The Effect of Banking Relationship on Firm Performance in Malaysian Public Listed Companies

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ABSTRACT

Funds from banks play an important role in the growth and maintenance of a firm. Hence, it is important that a firm creates and maintains a good relationship with its bank in order to secure the funds. Establishing a good bank-firm relationship can also help to reduce conflicts between shareholders and creditors since close bank relationship helps the firm to get funding from other financial institutions. Relationships between a bank and a firm consist of two types: bank-borrower relationship and consumer-supplier relationship. The bank-borrower relationship involves primarily a loan agreement between two interested parties. Cooperation between a bank and a firm is more durable than customer-supplier relationships in terms of provision of financing. This thesis investigates the effect of banking relationships on firm performance on companies in Malaysian capital market. Seventy eight firms from the Top 100 public-listed companies in Bursa Malaysia are examined. Investigation is performed to show the effects of number of banking relationships, short-term financing, long-term financing, firm size, and foreign ownership on the firms' performance as measured by return on assets (ROA), return on equity (ROE), and Tobin's Q. Findings show a significant and negative relationships on the number of bank relationships for all of firm performance measures, consistent with previous studies. For ROA measurement, result shows a significant positive relationship with short-term financing, a finding also consistent with past studies. Short-term loan and long-term loan impact ROA and ROE positively, while affecting negatively firm performance measured by Tobin's Q. ROA and ROE have a positive correlation with foreign ownership, while Tobin's Q is negatively correlated with foreign ownership. In general, the study contributes to banking literature by investigating and evaluating the relationship of firm performance and lending banks in shareholders' perspectives.

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LIST OF ABBREVIATIONS

BNR	Number of bank relations
FBMKLCI	FTSE Bursa Malaysia Kuala Lumpur Composite Index
FSZ	Firm Size
FOW	Foreign ownership
LTF	Long-term financing
LAsset	Log of asset
ROA	Return on asset
ROE	Return on equity
STF	Short-term financing

Chapter 1
Introduction

1.1 Introduction to Study

As the business world today becomes more competitive and challenging, firms must have good management in order to improve their performance and sustain it. The management includes the board of directors as a resource provider because they provide social and business contacts, and influence the environment in favors of the firms (Carpenter and Westphal, 2001). It is also believed that managers have the capability as a resource to provide connections to other business sectors and also to the external environment (Zahra and Pearce, 1989). However, there is a separation between management and owners, where the managers tend to act with self-interest that are not always in the best interest of the owners (Jensen and Meckling, 1976).

In order to avoid any irresponsible and unethical acts, the regulatory bodies and shareholders are required to impose a monitoring and control process via corporate governance code to control risks. Corporate governance generally refers to the mechanisms, processes and relations by which firms are controlled and directed. It identifies the rights and responsibilities among different participants in the corporation (such as the board of directors, managers, shareholders, creditors, auditors, regulators, and other stakeholders) and includes the rules and procedures for making decisions in corporate affairs. Corporate governance

includes the processes through which corporations' objectives are set and pursued in the context of the social, regulatory and market environment.

Bank-firm relationships are linked with the main functions of banks which are keeping the customer's account, and implementing loan agreements or other banking services. They involve exchange of benefits and information over time between the bank and the enterprise, leading to development of certain information resources, both on the bank's part and on the firm's part. It is assumed that the bank and the firm are in a relational contract if they have an understanding which allows certain contract terms and conditions to be further specified over time. Over a longer time period, the firm relies on the bank, which provides it with financial services, whereas the bank depends on repayment of loans by its long-term borrowers and the borrowers purchasing loan-related services (Heffernan, 2007).

There are two types of relationships between a bank and a firm: bank-borrower relationship and consumer-supplier relationship. The bank-borrower relationship involves primarily a loan agreement between two interested parties. The most crucial research problems undertaken in the field of relationship banking include determining its characteristics and evolution under the influence of changes in markets for banking services, changes in the structure of financial systems (including technological changes) as well as its impact on terms and conditions of financing firms, goodwill of firms and banks. Cooperation between a bank and a firm is more durable than customer-supplier relationships in terms of provision of financing.

Hodgman (1961) demonstrates that firms with bank deposits enjoy better lending terms and conditions than firms without deposits. However, according to Wood (1975), the so-called lending relationships may develop independently and banks may extend loans at a lower price, hoping for higher income in the future. During long-term provision of financial services, the bank collects additional information about its customer. Information about the borrower is an important aspect of banks' lending decisions, thus its quality should improve proportionally to the duration and closeness of the cooperation (Diamond 1984; Petersen and Rajan, 1994).

In order to conduct flexible firm financing policy, the bank should be in a close relationship with the firm. This relationship is referred to as relationship banking. Banks benefit from maintaining such relationships through better access to information about the firm, whereas the firm expects the bank to provide access to financing even when it experiencing financial difficulties (such as during financial crisis). Boot (2000) defines relationship banking as provision of financial services by a bank which: (1) invests in access to specific information about a customer, which is frequently publicly unavailable and (2) assesses the profitability of this investment while taking into account the duration of cooperation with the customer and banking products provided to it.

Berger and Udell (1998) define relationship banking (relationship lending) as the bank being able to obtain information about the firm during cooperation. The information is then used to develop future business conditions of bilateral cooperation (loan availability, interest rates and collaterals). To sum up, relationship banking requires four conditions to be fulfilled:

(1) banks being in contractual relationships with enterprises, (2) as a result of relationships banks enduring over time (3) collecting information more extensive than that available from public resources and (4) the collected information being confidential (Berger, 1998).

However, it should be noted that the nature of cooperation between a firm and a bank is more complex and it is difficult to provide strict definitions of relationship banking and transaction-oriented banking. To simplify it, one can assume that if a firm uses services of only one bank at a given time (so-called single relationship), this cooperation takes the form of relationship banking. If there are more banks providing credit facilities, we are dealing with multiple relationships or transaction-oriented cooperation. However, it should be noted that multiple relationships may also have the nature of relationship banking. As a result, banks may reduce the monopoly margin and offer better financing terms to current customers (Petersen and Rajan, 1994). This cooperation usually involves a so-called main bank.

Banking relationships on firm performance have been widely studied in developed countries. However, to the present author's knowledge, this topic has not been much examined empirically in Malaysia. Hence, the purpose of this paper is to analyze whether firm's banking relationship affects the performance of firms in Malaysia and to suggest policy implications related to the firm's banking relationship.

This study examines the performance of firms in the bank-firm relationship on selected public listed companies in Malaysia. The analysis is based on sample from top 100 public listed firms in Malaysia (excluding financial firms) in the year of 2013. This provides a final

sample of 78 non-financial firms. In particular, this study attempts to determine whether firms with strong banking relationships operate more effectively compared to the other firms that do not enjoy banking relationship. Since research in this area is still lacking in Malaysia, this current study attempts to provide an analysis on firm's banking relationship and show how this relationship affect firms' performance.

1.2 Problem Statement

Previous studies regarding bank-firm relationship carried out in other countries have focused more on the firms' side. It is believed that establishing a good bank-firm relationship will help to reduce the conflicts between shareholders and creditors. Some authors argue that close bank relationship helps the firms get funding from other financial institutions (Diamond, 1984; Fama, 1985; Horiuchi, Parker and Fukuda, 1988).

One of the corporate governance mechanisms is through board of directors, which are generally believed to have an important role in corporate governance, especially in monitoring top management (Fama and Jensen, 1983). The boards have the responsibility to monitor the management in order to protect the shareholders and at the same time to ensure that the managements acts in shareholder's interest.

In Malaysia, there are many firms listed on the stock market exchange with the purpose to help the firm gaining other funding resources. However, funds from the bank still play an

important role in growth and maintenance of the firms. Hence, it is important to the firms to have good relationship with the bank in order to secure the funds. Despite the positive impacts of the bank-firm relationship, there are also arguments about the effectiveness of the firm with better banking relationship with those firms which do not have such relationship.

This present study contributes to the literature on banking relationship by examining and establishing whether bank-firm relationship has a positive or negative impact on firms' performance. The dependent variable of this study is firm performance, which is measured by two measurements from different perspectives: accounting measures (ROA and ROE) and a market measure (Tobin's Q). The independent variables are the number of bank-firm relationships, and bank credit financing (short-term, long-term, and overall). Two control variables (firm size and foreign ownership) are also included.

1.3 Bank-firm Relationship

Relationship banking is more frequently encountered in countries such as Japan and Germany, where there are strong capital relationships between banks and enterprises from the non-financial sector (Ongena and Smith, 2000). In the previous century in Japan and Germany, close bank-firm relationships were considered to be one of the key success factors for these economies. However, in the 1990s, the popularity of relationship banking dropped due to firms having more opportunities of obtaining funds and increased number of players in the financial market (Haffernan, 2007).

Bank-firm relationships depend on several factors. The benefits and costs related with the changes in these relationships depend on business cycles and the firm which provide incentives to interested parties to establish and support such relationships (Degryse and Ongena, 2001). These relationships have impact on both parties respectively. From the banks' perspective, relationship financing reduces negative selection linked with information asymmetry, which is particularly increasing during periods of financial crises or restrictive monetary policy. On a firm's point of view, relationship financing increases access to external financing.

Long-term relationship between main banks and their client firms generate value and increase economic efficiency. In the process of building the relationship, the lender gains borrower-specific information which gives him several benefits. These relationships will also be valuable from the borrower's point of view to the extent that the lender passes these benefits to the borrower.

Even though commercial banks cannot directly trade in shares, they may still manage the portfolios held in trust on behalf of customers (Santos and Wilson, 2005). Moreover, commercial banks are often part of the bigger financial conglomerates, with affiliated investment associate (such as investment banks, mutual funds, pension funds, and insurance companies) that can trade on the basis of the information acquired through lending (Massa and Rehman, 2008; Acharya and Johnson, 2007). Thus, the privileged information of the commercial bank and its potential to influence the borrower's stock price by trading through its asset-management department may increase information asymmetry and adverse selection

for the investors in the borrower's stock. This creates disincentives for other investors to trade in this stock, thus lowering its liquidity.

In the context of asymmetric information in credit markets, lending relationships make the information exchange between the borrower and the lender easier through repeated interaction over the duration of the relationship and through the provision of multiple financial services. Lenders invest in generating information from their client firms and borrowers are easier to disclose information (Boot, 2000).

It is widely accepted that bank loans are special because of inside information that comes with lending. More inside information increase the monitoring ability of the bank (Diamond, 1984), and therefore improves capital allocation and corporate governance (Levine, 2002). However, the bank may also exploit its informational advantage in the equity market and effectively become an insider (Kahn and Winton, 1998). This dual effect on the borrower makes bank loans special.

However, the information asymmetries between the bank and the firm are lessened as time goes by. This process enhances economic efficiency through many channels. Firstly, having a long-term horizon facilitates the design of implicit credit contracts over the duration of the relationships that may increase value. Second, the reusability of the information generated by the lender over repeated transactions and over time is also beneficial in terms of savings on the fixed cost of screening and monitoring (Boot, Greenbaum and Thakor, 1993). Third, it avoids the free-rider problem of monitoring since the bank internalizes the benefits of such

investments. Higher monitoring levels increase value since, for instance, they help solve principal-agent problems of managerial behavior.

Close bank-firm relationships have some disadvantages to the firm. The most significant disadvantage is that having a single relationship gives an informational monopoly to the only informed bank, which can impose hold-up costs for the firm (Sharpe, 1990; Rajan, 1992). Additionally inefficient loan renewal decisions is more likely to happen when only one lender has the option to bail out the firm in case of financial crisis (Dewatripont and Maskin, 1995) where managers are more disposed to divert cash to themselves when there is only one creditor than when there are many creditors (Bolton and Freixas, 2000). However a firm will benefit from relationship lending as long as the bank shares the value with the borrower. Consequently, if lending relationships are valuable, it should be reflected in the overall firm performance.

1.4 Research Questions

In order to conduct the analysis of the study, the following research questions are posed:

1. Is there a significant relationship between the numbers of bank relationships and the firms' performance?
2. Is there a significant relationship between short-term financing and the firms' performance?

3. Is there a significant relationship between long-term financing and the firms' performance?

4. Is there a significant relationship between firm size and firm performance?

5. Is there a significant relationship between foreign ownership and firm performance?

1.5 Research objectives

The main purpose of this research is to examine firm performance in the bank-firm relationship in Malaysian firms. Do firms that have better banking relationship actually operate more effectively compared to those which do not have? In addition, the study has three sub-objectives as follow:

1. To examine if there is a significant relationship between the number of bank relationships and firm performance.

2. To examine if there is a significant relationship between short-term financing and firm performance.

3. To examine if there is a significant relationship between long-term financing and firm performance.

4. To investigate whether there is a significant relationship between firm size and firm performance.

5. To establish if there is a significant relationship between foreign ownership and firm performance.

1.6 Significance of the study

The significance of this thesis involves two important aspects, theoretical and practical. The study describes the theoretical background which forms the basis for empirical prediction and hypotheses. Since there are not many studies examining this bank-firm relationship in Malaysia, the results are expected to contribute new knowledge in this area. The samples from the top 100 public listed companies have a big impact on the FBMKLCI and since foreign and local investors usually take into consideration the performance of the Top 100 public listed companies in order to invest, the results therefore should be able to provide an influence on shareholders' and investors' decision makings.

1.7 Organization of Remaining Chapter

The rest of this paper is organized as follows. Chapter One provides an overview of the study and explains the important of the study including the problem statement of the study, significance and also objectives of the study. Chapter Two focuses on bank-firm relationships, which provide a review of relevant literature on bank-firm relationship as the basis of this research, and firm's performance. Chapter Three provides the methodology adopted in this study, simultaneous research design; the sample, data collection, research's

model and measurement variables. Chapter Four discusses the results of the study using tables and observations. Chapter Five concludes the thesis.

Chapter 2

Literature Review

2.1 Introduction to Study

This chapter explores and discusses relevant literature reviews which focus on many aspects of bank-firm relationship. The discussion is divided into three sections. First section presents the theoretical basis of bank-firm relationship. Second section discusses about the positive impact of the bank-firm relationship to the firm performance, and the third section will represent the negative impact of the bank-firm relationship to the firms' performance.

2.2 Bank-firm Relationship

A bank relationship is a continuing contact between the financial institution and the firm for the provision of financial services beyond simple, various transactions which is associated with the collection of information that can be used to make decisions about the evolution of the contract terms (Berger and Udell, 1998). On the other hand, borrowing firms may need to consider negative effects from the leakage of confidential information. The main issue that arises is the potential benefit of this relationship for the borrower and the bank. This benefit has to be taking into consideration the influence of external factors such as the competitiveness of the environment, the degree of technological diffusion and the level of financial market development.

The banking relationship consists of two type of relation: deposit relation and lending relation. This study will concentrates on the lending relationships. Banking relationships are shown through the number of banking relationships, duration of banking relationship, the amount of credit (Peltoniemi, 2004), interest (Bolton and Freixas, 2000), and banking services (Degryse and Cayseele, 2000).

Banks benefit from maintaining such relationships through better access to information about the firms, whereas the firm expects the bank to provide access to financing even when it experiencing financial difficulties. According to Ongena and Smith (2000), relationship banking can be described with more detail using two dimensions. The first dimension is duration since the measure of relationship banking is the length of bank-firm cooperation (Wood, 1975; Rajan, 1997). The second dimension is the product scope of cooperation (Hodgman, 1963).

2.3 Firms' Performance

Castell, Dwyer and Hasan (2006) shows that ROA and ROE of Italian enterprises were dropping in 1998–2000 as the number of lending bank increased (multiple-banks), especially among small firms. The results of these works support the thesis that a single-bank relationship reduces information asymmetry and agency costs and allows to neutralize the effect associated with the so-called monopoly rent (hold-up problem).

Bank-influenced firms should have better performance than independent firms, if banks have access to private information that is used to reduce agency costs, and if firms with close bank relationships benefit from better access to finance. These relationships should lead to both higher profitability and higher growth rates for bank-influenced firms (Argawal and Elston, 2000).

Firm performance can be negatively affected by bank-influence if banks choose to fully use their unique position for their own interests rather than the shareholders' interest. For example, banks could share private information about the firm with its competitors or strategically release industry specific information to better its own interests at the expense of the firm. Additional conflicts of interest could also include the bank influencing management to undertake less risky projects in case that the bank is financing the project.

2.4 Banking Relationship

Exclusive bank-firm ties not only affect the price and availability of capital, but also may also directly influence management decisions and firm performance. Maintaining multiple creditors creates inefficient renegotiation which may cause strategic default (Bolton and Scharfstein, 1996). Banks may want to diversify firm-specific credit risk, resulting in more creditors for high default risk firms. The extant empirical evidence, though for smaller and medium sized firms, seems to indicate such diversification may play a role. Distressed firms (in Germany and Italy respectively) have significantly more bank relationship compared to non-distressed firms (Harhoff and Körting, 1998; Foglia, Laviola and Marullo, 1998).

Firms are often required to disclose proprietary information to demonstrate their quality in order to obtain credit. Checking account activity may lead to an additional source of 'confidential' information about a firm's current condition and future prospects (Vale, 1993; Nakamura, 1993). A bank could transfer such valuable information, directly or indirectly, to product market competitors of the firm once the information acquired and analyzed.

However, a bank might stop spreading confidential information obtained in an exclusive relationship when there are losses of reputation for the bank, or the negative impact on the performance of an important client may. Banks may still accidentally, leak confidential information. The information spill from the bank may be limited or they may choose to provide useful information to an important client. The provision of information and advice to firms has also been an important part of the bank-firm relationship (Hellwig, 1991).

Recent researches focus more closely on the interaction between the number of creditors and product market competition, with creditors acting as intermediaries of confidential information. Based on Yosha (1995), when an innovator is entering a competitive product market with one established competitor, there is asymmetric information about the impact of the innovator's entry on the profits of the established firm. If the entrant draws a high quality project, the profits of the established firm will be decrease. These expected losses will trigger an aggressive reaction by the established firm to reduce the expected profits of the innovator. As a result, the high-quality innovator would like to hide its product as long as possible. However, if the innovator draws only low-quality projects, the innovator would like to reveal

their product as soon as possible to avoid any unnecessary aggressive response from the established firm.

The number of financing sources determines the revelation percentage of the innovator's confidential information concerning project quality (Degryse and Ongena, 2000). If the innovator obtains financing from one source (exclusive financing), less information is leaked to the established competitor than if the innovator uses multiple financing. However, a multilateral financing arrangement is more costly because it is more difficult to communicate with multiple lenders, and there may be a loss for the borrowing firm, as its actions have to be coordinated with more than one lender.

Multilateral banking does not only cause higher transaction costs, but also more competitive interest rates and the innovator can decide whether or not to disclose confidential information during the loan granting process (von Rheinbaben and Ruckes, 1998). In other words, establishing a bank relationship and disclosing confidential information are independent decisions. If the innovator discloses information, the innovator's expected sales profitability will be reduce by the lender banks, as the probability that information leaks to the established firms increases. If there is no disclosure of confidential information, sales profitability remains unaffected.

As a result, there is no continuous relationship between sales profitability and the number of banks. Sales profitability decreases in the number of banks within the range of disclosure, and remains high when no disclosure takes place. Only a highly-rated innovator will find it

optimal not to disclose confidential information, while dealing with multiple banks. Disclosure would not improve the innovator's credit standing, and without disclosure there is no risk of information leakage, while competition between multiple banks lowers the interest rate.

Summarizing, multiple bank relationships go hand-in-hand with lower sales profitability in study by Yosha (1995) and von Rheinbaben and Ruckes (1998) in case of information disclosure. A highly rated innovator will not disclose confidential information such that its high sales profitability is unaffected. This innovator will deal with many banks in order to obtain a competitive interest rate.

2.5 Credit Financing Relation

The literature discussed so far focus on the static relation between the number of credit relationships and the cost and availability of capital. There are additionally connections between the credit relationships switching, firm quality, and the cost of capital (von Thadden, 1998). The informational asymmetry between the inside bank and the outside banks gives the existing lender an advantage. The inside bank observes after one period the quality of the firm (good or bad), and can therefore set the interest rate in the second period contingent on the quality of the firm. The other 'outside' banks observe only from the rumors about the firm's quality.

In particular, the lower the interest rate offered, the higher is not only the probability that the bank obtains the client-firm, but also the higher is the probability that the firm, if obtained, is estimated by other banks to be of a lower value. By switching banks, both good and bad firms reduce their interest payments, compared to non-switching good and bad firms respectively. But bad firms are expected to switch more frequently.

Jensen and Meckling (1976) argue that possibility of problems between the managers, shareholders and creditors tend to increase the firms' external costs of finance. Bank-influenced firms should enjoy increased access to capital through easier access to bank debt or preferential terms on loans. In addition, bank involvement with a firm serves as a signal to outside investors and causes a certification effect, which makes it easier for firms to gain funds.

Close bank-firm relationships can also cause a potential conflict of interest that may show in firm financing decisions. Specific abuses of private information held by banks may include influencing the firm to issue equity to pay bank-debt in cases of financial issue or the use of equity rather than debt financing to finance risky projects. Thus, leverage could either be higher or lower for bank-influenced firms, but close relationships with the bank should improve the firm's access to bank debt.

Part of the literature on the value of a close relationship between a firm and a bank is premised on observations by Fama (1985) and James (1987) compared to other forms of

financing, bank loans to firms are based on less widely available information. The relationship between a firm and a bank can help to overcome information asymmetries and agency problems that create liquidity constraints which can reduce firms' investment (Fazzari, Hubbard and Peterson, 1988; Hoshi, Kashyap and Scharfstein, 1991; Bernanke and Gertler, 1995). These theories suggest that screening and monitoring by banks can overcome information and possibility of problems and reduce liquidity constraints for borrowers (Leland and Pyle, 1977; Diamond, 1984; Boyd and Prescott, 1986; Bhattacharya and Thakor, 1993).

Bank-firm relationships may affect firm profitability through the price of capital. Multiple bank relationships decrease the informational lock-in problem, which may reduce the interest rate charged by the inside banks (von Thadden, 1992). Some evidence supports this potential correspondence between the number of bank relationships and the interest rate paid by the firm. The numbers of credit relationships show a negative effect of on the interest rate charged by the credit granting banks (Angelini, Di Salvo and Ferri, 1998).

However, Petersen and Rajan (1994) find that, for small U.S. firms, multiple bank relationships may even increase lending rates. Degryse and Van Cayseele (2000) show that Belgian firms which took loans from a second bank pay higher rates on these loans compare to the interest rates these firms pay on the loans granted by their first bank.

2.6 Firm Size

A study done by Thanh and Minh Ha (2013) shows that firm's size is related positively to firm's performance because small firms are less likely to be close to the minimum efficient scale needed to operate efficiently in a market (Audretsch and Mahmood, 1994; and Geroski and Mata, 2005) and small firms also apply different technologies in accordance with their size. Due to their small scale, they use less capital intensive approaches. Because operational risk is inversely related to company size, small companies should fairly have less debt. In a case of lowering prices, small firms find it difficult to bear these costs for a long time; thus, they are less efficient.

Furthermore, small firms' market power is weak, and their operations are in niche markets, which are uncertain. They are more vulnerable to temporary demand shocks and the uncertainties of the market than large firms. Moreover, small firms are typically less diversified than larger firms, which may deteriorate their survival prospects by increasing risk and failing to keep alive options in a fiercely competitive market (Geroski and Mata, 2005).

There are a number of ways to measure size of a firm, for example size of company measured based on natural logarithms of sales (LNSA) and logarithm of book value of firm assets.

2.7 Foreign Ownership

Wei, Xie and Zhang (2005) and Tian and Estrin (2008) suggest a positive relationship between firm performance and foreign shareholdings. They suggest that foreign investors can

effectively monitor and influence management of the firm that they are holding. If foreign ownership represents only 0% to 5%, it is only a small shareholder and it has less power of voting. If the foreigner owns from 5% to 35% firm's equity, it is a major shareholder, but it is not strong enough to vote on any business issues of firm. However, if the foreigner holds shares of 35% or more, it is a major shareholder and has enough power of vetoing on any business issues of firm.

2.8 Lending Relationship

There is a consensus that banks involved in relationship lending also offer other services which do not require such close relationships or are not binding for the parties in a long-term perspective. Such cooperation is referred to as transaction-oriented banking. In transaction-oriented banking, the parties develop agreements so as to choose the most beneficial terms and conditions.

However, it should be noted that the nature of cooperation between firms and a bank is more complex and it is difficult to provide strict definitions of relationship banking and transaction-oriented banking. If the firm uses services of only one bank at a given time which known as single relationship, this cooperation takes the form of relationship banking. Otherwise, when there are more banks providing credit facilities, multiple relationships or transaction-oriented cooperation exist.

However, it should be noted that multiple relationships may also have the nature of relationship banking. As a result, banks may reduce the monopoly margin and offer better financing terms to current customers (Petersen and Rajan, 1994). This cooperation usually involves a so-called main bank. Relationship banking is more frequently encountered in countries such as Japan and Germany, where there are strong capital relationships between banks and enterprises from the non-financial sector (Ongena and Smith, 2000).

A main objective of financial markets is to transfer capital from investors to firms and entrepreneurs with the intention to earn profit from the investment opportunities and divide the risk among investors. The existence of financial markets and financial institutions occurs when they arise to help solve some of the issues that can be found in real markets.

Banks offer multiple purposes. They transform short term cash investments such as deposits into long term assets such as loans (Diamond and Rajan, 1998). They also focus on collecting and processing the information necessary to make investment and lending decisions. If borrowers know more about their abilities and intentions, capital markets can break down because there may be no price for capital (interest rate) which will allow lenders to make a profit (Stiglitz and Weiss, 1981). This occurs when the information about borrowers is limited and expensive to acquire.

Banks are more efficient at collecting information due to simple economies of scale. They can collect information of hundreds of borrowers at once thus reducing the cost of collecting information. Theory suggests that a firm with close relationship with financial institutions

should have a lower cost of capital and greater availability of funds compare to a firm without such relationship, if the information collected can be used as an input to the lending decision over multiple periods and not easily duplicate by competitors (Diamond, 1984, Haubrich, 1989; Diamond, 1991).

The idea that banks can provide a service in the form of a lending relationship arises out of the value that firms place on these relationships. If by building a relationship banks can learn the quality of borrowers, they may be able to profitability lend, where less informed capital providers may not.

Research shows that building a relationship with a lender has only a small effect on the cost of capital facing the lending firms. Instead, relationships appear to be valuable because they give these firms access to more capital, not because they provide small firms with cheaper capital. The role relationships play in providing capital to small firms depends mostly on the competitiveness of the capital markets. The number of bank relationships can increase with a firm's age and size (von Rheinbaben and Ruckers, 2004).

A difficult situation in the banking sector works to the advantage of relationship banking, which has been confirmed by studies related to crises in Asia. In conditions of a crisis, banks maintaining close relationships with firms may subsidies their customers by offering better crediting conditions, in particular for small, loyal firms (Berg and Schrader 2009). Empirical results have demonstrated that strong, durable relationships with banks had positive impact on development of firms and their fate during economic crises (Fok, Chang and Lee, 2004).

The bank-borrower relationship, which involves mainly a loan agreement between two parties, remains the subject of research related to its nature and effects — for banks, firms as well as development of financial systems (Koch and Macdonald, 2000). Cooperation between a bank and a firm, focused on provision of financing, is more durable than other customer-supplier relationships. Bank-firm relationships are associated with the main functions of banks including keeping the customer's account, implementation of loan agreements or other banking services. They involve exchange of benefits and information over time between the bank and the enterprise, leading to development of certain information resources, both on the bank's part and on the firm's part.

2.8.1 Lending Relation Value

A. Information from Relation

Theoretical analyses suggest that a close relationship between a bank and a firm can reduce information asymmetries, improve the firm's access to credit and lead to an overall improvement in the firm's performance. Stiglitz and Weiss (1981) find that the threat of future credit rationing can reduce moral hazard. Diamond (1991) shows that reputation building through bank borrowing can provide certification, which can allow a firm to eventually raise funds on public markets. This benefit of a successful bank relationship raises the cost of default on a bank loan and lowers the probability of default.

In a simple market, price will adjust according to supply and demand for a good. Thus in the loan (capital) market, the interest rate should adjust according to the demand for capital with the supply of capital. The interest rate would rise until the excess demand for capital was

driven to zero if firms found themselves wanting more capital than lenders were willing to supply at the current price.

Firms with higher risk would need to pay higher rates on their capital. This simple rules works as long as lenders know information about the borrower's type and investment opportunities same as the borrower. Otherwise increases in the interest rate may not clear the market. Higher interest rates will cause safer borrowers to choose other banks or encourage firms which accept the loans to invest in riskier projects. Thus the higher interest rate may no longer cover the bank's expected losses and the bank may optimally choose not to lend (Stiglitz and Weiss, 1981). This causes the firms to faced credit constrained especially when having more profitable investment than they are able to fund.

One solution to this problem is the use of financial intermediaries to produce and use information in the loan origination process. The market can once again clear if the information between borrower and lender can be resolved. The role of credit reporting agencies in transforming information from multiple sources into easy to use indexes is part of this process. However, not all information can be collected from information agencies.

During long-term provision of financial services, the bank collects additional information about its customer. Information about the borrower is an important aspect of banks' lending decisions and its quality should improve based on the duration and closeness of the firms (Diamond, 1984; Petersen and Rajan, 1994). In order to conduct flexible firm financing policy, the bank should be in a close relationship with it. This relationship is referred to as

relationship banking. In the abovementioned context, Ongena and Smith (2000) define relationship banking as a relationship between a bank and a firm, which is something more than a simple, anonymous financial transaction

2.8.2 The Empirical Value of Lending Relations.

Lending relationships should be most valuable where the information about a firm and its potential investment opportunities are most uncertain. Empirical research on lending relationships focused on small firms due to they tend to be young and have little track record. They are often in new industries or markets, so firms which they can be compared are also less common.

However, for large and publicly traded firms, lending relationship appears to have value due to the access to capital markets are less costly and lending relationship potentially less valuable. Slovin, Sushka, and Polonchek (1993) examine the stock price response of firms which had publicly disclosed lending relationships with Continental Illinois Bank when the bank announced its insolvency. The stock price change was bigger when the borrower had publicly documented relationships with other banks.

2.9 Advantages of Lending Relationship

The most important advantage of relationship banking is it minimized agency costs on the principal-agent line (which occurs as a result of a contract between the lending bank and the firm) due to the bank gains additional information and decreases the costs resulting from the

issue of negative selection (Heffernan, 2007). For firms to maintain multiple relationships is expensive, mainly due to transactional costs (Diamond, 1984). However, empirical research provides no explicit answers, while costs and benefits depend on many factors.

Relationship financing leads to two-way information flows, which the parties getting to know their mutual expectations, deeper recognition of the customers' situation as the basis for trust and improved flexibility of action in the case of a typical financial requirement. Information gained by the bank in the process of relationship financing allows it to better predict the behavior and risk profile of the borrower. Combined with larger resources of information about the economic situation at the bank's disposal, it makes the bank more issues.

Benefits of information about customers, during the relationship financing, may be among the main factors of banks' profitability (Boot, 2000). Information gains during relationship banking allows banks to provide long-term, renewable and flexible financing to firms which are their customers, which decreases the probability of banks' bankruptcy due to conducting less risky activity (Keeley, 1990). The benefits for the bank depend on the quality of information about the customer and diversified quality of this information determines the level of the bank's specialization in establishing relational contracts. It was determined that having information about the behavior of customers provides significant benefits to both individual banks and entire banking systems (Cull, Haber and Imai, 2011).

Profit from relationship banking depends on the competition in the banking sector (Boot, and Thakor, 2000). Competitions increased in the banking sector decrease the profitability of

relationship banking by lessen the intention to maintain close relationships (Ergungor and Thomson, 2005). However, this depends on the degree of market concentration (Elsas, 2005). Access to information about customers and its use may be the key to retain competitive advantage, especially for smaller banks (Berger and Udell, 2002; Boot and Marinc, 2008).

Benefits from relationship banking for firms are also broadly discussed in literature and concern mainly on reduction of the negative effects of information asymmetry (Diamond, 1991; Petersen and Rajan, 1994). Establishing a long-term relationship based on information collected by both parties reduces transaction costs resulting from negative selection and agency costs (Diamond, 1991; Boot, 2000). A strong relationship with a bank may also improve the firm's image and reputation.

A close bank-firm relationship, not only the bank monitoring costs would be at its lowest level, but does it suggest a solution to agency problem (Diamond, 1984). It can effective avoid wealth transfer from lenders to shareholders, and improve corporate governance (Limpaphayom and Polwitoon, 2004). Previous researchers also suggest that this relationship reduces the information asymmetries and incentive problems (Jensen and Meckling, 1976; Weinstein and Yafeh, 1998). It is largely agreed that such problems (asymmetry and incentive) affect corporate investment to a large degree. Therefore, firms with such a relationship should improve their access to capital and invest more in the market.

The strong bank-firm relationship maintains a significant role in the modern financial markets, especially during the financial crisis. Many researchers agree that burdens of debt

make companies more unstable in economic issue. A close bank relationship can reduce the costs of financial instability (Hoshi, Kashyap and Scharfstein, 1991). Moreover, it is possible that a firm's main bank is also the main bank of its suppliers and even its customers. Therefore, this relationship can overcome the issues of credit expansion and trustworthiness among customers, suppliers, firms and banks.

One of the advantages of lending relationships is it allow the lender to collect information about a borrower which is not easily reproduced by other financial institutions. This will give the lender a competitive advantage. Banks can know about a firm by observing it over time as well as over products. The bank can observe the firm's repayment history as well as other information about the firm and the manager which the bank obtains through the loan officer. History with the bank raises the banks expectation that the borrower is a good credit risk (Diamond, 1991).

In addition, relationships can be built through interaction over multiple products due to banks offers more than just lend money. They may manage the firm's cash account, factor its sales, and service its lock box. These additional services provide by the bank can give the bank an additional information on the current financial strength of the borrower and give an early indicator if the borrower experiences financial issue.

From firm's point of view, creating a good relationships with banks will help firms to improve business reputation, to reduce the leakage of information to competitors (Campbell, 1979), to decrease the negative impact of asymmetric information (Diamond, 1984 and 1991;

Fama 1985; Rajan, 1992; Holmstrom and Tirole, 1997; Bolton and Freixas, 2000), to reduce agency conflicts related to financial intermediation (Deloof and Vermoesen, 2010), to increase accessibility to loans, and to reduce the interest cost (Houston and James, 1996; Pertersen and Rajan, 1995). This will cause the firm not only depend on the cash flow liquidity within the firms so that the firms can easily invest in fixed assets with lower cost of capital, and reserves cash will be used to increase profitability (Fazzari et al., 1988; Hoshi et al., 1991).

Firm's investment is less sensitive to cash flow when a firm has a strong banking relationship (Shen and Wang, 2004). Diamond (1984) finds that a close relationship allows the bank to handle an active monitoring role which can lessen problems related to free-riding and information asymmetry. In addition, when firms establish close banking relationship through repeated lending from a bank, they will increase their reputation on the various funding sources.

Diamond (1991) also indicates that firms choose bank funding first in order to establish sufficient credibility and then access the capital markets. Research on Japanese firms shows that establishing good relationships with commercial banks increase accessibility to equity capital markets (Kutsuna, Smith and Smith, 2003). Furthermore, building up close relationships with banks helps firms overcome financial or business crisis (Hoshi et al., 1991).

These effects of relationships between banks and firms are likely to be more important for small firms due to small firm have a higher cost when obtaining investment funds from financial markets and rely heavily on banks as the main credit channel. Small firms tend to borrow from banks and to borrow from a few banks with which they have a long-term relationship. These relationships are an important feature of small business lending.

Small firms usually do not enter into contracts that are publicly visible because they do not have audited financial statements and consequently can have difficulty building reputations to signal high quality (Berger and Udell, 1998). Relationship lending enables banks to collect private information on the credit-worthiness of these firms since there may be little public information available on small firms (Strahan and Weston, 1998). These factors suggest that relationship lending may be particularly beneficial to small firms, including lower cost or greater availability of credit, protection against credit issue, and the provision of implicit interest rate or credit risk insurance.

A problem with the credit line from the bank can be considered as a bad signal about the firm for a small firm with a single relationship, even if the withdrawal of the credit is not linked to financial issue of the small business. As a result, small firms can have multiple banking relationships, which have higher transactions costs but also greater benefits than a single relationship (Berger and Udell, 1998).

2.9.1 Exclusive Bank Relationship

A single bank with better information about a firm can impose hold-up costs that can adversely affect the borrowers' value (von Thadden, 1998). These additional costs can be reduce or eliminated by multiple banking relationships. The duration of a relationship between a firm and a bank also plays a role. During a recession, firms that have ongoing relationships with a bank are better able to obtain additional financing which allowing them to survive the recession with minimal loss (Longhofer and Santos, 2000).

There is another reason why firms prefer an exclusive financing contract, which is to reduce the costs of information disclosure. Campbell (1979) shows that the small companies with creative and interesting ideas are viewed as main participators. They do not have a lot of internal funds or external opportunities raising money. More importantly, they do not need to disclose the confidential information related to their product innovation to their competitors either in direct or indirect ways.

Banks provide firms with contracts that require high initial collateral together with interest payments that fall when the bank has verified the successful completion of financed projects (Boot and Thakor, 1994). This is particularly important for innovating and RandD-investing firms, as highlighted by Yosha (1995) and Bhattacharya and Chiesa (1995).

Previous research has largely discussed the importance of an exclusive banking relation. It is more advantageous for a company to have a single bank relationship rather than with several

banking relations (Harhoff and Körting, 1998). The quality of information between the company and the bank is better shared due to there are comparative advantages of information for the two economic agents. It allows a better banking supervision.

Bank-firm relationship uniqueness allows a good impression about the debtor by the creditor as well as a confidence between the partners. The company finds that such a relation allows a firm to gain an easier access to the loans. Firms applying for loans will make it easier for the bank to evaluate the quality of their firms by providing an informational advantage (Boot, 2000). In return, the bank offers them the capital they need and assumes the risk relating to the process of financing.

Banking relations focus on the confidentiality of the information gathered by the banks. The main objective is to ensure an informational advantage where one should not reveal specific information about a company to its rivals. However, a context of information asymmetry, the bank is facing the risk of selection and consequently, it is difficult to differentiate the quality borrowers from non-quality ones. This can lead to a conflict situation between the two parties due to the insufficiency of the informational exchange. In order to avoid such conflicts, a good banking supervision is important to know potential borrowers.

The financial intermediation is a monitoring system where the exclusiveness in the banking financing constitutes a means of decreasing competition between banks (Diamond, 1984; Sharpe, 1990; Rajan, 1992). In fact, the banking monitoring is a complicated activity which includes the flows of treasury follow-up in the company and the renewals of the appropriation

(Nakamura, 1993). This explains the transmission of the investors' responsibility for the control of cash flows from the company to the bank. On another side, the financial intermediation represents in a certain way a mechanism of commitment in a relation where the exclusiveness in the financing is a tool which can reduce the costs of monitoring (Hellwig, 1991). Thus, the effectiveness of the banking intermediaries is increased within the frame work of the exclusive relation.

The increase in the performance of the firms is cause by the contact with the bank which makes it possible for a high probability of the success of the financed project. In fact, the evaluation of the customers' quality is based on an individual analysis which is determined by the exclusiveness in the banking relation and the co-operation between the bank and the company (Morck and Nakamura, 1999).

2.9.2 Multiple Bank Relationship

Research on multiple relationships leads economists to consider other factors. A bank can acquire a great deal of unique information about a firm and the bank may be able to exploit this, when a bank and a firm have a long-term relationship. Long-lasting bank and firm relationships arise because high quality firms are unable to convey information about their quality to other banks (Sharpe, 1990).

Some banks choose have a relation with a company which already had other banking contacts in order to gain information on which loan- related decisions will be based (Japelli and

Pagano, 2002). The improvement of the efficiency of the granted appropriations involves an improvement in the performance of company (Foglia, et al., 1998). The advantages of information sharing among banks are explained by Padilla and Pagano (1997).

Generally, the strategy of financing through a multiplicity of banking relations avoids the allocation of funds to non-profitable projects. Some firms choose to have multiple banking relations in order to minimize the probability of financing issue (Berger et al., 2005). When the banking system is fragile, the multiple banking relations took an insurance coverage against the loss of their in formational flows revealed by the company (Ongena et al., 2003).

The good quality company may find it beneficial to have several banks relations in order to limit the risk of misuse of the credit (Thakor, 1996). However, the dependency to the multiplicity of the banking relations presents a more advantageous solution, if the control was carried out by only one bank is ineffective. Moreover, the diversification of the banking relations does not necessarily shows an additional financing cost for the firm because it is dependent on the cost of control supported by the bank and of the facility of obtaining and data processing concerning the firms (Farinha and Santos, 2002).

From this review of the theoretical literature, it seems that the dependency to a multiple banking relation banks aims at avoiding the financing issue.

2.10 Disadvantages of Lending Relationship

On the other hand, close cooperation with the bank may be costly for the firms (Sharpe, 1990; Rajan, 1992). Having information about the firms reduces competition in the market of bank loans, which causes an increase in loan prices in the future (Boot, 2000). The firms may reduce monopolistic pressure by comparing offers and actions of individual banks and establishing relationships with selected banks (Broecker, 1990). The costs of relationship banking are also borne by banks themselves.

In the case of relationship financing, banks should not continue to finance the firms which are experiencing financial difficulties although being familiar with the firm's situation. However, if the bank chose not to continue crediting, it would certainly lose the original loan (Boot, 2000). Relationship financing can also give rise to opportunistic behavior in firms, who take advantage of their creditworthiness and multi-annual cooperation with the bank in order to obtain further financing (Heffernan, 2007).

The relationship-building process between firms and banks is very costly to the borrowing side (Sharpe, 1990; Rajan, 1992). Since the lending side initiate the borrowing contract and gives the borrower financial aid at a favorable rate at the beginning, in return, the financial institution can accumulate a large amount of non-public material about the firm through this relation and finally have a bargaining power over the firm.

Furthermore, by using this monopoly power, a bank could even threat to cut off a firm's loan or simply charge it at a higher rate during the relationship process (Diamond, 1991). This is because there is an extra searching cost for the firm looking for an alternative bank to replace the current one. Others would view as a negative sign if a firm stops the relationship with its current bank, due to information gain and adverse selection problems (Castelli, Dwyer Jr. and Hasan, 2006).

Firms enjoy faster growth or high profitability among their peers if a close bank relationship helps firms' access to capital easier than those without such a relationship. However, some empirical evidence shows opposite stories. There are negative relationships between profitability and the degree of bank-firm relationship (Weinstein and Yafeh, 1998). They used sample period of the Japanese financial market liberalization from 1977 to 1986. The evidence shows that even though the strong bank relationship did increase access to funds, this phenomenon has stop since deregulation in early 1980s.

Meanwhile, they conclude that banks conduct rent-seeking behavior which means banks use their monopoly power to siphon profits from their client-firms. Further, they find that banks tend to shy away from risky but profitable investment and put pressure on their client-firms. This could be one of the reasons that companies with close bank ties cannot beat non-relationship firms in the Japanese atmosphere. Moreover, Agarwal and Elston (2001) who examine a hundred large listed German firms from 1970 to 1986 do not find any evidence showing the benefits of German universal banking relationship. Nevertheless, there is a negative relation between interest payment and bank-influenced firms although it is only

significant at the 10% level. In addition, Agarwal and Elston (2001) conclude that existing easy access to capital benefit could be balanced by less risky projects taking or by rent-seeking effect.

2.10.1 Exclusive Bank Relationship

The exclusive banking relationship leads to the creation of a climate of trust between the two parties (Aya and Mouldi, 2012). However, this confidence can be fully used by the bank and thus spread the information collected with a third party. The exclusive relation sometimes can be harmful. There is a risk that private information will be reveal to a third party since the exclusive relation requires the exchange of information between the bank and its customer (the suppliers, the customers or the competitors) during the activities of the bank council.

The probability of transferring information about a company can be increased if the bank maintains a relation with competitive companies (von Rheinbaben and Ruckes, 2004). Therefore, in the case of banking concentration, the firms' performances reduce when the probability that the companies are in relation to the same bank is increased (von Rheinbaben and Ruckes, 2004). The information confidentiality is important in particular when it comes to strategic nature.

Furthermore, the exclusive banking relation can harm the quality of bank control. The banking supervision is started only if the bank estimates to optimize its profits following the

financing of the company. The bank will be strongly involve in the choice of the projects to finance, the selection of investment and the choice of financing channel when they have private information about the firm (Bellouma, 2005).

A poor quality firm (bad reputation and firm having financial problems) may not find it beneficial to involve itself with a multiple banking supervision. The uniqueness of the relation is the bank can be pushed to reduce its monitoring and to reduce its techniques of monitoring (Udell, 1989). The firms tend to take more chances because they know that they will be financed in the case of financial problems. The exclusive banking relation leads to a fraudulent diversion where the funds used other than supporting the reproduction of the personal information, which resulting a cost of misuse of the credit and reducing the firms' performance (Berger and Udell, 2002).

2.10.2 Multiple Bank Relationship

Having several banking relations does have negative effects on the firms. The multiplicity of banking relations reduces the possibility of bank to collect information and to control the company. The multiple banking relations show the appearance of a similar behavior in the banks (Petersen and Rajan, 1995). Indeed, each bank tries to reduce its effort of evaluation and to base its own decision on that compare to other bank (Rajan, 1992). Banks can grant credits by requiring high guarantees of carrying out their activities of control when faced with multiple relations.

The firms tend to takes the chance to misuse the banks financing without assistance, advice and follow-up, by widening its banking relations. The firms tend to refund a loan contracted at a bank by another granted by other bank without control. In other words, the firms can require funds higher than its real need and use the additional funds in risky activities. This behavior decreases the feeling of its real risk and damages its performance (Foglia et al., 1998).

Moreover, the maintenance of several banking relations by the firms is proof by the refusal of the initial bank to present the required funds to it (Harhoff and Körting, 1998). This idea was supported by Farinha and Santos (2002) who show that firms at significant risk of credit borrow from several banks. Therefore, this kind of banking strategy increases the probability of turning down loan applications presented by firms (Child and Terence, 2005).

Chapter 3

Methodology

3.1 Introduction

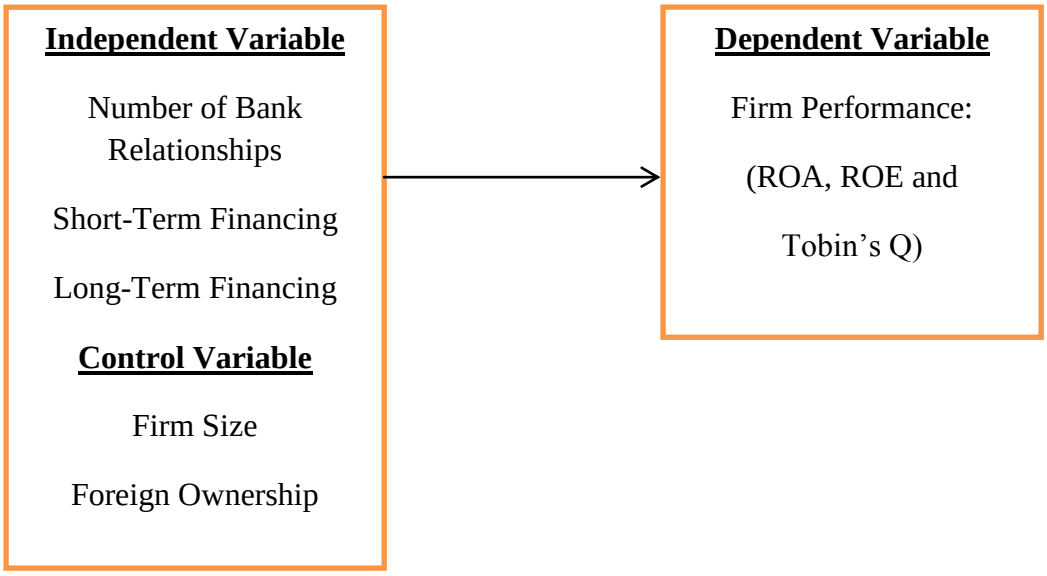
This chapter discusses the theoretical framework followed by hypothesis development, data collection and variable measurement, as well as model specification and analysis in the last section. This chapter also explains the research design conducted and how the data was collected. Data are very important in guaranteeing and ensuring the reliability and accuracy of the findings in a study. This chapter also clarifies the method used in analyzing the relationships between bank-firm relationship and firm performance of top 100 listed companies in Malaysia.

3.2 Theoretical Framework

The firm performance in this study is measured by two different approaches; finance or market based approach (Tobin's Q) and accounting based approach (ROA and ROE). The independent variables used in this study is number of bank relationship and credit financing, while the control variables is firm size and foreign ownership. The independent variables chosen due to the ability to examine the impact of bank –firm relationship to the firm and also to measure effectiveness of a firm using its credit financing. The control variable is chose due to the small impact on the effectiveness of the firm operating business.

Research model:

Figure 3.1 Research Framework



3.3 Hypothesis Development

The research hypotheses are proposed below according to research questions in chapter one and relevant literature reviewed in chapter two.

- H1 - There is a significant relationship between the number of bank-firm relationships and firm performance.
- H2 - There is a significant relationship between short-term credit financing of a firm and its performance.
- H3 - There is a significant relationship between long-term credit financing of a firm and its performance.

- H4 - There is a significant relationship between firm size and firm performance.
- H5 - There is a significant relationship between foreign ownership in a firm and its performance.

3.4 Data Collection

3.4.1 Sample Selection

The initial sample of the study consists of the Top 100 public listed companies in Malaysia, in the year of 2013. These Top 100 companies were selected to be examined because their market capitalization formed about 85% of the total market capitalization of companies listed in Bursa Malaysia. (Azlan, Jamal, Geetha, Mohidin, A.Karim, Lim, Ch'ng (2013)). The results from the study are thus expected to be able to generalize the listed companies on Bursa Malaysia as far as firm-bank relationship is concerned.

In this study, financial institutions such as investment funds, insurance firms, REITS, Trusts firms, banking and finance and securities firms are excluded from the sample due to the differences in characteristics in their assets and capital structure, compared to non-financial firms. After excluding the 19 firms that fall under the criteria mentioned earlier, and excluding 3 firms which merged and were de-listed, there left a final total of 78 firms, representing a sample rate of 78% of the population for analysis. All the sample data are categorized into groups the same as in Bursa Malaysia as follow: trading and services, industrial product, plantation, construction, consumer, properties and hotel.

The data collected in this research comprise two categories: dependent variables and independent variables. There are three dependent variables in this research based on two different measurements: value-based measure (Tobin's Q), and accounting measures (return on assets, ROA, and return on equity, ROE). Tobin's Q is used to test how the bank firm relationship affects the firm market performance. Firms' profit is measured by ROA (return before tax on assets) and ROE (return after tax on equities).

The independent variables consist of the number of bank relationships, short-term credit financing relationships, long-term financing relationships and overall credit financing relationships. Two firms' characteristics variables (firm size and foreign ownership) are included in the examination as control variables. All the data needed in this research are extracted from respective corporate annual reports of the firms.

3.4.2 Ordinary Least Square Regression and Model Specification

In this study, the method of ordinary least squares (OLS) regression is used to examine the relationships between firm performance and number of banking relationships, credit financing relationships (short-term, long-term and overall), and two control variables (firm size, and foreign ownership).

In analyzing firm performance and firm-bank relationships with firm performance, OLS is the common method used by the previous studies. The model developed and used in this study represents the appropriate assumptions derived from previous literature to show the relationships between the dependent variables and the independent variables.

3.4.2.1 Model Specification

The general structural equation used in this study to test and explain the relationship is as follows:

$$ROA = \beta_0 + \beta_1 BNR + \beta_2 STF + \beta_3 LTF + \beta_4 FZS + \beta_6 FOW + \varepsilon \quad (1)$$

$$ROE = \beta_0 + \beta_1 BNR + \beta_2 STF + \beta_3 LTF + \beta_4 FZS + \beta_6 FOW + \varepsilon \quad (2)$$

$$\text{Tobin's Q} = \beta_0 + \beta_1 BNR + \beta_2 STF + \beta_3 LTF + \beta_4 FZS + \beta_6 FOW + \varepsilon \quad (3)$$

Where:

ROA/ROE/Tobin's Q	-	Firm's performance
β	-	Intercept of the equation
BNR	-	Number of firm-banking relationships
STR	-	Short-term credit financing relationships
LTR	-	Long-term credit financing relationships
FSZ	-	Firm size
FOW	-	Foreign ownership
ε	-	Error Term

3.5 Research Model and Measurement of Variables

3.5.1 Dependent Variables

Tobin's Q is a ratio of the combined market value of all the companies on the stock market which should be about equal to their replacement costs. The ratio is devised by James Tobin from Yale University (Tobin, 1969; Brainard and Tobin, 1968). The Q ratio is calculated as the market value of a company divided by the replacement value of the firm's assets:

Q Ratio = Total Market Value of Firm/Total Asset Value

Where:

- Total Market Value of Firm = (Share price) x (outstanding shares)
- Total Asset Value = Current Asset + Non-current Asset

Tobin's Q Ratio provides information on how well a company's investments pay off. A low Q (between 0 and 1) means that the cost to replace a firm's assets is greater than the value of its stock. This implies that the stock is undervalued.

The other dependent variables for measuring firm performance are ROA and ROE.

ROA = Net Income / Total Assets

ROE = Net Income / Shareholder's Equity

3.5.2 Independent variables

For defining the independent variables and control variables, Table 3.2 summarizes the measurement description and the prediction of the result. Most measurements and expected relations are consistent prior with previous research (indicated in italics in the table). There are three independent variables and two control variables used in this research. The independent variables are as follow:

(i) Number of bank relationships (BankN):

This variable has quadratic function relation with dependent variable (Castelli et al., 2006). This means that when a firms is involved in more number of bank relationships, the firm's performance will increase due to the increase in the power of negotiation, hold-up cost reducing, ease of getting more loans for investment, and liquidity of cash flow improved.

However, if a firm is involved in many number of bank relationships, they will also have to bear extra transaction costs and representative costs. The firm's profit will thus decrease because of those costs. Firm's performance will therefore be negatively affected.

(ii) Short-term credit financing (STF):

This variable is measured by short-term loan over total loan. This variable is expected to have negative impact on firm's performance because of several factors, for example time constraint and higher interest rate and hold-up cost.

(iii) Long-term credit financing (LTF):

This variable is measured by short-term loan over total loan. This variable is expected to have positive impact on firm's performance due to the ability to fully used the financing despite from the longer period given. It also means that the firm has stronger long-term credit financing relationships than others.

Apart from the four independent variables mentioned above, two control variables are included, as follow:

(i) Firm size:

This variable is measured by the logarithm of total assets (LAsset). This variable is expected to positively relate to firm's performance because of following reasons:

- Small firms are less likely to be close to the minimum efficient scale needed to operate efficiently in a market (Audretsch and Mahmood, 1994; Geroski and Mata, 2005).
- Small firms apply different technologies based on their size. Due to their small scale, they use less capital intensive approaches, so variable costs achieve a higher ratio within the total costs of the firm.

(ii) Foreign ownership:

Wei, Xie and Zhang (2005) and Tian and Estrin (2008) suggest a positive relationship between firm performance and foreign shareholdings. Foreign ownership is measured by the

percentage of share own by the foreign. They may have access to cheaper financing via the parent firm or by virtue of their implicit government guarantee. They note that foreign investors can effectively monitor and influence management of the firm that they are holding. Thus, a positive relationship between firm value and firm's foreign ownership is expected.

Table 3.2 demonstrates the description of the independent and control variables used in the study. The prediction of the directions (impact on firm performance) is stated based on past literature.

Table 3.1: Independent and Control Variables

Test Variables	**Description of Measurement**	**Prediction of Direction**
BankN	No. of banking relations in the firm *Aya and Mouldi (2012)*	-
STF	No. of short-term credit financing in the firm	-
LTF	No. of long-term credit financing in the firm *Thanh and Minh Ha (2013)*	+
Control Variables	**Description of Measurement**	**Prediction of Direction**
Firm Size	Log of Asset and Log of Turnover *Cao, Chen and Chi (2010)*	+
Foreign ownership	Percentage of foreign ownership in the firm *Ghosh (2004)*	+

Table 3.2: Description of Variables Used in the Study

Dependent Variable	**Description**
Tobin's Q	Market value of a company divided by the replacement value of firm's assets
ROA	Ratio of net income scaled by total asset
ROE	Ratio of net income scaled by shareholders' equity
Independent Variable	**Description**
No of bank relationships (BankN)	Total number of banks that lend loans to a firm in fiscal year 2013
Short-term credit financing (STF)	Ratio of short-term bank loans to total loan of a firm
Long-term credit financing (LTF)	Ratio of long-term bank loans to total loan of a firm
Control Variable	**Description**
Firm size (LAsset)	Natural logarithm of total assets
Foreign ownership	Percentage of foreign ownership of the firm

Chapter 4

Results and Findings

4.1 Introduction

In this chapter, the results are analyzed and discussed. Data collected from company's annual reports were run using several analyses, which are descriptive analysis, multicollinearity test, correlation analysis, and linear regression analysis, by using Statistical Package for the Social Science (SPSS) version 16.0. The purpose of this chapter is to present and discuss the findings of this study. The chapter is organized into sections as follow: Section 4.1 presents the introduction, Section 4.2 presents the descriptive analysis, Section 4.3 examines the descriptive statistics, Section 4.4 shows the correlation among independent variables using a Pearson product moment correlation analysis, and Section 4.5 presents the results of regression analysis of the model tested.

4.2 Descriptive Analysis

Table 4.1 shows the distribution of companies by sector that is used for analysis in this study. The final total number of companies used as empirical evidence in Malaysia is seventy eight. These sample companies have been organized for industry differences that may impact the accruals behavior by firstly estimating the discretionary accruals according to industry–year portfolio, and secondly by involving industry dummies in the regression. From the 81 companies, three were further excluded because of them being delisted or merged during the observation year.

4.2.1. Sector Classification

These 78 companies are divided into 7 sectors according to the classification by Bursa Malaysia. Table indicates that trading and services sectors have large sample (36 companies), industrial product (9 companies), plantation (10 companies), construction (5 companies), consumer (11 companies), properties (6 companies) and hotel (1 company).

Table 4.1: Sample Distribution of Companies Based on Sector Classification

Sector	**Number of companies**	**Percentage (%)**
Trading and services	36	46.2%
Industrial product	9	11.5%
Plantation	10	12.8%
Construction	5	6.4%
Consumer	11	14.1%
Properties	6	7.7%
Hotel	1	1.3%
Total of companies	**78**	**100%**

4.2.2 Number of Bank Relationships

Table 4.2 shows the percentage of bank number relationship of the sampled companies from all sectors. The range of percentage is divided into three proportions as follow:

1. First proportion (0 – 10 relationships)

2. Second proportion (11-20 relationships)

3. Last proportion (more than 20 relationships)

Table 4.2 shows that majority of the companies (71 companies or 91%) has a proportion of less than 10 bank-firm relationships, 6% have between 11-20 bank-firm relationships, while there is only one company that has more than 20 bank-firm relationships.

Table 4.2: Percentage of Bank Number Relationships of Sampled Companies

No of Bank Relation	No of Firm	Percentage
0 -10	71	91.03
11 - 20	6	7.69
> 20	1	1.28
Total	**78**	**100.00**

4.2.3 Percentage of Foreign Ownership of Sample Companies

Table 4.3 shows the percentage of short-term credit financing relationship of the sample companies from all sectors.

Table 4.3: Percentage of Foreign Ownership of Sampled Companies

Foreign Ownership	No of Firm	Percentage
0 - 30	71	91.03
31- 50	1	1.28
> 50	6	7.69
Total	**78**	**100.00**

4.3 Descriptive Statistics

Table 4.4 presents a summary of the dependent variables and independent variables using descriptive statistics that comprises data for mean and standard deviation. It is divided into four sections: minimum value, maximum value, mean and standard deviation. It includes independent and control variables as tested variables. The results show that the mean for ROA ratio for all 78 companies is 6.5 percent and the minimum and maximum of ROA is 0 and 13.7 percent respectively. The minimum and maximum of the ROA indicates how profitable a company is relative to its total assets. The mean for ROE ratio is 12.3 percent and minimum and maximum of ROE is 0 and 27.1 percent respectively. This ratio indicates how profitable a company is by comparing its net income to its average shareholders' equity.

Meanwhile, the mean for Tobin's Q ratio is 0%, minimum and maximum of Tobin's Q is 0 and 0.4 percent respectively. A low Q (between 0 and 1) means that the cost to replace a firm's assets is greater than the value of its stock. The impact of bank-firm relationships to firm

performance is estimated using independent variable which is short-term credit financing (STF) and long-term credit financing (LTF). This shows how much the firm depends on the type of credit financing, either short-term or long-term. The mean for STL is 41.9 percent, while the mean for LTF is 55.3 percent. The minimum and maximum for both variables is 0 and 1. The mean for firm size (LAsset) is 6, which indicates that the average Malaysian firms' size is moderate because the value for minimum size is 5 and the maximum value is 8. The mean for FOW (foreign ownership) is 15%, minimum is 0.65% and maximum is 74%, indicating the percentage of foreign ownership in the sample data.

Table 4.4: Descriptive Statistic of Continuous Variables

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
ROA	.0027	.1371	.0651	.0315
ROE	.0064	.2714	.1203	.0509
TQ	.0001	.0041	.0016	.00096
BNR	.0000	23.0000	5.9615	4.1417
STL	.00	1.00	.4194	.3706
LTL	.00	1.00	.5536	.3745
LAsset	5.58	8.65	6.7125	.5755
FOW	.65	74.33	15.0064	16.5352

4.4 Multicollinearity

Multicollinearity is a statistical phenomenon when two or more variables in a regression model are highly correlated. The multicollinearity test is an important analysis because the existence of muticollinearity shows a critical issue on the regression model due to the obstacles that occurred when identifying the consequence between independent variables and dependent variable.

Multicollinearity is one of the many ways that can be used to check the abnormal relationships that might exist among the independent variables tested because most of the variables usually explain the result which variables are affected to be established in the study. In order to detect multicollinearity and to measure the results, Variance Inflation Factor (VIF) is used. In the situation where the Variance Inflation Factor (VIF) is above 10, the independent variables in the study are considered as highly correlated. Thus, when running the multiple regression models, the command for multicollinearity diagnostics to include VIF is selected in the analysis. In Table 4.5, results show that there is no multicollinearity problem with the independent variables because all the variables have VIF values of below 10.

Table 4.5: Multicollinearity Test Summary

Model		Collinearity Statistics	
		Tolerance	VIF
1	BNR	.855	1.170
	STL	.169	5.910
	LTL	.163	6.134
	LAsset	.907	1.102
	FOW	.900	1.111

4.5 Correlation Analysis

Correlation analysis is used as a statistical tool analysis in order to determine the relationship level of one variable to another. Before carrying out the linear regression and in order to establish the association between the dependent and independent variables, a correlation matrix is developed.

Table 4.6 shows the correlation relationships between firms' performance (ROA, ROE and Tobin's Q), independent variables and control variables. The highest correlation among the independent variables is between LTF and BNR, which is 0.339 ($p<0.05$), suggesting that the higher the number of bank relationships, the more will be the number of long-term credit financing. The result shows a negative relation between LTL and STL (-0.909) ($p<0.05$). The number of bank relations is negatively correlated to firm's performance as indicated by the negative values of 0.356, 0.299 and 0.332 respectively. Foreign ownership is found to have has a positive effect on firm performance.

Table 4.6: Correlation Matrix Summary

	ROA	**ROE**	**TQ**	**BNR**	**STL**	**LTL**	**LAsset**	**FOW**
ROA	1							
ROE	.741**	1						
TQ	.442**	.482**	1					
BNR	-.356**	-.299**	-.332**	1				
STF	.280*	.152	.185	-.311**	1			
LTF	-.227*	-.111	-.169	.339**	-.909**	1		
LAsset	-.068	.037	-.013	.176	-.176	.253*	1	
FOW	.071	.011	.023	-.231*	.271*	-.253*	-.114	1

***, ** and * indicates significance at 1%, 5% and 10% levels

4.6 Regression results

The effects of the independent variables on firms' performance (measured by ROA, ROE, and Tobin's Q) are described in Table 4.7 as follow:

Table 4.7: Linear Regression Model Summary

	ROA	**ROE**	**Tobin's Q**
R-squared	.173	.116	.127
Adjusted R-Squared	.115	.054	.066
Std. Error of the Estimate	.0296	.0495	.00093
N	78	78	78

Table 4.7 shows the results from the regression model. The R squared (R^2) and adjusted R square are used as the explanatory model. The R^2 in the table explains by percentage the influence of the independent variables on the dependent variables. The table shows that 17.3 percent (ROA), 11.6 percent (ROE) and 12.7 percent (Tobin's Q) respectively of the variation is the dependent variable (s) is explained by the independent variables. The other remaining percentage of dependent variable(s) variation could be explained by other factors.

The lower result of the R^2 in ROA, ROE and Tobin's Q is considered acceptable for this kind of research because previous studies have obtained lower results. (See for example, Castelli, Dwyer, and Hassan, 2006).

The effects of the independent variables on firms' performance (measured by ROA, ROE, and Tobin's Q) are described in Table 4.8 (a), (b), and (c) as follow:

Table 4.8 (a) shows the results of the coefficient linear regression for the present study. The number of banking relationship affects firm performance negatively and significantly at a significant level of 5%. Short-term financing effect firm performance significantly and positively at significant level 10%. They indicate that if the number of bank relationship increase by one unit, the ROA for the companies is decreased by 0.002. For short-term financing, if it is increased by one, the ROA is increased by 0.037. For long-term financing, if it is increased by one, the ROA is increased by 0.022. There are no changes in ROA if the firm size and foreign ownership increase by one.

Table 4.8 (a) Linear Regression Analysis

(Dependent Variable: ROA)

Model	Unstandardized Coefficients		Standardized Coefficients	t	P-value
	B	Std. Error	Beta		
(Constant)	.056	.043			
BNR	-.002	.001	-.322	-2.776	.007**
STF	.037	.022	.436	1.675	.098*
LTF	.022	.022	.267	1.006	.318
LAsset	.000	.006	-.008	-.072	.943
FOW	.000	.000	-.055	-.484	.630

***, ** and * indicates significance at 1%, 5% and 10% levels

When firm performance us measured by ROE, the result show that the number of banking relationships is negatively and significantly correlated with firm performance at significant level 1%. All other variables (short-term financing, long-term financing, assets and foreign ownership) are positively correlated by none of them is significantly related. Of these four variables, STF affects ROE the most. For short-term financing, if it is increased by one, the ROE is increased by 0.039. For long-term financing, if it is increased by one, the ROE is increased by 0.029. The ROE increases by 0.07 if the firm size increased by one unit. Foreign ownership is found to have no effect on ROE.

Table 4.8 (b) Linear Regression Analysis

(Dependent Variable: ROE)

Model	Unstandardized Coefficients		Standardized Coefficients	t	P-value
	B	Std. Error	Beta		
(Constant)	.068	.072		.942	.349
BNR	-.004	.001	-.315	-2.631	.010***
STF	.039	.037	.281	1.043	.301
LTF	.029	.037	.213	.775	.441
LAsset	.007	.010	.079	.682	.498
FOW	.000	.000	-.075	-.641	.524

***, ** and * indicates significance at 1%, 5% and 10% levels

Table 4.8 (c) shows the results of the coefficient linear regression for the study. The number of banking relationship affects firm performance negatively and significantly at a significant level of 1%. Short-term financing and long-term financing have no effect on Tobin's Q, while assets have positive but very low impact on Tobin's Q. Foreign ownership effects negatively Tobin's but the impact is very low.

Table 4.8 (c) Linear Regression Analysis

(Dependent Variable: Tobin's Q)

Model	Unstandardized Coefficients		Standardized Coefficients	t	P-value
	B	Std. Error	Beta		
(Constant)	.001	.001		1.018	.312
BNR	-.00007634	.000	-.328	-2.750	.008***
STF	.000	.001	.175	.655	.514
LTF	.000	.001	.070	.255	.799
LAsset	.00008253	.000	.049	.426	.672
FOW	-.000004476	.000	-.077	-.661	.511

***, ** and * indicates significance at 1%, 5% and 10% levels

4.7 Discussion

Impact of the number of bank relationships (BankN) on firm performance

Castelli et al. (2006) find a negative influence between number of bank relationships and firm performance, while Garriga (2006) points out the opposite. The estimation results of this present study for all the three performance measures (ROA, ROE and Tobin's Q) are similar to Castelli's.

The increase in the number of bank relationships helps firms to increase in number of credit supply resources and solve hold-up problems. However, the firms may have to bear increased transaction costs, representative cost and free-riding problems. An increase in the number of banks in banking relationship helps firms to easily find more sources of funding, but this also makes firms easily use credit provided to invest in unnecessary business activities. When a firm get credit financing from a bank, the process of applying credit financing from other banks will be easier since the other banks will rely on the evaluation from the previous banks.

Impact of short-term credit financing on firm's performance

Hiraki et al. (2003) find that short-term credit financing has a negative relationship to firms' performance by using a measure of ratio of total main bank loans to total liabilities in estimating their models. Firms which have strong short-term credit financing relationships are expected to be less effective than the others which do not have such relationships. Short-term credit financing helps firms solve financial problem in short-term, but firms have to accept

higher borrowing cost in exchange. There are also some firms that use short-term loans to cover to long-term businesses. The explanation causing the firm to use short term relation as mentioned in the review of literature shows the reason for the negative impact of short-term financing relationship to firm performance.

This present study shows that short-term credit financing have a positive but not significant relationship with ROA and ROE, and no effect on Tobin's Q. Theoretically, when firms establish strong short-term credit financing, they would have an opportunity to achieve more effectively short-term business activities; thereby this affects positively overall firm performance (Baum, Sch¨afer and Talavera, 2007).

Impact of Long-Term Credit Financing on Firm Performance

This variable shows that even though there is no significant relation with any of the firm performance measures (ROA, ROE and Tobin's Q, there is a positive relationship between long-term credit financing and ROA and ROE, while there is no impact on Tobin's Q. The current research finds that firms having strong long-term credit financing relationships are more effective compared to other firms (Asterbro and Bernhardt, 2003). This suggests that concentrating on long-term growth through long-term investment can help firms create sustainable performance.

However, bearing long-term financing might make the firm face higher total interest compared to total interest in the short-term credit financing. Some firms might also misuse

the financing in non-profitable aspect. It can be concluded that even though firms having strong long-term credit financing relationships can use financial leverage (in long-term loans) better, but the effectiveness of using total assets is not significantly better.

Impact of firm size on firm performance (LAsset)

This study shows no significant result between firm size and firm performance. However, it positively correlated firm performance. Total assets impact negatively all the three measures of firm performance, implying that firms with more assets tend to have lower firm performance compared to others. This finding is consistent with those of Thanh and Min Ha (2013), and Garriga (2006).

Impact of foreign ownership (FOW) on firm performance

Foreign ownership has no significant relationship on firm performance. However, there is a positive relationship with firm performance as measured by ROA and ROE. This finding is consistent with a previous study by Azzama, Fouad, and Ghosh, D. K. (2013) that indicates that there is a positive relationship between foreign ownership and firm performance. When foreign investor owns shares in a company, they can help improve the company's access to the capital market.

Chapter 5

Summary and Conclusion

5.1 Introduction

The purpose of this chapter is to represent the findings with discussion about the contribution and limitations of this study, as well as suggestion for future research. The final chapter is organized in several sections as follow: Section 5.1 is the Introduction, Section 5.2 summarizes general findings of this study, Section 5.3 shows the implication and limitations, Section 5.4 provides suggestions for future research, and Section 5.5 concludes the study.

5.2.1 Summary of General Findings

This study examines the effect of bank-firms relationships on firm's performance for a sample of public listed companies in Malaysia, by investigating the impact of three bank-firm relationship variables (number of bank relationships, short-term credit financing, long-term credit financing) and two firm characteristics (assets and foreign ownership) on three measures of performance (ROA, ROE, and Tobin's Q).

The general findings in this study indicate that two variables (BNR and STF) have significant relationship on firm performance. The number of bank relationship (BNR) shows a significant negative relationship on the three firm performance measures (ROA, ROE, and

Tobin's Q). While short-term financing shows a significant positive relationship on ROA, and a positive effect on ROE, it has no impact on firm performance measured by Tobin's Q. Other variables namely long-term financing, firm size and foreign ownership shows no significant relationship with firm performance. Foreign ownership shows positive impact on ROA and ROE but is negatively correlated with Tobin's Q.

Based on the research findings presented in chapter four (results and findings), the hypotheses developed have been tested to determine whether they can be accepted or otherwise.

Table 5.2 Acceptability of Hypothesis

Hypothesis	Result
• H1 - There is a significant relationship between the number of bank-firm relationships and firm performance.	Supported
• H2 - There is a significant relationship between short-term credit financing of a firm and its performance.	Supported (for ROA)
• H3 - There is a significant relationship between long-term credit financing of a firm and its performance.	Not Supported

• H4 - There is a significant relationship between firm size and firm performance.	Not Supported
• H5 - There is a significant relationship between foreign ownership in a firm and its performance.	Not Supported

5.3 Limitations of the Study

There are two limitations of the study as listed below:

1. Sample data used in this study covers a period of only one year that is 2013, as there are several companies yet to publish their annual reports for the financial year of 2014. The study period of 2013 can be considered as appropriate since it represents the latest year of which all annual reports for the companies sampled were available.

2. The samples of firm is derived from the Top 100 public listed companies in Malaysia which represent the larger firms among all the public listed companies in Malaysia. Top 100 companies are chosen because of the limited time to analyze more than 1000 companies listed in Bursa Malaysia.

5.4 Recommendations for firms

Based on the conclusion, there are some recommendations as follows:

1) Firms should focus on quality of banking relationships rather than trying to establish more number of relationships. In distress period, establishing more number of bank relationships helps firms increase their credit supply resources and solving the hold-up problem, but firms need to bear the increase of transaction costs, representative cost and free-riding problem.

2) Firms should increase their short-term credit financing if there are more opportunity in short-term business activities rather than long-term business activities. This will help increase their firm's profit. Once firms overcome the pressure of short-term performance through improving managerial activities, firms will have sufficient time concentrating on improving long-term business activities radically. This helps firm sustainably grow and earn higher profit

3) Banks should avoid opportunities to increase more number of bank relationships. This increase is likely that firms are looking for more sources of credit financing to solve short-term problem in the distress period rather than of solving business activities. Banks should also consider the offer of easy financing credit which is financed credit from previous banks.

4) Firms may carefully consider increasing foreign ownership rate in firms because in Malaysia, the firm with less foreign ownership tends to get credit financing easier compared to firms with more foreign ownership, except for those companies which are franchisee, for example Nestle, Carlsberg and British American Tobacco, which are owned by foreign firms

5.5 Recommendations for future research

Future research can be developed in several areas as list below:

1. This study relies mainly on quantitative analysis as based research approach. Future research might follow up with face to face interview with the person in charge of the selected companies that been used as the sample since they did not disclose everything in the annual report, such as name of the borrowing banks.

2. The empirical study of this thesis focused only one year, 2013. In future research, a longer time frame should be carried out to get more accurate results and findings.

3. The sample used in this study is based on Top 100 public listed companies in Malaysia, which is among the largest companies in Malaysia. In future study, the samples should cover also small and medium companies in order to balance the sample data.

5.6 Conclusion

From the results and findings in the earlier chapter, it can be concluded that there are significant impact of number of bank relationship and short-term financing with firm performance. This study shows that if firms can establish a strong short-term credit financing, there a positive impact on their firm performance.

However, there result shows no significant relationship between long-term financing, firm size and foreign ownership. If the firm sustains long-term credit financing, there are positive impact on their performance. It is not appropriate for firm to focus on short-term relationship due to time constraints when dealing with the short period given to fully utilize the said credit financing. Focusing on long-term relationships helps firm get better performance, since there are no time constraints that need to be monitor when utilizing the credit financing.

The increase in total assets during this period through borrowing from banks reduces the effective use of assets but improves financial leverage and these lead to increase in effectiveness of using equity. The use of tangible assets through debt financing from financial institutions is ineffective leading to reduction of firms' performance.

The foreign ownership shows no significant relationship but a positive impact on firm performance. This is indicates that the foreign ownership will have influence in the firm decision making and operating business. Therefore, it will help to increase the firm performance.

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