

A Research On The Effects Of Basel Criteria On Sme's And Awareness Of This Effect By Turkish Financial Professionals In The Turkish Banking System

Authors

Aysel Sapankaya^{1*}, Can Tansel Kaya²

Affiliation

¹Master's Program in Business Administration, Graduate School of Social Sciences, Yeditepe University, Istanbul, 34755 Turkey.

²Business Administration, Graduate School of Social Sciences, Yeditepe University, Istanbul, 34755 Turkey.

*To whom correspondence should be addressed; E-mail:

Aysel.Sapankaya@yeditepe.edu.tr

Abstract

The aim of this study is to find out the effects of Basel Criteria on the banking system and SMEs, and how much they are known by the bankers and accounting experts who are the actors of the financial system. In this research, firstly, the role of Basel Criteria of SMEs in Turkey in the crediting process, the collateral structure and the credit pricing processes in the lending stage were examined. In the second part, a survey was conducted with 69 experts (bankers and accountants) who are experts in their fields about the extent to which they create awareness about the benefits of these effects, and the results were analyzed.

In the study, it is explained why the BIS and Basel Criteria are needed, how they emerged, why and how banks try to secure themselves. It has been explained how SMEs in Turkey are affected by these regulations and how they should create a collateral structure especially for bank loans, and which issues are taken into account by banks in loan pricing during the loan utilization phase.

In this context, Basel 1, Basel 2, Basel 3 were examined in detail. In addition, SMEs in Turkey have been examined in general terms. In the last part, the survey questions and the results were tried to be interpreted with frequency analysis using the statistical program SPSS. According to the analysis; It has been concluded that the Basel Criteria are extremely important and effective for SMEs in the Turkish Banking System.

Keywords: Basel Criteria; BIS; Credit; SME; SME Banking. SPSS.

INTRODUCTION

The importance and business volumes of banks in the field of economy is indisputable. This situation brings with it many risks that are experienced or likely to be experienced in the financial system, which has a fragile structure. It is not possible for banks to remain indifferent to such negativities, and it is a natural attitude to protect themselves. At this point, it is seen that banks try to have a stronger financial structure and protect their reputation. It has been understood that this situation is only possible by keeping their capital at a sufficient level. Because the more capital a bank holds, the stronger it will survive and the more robust it can stand in the face of negative scenarios.

Although it is known that the main causes of financial crises stem from banking activities, banks, which are the building blocks of the financial system, have undergone radical changes with each new regulation. The common goal of these changes is to create a strong banking sector; to ensure the smooth functioning of the financial system and the immunity of financial institutions against crises.

It is an important issue that the financial system, which is constantly developing with globalization, has a more stable and transparent structure. For a stronger financial and banking sector, the concept of 'transparency' has become increasingly important with the Basel Regulations. Another important issue for banking is 'financial stability'. 'Financial stability' plays an important role in the operation of funding the market by lending money with the money they borrow from their customers under the name of 'deposit', together with the equity capital of the banks, and in ensuring this commercial cycle without any problems. The concept of financial stability is vital for banking, as banks have a high responsibility to individuals and institutions to whom they borrow and lend. The Basel Criteria have a great contribution in terms of gaining importance of this understanding in financial circles (especially in banks) and in bank customers (firms) over time. The importance of capital adequacy ratios for banks was realized through these criteria and banks tried to continue their activities by establishing special units to comply with these criteria. As a result of these studies, banks first integrated the necessary regulations into their own structures; then, as a reflection of this, they try to adapt it to their customers (businesses) that they aim to achieve profit and efficiency.

RESULTS

The globalization that emerged from the beginning of the 1900s, the crises experienced spread rapidly among the countries and caused unpredictable harmful results. Problems such as banks' borrowing more than their current capital, lack of adequate regulation and supervision mechanisms in transactions, and unpredictability of the risks undertaken were influential in the establishment of the BIS (1930).

As a result of the first examination of the Basel committee, it was concluded that most of the banks operating in international markets work with insufficient capital (Aksoy, 2010). The most important initiative for international harmonization of banking regulations has been the Basel Criteria. The basis of the Basel Criteria is the establishment of rules that will ensure that banks have sufficient capital ratios.

In 1988, the Basel Committee determined the Basel I Criteria to harmonize the methods used in the calculation of national capital adequacy for the first time, and named these criteria as the "Capital Adequacy Consensus". intended (Figure 1). Thus, it is suggested that the ratio of bank capitals to risky assets, that is, the Capital Adequacy Ratio, should be at least 8%. This rate has been determined as 12% by the BRSA in our country.

Although the Basel I Criteria only covers the capital adequacy regulation, it is effective in strengthening the structure of the banking sector, but the inability of the criteria to respond quickly enough to the increasing needs of the sector and the economic problems experienced have brought the need for a new regulatory standard to the agenda. In accordance with this need and the dynamic nature of the markets, the Basel Committee published the new consensus Basel II in 2004 (E.Aslan Külahi, G. Tiryaki, A.Yılmaz, July 2013) (Figure 2)

Credit risk is the risk of the loan extended by the bank, the security purchased or anythe partial or complete non-return of the money given in any way,

Market risk depending on the volatility in the financial markets, interest rates, foreign Exchange as a result of changes in exchange rates and stock prices, a bank's loss risk of losing or losing capital,

Operational risk on the other hand, is the inoperable or inappropriate internal processes, people, the risk of damage that may arise due to systems or external factors (TBB, 2006)

Basel II consists of three main parts:

1-First Structural Block: Minimum Capital Requirement

2-The Second Pillar: Supervisory Authority's Review

3-Structural Block Three: Market Discipline (Figure 3)

The differences between Basel 1 and Basel 2 are clearly stated on the BRSA website as follows:

- The "club rule" in Basel-I, which is based on the principle of determining the capital requirement in terms of credit risk according to the criteria of being an OECD country or not, is abolished with Basel-II.
- In Basel-II, credit risk is determined according to the rating grades of the borrowers. While some methods in Basel-II use the ratings given by independent rating companies (eg Standard & Poors, Fitch, Moodys, etc.), some advanced methods (subject to the banking supervisor's approval) take into account the ratings given by banks based on their own assessments.
- In Basel-I, there is only a capital requirement for credit and market risks. In Basel-II, in addition to these risks, operational risk capital requirement has been added. In Basel-II, operational risk is defined as the risk of loss resulting from inadequate or disrupted internal processes, people or systems, or external events (for example, losses resulting from embezzlement, earthquake, data processing failure), and banks also provide capital for these risks. In Basel-II, banks are required to evaluate their own capital adequacy, and both the capital adequacy and the bank's self-evaluation process are requested to be supervised and evaluated by the banking supervisor.
- Within the scope of Basel-II, it is obligatory to disclose detailed information specific to Basel-II regarding capital adequacy. This issue is not included in Basel-I.(BRSA, 2005)

Although the Basel II Criteria have eliminated a significant part of the criticisms against the Basel I Criteria, they have also been the target of many new criticisms on a global scale. The rigidity in the risk coefficients, which is one of the most criticized aspects of

the Basel I regulation, disappeared with the introduction of credit rating agencies, but this situation brought new problems with it. Failure of rating agencies to accurately measure the dimensions of risks causes failure to take timely measures against crises. As a matter of fact, after the crisis began to occur in countries with very good ratings in the Asian Crisis, the country ratings were downgraded and this situation was subjected to serious criticism (Griffith and Spratt, 2011).

After the financial crisis that emerged as a result of the fluctuations in the housing markets in the United States in mid-2007 and spread all over the world, we are living in a period in which countries are still trying to recover.

Recent developments, one of the biggest financial crises the world has faced, have brought up the debates about the inadequacy of financial regulations, which seem extremely detailed and complex from the outside (Tiryaki, 2010).

In order to make the financial crisis both very costly and troublesome, and to make the banking and financial system more resistant to future crises; demonstrated the necessity of important reforms such as increasing liquidity, capital quality, taking into account the economic conjuncture and increasing the capital requirement (BDDK, 2010) After the global crisis, the Basel Committee of Banking Supervision, of which our country is a member, started to work on regulations in order to increase the resilience of banks against shocks and to strengthen their capital. As a result of these studies, documents called Basel III were published (TCMB, 2010)

Basel III, which was announced by the Basel Committee on September 12, 2010, came into effect gradually in 2013-2019 (Figure 4)

Basel III is not a "revolution" that completely changes the capital requirement calculation method like Basel II, but it is an "additional set of regulations" that completes the deficiencies of Basel II, especially in the 2008 financial crisis (BRSA, 2010).

In the new set of rules, there are topics such as the standards for increasing the quality and quantity of capital, which is important in the calculation of current equity and capital adequacy, and the creation of an additional capital buffer to be used depending on the periodicity. In addition to the aforementioned issues, new regulations have been introduced on issues such as liquidity adequacy and non-risk-based leverage ratios,

which were previously seen as the biggest shortcomings of Basel II implementations (BRSA,2010).

To summarize, the issues that Basel 3 foresees changes (BRSA, 2010):

- I-More qualified capital,
- II- Quantitative increase in capital adequacy,
- III. Creating a capital buffer,
- IV. Non-risk-based leverage ratio,
- V. Liquidity arrangements.

The Impact of Basel Criteria on SME Banking and SMEs

It is obvious that the Basel Criteria will affect SMEs the most in terms of bank loans, which are a source of financing. Bank loans are of great importance in eliminating the resource problem for SMEs. It is as if bank loans are as vital for SMEs as “breathing”. In the profession, we express this importance as “water of life”. with Basel Criteria. When we correlate it, 3 important issues come to the fore in SME Loans. These; risk rating of the enterprise (scoring, rating), collateral and pricing.

Rating Effect (Scoring, Rating)

The risk rating generally used by banks in practice is as follows: 1 represents the lowest credit risk and 4 represents the highest credit risk. The best grade given in the analysis is 1 and the worst grade is 4. In practice, credits are allocated mostly to CC and higher companies. C group companies are under the authority of the board of directors. Firms with a D grade are not allocated loans as per the Bank's policy. It is seen that the companies that banks give loans to SMEs have mostly CCC, B, BB, BBB and rarely A grades.(Figure 5)

The Banks Association of Turkey emphasized the importance of the following points for SMEs to have a good risk rating: “In the Basel II system, SMEs have a high rating by adopting corporate governance principles, not having unregistered activities, having a strong financial structure, and by banks and banks. Factors such as the ability to

provide the data requested by the rating agencies in a timely and accurate manner will be decisive.”(TBB, 2004).

Today, these factors are very effective for SMEs to have a good risk score. The points to be taken into account in SME balance sheets, especially in preventing informality, are as follows: (Figure 6)

Collateral Effect

It is essential that loans or liabilities are paid on time. If the loans are not paid on time, the loan will be in default and banks will have to resort to legal means to collect their receivables. The concept of collateral for banks gains more importance in this difficult period. In banking, collateral refers to the rights arising from all kinds of assets, guarantees, sureties and contracts that ensure all or a part of the bank's receivables against the risk of non-repayment of the loans. Banks demand this in order to reduce the probability of loss of risks (financial, economic, structural risk, etc.) that they may encounter after the lending process. There are 4 main reasons for obtaining collateral by banks. These are:

1-) It is aimed to reduce the risk of non-repayment of the loan after financial analysis and other evaluations (morality, intelligence, etc.).

2-) Experiences, the necessity of obtaining collateral arises as a result of the experiences of the banks in the past.

3-) Forcing the customer, the existence of the collateral and its ability to be converted into cash are effective as a deterrent factor in directing the borrower to comply with the loan conditions and pay the loan. This is especially common with customers who mortgage their home. Borrowers who make more effort to pay their debts in order not to lose their home (especially if it is a family residence) in economic hardship are frequently encountered.

4-) Profitability (efficiency): It is important to increase the profitability of banks or to give a better price to the customer in loan pricing.

Pricing Effect

So far, I have tried to explain the two main elements used in risk measurement with the Basel Criteria. The first of these is the "firm rating score", which is determined as a

result of the evaluation of the financial data and qualitative factors of the enterprise. The second is the collateral structure, which is evaluated together with the risk perception as well as the rating. Efficiency is the basis for the existence and continuity of the Banks, as in every business that we have included in this section and will consider as the third effect. We can also express this as the profit that a bank obtains from its customers or wants to make. Profitability is mostly measured and evaluated by the marketing units of the Banks. This issue emerges with the pricing process in product and service sales, which is the most important item of these units.

In the marketing units of the banks, the rating, collateral and profitability aspects of the enterprise are very effective in the pricing process. While determining the interest and commission rate of the loan, the first considerations are the credit rating of the enterprise, the second is the existing or the collateral to be received, and the third is the current or potential profitability. Pricing is made by synthesizing these 3 data. Thus, the credit rating sheds light on the analysis of the loan requester as "high risk" or "low risk" and plays an important role in the pricing process. In other words, the lower the credit rating of the firm, the lower the bank's risk, the more capital it will hold in return, thus depriving more of its resources (as long as the inability to transform into return on assets or reduce costly resources in liabilities) of return. (TBB, 2006)

With regard to collateral and pricing, Banks display more appropriate and flexible pricing in businesses with strong collateral, and higher and more stringent pricing in customers with weak collateral. Because if the loan is not repaid, it is known that the return of the loan is provided faster and with less loss with a strong collateral, while the return of the loan with weak collateral is much more difficult and costly. Naturally, it is seen that banks reflect this additional cost to be incurred as interest and commission at the pricing stage.

The Importance and Value of SMEs in the Turkish Economy

Small and medium-sized enterprises (small and medium-sized enterprises) whose value is recognized more and more in developed and developing countries to strengthen and grow sized enterprises (SMEs) more than large enterprises. A lot of study is being done for this purpose. Growth with a constantly dynamic and flexible movement SMEs, which tend to are the most important institutions. It would be more beneficial to explain the place of SMEs in the Turkish Economy with TUIK.(TUIK,2020)

3 million 295 thousand enterprises operating in the industry and service sectors are classified as SMEs enters. SMEs constituted 99.8% of the total number of enterprises in 2020. With this, account for 72% of employment, 49.2% of personnel costs, 49.4% of turnover, production accounted for 42.7% of its value and 41.3% of added value with its factor cost. by 2020. SMEs accounted for 36.4% of total exports and 24% of imports. 47.8% of exports made by SMEs in 2020 to European countries, 34.3% to Asia carried out to their countries. SMEs import 49.6% of their imports from Asian Countries and 40.2% made from European Countries.

Strengths and Weaknesses of SMEs

Thanks to their small and flexible structures, SMEs easily adapt to the rapidly changing conjuncture. Therefore, SMEs are of great importance for both developing and developed countries is doing. However, from time to time serious economic fluctuations, especially in Turkey, and SMEs are even more important for countries facing crises exists (N. Hacıevliyagil, 2016). The contributions of SMEs to the economy can be examined under 5 main headings (ATO, 2007)

- Employment creation
- Quickly adapt to changes,
- To enable product differentiation,
- Encourage entrepreneurship,
- Supplying intermediate goods to large enterprises.

In addition, the development of national economies and the realization of sustainable growth structural advantages of SMEs, which are extremely important for with lower capital establishing a closer relationship with customers and personnel, reducing the internal bureaucracy stock problems and products not being sold because they are less and are made to order considered to be less risky (Zengin, B. 2010: 62-63) With these structural contributions, there are weak and problematic points of SMEs. Of these some:

- Since the sales of SMEs are not stable in general, they are used both in decision making and in cash, have a hard time balancing.

-Management problem in SMEs, raw material acquisition problem, not finding skilled workers, R&D not being aware of their work and not being able to allocate a budget, not enough investment in technology (Zengin, B. 2010: 64-65). Failure to do so, inadequacy of financial planning and financing problems are the main problems encountered.

Financing Problem and Financial Management Approach in SMEs

The need for financing in SMEs is a very important problem; especially equity and business lack of capital is common. SMEs, new investment, growth stage or they are mostly faced with this problem in the liquidity crunch during the crisis periods. These problems equity is generally provided by SMEs from the personal assets of the company partners (with the personal savings of the partners or the sale of a valuable real estate owned by them), acquisition of new partners, government incentives or financial institutions that can provide equity to the company. It is tried to be overcome by providing borrowing at appropriate interest and maturity. Apart from this, it is not directly related to financing; frequently, albeit indirectly, related to finance, one of the problems is that SMEs have competent personnel with effective financial management is the absence. Generally; It is a financial system established at the will of the company's partners. Because they are the owner of the business and are usually the only authority. Most business owners, although they do not have an education and professional background, the job is carried out by family elders and even their fathers. They manage finance with the old-fashioned 'black book' method, as he learned from their side. Some there is no financial unit in enterprises. Financial management, mostly still firm entrusted to the follow-up of close relatives to the partners or persons responsible for administrative affairs such as pre-accounting has been done. In such cases, financial management in SMEs is not carried out by experts irregular cash flow, poor financial literacy, lack of balance sheet and financial analysis information deficiencies such as inadequacy and lack of institutionalization are frequently encountered.

Financial Resources Provided to SMEs and Share of Banks

SMEs finance their activities mostly with their own resources, that is, with equity. However, they prefer bank loans when their own resources are not enough (Kutlu, H. A. & Demirci, N. 2007).

As can be seen from the Figure 8, it is seen that 74,6% of the total enterprises in Turkey turn to their own resources to find resources, and 66,9% to commercial bank loans. Therefore, the financial resources provided by the banks to the enterprises have a very large share. The shares of banks and other financial institutions in total asset size in the financial sector between 2014 and 2017 are as follows:

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DISCUSSION

Research data is based on around 300 bankers and accountants responses on the subject of the Basel Criteria. These bankers and accountants are employed in Istanbul, Ankara, Bursa, Kocaeli, Denizli and other provinces. Questionnaire was sent to all of the bankers

and accountants, 69 out of 300 bankers and accountants were reached for the survey and the response rate was just over %23.

Research variables are each of the Basel Criteria totaling 20 variables. In addition to the 20 variables, there are additional 2 open-ended variables. There are 22 research variables in total.

The questionnaire is composed of three sections.

The first section asks the respondents of the socio-demographics such as the title, employed in provinces, and the professional experience of the respondent.

The second part of the questionnaire consists of 20 items focusing on the importance and effects of the Basel Criteria for SMEs that measure the necessity of the questionnaire. Each item from 1 to 12 questions a 5-point Likert type scale was used, ranging from 1 “not important” to 5 “very important”. The measurement has been developed by the researcher based on the Basel Criteria. From the 13th to the 18th questions, multiple-choice answers were presented and it was tried to learn the opinions of the participants on the compliance of SMEs with the Basel Regulations.

In the third part, 4 interrelated questions were asked, two of which were open-ended. In this section, it has been tried to learn the opinions of the participants about the reasons by asking whether the Basel Criteria are necessary for SMEs and which criterion is the most effective.

Demographic Characteristics of the Participants

69 participants in the Statistics section and there are no missing values. The total numbers and % values in the profession variable. 91.3% of the participants are bankers and 8.7% are accountants. While 63.8% of the participants have 5-15 years of experience, 27% have more than 15 years of experience and 6% have less than 5 years of experience. 73.9% of the participants were from Istanbul, 2.9% from Ankara, 1.4% from Bursa and 21.7% from other provinces.

According to the Figure 9, it is seen that the average values for the answers to 5-point Likert-type questions in the range of 1-12 questions are at the level of 4.0628, and this average is spread around the "important" option. The fact that the standard deviation and variance values are generally below 1 shows us how compatible the data are.

Considering that questions 13-18 are different from likert type questions and each answer may differ according to the question, no comments were made by looking at the mean value, standard deviation and variance data.

Question 1: The importance of Basel Criteria in the economy of the world and our country?

56,5% of the participants answered 'very important', 40,6% 'important'. The remaining 2,9% answered as 'not important' and 'undecided'.

Question 2 : Impact/contribution of Basel Criteria on SME Banking and SMEs?

55.1% of the participants answered 'very important', 37,7% 'important'. The remaining 7,2% answered 'less important' and 'undecided'.

Question 3: The role/importance of capital adequacy ratios of Basel Criteria in bank balance sheets?

55,1% of the participants answered 'very important', 42% 'important'. The remaining 2,9% answered as 'not important' and 'undecided'.

Question 4: The effect of Basel Criteria in the decision of banks to lend to SMEs?

Participants 44.9% answered as 'important', 40.6% as 'very important', and 10.1% as 'less important'. The remaining 4.4% answered as 'not important' and 'undecided'.

Question 5: The role/importance of Basel Criteria in the collection of bad loans that cannot be collected after banks lend to SMEs?

Participants 47.8% answered as 'important', 34.8% as 'very important', and 11.6% as 'less important'. The remaining 5.8% answered as 'insignificant' and 'undecided'.

Question 6: Contribution of Basel Criteria to sustainable growth in SMEs?

56.5% of the participants answered as 'important', 27.5% as 'very important' and 11.6% as 'less important'. The remaining 4.4% answered as 'insignificant' and 'undecided'.

Question 7: The effect/contribution of Basel Criteria on financial costs in SMEs?

50.7% of the participants answered as 'important', 23.2% as 'very important' and 18.8% as 'less important'. The remaining 7.3% answered as 'insignificant' and 'undecided'.

Question 8: Are Basel Criteria well known and applied by banks in global crises?

40.6% of the participants answered 'important', 50.7% 'very important', the remaining 8.7% 'less important' and 'undecided'.

Question 9: Considering the capital adequacy ratios, whether the banks are domestic, public or private?

43.5% of the participants answered 'important', 26.1% 'very important', 17.4% 'less important' and 13% 'unimportant'.

Question 10: Adaptation of SMEs to Basel Criteria in Turkey?

42.9% of the participants answered 'important', 42% 'very important', 7.2% 'less important' and 5.9% 'unimportant' and 'undecided'.

Question 11: In your opinion, what the Basel Criteria brings to the financial system should be sufficiently known by SMEs?

52.2% of the participants answered 'important', 34.8% 'very important', 8.7% 'less important', the remaining 4.3% 'unimportant' and 'undecided'. has given.

Question 12: Is it important to constantly revise the Basel Criteria and to implement Basel 4 very soon in terms of creating insecurity and/or financial instability in SMEs?

50.7% of the participants answered 'important', 24,6% 'very important', 10,1% 'less important', the remaining 14,5% 'unimportant' and 'undecided'. has given.

Question 13: From whom do SMEs first learn about the existence of the Basel Criteria?

The response was 47.8%, where SMEs first learned of the existence of the Basel Criteria from 'banks'.

Question 14: In which subject do SMEs in Turkey have the most difficulty in adapting to the Basel Criteria?

In Turkey, the most difficult issue in complying with the Basel Criteria for SMEs was the answer to 'Preventing informality' with a rate of 31.9%. In the second place, with 20.3%, 'domination of legal regulations' and 'creating an accounting system and infrastructure' were marked.

Question 15: What should be the priority issue that SMEs in Turkey should develop in order to make the transition period to Basel Criteria better?

The answer was 'to prevent informality' with 29% in the first place, and the answers to dominate the legal legislation with 23.2% were given in the second place.

Question 16: SMEs in which sector provide the most comfortable transition to the Basel Criteria compliance process?

With the highest rate of 53.6%, the Basel Criteria were answered as the most comfortable sector for 'SMEs that make their purchases / sales predominantly to corporate companies, regardless of the sector, and SMEs with foreign connections and / or foreign trade'.

Question 17: SMEs in which sector have the most difficult transition in the Basel Criteria compliance process?

In the survey, it was accepted that the sector with the most difficult transition in the compliance process of SMEs with the Basel Criteria was the construction contracting sector with a rate of 31.9%.

Question 18: What is the issue/problem that SMEs are most affected by during or after the decision process of banks to lend to SMEs with Basel Criteria?

With the Basel Criteria, the problem that SMEs are most affected by during or after the decision process of banks to lend to SMEs: Rating-Scoring-Scoring: It is accepted that SMEs do not have sufficient and necessary grades for crediting

According to the relevant questions and answers in Figure 10, the mean value, standard deviation and variance data are compatible.

Question 19: Do the Basel Criteria need to be better known and applied by SMEs?

To the question of whether Basel Criteria should be better known and applied by SMEs, 65 people answered 'yes' with 94.2%.

Question 20: If your answer to question 19 is No, explain why? If your answer is yes, why and what do you think is needed for this?

The following answers were given to this open-ended question 20, which was asked depending on the 19th question:-Trying to comply with the Basel Criteria is necessary for the sustainability of commercial life for many years for SMEs.

-It is enough for them to know, but it is not enough on its own. Banks and legislators need to introduce incentives for the implementation of this system.

-It will contribute to less borrowing with more affordable costs. For this, more effective finance departments should be established in SMEs and finance management should be managed by personnel with high financial literacy.

-Providing direct information to SMEs and increasing awareness of public service advertisements or banks.

-If the SME knows the Basel legislation and how this legislation is implemented by the bank, it will be easier and more understandable to access credit.

-I think that the whole financial sector should work on the same system and everyone should have the same consciousness. In this, a standard training and certificate can be offered.

Question 21: Which criterion in Basel Criteria affects SMEs the most?

In the Basel Criteria, the criterion that most affects SMEs is accepted as Basel 2 with 46.4%.

Question 22: What is the reason for your answer to question 21?

The following answers were given to this open-ended question 22, which was asked depending on the 21th question:

- Firm rating and collateralization is in question in Basel 2.
- It is Basel 2, with Basel 2, more effective applications have been brought to the Banks and SMEs.
- Basel 2 criteria are the criteria that affect SMEs the most, as they include parameters with a high risk perception.
- More stringent controls are included in Basel 3, which was prepared due to the inadequacy of Basel 2.
- Basel 3: Coming of more comprehensive coercive rules.
- Basel 2, rating and collateral.
- Basel 3 being the last applied criterion.
- Basel 2, financial news.
- Basel 2, terms and obligations are more difficult.
- With Basel 3, rational control mechanisms were developed for additional liquidity.
- Basel 3 have strict rules
- Basel 3, but I do not have detailed information about the criteria.
- Basel 3: SMEs with higher ratings incur lower costs.
- Basel 1 important.
- Basel 2 due to its capital adequacy.
- Basel 3 due to capital adequacy changes.
- Basel 3 due to the capital adequacy ratio,
- Basel 1 - Uniform valuation is not sufficient to evaluate different sectors.
- I think the basic adjustments were made in Basel 2.
- Basel 2- The most applied system in Turkey.
- Basel 3- Being Coercive

CONCLUSION

The direction Basel criteria gives to the banking system and SMEs is quite clear. In this study, it is emphasized how much these effects are known by the bankers who are a part of the financial system and the accounting experts who are the regulators of financial reporting. In particular, this awareness has been researched through its impact on SMEs, which constitute 99.8% of companies in Turkey. The results of the survey study are not surprising. Considering the answers given, the answers to the first 12 questions (related to the place and importance of the Basel Regulations for SMEs) using a Likert type scale were predominantly and very important. The remaining 13-18. The question and answer within the range of questions should be evaluated on its own merits. It is clear that the answers given at this point are consistent. Although the answers to questions 14-15 and 16-17 are the same, the questions are different. Participants understood these questions correctly and did not give contradictory answers. We can see the same attention in the answers given to questions 19-21. As a result, it is understood that the level of recognition regarding the subject we are trying to reach is quite high.

In addition to the survey results, the answers given to the questions 'Better knowing and applying the Basel Criteria by SMEs' and 'The criterion that most affects SMEs in the Basel Criteria' and the answers to the open-ended questions related to these questions are also satisfactory. Better knowledge and application of Basel Criteria by SMEs forms the basis of our work. Emphasizing the importance of this with a rate of 94% also supports the study. It is also natural that Basel 2 has impressive criteria. It is clear that the most effective and systematic decisions in the banking system are taken with these regulations.

I would like to thank the participants once again for their meticulous contributions.

In addition to contributing to the study, I would like to add the following information. With the Basel I Criteria, which includes regulations on minimum capital adequacy, which was first published in 1982, the capital ratio that banks should allocate against possible risks is determined as 8% and above. It has been reported that capital adequacy below 8% may put banks in trouble in case of possible crises. Basel I Criteria were criticized and a new regulation was needed due to situations such as the low risk sensitivity of the Basel I Criteria, the use of a single risk measurement method and the functioning of the club member rule. (Cicioğlu and Çil, 2019)

In 2006, different concepts were used in risk measurements with the Basel II Criteria. In the calculation of risks, the concept of operational risk is included in credit and market risk. Thus, the Basel II Criteria appear as a more sensitive regulation against risks.

The global financial crisis experienced in 2008 affected the whole world. Especially in the banking sector, there were great shocks and some important banks came to the brink of bankruptcy. The Basel II Criteria, which were in force in this period, started to be criticized. After the crisis, new regulations were needed and Basel III Criteria were published.

Basel III Criteria brought new regulations. Increasing the amount and quality of capital, establishing leverage ratios, regulations regarding liquidity and creating cyclical capital buffers are some of the innovations.

We see that the Basel regulations have a history of about 40 years from past to present. It is known that Basel 4, which changed its name to Basel 1-2-3 over time, is likely to be created in the near future, although its infrastructure is not yet completed. The common aspect of these regulations is; It is a continuous effort to be developed with the improvement policies determined by the financial actors in order to eliminate the economic crisis and disruptions that developed in the process. Although the name of the regulations changes; It seems that the policies to be improved and the regulations to be made will never end. I liken this situation to diseases and epidemics that mankind has been fighting for centuries. As a result of every disease and epidemic, there is a treatment and vaccine over time, but the emergence of new types of viruses and diseases cannot be prevented after years. As a result, new treatment and vaccine studies are started. It is a fact that since Adam Smith, who is accepted as the father of economics, we are constantly in the process of new economic wars (crises) and we are in policies that need to be constantly improved.

It cannot be denied that the Basel Criteria, which act as a vaccine as a result of financial problems, have become more inclusive and effective over time than the previous one. However, it is obvious that economic changes and, accordingly, crises (diseases) will continue, as we are constantly exposed to change in all areas of life. In this case, we can say that the measures and improvement policies will not remain stable. In addition, another important point that needs to be emphasized is that, as in all BIS member countries, financial actors and especially banks have constantly taken financial measures and regulations with the Basel Criteria in Turkey. However, I think that in addition to these regulations, a solution can be developed on the other hand. As an example, it may be in the direction of eliminating the problems we mentioned under the title of "financing problem and financial management understanding in SMEs" in our study. Since our subject includes SMEs, it will help to solve the problem in a different dimension by making more criteria mandatory from the establishment of SMEs. Among these criteria, the partners of the company must be at a certain level of education, have a professional background of at least 5 years in the field, make the finance unit mandatory in the enterprise, and the person who manages the finance must have a good grasp of financial statements such as cash flow, balance sheet and trial balance, if not, being forced to receive training in this field, Issues such as keeping the paid-in capital figure high at the establishment stage and increasing this figure over time, not allowing fictitious transactions in accounting records, establishing stricter rules to prevent informality, making the IFRS system mandatory for SMEs are particularly beneficial for the development of SMEs will be. For Turkish Banking, on the other hand, businesses with more conscious, healthy and strong financial management mean less bad loans, less provision (cost-loss), less problematic customers (less energy and labor loss).

REFERENCES AND NOTES

- Aslan Külahi, E. , Tiryaki, G. & Yılmaz, A. (2014). Türkiye’de Basel I, II ve III Kurallarına Uyum Süreci [The Process of Compliance With the Rules of Basel I, II and III in Turkey]. Öneri Dergisi, 10 (40) , 185-200. Retrieved from <https://dergipark.org.tr/tr/pub/maruoneri/issue/17901/187832BDDK>, (2010). 10 Soruda Yeni Basel Sermaye Uzlaşısı (Basel II), [The New Basel Capital Consensus in 10 Questions (Basel 2)] 1–2. 01.07.2018 Basel Düzenlemeleri . www.bddk.org.tr/ContentBddk/dokuman/duyuru_basel_0001_53.pdf BDDK, “Sorularla Basel III”,2010,
- Cicioğlu Ş. & Çil. C. G. (2019). Basel Criteria Applied in Turkey and Effects of Basel III Criteria on the Turkish Financial System, Political Economic Theory, Vol 3(1) 101.
- Griffith-Jones, S. and Spratt, S. (2001). Will the propo-sed new Basel Capital Accord have a net negative effect on developing countries. UK: Institute of Development Studies University of Sussex Pub.
- Hacıevliyagil, N. (2016). KOBİ’lerin Finansman Sorununa Bir Çözüm Önerisi: Milli Ekonomi Modeli (MEM), [A Suggestion for a Solution to the Financing Problem of SMEs: The National Economy Model]Yönetim ve Ekonomi Araştırmaları Dergisi, 14(3), 32-50.
- TBB, (2006). Basel II Çalışma Raporları [Basel II Working Papers], 2006, p. 58, p.33.) <https://www.tbb.org.tr/tr/ana-sayfa/arama-sonuclari/315/?aranan=Basel+II+chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.tbb.org.tr/Dosyalar/Dergiler/Dokumanlar/58.pdf>
- TBB,(2004). Risk Yönetimi ve Basel II 'nin Kobi'lere Etkileri, [Risk Management and Effects of Basel II on SMEs], p.28–29. https://www.tbb.org.tr/Content/Upload/Dokuman/821/Konferans_KOBI_Kitapçigi.pdf
- TCMB, (2010). Finansal İstikrar Raporu,[Financial Report Stability) <https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Yayinlar/Raporlar/Finansal+Istikrar+Raporu/2010/Sayi+11>

TİRYAKİ, G. (2010). Bankacılık Sektöründe -Basel Sermaye Uzlaşmaları- Sermaye Yeterliliği Standart Rasyosu Gerçekten Yeterli Midir? Kaldıraç Oranı'na ve Daha Güçlü Bir Bankacılık Düzenleme Çerçevesine İlişkin Değerlendirmeler,[Is the Capital Adequacy Standard Ratio Really Sufficient in the Banking Sector -Basel Capital Accords? Evaluations of Leverage Ratio and a Stronger Banking Regulatory Framework] Vergi Dünyası Dergisi, 347. Sayı, Temmuz, s.118-122. – T.C. Avrupa Birliği Bakanlığı.

Zengin, B. Küreselleşme sürecinde KOBİ'lerin Durumu ve KOBİ Destekleri: Türkiye Üzerine Bir Uygulama.[The situation of SMEs in the globalization process and SME supports: An application on Turkey] Basılmamış Doktora Tezi, [Unpublished Doctoral Dissertation), Kadir Has Üniversitesi SBE.

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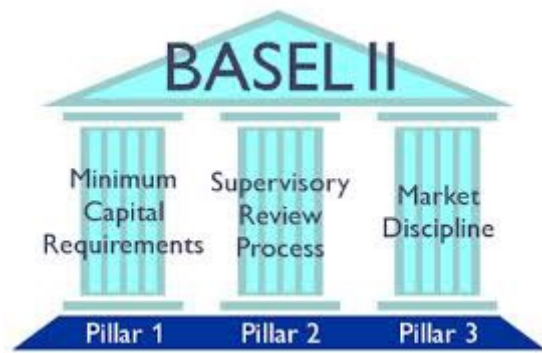
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Capital Adequacy Ratio =	Capital	>=%8
	Credit Risk+Market Risk	

Figure 1 Capital Adequacy Ratio in Basel 1

Capital Adequacy Ratio =	Capital	>=%8
	Credit Risk+Market Risk+Operational Risk	

Figure 2 Capital Adequacy Ratio in Basel 2



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Figure 3 Structural Blocks of Basel 2

Note

Entrepreneurial SMEs

PHASE IN ARRANGEMENTS										
(Shading indicated transition periods - all dates are as of 1 January)										
	2011	2012	2013	2014	2015	2016	2017	2018	As of 1 January 2019	
Leverage Ratio	Supervisory Monitoring		Parallel run 1 Jan 2013 - 1 Jan 2017 Disclosure starts 1 Jan 2015						Migration to Pillar 1	
Minimum Common Equity Capital Ratio			3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%	
Capital Conservation Buffer						0.625%	1.25%	1.875%	2.50%	
Minimum Common Equity Plus Capital Conservation Buffer			3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%	
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and Financials)				20%	40%	60%	80%	100%	100%	
Minimum Tier 1 Capital			4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%	
Minimum Total Capital			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	
Minimum Total Capital plus Conservation Buffer			8.0%	8.0%	8.0%	8.625%	9.25%	9.875%	10.5%	
Capital Instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital			Phased out over 10 year horizon beginning 2013							
Liquidity Coverage Ratio	Observation Period Begins				Introduce Minimum Standard					
Net Stable Funding Ratio	Observation Period Begins							Introduce Minimum Standard		

Source - The website for the Bank for International Settlements - <http://www.bis.org/bcbs/basel3.htm>

Figure 4 Phase in Arrangement

Score Note	
AAA	1,00-1,40
AA	1,41-1,80
A	1,81-2,00
BBB	2,01-2,20
BB	2,21-2,40
B	2,41-2,60
CCC	2,61-2,80
CC	2,81-3,20
C	3,21-3,60
D	3,60-4,00

Figure 5 Bank's Ratings

NOTE: This preprint reports new research that has not been certified by peer review and should not be used as established information without consulting multiple experts in the field.

BİLANÇO	
AKTİF	PASİF
1. Dönen Varlıklar	3. Kısa Vadeli Yabancı Kaynaklar
Hazır Değerler	Mali Borçlar
Ticari Alacaklar	Ticari Borçlar
Stoklar	Yıllara Yaygın İnşaat Taahhüt Hakedişleri
Yıllara Yaygın İnşaat Taahhüt Maliyeti	Diğer Borçlar
Diğer Dönen Değerler	
2. Duran Varlıklar	4. Uzun Vadeli Yabancı Kaynaklar
Binalar	U.V. Mali Borçlar
Makina Teçhizat	U.V. Ticari Borçlar
Diğer Duran Varlıklar	U.V. Diğer Borçlar
	Ortak Finansmanı
	5. Özkaynaklar
	Ödenmiş Sermaye
	Yedekler
	Yeniden Değerleme Fonu
	Dönem Net Kazı (Zararı)
AKTİF TOPLAMI	PASİF TOPLAMI

Figure 6 Items to be Considered in SME Balance Sheets for Prevention of Informality

Note. TBB,2006

	Ratio %
Number of SMEs	99,8
Number of Personnel Employed	72
Sales	49,4
Personnel Cost Incurred	49,2
Production Value	42,7
Added value with factor cost	41,3
Total Exports	36,4
Total Imports	24

Figure 7 The Importance of SMEs in the Turkish Economy

Note. TÜİK, 2020

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Financing Resources	Small Sized Enterprises	Mid Sized Enterprises	Large Sized Enterprises	Total Enterprises
Equity Capital	70,4	76,7	80,2	74,6
Commercial Banks	66,9	65,2	69,5	66,9
Exim Bank	8,5	24,8	40,5	20,6
Leasing	14,1	20	25,2	18,4
Factoring	10,2	7,6	19,1	11,2
Investment and Development Banks	6,3	11,9	12,2	9,4
Foreign Financial Institutions	0,4	1,9	14,5	3,8
Other	2,8	2,4	3,8	2,9
Capital Market Instruments and Mutual Funds	0,4	1	3,1	1,1

Figure 8 Distribution of Businesses by Financial Resources Used in Turkey

Note. İSO, 2013

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Question number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
I Valid	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	4,3478	4,2609	4,4928	4,1014	3,9710	3,9710	3,6957	4,3768	3,5217	4,1884	4,1014	3,7246	2,6522	3,1304	3,1304	4,4928	3,1739	1,7536
Median	4,0000	4,0000	5,0000	4,0000	4,0000	4,0000	4,0000	5,0000	4,0000	4,0000	4,0000	4,0000	3,0000	3,0000	3,0000	6,0000	3,0000	2,0000
Std. Deviation	0,6603 5	0,7205 4	0,6778 7	1,0452 3	1,1110 5	0,9544 2	1,1543 3	0,7689 1	1,3891 2	0,9279 2	0,9258 5	1,1990 7	1,0547 7	1,5521 6	1,5803 3	1,7373 3	1,8146 2	0,75549
Variance	0,436	0,519	0,460	1,092	1,234	0,911	1,332	0,591	1,930	0,861	0,857	1,438	1,113	2,409	2,497	3,018	3,293	0,571

Figure 9 Statistics of survey questions 1 and 18

NOTE: This preprint reports new research that has not been certified by peer review and should not be used as established information without consulting multiple experts in the field.

Statistics			
Question number		19	21
	Valid	69	69
	Missing	0	0
Mean		1,0580	2,2174
Std. Deviation		0,2354	0,7044
Variance		0,05541	0,49616

Figure 10 Statistics of survey questions 19 and 21

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