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PRACTICES OF BANKS FOR CREDITS TO BE GRANTED TO SMEs

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ABSTRACT

While a certain definition has not been made for SMEs across the world yet, this definition is determined according to conditions of country where SME operates in. In general, companies defined as SME constitute 80%-90% of the overall economy, SMEs lead and drive both employment and economy.

In this study, definition of SMEs made in general or by banks and challenges and advantages to be seen with BASEL III are addressed. Innovations brought by BASEL III and effects of these innovations on SMEs are also mentioned. With a field study conducted for Istanbul province specifically, it is aimed to research the source of financing issues of SMEs and tools they use to get over this problem, possible problems they may face with BASEL III and their thoughts on the transition process. In the light of survey findings, it is concluded that most of enterprises operate as SME clients in Turkey, they go through financial issues and their concerns mostly focus on credit costs with BASEL III, but most of them expect a trouble-free transition to BASEL III.

KEYWORDS: SME, BASEL III, BANKING, ISTANBUL PROVINCE

ÖZET

KOBİ'lerin dünya genelinde kesin bir tanımı bulunmamakla birlikte faaliyet gösterdiği ülkenin şartlarına göre bu belirlenmektedir. Genellikle KOBİ tanımı içinde bulunan firmaların genel ekonominin %80-%90 oluşturmakla birlikte hem istihdamın hem de ekonomin öncüleri ve sürükleyicileri pozisyonundadırlar.

Bu çalışmada, KOBİ'lerin genel tanımları ve Ülkemizdeki bankalarca yapılmış tanımları ve BASEL III ile birlikte karşılaşacakları zorluklar ve kolaylıklar ele alınmıştır. BASEL III getirdiği yenilikler ve bunların KOBİ'ler üzerinde etkilerinden bahsedilmiştir. İstanbul ili özelinde yapılan bir alan çalışması ile KOBİ'lerin finansman sorunlarının kaynağını ve bu sorunu aşmada kullandıkları araçları; BASEL III ile birlikte karşılaşmaları muhtemel sorunları ve geçiş süreçlerini hakkındaki düşüncelerini araştırmak amaçlanmıştır. Anket bulguları ışığında işletmelerin çoğunun Ülkemizde bulunan KOBİ segmet müşteriler içinde faaliyetini sürdürdüğünü, finansman sorununun yaşandığı ve BASEL III ile birlikte en çok kredi maliyetleri konusunda kaygı yaşadıkları ama çoğunun BASEL III'e sorunsuz bir geçiş beklediği sonucuna ulaşılmıştır.

ANAHTAR SÖZCÜKLER: KOBİ, BASEL III, BANKACILIK, İSTANBUL İLİ

1. Definition of SME

The abbreviation "SME" is used by international institutions, such as the World Bank, European Union, United States and World Trade Organization (WTO). There is no definition for SME (Small and Medium Sized Enterprise) agreed globally, but it is generally thought that such an agreement is not necessary. SME, which is a statement of size, varies depending on countries or corporations.

Governments have had to categorize size of enterprises once economy policies suggested that enterprises operating in the country must be subject to some different practices over time. For example, Australian SMEs constitute 98% of all Australian enterprises, produce one third of total GDP and employ 4,7 million people. 30 million SMEs of the United States constitute almost two third of net new private sector businesses in the last decade.

SMEs have a vital role in the global economy. Most of the companies in the world consist of SMEs and they contribute to employment opportunities and economic growth considerably.

Small and Medium Sized Enterprises (SMEs) play an important role in most economies, especially within developing countries. SMEs constitute majority part of enterprises in the world and contribute to employment and global economic development considerably. SMEs represent about 90% of enterprises and more than 50% of employment across the world. Registered SMEs contribute to 40% of the national income (GDP) in developing economies. These numbers are dramatically higher when unofficial SMEs are included. It is estimated that 600 million businesses will be needed by 2030 to absorb growing global labor and this makes development of SMEs a high priority for a number of governments in the world. In developing markets, most of the official transactions are produced by SMEs which constitute 7 of 10 works (World Bank, 2021).

1.1. Definition of SME in Turkey

There are number of factors affecting the definition of Small and Medium Sized Enterprises (SME) including number of employees, amount of sales, amount of capital, field of work, distribution of wages, amount of production. The general criteria are number of employees and turnover of the company.

Regulation of Ministry of Economy on changing definition of Small and Medium Sized Enterprises (SMEs) was published on the Official Gazette dated 24.06.2018 and entered into force. Accordingly, SMEs are defined as economic units employing less than 250 people annually and having annual net sales revenue or financial balance sheet less than 125 million TL and categorized as micro enterprise, small sized enterprise or medium sized enterprise according to the regulation.

1.2. Definition of SMEs by Some Banks in Turkey

1.2.1. Halkbank

a) The main criterion in client segmentation is turnover of that client of the last financial year. In companies that are included in the same group, client type will be determined according to company with the highest turnover instead of total turnover of companies even if there is no credit work/request. Client types according to turnover amount will be determined within the frame of the limits below:

Turnover (Net Sales)	Client Type
200.000.001 TL and above	Corporate
60.000.001 - 200.000.000 TL	Commercial
0 - 60.000.000 TL	SME

b) The main criteria in client segmentation for companies operating in the contracting sector is total reference limit of the company. Types of customers according to reference limits are determined as follows:

Total Reference Limit	Client Type
400.000.001 TL and above	Corporate
150.000.001 TL – 400.000.000 TL	Commercial
0 –150.000.000 TL	SME

c) The main criteria in client segmentation for accommodation enterprises operating in tourism sector is number of beds and size of assets. Size of assets of the group in the tourism sector will be determined by considering the company with the highest asset size in the group, not total assets of group companies.

It is required to meet both criteria as number of beds and size of assets for categorization in "SME" segment.

Types of clients according to current number of beds and criteria of size of assets are determined as follows:

Number of Beds	Size of Assets	Client Type
1501 and above	100.000.001 TL and above	Corporate
0 – 1500	100.000.001 TL and above	Commercial
0 – 800	0 –100.000.000 TL	SME

1.2.2. Vakıfbank

Sector Name	**Criteria**
Trade/Service	Enterprises with turnover below 60 Million TL
Manufacturing	Enterprises with turnover below 60 Million TL
Tourism	Enterprises with capacity below 500 beds and enterprises with size of assets below 60 Million TL
Energy	Enterprises with annual power generation capacity below 25 MGW
Construction	Enterprises with turnover average of corrected net sales for the last 3 years below 60 Million TL

1.2.3. Ziraat Bankası

Client Segment		Manufacturing	Trade	Contracting	Tourism **	Energy	Agriculture
		Net Sales (Million TL)	Net Sales (Million TL)	Reference Limit (Million TL)	Bed Capacity	Power Generation Capacity (MW)	Turnover (Net Sales) (Million TL)
SME	Large	<200 ≥120	<250 ≥150	<300 ≥200	<2000 ≥1000	<50 ≥25	<50 ≥30
	Medium	<120 ≥50	<150 ≥75	<200 ≥125	<1000 ≥250	<25 ≥10	<30 ≥10
	Small	<50 ≥5	<75 ≥8	<125 ≥10	<250 ≥50	<10 ≥5	<10 ≥2
	Micro	<5 ≥1	<8 ≥2	<10	<50 ≥20	<5	<2 ≥1
	Mass	<1	<2		<20		<1

1.2.4. DENİZBANK

Current segment, annually-assigned segment and service segment are categorized as clients who are considered in SME Line in the main branch.

Appointment of current segment is performed in the following hierarchy. Clients meeting at least one of the criteria for clients in the commercial segment are categorized as Commercial; clients meeting at least of the criteria for clients in the ME Plus Segment are categorized as ME Plus; clients meeting at least one of the criteria for clients in the ME (Medium) are categorized as ME; clients meeting criteria for Agriculture are categorized as Agriculture and those meeting criteria for Small Segment and remaining clients are categorized as Small.

Commercial clients are defined as clients with current or point turnover in the last 4 years above 125 Million TL.

Clients to be categorized as ME Plus segment are determined with reference to the following hierarchy.

Clients with current or point turnover in the last 4 years except the last year above 25 Million TL and at or below 125 Million TL or clients with WB credit risk above 2 Million TL.

Clients to be categorized as ME-Medium segment are determined with reference to the following hierarchy.

Clients with current or point turnover in the last 4 years except the last year above 10 Million TL and at or below 25 Million TL or clients with combined cash limit above 5 Million TL.

1.2.5. Akbank

Clients meeting at least one of the following criteria are segmented as "Company".

- Clients with turnover above 1,25 Million TL and below 40 Million TL,
- Clients with global limit at or below 8 Million TL or for group companies; clients with group limit at or below 8 Million TL,
- Clients with combined risk between 700.000 TL and 16 Million TL,

Clients segmented as company are divided into two categories as 'Large Sized Company' and 'Company'.

Rules for the subsegments of Large Sized Company;

- Clients with turnover above 20 Million TL and below 40 Million TL,
- Clients with global limit above 6 Million TL or below 8 Million TL or for group companies; clients with group limit above 6 Million TL and below 8 Million TL,
- Clients with combined risk between 10 Million TL and 16 Million TL,

Rules for the subsegments of Company;

- Clients with turnover above 1,25 Million TL and below 20 Million TL,
- Clients with global limit at or below 8 Million TL or for group companies; clients with group limit at or below 8 Million TL,
- Clients with combined risk between 700.000 TL and 10 Million TL.

Rules for micro segment;

- Clients with turnover at or below 1,25 Million TL,
- Clients with base limit at or below 250.000 TL or for group companies; clients with group limit at or below 250.000 TL,
- Clients with consolidated limit at or below 700.000 TL.

2. Traditional Approach for Credits

Traditionally, banks relied on subjective methods to evaluate credibility of their clients. Methods focus on characteristics of the borrower and credit analyst must evaluate credit risk level for granting loan to the borrower. In general, traditional approach evaluates basic features of the borrower, which is called 5K Credit. An analysis which is completely based on features of the borrower is subject to human error and abuse. Banks continue relying on traditional approaches for credit analysis in evaluation of potential borrowers.

Apart from traditional approaches, modern credit analysis approaches are based on qualitative credit scoring systems. In this approach, credit analysts use credit scoring systems based on univariate accounting to compare basic accounting rates of clients with rates in the sector with the purpose of showing how different rate of a client is than industrial standards or trends.

Credit scoring systems assign points for various aspects related to credibility of a borrower. Scores may vary between 300 and 850, the latter is the highest credit score a lender can get. Main aspects determining credit score of a borrower include paying background, current debts, term of debt, type of debt and payment interest. A bank may establish its own credit scoring system or use a third-party service like FICO.

2.1. Financial Evaluation

Financial evaluation includes evaluation of current cash flows produced by an enterprise to determine whether borrower is capable of paying its debt. Lender may evaluate financial performance of a company alone or in comparison with other companies operating in the same sector with the lender.

Optimally, it will be confirmed that a company has strong financial sources for credit purposes if its cost structure allows to produce profits higher than the average continuously throughout the financial period. This means that the company also generates income above average in fall periods, as well as in busy periods. Since such company shows a low default risk, it will probably get confirmation for credits more easily.

In contrast, a company that generates irregular income at all stages of its business cycle will be considered weak in terms of credibility. It may be referred to a company reporting results above the average in busy periods, but struggling to obtain profit in case of a fall due to low market demands. Lender may reject application for credit due to weak cash flows of the company or grant credit in lower amount than it needs with higher costs.

2.2. Competitiveness in the Sector

How much is the company competitive in the sector? A bank is interested in granting credit to a company with a strong competitive position in its industry. While evaluating competitiveness of a company, lender checks business strategy of the company and how much this will be coherent and adaptable to current trends and changes in the market.

Companies which are dominant in the market have strong barriers limiting new entries to the market. Barriers may be license agreements, powerful patents, copyright protections and privileges and these may be too expensive to be met by the new joiners. In general, weak companies have poorly structured business strategies that are not compatible with market trends and changes. Such companies tend to see high rates of client dissatisfaction and low reinvestment rates.

2.3. Business Environment

Lender examines the business environment in which an enterprise operates in to determine the difficulties which the enterprise may face and which may affect the ability of the enterprise to fulfill its financial obligations. For example, lender may

evaluate the sector risk to determine how dynamics of the sector and regulatory environment can affect performance of the enterprise.

Another matter to be considered is the country risk, especially how political, legal and taxational environment of the country where the company operates in affect its commercial activities. A company may isolate itself from such risks and be accepted as an applicable borrower if it can set strategical alternatives to protect itself against them. On the other side, an enterprise may be defined as weak if its revenues are considerably affected from changes in business cycles and factors in the business environment.

3. Basel Approach

Banks use a series of techniques to reduce credit risks they are exposed to. For example, risks may be collateralized with first-priority requests, partially or wholly cash or securities, a credit risk may be guaranteed by a third party or a bank may purchase a credit derivative to balance various types of credit risk. In addition, banks may accept net credits indebted to them against deposit of the same counter party. BIS (International Settlements) was established to standardize them. BIS (International Settlements) is an international institution established with collaboration of central banks of countries. BIS "Basel Committee" was established in 1974 to inform the banks about common standards adopted in the world.

With "Basel I Standards" published in 1988, Basel Committee brought operating criteria of banks to be followed and capital adequacy ratio stating that proportion of bank capitals to risk assets cannot be below 8 percent in order to raise resistance against crisis. Market risk and market risk calculation were added in 1996 and 1998 respectively. It acknowledged audit authority of various countries including Turkey, especially G-10 countries. Once financial markets developed more and transactions got more complicated over time, it was seen that Basel I criteria failed to satisfy and authorities started to work on new standards. Therefore, “Basel II Standards” were issued.

Basel II was published in June 2004 and revised in November 2005. The first consultation text was published in June 1999 and second and third texts were published in 2001 and 2003 respectively. Standard method was adopted in European Union states in January 2007 and advanced methods were adopted in January 2008.

Banks started to report Capital Adequacy Ratios individually as of July 2011 and in a consolidated manner as of December 2012 with Basel II. At the stage of a one-year parallel practice, communication of banks was published officially in July 2012.

With Basel II, risk-oriented capital management has brought risk-oriented credit pricing. Risk-oriented credit pricing must affect amount/price of credits to be used by SMEs in a positive/negative way. Various criteria from type to maturity of credit used, guarantee to company score should be reflected in price of credits. When credit risk is determined without being measured with advanced techniques, banks may evaluate the same company differently and different credit amounts may arise.

With Basel II, risk measurement is based on two main factors; risk level of the borrower (company) and risk level of credit transaction.

Risk of borrower is stated with "company score" determined upon evaluation of financial data of the company (balance sheet, statement of income, etc.) and of qualitative factors (background of managers and partners, managerial and organizational structure, product/service development, import, export, market share, etc.). Risk of credit is evaluated according to type of transaction, guarantee, maturity, currency, etc. Therefore, credit is defined as "very risky" or "less risky" and pricing is made accordingly.

With implementation of Basel II criteria, risk level of the company and credit should have affect cost of credit directly. As score of borrower company decreases, bank will take more risks and retain more capital as provision. Therefore, it will deprive more sources of return. In such case, cost of credits to be granted to companies will increase. On the other side, client cheques and securities and common and group company bonds that are mostly used in Turkey are not covered by the Basel II.

Weak equity structures lie behind financing issues of SMEs. SMEs to be evaluated by independent rating agencies and banks are evaluated for their working capital at first in terms of properties that are subject to evaluation. Cost of credits to be granted to SMEs with strong capital structure will be more effective.

Effects of changes foreseen with implementation of Basel II on SMEs include engagement of companies in their main fields of activity, use of financial instruments to manage risks resulted from activities, compliance of SMEs with guarantee structure provided by Basel II, preparedness to get credit scores from independent rating agencies and banks and operations to consolidate their capitals to get a good score, production of reliable financial statements at internationally-accepted standards, adoption of corporate management culture by top management and all employees, investment in qualified human resources and establishment of a system ensuring any kind of risks is considered in decision-making process.

SMEs that are managed and financed well and ensure transparency by submitting all required information (financial and qualitative) sufficiently timely must have the opportunity to be granted to credit in the best conditions provided that they receive the best score potentially.

SMEs may from time to time issue different financial statements (balance sheet, income and expense statements, etc.) for different authorities. SMEs have challenges at scoring stage, mainly including balance sheets of SMEs not complying with credit grant (negative capital, loss in balance sheet) and not registered transactions. Many companies apply official accounting as well as general accounting. This has even become an ordinary practice.

Before implementation of Basel II, aim of the Banks was to grant “good credit” in the “traditional” approach generally accepted. Within this frame, each company was investigated by experienced experts, intelligence was made and companies having good results were granted to credit. Such credits are guaranteed for assurance

and reimbursements are tracked. Since such structure is not risk-oriented, bank made the pricing was made by imposing profit share on the cost.

However, traditional approach had very important disadvantages:

- Since opinions of experts are important in credit grants, results were subjective and a company considered "inadequate" by an expert may be considered "adequate" by another expert,

- Since credit grant was not based on digitization of carried risks, risks could not be priced and companies in good condition that could manage risks could not benefit from its advantages,

- Different evaluation criteria of different banks prevented creation of a common pricing in the banking sector,

Since disadvantages of traditional approach has arisen over time, banks should have shifted from "traditional approach" to "risk-based" approach.

With regulations to be made, it was estimated that due diligence will be shown to prevent discrimination between SMEs and other companies, companies with different managerial and financial structures will be included in the same approach and requests for credit grant will be evaluated under similar criteria. However, "Credit Scoring" is applied just for publicly-held companies and companies that request the application. There is no mandatory and independent Credit Scoring for SMEs.

Another matter is that segmentation that an enterprise is subject to due to credits and sales volume, etc. may be evaluated within a corporate portfolio in a bank and retailer portfolio in another bank and risk weights may be different in both banks. This may lead to situations in favor of enterprises in the standard method and it is seen that uniformity still does not exist in practice.

With Basel II, subjective methods for determining good credits have been abandoned and it has been started to determine how risky the credit is along with various factors and make the pricing according to this process. The new approach includes "risky" or "less risky" credits instead of "good" or "bad" credits. A risky

credit is not meant to be "bad", what is important is that credit risk is analyzed well and priced correctly.

It was specified and estimated that SMEs who could not adapt to changes brought by the Basel II and manage change would be subject to increase of credit costs and have difficulty in making realistic plans for the future. Adapting to changes was vital for SMEs. There is also no progress at this point.

Even if our banks had, our SMEs did not behave proactively and analyze at which points they were incapable and prepare their adaptation plans. Especially Turkish SMEs have not started operations to restore their financial structures, accounting systems and organizations according to the current conditions.

With reference to the Basel III, capital and liquidity are also new global standards. It has been commenced by G20 and accepted by the Banking Supervision (BCBS). It features as a respond to 2007-2008 financial crisis globally coordinated. It was designed and acknowledged as a transformation required to prevent similar crises.

The Basel II focused on calculating risk-weighted assets and Data collection, Modeling and System implementation were required. However, Basel III has been adopted in addition to the Basel II and its effect on banks is broad and important. Definition of capital, minimum capital ratio (the concept of capital buffer is emerging) and counter party credit risk approach change and two liquidity ratios and leverage ratios are added. Since 2014, BRSA has started to implement some criteria regarding the Basel III. BRSA encourages to preserve standard ratio of capital adequacy at minimum 12% for long years and add period profits to equities. Thanks to such policies, it is seen that high quality and high level of equity is preserved despite the high growth in the banking system.

Consolidating the cyclical situation resulted from redundancy of liquidity in the world as seen as of 2000s with the fire of ambition for competition and profitability, Turkish Banking sector has wasted and is still wasting its sources with inappropriate

lending processes even if it has seemed strong with rates of capital sufficiency accepted for a long term. A bank determining the limit by taking average of limit given by three big banks to a company in the past now goes through difficult times. It feels the pain of financial vulgarity of real sector which only blames banks or political power generally. In fact, banks are also not innocent since they enable this situation.

Basel IV will be implemented as of December 2017 and January 2022 by Basel Committee (almost wholly). December 2017 agreement, credit risk, operational risk and correction of evaluation of credit capital proceeding, impose of an output base, revisions in definition of leverage ratio and applying leverage ratio on banks with global systematic importance. A market risk revised The framework was completed in January 2016 to a large extent.

The Basel IV will be implemented completely in the EU and this will require not only to complete CRR2 / CRD5 package (mostly covering revised market risk framework), but also to commence CRR3 / CRD6 package for other components of the Basel IV.

The EU implemented Basel III through its Capital Requirements Regulation (CRR) and revised Capital Requirements Directive (CRD4). These include amount and quality of capital that banks are required to retain, minimum leverage ratio, two new liquidity rates (LCR and NSFR), implementation of a stronger capital in securitizations and use of counter cyclic capital buffer as a macro cautionary tool.

3.1. Importance of the Basel III For SMEs

SMEs are less likely to get bank credits than large sized companies; instead, they use cash internal funds or cash from their friends and families in order to commence entrepreneurship and operate their enterprises at first. International Finance Corporation (IFC) estimates that 65 million companies and 40% of registered micro, small sized and medium sized enterprises (MSMEs) in developing companies have 5,2 Trillion Dollars of unmet financing need; this is global SME credit level. Followed by Latin America and Caribbean (23%) and Europe and Central Asia (15%), East Asia and

Pacific constitutes the biggest share of total global financial deficit (46%). Clearance volume varies considerable depending on region. Especially Latin America and Caribbean and Middle East and North Africa have the highest financial deficit when compared to the potential demand measured at 87% and 88% respectively. Almost half of registered SMEs cannot access official credits. When micro and off-record enterprises are taken into consideration, financing deficit grows bigger (World Bank, 2021).

As other companies, banks also must revise their capital status with the Basel III. If banks do not use advanced methods that are specified in the Basel III suggestion in risk measurement, needs of banks for capital will increase incrementally.

They will reflect this on cost of credits granted to the companies. A critical issue stands out for Turkish economy and similar economies: approach towards SMEs. Since SMEs have a considerable role in Turkish economy, these enterprises are required to make some preparations before adopting the Basel III.

Basel III regulations will reduce credibility of small sized enterprises and make credits more expensive for companies which can use credits granted for small sized companies.

Basel III will increase the cost of capital increase for all small sized enterprises and increase cost of debt and of purchasing and retaining of equity instruments for investors desiring to have a small sized enterprise (Bob Sloan, 2017).

Traditionally, it is obvious that small sized banks that are focused on providing services and granting credit to small sized companies may have difficulty in terms of Basel III. The reason is that higher capital cost will affect small sized banks inproportionately, as well as high capital rates and compliance costs.

It is estimated that hundreds, even thousands of small sized banks will be forced to be closed down due to the Basel III regulations. Since capital requirements for Basel III were commenced gradually, about 200 small sized banks have not been able to their capital levels to an adequate Basel III levels yet (SNL Financial, 2019).

3.2. Pricing and Collateralization in the Basel III

New regulations not only will affect banks disproportionately, but also affect SMEs and companies in the same way. On condition that retail portfolio of bank is diverse and no credit exceeds one million Euro, small sized enterprises and individuals will be given a retailer risk score at 75%. However, a SME credit will be given a risk weight at 100% in the event that the bank cannot meet these conditions. In return, sovereign governments and central banks with high credit score have 0% of credit risk weight and large sized companies with high credit score will have only 20% of risk weight. Differences in these risk weights will have a significant impact in terms of capital requirements needed to balance credits granted to small sized enterprises. While financing of a SME may require the bank to keep 7% of credit amount as capital, (100% risk weight is multiplied by 7% capital), granting credit to a big sized company may require only 1,4% (20% risk weight is multiplied by 7% capital). Therefore, while a big sized company with a credit score AAA and AA may be granted to credit in the amount of $ 100.000 - with a capital in the amount of $ 1400 required to compensate the credit - or a sovereign government without any equalization capital -, a bank is required to retain $ 5250 (for SMEs with risk weight at 75%) or $ 7000 (for SMEs with risk weight at 100%) in its capital.

4. Research Method

4.1. Data Analysis

Data were analyzed statistically in the computer environment. Data were controlled and data entered erroneously were corrected according to the survey form. Research data were analyzed statistically in IBM SPSS 22nd package program. Number and percentage were used in categorical measurements. Research data were tested for validity and reliability and factor analysis was performed for them. In addition, it was detected that it does not show a normal distribution with research data test and Kolmogorov-Smirnov and Skewness and Kurtosis tests. Non-parametric tests

were used for analysis of data not complying with normal distribution. Spearman's correlation test was applied to see relationship between two dimensions.

Tablo 1. Distribution of Enterprises According to Introductory Features

Introductory Features		
Type of Company	**Number**	**Percentage**
Sole Proprietorship	44	60,3
Limited Liability Company	28	38,4
Incorporation	1	1,4
Number of Employees	**Number**	**Percentage**
1 – 25	24	32,9
26 – 50	22	30,1
51 – 100	9	12,3
101 - 150	4	5,5
151 - 200	10	13,7
201 – 250	4	5,5
Size of the Company	**Number**	**Percentage**
1 - 25.000.00	26	35,6
25,000,001 - 50,000,000	16	21,9
50,000,001 - 100,000,000	15	20,5
100,000,001 - 125,000,000	16	21,9
Evaluation of SMEs according to Basel-III Criteria	**Number**	**Percentage**
Retailer SME (Total amount of liabilities < 2 mn TL)	29	39,7
Corporate SME (Total amount of liabilities* > 2 mn TL)	44	60,3
Financing Issues	**Number**	**Percentage**
Lack of Equity	7	9,6
Delay in Collection of Receivables	30	41,1
Fluctuations in Exchange Rates	16	21,9
Short-Term Commercial Credits	3	4,1
Lack of Working Capital	3	4,1
Redundant Sales on Account	5	6,9
Equities	**Number**	**Percentage**
Only Equities	3	4,1
Incentive Credits	13	17,8
Financial Enterprises (Factoring, leasing companies, etc.)	4	5,5

Commercial Bank Credits	53	72,6
Credit Preference	**Number**	**Percentage**
Traditional Approach	69	94,5
Basel III Approach	4	5,5
Guarantees Deemed Appropriate under Basel III	**Number**	**Percentage**
Cash, deposit or certificate of deposit	9	12,3
Real estate mortgage	47	64,4
Cheques and securities of client	17	23,3
Financial Difficulty	**Number**	**Percentage**
Transparency Issues	9	12,3
Financing Issues	22	30,1
Risk-Based Pricing	26	35,6
Collateralization	16	21,9
Expectations of SMEs in the Transition Process		
I am expecting to adopt to Basel III smoothly	51	69,9
I am not expecting to adopt Basel III smoothly	22	30,1

Distribution of introductory features of enterprises in the scope of the research is shown in the table 1 While 60,3% of participants are sole proprietorship, 38,4% are limited liability company and 1,4% are incorporation. The companies having 1 - 25 employees stand out as participating mostly with 24 persons. While companies with 1 - 25.000.00 of company size constitute 35,6% of the research, companies with more than 2 million TL of total debt amount constitute 60,3% and there are 16 companies having financial issues due to fluctuation in exchange rates. It was detected that the first source of financing they apply to when equities are insufficient is incentive credits with 13 companies. Moreover, 94,5% of the companies preferring traditional approach instead of the Basel III in credit options. Real estate mortgage has the highest rate among guarantees deemed appropriate for the Basel III at 64,4%. It was detected that the minor problem resulted from the Basel III is transparency issue. Companies expect to adopt the Basel III without any problem at 69,9%, which is a very high rate.

4.2. Reliability Test of Enterprises

If $0.00 \leq \alpha < 0.40$, the scale is not reliable,

If $0.40 \leq \alpha < 0.60$, reliability of the scale is low,

If $0.60 \leq \alpha < 0.80$, the scale is very reliable and

If $0.80 \leq \alpha < 1.00$, the scale is highly reliable. (Akgül & Çevik, 2003; 435-436)

Tablo 2. Cronbach Alpha (Reliability) Values of Enterprises for Basel III Research

Articles Included	Corrected Article When Total Correlation	If Article Is Deleted	All Is
Type of Company	,305	,492	,505
Number of Employees	,261	,471	
Equities	,470	,284	
Guarantee	,450	,313	
Expectation	,339	,537	

According to the results of reliability test in the Table 2, total correlation values of 10 items of enterprises in the scale of Basel III research were evaluated at the first stage, but it was detected that 10 items are not valid and reliable as a result of analyses. As a result of analyses, while total correlation of 5 items of enterprises in the scale of the Basel III research varies between 0,261 - 0,470 and any item with total correlation below 0,250 was not seen. Reliability of the Basel III research scale for this study regarding the enterprises in these 5 items is 0,505 and reliability of the scale was established at a level to continue performing analyses.

4.3. Factor Analysis of Enterprises

Tablo 3. Factor Analysis of Enterprises for the Basel III Research

	Factor Loads	Described Variance %	Validity of Number of Factor KMO	Sig.
Type of Company	,563	58,612	,684	,000
Number of Employees	,453			
Equities	,584			

Guarantee	,661			
Expectation	,770			

According to the Table 3, value of KMO and Brartlett test is 0,684 and significance is 0,00. This shows that data are eligible to factor analysis. It is accepted that KMO value is above 0,60 (P<0,05). According to the total variance percentage values arising from the factor analysis, factors describe 68,612% of the variance.

Factor loads show strength values of items. According to the Table ..., values of 5 items in the scale of the Basel III research and quality of items are shown separately. Among these 5 items in the Basel III research scale, it is seen that the highest-quality and strong one is "expectation" item with 0,770 of value. If factor load values are higher than 0,4, they are deemed valid.

4.4. Normality Test in The Basel III Scale

Tablo 4. Normality Test for Equities Scale.

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
Equities	,155	312	,000

Equities	Statistics	Standard Fault
Average	7,07	,238
Median	7,00	
Variance	4,066	
Standard Deviation	2,016	
Minimum	1	
Maximum	10	
Skewness	-1,084	,283
Kurtosis	2,550	,559

Normality test and introductory statistics including questions of enterprises that participated in the research about equity scale are shown in the Table 4. It is required to examine the one sample above to determine normality of data in order to understand whether data from Kolmogorov-Smirnov Test are distributed normally.

According to Kolmogorov-Smirnov sig. value, it is seen that it is significant (Sig.<0,05). It is not desirable that sig. value is deemed significant in the normality test. This shows that tested data are not distributed normally. However, it is rare that values are distributed normally in SPSS analyses. Since survey questions of SPSS are Likert scale questions, it is required to review Skewness Value and Kurtosis Value in the second table to determine whether values are distributed normally.

When Skewness and Kurtosis coefficients are between the values of ±1,5 (tabashnik), values are deemed normal. Since all Skewness and Kurtosis values are not between ±1,5, it was seen that equity scale questions are not distributed normally. It was detected that analyses will be subjected to non-parametric tests.

Tablo 5. Normality Test for Guarantee Scale

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
Guarantee	,155	312	,000

Guarantee	Statistics	Standard Fault
Average	7,35	,289
Median	8,00	
Variance	6,004	
Standard Deviation	2,450	
Minimum	1	
Maximum	9	
Skewness	-2,182	,283
Kurtosis	3,133	,559

Normality test and introductory statistics including questions of enterprises that participated in the research about guarantee scale are shown in the Table 5 It is

required to examine the one sample above to determine normality of data in order to understand whether data from Kolmogorov-Smirnov Test are distributed normally.

According to Kolmogorov-Smirnov sig. value, it is seen that it is significant (Sig.<0,05). It is not desirable that sig. value is deemed significant in the normality test. This shows that tested data are not distributed normally. However, it is rare that values are distributed normally in spss analyses. Since survey questions of spss are likert scale questions, it is required to review Skewness Value and Kurtosis Value in the second table to determine whether values are distributed normally.

When Skewness and Kurtosis coefficients are between the values of ±1,5 (tabashnik), values are deemed normal. Since all Skewness and Kurtosis values are not between ±1,5, it was seen that guarantee scale questions are not distributed normally. It was detected that analyses will be subjected to non-parametric tests.

Tablo 6. Normality Test for Expectation Scale

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
Expectation	,155	312	,000

Expectation	Statistics	Standard Fault
Average	1,29	,054
Median	1,00	
Variance	,210	
Standard Deviation	,458	
Minimum	1	
Maximum	2	
Skewness	,936	,283
Kurtosis	-1,156	,559

Normality test and introductory statistics including questions of enterprises that participated in the research about expectation scale are shown in the Table 6. It is required to examine the one sample above to determine normality of data in order to understand whether data from Kolmogorov-Smirnov Test are distributed normally.

According to Kolmogorov-Smirnov sig. value, it is seen that it is significant (Sig.<0,05). It is not desirable that sig. value is deemed significant in the normality test.

This shows that tested data are not distributed normally. However, it is rare that values are distributed normally in SPSS analyses. Since survey questions of SPSS are Likert scale questions, it is required to review Skewness Value and Kurtosis Value in the second table to determine whether values are distributed normally.

When Skewness and Kurtosis coefficients are between the values of ±1,5 (tabashnik), values are deemed normal. Since all Skewness and Kurtosis values are not between ±1,5, it was seen that guarantee scale questions are distributed normally. It was detected that analyses will be subjected to parametric tests.

4.5 Correlation Analysis

Correlation analysis determines relationships between two or more variables. Variables are not intervened while relationship between them are reviewed. Correlation analyses only review changes in variables together. It is used to reveal out the relationships between the variables and determine the level of these relationships (Büyüköztürk vd., 2012, ss. 184-185). Review of relationships between the enterprises at the stage of the Basel III research is shown in the Table 7 below.

H1: Type of Company affects Financing Sources that SMEs apply to when their equities are insufficient positively.

H2: Type of Company affects Guarantees Deemed Appropriate within the Frame of the Basel-III positively.

H3: Type of Company affects expectations of SMEs in the Process of Adopting the Basel-III positively.

H4: Number of Employees affects Financing Sources that SMEs apply to when their equities are insufficient positively.

H5: Number of Employees affects Guarantees Deemed Appropriate within the Frame of the Basel-III positively.

H6: Number of Employees affects expectations of SMEs in the Process of Adopting the Basel-III positively.

H7: Guarantees Deemed Appropriate within the Frame of the Basel III affect Financing Sources that SMEs apply to when their equities are insufficient positively.

H8: Expectations of SMEs in the Process of Adopting the Basel III affect Guarantees Deemed Appropriate within the Frame of the Basel III positively.

H9: Financing Sources that SMEs apply to when their equities are insufficient affect Expectations of SMEs in the Process of Adopting the Basel III positively.

Tablo 7. Correlation Analysis Applied according to the Basel III Scale

Type of Company	1,000				
Number of Employees	,104	1,000			
Equities	,194	,209	,000		
Guarantee	-,006	,173	,589**	1,000	
Expectation	,240*	,032	,065	-,110	1,000
*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).					

Findings of correlation analysis and evaluation between sense of enterprises for type of companies and their sense for financial sources that they apply to when equities are insufficient are shown in the Table 7. A positive, statistically nonsignificant and low-degree relationship was not detected (r=,194) between sense for enterprises for type of companies and their sense of financial sources that they apply to when equities are insufficient. It was determined that sense of enterprises for type of companies and their sense for financial sources that they apply to when equities are insufficient are not affected from each other. H1 hypothesis was rejected.

Findings of correlation analysis and evaluation between sense of enterprises for types of company and their sense for their guarantees deemed appropriate within the frame of the Basel-III are shown in the Table 7. A negative, statistically nonsignificant and low-degree relationship was not detected (r=,006) between sense of enterprises for type of companies and their sense for their guarantees deemed appropriate within the frame of the Basel-III. It was determined that sense of enterprises for type of companies

and their sense for their guarantees deemed appropriate within the frame of the Basel-III are not affected from each other. H2 hypothesis was rejected.

Findings of correlation analysis and evaluation between sense of enterprises for type of companies and their sense for expectation of SMEs in the process of adopting the Basel-III are shown in the Table 7. A positive, statistically significant and low-degree relationship was detected (r=,240*) between sense of enterprises for type of companies and their sense for expectations of SMEs in the process of adopting the Basel-III. Therefore, it was determined that sense of enterprises for type of companies and their sense for expectations of SMEs in the process of adopting the Basel-III are affected from each other in a direct proportion. It means that as sense of enterprises for type of companies raises, expectations of SMEs in the process of adopting the Basel-III will also raise even at a different rate. H3 hypothesis was accepted.

Findings of correlation analysis and evaluation between sense of enterprises for number of employees and their sense for financial sources that they apply to when equities are insufficient are shown in the Table 7. A positive, statistically nonsignificant and low-degree relationship was not detected (r=,209) between sense of enterprises for number of employees and their sense for financial sources that they apply to when equities are insufficient. It was determined that sense of enterprises for number of employees and their sense for financial sources that they apply to when equities are insufficient are not affected from each other. H4 hypothesis was rejected.

Findings of correlation analysis and evaluation between sense enterprises for number of employees and their sense for their guarantees deemed appropriate within the frame of the Basel-III are shown in the Table 7. A positive, statistically nonsignificant and low-degree relationship was not detected (r=,173) between sense of enterprises for number of employees and their sense for their guarantees deemed appropriate within the frame of the Basel-III. It was determined that sense of enterprises for number of employees and their sense for their guarantees deemed

appropriate within the frame of the Basel-III are not affected from each other. H5 hypothesis was rejected.

Findings of correlation analysis and evaluation between sense of enterprises for number of employees and their sense for expectation of SMEs in the process of adopting the Basel-III are shown in the Table 7. A positive, statistically nonsignificant and low-degree relationship was not detected (r=,032) between sense of enterprises for number of employees and their sense for expectations of SMEs in the process of adopting the Basel-III. It was determined that sense of enterprises for number of employees and their sense for expectations of SMEs in the process of adopting the Basel-III are not affected from each other. H6 hypothesis was rejected.

Findings of correlation analysis and evaluation between sense of enterprises for their guarantees deemed appropriate within the frame of the Basel-III and their sense for financial sources that they apply to when equities are insufficient are shown in the Table 7. A positive, statistically significant and medium-degree relationship was not detected (r=,589**) between sense enterprises for guarantees deemed appropriate within the frame of the Basel-III and their sense for financial sources that they apply to when equities are insufficient. It was determined that sense of enterprises for their guarantees deemed appropriate within the frame of the Basel-III and their sense for financial sources that they apply to when equities are insufficient are affected from each other in a direct proportion. It means that as sense of enterprises for their guarantees deemed appropriate within the frame of the Basel-III raise, their financial sources that they apply to when equities close to the rate are insufficient will also raise. H7 hypothesis was rejected.

Findings of correlation analysis and evaluation between sense of enterprises for their guarantees deemed appropriate within the frame of the Basel-III and their sense for expectation of SMEs in the process of adopting the Basel-III are shown in the Table 7. A negative, statistically nonsignificant and very low-degree relationship was not detected (r=-,110) between sense of enterprises for their guarantees deemed

appropriate within the frame of the Basel-III and their sense for expectations of SMEs in the process of adopting the Basel-III. It was determined that sense of enterprises for their guarantees deemed appropriate within the frame of the Basel-III and their sense for expectations of SMEs in the process of adopting the Basel-III are not affected from each other. H8 hypothesis was rejected.

Findings of correlation analysis and evaluation between sense of enterprises for financial sources that they apply to when equities are insufficient and their sense of expectation of SMEs in the process of adopting the Basel-III are shown in the Table 7. A positive, statistically nonsignificant and very low-degree relationship was not detected (r=,065) between sense of enterprises for financial sources of enterprises that they apply to when equities are insufficient and their sense for expectations of SMEs in the process of adopting the Basel-III. It was determined that sense of enterprises for financial sources that they apply to when equities are insufficient and their sense for expectations of SMEs in the process of adopting the Basel-III are not affected from each other. H9 hypothesis was rejected.

5. Conclusion

Announced to the public as of September 2, 2010, Basel III is an additional text prepared by the Basel Committee in return for criticism of "Insufficiency of Basel III in global crisis" and brings new provisions as well as existing provisions while not abolishing provisions of the Basel II. Since high leverage ratios (high borrowing) that are announced as the most important reasons for global crisis expand the components such as lack of liquidity and weak capital structure, we cannot say that the Basel III will not contribute to the financial system. Yet, additional ratios determined are new provisions compelling Banks to have strong capital and liquidity to fulfill their commitments even in extraordinary situations. The way that these and all other similar provisions become successful also largely depends on audits to be performed by local authorities in the countries where the regulation is expected to be implemented and close follow-ups.

Potential effect of the Basel III on small sized enterprise credits may have different forms;

Firstly, regulations force banks to assign higher risk weights to small sized enterprises, so much higher capital levels are required to support credits to small sized enterprises. As a result, banks will not tend to grant credits to small sized enterprises.

Secondly, banks which continue granting credits to small sized enterprises will probably limit their credit product offers with "standard collectible" credits that do not give flexibility to bank to customize credit according to unique needs of a small sized enterprise. Thirdly, if there are less small sized banks to grant credits to small sized enterprises, this will reduce the number of small enterprise credits and make them more expensive.

If it is harder for banks to grant credit to small sized enterprises and there are less number of banks to grant such credits, this will affect credit access and growth potential adversely and fluctuation impact will slow down overall economic growth in the world (Sloan, 2018).

Many bank employees argue that an approach better than uniform characteristics of Basel III for everyone would be regulations having standards depending on complexity and risk instead of size of a bank. Furthermore, they point out that regulations must consider the fact that needs of both banks and small sized enterprises will also change as economic conditions get better.

In other words, regulations that are effective today will probably have no impact on a growing economy. Time will show whether the Basel III regulations will help prevent another global financial crisis or will damage growth of small sized enterprises and generation of employment and generally wider world economy considerably.

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SURVEY QUESTIONS

1- What is the type of the company?

a) Sole Proprietorship
b) Limited Liability Company
c) Incorporation
d) Other

2- What is the number of persons employed by the company?

a) 1 – 25
b) 26 – 50
c) 51 – 100
d) 101 - 150
e) 151 - 200
f) 201 – 250

3- What is the active size of the company?

a) 1 TL - 25.000.000 TL
b) 25,000,001 TL - 50,000,000 TL
c) 50,000,001 TL - 100,000,000 TL
d) 100,000,001 TL - 125,000,000 TL

4- How SMEs are evaluated according to Basel-III Criteria?

a) Retailer SME (Total amount of liabilities < 2 mn TL)
b) Corporate SME (Total amount of liabilities* > 2 mn TL)

5- What are the financing problems that SMEs face?

a) Lack of Equity
b) Delay in Collection of Receivables
c) Fluctuations in Exchange Rates
d) Short-Term Commercial Credits
e) Lack of Working Capital
f) Redundant Sales on Account
g) High Input Costs
h) No Credit with Reasonable Interests
i) Lack of Necessary Investments
j) Other

6- Which financing sources SMEs apply to when equities are insufficient?

a) Only Equities
b) Participation Banks
c) Financial Enterprises (Factoring, leasing companies, etc.)
d) Free Market (Pawn Brokers, etc.)
e) Seller Credits (Open Account)
f) Real Estate Sales
g) Commercial Bank Credits
h) Interest-Free Banking

i) Husband/Wife / Friend / Relative
j) Incentive Credits
k) Dated Cheques and Securities
l) Other

7- Which lending methods do most of companies use?

a) Traditional Approach
b) Basel III Approach

8- What are the guarantees deemed appropriate under Basel-III?

a) Cash, deposit or certificate of deposit
b) Gold
c) Debt Securities
d) Shares in the main index
e) Investment funds
f) Securities traded in organized markets out of the main index
g) Funds including securities traded in organized markets out of the main index
h) Real estate mortgage
i) Cheques and securities of client

9- What are the financial difficulties of Basel-III approach imposed on the companies?

a) Transparency Issues
b) Financing Issues
c) Risk-Based Pricing
d) Collateralization

10-What do SMEs expect from the process of adopting Basel-III?

a) I am expecting to adopt to Basel III smoothly
b) I am not expecting to adopt Basel III smoothly