

# Bank-firm Relationships vs Financial Expenses of the Client Firm: Evidence from Developing Markets (Pakistan)

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## Abstract

Aiming to perform better always, the management and strategy makers of the firm feel pressure of decision making. An aspect of this strategy is to maintain the continuous and low cost of finance for the firm to excel in the industry. Banking relationships, being the main or sometimes the only source of financing, is very important for the firm. This research aims to answer the question about the number of banking relationships and their effect on firm's financial expenditures. Our research is unique as our data set is from developing markets and most of the previous researches are focused on developed markets like U.S, Japan, and Italy etc. the data for 180 listed firms is paneled for our research from Karachi Stock Exchange. We attempt to regress the financial expenses of clients firms against our main variables (NBR, MBR) using OLS regression analysis with robust errors. Some other most commonly used variables are also used to control the effect. Our results shows significant and positive effect on financial expenses with respect to increase in number of bank relationships. This means a negative impact on the firm's performance indirectly. Thus, the firms have to reconsider the number of banking relationship it should establish.

**Keywords:** Multi-bank relationship (MBR), Financial Expense, Firm Performance.

## 1. Introduction

There is no question about the importance of a bank relationship but researchers are still not sure about the answer of a commonly asked question that what is the optimal number of banks for a firm to borrow from? The solution to the said question is vital for the management of the firms in order to approach such a strategy which leads them to a low cost of loans and guarantees an easy access to bank loan.

Bank remains the back bone of the modern economy as it facilitates the business in global era with the introduction of new technologies like financing, mobile banking, internet banking, online transfer and e-commerce. These facilities certainly have some cost to bear. Therefore, for low cost facilities and assurance of the timely availability of the said facilities the firms maintain relationship with banks. This relationship can be of different natures varying from short-term to long-term, credit to equity and single to multiple. However, some researchers raised questions about the facilitation of the close firm-bank relationship as they argue that this sort of bank-firm relationship may also harm the client firms by charging high financing rates which leads to overall high financial expenses (Morck, Nakamura et al. 2000). Moreover, the monogamy with a bank is reported as undesirable by many researchers due to different reasons. Berger and Udell (1998) reported that a rejection of credit in case of single bank relation throws a negative signal to the market which makes such exclusive relationship, objectionable. On the other hand the competition in banks may also result in low cost of debt for the firm pursuing multiple banking relationships (Boot and Thakor 2000).

## 2. Literature

Bank-firm relationship is not new phenomenon as a lot of researchers have tried to explore this avenue in different aspects (Ongena, Smith et al. 2003, Elsas 2005, Bonfim and Franco 2007, Carletti, Cerasi et al. 2007, Yao and Ouyang 2007, Wang, Cheng et al. 2012, Cenni, Monferrà et al. 2015). The relationship funding appeared to be desirable by firms in order to ensure a flawless stream of finances and low cost of loans to maximize firm's profit. Studies conducted in early 90s by Hoshi, Kashyap et al. (1991) stressed that even if the firms are financially distressed but able to invest due to their close ties with banks. These findings supports the phenomena of bank-firm relationships. But it is quite important that most of the researches are attempted to investigate the relationship in the developed markets. Some researchers have drawn the attention towards the developing and underdeveloped markets by arguing that these markets needs more research as developing and underdeveloped markets are having different characteristics in terms of political instability, high financing rates, poor creditor rights and market imperfections (Barth, Caprio et al. 2005).

### 2.2 Favorable Literature:

Multiple firm-bank relationship is favorable as argued by many researchers but the question about the optimal number of bank relationship a firm should maintain is still researchable. Degryse and Ongena (2008) while doing their research on European countries says that the multiple bank relationships are beneficial for the firms as their findings posit either no effect on cost of loan or a reduction in the cost by 1 to 10 basis points for every

additional bank involvement. The study on Portuguese firms was done by Bonfim and Franco (2007) which analyzed the bank-firm relationship and argued that if a firm borrows from more banks the cost of the loan will be reduced. Another published research on Japanese firms reported the dark side of bank-firm relationship and claimed that a single or main bank power results in higher loan ratio and higher interest payments (Yao and Ouyang 2007). The same was concluded earlier by Sharpe (1990) as the researcher contends the close relationship with the a single bank or lender may result in extraction of extra rents as the lender learns more about the firm characteristics and enjoys monogamy.

Broadly, the firm-bank relationship has a significant impact on the borrowing firm. The literature extends that the multiple relationship with banks may result in lower financing rate as compared to single or exclusive nature of such relationship (Von Thadden 2004). Some other researcher also support the same phenomena for Italian and Japanese industries and reported some correspondence between the number of relationships and the cost of borrowing. Angelini, Di Salvo et al. (1998) supports the results suggested by Von Thadden (2004) and posits a negative and favorable impact on interest rate charged with respect to increase in number of credit relationships for Italian firms. While the peers reported same indirectly that the single or exclusive credit relationship extracts higher interest payments for Japanese firms (Weinstein and Yafeh 1998).

### *2.3 Single bank support:*

Petersen and Rajan (1994) found that the relationship lending has some positive effect on the cost of loan with respect to its length of relationship but relatively high price was observed if the firm borrows from more banks. The same statement was supported by other researcher while investigating Italian market and reported lower cost of debt while borrowing from single bank (D'Auria, Foglia et al. 1999). Degryse and Van Cayseele (2000) investigated the same question for Belgian firms and found no evidence in support of multiple bank relationship in terms of low cost of borrowing instead argued that the firms pay higher interest if taking loans from second bank.

Being not answered for generalizability, this question of optimal number of credit relationships is targeted by different researchers from all the regions. But it found to be quite mix in nature some reported positive while others reported negative impact on firm performance and cost of borrowing. Limpaphayom and Polwitoon (2004) pleaded that it is not necessary that the bank loans always support the better performance and so is the close bank relationship.

Most of the researchers appear to be agreed upon the importance of the bank-firm relationship in terms of better availability of credit but a disagreement is found for the cost of borrowing in such relationships as some favor the exclusive relationship, some are against such relationship and support multiple relationship while another bunch of researchers are neutral. While carefully analyzing the literature the question of optimal number of bank relationship from which a firm should borrow remains unanswered. In this paper we will try to find out the answer to the said question in context of Pakistani Firms as to the best knowledge of the author no such attempt is made earlier. This research will follow the methodology introduced and used by Carletti, Cerasi et al. (2007) while their research on Portuguese firms.

## **3. Data and Methodology**

We have collected data for Pakistani firms listed in Karachi Stock exchange for a period of 2008-2013. We have excluded financial firms from our data set as we aimed to find out the impact of Bank-firm relationship on financial expenses of non-financial firms. All information about listed non-financial firms is collected through their published annual reports and financial statements.

To measure the financial expenses, we refer to online data base (Osiris) to extract the figures annually. In order to normalize the extracted values, natural log is taken.

### *3.1 Dependent Variable*

As this research is aimed to check the impact of multiple bank relationship on the financial expense of a firm, so our dependent variable is the natural log of financial expenses of the firm. A positive relationship is expected. As suggest by previous literature that if a firm increases the number of lending relationship the financial charges is decreased but in case of Pakistan, the average number of bank relationship maintained by a firm is relatively higher than those of European and American firms, i.e. 8. Therefore, we expect it a relative rise in the financial charges.

### *3.2 Independent Variables*

Two proxies are used in this research for the number of bank relationship. One of the variable used to measure the impact of bank relationships on interest expense is taken as the numeric value of the actual number of banking relationship a firm is maintaining i.e. NBR and the other variable is taken as a dummy for multiple banking relationship which will acquire the value of 1 if the number of banking relationship is more than 5 else it

remains as 0. These definitions are same as taken by Berger, Klapper et al. (2008). Further exploration about this relationship is being tested by introduction of square of NBR as NBR2. This introduction will help us to argue what is the maximum limit of the number of relationship a firm should establish (Thanh and Ha 2013).

### 3.3 Controlling variables

Rest of the change in the depended variable is explained by our control variables. The turnover, tangible assets, leverage, debt coverage and firm age are taken into consideration for our regression model. All these variables are lagged by 1 as the data available to banks for decision about lending is of previous years only.

$$\text{Log}(FExp) = \beta_0 + \beta_1 \text{NBR} + \beta_2 \text{MBR} + \beta_3 \text{NBR}^2 + \beta_4 \text{Turn}_{t-1} + \beta_5 \text{Tang}_{t-1} + \beta_6 \text{Lev}_{t-1} + \beta_7 \text{Debt coverage}_{t-1} + \beta_8 \text{FAge}_{t-1} + \varepsilon$$

- FExp*: Financial expenses are taken as natural log of the financial expenses  
*NBR*: Numeric value of the number of bank relationships  
*NBR2*: Square of the numeric value of the number of bank relationships  
*MBR*: Multi-bank Relationship is a dummy variable which is equal to 1 if value  $\geq 5$   
*TURN<sub>t-1</sub>*: Calculated as Sales as percentage of Assets  
*TANG<sub>t-1</sub>*: Tangible assets as a percentage of Debt  
*LEV<sub>t-1</sub>*: Debt as percentage of Assets  
*COV<sub>t-1</sub>*: Net profit as percentage of debt  
*FAGE<sub>t-1</sub>*: Log of Age of the firm

## 4. Results and Discussion

Our panel data contains the information of 180 listed firms of Pakistan in Karachi stock exchange. The data considered is from 2008 to 2013 which is annual in nature.

We regress our model against our dependent variable (Financial expenses) using robust least square estimations. Table1 presents our regression results as follow:

Table 1 Regression Results Taking Dependent Variable as Financial Expense

Variable	Expected Sign	Coefficient	P>t
NBR	+	0.043312	0.00
MBR	+	0.164930	0.01
AGE	+	0.001	0.38
LEVERAGE	-	-0.001836	0.9168
TANGIBILITY	+	0.007845	0.0000
TURNOVER	+	-0.000202	0.0000
COVERAGE	-	-0.004431	0.0000

Results shows that the bank relationships do affect the financial expenses of the firm which may leads to a better or poorer performance. Our aim for the research was to find out the impact of bank relationships on the financial expenses for which we have taken Number of bank relationship as a numeric variable having the actual value of relationship established by a firm. Regression shows that the number of bank relationships have negative impact on firm performance as it raise the financial charges with a coefficient value of 0.043312 with a significance at 1%. Result explains that for Pakistani firms the large number of bank relationships enhance the financial charges paid by firms. Second variable also depict the same. We have taken a dummy to check the single vs multiple bank relationships and found that the multiple bank relationship give a raise to overall financial expenses. The coefficient for MBR is 0.16 which is significant at 1% too. R<sup>2</sup> for the model appears to be 17% which means the variables in the model explains the variation up to 17%. Rest of the variables in the model are also found significant as expected except AGE and Leverage.

## 5. Conclusion

The aim of this research was to answer the question about multiple banking relationships. The banking system is the back bone of the modern economy of the world and is main source of financing in developing nations. The researches attempted in the past were more inclined towards the developed markets like Japan, Italy, U.S.A and Germany but very fewer focused on underdeveloped or developing regions like Pakistan and India. This research will contribute to the existing literature by empirically testing the said phenomenon. The results shows that the good relationship between firms and banks is good but the management should curtain the number of banking relationships. If the number of banking relationships is too high it may affect the financial expenses of the firm which might be a result of competition, high loan renegotiation cost, or high cost of borrowing from newer banks. This research was limited to the firm specific variables which can further be extended to market specification and across the industry analysis. This future analysis may also involve the family and non-family firm in comparison to group and non-group firms as this might also be a factor in financial cost determination. Variables explaining the board composition and corporate governance may also be added in the future horizon in order to

have in depth analysis.

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