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As a case study, lending relationships of a private bank, Karafarin Bank (KB), and twenty four of its relationship borrowers (some being creditworthy clients and some having past dues), are examined and the credit committee of the bank is asked to rate these companies according to extracted attributes found by this research through Delphi method. The relationship risk score of these companies are then derived and analyzed. The analysis of the firms' risk scores reveals useful managerial implications on how to better manage B2B relationships by distinguishing low risk and high risk borrowers.

Keywords: *relationship lending, Delphi method, relationship risk factor, relationship risk score, interview*

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1. Introduction

It is the age of relationship marketing, an age in which making a sale is just the beginning, rather than the end, of a company-customer relationship. At the core of relationship marketing is the development and maintenance of long-term relationships with customers, rather than simply a series of discrete transactions. One consequence of relationship marketing is, therefore, a major directional change in the criterion variable that should guide managerial decisions (Jain and Singh 2002).

In the financial services industry as well, more than ever before, managers must understand their best customers' needs and prevent them from switching to other companies (Chiu, Hsieh et al. 2005). It is now proposed that closer attention is paid to the long-term financial benefits, and other benefits, of retained customers the main reason being that competition in the marketplace has intensified. To achieve growth, it is argued, organizations must change their paradigm to that of relationship marketing (Lindgreen and Crawford 1999). Relationship lending is then defined as a long-term implicit contract between a bank and its debtor. Due to information production and repeated interaction with the borrower over time, the relational bank accumulates private information, establishing close ties between the bank and the borrower (Elsas 2005).

Iranian banks are not an exception to these challenges. Banking industry in Iran is getting more and more competitive by the establishment of private banks in 2001, so banks are urged to manipulate practices by which they could gain competitive advantage over competitors. Fundamental means to obtain this goal would be maintaining relationships that are more profitable in long term for the bank. Prerequisite of this practice would then be identification of relationship risk factors, specifically for Iranian banks where the concept of relationship banking is a new perception. By relationship risk factors in this research we mean non-financial factors that would affect the relationship borrowers' probability of default in Iranian banking industry. Since credit facilities (guarantees, loans, L/C's) are recognized as the most profitable services of a bank, we have considered a B2B lending relationship as our unit of measurement.

A pioneer bank in adoption of relationship banking in Iran, Karafarin Bank (KB), has provided us with details of lending relationships with twenty four of its business customers of whom seventeen firms have less than three months of past dues (called good customers in this paper) and seven firms have more than three months of past dues (called bad customers in this paper).

The remainder of this paper is structured as follows. In the next section we will review the literature on relationship lending and its constructs. In section 3 we will briefly review the background and lending process at KB plus the risks and benefits of relationship lending for this bank according to its managers' point of view. Section 4 deals with the Delphi process for information solicitation and analysis of risk scores for the firms. We conclude with some managerial implications and future research directions in section 5.

2. Literature review

Grönroos (1994) suggests a relationship definition of marketing:

Marketing is to establish, maintain, and enhance relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. This is achieved by a mutual exchange and fulfilment of promises (Gronroos 1994).

It is proposed that closer attention is paid to the long-term financial benefits, and other benefits, of retained customers the main reason being that competition in the marketplace has intensified. To achieve growth, it is argued, organizations must change their paradigm to that of relationship marketing (Lindgreen and Crawford 1999).

In the financial services industry as well, more than ever before, managers must understand their best customers' needs and prevent them from switching to other companies (Chiu et al., 2005). One most successful approach to address these issues would be relationship banking which according to Bharath et al. (2005) is that if a financial intermediary's decision to supply various services to a firm is based on borrower-

specific information that the intermediary collects over multiple interactions (over time as well as across multiple products), and further, if this information is proprietary (available only to the borrower and the intermediary), the intermediary is engaged in relationship banking. In contrast, transaction-oriented banking is based on identical transactions with various customers, so that transaction based lending is financing according to that particular transaction rather than being aimed at an information based relationship (Boot 2000). It is important for prudent lenders to gather information about the creditworthiness of the borrowers. There are several ways to obtain this information, but one method that is especially well suited for opaque firms is the development of long-term lender-borrower relationships (Elyasiani and Goldberg 2004), which enables the lender to better know the borrower and offer suitable services at the right time to the right borrower. The aim of relationship banking then would be resolving problems of asymmetric information (Boot, 2000). As a subset of relationship banking, relationship lending is defined as a long-term implicit contract between a bank and its debtor (Elsas 2005).

Researchers have mentioned several benefits of relationship lending (for lender) which could come from multiple sources such as the ability to share sensitive information, more flexible contracts, the ability to monitor collateral, and the ability to smooth out loan pricing over multiple loans (Bharath, Dahiyab et al. 2005). Baharath et al. (2005) show in their research that strong past lending relationships significantly increase the probability of securing future lending and investment banking business.

Two main constraints faced in any relationship lending are the soft-budget constraint (for lender) and the hold-up problem (for borrower). The solution to the former is defined as the bank seniority which means making the bank's debt claim the most senior (Boot, 2000). The latter happens due to the proprietary information about borrowers that banks obtain as part of their relationships and a solution as Ongena and Smith (2000) offer is to have multiple bank relationships. A potentially superior solution is that a borrower could use long-term debt contracts that resemble the line of credit arrangement that the lending bank may terminate, but if it chooses to continue financing, it should do so at ex ante specified terms as cited by Elsas (2005).

The most commonly used proxy for relationship lending in applied empirical work is the duration of a bank–borrower relationship (Elsas, 2005). The basic idea is that duration reflects the degree of relationship intensity over time. The other important proxy is the number of bank relationships which is associated with a higher riskiness of the borrowers because when a large number of lenders are involved, monitoring of the borrower tends to be weaker (Foglia, Laviola et al. 1998). It could also be due to inefficient judicial systems and poor enforcement of laws of a country, or size of the firm: the larger the firm, the more the number of relationships (Ongena and Smith 2000). Many other factors have been examined effective in relationship lending in financial service industry, an important one being the risk. The constructs of risk are investigated by many researchers and each of these researches indicates the risk factors for a specific financial service in a specific country. For instance the amount of return on sales and size of the firm for relationship borrowers of German banks are investigated (Behr and Guttler 2007), or Ryals and Knox (2006) have prepared a relationship scorecard for business customers of an insurance company according to nine main factors they have extracted from a KAM's team. These factors include number of customer relationships within the company, number of products bought by the customer, longevity of relationship or how good is the company's understanding of customer's company and industry (Ryals and Knox 2006).

3. Lending process in financial services

Iranian private banks started to establish in 2001 after a twenty-year gap, and now they add up to five banks. During the past 7 years, KB has been proved to be a pioneer not only in offering new services to its customers but also to adopt new banking concepts in Iran, one being the relationship banking concept. For this reason, we considered KB as the best potential for providing our case study.

Since the lending process of KB has been the subject of the case study in our research, we will take a look at lending technique at KB to get an understanding of ineffectiveness of this process which has motivated this bank, to move towards new lending techniques. We will also review the benefits and risks of relationship lending from KB's point of view according to the interview with some of its managers.

3.1 KB's background

KB was initially established as Karafarin Credit Institute in 1999. The Institution was officially converted into a bank on January 1, 2001 as the first Iranian privately-owned bank in operation. With new opportunities in the business environment available in Iran and an expansion of the Iranian market beyond the oil and gas industries, KB is going to formulate a new strategy to meet the growing demands of both the retail customers and the business community. Their mission is to offer specialized financial services to develop business units

that offer strong potential in terms of growth and profitability (www.karafarinbank.com January, 2008). The KB's amount of capital is 1.05 trillion Rials and total assets are more than 23 trillion Rials right now.

3.2 Lending technique at KB

When a loan application is filed by a firm at KB, the credit committee of the bank will decide on the amount of loan that could be granted to the firm. This committee, which differs in number and expertise of members from one bank to another, includes four members at KB which decides on the basis of financial and non-financial criteria and credit policies that the board of directors sets for the bank. These criteria include profitability, solvency, and efficiency of the firm through financial statements and also the business environment and the status of the firm's industry. These criteria are checked either by objective factors or by subjective knowledge of the committee members about the firm and its industry.

According to Baas and Schrooten (2006), there are four types of lending in financial services in which the first is based on soft information and the other three based on hard information.

Table 1. Lending techniques

Relationship lending is based on the experience of a given bank with a specific borrower and therefore on soft information collected over time. So if financial data is limited, relationship banking is the technique of choice
Financial statement lending is based on evaluating information from the firm's financial statements. The decision to lend depends largely on the strength of the balance sheet and income statements.
Asset-based lending is principally based on the quality of the available collateral. This type of lending causes high monitoring costs and requires high-quality receivables and inventory available to pledge (Berger and Udell, 1995, 1998; Boot, 2000). That is why it is generally used as a substitute for relationship lending if the term of the relationship is short.
Small business credit scoring is an adaptation of statistical techniques used in consumer lending. In addition to information about the financial statements, the creditworthiness and history of the owner is heavily weighted (Frame et al., 2001).

Source: (Baas and Schrooten 2006)

In Iranian financial services including KB, traditional asset-based lending is applied in which hard assets, such as real property, equipment, and inventories are pledged. In such an application, the bank's experts determine the value of the borrowing firm's assets, and if the total value of these assets is higher than the credit amount, the bank lends the money. If a firm fails to repay its debts, which is very common in Iran, the bank takes over pledged assets through a lengthy and a bureaucratic process and tries to sell those assets to the highest bidder in an auction. The lengthy process of collateral evaluation besides the lengthy process of collateral liquidation through judicial system (in case of default of customers), makes the lending process unfavorable both to borrowers and lenders in Iran.

In literature, there are contradicting opinions about collateral and riskieness of clients. For instance according to Boot (2000), a contractual benefit of relationship lending is that bank loan contracts can more easily and safely accommodate collateral requirements to secure loans. Secured loans are riskier than unsecured loans even after taking account of the value of the collateral, suggesting that these loans are for risky borrowers, which more often need relationship to get bank credits (Berger and Udell, 1990; cited by Boot, 2000). Greater collateral use could indicate that loans go to borrowers of low quality and higher risk. However, Jimenez et al., (2006) show that collateral is a way to decrease the risk of the loan operation.

Another benefit of collateral is exposure of valuable information to the bank over time. For example, a bank with inventories and accounts receivable as collateral, may learn valuable information about the business and it (collateral) can actually mitigate moral hazard and adverse selection problems in loan contracting (Boot, 2000). Also Jimenez et al., (2006) found empirical evidence that relationship lending pays off for borrowers in terms of a lower likelihood that banks will require them to pledge collateral in new loans.

3.3 KB and relationship lending

Due to mentioned benefits that relationship lending could bring for both the bank and the customer based on literature, and also because of mal process of credit evaluation and collateral liquidation, KB has decided to pioneer relationship lending concept to better serve its customers and to bring more efficiency for the bank.

3.3.1 Benefits of relationship lending for KB[1]

As relationships mature over time with a relationship borrower, KB gathers more and more information by monitoring the firm's financial activities. Acquisition of this information would cost other lenders both time and money thus giving KB a competitive advantage by somehow overcoming the information asymmetry problem. Furthermore the costs of producing information is spread over multiple products (guarantee, letter of credit, loan), therefore the marginal cost of producing any individual product is lower for KB.

Each year KB assigns credit limit for its relationship borrowers and performs the evaluation (collateral evaluation, credit evaluation, etc) and consulting only once, at the beginning of the fiscal year. This way, the relationship borrower goes through the process once a year and will take advantage of the credit limit and guarantees whenever needed during that year. This also causes evaluation cost reduction for KB.

The probability of winning subsequent loans from relationship borrowers is also significantly high for KB due to their strong relationship.

A potential benefit of relationship lending for KB would be in internationalization because the information advantage KB gains about relationship borrowers, makes it beneficial both for KB and the customer to be followed up out of Iran.

3.3.2 Risks of relationship lending for KB

Even when relationship borrowers have no past dues and are considered our best client, there is always the risk of not keeping their commitment due to any of the risk factors.

Proximity of relationship between KB and relationship borrowers makes renegotiation of firm's contracts easy which happens several times during the relationship period. The risk is then that borrowers who realize that they can renegotiate their contract, may exert insufficient effort in preventing a bad outcome from happening. The solution of making a sort of seniority contract (as mentioned in the literature) was discussed with the KB's interviewees, but they considered it impossible with current banking regulations in Iran.

4. Relationship risk score

As mentioned in section 2, Ryals and Knox (2006) have extracted relationship risk attributes through semi-structured interviews with company's Key Account Managers, and then prepared a relationship risk scorecard according to extracted attributes. In this section we will go through the Delphi process for extraction of risk attributes that affect the lender-borrower relationship, and then we discuss how to use it for estimation of relationship risk.

4.1 Delphi process

For the purpose of gathering attributes that are most influential in the continuation of relationship lending with a business client of a bank in Iran, Delphi method was conducted. In other words we wanted to solicit information from banking experts on relationship lending risk factors. The Delphi method was originated in a series of studies that the RAND Corporation conducted in the 1950s and the objective was to develop a technique to obtain the most reliable consensus of a group of experts (Okoli and Pawlowski 2004). Delphi researchers employ this method primarily in cases where judgmental information is indispensable, and typically use a series of questionnaires interspersed with controlled opinion feedback (Okoli and Pawlowski 2004).

We got two main panels including the credit evaluation experts and the other one, the risk management experts. The experts were listed according to their work experience in banking sector meaning that CEOs of the five Iranian private banks were asked to introduce their risk and/or credit experts that they had in the bank or knew outside the bank. From 28 panelists of the two panels that we contacted, 23 accepted to participate and remained till the last questionnaire. Of these twenty three experts, seven were risk experts and the rest were credit experts.

In our first questionnaire, we asked panelists to bring up as many non-financial factors as they can that is, in their opinion and due to their experience, influential in the continuation of relationship with a relationship borrower. They were also asked to give a brief description of each factor they had mentioned, to help in

[1] Please note: All information in sections 4.1.1 and 4.1.2 are cited according to the interview with the head of risk management dept., head of credit dept. and the V.P of KB.

categorization of the factors. There were 28 factors gathered in this questionnaire of which 6 were identified as factors influential in formation of relationship lending with a new customer, such as credit history of the firm in banking system or the credibility of the referee of that firm to the lending bank and were omitted from the list.

Next we categorized extracted factors into three groups of internal factors of the firm, environmental factors, and firm's relationship with lending bank.

In the second questionnaire, we put factors in corresponding categories and sent it along with a copy of their responses to first questionnaire. We then asked experts to verify their answers and modify the categorization of their factors. According to (Schmidt 1997), ''without this step, there is no basis to claim that a valid, consolidated list has been produced.''

In our third questionnaire we asked experts to identify (and not rank) at least 10 factors (from all three categories) that they thought were the most influential in continuation of relationship lending. Final attributes were those with more than or equal to 12 votes (50%). We got total of 13 attributes and in our last questionnaire asked them to grade the importance of each of these attributes from 1 indicating very poor, to 7 indicating very strong. The mean weight of each attribute was then calculated and shown in table2.

Table 2.Final Delphi extracted attributes and their weights

Factor	**Mean weight**
Environmental factors	
1.Number of competitors	4.33
2.Impact \ degree of government regulations on firm's activities	5
3.Impact of imports on client's business	5.17
4.Client's market share	5.33
5.Domestic growth of firm's industry	5.67
6.Buyers' bargain power	5.5
7.Suppliers' bargain power	4.67
Internal factors	
8.Management quality of the firm	6.67
9.Type of collateral and credibility of cosigners	4.83
10.Firm's production/sales capacity	5.33
11.Reliability of firm's financial statements	5.83
Firm's relationship with bank	
12.Longevity of relationship with bank	5.83
13.Firm's checking account activity within the bank	6

4.2. Relationship score computations

Next we gave the list of extracted attributes to credit committee of KB (four members) and asked them to grade a list of twenty four firms on basis of each solicited attribute, again on the scale of 1 (very poor) through 7 (very high). From the members of the committee only two members were completely familiar with the firms that we had chosen, so the grades were given by two credit experts. One of the graders was included in our Delphi panel and the other one did not entail any objection to the extracted Delphi attributes. Note that for five of the attributes (A1, A2, A3, A6, and A7), a coefficient of (-1) was considered for calculations because for these attributes higher grades mean higher risks. Scores of each firm is calculated by summation of multiplication of mean grades of each attribute by the mean weight of it, then divided by the maximum score which is the sum-product of 7 (maximum grade) and each weight. The closer the score is to 1, the lower the risk of relationship with that firm. These results are shown in table3. The "performance" column of table3 indicates the performance of each firm on the scale of one through four, where 1 means no past dues, 2 means past dues of less than three months, 3 means past dues of three to six months, and 4 means past dues of over six months. The performances of the firms are filled out from their files at KB.

Table 3. **Firms' scores and their behavior**

Firm	Score	Performance	Firm	Score	Performance	Firm	Score	performance
F1	79.73%	1	**F9**	42.76%	4	**F17**	64.50%	1
F2	69.77%	2	**F10**	53.92%	4	**F18**	66.72%	1
F3	70.30%	2	**F11**	76.22%	1	**F19**	58.64%	1
F4	73.95%	1	**F12**	78.69%	2	**F20**	53.44%	3
F5	59.15%	3	**F13**	71.57%	2	**F21**	30.07%	4
F6	62.37%	2	**F14**	75.53%	1	**F22**	69.16%	2
F7	66.71%	2	**F15**	79.47%	1	**F23**	56.03%	2
F8	66.38%	2	**F16**	66.61%	1	**F24**	50.14%	3

If we consider the firms who have got grades "1" or "2" for their performance to be "good" customers, and those with grades of "3" or "4" to be "bad" customers, the average of "good" firms' scores will be 69.57% and for "bad" ones will be 48.25%. If we consider the average (60%) to be the border line of the goods and the bads, all six bad customers fall below this limit. Among good customers, F19's score is 0.58 although its performance grade shows no past dues for this firm. F19 is a firm which has had 3 years of relationship with KB (out of maximum of seven years) and highly affected by imports as the committee has indicated in grading. The other firm which has past dues of less than three months but has got score of 0.56 is F23 which has unsecured financial statements and very large number of competitors as indicated by the committee. So we could say that we have 8.3% error (2*100/24) which could also be due to negative bias of the graders towards these companies.

To further analyze the results, we got the score for difference of averages of each attribute for good customers and bad customers to indicate the most important differentiators of these two groups. The results are shown in table4. We found out that A8, A9, A2, A13 and A11 are consequently the most influential factors that cause the difference between bad and good customers. These factors according to table2 are management quality of the firm, type of collateral, impact of government regulations on firm's activities, firm's checking account activity with the bank, and reliability of firm's financial statements.

Table 4 . Strength of differentiating factors of "good" and "bad" group of customers

Attribute	Good Customers	Bad Customers	Difference	Weight	Factor differentiation strength
A1	4.11	4.33	-0.22	4.33	-0.96
A2	3.00	5.00	**-2.00**	5	**-10.00**
A3	3.94	5.67	-1.72	5.17	-8.90
A4	4.56	4.00	0.56	5.33	2.96
A5	5.28	3.95	1.33	5.67	7.56
A6	5.72	4.56	1.17	5.5	6.42
A7	4.89	4.67	0.22	4.67	1.04
A8	6.39	3.45	**2.94**	6.67	**19.64**
A9	5.94	2.45	**3.50**	4.83	**16.90**
A10	4.33	3.00	1.33	5.33	7.11
A11	4.89	3.33	**1.56**	5.83	**9.07**
A12	5.17	4.33	0.83	5.83	4.86
A13	2.89	1.33	1.56	6	**9.33**

5. Conclusion and managerial implications

In this paper, first we tried to get an overview of the lending technique at KB which appears to be *asset-based* lending according to Baas and Schrooten (2006) categorization. This technique is unfavorable both to borrowers and lenders in Iran due to long and costly process taken for both parties, being a motivation for some banks to move towards relationship lending technique.

We investigated what premises of relationship banking KB supported like the soft-budget constraint which is a concern for KB according to interviewees or Jimenez et al.'s finding that relationship lending pays off for borrowers in terms of a lower likelihood that banks will require them to pledge collateral in new loans.

Next we discussed the Delphi methodology to solicit the factors that are considered most influential in continuation of a lending relationship in Iran. Thirteen attributes were derived among which the management quality of the firm had the highest weight, firm's checking account activity within the bank was next important factor, and longevity of relationship besides the reliability of financial statements of the firm was the next. Among these factors, longevity of relationship is an emphasized proxy according to Elsas (2005). Although these factors had the highest weights, the factors which got the highest score in differentiating creditworthy customers and those with past dues were management quality of the firm, type of collateral, impact of government regulations on firm's activities, firm's checking account activity with the bank, and reliability of firm's financial statements. So the management of KB should consider these factors with greater attention in its decision makings for investment on customer relationships. Factors like number of products or number of banking relationships which are emphasized in literature did not seem to be significant factors for this bank.

This scoring method of relationship risk that is discussed here will be examined for other business customers of KB as the next step of this research to increase the reliability of this decision-making method. This relationship score could help the management in segmenting bank's customers and the manager would be able to decide which relationships should be discontinued, which ones could be modified with regards to the attributes that cause their low scores, and which relationships are worth special services to be maintained. KB could also use this score for loan pricing or for setting collateral conditions for customers by considering higher score customers as more profitable in long term so offering them lower interest rates or easy circumstances for collateralization while observing relationships with the lower scored firms more closely to avoid probable losses.

Another application of this score would be in estimation of customer lifetime value of the bank's customers. This risk score could be considered either in the discount rate, or in estimation of probability of default of customers for revenue generation.

In the end we should note that transition from asset-based lending to that of relationship-based in countries with weak institutional framework is a big change which couldn't be done without deep knowledge of pros and cons of each technique which has been tried to be clarified in this research to some extent.

References:

Baas, T. and M. Schrooten (2006). "Relationship Banking and SMEs: A Theoretical Analysis." Small Business Economics **27**: 127-137.

Behr, P. and A. Guttler (2007). "Credit Risk Assesment and Relationship Lending: An Empirical Analysis of German SME's." Journal of Small Business Management **45**: 194-213.

Bharath, S., S. Dahiyab, et al. (2005). "So what do I get? the bank's view of lending relationships." Journal of financial Economics.

Boot, A. (2000). "relationship banking: what do we know?" Journal of Financial Intermediation **9**: 7-25.

Chiu, H., Y. Hsieh, et al. (2005). "Relationship marketing and consumer switching behavior." Journal of Business Research **58**: 1681-1689.

Elsas, R. (2005). "Empirical determinants of relationship lending." Journal of Financial Intermediation **14**: 32-57.

Elyasiani, E. and L. G. Goldberg (2004). "Relationship lending: a survey of the literature." Journal of Econimics and Business **56**: 315-330.

Foglia, A., S. Laviola, et al. (1998). "Multiple banking relationships and the fragility of corporate borrowers." Journal of Banking and Finance **22**: 1441-1456.

Gronroos, C. (1994). "From Marketing Mix to Relationship Marketing. Towards a paradigm shift in Marketing." Management Decision **32**(2): 4-32.

Jain, D. and S. S. Singh (2002). "Customer lifetime value research in marketing: A review and future directions." Journal of Interactive Marketing

16.

Lindgreen, A. and L. Crawford (1999). "Implementing, monitoring and measuring a programme of relationship marketing." Marketing Inteligence and Planning **17**(5): 231-239.

Okoli, C. and S. D. Pawlowski (2004). "The Delphi Method as a research tool: an example, design considerations and application." Information and Management **42**: 15-29.

Ongena, S. and D. C. Smith (2000). "What determines the number of bank relationships?" Journal of Financial Intermediation **9**: 26-56.

Ryals, L. and S. Knox (2006). "Measuring and managing customer relationship risk in business markets." Industrial Marketing Management.

Schmidt, R. C. (1997). "Managing Delphi surveys using nonparametric statistical techniques." Decision Sciences **28**(3): 763-774.