Bank Lending Criteria and Relationship Lending

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Abstract-Making the decision to extend the right amount of money to the right Borrower at the right time became extremely significant for the Banks in today's world. This paper attempts to comprehend the factors taken into consideration in credit lending to large corporations and also to observe whether or not relationship lending exists in the Turkish Corporate Banking system. 2 focus groups and 3 in-depth interviews are conducted as part of the qualitative research; as a result of which a scale is developed, which has been sent as a questionnaire to bankers in Turkey; the outcome of which has been analyzed with factor analysis in SPSS. The results obtained from this study suggest that in the Corporate Banking world, in the process of extending credit to large institutions; bankers take into consideration the inherent risks involved, the relationship with the Borrower, Soft Information on the Borrower, the Borrower's business cycle and finally the business model. To conclude, in line with the expectations of the researcher, "relationship" has been found to be one of the significant factors taken into consideration in credit lending in Turkey.

Index Terms—bank lending criteria, relationship lending, credit process, corporate banking

I. INTRODUCTION

In the modern world, banks are trying to give loans to companies and increase their expected earnings and at the same time they are trying to reduce risk. They are changing how they assess the risk of loans and are trying to monitor companies once loans are made. The money that banks are lending is usually not their own money, rather the money belongs to the depositors, who will want it back one day. So, when the Bank is lending out the money, it should be made sure that the money will be properly repaid. Therefore making the decision to extend the right amount of money to the right Borrower at the right time becomes extremely significant for the Banks in today's world.

In light of this, this paper is an attempt to comprehend the factors taken into consideration in credit lending to corporate companies (i.e. large corporations). While the availability of external-financing for small and medium enterprises (SMEs) and the decision making process in credit extension for SMEs is a topic of significant research and academic interest around the globe, the same is not true for Large Corporations and the purpose of this paper is to fill this gap. Furthermore, 'relationship lending', which is a phenomenon on which extensive academic research has been done so far; will also be analyzed within this research and this paper will try to answer the question of: Does relationship lending exist in the Turkish Corporate Banking system?

In this study, a detailed literature review will initially be presented to get a grasp of what has been done in the literature so far. After completion of the literature review, the findings of the qualitative analysis, i.e. focus groups and in-depth interviews, will be analyzed to search for the factors that affect the credit decision making mechanism. Based on the qualitative study, as well as the literature review, a scale on "factors affecting credit decision making process" will be formed. Data will be collected in order to purify and test the reliability and validity of the scale.

II. LITERATURE REVIEW

A. General Factors in Credit Lending

Bank loan officers rely on the 'Five C's of Credit' when making credit decisions for commercial companies: Character, Capacity, Capital, Conditions and Collateral [1]:

Character: In this area, the banks usually seek for qualities like training and knowledge, experience, financial competency and plans for the future. Training and knowledge are examined in terms of education and understanding of the industry. On the other hand, direct experience under many different managers as well as in other industries gives a strong basis to be a good manager, which also gives a manager the resources often required when times get tough. Finally, financial competency means that one can understand the importance of records and record keeping as well as how to use them to one's advantage.

Capacity refers to the ability to service the debt, replace assets as they wear out and provide money for the current standing and possible expansion of the Company. For this, the business must have liquidity, i.e. having cash or the ability to generate cash to meet the ongoing commitments and expenses. Company's borrowing history and track record of repayment also plays a crucial role for capacity. How much debt can the Company handle? Will the Company be able to honor the obligation and repay the debt? Debt and liquidity ratios like Debt Service Coverage Ratio, Current Ratio and EBITDA leverage are the most frequently used ratios that are used by banks before debt rising.

Manuscript received September 11, 2013; revised January 23, 2014.

Capital: How well the company is capitalized and how much money has been invested in the business are the main concerns with respect to this point. Banks usually seek to see that the Company, itself has also made a financial commitment, that they have put themselves at risk, as well. Lenders will generally consider the company's debt-to-equity ratio to understand how much money the lender is being asked to lend (debt) in relation to how much the owners have invested (equity).

Conditions are the national, industry level and local economic conditions and how the Company fits in the economic conditions. If the business in question is sensitive to economic downturns, the Bank wants to know that the Company is good at managing productivity and expenses. Conditions generally include markets, consumer trends, economic predictions, as well as environmental considerations. Conditions may also refer to the intended purpose of the loan, for example working capital, additional equipment or new offices.

Collateral is also referred to as security. While cash flow will nearly always be the primary source of repayment of a loan, bankers look at what they call a secondary source of repayment. Collateral represents assets that the company pledges as an alternate repayment source for the loan. While most of the time collateral is in the form of real estate, office or manufacturing equipment; accounts receivable and inventory can also be pledged as collateral.

A prospective borrower can be turned down for many reasons [2]. There may, for example, be question over his character and integrity; his own stake in his business. The purpose of the proposition may be questionable: the amount may be too much (or too little) [2]. On the other hand, the capability of the borrower to run the business could be questioned; the prospects of repayment could be in doubt: the required term might be too long; and there may not be any available security. According to the findings, falling down on any one of these eight factors can result in a refusal – even if the other seven items pass the test. Unlike the pools, one cannot perm six or seven from eight, as all eight factors must be right [2].

Banks can improve the quality of their corporate lending decisions by improving their analysis of the information they are given [3]. Furthermore, the author asserts that an ideal loan application would consist of the following items, which the bankers should be carefully evaluating:

- Verifiable set of financial forecasts
- Information on the quality of the management team and labor force
- Summary of the business's background and its strategy
- Statement of past performance

B. Relationship Lending

Besides the general factors taken into consideration in credit lending; the past literature and academic research has also focused to a great extent on relationship banking in the context of commercial lending to small and midsized enterprises (SMEs), in order to distinguish relationship lending from other types of lending.

A durable lending relationship, in which the bank gains information about the borrowing firm, has been shown to be valuable, both to small firms [4]-[5] and to large firms [6]-[7]. In particular, continuing relationships are associated with lower loan rates, less stringent collateral requirements and a lower likelihood of credit rationing.

According to Sohn and Choi, long term relationships between banks and borrowers are important instruments for alleviating informational asymmetries in the loan markets [8]. Information is produced more efficiently over time through long-standing relationships and the benefits of continuing relationships are shared with borrowers. According to their work, these benefits to borrowers include lower loan interest rates, lower collateral requirements and perhaps more importantly greater credit availability.

According to Berger and Udell (2002), despite the recent academic focus on relationship lending a fully satisfying analysis of precisely how bank-borrower relationships work is missing in the literature [9]. Based on Berger and Udell's work, relationship information is often 'soft' data, such as the information about character and reliability of the firm's owner, and may be difficult to quantify, verify and communicate through the normal transmission channels of a banking organization [9]. Relationship lending is associated with a fundamentally different lending process than transactions-based lending technologies, such as financial statement lending, assetbased lending or credit scoring. According to Berger and Udell's findings, transactions-based lending is based on 'hard' information that is relatively easily available at the time of loan origination and does not rely on 'soft' data gathered over the course of a relationship with the borrower [9]. This hard information is based on relatively objective criteria, such as financial ratios in the case of financial statement lending. The decision to lend and the terms of the loan contract are principally based on the strength of the balance sheet and income statements. Financial statements lending is best suited for relatively transparent firms with certified audited financial statements. In the current framework, transaction lending is generally viewed as being focused on informationally transparent borrowers, while relationship lending is seen as used for opaque borrowers [10]. However, Berger and Udell find this characterization fundamentally flawed, as transaction lending is not a single homogenous lending technology [10]. Hence, according to Berger and Udell, relationship lending and transactions-based lending differ in important ways [9]. Soft information may not be easily observed by others, verified by others or transmitted to others and includes assessments of an SME's future prospects, compiled from past interactions with its suppliers, customers, competitors and other businesses and business associations in the local market [11].

On the other hand, Berger and Udell also suggest that large banks may choose to avoid relationship lending because these banks are often headquartered at a substantial distance from potential relationship customers, aggravating the problems associated with transmitting soft, locally-based relationship information to senior bank management [9].

According to Berger and Udell, large institutions have a comparative advantage in transactions lending to SMEs based on hard information, while small institutions have a comparative advantage in relationship lending based on soft information [10].

On the other hand, according to Memmel et al., relationship lending exists all over the world, including market-oriented banking systems as the United States and within the European Union [12], one of the countries where relationship lending is especially prevalent is Germany, which is often cited as the classical example of a bank-based system with strong customer-borrower relationships [13]. According to the study of Memmel et al, it is typically assumed that relationship lending helps reduce information asymmetries between borrower and lender by the close contact between the two parties [12]. Therefore, companies that are especially exposed to high information problems, such as small companies and companies with a high R&D intensity, should choose a relationship lender.

According to Peterson and Rajan, relationships lower the lender's cost of lending to small firms [4]. According to them, the first dimension of a relationship included is the length of the relationship between the borrower and its current lender, which should be a proxy for the private information the institution has about the firm. The longer a borrower has been servicing its loans, the more likely the business is viable and its owner trustworthy [14]. Conditional on its past experience with the borrower, the lender now expects loans to be less risky, which will eventually reduce its expected cost of lending and increase its willingness to provide funds [4].

As can be analyzed from the literature review stated above, the academic research has mainly focused on Small and Medium Enterprises, while the main purpose of this study will be to focus on credit lending to Large Enterprises. Although there may be similarities in the credit decision process for both sub-segments, researcher also expects to obtain significant differences in the lending process and also in the factors taken into consideration, as well; which will be investigated in detail in the subsequent sections.

III. METHODOLOGY & DATA & FINDINGS

A. Qualitative Research

After the completion of the literature review, qualitative research is conducted for idea generation [15], [16]; which will mainly be used for scale development. The goal is to clarify, sum up and implement what has been captured in the literature review mainly concerning SMEs to Corporate Companies. Moreover, as the literature review did not necessarily concentrate on the Turkish market and the applications used in the Turkish market, with the conduct of qualitative research with the Bankers in Turkey, the ultimate aim is to focus on the applications used in the Turkish banking system. With this purpose, two focus groups and three in-depth interviews have been carried out.

The purpose of the focus groups was to generate an environment to discuss 'what are the factors taken into consideration by the Banks in credit extension to Corporate Companies'. In order to clarify concepts, all participants were initially asked what they understand from 'Corporate Companies' (companies with minimums sales of USD 150MM). Two focus groups were conducted and the following questions were discussed in each one:

- Which factors do you consider while extension of credit to a Corporate Company?
- Which qualitative factors are the most essential to learn about a Company before credit lending?
- Which quantitative factors are the most essential to learn about a Company before credit lending?
- If faced with a new loan application, what are the five most important issues that you look further into?
- Does 'Relationship Lending' exist in the Turkish banking system?

While the two groups were heterogeneous in terms of their experience in the banking business, both groups were homogenous within themselves in terms of age, educational background, banking experience and life styles.

Three in-depth interviews were conducted in addition to the focus groups. The interviews were done with three bankers from three different banks (2 foreign banks and 1 local bank). The in-depth interviews carried utmost importance for this study and especially for item generation, given the limited literature review and given the level of expertise required to capture the dynamics of the banking world. In order to get a better grasp of the banking business in Turkey; representatives of both foreign banks, as well as local banks were interviewed, since the approaches used by foreign and local banks may differ from each other.

The main idea behind the interviews is to be able to pose questions to the interviewees about the credit lending process and hence get a better grasp of the picture with full of details. The researcher first discussed the general requirements of credit lending with the interviewee, following which each interviewee was asked to list the five most important aspects s/he would look at when first faced with a new credit application.

After generating ideas about the construct of 'lending criteria in corporate banking'; as a second stage; the researcher also asked the interviewee to walk her through a documented credit application process; in order to see what the banks are really taking into consideration in the lending decision. At this stage, besides the generated ideas; it was possible for the researcher to see what in reality was demonstrated to the Credit Committee within each bank and what further information requests are coming from the Committee, at the same time; which basically provided the whole picture.

Data Analysis: The focus groups and the in-depth interviews were tape-recorded and then transcribed. The

analyst especially looked for statements about lending criteria. The initial list had 95 statements, which were later categorized into 38 items. The researcher went through the items and further combined certain items to reach a list of 32.

B. Scale Development

The main purpose of this research is to produce a scale about factors affecting credit lending process in Corporate Banking. The aforementioned literature and the outputs of the qualitative research have been effective in generating a concept that has been operationally defined.

At the initial stage, the researcher obtained the 32 items from the qualitative research. As the literature review has mainly focused on Small and Medium Enterprises (SMEs), with relatively less academic research on Large Corporations, no new items could be found from literature; as all main points have been already covered in the qualitative research. Therefore, a final list of 32 items has been prepared.

Interjudge Agreements: Before constructing the questionnaires, the 32 items were provided to three independent judges. The judges were requested to categorize these 32 items into five categories and also comment on the ambiguous items. Please note again that academic research has mainly focused on SME banking; while the researcher of this study has concentrated on Corporate Banking; which may have points in common, while at the same time differ to a great extent. This is why, in the subsequent sections, the researcher will be using her own dimensions derived from the qualitative studies. The dimensions that will be used for the construct of 'credit lending factors for Corporate Companies' are as follows:

- Soft information on the Borrower (i.e. sector, business environment, people, etc.)
- Financial standing of the Borrower
- Relationship (Lending)
- Risks Involved
- Return expectations of the Bank

The number of agreed items was compared within pairs of judges (Table I):

TABLE I. INTERJUDGE AGREEMENT TABLE

Indeed	Number of	Percent of		
Judges	Items	Items		
A and B	28	87.50%		
B and C	29	90.63%		
A and C	29	90.63%		

In order to observe Interjudge agreement, 'Index of Reliability', 'z-scores' and 'Cohen's Kappa' were calculated:

1) Index of reliability:

$$Ir^{2} = [(F_{o}/N) - (1/k)]^{*}[k/(k-1)] \text{ for all } (F_{o}/N) \ge (1/k) (1)$$

where;

- F_o = observed number of agreements by both judges
- N = total number of observations

k = number of categories

Ir for judges A and B:
$$\sqrt{\left[\left(\frac{28}{32}\right) - \left(\frac{1}{5}\right)\right] * \left[\frac{5}{4}\right]} = 84.38\%$$

Ir for judges B and C: $\sqrt{\left[\left(\frac{29}{32}\right) - \left(\frac{1}{5}\right)\right] * \left[\frac{5}{4}\right]} = 88.28\%$
Ir for judges A and C: $\sqrt{\left[\left(\frac{29}{32}\right) - \left(\frac{1}{5}\right)\right] * \left[\frac{5}{4}\right]} = 88.28\%$

All three scores for index of reliability scores were calculated to be high for the three judges. However, as the indexes are below 90%, a z-score test was also administered to guarantee the study. 2) Z-scores:

$$z = k - \frac{Ek}{\sqrt{N*p*(1-p)}} \tag{2}$$

where:

N = total number of items

k = number of agreed items

 E_k = expected number of agreed items

p = probability of one dimension

z-score for judges A and B=
$$\sqrt{\left(28 - \left(32 * \left(\frac{1}{5}\right)\right)\right)}$$

 $\left(32 * \left(\frac{1}{5}\right) * \left(\frac{4}{5}\right) = 4.22$

z-score for judges B and C=
$$\sqrt{(29 - (32 * (\frac{1}{5})))/(32)}$$

 $\left(\frac{1}{5}\right) * \left(\frac{4}{5}\right) = 4.41$ z-score for judges A and C= $\sqrt{\left(29 - \left(32 * \left(\frac{1}{5}\right)\right)\right)}/\left(32 * \left(\frac{1}{5}\right)\right)$

 $\left(\frac{1}{5}\right) * \left(\frac{4}{5}\right) = 4.41$

At an alpha of .01, the z_{table} is 2.33. All the z-scores for inter-judge agreements are above 2.33; therefore, the null hypothesis of two judges coding 32 items into the same 5 categories by chance is rejected in all comparisons.

3) Cohen's Kappa:

In addition to Index of Reliability and z-scores, Cohen's Kappa is also calculated in order to see interrater reliability (Table II).

where:

PO = relative observed agreement among raters PE = hypothetical probability of chance agreement

TABLE II. COHEN'S KAPPA

	Judges A & B	Judges A & C	Judges B & C
PO	0.906	0.906	0.906
PE	0.231	0.227	0.231
Cohen's Kappa	0.877	0.879	0.878

As all Cohen's Kappa values are greater than 0.7; the researcher concludes that the Interjudge reliability is satisfactory. Items that were not common in pair-wise comparison were put into the appropriate categories by the researcher as a result of the literature review and the qualitative research.

Questionnaires: Two questionnaires are developed. In the first questionnaire, the items were measured with an interval (5-point Likert) scale, where 1 meant 'strongly disagree' and 5 meant 'strongly agree'. The second questionnaire involved the same items; but this time a ratio scale is used; where 0 meant 'I strongly disagree with the statement' and 100 meant 'I strongly agree with the statement'. Both questionnaires were sent to 58 respondents via e-mail and 45 were received back in 1 week. Both questionnaires included certain demographic variables such as gender, age, education level and number of years spent in business life and number of years spent in banking, in case will be needed in a further study.

Sampling: Before the submission of the questionnaires, the researcher first defined the population. The most important factor was that the respondents should be in the banking business and within the banking world the respondents should mainly be involved in Corporate Banking. Based on this, the researcher defined her population as having at least 1 year of Corporate Banking experience either in the respective bank's marketing or risk analysis unit; hence as a very special kind of information is required, random sampling could not be done.

C. Factor Analysis

As a result of the qualitative research, the researcher had come up with five dimensions; but rather than working with these dimensions right away; factor analysis has been applied initially to observe how the items were grouped according to the SPSS output.

Factor analysis was done based on the Interval scale data obtained from the respondents. The initial factor analysis where eigenvalues were set to over 1, revealed 9 factors for the questionnaire with the interval scale explaining almost 71% of the total variance. On the other hand, with all items involved in the factor analysis, KMO comes out to be 0.387, which is less than the benchmark level of 0.5; which is why as part of this study the researcher will repeat the factor analysis through deleting the items with the least anti-image correlation; which will eventually improve the KMO values; as a consequent to which the final dimensions will be obtained. Please note that normally, items with correlations which are less than 0.5 should be deleted; however doing so would erase numerous items from the scale: therefore, the researcher has chosen to initially consider deleting the items with correlation less than 0.3. However, before deletion of each item; the researcher has gone back to the definition of the item, in order to comprehend whether or not that item carries specific importance for the conduct of this research. Based on this, at the initial stage, 7 items were deleted from the list; as a result which KMO has increased to 0.508.

After this step; correlation for the rest of the items is analyzed. Researcher has noticed that there are still items with correlation less than 0.4; all of which is again deleted from the list. As a result of this, KMO has increased to 0.601, which is greater than 0.5. Now that the researcher has reached a KMO level of 0.601 and only left with 20 items; item elimination is stopped at this stage, to investigate the dimensions proposed by SPSS.

 TABLE III.
 DIMENSIONS PROPOSED BY SPSS

Rotated Component Matrix ^a							
	Component						
	1	2	3	4	5		
V18	0.752	-0.044	0.208	0.056	-0.33		
V22	0.705	0.3	0.025	0.106	-0.018		
V20	0.684	0.213	0.045	-0.281	0.026		
V15	0.677	0.171	-0.33	0.374	0.024		
V30	0.664	0.071	-0.193	0.077	0.215		
V5	0.562	-0.116	-0.007	0.407	0.244		
V19	0.522	0.443	0.063	-0.258	-0.076		
V31	0.186	0.776	-0.324	0.048	0.032		
V28	0.047	0.775	-0.248	0.185	0.165		
V17	0.255	0.746	0.019	-0.121	0.119		
V26	0.182	0.664	-0.062	-0.204	0.411		
V25	-0.021	0.62	0.24	0.06	-0.077		
V10	-0.034	-0.045	0.762	0.206	-0.039		
V12	-0.063	0.117	0.752	0.012	-0.056		
V14	0.234	-0.24	0.666	0.108	-0.095		
V11	-0.284	-0.164	0.626	-0.082	0.516		
V9	0.047	0.058	0.17	0.843	-0.099		
V6	-0.16	0.167	0.352	0.721	-0.138		
∨7	0.304	-0.22	-0.114	0.6	0.142		
V27	0.077	0.351	-0.107	-0.014	0.771		

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 12 iterations

As can be observed from the above table (Table III); SPSS has proposed five different dimensions:

- The first dimension includes V5, V15, V18, V19, V20, V22 and V30. Except for V5, which is related to financial ratios of the Borrower (hence researcher believes it to belong to Financial Standing of the Borrower); all other items belong to the 'Risks' dimension.
- On the other hand, the second dimension is comprised of V17, V25, V26, V28 and V31. Similar to the first dimension; except for one item (V17) which concerns expected earnings of the Bank; (which the researcher believes it to belong to 'Expected Earnings' dimension); all other items belong to the 'Relationship' lending dimension.
- The third dimension on the 'Rotated Component Matrix' comes to include V10, V11, V12 and V14; all of which belongs to the 'Soft Information of the Borrower' dimension; which is exactly as expected by the Researcher.
- The fourth dimension, on the other hand, is comprised of V6, V7 and V9. While the researcher thinks that two of the three items in this dimension belong to 'Soft Information of the Borrower', the researcher thinks that the last item in this dimension belongs to the 'Financial Standing' dimension.
- Finally, the fifth dimension is composed of one item only; as it is not logical to have a dimension with one item only; the researcher has decided to drop it.

Please refer to Appendix for the definition of variables used in the questionnaires and processed in SPSS.

Scale Purification: As a next step; Cronbach's alpha values are calculated for the dimensions determined in the previous section; to see if further items could be eliminated. Before calculating the Cronbach's alpha values for each dimension, the researcher also calculated the Cronbach's alpha for all of the items for interval scale and ratio scale. Please note that Cronbach alpha values for the whole sample came out to be 0.768 for the

interval scale and 0.841 for the ratio scale, which are both at satisfactory levels.

The first dimension obtained as a result of the factor analysis was 'Risk', whose Cronbach alpha came out to be 0.797. As the Cronbach alpha value is high and as this is the highest number possible (through looking at the 'Item-Total Table'); none of the items should be further deleted.

From the factor analysis, a second dimension was obtained: Relationship, which encompassed 5 items. Please note that the Cronbach alpha value for Interval and Ratio scales stand at 0.819 and 0.821, respectively; which are both very high.

The third dimension generated from the factor analysis is 'Soft Information'; which captures all non-written information about the Borrower including the quality of the manager and the character of the owner. Based on this, the Cronbach alpha value for the Interval scale stands at 0.697, while that of Ratio scale stands at 0.711. Although not very high, these alpha values around 0.7 are acceptable.

The fourth and hence the last dimension involved three items, two of which can be grouped by the researcher with the exception of one of the items belonging to another dimension, hence contradicting the researcher's expectations. Based on these three items, Cronbach alpha values came out to be 0.624 and 0.720 for Interval Scale and Ratio scale, respectively. However, in the 'Item-Total Statistics Table'; it has been indicated that if V7, which is the item the researcher thought to be belonging to another group, is deleted from the group; Cronbach alpha increases to 0.73 and 0.798 for Interval Scale and Ratio scale, respectively. Both because this deletion is in line with the expectation of the researcher and also because Cronbach alpha values increase as a result of this action; researcher has decided to omit V7 from the fourth and the last dimension. However as only two items are left in the 4th dimension, researcher has decided to look at their correlations instead of Cronbach's Alpha, which came out to be 0.588.

Please find below a summary of the reliabilities calculated for each dimension and each method in Table IV below.

FABLE IV.	CRONBACH'S ALP	HA RESULTS
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	1st Dimension:	2nd Dimension:	3rd Dimension:	4th Dimension:	
	Risk	Relationship Soft Information Business Model & Cy		Business Model & Cycle	
Interval Scale	0.797	0.819	0.697	0.73	
Ratio Scale	0.827	0.821	0.711	0.798	

To sum up, with the final deletion from the list, the items that were grouped in the same category can be summarized as follows, with the following dimension names assigned to them:

- Risk: the items in this dimension are about all kinds of risk involved in extending credit to a Borrower, including items from security structure to country risk.
- Relationship: items regarding the relationship between the Bank and Borrower and also between

the Bank and the Group the Borrower belongs to, are listed in this dimension.

- Soft Information: Refers to those items, which cannot be directly observed from the documents like experience of the manager and character of the owner.
- Business Cycle & Model: this dimension, which has been formed as a result of the factors analysis, mainly encompasses the Borrower's procurement, inventory and sales cycle; as well as its strategy and operations.

As a final point, the researcher has also looked at the Cronbach Alpha values of the whole data set, covering only the items left to the final scale, i.e. 18 items. Please note the Cronbach Alpha values of both scales stand at above the benchmark level of 0.7, which indicates that the scale is reliable. (Cronbach's alpha is 0.752 for the Interval scale and 0.798 for the Ratio scale)

In order to test the internal consistency of the Scale, the researcher has decided to use split-half method. SPSS has split the sample into two, with the first part encompassing the first 9 items and the second part encompassing the last 9 items. Correlation between the two parts is 0.255, which is rather low. On the other hand, while Cronbach's Alpha for Part 1 is 0.795, which is very good, that of Part II is 0.564, which is not at an optimal level and needs further improvement.

D. Reliability & Validity Analysis – MTMM

Following the factor analysis, reliability and construct validity of the scale were analyzed with the MTMM (Multitrait – Multimethod) matrix (Table V) for the eighteen items and the four dimensions. The cells in the light blue color represent the reliability diagonal. The figures in the reliability diagonal are Cronbach's Alpha values. According to Peter (1979), reliability figures between 0.5-0.6 will be enough during the early stages of research for basic research; it is good to have a reliability of 0.7-0.8. It can be observed from Table V that all the reliability values are at least 0.7.

TABLE V.	MTMM RESULTS

			INTE	RVAL	RATIO				
		Risk	Relationship	Soft Information	Business Cycle & Model	Risk	Relationship	Soft Information	Business Cycle & Model
	Risk	0.797							
RVAL	Relationship	0.393**	0.819						
INTE	Soft Information	-0.129	-0.176	0.697					
	Business Cycle & Model	0.015	0.017	0.318*	0.730				
	Risk	0.877**	0.332*	0.001	-0.003	0.827			
01	Relationship	0.328*	0.914**	-0.104	0.072	0.390**	0.821		
RA	Soft Information	-0.087	-0.194	0.863**	0.273	0.094	-0.105	0.711	
	Business Cycle & Model	-0.012	-0.002	0.266	0.831**	0.072	-0.009	0.293	0.798

*significant at the 0.05 level (2 tailed)** Significant at the 0.01 level (2 tailed)

An essential principle of MTMM is that coefficients in the validity diagonal (dark green cells) should be significantly different from zero, which is an evidence of convergent validity [17]. The validity diagonal in the MTMM table above meets this principle and all the values are significant at the 0.01 level. For discriminant validity, the following principles should be met: a validity coefficient should be greater than the values lying in its column and row in the same hetero-method block [17]. This criterion is met for all four dimensions. Secondly, a validity coefficient should be higher than all coefficients in the heterotrait-monomethod triangles [17]: which is again met for all four values in the validity diagonal. Finally, similar patterns of trait interrelationships should be seen in all triangles [17]. Although this criterion is met in two of the triangles, it is violated in one of the triangles, i.e. Relationship (ratio) and Business Cycle & Model (ratio) heterotraitmonomethod triangle.

In a nutshell, although not perfect, the MTMM results are promising. Construct validity is obtained despite the small size of the sample. The researcher expects that a 7point Likert scale would raise the reliability of the model, as a result of which all the criteria of MTMM will be met.

IV. CONCLUSION

The purpose of this study was to understand the factors taken into consideration in the process of extending credit to Corporate Companies. Although the researcher had initially developed five dimensions from the qualitative study; as a result of the factor analysis the number of dimensions has decreased to 4, with 3 dimensions coming from the qualitative research and 1 new dimension being formed as a result of the factor analysis in SPSS; which are as follows: Risk, Relationship, Soft Information and Business Cycle and Model. The results obtained from this study suggest that in the Corporate Banking world, while extending credit to Large Institutions, bankers take into consideration the inherent risks involved, the relationship with the Borrower, Soft Information on the Borrower and the Borrower's business cycle and business model, which encompass the sales, inventory and procurement activities of companies, as well as Company's operations and strategy. The researcher is surprised to find out that 'Financial Standing' of the Company, which has been one of the dominant factors in the qualitative study did not come out to be a significant dimension as a result of the factor analysis conducted in SPSS. Finally, in line with the expectations of the researcher, 'relationship' has been found to be one of the significant factors taken into consideration in credit lending to large institutions in Turkey.

On the other hand, the scale developed for the research question has construct validity and despite the size of the sample, which is rather low, the reliability values are high. Looking forward, the purpose of the researcher is to advance this study through collecting data from a broader sample, possibly with alterations in the questionnaire types.

APPENDIX: SCALE DIMENSIONS & ITEMS

Variables of the "Risk" Dimension:

- V5: EBITDA, EBITDA leverage and DSCR of the Company are the main ratios that I take into consideration before extending credit to a Corporate Company.
- V15: Security Structure of a credit, including mortgages, pledges, post-dated cheques, also influence the credit decision process to a great extent.
- V18: 'Country-specific' risks also constitute one of the main risks and therefore should also be analyzed before extending credit.
- V19: Ability to 'insure' the credit is also an important aspect for me before approving a credit.
- V20: 'Saleability of the credit', i.e. in primary markets through syndication and also in secondary markets, also affects my decision in the loan process to a great extent.
- V22: Structure of the credit, i.e. long term vs. short term; also affects my credit decision process.
- V30: In the credit decisions, besides Company specific factors, my Bank's own credit appetite and how the credit will be financed also plays a significant role.

Variables of the "Relationship" Dimension:

- V17: Even if the Company specific details are not very optimal, I would approve a credit for a Company if my expected earnings from side businesses are high.
- V25: The fact that the Company I am considering belongs to a conglomerate gives me comfort.
- V26: I sometimes approve a credit for a subsidiary of a big group although I would not have done so if the company was standalone.
- V28: I sometimes approve credits under the umbrella of 'relationship lending' as a top down approach for those companies with whom I have a long term relationship.
- V31: Sometimes, I am being obliged to extend credit to companies due to stiff competition between other banks in the market.

Variables of the "Soft Information" Dimension:

- V10: Corporate Governance and Full disclosure by the Company are also fundamental requirements for me.
- V11: 'Capacity' and 'Character' of the owner are the key variables that should be analyzed in depth before extending the credit.
- V12: 'Track record' of the Company in terms of 'years in business' is a very important phenomenon for me in the lending process to a Company.
- V14: 'Experience, integrity and ability of the Management' is a key consideration for credit extension.

Variables of the "Business Model & Cycle" Dimension:

• V6: Before approving the credit lines for a Company, it is extremely important to understand

its Business Cycle, including its procurement, inventory and sales cycle.

• V9: As an overall view, I also analyze if the Business Model of the Company is a correct one including its strategy, operations, financing and sales structures.

ACKNOWLEDGMENT

The author wishes to thank Department of Management, Bogazici University. This work was supported by a grant from the Faculty.

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