In the Context of Basel II Accord, Capital Adequacy and Rating

Feyyaz YILDIZ

Assist. Prof. Dr., Afyon Kocatepe University Department of International Trade and Finance, feyyaz.yildiz@gmail.com

Mustafa ÜÇ

Assist. Prof. Dr., Epoka University Department of Business Administration mustafauc@epoka.edu.al

Bilge Leyli ELİTAŞ

Res. Assist., Afyon Kocatepe University Department of Business Administration bilgeleyli@gmail.com

Cemal ELİTAŞ

Assoc. Prof. Dr., Afyon Kocatepe University Department of Business Administration cemalelitas@gmail.com

Idaver SHERIFI

Epoka University, Department of Business Administration isherifi@epoka.edu.al

Abstract: Basel II is a series of rules which brings new things and radical changes to the banking regulation standards. The basic reason of this change; while calculating the risk of the capital adequacy is taken into consideration and activities which forms the basic degree of Basel II's criterion. Especially Basel II criteria get heavy the circumstances of lending banks credits and in meantime the importance of rating marks in on the deal.

In that study, reforms which bring Basel II the changing of the calculation of capital adequacy and in that way the criteria of rating and feasibility will be evaluated.

Key Words: Basel, Rating, Capital Adequacy

Introduction

In order to create a series of rules which can regulate globalized financial markets and bring the banks in the global common standards, in 1974 the head of the central bank of ten developed countries with the participation of BIS (Bank for International Settlements), formed the "Basel Committee" (Aksoy, 2007, p. 21). This committee publishes regulations, recommendations and best practices of supervisory standards for banking authorities while making arrangements about the best way to adapt the system to their countries. In this way, the committee encourages member states' to harmonize common approaches and standards of surveillance techniques, without forcing them to converge in details. This Committee is collected 4 times per year and current members are Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Netherlands, Spain, Sweden, Switzerland, United Kingdom and the United States of America (Doyrangöl and Saltoğlu, ismmmo.org.tr, 2009).

In 1988, a capital measurement system, called Basel I has been prepared. Despite Basel I was developed for international banks operating in many countries, it began to spread widely. Once Basel I has been started and implemented, in various events some problems appeared and it started to be criticized.

The problems which were occurred after starting the implementation of Basel I, are listed as below:

- Banks exposure to credit risk is calculated by separating in different classes the banks' assets and out of balance sheet items, and by multiplying the risk ranges of corresponding classes with 0%, 20%, 50% and 100% coefficients.

- Basel I was tried to be applied equally to all banks of different areas of activity, because of lower risk sensitivity of Basel I, which uses four different risk weights.

- According to the application known as "OECD club rule", there is a predicted risk weight of 0% for governments of the countries members of OECD, 20% for the banks of those countries in case of debt, and 100% for countries which are not members of OECD. Because of these problems and the continuous changes in the market prices, Basel I was seen to be insufficient, and Basel Committee accelerated the work to develop the Basel II standards (Yardımcıoğlu and Çam, 2007, p.60-61).

At the Accord of 1998, the market risk, which represents the whole of interest rates, exchange rates and changes in commodity prices was ignored to be part of capital adequacy and in 1996 market risk was added in capital adequacy calculation in USA. By taking into consideration this significant progress and other critics, in 1999 Basel Committee started preparing a new draft study for capital adequacy (Teker, Bolgün, Akçay, 2005).

The Basel Committee, taking into account the developments occurring in the financial markets and the lack of measurements of capital adequacy of Basel I, in June 1999, published the initial advisory text for the New Basel Capital Adequacy Accord (Basel II). After that, at the beginning of 2001 the second advisory text was published, and in April, 2003 the third one. These advisory texts are revised and renewed based on opinions of countries' supervisor authorities, banks and other interested parties, and the final text of Basel II was published in June, 2004 (BDDK, 2005).

In Turkey, BDDK (Banking Regulation and Supervision Agency) worked on this issue and in 30.05.2005 announced the transition roadmap to Basel II. In June 2006, a comprehensive document about this was prepared. However, European Union countries expected to complete the legislation until the end of 2006 and to start applying from 01.01.2007, and most of countries succeeded. Actually, in banking system of Turkey is applied the "Regulation on measurement and evaluation of capital adequacy of banks", published in 01.11.2006 in Official Gazette of Republic of Turkey. Financial statements of sector should be prepared according to IFRS (International Financial Reporting Standards). Turkish Accounting Standards Board (TMSK), which arranges regulations from 2002, has completed their work. However, because of missing of obligatory legislation for the application of these standards, there was accordance with certain standards but the total transition has not been achieved. As a result, transition process was delayed again.

Basel II regulations is a set of international rules, which effects banks because of radical changes envisaged in the financial system, and firms because of credit relations with banks (Aksoy, 2007). This arrangement with the banks' capital adequacy has been brought in an international standard.

Capital adequacy ratio of this practice determined as 8%, at the beginning was applied to show the power of the financial structure of the banks and was used as a driving force to consolidate the capital structure of banks in a lot of countries (Aras, p. 4).

Reconcillation of the Basel Basel I Regulations

Basel I Capital Accord was published as new banking standards by Basel Committee. With this regulation are determined international capital adequacy standards which will be applied by the banks. These standards must be applied by banks with international activity, and define the lower limit of the capital that banks must have, towards the risk-weighted assets. The standard rate of minimum 8% known as "Capital Adequacy Ratio", is based on the principle of increasing financial stability of banks, in the sense to control the risk by maintaining enough capital at the same rate. For this purpose, in Basel regulations, the minimum capital amount holded by the banks is applied as a criterion which indicates the financial stability of banks.

In Basel I, during the setting of risk weight which is fundamental in calculation of the capital adequacy, is calculated the total credit risk of banks and market risk and in this way try to find a method which will show better the banks' exposure to the risks. In this context, the calculation of capital adequacy in Basel I, is as below:

Total Capital ----- ≥ 8 Credit Risk + Market Risk

However, during the implementation process of Basel I, it was seen that it is not possible to ensure the existence of a more robust and stable financial system only by providing the minimum capital adequacy (Aras, 2007, p. 4).

For example; According to one of the rule in Basel I accord, a bank's assets have to be classified into five risk groups (0, 10, 20, 50 and 100 percent) based on credit risk. This risk groups are determined in terms of the length of maturity date of related credit.

If a bank lends 100 Euros for a year, this operation's risk is computed at 20% therefore bank has to allocate its 1, 6 Euros capital for this transaction in order to meet 8% the least capital adequacy ratio. But if the same amount lends for more than a year, bank has to allocate minimum its 8 Euros capital to meet minimum of requirement because the risk computation is made at 100%. When it is considered from the perspective of economic growth, this situation is unfavourable. Because long-term investments can be financed by long-term credits but risk grouping in Basel I accord discourages to banks to lend for long-term credits (Ariss and Sareddinne, 2007, p.48). Even only this case implies Basel I accord is not a sustainable regulation.

Current methods used in measuring credit risk and market risk, to whom banks are exposed and that are defined in the Basel I, because of a not accure measuring of banking risk, not taking into consideration in the appropriate measure the price fluctuations of financial market and not being able to differentiate the behavior of banks during the creation of the portofolio, the revision of this standard has become a necessity, by extending the scope and restructuring with new management methods and methods for measuring the risk exactly.

Therefore, it was understood that it was needed to be able to calculate in a right and exact way the effected risk, to provide financial stability, and to increase the compatibility of market conditions in order to improve the quality of market discipline for the crises that banks experienced. Basel I was criticized by global big players and academic community, because of its simple content. However, the simple content and easy implementation ability made Basel I more preferable and easely adaptable for developing countries. Basel I, contributed in the modernization of regulations and in increasing of competitivity in financial sector of these countries.

Except the critics, there were recognized some positive aspects of Basel I, which creates a "fair competition environment" with specified rules for market players, and because of 8% minimum capital adequacy, some developing countries have strengtht their financial stability (BDDK, 2005, p.2-3). The deficiencies identified in this process, made necessary the developing of a more complete regulation than Basel I. For this reason, Basel Committee redefined the bank's capital adequacy, by revising the components used for calculating it. The new regulation was named Basel II Minimum Capital Adequacy Accord since it was based on Basel I which was used from 1988. Basel II, must not be percepted as a new regulation because it is the continuity of Basel I, but there must not be ignored that predicted extremely important changes (Aras, 2007, p.4).

Basel II Regulations

The capital adequacy ratio calculated in Basel I framework, no longer accurately reflect the financial situation of the banks. In the days where the areas of activity of banks increase and there are intensive financial changes in the sector, the diversity and dimension of the risk also grows. Because the cost of banking crises to the economy reached at highest level, the need for effective risk management increased. Basel II Accord is formatted in accordance with emerging requirements, and as a result it is not only a well prepared comprehensive theoretical study but also achieved great success in practice. Being prepared based on suggestions and critics of concerning interested parties, this Accord provides the necessary flexibility of applicability (Aras, 2007, p.4).

Basel Committee started working in order to update and correct deficiencies of Basel I and to help banks to make a better risk measurement, so in 2004 published the Basel II standards. Basel II criteria aim to regulate more efficiently the capital adequacy, to establish market discipline and supervision, and to enhance financial stability and risk management. With Basel II criteria, it is expected a reduction of informal economy, a better preparation of financial statements and a more effective working of banking system in Turkey (Yardımcıoğlu and Çam, 2007, p.61).

Basel II consists of three complementary structural blocks:

- Determination of the minimum capital requirements
- Reviewing of supervision authority
- Market discipline

Determination of the minimum capital requirements

Minimum capital requirement, which is the first rest of Basel II regulations, is calculated as a sum of credit risk, operational risk and market risk. Capital adequacy ratio is calculated as a legal capital and risk-weighted assets. According to the regulation, the total capital adequacy ratio should be as before, not below 8%. The total of risk-

weighted assets can be reached by multiplying the market and operational risk requirements with 12.5 (i.e. the opposite of 8% minimum capital requirement ratio) and by adding the reached amount to the total of risk-weighted assets of related credit risk (Başar, 2007, p.17). The Basel II capital adequacy is calculated as below:

Total Capital

----- ≥ 8

 $Credit \ Risk + Market \ Risk + Operational \ Risk$

Market Risk is a probability to loss in positions held in balance sheet and off-balance sheet accounts, due to fluctuations in financial markets from shifts in prices of interest rates, exchange rates and stock prices, and as consequence of risk of interest rates ratio, stock risk and exchange rates risk. Shortly, this is a risk arising from the changes in interest rates and market prices so Basel II does not bring much change regarding this.

Credit risk is the risk arising from possible credit losses. In general, it is the situation faced by the lender when the debitor fails to comply it's obligations of the contract complitely or partially. At the same time it indicates the situation of loss in market value, which is caused by deterioration in financial situation of counterparty. Counterparty may be the borrower of credit operations or the guarantor.

Operational Risk is the risk arising from the wrong or insufficient internal managament, people, system and from other external events. Human errors, abuses, inadequate internal controls and business processes, and reasons arising from technological infrastructure and system, are likely to cause losses to the institution. Operational risk usually occurs rarely but causes big losses in financial system, as happened with Barings Bank, Allied Irish Bank, General Societe. The destructive effects in the cases of operational risk show as that to be protected it's enough only to hold capital. For this reason, it is very important and necessary to have a strong risk management (Mazıbaş, 2005, p.12). In this case, risk measurement is very important.

Risk Measurement Methods

Risk Measurement Methods used in Basel II for calculating the capital requirement can be grouped as Internal Rating Method, Standard Method and Method of Basic Indicators. These groups are also divided into subgroups according to their levels of development. In the following tabel, there are presented different calculation methods for different categories, according to Basel II.

The level of development of measurement Risk	<u>Basic</u>	<u>Medium</u>	<u>Advanced</u>
Credit Risk	Standard Approach	Basic Internal Rating Approach	Advanced Internal Approach based on Rating
<u>Market Risk</u>		Standara Method	Internal Model
<u>Operational</u> <u>Risk</u>	Method of Basic Indicators	Standard and Alternative Standard Method	Advanced Internal Rating Approach

 Table I. There are presented different calculation methods for different categories, according to Basel II (Arslan, sosyalbil.selcuk.edu.tr, 2009, p.54)

Credit risk is calculated using standard method or advanced method, in other hand operational risk is calculated using method of basic indicator, standard method and advanced method. Using Standard Method, banks calculate the credit risk, based on the ratings given to the companies by the international institutions for external rating (S&P, Moodys, etc.). Whereas, using advanced method, banks calculate the credit risk using the rating given to this method, during the calculation of the credit risk, it must be considered also the probability of this credit to become problematic and the risk, maturity and other risk factors in this case (Doyrangöl and Saltoğlu, ismmmo.org.tr, 2009, p.359). Internal rating approach is more sensitive toward

risks, but is more complicated comparing to standard approach and needs more information; its application is more difficult and needs technical support (Doyrangöl and Saltoğlu, ismmmo.org.tr, 2009, p.359). This method is divided in two parts, basic internal method and advanced internal method.

In Basic internal method, banks calculate theirselves the probability of credit to become problematic, using rating systems, but for other risk factors they use the coefficients determined by legal authorities. Whereas, advanced internal method gives the opportunity to banks to use thir own approaches in calculating all risk factors, but these approaches must be approved in advance by the regulatory authorities (Doyrangöl and Saltoğlu, ismmmo.org.tr, 2009, p.360).

Reviewing of supervision authority

Aims to make compatible the risk profiles and strategies of the banks by ensuring the necessary precaution and supervising. The regulation authority, can intervene if the capital of the bank isn't enough to encover the taken risk and if needed can request from the bank to hold more capital than minimum capital adequacy.

Market discipline

The providing of market discipline depends on feedbacks from risk assessments of the banks and evaluations of credit rating institutions. The aim is to complete the minimum capital requirements and the inspecting process of supervision authority. During this process, the steps taken to ensure the market discipline will help in a more effective and more rigorous valuation and work. By looking to Basel II framework, can be understood that there is a possible systematic risk in financial institutions and especially in banking sector (Başar, 2007, p.28-30).

The aim of Basel II standards is to highlight the risk management in risk criteria of the banks. In this direction, with Basel II, the risk-based credit management and risk-based credit pricing becomes more important. The price of crediting will be determined depending on the risks of the company and the types of the guarantee. The firm's risk level will be considered as risk level of credit transactions (atonet.org.tr, 2009, p.2009).

The difference between Basel I and Basel II

The differences of Basel II from Basel I are as below:

- The criteria of being or not a member of OECD, which was important in determination of capital adequacy for credit risk in Basel I, in Basel II is removed.
- While in Basel I, capital requirement is only required for credit and market risk, in Basel II it is also included the capital requirement for operational risk. In Basel II, operational risk is defined as risk of wrong or insufficient internal managament, people, system and from other external events, so it is required from banks to hold capital to face this risk.
- Basel II predicts banks to evaluate the capital adequacy, and process of selfevaluation of the bank and the capital adequacy should be evaluated and monitored by the banking supervision authority.
- According to Basel II, detailed information regarding the implementation of Basel, must be published to the public. This wasn't included in Basel I.
- In Basel II, the credit risk is determined by credit ratings of parties. For this, rating notes independent rating institutions can be used (Kutlu and Demirci, ulakbim.gov.tr, 2009, p.206).

One of the innovations in Basel II is grading activities. The purpose of Basel II standards is to highlight the risk management in credit criteria of banks. With Basel II standards, the companies' risk weighting is linked to the credit rating. So, with starting of the implementation of the Basel II, the risk level of the credit and firms, affects directly the cost of the credit. For this reason, the credit rating given to the companies by independent rating institutions, gain importance.

Rating

Rating is the process of independent evaluation of a company or institution which issues securities, if the obligations of principal and interest are fulfilled or not. Reaching to the final note is done after evaluation of a lot of factors, starting from financial datas to managerial qualifications, past performance to future projects, etc. Rating process also includes the probability of delaying of a payment during the payment process of an issued security

2nd International Symposium on Sustainable Development, June 8-9 2010, Sarajevo

(Babuşçu, 1994, p.6). There are two main reasons of using the rating system by the banks and other credit agencies, to increase the transparency of the credit which will be given and to reduce the cost (Başar, 2007, p.56). Instability in interests of bank credits, increased competition among companies and increasing of unions, the development in wholesale money and capital markets, has obligated the companies to work on strengthening of their financial structure. For this reason, the need for credit rating increased because of expansion in the financial market, due to increasing of the number of the issuers of the securities and number of borrowers in other ways (Babuşçu, 1994, p.10).

By the use of Basel II accords credit rating agencies play to very crucial regulatory role in the banking sector which its failures associated with many social costs. Due to credit rating agencies have private ownership brings doubts about to sustainability of the regulation (Weber and Darbellay, 2008, p.2-3).

Ratings may be long-term or short-term. Long-term rating is an opinion given to the companies based on the performance of the company and the main economic and financial characteristics of the sector, where the company operates. Important elements are: sensivity of economic conjucture, technological developments, changes in demand, legal arrangements, quality management and other. Rating in Long-term determines the possibility of fulfilling obligations. In short-term, rating is the evaluation of the opportunity to access liquidity and capital resources in order to fulfill all obligations for a period of a year. Rating is divided into international foreign exchange and local currency and evaluates the ability to pay the obligations in respective valutes (Berker, fitchratings.com.tr, 2009, p.12).

The first legal regulations on the activities of rating agencies, was done in the USA, by the regulatory institution, known as Securities and Exchange Commission (SEC). Starting from 1975, SEC gives to the credit rating agencies which have market credibility, the title NRSRO (Nationally Recognized Statistical Rating Organizations). Actually, there are only four NRSRO-s, Moody's Investors Service Inc; Fitch Inc; Standard and Poor's Inc and the last who get this status is Dominion Bond Rating Service Ltd. (Berker, fitchratings.com.tr, 2009). In Turkey, the companies who are acreditted by the Capital Markets Board of Turkey (SPK) are JCR Avrasya Derecelendirme A.Ş., TCR Kurumsal Yönetim ve Kredi Derecelendirme A.Ş., Saha Kurumsal Yönetim ve Kredi Derecelendirme Hizmetleri A.Ş. and Fitch Ratings Finansal Derecelendirme Hizmetleri A.Ş. (spk.gov.tr, 2010).

Financial Institutions, evaluate the risk measurement based on the criteria of the worl rating institutions (agencies); According to Standart and Poor's company, the economy risk is very important for a bank to understand the environment. In fact, economic risk is not a credit quality of the bank but the risk level of the country's economy. Here, should be payed attention to the size of the economy, growth expectations, encountered structural problems, the course of the functioning of the economy and external opening of the national economy. The risk in the sector, industry structure, customer base, national and international regulations and public-private status must be reviewed. After that, what must be reviewed is the management and organizational structure, accounting compliance, liquidity situation, the level of using of assets and the institution's capital adequacy. Depending on credit risk, is reviewed the way of management of structure of bank's credit portfolio. In the case of market risk, evaluation is done according to risk measurement methods, preventive strategies, control, market monitoring mechanisms, and structure compliance with financial conditions. If these are gathered in four main categories then economic risk, sector risk, credit risk, and business risk can be evaluated (standardandpoors.com, 2009).

According to Moody's, bank analysis is based on three basic principles. Those are, the role of the bank's operating environment, the role in the national financial system and bank's main analysis. In terms of Regulatory and Supervisory agencies, the role of the environment and competition structure are considered as reliable. In terms of the role in national financial system, are reviewed the government guarantees, the level of damage of the bank's bancruptcy to the national and international economy, the status of creditors in bankruptcy and the public-private status of the bank. Looking at the basic analysis of the bank, is observed the ability to use assets, financial and statistical data open for the public, profitability, management strategy, and using of the opportunities and creating values from them. Interest and exchange rate risk is also a very important topic to be evaluated (Boyacioğlu, 2005).

These worldwide rating agencies, considering the listed risk factors give the rating note. Note is given after calculating the risks and depending on capital adequacy is given a specific letter. The meanings of the letters are explained in this table.

S&P	Moody's	Meaning of the Note	
AAA	Aaa	Shows an extremely strong capacity in repayments of principal and interests. Represents the highest credit quality and the lowest credit risk. Almost not affected at all from economic conditions.	
AA	Aa	Shows a very strong capacity in payments of principal and interests. Not affected at all from economic conditions.	
А	Α	Although have a positive attitude, should be dignified against negative economic changes. But the capacity to meet financial obligations toward creditors is still strong.	
BBB	Baa	Even has a capacity for principal and interest, should be taken the risk of delayin in payment in negative conditions. Negative changes can reduce the capacity. Is in the lowest rating category possible for investment.	
BB	Ba	Speculative. In principal and interest repayments exists a moderate protection. Is exposed to continuous uncertainties or commercial financial and economic diasadvntages. Can fail to meet financial obligations.	
В	В	The risk of repayment is very high. The highest probability is that is speculative. It can pay financial obligations but to continue this situation depends on the economic conditions.	
CCC	Caa	Fulfilling of the financial obligations depends totally on good business and economic. There is a high probability for default status.	
CC	Ca	There is a very high risk. Just started facing with problems in meeting financial obligations.	
С	C	This is the lowest quality note. There is a high risk borrower to don't be able to pay the obligations. Bankruptcy and similar situations can also be expressed.	
D		The worst note that can be given. Repayment is impossible. Shows the default status.	

Table II: The meanings of the leters

In the Standard & Poor's rating system, putting "+"or "-" between "AA" and "CCC" diversifies the rating. For example, putting (+) on the right of "A" ("A+") shows that even though the rating of the country is below "AA", it is still slightly above "A". On the other hand, putting (-) shows that the credit rating is better than "BBB" but nevertheless slightly under "A".

On the other hand, while giving credit ratings to countries Moody's uses numerical symbols such as 1, 2, 3 for each ratings group, from Aa to B. Symbol 1 shows the best level within the rating group concerning the debt payment capacity, symbol 2 the middle level, whereas symbol 3 refers to the weakest debt payment capacity within the group.

The topics generally dealt by ratings agencies are: operational framework, risk profiles, funding and liquidity, shareholders' equity, profitability and performance, management and strategies, ownership and support criteria. In the context of Basel II, rating activities are carried out as internal rating (giving scores to companies by banks) and external rating (ratings issued by independent rating agencies such as S&P and Moody's) activities.

In the internal rating, banks evaluate at least the two-year financial and qualitative indicators on the credit activities (Mısırlıoğlu, ismmmo.org.tr, 2009). In order to do this, it should have a rating system to measure the credit worthiness and risk level of companies. According to these criteria, banks shall use two types of loans. In the case of demand for loans of less than one million Euros the retail portfolio is evaluated, in case the demand exceeds 1 million Euros, the institutional portfolio should also be used. During the conduct of internal rating, borrower's risk, operational risks and the characteristics of these risks as well as whether there has been a delay in the credit payments.

With regard to external rating, independent rating agencies are employed. Credits exceeding 1 million Euros and that are found in the institutional portfolio (category) of banks will be subject to rating by external rating agencies (Moody's, Fitch, S&P, Duff etc.) and the credit ratings will be determined accordingly. These independent agencies take into consideration the country risk, market risk and company risk while conducting ranking.

Independent rating agencies after carrying out evaluations on the financial situation of banks, give the ratings to banks as instruments that point out banks' credit worthiness and capacity to carry out obligations. In the context of the rating of bonds, apart from the debt securities exports by banks, financial strength ratings, individual ratings and support ratings (Alp and Üstğindağ, 2007).

Basel II and importance of Ratings

In case risks related to banks' activities materialize, the possessed capital to meet the losses incurred by clients and banks is very important. A good relation should be established between capital and risk so that they are affected only minimally by these losses. For this reason it is important to calculate the possessed minimum capital. Basel II is an arrangement for this purpose (kobifinans.com.tr, 2009).

According to the Banking Regulatory and Supervisory Agency of Turkey, if analysed country's perspective, Basel II can be considered as an opportunity to ensure a stronger and more efficient banking system. Some countries have fully implemented these standards and Turkey has made the necessary preparations to be ready for it. Some banks have even established Basel II departments and are waiting for the full transition stage. Delays in the full implementation of Basel II will principally result in increased costs. If full implementation is ensured, the efficiency of risk management at banks as well as their intermediation activities will increase.

Market discipline which represents the main subject of Basel II will increase, the institutional governance structure of companies that are clients to banks will improve and it will also be ensured that the capital levels develop in parallel with their risk exposure. In the context of Basel I, domestic and foreign banks which invested in Turkey's Treasury securities were not required to hold capital for these securities. In the context of Basel II, since turkey has a low rating, a capital adequacy ratio of 8% is envisaged for foreign currency-denominated government securities.

In fact, the possibility of non-repayment of the loan is related to who is given, but in present application, banks are applying the same approach to all companies with too high or too low credibility. Basel II separates the risk and adjusts it.

However, the calculation of capital should be done according to risk. If the bank gives loans to a company with high risk, maybe will need to hold more capital than 8%. This is the logic in Basel II functioning (kobifinans.com.tr, 2009).

Basel II brought two new different methods in credit risk measurement. These are standard method and basic internal rating method. There was no innovation in market risk measurement, but in new added operational risk are developed two methods, the basic and advanced measurement method.

Credit risk can be defined as the risk of the probability of a party to not-fulfill the obligations to counterparty. With Basel II, as a result of risk-based pricing in credit risk calculation, the types of credits which require keeping more capital will be avoided or the prices will be increased, and the most important point will be to work with qualitative clients. There will not be any significant change in market risk, and in the same way the exchange risk, the interest rate risk, stock risk and liquidity risk will take place. The most important element that divide Basel II from Basel I is operational risk. According to Basel Committee, Operational Risk is the risk arising from the wrong or insufficient internal management, people, system and from other external events. On Basel I the most important risk is credit risk, and recent years' banking crises and fraud events within companies, highlights the importance of calculating of operational risk. This is one of the biggest indicators of the importance of Basel II.

Related to Basel II the importance of degree is very important. The notes given by the rating agencies, are seen as the indicator for the borrower's risks. Many markets and institutions (banks, etc.), in this way reduces the research effort of individual investors and helps individual savers in evaluating of various investments (Çelik, 2004). Another important thing is ensuring the capital flows. Investors, who are interested to invest in international market, need the credit rating of specific company/business. Investing with a company, which note is known and where accountancy and transparence standards are evaluated, emphasize the importance of rating. Also, the companies who have rating notes, have the opportunity to access to a large investor audience, more credibility, trust and opportunity for more loans.

Basel II and Ranking in Turkey

The Capital Measurement and Capital Standards Harmonization in the International level document, established by Basel Committee on Banking Supervision has started to be implemented within a given transition by EU member states.

In Turkey, Basel I criteria are still being implemented. According to the BDDK 2009 Basel II Progress Report, the % 39.8 of the sector's total asset size formed by banks on individual basis, and the % 29.7 formed by the banks of the consolidated Basel II- have submitted for approval or approved the implementation of the related strategies and policies by their board of directors. 99% of the banking sector, is composed by the top management and related units that will carry out the work of Basel II, 82% responsible staff and 70% the committees.

If we look at risk measurements, it can be seen clearly that there is a rising in using internal rating method and they are adapted to standard method, during the calculating process of risk. For market risk, all of banks comply the standard rating method, however for operational risk, most of banks use basic indicator method and the number of banks which use standard rating method is very limited.

According to the results of quantitative impact studies, while the Basel-II reduces to the extent the capital adequacy of banks, the Turkish banking system's capital adequacy is high so due to these adverse effects they do not reach a significant size. According to the results of the local digital effects work, the 23 banks participating in the study had an aggregated capital adequacy ratio of 28.8% in the current situation and after applying the provisions of the Basel-II this ratio fall to 16.9%. If we take into account the minimum level of capital adequacy that is 8% we see that under the provisions of Basel-II that it's available a capital more than double the minimum level (BDDK, 2005).

When we take a look to the implementation of Basel II for the past six months considering the developments, the most positive is being a member of the Basel Committee and the most negative development has been the global crisis. In addition the data deficiency and the lack of legislation and technology constitute a negative side.

Turkey met with the rating activities in 1992. Moody's and S & P has given to Turkey for a long-term debt mark. After a series of falls experienced in 1994, 1995, 2001 the credit ratings currently is (B) as in the countries where investing should not be done and this prevents Turkey's borrowing ability from international debt markets (NYE and EKE, 2004, p.1). In this way the first time Turkey had met with the rating activities which continued with the beginning of the applicability of Basel II criteria.

Conclusion

Basel II regulations, in the context of the changes and improvements in the banking system means risk management. In the effective risk management, it is important to identify the credit risk, market risk and operational risk in the calculation of the capital adequacy which is the basic structural block of the Basel II. Other structural blocks provide the market discipline of risk management to develop effective monitoring mechanisms. It appears to be a fact that the further development of risk management in banks culture, indirectly will affect also the real sector firms which are in the position of the banks' customers. The most significant innovation Basel II has brought is the calculation of capital adequacy proportional to the risk in and the use of ratings. In the standard approach in the calculation of ratings, are used the notes based on the rating agencies, while in the internal approach banks are allowed to use their own notes in the ratings. The company internal ratings are based on such criteria as financial statements, market share and product quality. The most important criteria in the company rakings are the financial statements of companies. This is why the companies should be prepared from the results of banks ratings and need to strengthen their capital to get good grades. However, in standard method, international rating agencies by givin a rating note to banks, have an importan mision to be reference for banks if they have capability to carry out with the credit obligations or not. If the rating note is high, the financing costs is low, if rating note is low then the financing costs is high. The two reasons of rating are to increase the transparence and to decrease the cost. While some countries have passed to the Basel II standards Turkey is ready and getting well prepared. Some banks have also established a Basel II department and are waiting for the full shift to the standards. Despite the delays in the transition, this will return to us as a more cost.

References

Boyacioğlu, M. A., (2005). Bankalarda Derecelendirme (Rating) ve Türk Bankacılığı Üzerine Ampirik Bir Çalışma (Doktora Tezi). Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Ünal Aysal Tez değerlendirme Yarışama Dizisi.

Aksoy, T. (2007). Basel II ve İç Kontrol, Ankara SMMM Odası Yayın No: 53, Ankara.

Aksoy, T. (2007). Derecelendirme Süreci Işığında Basel II'nin Kobilere Etkileri ve Kobilerce Atılması Gereken Adımlar: Analitik Bir Bakış. Mali Çözüm ISMMMO Yayın Organı. Number: 84.

Alp, Ali. ve Üstündağ, S. (2007), Active. Bankaların Derecelendirilmesi

Ankara Ticaret Odasi., Basel II, Kobilerin Kredi Riski ve Derecelendirmesi, <u>http://www.atonet.org.tr/yeni/files/ files/OZEL IHTISAS KOMISYONLARI/files/ato basel.pdf-matbaa.pdf</u> Access Date: 13.12.2009. Aras, G. (2007). Basel II Bankacılık Düzenlemelerinin Ekonomiye ve Reel Sektöre Yansımalar, Deloitte.

Aras, G. Basel II Uygulamasının KOBİ'lere Etkileri ve Geçiş Süreci.

Ariss, R. T. and Sarieddine, Y. Challenges in implementing capital adequacy guidelines to islamic banks (p. 48). Y. Journal of Banking Regulation Vol. 9.

Arslan, İ. Basel II Kriterleri ve Türk Bankaclık Sektörüne Etkileri

http://www.sosyalbil.selcuk.edu.tr/sos_mak/makaleler/%C4%B0brahim%20ARSLAN/ARSLAN,%20%C4%B0BRAH%C4%B0 M.pdf., Access Date: 01.12.2009.

Babuşçu, Ş. (1994). Bankacılıkta Risk Değerlendirmesi(Rating) ve Türk Bankacılık Sektörüne Uygulanması. Sermaye Piyasası Kurulu.

Başar, M. (2007). Basel II Düzenlemeleri ve Kobiler, Anadolu Üniversitesi Yayınları.

BDDK. (2005), Basel II Ekonomik Yansımaları ve Geçiş Süreci, Araştırma Dairesi.

BDDK. (January 2005). 10 Soruda Yeni Basel Uzlaşısı (Basel II).

BDDK. (September 2009), Bankacılık Sektörü Basel II İlerleme Raporu.

BDDK. (2005), Basel II'ye Geçişe İlişkin Yol Haritası (Taslak).

Berker, A. B., Kredi Derecelendirmesi. http://www.fitchratings.com.tr/ftp/derecelendirme/drc_20.pdf, Access Date: 25.12.2009.

Berker, A.B., Derecelendirme Kuruluşları.. <u>http://www.fitchratings.com.tr/ftp/derecelendirme/drc_23.pdf</u>, Access Date: 27.11.2009.

Çelik, P. (2004), Bankaların Risk Derecelendirmesi (Uzmanlık Yeterlilik Tezi). TCMB, Bankacılık ve Finansal Kuruluşlar Genel Müdürlüğü, Ankara.

Doyrangöl, N. C. ve Saltoğlu, M., Muhasebeci Gözüyle Basel II. <u>http://archive.ismmmo.org.tr/docs/malicozum/malicozum_kongreozel/19%20nurancomertdoyrangol.pdf</u>, Access Date: 27.10.2009.

Kutlu, H. A. ve Demirci, N.S. Kapsamlı Bir Risk Yönetimi Düzenlemesi: Basel II ve Kobilere Muhtemel Etkileri. <u>http://uvt.ulakbim.gov.tr/uvt/index.php?cwid=3&vtadi=TPRJ%2CTTAR%2CTTIP%2CTMUH%2CTSOS&c=google&s_f=_5&d</u> <u>etailed=1&keyword=86942</u>,14.12.2009.

Mazibaş, M., Operasyonel Riske Basel Yaklaşımı: Üç Yapısal Blok Çerçevesinde Bir Değerlendirme. BDDK Araştırma Rapoları, 2005/1.

Misirlioğlu, İ. U., UFRS ve Basel II'nin İşletme Faaliyetleri Üzerindeki Etkileri. <u>http://archive.ismmmo.org.tr/docs/malicozum/76MaliCozum/1ismailufukmisirlioglu.pdf</u>, Access Date: 27.12.2009

NYE, R. P. ve Eke, S. (March 2004), Türkiye'de Kredi Derecelendirmesi, Activeline.

Rodoplu, G. ve Ayan E. (2008). Basel II Uzlaşısında Piyasa Risk Yönetimi ve Türkiye Açısından Faiz Riskine İlişkin Bir Uygulama. Süleyman Demirel Üniversitesi İİBF Dergisi.

Teker, S., Bolgün, K.E., Akçay, M.B. (2005). Banka Sermaye Yeterliliği: Basel II Standartlarının Bir Türk Bankasına Uygulanması (p. 42-54). Elektronik Sosyal Bilimler Dergisi, www.e-sosder.com, Number: 12.

Weber, H. R. and Darbellay, A. (2008), The regulatory use of credit ratings in bank capital requirement regulation (p.2-3). Journal of Banking Regulation Vol. 10.

Yardimcioğlu, M.ve Çam, A. V. (2007). Sermaye Piyasalarındaki Derecelendirme Müessesesinin Basel II Kapsamında Değerlendirilmesi. Mali Çözüm ISMMMO Yayın Organı, Number: 80. www.kobifinans.com.tr, Access Date: 25.12.2009 www.spk.gov.tr, Access Date: 21.12.2009 www.standardandpoors.com, Access Date: 25.12.2009