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The Development of Debt to Equity Ratio in Capital Structure Model: A case of micro franchising

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Abstract

This paper aims to develop a capital structure model in micro franchising within Malaysia's perspective. This study will emphasize on the factors that contribute to the development of a capital structure model focusing on debt to equity ratio. The regression model is used to analyse the debt in micro franchising. The independent variables in this research are growth, tangibility, profitability, firm size, liquidity and age, while the dependent variable is debt to equity ratio.

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Keywords: Capital structure; Micro franchising

1. Introduction

Franchising originated from the United States and Europe in the late 1940s. Meanwhile, Isaac Singer is the founder of Singer Sewing Machine Company. During that time, he wanted to expand the distribution of his sewing machines by appointing an independent salesman for business expansion. So this was the time where franchising was created (A. Hamid & Omar, 2005). According to Mohd Harif et al. (2011), the franchising of Singer Sewing machine Company was the first franchise business being introduced in Malaysia, while A&W was the first fast food in this industry (Baputey, 1998)

People normally associate franchising with famous brand names which require a huge of startup cost, but Malaysia has expanded its franchise business by introducing micro franchising. Micro franchising is the business

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opportunities that help to overcome poverty, increase individual's self-reliance and help in terms of the country's economic development (Brackeen et al., 2006). Malaysia is still new in this franchise business because it was just being introduced in 2011. The role of micro franchising in Malaysia is to encourage perspective entrepreneurs with lower income opportunity to venture into business with low risk. In order to assist the potential entrepreneurs venturing into franchise businesses, the government has introduced Micro-Franchising Scheme which offers a maximum funding up to RM50,000. The scheme provides financing to prospective entrepreneurs to venture into micro-franchising which offers systematic and less risky businesses. There are some institutions that are designated to give financial support and also training to upcoming micro franchisees. These include PNS, SME Bank and others.

The financing decisions may affect the value of the firm if they made the incorrect decisions (Gomez et al., 2012). For example, high exposure to debt will lead to bankruptcy (Oino, 2014). The main objective of most profit-making businesses is to maximize shareholders' dividend. However, the manager needs to acquire the appropriate selection of mix between debt and equity (Ukaegbu & Oino, 2012). This study will develop the most appropriate capital structure model. There is lack of study being conducted in this particular field. This could be due to the difficulty in accessing data from small firms (Saarani & Shahadan, 2013). Firm managers are often faced with difficulties in determining the optimal capital structure. During credit expansions, companies have been unable to build enough liquidity to survive the contractions, especially those enterprises with unpredictable cash flow streams which end up with excess debt during business failure (Handoo & Sharma, 2014).

When the firm is facing different level of debt and equity used in capital structure, it is suggested for the managers to employ firm-specific strategies to improve firm's performance (Gleason, Mathur & Mathur, 2000). However, to increase firm's performance, attaining the appropriate mix of debt and equity is not easy (Ukaegbu & Oino, 2014). According to Ramalho and Silva (2007), the issues of different size may have different composition of capital structure determination. SMEs also have limited access to external financing and eventually they are more dependent on internally generated funds resulting from profitable operations (Uyar & Guzelyurt, 2015). This argument is also supported by Coleman (2000), who stated that SMEs have inability to secure adequate sources of finance and this causes SMEs failure. There are several studies conducted to determine the factors that determine capital structure. For instance, the studies by Hashemi (2013), Al-Najjar and Taylor (2008) state that growth, firm size and profitability affect the composition of debt in capital structure, while Gomez et al. (2001) and Ondieki, Gaster and Moraa (2013), and Saarani and Shahadan (2013) in their study suggest that liquidity also affects the composition of debt in capital structure.

Therefore, this paper aims to develop a capital structure model of debt to equity ratio in micro franchising to improve the financial position in the micro franchise business to compete in this competitive market. Besides that, the capital structure model also makes easier for the upcoming franchisee to reduce the overall risk of the company, to make adjustment according to business environment and to generate idea on a new source of fund by using the suitable formula. On the other hand, this new model will assist the government to match the composition of micro franchise scheme and consequently, increase the number of entrepreneur involvements in this business.

2. Problem Statement

With regard to the above issues, none of studies conducted had developed a debt to equity in the capital structure model for this particular field. Therefore, this paper aims to develop the capital structure of debt to equity ratio in micro franchising and to improve the financial position of franchise business. In addition, this study will realign the factors that contribute to the composition of debt to equity ratio with capital structure in micro franchising.

3. Research Objectives

The objectives of this study are:

- a) To identify the relationship between growth and the capital structure of debt to equity ratio in micro franchising.
- b) To identify the relationship between tangibility asset and the capital structure of debt to equity ratio in micro franchising.

- c) To identify the relationship between profitability and the capital structure of debt to equity ratio in micro franchising.
- d) To identify the relationship between liquidity and the capital structure of debt to equity ratio in micro franchising.
- e) To identify the relationship between firm size and the capital structure of debt to equity ratio in micro franchising.
- f) To identify the relationship between firm age and the capital structure of debt to equity ratio in micro franchising.

4. Research Questions

This paper attempts to provide answer to the questions below:

- a) Does growth positively relate to the debt to equity ratio of the capital structure model in micro franchising?
- b) Does tangibility of asset positively relate to the debt to equity ratio of the capital structure model in micro franchising?
- c) Does profitability negatively relate to the debt to equity ratio of the capital structure model in micro franchising?
- d) Does liquidity positively relate to the debt to equity ratio of the capital structure model in micro franchising?
- e) Does firm size positively relate to the debt to equity ratio of the capital structure model in micro franchising?
- f) Does firm age positively relate to the debt to equity ratio of the capital structure model in micro franchising?

5. Literature Review

Growth

According to Huang and Song (2002), firms with high-growth opportunities are likely to be more leveraged. In the case of those firms that are at a tender stage with more concentrated ownership, it is expected that high-growth firms will require more external financing and could be highly leveraged (Heshmati, 2001). According to Bhaduri (2002), Chen (2004), Tan and Jang (2005), Norvaisiene and stankeviciene (2007), Oyesola (2007), Shah and Khan (2007), Al-Najjar and Taylor (2008), and Cespedes et al. (2009), there is a positive relationship between growth and total debt. New project are often presented to investors and shareholders as growth opportunities face an underinvestment problem which leads them to forgo investment projects with a positive net present value (Saraani & Faridah, 2013).

Tangibility Assets

The more tangible the firm's assets are, the greater the firm's ability to issue secured debt (Booth et al., 2001). A firm with large amount of fixed assets can borrow at relatively lower rate of interest by providing these assets as collateral. The restriction of maturity length of credit offered by lenders may explain partially, the debt structure in SMEs. Thus, small firm may use less long-term debt, but probably more long-term debt, than large firms (Sogorb-Mira, 2005). The empirical evidence suggests a positive relationship between assets' structure and long-term debt and at the same time, negative relationship with short-term debt (Hall, 2005; Cassar & Holmes, 2004).

Profitability

Empirical studies on SMEs confirm the negative relationship between firm profitability in both short-term and long-term debt (Hall et al., 2000). SMEs will use internal fund to finance their operations (Joshua & Nicholas, 2007). However, according to Nguyen and Ramachandran (2006), there was no strong evidence of relationship between leverage and profitability. For instance, Prasad et al. (2001) proposed that lenders will not finance firms with low level of profit.

Liquidity

Liquidity addresses the sufficiency of a stock of high quality liquid assets to meet the short-term liquidity needs under a specified acute stress scenario (Saararani & Shahadan, 2013). According to Sibilkov (2009), leverage is positively related to liquidity. The relationship between liquidity and capital structure needs to be considered in the view that liquidity has significant impact on debt ratios (Udomsirikul, Jumreornvong & Jiraporn, 2011). Firms that have high liquidity ratios may have higher debt ratio due to their greater ability to meet short term financing (Al-Najjar & Taylor 2008).

Firm size

The relationship between size of the firm and leverage is very crucial to understand because large firms have the tendency to diversify their financing sources compared to small firms (Shumway, 2001). According to Romano, Tanewski and Smyrnios (2001), that company's size is significant with leverage. In addition, there are differences in maturity structure of debts between small and large firms (Uyar & Guzelyurt, 2014). There is a positive relationship between size and long-term debt, and a negative one between size and short-term debt (Benkraiem & Gurau, 2013).

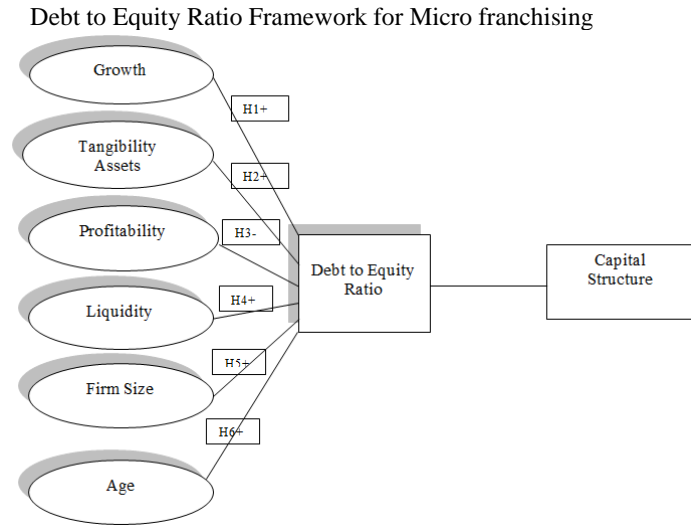
Age of the Firm

Age is important in the study of capital structure of a firm (Bhaird, 2010). Normally, financing institution will evaluate the creditworthiness of the firm over a period of time. The younger the firm, the less ability to access external financing. According to Klapper, Sarria-Allende and Sulla (2002), firms established less than four years are more dependent on informal financing and less depend on bank financing. Older firms tend to have more debt ratio in order to expand their business (Petersen & Rajan 1994). It is confirmed that age is positively related to debt (Hall et.al 2004).

6. Hypotheses

- H₁: there is a positive relationship between growth and debt to equity ratio.
- H₂: there is a positive relationship between assets' tangibility and debt to equity ratio.
- H₃: there is a negative relationship between profitability and debt to equity ratio.
- H₄: there is a positive relationship between liquidity and debt to equity ratio.
- H₅: there is a positive relationship between firm size and debt to equity ratio.
- H₆: there is a positive relationship between age of the firm and debt to equity ratio.

7. Framework



8. Methodology

Data Collection Procedure

The secondary data will be used in this study. This study will be conducted within the micro franchising business with the start-up capital of not more than RM50, 000 (Bernama, 2014). A list of respondents recommended by Perbadanan Nasional Berhad and SMEs Bank will be used in this study. The data will be obtained from the annual report of micro franchising business.

Panel Data Analysis

The panel data method brings more advantages compared to the times series and cross sectional methods. The panel data method is a combination of times series and cross sectional method. The panel data method has been selected in recent years (Michaelas et al., 1999; Sogorb-Mira & Lopez-Gracia, 2003; Frank & Goyal, 2003). There have been a number of studies of using panel data analysis in their research, but none of these studies the development of capital structure of debt to equity ratio in micro franchising. The general regression model of panel data is written as follows:

Model debt to equity ratio

$$i, t = \beta_0 + \beta_1 GROWTH_{i,t} + \beta_2 TA_{i,t} + \beta_3 PROFIT_{i,t} + \beta_4 FS_{i,t} + \beta_5 LIQUIDITY_{i,t} + \beta_6 AGE_{i,t} + \epsilon_{i,t}$$

Keys:

- Debt = Debt
- GROWTH = Growth
- TA = Tangible assets
- PROFIT = Profit
- FS = Firm size
- LIQUIDITY = Liquidity
- AGE = Age
- t = Time-series
- i = Cross section of the data

9. Expected Outcomes

The outcome of this study is expected to contribute to the limited research on the debt to equity ratio of the capital structure model in micro franchising. Moreover it is relevant to be applied in micro franchising business. Besides, this model also can be used by managers when allocating the suitable composition of different financings in the business. Finally it is important for the government to develop a micro franchise scheme that can benefit the upcoming micro franchisors.

10. Conclusion

The appropriate capital structure model of micro franchising will be developed and the model can help to improve the financial position in micro franchise business. Typically, this is something new because micro franchising is newly been emphasize in this area. Besides, the capital structure model can also make easier for the upcoming franchisee to reduce the overall risk of the company. On the other hand, this new model will guide the government to develop the micro franchise scheme, and at the same time, increase the number of new entrepreneur involvements in this business.

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