banking regulation and supervision according to the international standards of banking, the Basel Committee on Banking Supervision requirements and the European banking legislation. Secondly, planning of banking supervision development and improvement that is aimed at the provision for effective cooperation of off-site banking supervision, bank on-site examination, banks' activities risk decrease as the basis of their stable operating. Thirdly, determination of the list and the content of statistical reporting forms on banking supervision and carrying out complex analysis of the activity of the banking system of Ukraine based on the generalized statistical information. So, the representatives of this department have direct possibility to take into account the requirements of Basel II while developing forms of banks' statistical reporting.

The main forms of statistical reporting submitted by the commercial banks and used for the formation of information provision for banking supervision are given in the appendix 5. Moreover, for banking supervision forms of statistical reporting submitted by territorial directorates of the NBU and the bank's liquidation commissions are used (appendix 6). It is necessary to point out that the absolute majority of the mentioned forms are developed by the representatives of the Department of Regulatory and Methodological Provision for Banking Regulation and Supervision. The information from these forms is chiefly used by the clerks of this subdivision. In the mentioned appendixes except forms' number, title and periodicity of submitting, main directions of their use are also determined.

As it follows from the appendixes 5 and 6 forms of statistical reporting that provide information basis for banking supervision are chiefly used for data base formation in the information system "Banks' files" or for the calculation of "Uniform Report" indexes. The information system "Banks' files" is worked out for information accumulation and systematization in the aspect of every bank, registered at the territory of Ukraine (table 12).

As we can see from the table 12, this system consists of 23 modules which reflect the information about owners, office holders, the bank's main contractors, audit and examination results. The information about separate bank's financial indexes is also given.

In contradistinction to the system "Banks' files", that chiefly contains organizational and legal information as to the bank's activities, indexes of the "Uniform Report" have the financial character (appendix 7). "Uniform Report" indexes are given both in absolute form (are directly formed from the statistical reporting forms) and have the calculated character. From the point of view of the analysis of the correspondence of the bank's capital to risks according to the approaches provided for by Basel II, it is reasonable to use the following tables of the "Uniform Report": №5 "Structure of assets, liabilities, capital", № 10 "Main indexes of banks' activities", № 11 "Economic norms and their components".

Table 12

List of modules of the information system "Banks' files"

№	Title of the Module	Source of information
1	Active bank operations	Forms of statistical reporting № 613, 614
2	Owners' forms	Entered manually
3	Bank audit	Entered manually
4	Affiliated persons of the bank	Forms of statistical reporting № 643
5	Remaining assets in banks	Forms of statistical reporting № 618
6	Measures of influence on heads	Separate data of the module "Banks' registration" is used, other information is entered manually
7	Measures of influence by the NBU	Forms of statistical reporting № 682
8	Banks' examination	Entered manually
9	Credits' files	Forms of statistical reporting № 617
10	Correspondence relationship	Forms of statistical reporting № 619
11	The bank's creditors	Forms of statistical reporting № 627
12	Banks' liquidation	Is formed from module "Banks' registration" and form № 621
13	Licensing of the banks	Entered manually
14	Interbanking credits	Data of the software complex "Interbanking credits" is used

Table 12 continued

№	Title of the Module	Source of information
15	Monitoring of the bank-entity	Entered manually
16	Bank passport	The information is formed from other modules
17	Revaluation of fixed assets	Entered manually
18	Regional examination	Main data on examination is entered into the module
19	Banks' registration	Entered manually
20	Registration of breaches	Entered manually
21	Banks' restructuring	Entered manually
22	Generalized information	Entered manually
23	Uniform report	Entered manually

According to the appendix 7, the main information source for the formation of the majority of "Uniform report" indexes is a daily form No 1D "Balance sheet" and monthly form No 10 "Circulating assets balance sheet". Mentioned forms provide for submission of the information according to all balance accounts, profit and loss accounts and extrabalance accounts in the aspect of currency and contractors residence. Daily form No 1D contains residues on all synthetical accounts by the state on the reporting date and is used to carry out the bank's activities operating analysis and to execute banking supervisory functions. Form No 10 has a similar structure, but except residues on the reporting date, the information as to the circulation on the reporting month is additionally given.

So, we have analysed banking reporting in the aspect of the possibility of its use for the implementation of the approaches provided for by Basel II. According to the results of our research the following conclusions have been done. Firstly, the reform of the financial reporting system of the banks of Ukraine as to its compliance with international standards' requirements contributed to the improvement of information disclosure as to the bank's risks in quarterly and annual financial reporting. Taking into consideration the publicity of banks' financial reporting, the improvement of information disclosure process as to risks can be considered in the context of execution of the third Basel II component requirements. A detailed public information as to the bank's risks will allow the participants of the market to assess the scope of use and adequacy of the bank's capital and to assess its risk rate.

Secondly, the National Bank of Ukraine has implemented the qualitative bank's statistical reporting collection system. This system allows getting full information on the results of the bank's activities in good time, particularly to analyse its risks. Using forms of statistical reporting, the

NBU can execute an effective supervision based on risks according to the requirements of the second component of Basel II.

Thirdly, under the circumstances of aggravation of the world economic crisis and its influence on the national banking system, the significance of operating banking reporting has increased. The National Bank of Ukraine has actively used this type of reporting in the process of development and the realization of anti-crisis measures.

So, the banking system of Ukraine shows quite high rate of its development that makes it interesting for foreign investors. At the same time the regulatory basis does not fully meet the requirements of the European and world standards of doing business in this sphere including banking regulation and supervision. Now the measures are being taken to bring the regulatory documents in compliance with the requirements of Basel II.

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Appendix 1

Structure of the banks' financial reporting and the disclosure of the information as to risks

Type of the financial reporting	Financial reporting content	Disclosure of the information as to risks of banking activities	Where it is specified in the Instruction № 480
Quarterly	Balance sheet	Reserves on active transactions and liabilities, currency transactions characteristics, the structure of credit and deposit portfolio in details	Chapter 3, Appendix 2, amendments to the Regulation of the NBU № 141 of 17.03.2009
	The report on financial results		Chapter 3, Appendix 4
	Notes	In the note "Separate indexes of the bank's activities" the majority of the economic norms (capital, liquidity, credit risk) are disclosed, profitability of the activity and the structure of credit portfolio in the aspect of credit class are determined, the owners of the significant participation are given	Chapter 3, Appendix 11, amendments to the Regulation of the NBU № 141 of 17.03.2009
Annual	General information on the bank's activities	The bank's solvency (established by the Instruction № 368 ratios are used), risk management and the structure of owners	Chapter 2, item 2.2
	Balance Sheet		Chapter 4, Appendix 3
	The report on financial results		Chapter 4, Appendix 5
	The report on funds traffic		Chapter 4, Appendix 6,7
	The report on equity		Chapter 4, Appendix 8
	Notes to reports	Note 37 "Financial risks management (currency risk, interest rate risk, liquidity risk, risk of geographical concentration)"	Chapter 4, item 4.5, Appendix 14
Consolidated	The structure is similar to annual reporting	Risk supervision on the consolidated base	Chapter 4, item 4.4, Chapter 5
With allowance for inflation influence	Annual (consolidated) with allowance for inflation influence	Risk analysis under the conditions of inflation process increase	Chapter 6

Appendix 2

Note "Separate indexes of the bank's activities" OJSC "Bank1" for the IV quarter of 2009

Line	Title of the line	On reporting date	Norm indexes
1	The bank's regulative capital (thd. UAH)	4 215 653	not less than 74 194
2	Regulative capital adequacy [1] (%)	26,22 %	not less than 10 %
3	Asset-to-regulatory capital ratio (%)	20,74 %	not less than 9 %
4.	Current liquidity[2] (%)	53,14 %	not less than 40 %
5	Maximum credit risk per one contractor (%)	14,49 %	not more than 25 %
6	Large credit risks (%)	36,28 %	not more than 800 %
7	Maximum amount of credits, guarantees given to one insider (%)	0,83 %	not more than 5 %
8	Maximum total amount of credits, guarantees given to insiders (%)	1,63 %	not more than 30 %
9	Assets profitability [3] (%)	0	x
10	Credit operations classified as "standard" (thd. UAH)	2 965 600	x
10.1	Reserve formed on such transactions (thd. UAH)	20 687	x
11	Credit operations classified as "under control" (thd. UAH)	4 837 955	x
11.1	Reserve formed on such operations (thd. UAH)	55 851	x
12	Credit operations classified as "substandard" (thd. UAH)	3 246 842	x
12.1	Reserve formed on such operations (thd. UAH)	333 332	x
13	Credit operations classified as "doubtful" (thd. UAH)	1 584 092	x
13.1	Reserve formed on such operations (thd. UAH)	491 136	x
14	Credit operations classified as "desperate" (thd. UAH)	6 088 001	x
14.1	Reserve formed on such operations (thd. UAH)	5 306 431	x
15	Net proceeds per ordinary share (thd. UAH)	(2,01)	x
16	The amount of dividends paid for____ year per:	–	x
16.1	Ordinary share	–	x
16.2	Preference share	–	x
17	List of the bank's participants (shareholders) who directly or indirectly own 10 and more per cent of the bank's authorized capital	Swedbank AB (publ); Sweden – 752; direct participation 99,9995 %	x

Regulatory capital adequacy reflects the ability of the bank in good time and in full volume.

[1] To meet its liabilities on trading, credit or other monetary operations.

[2] Current liquidity – the capacity of the bank to meet its current liabilities (by 31st day) for the customers.

[3] Assets profitability – assets efficiency use index.

Appendix 3

The general list of notes to annual financial reporting of banks of Ukraine on the Instruction № 480

Number of the note	Title of the note	Purpose
1	Bank accounting policy	
1.1	Main activity	Submission of the general information on banking establishment
1.2	Basis of accounting policy and reporting drafting	Disclosure of the bank's accounting policy and the elaboration of accounting methods of separate transactions and types of activities
1.3	Consolidated financial reporting	
1.4	Initial definition of financial instruments	
1.5	Securities	
1.6	Customers' credits and indebtedness	
1.7	Securities in the bank's portfolio for sale	
1.8	Securities in the bank's portfolio before the maturity	
1.9	Investment realty	
1.10	Fixed assets	
1.11	Intangible assets	
1.12	Operating leasing (lease)	
1.13	Financing leasing (lease)	
1.14	Long-term assets meant for sale, and assets of quitting group	
1.15	Stopped activity	
1.16	Derivative financial instruments	
1.16	Income tax	
1.18	Own shares bought from shareholders	
1.19	Profit and loss	
1.20	Foreign currency	
1.21	Interaccount of assets items and liabilities	
1.22	Reporting on segments	
1.23	Effect of changes in accounting policy and the correction of serious mistakes	
2	The economic environment under which the bank carries out its activity	Elaborate items of an annual balance sheet
3	Transition to new and reconsidered norms and definitions that guarantee the context in which standards should be read	
4	Funds and their equivalents	
5	Marketable securities	
6	Other securities accounted on fair value with acceptance of the reevaluation in financial results	
7	Funds in other banks	

Appendix 3 continued

Number of the note	Title of the note	Purpose
8	Customers' credits and liabilities	
9	Securities in the bank's portfolio for sale	
10	Securities in the bank's portfolio before the maturity	
11	Investments into the associated companies	
12	Investment realty	
13	Goodwill	
14	Fixed assets and intangible assets	
15	Other financial assets	
16	Other assets	
17	Long-term assets meant for sale, and assets of quitting group	
18	Banks' funds	
19	Customers' funds	
20	Debt securities emitted by the bank	
21	Other funds attracted	
22	Reserves on liabilities	
23	Other financial liabilities	
24	Other liabilities	
25	Subordinated debt	
26	Authorized capital	
27	The bank's reserves and other funds	
28	Interest rate income and expenses	Elaborate items of annual report on financial results
29	Commission income and expenses	
30	Other operating income	
31	Administrative and other operating income	
32	Profit tax expenses	
33	Net profit / (loss) on sale of long-term assets meant for sale	
34	Net profit / (loss) on one ordinary share and a preferred share	
35	Dividends	
36	Reporting segments	Disclose the information (first of all as to risks), that is not given in financial reporting, but is binding for disclosure
37	Financial risk management (currency risk, interest rate risk, liquidity risk, risk of geographical concentration)	
38	Capital management	
39	Potential liabilities of the bank	
40	Accounting on hedging	
41	Fair value of financial instruments	
42	Operations with related persons	
43	Main subsidiaries and associated companies	
44	Merger	
45	Events after the balance date	
46	Information about the auditor (audit company) and an audit opinion	

Appendix 4

Assessment of interest rate risk of OJSC "Bank 1" by the state on 31.12.2008

Table 4.1

Influence on income and capital of market rate increase by 100 basic points scenario

Line	Title of the item	On demand and less than 1 month	From 1 to 6 months	From 6 to 12 months	More than a year	Nonmonetary	Total
	2007						
1	Total financial assets	10 317	5 657	9 901	49 346	0	75 221
2	Total financial liabilities	18 391	29 168	15 012	9 135	0	71 705
3	Net influence on income and capital	(8 073)	(23 511)	(5 111)	40 211	0	3 516
	2008						
4	Total financial assets	7 827	12 262	23 732	97 182	0	141 004
5	Total financial liabilities	37 437	40 165	36 185	12 817	0	126 604
6	Net influence on income and capital	(29 610)	(27 902)	(12 453)	84 365	0	14 400

Table 4.2

Influence on income and capital of market rate decrease by 100 basic points scenario

Line	Title of the item	On demand and less than 1 month	From 1 to 6 months	From 6 to 12 months	More than a year	Nonmonetary	Total
	2007						
1	Total financial assets	(10 317)	(5 657)	(9 901)	(49 346)	0	(75 221)
2	Total financial liabilities	(18 391)	(29 168)	(15 012)	(9 135)	0	(71 705)
3	Net influence on income and capital	8 073	23 511	5 111	(40 211)	0	(3 516)
	2008						
4	Total financial assets	(7 827)	(12 262)	(23 732)	(97 182)	0	(141 004)
5	Total financial liabilities	(37 437)	(40 165)	(36 185)	(12 817)	0	(126 604)
6	Net influence on income and capital	29 610	27 902	12 453	(84 365)	0	(14 400)

Appendix 5

Banks' main forms of statistical reporting used for banking supervision

№	№ of reporting form	Periodicity	Title of the reporting form	Use specialization
1	1D	Daily by 16.00 of the following working day	The bank's balance sheet	"Uniform Report" drafting
2	10	Monthly, (by 10th)	Circulating balance	"Uniform Report" drafting
3	302	Monthly, (by 12th)	Report on classified credit operations and reserves provided	"Uniform Report" drafting
4	321	Monthly, (by 10th)	Report on requirements on credits granted	"Uniform Report" drafting
5	360	Monthly, (by 10th)	Report on liabilities on attracted funds	"Uniform Report" drafting
6	410	Twice a year (by 15.02 and by 15.07)	Report on quantity of the bank's clients and the quantity of the accounts opened by clients	"Uniform Report" drafting
7	604	Monthly, (by 12th)	Report on reserve formation on credit operations	"Uniform Report" drafting
8	605	Monthly, (by 12th)	Report on reserve formation on debit indebtedness	"Uniform Report" drafting
9	606	Monthly, (by 12th)	Report on banks' reserve formation on expired and doubtful credits before income receiving	"Uniform Report" drafting
10	610	Decade (dates 01,11,21)	The information on taking into consideration of the subordinated debt to the bank's capital	"Uniform Report" drafting
11	611	Monthly (by mail), by 15th	Report on observing economic norms and limits of open currency position	"Uniform Report" drafting
12	612	Annual (by mail) by 20th May	Report on observing economic norms on consolidated base	"Uniform Report" drafting
	File 42	Daily (by 16.00)	Data as to maximum risk per one contactor	
	File C5	Daily (by 16.00)	Additional data for economic norms calculation	
13	613	Monthly, (by 11th)	Report on risk concentration for active bank operations with contactors and insiders	for modules "Banks' files"
14	614	Monthly, (by 11th)	Report on the bank's biggest participants and contactors	for modules "Banks' files"

Appendix 5 continued

№	№ of reporting form	Periodicity	Title of the reporting form	Use specialization
15	618	Decade (dates 01,11,21)	Report on funds residuals, placed in banks and attracted from banks	for modules “Banks’ files”
16	625	Monthly, (by 11th)	Report on risk concentration on passive bank’s operations	“Uniform Report” drafting
17	627	Monthly, (by 12th)	Report on the bank’s 20 biggest creditors	for modules “Banks’ files”
18	631	Decade (dates 01,11,21)	Report on assets and liabilities structure according to terms	“Uniform Report” drafting
19	643	Quarterly (by 20th)	Report on the bank’s affiliated persons	for modules “Banks’ files”
20	645	Quarterly (by mail) (by 20th residents, by 30th nonresidents)	Information on economic entities’ activity in which the owner of significant participation in the bank has the participation that exceeds 10 %	for modules “Banks’ files”
21	650	Monthly, (by 10th)	Report on trust management operations	“Uniform Report” drafting
22	653	Monthly, (by 13th)	Report on credit contracts quantities and indebtedness volume	“Uniform Report” drafting
23	655	Monthly, (by 13th)	Report on restructured credit contracts quantities and indebtedness volume	“Uniform Report” drafting
24	658	Monthly, (by 13th)	Report on indebtedness on credit transactions where the overdue payments for the main debt and /or accrued proceeds occurred	“Uniform Report” drafting
25	670	Quarterly (by 5th)	Report on the bank’s twenty biggest participants	for modules “Banks’ files”
26	691	Monthly, (by 12th)	Report on transactions with securities and reserves formed for them	“Uniform Report” drafting

Appendix 6

Main forms of statistical reporting of TD of the NBU and liquidation commission used for banking supervision

№	№ of reporting forms	Periodicity	Title of the reporting form	Use specialization
List of files and reporting forms submitted to the NBU by territorial directorates				
1	91	Monthly (by 3rd)	Information on revealed by the system of banking supervision of the National Bank of Ukraine breaches of banking legislation, including those which can testify for criminal activity and measures taken as to them	for modules "Banks' files"
2	619	Weekly (every Monday)	Data on establishment of correspondent relations by banks	for modules "Banks' files"
3	682	Monthly (by 7th)	Report on influence measures application towards banks by the National Bank of Ukraine	for modules "Banks' files"
List of files and reporting forms submitted to the NBU by liquidation committees				
1	621	Monthly (by 8th)	Report on the bank liquidator's (liquidation committee) work	for modules "Banks' files"

Appendix 7

Information provision for "Uniform report" drafting

№ of the table	Title of the table	Incoming reports' forms
1	Summary statistics	Form № 10 Circulating balance and other "Uniform report" tables
2	Profit and loss analysis	Form № 1 D Balance sheet and form № 10 Circulating balance
2a	Profit and loss structure and dynamics	Form № 1 D Balance sheet
3	Assets profitability and indebtedness cost analysis	Form № 1 D Balance sheet
3a	Structure of interest assets, liabilities, profit and loss	Form № 1 D Balance sheet
4	Balance sheet data (according to the balance sheet form or in aspect of calculations)	Form № 1 D Balance sheet and form № 10 Circulating balance
5	Structure of assets, liabilities and capital (in aspect of residents and currency)	Form № 1 D Balance sheet and form № 10 Circulating balance
6	Liquidity data and other indexes	File A7, table 7 of the Uniform report
6a	Structure of assets, liabilities and extrabalance liabilities on terms	Form 631
6b	Structure of assets, liabilities without extrabalance liabilities	Form 631
7	Credit portfolio (including risk rate)	Form № 10 Circulating balance, forms 302 and 321
7a	Concentration of credit portfolio on regions (in aspect of regions)	Form 302
8	Classified assets and reserves	Forms 604, 605, 606, 650, 653, 655, 691, 302, 321, 360, data
9	Extrabalance transactions (in aspect of accounts)	Form № 1D Balance sheet
10	Main indexes of banks' activities (net assets, general assets, credits, liquid assets, liabilities, regulatory capital, adequacy capital norm)	Tables 8, 1, 6b of the "Uniform report", Form № 10 Circulating balance
11	Economic norms and their components	Data, forms 611 and data of files 42 and C5
12	Quantity of the bank's customers and accounts opened	Forms 201,410

Наукове видання

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БАЗЕЛЬ II: ПРОБЛЕМИ І ПЕРСПЕКТИВИ ВИКОРИСТАННЯ В НАЦІОНАЛЬНИХ БАНКІВСЬКИХ СИСТЕМАХ

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(Англійською мовою)

У монографії розглядаються особливості розвитку національних банківських систем різних країн, а також організація системи банківського регулювання та нагляду. Розкрито можливості впровадження положень Базеля II в банківських системах різних країн.

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