

Financial constraints and Islamic finance: Lesson learned from external financing perspective

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Abstract

This study examines the presence of financial constraints and explores the role of profit-loss sharing (PLS) in mitigating the problem of the financial constraints stemmed from the capital market imperfections. Using Malaysian listed companies' data, this study finds that the financial constraints are present in the capital market. This finding implies the imperfect capital market. In Islamic PLS framework, there are two options of financing contracts that may be enforced in the capital market as financing mechanisms, i.e. al-musharakah and al-mudharabah. These schemes promote sharing of information and mutual trust between financiers and 'borrowers'. In these contracts, there are strict terms and conditions to be adhered to by both parties so that the contracts pursue to be valid. Besides, PLS mechanism may reduce the cost of capital since the profit and loss are shared rather than be burdened only on one shoulder. In this regard, the imperfect market problems namely asymmetric information, agency problem and transaction cost can be reduced if not be overcome.

Abstrak

Penelitian ini menguji adanya kendala keuangan dan mengeksplorasi peran *profit-loss sharing* (PLS) dalam mengurangi masalah keuangan berasal dari ketidaksempurnaan pasar modal. Dengan menggunakan data perusahaan yang terdaftar di Bursa Efek Malaysia, studi ini menemukan adanya kendala keuangan yang terjadi di pasar modal. Temuan ini menyiratkan pasar modal tidak sempurna. Dalam kerangka *Islamic PLS*, ada dua pilihan kontrak pembiayaan yang dapat diberlakukan di pasar modal sebagai mekanisme pembiayaan, yaitu al-musharakah dan al-mudharabah. Skema ini mempromosikan berbagai informasi dan saling percaya antara pemodal dan peminjam. Dalam kontrak ini, ada syarat dan ketentuan yang ketat harus ditaati oleh kedua belah pihak sehingga kontrak menjadi valid. Selain itu, mekanisme PLS dapat mengurangi biaya modal sejak keuntungan dan kerugian yang dibagi pada kedua belah pihak. Dalam hal ini, masalah pasar tidak sempurna yaitu informasi asimetris, masalah keagenan dan biaya transaksi dapat dikurangi.

Introduction

The perfect capital market is assumed mainly on the fact the market-related information is equally disseminated among market participants or agents. This equality indicates that all agents in the market have equal chance of gaining profits or incurring losses as they are exposed to the same risks. In addition, the perfect capital market condition also assumes that the problems of agency costs and transaction costs are insignificant. As a result, the capital market becomes frictionless as such products in the market are perfect substitutes. Furthermore, from the perspective of financing, firms in the market may simply choose either to finance their investments activities internally from retained earnings or externally from new share issuance and borrowings (Ismail, Ibrahim, Yusoff, & Zainal, 2010a). This condition has been argued by economists such as Modigliani & Miller (1958) and Jorgenson (1963).

In fact, the perfect capital market condition mentioned above can be simply relaxed. The condition contradicts the reality, thus it does not hold in the real world. In this case, imperfect capital market takes place. Economists like Oliner & Rudebusch (1992) and Bhaduri (2005) argue that the major factors

causing the market imperfection are namely information asymmetries and agency problem. The presence of information asymmetries problem causes the market participants not able to equally possess similar information. This wedge leads the internal and external funds to becoming no more perfect substitutes. Consequently, the agents who obtain market information better or earlier than others will be able to exploit the information to gain profits (Ismail, Ibrahim, Yusoff, & Zainal, 2010b). The agency problem is closely related to the information asymmetries problem as it involves outside investors who do not have enough relevant information on firm investment activities and returns and the inside investors (insiders or managers) who possess all relevant information. The problem arises when there is a conflict of interest among them as managers (the insiders) who have inside information pursue their own interests rather than interest of outside investors (Ismail et al., 2010a). This conflict of interest increases the cost of external finance (Oliner & Rudebusch, 1992), as to avoid the interest of outsiders to be jeopardized the outsiders may implement management control and monitoring at additional costs incurred by firm (Ismail et al. 2010a).

It has been argued by Ismail et al. (2010b), firms in the imperfect capital market cannot simply substitute internal funds with external sources of financing¹ since the presence of above factors made the firms less attractive to the outside investors. Paradoxically, firms' try to maximize their values subjected to profitable investment activities. These activities however, are subjected to the current available budget that may limit the need to enhance investment beyond its available internal funds. In order to go beyond this 'internal boundary', the firms need financial help from the outside funds to finance their profitable projects. In the presence of information asymmetries and agency problem, firms may be not accessible to external funds. Hence, firms have to retain most of their profit gained from current investments at price of lower dividend at the end of year in order to smooth their investment activities in the following year. Otherwise the firms which have exhausted all internal funds, they have to ignore the future investments.

The study of Fazzari, Hubbard, & Petersen (1988) is the first ever to examine firm's investment behaviour of investment and its relation to internal funds. The study categorized its sample of firms into three subgroups based on dividend payout ratios. They argue that if all firms are equally accessible to external sources of financing, firms' responses to changes in the cost of capital or tax-based investment incentives should only be different due to the investment demand. However, in the imperfect capital market, the internal and external finances are not perfect substitutes. In support of their argument, empirical results show that cash flow as a proxy of internal finance affects investment spending significantly. It also indicates the significant reliance on internal finance. This significant relationship explains the presence of financial constraints that hinder firms to have access to external finance. Other studies also find that the financial constraints are present in capital markets they examined. For example, Schaller (1993) finds that the financial constraints are present in Canadian market but affect only certain firms, Barran & Peeters (1998) find that Belgian firms' investments are dependent on financial factors. It suggests the presence of financial constraints in the Belgian market. Some studies also show the presence of financial constraints in well-developed capital markets. Cleary (2006) finds that the financial constraints are present in Australia, Canada, France, Germany, Japan, the United Kingdom and the United States. Kadapakkam, Kumar, & Riddick (1998) find the similar significant relationship between investment and internal funds availability after testing for six OECD (Organization for Economic Cooperation and Development) countries comprising of the United States, Canada, Germany, United Kingdom, France except Japan. Bond, Elston, Mairesse, & Mulkay (2003) constructed panel data sets of manufacturing firms in the United Kingdom, Belgium, France and Germany.

The above findings indicate that the financial constraints exist even in well-developed capital markets. However, the markets run through conventional practices of capitalist economic system such that interest-debt-based financing instruments are dominant products, while mutual cooperation-based products are negligibly small. On the other hand, Malaysia as the world leading country in Islamic finance has developed its Islamic capital market side-by-side with its conventional counterpart. In 2009, Islamic banking system constitutes more than 20 percent of total banking industry (Bank Negara Malaysia, 2011). Based on Securities Commission Malaysia's (2011) estimates, the values of market capitalization of Shariah-compliant companies and Sukuk in 2010 were RM756.1 billion and RM294 billion, respectively. Therefore, it is interesting to investigate this market. This study is aimed to empirically examine the presence of financial constraints in Malaysian capital market. Next, the study is aimed to suggest a theoretical

¹ The financing hierarchy exists due to market imperfection. Read Fazzari et al. (1988) for further discussion on the financing hierarchy. However, in the absence of the hierarchy firms will try to substitute internal funds of financing with external counterparts due to some reasons which include opportunity cost, tax shield advantage and signaling purpose.

framework of Islamic PLS equity-based financing in order to mitigate the effects of financial constraints problem if any. This study is very crucial because the presence of financial constraints can cause the firms to be less accessible to external funds and thus their investments may fluctuate in association with the availability of internal funds. Furthermore, if the magnitude of the constraints is high, the constraints can exaggerate economic downturn.

This study is organized as follow: Introduction, the *Q*-model of investment, estimation and results, PLS financing, Silaturahmi financing and lastly conclusion.

The *Q*-model of investment

The *Q*-model of investment argues that a firm tries to maximize its present value of dividends:

$$V(K_t, \xi_t) = \max_{\{I_{t+s}\}_{s=0}^{\infty}} \left\{ D_t + E_t \sum_{s=1}^{\infty} \beta_{t+s-1} D_{t+s} \right\}$$

which is subjected to constraints respectively,

$$\begin{aligned} D_t &= \Pi(K_t, \xi_t) - C(I_t, K_t) - I_t \\ K_{t+1} &= (1 - \delta)K_t + I_t \end{aligned}$$

where t is the current period of time and s is its increment; V is the firm value; K_t and K_{t+1} are the beginning of period capital stock at time t and $t + 1$ respectively; ξ_t is the current productivity shock; I_t is the investment during the time t ; D_t is the dividend given out at the end of time t ; E_t is an expectational parameter; β_{t+s-1} is the discount factor; Π is the profit; C is the adjustment cost of capital; δ is the depreciation rate of capital stock.

The cost of capital is quadratic and persistence effect of investment exists,

$$C(I_t, K_t) = \frac{\omega}{2} \left[\left(\frac{I}{K} \right)_t - \gamma \left(\frac{I}{K} \right)_{t-1} - v \right]^2 K_t$$

where ω and γ are functional parameters; v is the adjustment error.

With the first order maximization, rewriting the model to include time dummies and panel subscript i ²,

$$\left(\frac{I}{K} \right)_{i,t} = \beta_0 + \beta_1 \left(\frac{I}{K} \right)_{i,t-1} + \beta_2 Q_t + \beta_3 \left(\frac{CF}{K} \right)_{i,t} + f_i + d_t + \varepsilon_{i,t}$$

where β_0 is the constant; f_i are firm-specific effects; d_t are time specific effects; $\beta_1 - \beta_3$ are the estimated coefficients; $\varepsilon_{i,t}$ is the error and double subscripts of i and t denote individual firms and series of time period³. Q_t is the average *Q* to proxy marginal *Q*. *CF* is cash flow variable scaled by current capital stock to proxy internal funds of firm.

The last equation is estimated to examine the statistical significance and sign for each coefficient. The main coefficient of interest is the cash flow variable. A positive and statistical significance sign will provide information regarding the presence of financial constraints, while its coefficient size indicates the magnitude of interdependency of investment on cash flow, i.e. the severity of the financial constraints. The other coefficients are β_1 , to measure persistence effects of investment, and β_2 to show the influence of firm profitability on investment.

Research Method

This study uses panel data estimation to examine the financial constraints. Following Laeven (2002), Koo & Maeng (2005), Ghosh (2006), and others, the Generalized Method of Moments (GMM) method is employed. The advantages of this method include the ability to overcome unobserved effects, endogeneity problem of explanatory variables and the use of lagged dependent variables (Baltagi, 2005). The difference-GMM is used in this study. To ensure unbiased, consistent and efficient results of GMM, two post estimation tests are carried out. Both tests is to identify the validity of the instruments in GMM. Unability to

² For derivational details, please see Ismail et al. (2010a).

³ The definition of each variable is explained in Appendix 1.

reject the null hypotheses of these tests at least at 10 percent of significance level indicates the validity of the models. First, the Sargan test of over-identifying restrictions tests the validity the moment conditions imposed in the GMM (Blundell, Bond, & Windmeijer, 2000) as well as both model specification and orthogonality conditions (Baum, Schaffer, & Stillman, 2003). Second, the serial correlation test examines the hypothesis of no second-order serial correlation for the error term in the first difference equation. Baltagi (2005) argues that the serial correlation test is very crucial because it identifies the consistency of the GMM estimators such that, $E(\Delta\varepsilon_{it} \Delta\varepsilon_{it-2}) = 0$. In contrast, first-difference error is usually serially correlated. Besides, to ensure robustness of the results, the results of ordinary least square (OLS), fixed effects (FEM) and random effects (REM) models are also presented. Time dummies are included in all models.

As the Q -model requires market values of shares to measure the average- Q which is not applicable non-listed companies, this study uses a sample of listed companies traded at the Bursa Malaysia's Main Board. The financial data are taken from Datastream. The data consists of unbalanced annual data ranging from 2000 to 2010. Next, this data is refined following the deletion criteria as outlined in the Appendix 2. Consequently, the number of firms that remain in the sample is 314 firms or 2,244 of firm-year observations.

Result and Discussion

The estimation results in Table 1 show that all coefficients are significant at least at 10 percent of significant level except lagged investment of one-step first difference GMM. The significance of this lagged variable indicates the persistence effects or dynamic effects in the model, while the significance of Q shows firm's profitability is importance to its future investment. The positive sign of Q confirms the theory such that higher Q will lead to higher investment. With respect to joint significance, both Wald test and F-test show that variables are highly significant at least at one (1) percent of significance level. To verify GMM results, m1 and m2 statistics shows that all GMMs are not second order serially correlated which indicates the consistent estimates. The Sargan's test indicates that the moment conditions hold in the GMM models such that the instruments used in the models are valid. Furthermore, Bond (2002) argues that the OLS estimate of lagged variable is likely to be biased upwards, in contrast to the FEM Within estimate that is likely to be biased downwards and that the GMM's estimate is between both estimates. The pattern is shown as expected which further support the efficiency of GMM estimates. Our variable of interest i.e. cash flow is significant and has positive sign. This implies that the firms in the sample are financially constrained. The severity of the constraints as is however low ($=0.05$). Though it is low, the strength of the relationship between the investment and cash flow is high.

Table 1. Estimation results

$\left(\frac{I}{K}\right)_{i,t}$	OLS	FEM	REM	Diff. GMM	
				1-step	2-Step
β^0	0.056* (0.029)	0.078*** (0.027)	0.056* (0.029)	0.061*** (0.020)	0.064*** (0.013)
β^1	0.382*** (0.026)	0.050* (0.030)	0.382*** (0.026)	0.168 (0.105)	0.157** (0.070)
β^2	0.009*** (0.003)	0.010** (0.004)	0.009*** (0.003)	0.014*** (0.005)	0.013*** (0.004)
β^3	0.014*** (0.001)	0.037*** (0.001)	0.014*** (0.001)	0.050*** (0.018)	0.042*** (0.014)
m1	n.a.	n.a.	n.a.	-5.383***	-4.709***
m2	n.a.	n.a.	n.a.	0.050	0.119
Wald test /	F(3,2232)=	F(3,919)=	chi2(3)=	chi2(3)=	chi2(3)=
F test	214.630***	205.330***	643.890***	18.960***	20.45***
Sargan test	n.a.	n.a.	n.a.	chi2(36)= 45.717	chi2(36)= 34.498

Notes:

***, ** and * indicate 1, 5 and 10 percent of significance levels respectively. All standard errors as in parentheses for the both GMMs are robust. m1 and m2 are statistics for first- and second-order serial correlation respectively. Wald test is a test of joint significance of the coefficients under the null that the coefficients are zero. For OLS and FEM, F-test is used instead. Sargan test validates over identifying restrictions but they can be only run if the errors are GMM-type errors. Time dummies are included in all models (not reported).

If we want to generalize the finding, it shows that Malaysian companies rely heavily on internal sources of financing to finance their future investment. Consequently, they are unable to produce beyond

their existing capacity. The situation could be otherwise worse if the firms incurred losses in previous years that would obstruct them to invest in following years. Later, it may affect the economy. It also signifies that there is wedge between internal and external investors in term of internal information and interest pursuing such that the outsiders are not willing to invest unless the firms are ready to guarantee their interests not being jeopardized. This situation happens since current conventional practices do not recognize sharing of information and interest between contracting parties (firm and investor) built on the mutual understanding and predetermined responsibilities. Therefore, we suggest the implementation of sharia-prescribed profit loss sharing (PLS) mechanism to remedy the problem. The discussion on PLS is followed in the next sections.

PLS financing

There two types of PLS financing in Islamic finance. The first is *al-musharakah*. It is an Arabic word which literally means mixing. The jurists define *al-musharakah* as a contract between people (parties) which involves mixing of capital and sharing of profit. Though, there are various definitions given by different schools of fiqh except the common meaning of *al-Musharakah* revolves around the co-ownership and co-organizing among partners (parties). The second PLS is *al-mudharabah*. It is a special case where the capital comes from one party and another party manages the capital. The former is a passive partner. The profit of business is shared based on pre-agreed ratio or based on capital share (*al-musharakah* only). The loss is also shared where the former bears financial loss while the latter bears entrepreneurial loss.

Sharia has outlined terms and conditions (T&C) in PLS. These T&Cs become the guidance for contracting parties to know their rights and responsibilities. These T&Cs are compulsory so that the PLS contract become valid. These T&Cs include:

- a. *Prospective partners*
To whom want to involve in the contract are those qualified. They are not slaves, mentally matured and *baligh*. They have equal right to manage their projects/businesses on their own or appoint an agent on behalf of them. However, their freedoms to manage the business are confined to not do anything against the benefits of the partnership or put the business into the risk of loss.
- b. *Work and capital*
The capital collected in *al-musharakah* must be mixed together⁴ and the work must not involve forbidden activities.
- c. *Offer and Acceptance*
There should be an offer and acceptance. All partners must understand the offer and acceptance.

Al-Mudharabah, along with *al-musharakah*, has been practiced in Islamic banking, is a concept which differentiates Islamic banking practice from conventional banking. In contrast to interest based system, it is based on profit and loss sharing (PLS) system, requiring the contracting parties to share the profit and loss of the business venture. The current Islamic banking practices adopt this concept both in the funding and financing sides. On the funding side, it is applied for saving and time deposits accounts. The practices show that this concept is working well. On the financing side however, this concept is reluctantly implemented due to some reasons, for example Dar & Presley (2001) identified several factors causing the lack of PLS financing implementation. This very fact of practices on Islamic banking seem to invite some criticisms on the insignificant portion of PLS financing and very heavy reliance on Non-PLS financing in their financing portfolios, so they look to mimicking conventional banking practices (El-Gamal, 1997). If that so, PLS may fail to mitigate the problem of financial constraints faced by firms.

Furthermore, PLS system is an important element to the principle of Islamic economics to avoid *ribawi* transaction, i.e. to replace interest-based system. Along with *zakah* instrument, PLS is aimed at preserving the justice principle. In this regard, Choudhury (1992) assert that the structure of socio-economic relationships in Islamic economy is mainly characterized by *Tawheed*, brotherhood of humanity, total felicity, i.e. temporal felicity in this world and supreme felicity in the hereafter, the principle of work and productivity, and the principle of distributive equity. This explanation leads us to understand the fundamental objectives of shariah known as *maqasid al-shari'ah*. Chapra (1985, p. 32) quotes Al-Ghazali that "*the very objective of the sharia is to promote the welfare of the people which lies in safeguarding their faith, their life, their intellect, their posterity and their property. Whatever ensures the safeguard of these five serves*

⁴ The capital in *al-mudharabah* is provided by the passive partner. Therefore, the issue of mixing does not arise.

public interest and is desirable." Al-Omar & Abdel-Haq (1996) assert that the intense commitment of Islam to brotherhood and justice makes the well-being (*falahi*) of all human beings the principal goal of Islam. This well-being includes physical satisfaction, because mental peace and happiness can be achieved only by means of a balanced realization of both the material and spiritual needs of human personality.

The connection between PLS and *maqasid al-shariah* can be shown in term of the spirit of cooperation to do things together in order to create value added to the economy, *vis a vis* society. As discussed that *al-mudharabah*, representing PLS, as a system basically embark from the concept of partnership and cooperation. It is participatory in nature, to drive cooperation among economic/business players to create value added by undertaking projects or business ventures. Value creation resulted from the undertaken project might have several forms such as; the goods and services produced to fulfil the needs of the people; job opportunities created; allocation of resources by efficient utilization; etc. *Al-Mudharabah* mechanism enables capital providers, who have financial resources, and entrepreneurs, who have skills and creativity to undertake every profitable ventures but lack of capital, to match in business dealing based on the merit of each party without worrying any collateral.

Based on those arguments, we can conclude that PLS consists of advantages with respect to market imperfection causes as below:

- a. It promotes sharing of information regarding the information on the progress of business investment. In the PLS, one party is not allowed to hide any information that may put another party into risk to lose. Once this practice is performed by both financier and finance, this may put both parties into a close relationship. Again, this close relationship may bring the gap between the parties closer.
- b. It promotes trust. The capital owner has no directive power in firm decision making except the owner has the rights to monitor the working partner. In this situation, the contracting partners have to put a trust on each other.
- c. It reduces cost of capital. In debt financing, interest rates are burdens to borrowers. In all cases; profitable or loss situations, borrowers are obliged to pay the debt plus the interest.
- d. It prevents agency problem. This cost arises from the conflict of interest between principals and agents when the parties claim to have better compensation than others. This is not an issue in Islamic PLS because the parties know their rights and obligations regarding the work, capital and profit and loss.

***Silaturahmi* financing: a recommendation**

PLS financing, specifically *al-Mudharabah*, is called as trusty financing, meaning that it relies very much on the trustworthiness from both involving parties, especially the entrepreneur who is entrusted to manage the capital provided by the financier to generate profit. A high trustable entrepreneur might play a very important role in developing further the relationship among both parties. A relationship might indicate a good *silaturahmi* between two parties, financier and entrepreneur. Spreading this concept throughout the whole community might contribute to strengthen economic stability of the community. The concept of relationship banking though will be defined as *silaturahmi* banking throughout this paper, and therefore the term relationship will refer to *silaturahmi* concept. Here, in the paper, we recommend the implementation of *silaturahmi* banking to mitigate financial constraints problem and increase firm accessibility to external financing especially from banks.

Definition and importance

Transactions between banks and their customers involve the exchange of a complex array of information. Banking services such as collection of funds are often difficult for customers to comprehend. Bank will know more about the expected return of the deposit than the consumer. On financing side, bank usually spend a lot of fund in information processing for monitoring customers. Customers will know more of their own risk level than the bank. Due to this complexity of exchange, potentially under the condition of information asymmetry, relationship-based forms of exchange (relationship banking) have developed (Ashton & Pressey, 2004).

Boot (2000, p. 10) defined relationship banking as "the provision of financial services by a financial intermediary that invests in obtaining customer-specific information, often proprietary in nature and evaluates the profitability of these investments through multiple interactions with the same customer over time and/or across products". Within this concept, a bank will develop a multifaceted relationship with customer, often by employing a specialised "relationship manager". The relationship manager, using both the financial

information from the bank, and “soft” knowledge about the reliability of the potential customer, will often be granted special powers to negotiate with bank customers to offer lending, within specified bank guidelines (Ashton & Pressey, 2004). Berger & Udell (2002) emphasize that relationship banking is based on the close contact between borrower and lender. Through this relationship the bank has the opportunity to collect soft, qualitative information about the borrower. Thus the bank might learn the character of the entrepreneur to estimate his management skills. The customer can be confident that the bank is more willing to support him.

By developing relationship over time the incentives for either party to act opportunistically are reduced (Achrol & Gundlach, 1999; Allen & Gale, 1999). As a consequence, the long-term relationship between a bank and their customers brings numerous financial benefits to both bank and customer (Sheedy, 1997; Ferri, Kang, & Kim, 2001; Leverin & Liljander, 2006). Boot (2000) argue that relationship lending leaves room for flexibility and discretion in contracts. In other words, there is room for negotiation between a bank and its customers in the case that the borrower is faced with adverse conditions and has difficulties fulfilling his contractual obligations (making payments). Relationship lending could permit the funding of loans that are not profitable for the bank from a short-term perspective, but may be profitable if the relationship with the borrower lasts long enough. By establishing a long-term relationship, a bank has an incentive to incur short-term losses with the expectation that it will generate long-term rents.

The benefits and costs

The development of relationship banking has occurred for a variety of reasons, for example, increasing the profitability of banks, the generation of information for bank decision making and the availability of bank finance to lend to SMEs (Ashton & Pressey, 2004). Relationship banking can facilitate exchange of information between borrowers and lenders. Another benefit of relationship banking is that it accommodates special contractual features that improve welfare. More specifically, relationship banking leaves room for flexibility and discretion in contracts that permits the utilization of subtle, non-contractable information, thereby facilitating implicit long-term contracting. A bank-borrower relationship allows room for discretion and this adds value to the bank and customer relationship. Chang (2005) argue that firm-bank relationship in both deposit and loan markets, although the latter is more likely to decide the banking relationship when the two markets are tied together. The benefits of tied contracts for the banks are (a) to monitor the risks indirectly through the firms’ deposit account activities and (b) to maintain the banks’ balance sheet more stable by having both assets and liabilities tied together.

There are two main costs of relationship banking. The first is the soft-budget constraint problem. This problem refers to the fact that a bank will most likely not deny additional credit to a long-term borrower. That increases the moral hazard problem on the part of the borrower. The reason is that if renegotiation of the loan is too easy, the borrower may not exert all the effort to prevent a bad outcome from occurring. The second cost of relationship banking is the hold-up problem. Through a long-term relationship, a bank accumulates proprietary information about a borrower and has an information monopoly over that borrower. The borrower becomes informationally captured by the bank. In this case, the firm may attempt to establish multiple relationships. This helps reduce the hold-up problem, but may deteriorate the availability of credit. The explanation is that, since each of the banks that a borrower has relationships with is able to obtain less proprietary information, the value of information acquisition is reduced for each bank and the bank does not have strong incentives to offer better loan terms to the borrower.

Factors influencing the effectiveness of *silaturahmi* financing

Some writers argue that the effectiveness of relationship banking influenced by some factors i.e. trust between bank and the customer, communication and shared value between bank and customer. Trust is a cross-disciplinary concept, incorporating ideas from economics, marketing, sociology, psychology, organization behaviour, strategy, information systems and decision sciences. Trust is so important to relational exchange that it is the cornerstone of the strategic partnership between the seller and the buyer (Mukherjee & Nath, 2003). Trust has been defined in various ways in literature. Trust is willingness to rely on an exchange partner in whom one has confidence (Moorman, Deshpande, & Zaltman, 1993). Trust exists when one party has confidence in an exchange partner’s reliability and integrity. Trust consists of two components: confidence in ability and intention. Trust has some dimensions (Mukherjee & Nath, 2003). Perceived risk is a key dimension of trust. The issue of trust arises because economic transactions involve

risk. The heightened risk perceptions of customers affect the level of trust towards the bank. Reputation is another dimension of trust. Reputation is defined as overall quality or character as seen or judged by people in general. Reputation arises from the strength of a particular brand name and endorsement from trusted third parties. The reputation of the bank is very important factor of trustworthiness.

Mukherjee & Nath (2003) developed model and indentified three antecedent of trust: 1) shared value; 2) communication; 3) opportunistic behaviour. They examined antecedent and consequence of trust. Shared value is the extent to which partners have beliefs in common about what behaviours, goals and policies are important or unimportant, appropriate or inappropriate, and right or wrong. In the on line banking context, shared value symbolizes the extent to which the bank and the customers share common beliefs on critical values like ethics, security and privacy. Communication can be defined as the formal as well as informal sharing of meaningful and timely information. Opportunistic behaviour has its root in the transaction cost literature and is defined as self-interest seeking with guile. In their research, opportunistic behaviour has been conceptualized as regulatory control and information asymmetry. From the three factors identified as antecedent of trust, their research findings indicated that shared value is most critical to developing trust. Communication has a moderate influence on trust, while opportunistic behaviour has significant negative effect. Besides it has strong effect on trust, shared valued might also influence on the relationship commitment. They also concluded that trust found to have effect on the relationship commitment. Overall, their study argued that communication, opportunistic behaviour and shared value has indirect effect on the relationship commitment, trust and shared valued has direct effect on relationship commitment.

Conclusion

This study finds that financial constraints are present in the capital market. This indicates the imperfect capital market. There are three sources of imperfect capital market. It comprises of information asymmetries, agency problems and transaction costs. Bhaduri (2005) argues that the magnitude of market imperfection depends on information asymmetries and agency problems. These causes are associated with inability of firms to access external financing where the constrained firms are being less accessible. Currently, Malaysian capital market operates mainly under debt-based financing revolves around the interest-based financing. Therefore, this study suggests the implementation of PLS-based financing as the main driver in the capital market. The PLS is able to reduce if not vanish those three problems because it encourage close relationship and trustworthy between partners since it is the root of PLS itself. Once the problems are overwhelmed the issue of imperfect capital can be put aside and firms become more accessible to external financing. This paper also recommends the implementation of *silaturahmi* relationship banking. This relationship banking is able to reduce moral hazard, to increase financial profitability to firms and banks and to provide rooms of flexibility in contracts. This relationship banking may be developed using PLS mechanism as it promotes trust and cooperation.

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Appendix 1

The definition of each variable is as follows (Ismail et al., 2010a; 2010b),

- i. Investment
It is the current period investment of during time t . It is equal to the capital expenditure. Bhagat, Moyen, & Suh (2005), Harrison et al. (2004), Moyen (2004) and Love (2003) used capital expenditure as the proxy of investment.
- ii. Capital
It is the net firm fixed assets which exclude depreciation at the beginning of period t . It includes property, plant and equipment. The use of net fixed assets can account for differences across firms (Kadapakkam et al., 1998).
- iii. Cash flow
It is the operating income plus depreciation at the beginning of period t . The depreciation includes total depreciation, amortization and depletion.
- iv. Q
It is the average Q at the beginning of period t . It is measured by dividing book value of total debt and market capitalization by firm total assets at the beginning of period. This definition of Q was used in Koo & Maeng (2005).

Appendix 2

Data deletion criteria

The data is refined to exclude some firms that:

- i. contain missing values
- ii. operate in the market less than 3
- iii. suffer at least three years of negative net income during the sample period
- iv. are financial firms

¹ Adapted from Ismail et al. (2010a; 2010b)