

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Modigliani - Miller (1958), in his article entitled "the cost corporation Finance and the theory of investment", proposes that the value of a corporation increases as debt increases due to the effect of the corporate tax shield. In the perfect market and tax conditions, interest paid through debt can be used to reduce tax revenues - in other words, it is tax-deductible. So if two companies make the same operating profit, but one incurs debt and pays the interest while the other does not, the company paying interest will pay less income tax. This is because saving tax benefits business owners, so businesses that incur debt have a higher value than those that do not. However, Modigliani and Miller's opinion, which shows that companies can increase their value by incurring as much debt as possible (under tax conditions), is met with criticism and objections from practitioners.

This objection is due to Modigliani and Miller's assumption in their analysis, namely, that the capital market is perfect. The presence of imperfections in the capital market leads business owners or shareholders to reject the use of extreme leverage because it reduces the value of the business. When the capital market is imperfect, there is the possibility of bankruptcy costs, agency costs or asymmetric information (Husnan, 1998).

2.2 Theoretical background and hypotheses development

Several key determinants have been recognised in the literature as influential in capital structure decisions and represent different arguments in the prevailing capital structure theory. These include profitability, tangibles, firm size, market-to-book ratio, and macroeconomic variables such as GDP growth and inflation.

2.1.1 Tangibility

The asset structure compares the total fixed assets with the total assets used by the company (tangibility). According to (Brigham, E, Houston J. 2011), companies with a high proportion of fixed assets can take on large amounts of debt as these assets can be used as collateral for corporate loans. Firms with a high proportion of fixed assets in total assets tend to take on more significant amounts of debt to meet their financing needs (Joni & Lina, 2010). The study results (Antoniou et al., 2008) show that asset structure positively influences capital structure. A tangible asset is represented by net fixed assets to total assets (Rajan & Zingales, 1995). On the other hand, research results (Seftianne et al., 2011) show that asset structure does not influence capital structure.

H1 : The tangibility will affect firm leverage

2.1.2 Profitability

Profitability is the ability of the business to make a profit. The higher the profitability, the higher the profit the company makes. If the company's profit is high, then the company has a sufficiently large source of internal funds, so the company needs less debt. Assuming that the company does not increase debt, the debt ratio automatically decreases when retained earnings increase. One indicator of profitability is the ratio of earnings before interest and taxes (EBIT) to total assets (Haron, 2014).

Profitable companies tend not to go bankrupt and use more debt with lower interest rates, reducing bankruptcy costs as profitability increases (Ali, 2011). High rates of return allow most of the financing to be financed with internally generated funds (Suresh & Kumar, 2012), which shows that profitability has a positive impact on a firm's capital structure. On the other hand, the research results (Seftianne & Handayani, 2011) show that profitability does not influence capital structure.

H2 : The profitability will affect firm leverage.

2.1.3 Size

Large companies have easy access to the capital market, i.e. they have the

flexibility and ability to raise more substantial funds compared to small companies. Relatively large companies tend to use more extensive external funds. The study results (Titman & Wessels, 1988) show that firm size does not influence capital structure. On the other hand, the results of the studies by (Akhtar & Oliver, 2009; Frank & Goyal, 2009) show that firm size positively influences capital structure.

H3 : The size will affect firm leverage.

2.1.4 Market to book ratio

A market to book ratio represents the intangible value of a business, which has no tangible value. This statement shows a negative relationship between leverage and the market-to-book ratio. The empirical evidence for the relationship between market to book ratio and capital structure is unclear. Studies confirming the negative relationship between investment opportunities and long-term debt or total debt include Titman and (Lasfer, 1995; Rajan & Zingales, 1995). However, (Michaelas et al., 1999) reported a positive relationship between investment opportunities and long-term and total debt ratios and short-term debt ratios.

H4: The market to book ratio will affect firm leverage.

2.1.5 GDP Growth

GDP growth shows growth opportunities in the economy (Joeveer, 2013). Companies usually need higher debt to make new investments, especially in countries with high economic growth (De Jong et al., 2008). Therefore, firms take advantage of higher growth opportunities by financing themselves through debt due to a greater demand for capital (Rajan & Zingales, 1995; Booth et al., 2001; Frank & Goyal, 2009). From a business perspective, economic growth describes increasing people's purchasing power. This increased purchasing power of the population must be responded to by increasing production capacity.

This will lead management to look for a source of funds to realise this. Management can respond to investment opportunities by using the source of external funds to finance activities. Previous studies have shown a positive correlation between GDP growth and debt financing. On the other hand, firms with

high growth opportunities may also face agency problems (Modigliani & Miller, 1958). Previous empirical findings, such as those by Kayo & Kimura (2011) and Joeveer (2013), confirm the negative relationship between GDP growth rate and leverage.

H5: The GDP growth will affect firm leverage.

2.1.6 Inflation

When there is high inflation in a country, the cost of commodities increases. Indirectly, the company's operating costs will also increase. Due to the increase in operating costs, the company needs substantial funds to finance its operational activities. One of the ways to raise these funds is through debt in the capital structure. (Kim & Wu, 2006)

Furthermore, (Franks & Goyal, 2009) concluded that inflation tends to increase the use of debt and hence the capital structure. So some of these studies say that inflation positively affects capital structure. However, this contradicts the research findings of (Ratnawati, 2007) that the inflation variable does not affect capital structure. The research of (Ramadhini & Hadziq 2017) states that inflation positively influences capital structure. According to (Aktas et al., 2015; Shah et., 2017), inflation harms capital structure. According to (Mahanani & Asandimitra 2017), inflation does not influence capital structure. The majority of existing studies state that inflation affects capital structure.

H6: The inflation will affect firm leverage.

2.3 Conceptual framework

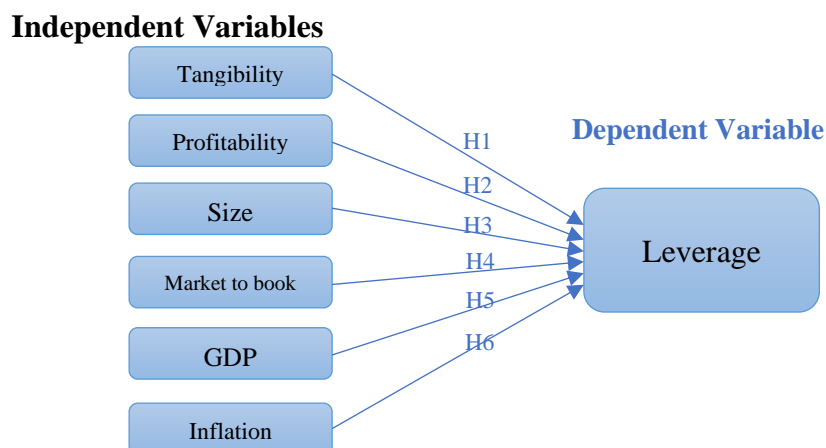


Figure 2.1 : Proposed relationship between independent variables and dependent variables

- H1 : There is a positive influence between tangibility toward leverage
- H2 : There is a positive influence between profitability toward leverage
- H3 : There is a positive influence between size toward leverage
- H4 : There is a positive influence between market to book ratio toward leverage
- H5 : There is a positive influence between GDP toward leverage
- H6 : There is a positive influence between inflation toward leverage

2.4 Empirical Study Analysis

Based on trade off theory, a positive influence of a company's tangible assets on the level of debt is predicted. A firm with more tangible assets would need to have more collateral to service the debt in the event of bankruptcy and would therefore be more likely to take on more debt. Tangible assets could also have a negative impact on leverage by increasing risk through an increase in operating leverage (Hutchinson & Hunter, 1995). Chiang et al. (2010) concluded a positive relationship between asset structure and long-term debt ratio. Moreover, many researchers have shown that there is a positive relationship between asset structure and debt ratios (Al-Najjar & Taylor, 2008; Teker et al., 2009; Deloof & Overfelt, 2008; Mitton, 2007; Heshmati, 2001; Viviani, 2008; Antoniou et al., 2008; Frank & Goyal, 2002).

Profitability plays an essential role in leverage decisions. Trade-off theory predicts a positive relationship between profitability and leverage. Abor (2005) highlights that a profitable firm can afford to have more debt in its capital structure because it has a great potential to absorb a large amount of interest and receive tax protection that comes from a high debt-to-equity ratio. They would prefer internal financing over external financing. Several empirical studies have found a negative relationship between leverage and firm profitability (Myers & Majluf, 1984; Kester, 1986; Titman & Wessel, 1988; Allen, 1992; Jensen et al., 1992).

It is essential to understand the relationship between size and leverage, as large firms are more likely to diversify their funding sources than small firms. Alternatively, size could be an indicator of the probability of failure, as large firms are less likely to fail and go into liquidation (Shumway, 2001). Size may also indicate the volatility of the firm's assets, as small firms are likely to multiply and inherently volatile (Fama & French, 2002). Those who have found a positive effect support the agency theory that large firms are widespread and owners cannot control management activities (Chung, 1993; Colombo, 2001; Bevan and Danbolt (2002); Dess & Robertson, 2003; Antoniou et al., 2008). However, (Titman & Wessels, 1988; Rajan & Zingales, 1995; Chen, 2003; Uzeoha, 2008) found a negative relationship between size and leverage.

The market-to-book ratio is also used to determine whether a stock is overvalued or undervalued. Baker and Wurgler developed a variable model, the weighted average market-to-book financing ratio. If equity sale activities are more promising, there should be a negative effect between the market-to-book ratio and leverage. (Baker & Wurgler 2002) the study provides recommendations on how companies optimally set leverage concerning the market-to-book ratio. When the market-to-book ratio is low, highly leveraged companies can sell their shares. The opposite is true when the market-to-book ratio is high.

The growth rate also influences firms' capital structure decisions. We find that the growth rate of real GDP per capita has a negative impact on the long-run and overall capital structure, supporting the thesis that the likely increase in the stock price during periods of economic growth should lead to lower corporate leverage (Lemma & Negash, 2012). This evidence also supports the view that the likely increase in earnings during periods of economic growth should lead to lower corporate leverage (Booth et al., 2001; Song and Philippatos, 2004; Wanzenried, 2006). Cheng and Shiu (2007) and Beck et al. (2002) come to similar conclusions.

The literature shows that there are different results and conclusions. For example, (Mokhova & Zinecker, 2014; Daskalakis et al., 2017) found no significant

relationship between inflation and debt, assuming that inflation does not affect capital structure. On the other hand, (Frank & Goyal, 2009) found a positive relationship between these two variables, arguing that firms expecting high inflation tend to load their capital structure more heavily with debt. The same relationship was confirmed by (Hanousek & Shamshur, 2011; Riaz et al., 2014) also examined the impact of macroeconomic conditions on the capital structure of Pakistani firms using panel data.

2.5 Summary

This chapter mainly contains a summary of the literature review. The literature review is divided into four subtopics. The first is the introduction, which explains the topic the second sub-theme deals with the theoretical background and hypothesis development used in this research. The third subtopic is the conceptual framework. The fourth subtopic is the empirical study.