

Globalization of financial markets and reflexion to Turkish small and medium size enterprises (SME): Basel II

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Abstract

Bank for International Settlements (BIS) is an international enterprise formed by the central banks of various countries in 1930. A working group, the “Basel Committee” had been created within the BIS in 1974, to conduct studies on banking. The aim of the financing function is to collect, under optimum conditions, the funds that the firms require, and provide effective usage of these funds. As far back as the early 20th Century in USA and Europe, significant improvements had emerged in the financial management field. Recently, significant improvements have materialized in banking, risk management application, techniques and control approach. Credit institutions and the enterprises which demand credit will be directly affected from this application by the start of adhibition of the Basel II criteria. In this study, the effects of Basel II application on Turkish Small and Medium Scale Enterprises will be examined.

Key words: Financial markets, Turkish SME's, Basel II



Introduction

In the global capital world, international capital investments are rapidly increasing. In this process, all the national economies want to receive interest from financial resources from around the world. This demand falls within the enchanted circle of economic systems that had not been integrated into the global markets or been a part of this process. The countries that are attracted by global capital movements must modify their financial systems to be able to receive interest from this resource.

At this stage, the economies must follow the global rules to expand in global markets. Therefore, in this context, these countries must make adjustments and act within the context of Basel II, which can be regarded as the global rule of the financial markets.

In this study, we will examine the arrangements that the economic systems need to make in the financial markets and the effects of these arrangements on the economic systems.

The meaning and scope of financing concept

The purpose of the financing function is to collect, under optimum conditions, the funds that a firm needs and provide for the effective usage of these funds.

As far back as the early 20th Century in USA and Europe, significant improvements had emerged in the field of financial management. In conjunction with industrialization, fund demand of enterprises had increased and meeting these demands had become a significant problem. Regardless of the excessive fund demand, the transfer of small savings into major enterprises was far from easy. Financing had been understood as the creation of currency and fund provision because of the excessive fund demand. The financing concept was simply known for providing funds until the '50s. The growth of enterprises and the improvements of incorporated businesses was an added burden to the provision of financing. In this context, the basic function of financial management is considered to provide adequate and low-cost funds for enterprises (Ceylan, 2003: 4).

Basel committee and new capital adequacy arrangement

Bank for International Settlements (BIS) is an international enterprise created by the central banks of various countries in 1930. A working group, the "Basel Committee" had been formed within BIS in 1974 to conduct studies on banking. The committee formed by 12 members, including the USA, Germany, Belgium, France, Holland, Sweden, Switzerland, England, Italy, Japan, Canada, and Luxemburg aims at monitoring the possible crises in banking and exchange markets and set a common standard for bank to work. Basel Banking Control and Audit Committee within BIS initially published the Basel Capital Accord in 1988. According to Basel I, the capital adequacy of banks is required to be at least 8%. The rate of capital to risk assets is considered in the calculation of capital adequacy (Pinelli, 2005: 3).

Recently, significant improvements had emerged in the banking sector, risk management and application, auditing approach and financial markets. The committee prepared a new draft arrangement to substitute the 1988 dated arrangement, and the committee announced this draft as the Basel II principle in 2004. These principles have been accepted by all banking sectors the world over, and the arrangements are expected to be activated in many countries between 2007 and 2009 (Rodriguez, 2003: 120).

More than two hundred opinions were delivered by banks interested in the new arrangement that involved more risk sensitivity. In the project, the draft standards in 1999 had been accepted as the risk weight of the countries.

1. Purposes and Essential Elements of New Arrangement

Basel II principles had been drawn up with an aim to restructure the banking sector. Risk management and valuation standards are being changed according to Basel II principles. Enterprises which use credits are expected to be affected by the changing standards. The risks, grading notes, and country advices of enterprises will be the main factors determining credit costs when activating the Basel II principles. It is important for enterprises to have a confidential financial reporting process and an adequate operational management culture to corporate governance principles in this period.

The Basel Committee expects that the revision, to be implemented in the January 2001 New capital arrangement, meets the control and audit goals listed below. According to this, the New arrangement includes (Yayla and Kaya, 2005: 4);

- Assessing the pending risks separately and better for each enterprise,
- Loading top management with a responsibility in the banking sector,
- Presenting the enterprises' and banks' financial accounts to the public in a secure way,
- Setting the whole banking system and capital market on a sound basis and inducing them to be more competition oriented and stable,
- Increasing competitive equality,
- Forming a more comprehensive approach to handle risks.
- Focusing on international banks, although the basic principles must remain the same for banks on different complexity levels.

The New arrangement intended to construct a structure with more risk sensitivity and elasticity, higher risk sensitivity in calculation of capital and increased incentive and compatibility in regulating the obligations.

Table 1: Comparison of New and Old Arrangements of the Basel Committee

Old Arrangement	New Arrangement
Focused on mono-type risk measurement.	Bring internal risk management methodologies, audits and market discipline oriented structure.
Mono-type model is applied for all of the enterprises.	Provide more flexible application.
Risk-based oriented Capital adequacy structure.	More sensitive to risk.

Reference: Bank Association of Turkey; New Capital Adequacy Arrangement of Basel, Ekim 2002, s.3.

Basel II principles were constructed on the three bases of minimum capital adequacy, control of capital adequacy and market discipline.

1.a. Minimum Capital Adequacy

Minimum capital adequacy was defined in the first part of arrangement. The definition of available capital and the condition of 8% available capital adequacy ratio had remained same in the new arrangement. But sufficient modifications had been made in the denominator of the ratio. Credit risk had been defined in detail, no changes had occurred on market risk, and for the first time, transaction risk had been added (TBB, 2002:5).

$$CapitalAdequacyRatio = \frac{TotalCapital}{(Credit + Market + TransactionRisk(i))} = BankCapitalCoefficient (AtLeast\%8)$$

Two different approaches are suggested for credit risk viz., standardized approach and internal grading-based approaches.

Standardized approach is similar to the present application in 1988, although risk sensitivity is higher. Personal risk weights lean against the category (countries, banks or enterprises) that includes the debtor. But personal risk weights will be determined by the criteria of an international grading enterprise with the new arrangement.

Risk weights had been determined per the different categories in the standardized approach;

1. Risk weights of countries (sovereign claims),
2. Two different options exist for risk weight of banks:
 - Whole banks in a country will be evaluated as one category lower than the risk weight of the country (Banks I).
 - Risk weights are leaned against the grading notes that bank received from grading enterprises (Banks II)
3. Corporation risk weights
4. Risk weights of real-estate credits.

1.b. Auditing to Capital Adequacy

The auditing aims at verifying whether banks have internal methods that can correctly determine the required capital in response to valued risks. Banks must dispose of capital in the ratio of their risks, and the supervisors are responsible for this adjustment. In the case of the use of internal methods, they could take charge of control and intervention. Principles determined for control and audit processes within the New arrangement are:

1. Banks need to develop strategies that can protect their capital amount and a process that can connect their risk profile with their capital adequacy.
2. The control authority must examine, evaluate, monitor, and interfere if necessary, in these processes and strategies.
3. The control authority must provide that banks have minimum capital adequacy.
4. The control authority must interfere before capital adequacy decreases under minimum rate.

The control authority structure must ensure that banks are inspected by an authorized higher authority in terms of operation of activities and system. This control authority is Banking Regulation and Supervision Agency (BRSA). The risk management systems of banks are evaluated, each bank is expected to set up an adequate risk control system in the control process. In Turkey, BRSA was established, related to control of the banking system, Bank 4389 numbered law for the banking risk management system, Risk Management and Audit Techniques Office can simplify to apply the Basel II principles (Beşinci and Kaya, 2005: 60).

1.c. Market Discipline

In the new structure, market discipline will be provided by clear transparency of the banks. To get more information on the banks' risk structure and capital adequacy position, a lucid structure is needed. Coupled with the information on more specific circumstances for credit risk, techniques to decrease credit risk and accept supervision of active security and transparency standards are valid for all banks. All banks are expected to maintain confidentiality as well as transparency in releasing information to the market and concerned parties in the market discipline segment of the system. (Koğar, 2006: 3; Alp, 2005: 59).

2. Financial Markets and Basel II

Recently, on detailed examination of the economic depressions in the world, the main reason for them is obviously the deficiency of the risk management model (Christoffersen and Errunza, 2000: 3-20). In their studies, the Basel Committee focused on risk management on capital markets. Basel II principles are a continuation of Basel I principles. In Basel I, when calculating capital adequacy, only credit risk had been added in the calculation, neglecting market risks and operational risks. Evidently, operational risks of the enterprises using bank credits are significant factors in the return of credits. Evaluation of this risk and its usage in the calculation of capital adequacy are needed in the banking sector. In Basel II principles, this risk is considered when calculating capital adequacy. The method relating to the calculation of the amount of capital required to be kept in reserve against risk assets had partially changed, and new methods had been developed in the field of measurement of credit risk (Yüksel, 2005: 5).

The committee had studied standard and internal grading-oriented methods of credit risk measurement. In this context, the importance of using the standard risk measurement approach had been re-emphasized, and the opinions and suggestions relating to these topics that had been submitted by the market participants and other parties concerned are considered. However, significant improvements have been made in the fields of asset securitization and technical discussions relating to specialization credits and the schedule was rearranged according to this.

According to Basel II principles, credit risk, market risks and operational risks should be considered in the calculation of capital adequacy. Operational risk is the asset suffering encountered by enterprises by the negativity met with in employees, systems applied and control processes (BIS, 2005a, 140).

While operational risks are being evaluated, the political, economic, legal, market and financial risks must also be considered (BIS, 2005b, 24-35; Wyk, Dahmer and Custy, 2004: 264). Market risks are those that are revealed by viable developments in the general economy or the sectors that the banks are active in. Credit risk is the nonpayment risk of the credit granted by the bank. Traditionally, while it is easy to measure the credit and market risks, it is not easy to draw the boundaries and measure operational risks (Rosenberg and Schuermann, 2005: 1-46).

Possible effects of Basel II principles to enterprises and national economies in the process of transition

Necessary preparations regarding the applications of Basel II principles were completed by the banking sector. The changes will affect financing costs, processes of financial reporting and accounting structures of enterprises and necessitating alterations to be made in these areas. New Capital Arrangement aims at more effective risk management, more secure and more effective banking activities along with ascribing new costs to the banks.

Tablo 2: Evaluation Associated with New Capital Arrangement of Basel Committee

Expected Effects of New Arrangement	Costs That New Arrangement Will Cause
Capital requirement will decrease.	The cost and collection of information to form public opinion will increase.
Risk management will improve.	Cost will be a significant issue to establish the required systems and their operation.
Better relations will be developed with systematizer authority.	The cost of collecting the required data will increase.
The relationship between market and credit enterprises will improve.	Cost of operation of systems and hiring of employees will rise.

Reference: Price Waterhouse & Coopers, FS Regulatory Alert, No:1.

1. Basel II In terms of credit cost

The average grading cost of a small enterprise is estimated about 30.000 Euro (Uyar and Aygören, 2006: 59), which can be an unexpected cost load for enterprises. These numbers have the probability of being higher than expected, as according to research done, the cost of Basel II application is estimated to be higher than expected in terms of both enterprises and banks (Mearian, 2005: 48). The general effect of credits to enterprises and markets are listed below:

- The credit cost will change for enterprises that used credit, depending on their grading note with the Basel II application (Mısırlıoğlu, 2006: 30). As the grading notes decrease, the credit risk and the cost credit will increase and it will become difficult to get credit for the enterprise concerned (Yüksel, 2005: 37). Grading enterprises will decrease the grading notes of the enterprises which have insufficient equity capital structure (Uyar and Aygören, 2006: 61), indicating that the credit costs of these enterprises will be higher. However, enterprises having high grading notes will be able to provide financing at low interest rates (Banks Association of Turkey, 15.01.2006).

- Mortgages which are approved today will lose ground with the Basel II principles. In this context, enterprises with high management quality, strong financing structure and the ability to present required information adequately and on time will be able to use credit under better circumstances.

- Basel II principles will force enterprises to institutionalize. Therefore, the Basel II principles can enable enterprises to attract interest from foreign capital movements by making it easier to find foreign partners for enterprises.

1. Effects of Basel II criteria to market institutionalization and accounting systems of enterprises

The effects of Basel II principles on the accounting structure of enterprises can exist in point of the abolition of the effects of tax laws in accounting applications and in point of the implementation of corporate governance applications. The Basel II principles are also expected to significantly affect the financial reporting processes of enterprises. At this point, the transparency of the financial reporting process, independent audit, internal control system, internal audit and risk management will be more important for enterprises. The Basel II principles should be expected to cause significant changes. In this context, the effects of Basel II principles on the internal economic system and institutionalization, accounting and the other systems of enterprises are sorted below:

- Application is predominantly seen in terms of tax regulations in Turkey, due to the lack of basic standards, which will find use in the financial reporting process. Financial accounts focused on taxes however, fail to reveal the truth. Implementation of accounting standards in application is critically important to the reliability and transparency of financial accounts that the Basel II principles predict (Kođar, 2006: 21).
- Corporate governance principles which are equality; equal treatment to allottees and beneficiaries in all activities, transparency; announcement of financial and qualitative information concerning the enterprise on time, accuracy, definitive and consistent to public, accountability; necessity of rendering accounts to the shareholders by the management, responsibility; compatibility of all the activities of the enterprise with regulations, main agreement and inter-corporate arrangements and their control are accepted in the Basel II principles (Yüksel, 2005, 37; Uyar and Aygören, 2006:63).
- Basel II criteria will contribute to transparency in preparing the financial accounts of enterprises. Basel II principles require grading enterprises to analyze the financial reporting and financial accounting processes. According to Basel II principles, cooperation which will be established between banks and enterprises in the financial reporting process as the basic condition to provide transparency (Uyar and Aygören, 2006: 65). In this context, enterprises need to submit all of their financial information to the banks and concerned grading enterprises on time, adequately, with transparency, and in a secure manner.
- Independent audit applications will become widespread within enterprises.
- Today, internal control system and internal audit have become necessities. Internal audit, imperative only for banks and stock brokers will become a property in request by the Basel II principles. Thus, enterprises need to set up an internal audit system.
- Due to mushroom growths in the economy, enterprises need to discover new strategies to secure their competitive advantages. Risk management and risk-focused audit head the list of these strategies (Kishalı and Pehlivan, 2006: 76). Recently, accounting and financial reporting scandals added to the burden of the risk management department of enterprises (Beasley, Clune and Hermanson 2005: 522). However, the risks which each enterprise will be exposed to, display an array of varieties, based on the varying nature of the enterprises. Thus, enterprises need to construct a specific risk model, which could be a static risk model or a dynamic risk model, which is more prominent of late (Fehle and Tsyplakov, 2005: 3-47). Researches on this subject revealed that enterprises, which with an adequate risk management system, overcame the adverse circumstances (O'Donnell, 2005: 177-195). According to the Basel II principles, the grading notes of enterprises with adequate risk management systems will be of a higher order than the others.

Conclusion

Applications of the banking sector are expected to undergo changes in the upcoming years with the Basel II principles. The basic point of change is the criterion which the bank sought when giving credit. This process will affect the economic systems and enterprises that provide financing from the banking sector. According to evaluations of the Institute of International Finance on the effects of the New arrangement to the global markets;

- Increase of debtor-credit quality will create a formal credit culture.
- Improvements in trusts related to international information resources will provide opportunities to widen and deepen capital markets.
- It will induce an increase in market discipline, transparency and competition.
- Fundamental transformations in customer relations and product pricing will occur.

However, the effects of this arrangement on the economic systems of developed countries will be a far cry from the effects it will have on the economic systems of developing

countries. It can also have different effects on international banks and other banks. In this context, continuing discussions and evaluations are given below;

- The most important effect of the New arrangement: banks will need to review their capital position.
- Besides, banks will need to publish more comprehensive announcements for public opinion.
- Both systematizers and banks need logistic and economic resources to apply and audit the new capital arrangement.
- The internal grading-oriented approach will cause serious problems in terms of the banks which show no activities on the international scenario.
- When the new capital arrangement was evaluated in terms of developing countries, it was felt that it would have significant effects.
- Increase in the capital requirements of banks is anticipated in countries, like Turkey, which will lose the advantage of being a member of the OECD.
- Many banks are under criticism for not being prepared with human resources and data set to use the internal grading-oriented approaches in credit risk measurement in the New arrangement.
- the number of grading enterprises showing activities and having adequate reliability are known to be too low, if the applications of the standard approach of banks is assumed to be presumptive.
- It is suggested that the usage of government notes as a ceiling of grading can limit the credits during an economic crisis.
- The prescribed benefits for short-term credit are considered relatively limited in the standard approach.

In this context, the subjects that the enterprises in developing economies will be affected by this process and the remedial measures to be adopted are listed below:

- Profitability of an enterprise having high notes will be affected in a positively, as credit costs change based on the grading notes that the enterprises possess. Mortgages like real-estate mortgages in the process of loans contracted will lose ground. The enterprises with high management quality, strong financing structure and ability to present necessary, sufficient and timely information will be able to use credits under better conditions. This means that enterprises need to focus on the activities that would raise their credit notes. Therefore, enterprises need to strengthen their capitals, ensure transparency in their accounting systems and set up corporate governance in their enterprises.
- Basel II principles will push family corporations to institutionalization. This will enhance making profits from the movement of foreign capitals for enterprises. Thus, inflow of foreign capital will accelerate and affect the economic growth positively. In this context, enterprises must give importance to institutionalization for their own benefits and national economy.
- Credits fewer than 1 million Euros are included in retail portfolio so that their risk level is low. If credits fewer than 1 million Euros are separated in different banks it can accrue some cost advantages; however, at this point, transaction costs must be considered. Also, the appraisal methods used by the banks can offer some advantages to the enterprises. For this, enterprises must work along with the banks that employ methods to their advantage.
- Enterprises must provide their financial and non-financial information to the banks and their related grading enterprises on time and in a clear, transparent and accredited manner. Simply stated, financial reporting process must run with transparency.
- Independent audit provides information on the reliability of financial accounts and financial reporting process. For reliability of the financial accounts, enterprises should be investigated by some independent source. Also, enterprises need to establish some kind of internal and external audit systems.

- Enterprises with risk management system will have higher grading notes, so such enterprises must establish dynamic and self-related risk models. Grading notes offer information on other enterprises' risk degree, so grades can be indicative of the operation policy of the enterprise. Especially in selling, buying and procurement policies, it can provide different options. Obviously, working with higher graded enterprises can decrease the operation risk. With the Basel II application, enterprises appear to abandon their traditional ways. They must establish more professional, transparent, informative, reliable management structure and financial reporting process.

In the immediate future, enterprises with unregistered applications, lag behind the updates in the financial world, failing to upgrade the financial structure, neglecting to upgrade their institutional performance, possessing weak internal control structure, and therefore will be unable to survive. If too many enterprises are unable to adopt this process it will slowly adversely affect economic systems. This could also affect the economic systems in other countries as well.

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