ASEAN Entrepreneurship Journal (AEJ)

Assessing the Determinants of Capital Structure: Real Estate Investment Trusts (REITs) listed in Bursa Malaysia

Husnizam Hosin[1]*, Mohamad Zaim Isamail[2]
1 Faculty Business and Management, Universiti Teknologi MARA, Johor, Malaysia, husni455@uitm.edu.my
2 Akademi Pengajian Islam Kontemporari, Universiti Teknologi MARA, Johor, Malaysia, mohamadzaim@uitm.edu.my

*Corresponding Author

Abstract
Capital structure refers to how a corporation finances its assets through some combination of equity, debt or hybrid securities. It is primarily comprised of long-term debt, preferred stock and net worth. It also can be quantified by taking how much of each financing a company holds as a percentage of all its financing. Most companies raise funds through equity or debt. This study focused on the determinants of capital structure for the properties and real estate investment trust (REITs) companies listed in Bursa Malaysia. Using trade-offs and pecking order theories as theoretical background, 18 sample firms were analyzed. The data was collected for ten years (2013 – 2022). Leverage was used as the dependent variable, and six market variables were used as independent variables for the analysis: growth opportunities, profitability, size of the firm, tangibility, volatility and liquidity. The result of multiple linear regression found that profitability, size of the firm, tangibility, volatility and liquidity were determinants of the capital structure of Real Estate Investment Trust (REITs) in Malaysia. It appears that less profitable, larger, more tangible, less volatile, and less liquid firms are more likely to have higher leverage levels.

Keywords: Capital Structure, Leverage, Real Estate Investment Trust (REITs)

1.0. INTRODUCTION

Real estate investment trusts (REITs) are funds designed to invest in several properties. Unlike traditional mutual funds that invest in stocks or bonds, real estate investment trusts allow investors to choose which property trusts to invest their money. Although Malaysian real estate investment trusts (REITs) are still in their early stages, the revised Securities Commission Guideline 2005 and other supportive government incentives have recently attracted many investors.

Listed Property Trusts (LPTs) were Malaysian real estate investment vehicles before 2005. In 1986, the Central Bank of Malaysia approved the regulatory framework for listed property trusts (LPTs) in Malaysia. The Companies Act 1965 and the Securities Industry Act 1983 are the principal statutes that govern their establishment and operation. In 1991, the Securities Commission established specific guidelines for property trust funds, revised in 1995. In 2007, the Securities Commissions

In 1999, the Securities Commission began consulting on property trust funds and comparable products in other countries, such as Singaporean property funds and real estate investment trusts (REITs) in the US. The first was a 1999 Consultation Paper on Property Trust Funds, and the second was a 2002 Real Estate Investment Trust. (Securities Authority, 2007)

According to the Finance Act 2004, which was officially published in December 2004, Real Estate Investment Trusts (REITs) will receive the following tax benefits (Securities Commissions, 2007):

- Real Estate Investment Trusts (REITs) will not be subject to taxation on the income they distribute to their unit holders. However, any income that is not distributed will be subject to a tax rate of 28%.

- The income allocated to unitholders will be taxed based on their individual tax rates. Non-residents will have 28% of their tax payable withheld by REIT. Unitholders can receive a tax credit for the

accumulated income already taxed and distributed.

In addition, the Finance Act of 2004 exempts all real property instruments used to transfer ownership to REITs from stamp duty. The real estate investment trust (REIT) tax does not apply to the sale of real estate by owners who sell to REITs. It is still necessary to comply with the filing requirements set out by the Real Property Gains Tax of 1976 and the Stamp Act of 1949—reference: Securities Commissions, 2007.

The Securities Commission published new guidelines on January 3, 2005, to regulate the management and operation of real estate investment trusts (REITs) in Malaysia. Many industry participants, particularly those with substantial investment properties, are seriously contemplating putting their assets into such trusts in light of the revised guidelines, which have sparked much discussion and enthusiasm (Lee et al., 2008).

The key features of the new guidelines, which are a major improvement from the previous guidelines, include the following (Securities Commissions, 2007):

- Liberalization of the borrowing limit for a REIT

- Relaxation of rules on acquisitions of leasehold properties

- Flexibility in the acquisition of real estate that is encumbered by financial charges

- Eligibility requirement for management companies that manage

- REITs have been streamlined as far as their scope of business for equity participation and structure similar with the requirements for management companies that overseas unit trust.

- Introduction of a declaratory approach in the establishment of REITs. The responsibility now lies with the directors/promoters to ensure compliance with the relevant laws and guidelines

- Enhancement in the amount of exposure and reporting required, which is consistent with international standards

The Securities Commission published the Guidelines on Islamic Real Estate Investment Trusts (Islamic REITs) on November 22, 2005, to encourage the creation of additional Islamic capital market merchandise. By issuing these standards, Malaysia became a world leader in the Islamic real estate investment trust (REIT) industry. Guidelines for Islamic real estate investment trusts (REITs) supplemented those for traditional REITs. To help management companies with their work with real estate investment trusts (REITs), the guidelines outline what is and is not permissible regarding rental and investment activities from a Syariah (Islamic jurisprudence) perspective. (Securities Commissions, 2007).

With the establishment of the framework for Listed Property Trusts in 1986, the regulations about REITs and Listed Property Trusts in Malaysia were established by the Bank Negara Malaysia. The Guidelines on Listed Property Trust was published by the Securities Commission in 1992. Following that, the 1995 revision of the Guideline on Listed Property Trust was carried out by the Securities Commission. A consultation paper on property trust funds was introduced by the Securities Commission four years later. First announced in 2002, the Securities Commission's Consultation Paper on Property Trust Funds and Real Estate Investment Trusts was followed in 2005 by the release of guidelines on Real Estate Investment Trusts and Arabic Real Estate Investment Trusts (Securities Commissions, 2007).

In September 1989, Arab Malaysian First Property Trust became Malaysia's first listed property trust (LPT). First Malaysia Property Trust was the second LPT to be formed; it was established in November 1989. Amanah Hartanah PNB, the third LPT, was commenced in December 1990. Mayban Property Trust Fund One, the fourth property trust, was launched in 1990 and was not listed. Before Mayban Property Trust Fund One, formerly known as Amanah Harta Tanah PNB 2, which was listed on KLSE in June 1997, no listed property trusts had been issued. In contrast, the First Malaysian Property Trust listing was discontinued in July 2002. Just three property trusts—Amanah Harta Tanah PNB 2, AmFirst Property Trust (previously Arab Malaysian First Property Trust), and Amanah Harta Tanah PNB 2—were listed on Bursa Malaysia as of the end of April 2005.

The inaugural listing on Bursa Malaysia occurred on July 29, 2005, with Axis Real Estate Investment Trust. The market reacted positively to the public offering, with retail subscriptions exceeding expectations by 3.7 times and institutional subscriptions by 18 times. After that, December 16, 2005, was the listing date for Starhill Real Estate Investment Trust. After that, UOA Real Estate Investment Trust went public in Bursa, Malaysia, on December 30, 2005. The biggest real estate investment trust (REIT) in Malaysia by assets, market capitalization, average daily turnover volume, and free float is Sunway REIT, which first appeared on the Main Market of Bursa Malaysia Securities Berhad on July 8, 2010. Another company, CapitaMalls Malaysia Trust (CMMT), went public on July 16, 2010, through Bursa Securities, the Main Market of Bursa Malaysia Securities Berhad. CMMT is the second biggest real estate investment trust (REIT) listed on the local bourse, with a market capitalization of over RM2.4 billion and an independently valued portfolio of RM2.8 billion.

The following real estate investment trusts are currently listed in Malaysia: Tower, Quill Capita, Hektar, Atrium, Al-A'qar Healthcare, Al-Hadharah Boustead, Amanahraya, AmFirst, As-Salam, IGB, KLCC, Pavilion, and YTL Hospitality.

Real estate investment trusts (REITs) are investment vehicles that facilitate the transfer of capital from one or more sources to the real economy. Investors in REITs want to reap the benefits of "...real estate returns and the portfolio objectives while retaining the investment liquidity provided by the secondary market for REITs share" (Corgel et al., 1995).

A company's capital structure consists of various financial instruments, including common and preferred equity and long-term and short-term debt. It describes the various ways in which the company raises money for its day-to-day operations and future expansion. In 2008, Lee et al.

Bonds and long-term notes payable are examples of debt, whereas common stock, preferred stocks, and retained earnings are examples of equity. A component of the capital structure may also include short-term debt, such as working capital needs. Analyzing a company's capital structure, its short-term and long-term debt ratio is considered (Allen, 1995).

One way to measure a company's risk is by looking at its debt-to-equity ratio or leverage ratio, both of which are part of the capital structure. Companies that rely more on debt financing are inherently riskier because of the high degree of leverage they have. The structure of a company's capital is a contentious topic in contemporary corporate finance.

An investment vehicle that mainly invests in income-producing real estate, real estate-related assets, or a special purpose company whose main assets are real estate and uses the income from those properties, after deducting expenses, to distribute returns to its unit holders is called a real estate investment trust (REIT).

Cash and deposits are two examples of alternative asset classes that a real estate investment trust (REIT) might hold. One gets a piece of the pie—the upside and the downside—when one buys into a real estate investment trust (REIT). Real estate investment trusts (REITs) are a great option for dividend-seeking investors because, regularly, they pay out dividends to unit holders from their distributable income (after expenses). One can find listed or unlisted real estate investment trusts (Securities Commissions, 2007).

This study focuses on the determinants of capital structure for real estate investment trusts (REITs) and property companies listed in Bursa Malaysia.

In this study, several research questions have been developed regarding the problem statement. One such question is whether all the market variables are related to leverage.

The main research questions are:

What is the relationship between market variables and the capital structure of REITs in Malaysia?

What are the significant determinants of capital structure of REITs in Malaysia?

Real estate investment trusts are relatively new to Malaysian finance. Despite this, this unit trust gained traction quickly.

This research aims to determine whether there is a positive or negative correlation between capital structure and market variables.

In particular, we want to learn how well market variables relate to leverage and whether and how different market variables affect the capital structure of real estate investment trusts and individual properties.

2.0. LITERATURE REVIEW

2.1. Theories of Capital Structure

Many studies have been done on the Real Estate Investment Trust Capital Structure by local and foreign researchers, but not in Malaysia (Ong et al., 2011; Newell & Osmandi, 2009; San Ong et al., 2012). DeAngelo and Masulis' (1980) and Masulis' (1983) theory that a firm seeks an "optimum debt level" and that a firm could increase or decrease its value by changing its debt level so that it moved towards or away from the industry average. A firm seeking external capital (either equity or debt) receives scrutiny from these respective capital markets.

An important and contentious topic in corporate finance since the seminal work of Modigliani and Miller in 1958, capital structure refers to the combination of a company's equity, debt, and other forms of capital (Bevan & Danbolt, 2004). Numerous studies have been conducted on these subjects. However, many theories have been put into the literature to explain the factors that influence capital structure decisions and the factors that determine it. To lay the groundwork for the subsequent empirical investigation, this chapter summarizes the leading theories of capital structure choices, which include the pecking order theory and the trade-off theory.

The idea behind the trade-off theory of capital structure is that when deciding between debt and equity financing, a business weighs the pros and cons of each. A perfect capital structure is achieved after factoring in personal and business taxes, insolvency fees, and agency costs.

The article delves into the reasons behind the variations in capital structure across different industries. It takes into account the fact that different companies may have different target debt ratios. Companies that have a lot of taxable income to keep and tangible assets should have high target ratios, while companies that have a lot of risk with intangible assets should mostly use equity financing. According to this theory, various businesses should determine their optimal target ratios to maximize their value (Liufang Li, 2010).

It also means that the optimal capital structure is obtained where the net tax advantage of debt financing balances leverages related costs such as financial distress and bankruptcy, holding the firm's assets and investment decisions constant (Baxter, 1967; Altman, 1984, 2002 and Giacomo & Beretta, 2006).

In light of this theory, issuing equity is bad because it deviates from the ideal. Companies that embrace this theory may be seen as aiming for a certain debt-to-value ratio and working their way towards it, as stated by Myers (1984).

If managers believe their stock is undervalued in the market, they will be hesitant to issue it, according to Myers (1984). As a result, investors only see equity issues as occurring when equity is fairly priced or overpriced. Consequently, management is hesitant to issue equity, and investors have a negative reaction to it.

Some of the most lucrative businesses take out the smallest loans, which defies explanation by trade-off theory, which explains why capital structures vary across industries. There should be strong incentives to borrow money if profits are high because a higher market value and more taxable income mean more money to hide. It predicts the exact opposite of how companies act (Liufang Li, 2010).

In the model, the firm's target is to slowly adjust the debt ratio. The debt is adjusted by comparing the debt ratio in the preceding period with the predetermined target debt ratio. The adjustment is only partial because of the market imperfections such as transaction cost highlighted by Marsh (1982) and adjustment costs and constraints as indicated by Jalivand and Harris (1984). Firms whereby the debt ratio below the target debt ratio increase the value of the firm because the marginal value of the benefit of debt is still greater than the costs connected with the use of the debt (Durinck. L. Van H and Vandenbroucke, 1998), highlighted that the cost and the benefits of debt made the corporations target debt ratio to exploit their debt in the best effort and firms that are above the target ratio reduced its debt. However, the speed of this adjustment fluctuated.

Donaldson proposed the Pecking Order Theory or model in 1961, and in 1984, Stewart C. Myers and Nicholas Majluf revised it. The principle states that companies should raise equity as a last resort when all other financing options have been exhausted and that they should prioritize internal financing over equity. Internal funds, mainly reinvested earnings, are used to finance investments first, followed by new debt issues and new equity issues (Brealey et al., 2008, p.517).

It all begins with the premise of asymmetric information, which means that managers have a better grasp of their companies' prospects, risks, and values than do investors from the outside. Companies aim to time their issues when stock prices are relatively low or high. When news of a stock issue breaks, investors know what is coming, and the stock price typically drops (Liufang Li, 2010).

Since a company's current leverage represents its total needs for external financing, there is no clearly defined ideal target debt ratio according to this theory (Morri & Cristanziani, 2009). The current leverage of a company, which refers to its existing level of debt, directly represents its total external financing requirements. This viewpoint suggests that the ideal level of debt is not a static figure or a specific goal that all companies should strive for uniformly. However, it is flexible and dependent on each company's specific circumstances and financial needs at any given moment.

It is also predicated on the idea that interest tax shield attraction is second order. When asymmetric information is the primary concern, debt is preferable to equity (Liufang Li, 2010).

2.2. Previous Studies

The seminal research on capital structure can be traced back to the influential article by Modigliani and Miller (1958), which has given rise to numerous theories on the subject over the past fifty years. Researchers typically hold diverse viewpoints regarding capital structure.

2.2.1. Leverage

There is no definitive definition of leverage in the literature. What matters most is that the analysis's goals inform the particular decision. While defining leverage, Rajan and Zingales (1995) use four different ones. If we look at total liabilities divided by total assets, we get the first and most general idea of leverage. This is a stand-in for the assets retained by shareholders upon liquidation. Still, it needs to be clarified from this metric whether the company is about to go bankrupt any time soon. The ratio of total assets to debt, including short-term and long-term debt, is defined as the second-way leverage. Debt is only loosely encompassed by this leverage metric, which does not account for provisions. However, the reality that certain no-debt liabilities cancel out certain assets is not considered.

In its third definition, leverage refers to the ratio of total debt to net assets. Net assets are calculated by subtracting accounts payable and other current liabilities from total assets. This leverage metric remains unchanged by non-interest-bearing debt and working capital management. Nevertheless, it is impacted by non-financial factors. The fourth and final definition refers to the ratio of the sum of all debts to the sum of debts and equity, known as capital. This metric of leverage examines the amount of capital that has been utilized, thereby reflecting the consequences of previous choices regarding financing. It has a closer connection to the issues of agency problems linked to debt.

2.2.2. Growth opportunities

Growth is likely to place a greater demand on internally generated funds and push the firm into borrowing (Hall et al., 2004). According to Marsh (1982), firms with high growth will capture relatively higher debt ratios. In the case of small firms with more concentrated ownership, high-growth firms are expected to require more external financing and display higher leverage (Heshmati, 2001).

Michaelas et al. (1999) argue that growth opportunities will be positively related to leverage. Empirical evidence seems inconclusive. Some researchers found a positive relationship between growth opportunities and leverage (Kester, 1986; Titman & Wessels, 1988; Barton et al., 1989; Kremp et al., 1999; Chen, 2004). Other evidence suggests that higher-growth firms use less debt (Kim & Sorensen, 1986; Stulz, 1990; Rajan & Zingales, 1995; Roden & Lewellen, 1995; Al-Sakran, 2001).

Michaelas et al. (1999) found future growth positively related to leverage and long-term debt. Cassar and Holmes (2003) and Hall et al. (2004) showed a positive association between growth and both long-term debt and short-term debt ratios. Pandey (2001) finds a positive relationship between growth and both long-term and short-term debt ratios in Malaysia. Chittenden et al. (1996), Jordan et al. (1998), and Esperanca et al. (2003) found mixed evidence.

Um (2001) asserts that as companies grow, their need for funding to pursue investment opportunities often exceeds their retained money. According to the 'pecking order' theory, these companies are more likely to borrow money rather than issuing new shares of stock. Therefore, if the theory of information asymmetry is relevant in Libya, we can anticipate a direct correlation between financial leverage and growth. According to Booth et al. (2001), this relationship is generally positive in all countries included in their study, except South Korea and Pakistan.

Rajan and Zingales (1995) use the market-to-book ratio as a proxy for the growth opportunities available to the firm. Rajan and Zingales suggest that one would expect a negative relation between growth opportunities and the leverage ratio. This is consistent with the theoretical prediction of Jensen and Meckling (1976), who argue that due to information asymmetries, firms with high leverage tend to pass up positive NPV investment opportunities. Thus, companies with large amounts of investment opportunities tend to have low leverage ratios. This theoretical result is backed up by the empirical studies carried out by Kim and Sorensen (1986), Titman and Wessels (1988), Jung et al. (1996), and Myres (1977), but Kester's study rejected this relation (1986).

The trade-off theory states that because growth opportunities cannot be collateralized, firms with future growth opportunities and intangible assets are likely to borrow less than firms with more tangible assets. This data suggests that leverage and growth prospects are inversely related. In a 2010 study, WannaPee Banchuenvijit

Agency theory also predicts a negative relationship because firms with greater growth opportunities have more flexibility to invest suboptimally, thus expropriating wealth from debt holders to shareholders (Sheikh et al., 2011). Firms with high growth opportunities should

borrow less to restrain these agency conflicts. Several empirical studies have confirmed this relationship (Deesomsak et al., 2004; Zou & Xiao, 2006; Eriotis et al., 2007).

Myres (1999) adds that there is a negative correlation between long-term debt and lucrative investment opportunities. A company's capacity to fund its future expansion could be impacted by the cost of financial distress, which is linked to high leverage. He argues that managers of companies with promising growth prospects should avoid taking on too much debt.

There are two reasons to believe a negative correlation exists between a company's leverage ratio and growth prospects. To begin with, managers are compelled to decrease the debt in the capital structure as the cost of financial distress rises relative to expected growth. Second, when overvaluation results in higher expected growth, the firm issues equity rather than debt. In order to pursue investment opportunities, companies may need to seek funding from outside sources if their internal resources need to be improved. Companies issue debt before equity when they need money from outside sources (Sbeiti, 2010).

Businesses poised for rapid expansion should refrain from taking on debt because they cannot be sure that their income will be sufficient to cover the payments when they are due. As shown in the following works: Smith and Watts (1992), Lang, Ofex and Stulz (1996), Barclay and Smith (2005), Buferna et al. (2005), Supanvanij (2006), and Akhtar and Oliver (2009), this postulates an inverse relation between firm growth and leverage.

2.2.3. Profitability

Theoretical forecasts regarding the impact of profitability on leverage are in disagreement. Firms would instead raise funds through retained earnings rather than through debt or new equity offerings, according to the pecking order theory put forth by Myers and Majluf (1984). A company's ability to fund future projects from retained earnings rather than taking out external loans improves as its retained earnings increase. This action results from managers and outside investors facing information asymmetries, which increases the costs of issuing new equity. When investment goes beyond retained earnings, the debt tends to rise, and vice versa when retained earnings are less than investment.

Leverage and profitability are predicted to have a negative relation according to the pecking order. The pecking order hypothesis is supported by the majority of empirical studies that found a negative correlation between leverage and profitability. Akhtar (2005) supports this theory by using multivariate Tobin regression; his results provide negative and highly significant coefficients for what concerns both multinational and domestic companies. Leary and Roberts (2005) found concurring opinions to this theory, using EBITDA over total assets as a proxy for profitability in their panel data of 3,494 firms and 127,308 observations. Among others, are most notable researchers that corroborate the negative relation between leverage and profitability are: Hovakimian (2004), Grier and Zychowicz (1994), Fama and French (2002), Baker and Wurgler (2002), Frank and Goyal (2003), Toy et al. (1974), Friends and Lang (1988), and Titman and Wessels (1988), Rajan and Zingales (1995), Wald (1999), Booth et al. (2001), Bauer (2004), Tong and Green (2005), Huang and Song (2006), Zou and Xian (2006), Viviani (2008), Jong et al. (2008), Serrasqueiro and Rogao (2009) and Antoniou et al. (2007) confirm the finding. Other studies also confirmed the relationship (Kester, 1986; Gonedes and others, 1988; Friends & Hasbrouck, 1989; Barton et al., 1989; Van der Wijst & Thurik, 1993; Chittenden et al., 1996; Jordan et al., 1998; Shyam-Sunder & Myres, 1999; Mishra & McConaugh, 1999; Allen, 1991; Deesomsak et al., 2004; Supanvanij, 2006; Kim & Berger, 2008; Akhatar & Oliver, 2009; and Michaleas et al. 1999).

Hall et al. (2004). Esperanca et al. (2003) and Cassar and Holmes (2003) all find that profitability negatively correlates with long-term and short-term debt ratios. Research from Nepal and India confirms what is found in international studies (Baral, 1996).

However, according to the trade-off theory, more lucrative businesses are pushed to increase their book leverage due to agency costs and bankruptcy costs. To begin, a drop in anticipated bankruptcy costs is associated with an increase in profitability. Second, more financially stable companies are more likely to take out loans to cover their expenses because interest paid by corporations is tax deductible. Lastly, Jensen (1986), Easterbrook (1984), and Jensen and Meckling (1976) all agree that managers should pay more of the firm's surplus cash due to higher leverage, which helps control agency problems. In order to deter managers from pursuing less-than-ideal investment opportunities, profitable firms with surplus cash flow will require a high level of debt. As a result, one would anticipate a positive correlation between leverage and profitability. Hant and Moore (1995), MacKay and Philips (2001), and Petersen and Rajan (1994) all came to the same conclusion: leverage greatly increases profitability.

2.2.4. Size of the firm

The literature agrees that a company's size matters when deciding whether to use the capital market for debt or equity financing (Shah & Khan, 2007). A favourable correlation between leverage and size has been found in most research. The central claim is that big companies are less affected by informational asymmetries than smaller ones. The bigger firm will have an easier time raising capital if the public knows more about its operations. In addition, bigger companies can spread their investment projects out over more areas, reducing their exposure to the ups and downs of any one product line (Shah & Khan, 2007).

According to the trade-off theory, a positive correlation exists between company size and leverage. This is because bigger companies are less likely to go bankrupt and have lower bankruptcy costs overall. To top it all off, big businesses can take advantage of the tax shelter to their fullest potential by taking on more debt, which lowers agency debt costs, makes monitoring costs more manageable, reduces cash flow volatility, and opens up the credit market. In 2008, Morri and Beretta published their findings.

Additionally, there is a positive correlation between a company's size and its debt capacity, according to Remmers et al. (1974) and Titman and Wessels (1988). This is because bigger firms are seen as more diversified and less likely to fail, suggesting that size can be used as an inverse proxy for the likelihood of bankruptcy. They also have easy access to the capital market, receive higher credit ratings for debt issues and pay lower interest rates on debt capital (Pinches & Mingo, 1973). It is generally believed that there are economies of scale in bankruptcy than smaller firms, as shown in Prasad et al. (2001). Castanias (1983) also states that if the fixed portion of default costs tends to be large, then marginal default cost per dollar of debt may be lower and increase more slowly for larger firms. Facts about larger firms may be taken as

evidence that these firms are less risky (Kim & Sorensen, 1986). Cosh and Hughes (1994) add that if operational risk is inversely related to firm size, this predisposes smaller firms to use relatively less debt.

Many theoretical studies include Narayan (1988) and Harris and Raviv (1990). Noe (1988), Poitevin (1989) and Stulz (1990) suggest that leverage increases with the value of the firms. Additionally, empirical research like Marsh's (1982) shows that small businesses prefer short-term loans while large firms favour long-term ones. When it comes to long-term debt, large companies may have more leverage due to economies of scale and negotiating power with creditors. Rajan and Zingales (1995) argue that larger firms disclose more information to outside investors than smaller ones. In general, bigger companies that do not have as many informational gaps should have lower leverage ratios because they have more equity and less debt. Additionally, many theoretical studies including Wald (1999), Booth et al. (2001) Barclay and Smith (1996), Friens and Lang (1988), MacKie-Mason (1990), Kim et al. (1998), Al-Sakran (2001), Hovakimian et al. (2004), Agrawal and Nagarajan (1990), Chkir and Cosset (2001), Deesomsak et al. (2004), Buferna et al. (2005), Supanvanij (2006), Akhtar and Oliver (2009), Martin et al. (1988) and Antoniou et al. (2007) generally find that leverage is positively significant related to company size. Based on their findings, smaller businesses are more prone to utilize equity financing, whereas larger firms lean more toward issuing debt. Leverage is positively correlated with size in the majority of empirical studies. Wiwattanakantang (1999), Booth et al. (2001), Pandey (2001) and Huang and Song (2002) find a significant positive relationship between the leverage ratio and size in developing countries.

Since larger firms can usually attract bankers who will extend bigger loans to them, a positive relationship between large firms and leverage is found in (Shah & Hijazi, 2004) studies. This is because it is easier for large firms to obtain loans by providing the necessary collateral. This is certainly possible in countries with lower levels of enforcement, and hence, the role of firm size as a proxy for the alleviation of information asymmetry is further enhanced. Bevan and Danbolt (2002) argue that due to credit rating, large companies are more likely to have access to non-band debt financing. In turn, this, too, would suggest a positive relationship between size and debt.

Cassar and Holmes (2003). Esperanca et al. (2003) and Hall et al. (2004) found a positive association between firm size and long-term debt ratio but a negative relationship between size and short-term debt ratio. Some studies also support a negative relationship between size and short-term debt ratio (Chittenden et al., 1996; Michaelas et al., 1999). According to Titman and Wessels (1988), small firms use more short-term finance than their larger counterparts because smaller firms have higher transaction costs when they issue long-term debt or equity.

2.2.5. Tangibility

Titman and Wessels (1988). Rajan and Zingales (1993) and Fama and French (2000) argue that tangibility should be an important factor for leverage. According to the trade-off hypothesis, tangible assets act as collateral and provide security to lenders in financial distress. (Liufang Li, 2010). Guarantees of this kind cannot exist in the absence of a collateralized asset. Companies can get better loan terms if they have physical assets that can be used as collateral, so they tend to issue a lot of debt. Therefore, according to the trade-off theory, the ratio of tangible assets to total assets should increase as leverage increases.

The positive relation between tangibility and leverage is found in the majority of empirical studies, such as Chen (2004) confirms a significant positive relationship between tangibility and leverage in China. It demonstrates that banks' credit policies heavily consider the tangibility of assets, especially for long-term loans. Other studies are; Marsh (1982), Long and Malitz (1985), Friend and Lang (1988), Titman and Wessels (1988), Harris and Raviv (1990), Rajan and Zingales (1995), Deesomsak et al. (2004), Akhtar (2005), Supanvanij (2006), Bradley et al. (1984), Wedig et al. (1988), MacKie-Mason (1990), Shyam-Sunder and Myres (1999), Hovakimian et al. (2004), Williamson (1988), Chen (2004), Huang and Song (2006), Zou and Xiao (2006), Viviani (2008), Jong et al. (2008), Serrasqueiro and Rogao (2009) and Akhtar and Oliver (2009).

However, if tangible assets lower information asymmetries, equity issues will be relatively less costly, lowering leverage ratios. (Wafaa Sbeiti, 2010). Consequently, tangibility and leverage are inversely related. When looking at depreciation expense as a

percentage of total assets and financial leverage, Kim and Sorensen (1986) discovered a noticeable negative coefficient. Titman and Wessels (1988) state that the tendency of managers to consume more than the optimal level of perquisites may produce a negative correlation between tangibility and leverage.

The firms with less tangibility may choose higher debt levels to stop managers from using more than the optimal level of perquisites. (Wafaa Sbeiti, 2010). This agency explanation suggests a negative association between tangibility and leverage. Booth et al. (2001) have reported a negative relationship between tangibility and leverage for firms in Brazil, India, Pakistan and Turkey. Some other empirical studies that have also reported a negative relationship between tangibility and leverage are Ferri and Jones (1979), Bauer (2004), Mazur (2007) and Karadeniz et al. (2009).

Some other empirical studies in developing countries find mixed relationships. For example, while Um (2001) in Korea reports a positive relationship between tangibility and leverage, other studies, such as Booth et al. (2001) and Huang and Song (2002) in China, find that tangibility is negatively related to leverage. It is argued, however, that this relation depends on the type of debt. Nuri (2000) also found a positive relationship between tangibility and long-term debt, whereas a negative relationship is observed for short-term debt and tangibility in the United Kingdom. Based on the above argument, a positive or negative relation between tangible assets and leverage might be expected.

Other studies specifically suggest a positive relationship between tangibility and long-term debt and a negative relationship between tangibility and short-term debt: Van der Wijst and Thurik (1993), Chittenden et al. (1996), Jordan et al. (1998), Michaelas et al. (1999), Cassar and Holmes (2003), and Hall et al. (2004). Esperanca et al. (2003) found a positive relationship between tangibility and both long-term and short-term debt.

2.2.6. Volatility

Higher volatility of earnings increases the probability of financial distress since firms may not have enough revenue to fulfil their debt-servicing commitments. (B. Wanrapee, 2010). This suggests a negative relation between volatility and leverage, as indicated in Bradley, Jerrell and Kim (1984), Harris and Raviv (1991), Jensen, Solberg and Zorn (1992), Fama and French (2002), Jong et al. (2008), Psillaki and Daskalakis (2008) and Akhtar and Oliver (2009).

However, risky firms are more likely to suffer from information asymmetries, and they are expected to have higher levels of leverage. (B. Wanrapee, 2010). This supports a significantly positive relationship between volatility and leverage, as shown in Booth et al. (2001), Bennett and Donnelly (1993), Cools (1993) and Deesomsak et al. (2004).

2.2.7. Liquidity

The impact of liquidity ratios on the capital structure decision is uncertain because they can have both positive and negative consequences. To start, companies that are able to pay their short-term bills quickly may have a higher debt-to-equity ratio because of their high liquidity ratio. According to this reasoning, a company's liquidity and leverage are positively correlated.

On the other hand, companies with much cash might use that money to finance other investments. Therefore, a firm's liquidity position would negatively affect its leverage ratio. Myres and Rajan (1998) add to the negative relationship by stating that outside creditors restrict the amount of debt financing a company can access when agency costs of liquidity are high.

Conversely, according to the pecking order theory, there should be a negative correlation between liquidity and leverage. This is because a company with more cash on hand would rather use its resources to finance new investments. Deesomsak et al. (2004), Mazur (2007), and Viviani (2008) are among the empirical studies whose findings are in line with the pecking order hypothesis.
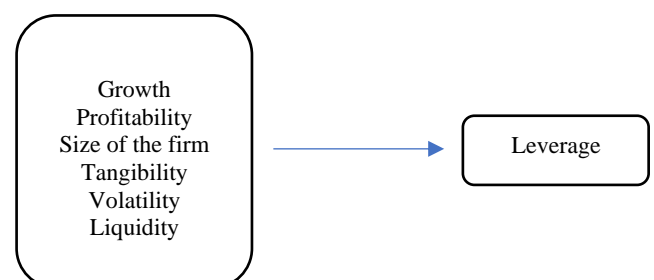
3.0. THEORETICAL FRAMEWORK

Figure 1: Theoretical Framework

The above schematic diagram elaborates that growth opportunities, profitability, firm size, tangibility, volatility, and liquidity are the factors that determine leverage.

3.1. Key Concepts & Expected Sign by the Theories

Table 3.1: Key concepts of the variables the expected sign by the theories

Dependent Variable	Definition		Measurement
Leverage	Leverage covers debt in a narrow sense (i.e. interest-bearing debt) and excludes provisions.		$\dfrac{Total\ Debt}{Total\ Assets}$
Independent Variables	**Theories**	**Expected signs by the theories**	**Measurements**
Growth opportunities	Trade-off	-	$\dfrac{Sales\ Growth}{Total\ Assets\ Growth}$
	Pecking order	+	
Profitability	Trade-off	+	$\dfrac{EBITDA}{Total\ Assets}$
	Pecking order	-	
Frim Size	Trade-off	+	$Log\ (Total\ Assets)$
	Pecking order	+	
Tangibility	Trade-off	+	$\dfrac{Tangible\ Asets}{Total\ Assets}$
	Pecking order	-	
Volatility	Trade-off	-	$Standard\ Deviation\ of\ Operating\ Income$
	Pecking order	+	
Liquidity	Trade-off	+	$\dfrac{Current\ Assets}{Current\ Liabilities}$
	Pecking order	-	

3.2. Ordinary Least Squares (OLS) Regression Model

The statistical tool that will be used in this study is the Ordinary Least Squares Regression Model. This analysis model tests the determinants of capital structure for real estate investment trusts (REITs) and property companies. It examines the simultaneous effects of several independent variables on an interval-scaled dependent variable. In other words, it will explain the correlation between the dependent and independent variables.

Multiple Linear Regression Model:

$$Y = \alpha + \beta 1 GROWTH + \beta 2 PROF + \beta 3 SIZE + \beta 4 TAN$$

$$+ \beta5VOL + \beta6LIQ + + \epsilon$$

(Equation 1)

Where:

Y	= Dependent variable, which represents leverage
α	= The constant number of equation
β	= Coefficient Beta value
GROWTH	= Independent variable which represents growth opportunities
PROF	= Independent variable which represents profitability
SIZE	=Independent variable which represents the size of the firm
TAN	= Independent variable which represents tangibility
VOL	= Independent variable which represents volatility
LIQ	=Independent variable which represents liquidity
ε	= Error

3.3. Hypothesis Statement

Hypothesis 1

H1: There is a significant relationship between growth opportunities and leverage.

Hypothesis 2

H2: There is a significant relationship between profitability and leverage.

Hypothesis 3

H3: There is a significant relationship between the size of the firm and leverage.

Hypothesis 4

H4: There is a significant relationship between tangibility and leverage.

Hypothesis 5

H5: There is a significant relationship between volatility and leverage.

Hypothesis 6

H6: There is a significant relationship between Liquidity and leverage.

4.0. DATA ANALYSIS AND RESULT

4.1. Descriptive Analysis

As we can see, the minimum value of leverage was 0.0000 times while the maximum value was 2.4204 times. Furthermore, the mean and standard deviation of leverage were 0.1935 times and 0.2183 times.

Table 4.1: Descriptive Statistics of Variables

	Minimum	Maximum	Mean	Standard Deviation
Leverage	0.0000	2.4204	0.1935	0.2183
Growth	-7.6945	242.2941	-0.4330	52.0213
Profitability	-1.1113	2.7245	0.0626	0.2198
Firm Size	0.0000	15.2842	1.1366	4.5754
Tangibility	0.0000	1.1597	0.3637	0.2997
Liquidity	0.0000	57.0398	2.1597	3.5794
Volatility	-0.1844	7.1875	3.7694	2.5401

Based on the Gurcharan S. (2010) study, the minimum value of leverage was 0.24 while the maximum value was 0.87. It was relatively moderate ratio. The mean and standard deviation of the leverage were 0.19 and 0.20. It is almost similar with the result of this study.

Shumi Akhtar, (2005) report that, the minimum and maximize value of the leverage in the research were between 0.0000 and 1.0000. The ratios were almost similar with this study, but for the mean and the standard deviation of the leverage, it shows the higher ratio which is 0.307 and 0.368.

Gincomo M. and Fabio C. (2009) in their research found that, the minimum and maximize value of leverage were 0.115 and 3.112 while the mean and standard deviation were 0.991 and 0.547 which is higher than the other studies.

Secondly, the minimum value of growth opportunities was -7.6945 times, while the maximum value was 242.2941 times. The mean of growth opportunities was -0.4330, while the standard deviation was 52.0214 times.

Next is profitability; the minimum value was -1.1113 times, while the maximum value was 2.7245 times. The mean of profitability was 0.0626 times with a standard deviation of 0.2198 times. In terms of the size of the firm, the minimum level was similar to the tangibility, which

was 0.0000 times, while the maximum value was 15.2842 times. The mean and the standard deviation of the size of the firm were 1.1366 times and 4.5745 times.

On the other hand, the maximum value for the tangibility was 1.1597 times. The mean of tangibility was 0.3637 times, while the standard deviation was 0.2997 times. The minimum and maximum value of liquidity, it is 0.0000 times and 57.0398 times while the mean of liquidity is 2.1596 with standard deviation of 3.5794 times.

Finally, is the volatility, the minimum value was -0.1844 while the highest value was 7.1875 times. The mean value of volatility was 3.7694 with standard deviation of 2.5401 times.

4.2. Multiple Linear Regression

Table 4.2:Model Summary of Multiple Linear Regression Model

R	R²	Adjusted R Square	F-Value	Sig.
0.423	0.179	0.168	16.592	0.000

From the table 4.2 above, the result of the multiple regression analysis shows that R square was 0.179. From the figure it indicates that 17.9% of variation in leverage is explained by the growth opportunities, profitability, size of the firm, tangibility, volatility and liquidity.

Adjusted R square in this study was 0.168. It indicated that after adjusting the R square, 16.8% of the variation in dependent variable is explained by the independent variables (growth opportunities, profitability, size of the firm, tangibility, volatility and liquidity).

For the Gurcharan S. (2010) study, the R square was 0.24 and it similar with this study and the adjusted R square was 0.23. The research is about the capital structure of 155 main listed companies from four selected ASEAN stock-exchange index links components for the period from 2003 to 2007.

Based on Shah and Khan (2007) in their study found that the R square was 0.259, which is almost similar to the Gurcharan S. study. The adjusted R square was 0.245. Teker D. et al. found that the R square was 0.084 while the adjusted R square was 0.075.

Overall F test is used to test for the significant of the overall multiple regression model. This test determines whether there is a significant relationship between the dependent variable (leverage) and the entire set of independent variables (the growth opportunities, profitability, size of the firm, tangibility, volatility and liquidity.

Table 4.2 also shows that F-value was 16.592 and it is significant at 0.000 which at 1% significant level. It is concluded that there is a significant effect of independent variables (the growth opportunities, profitability, size of the firm, tangibility, volatility and liquidity).

For the research made by Shah and Khan (2007), the F-value was higher, which was 63.49, while Teker D. et al. (2009) found that the F-value was only 2.552. Sbeiti (2010) reports that the F-value was 70.19, which is a higher value if compared to this study.

Table 4.3:Coefficient of Multiple Linear Regression Model

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	-0.113	0.036	-3.148	0.002
Growth	0.000	0.000	0.918	0.359
Profitability	-0.087	0.042	-2.070	.039**
Firm Size	0.025	0.003	8.147	0.000*
Tangibility	0.070	0.034	2.076	0.038**
Volatility	-8.0217	0.000	-2.309	0.021**
Liquidity	-0.010	0.002	-3.975	0.000*
Dummy	0.126	0.028	4.412	0.000

* Is significant at the 0.01 level; the confidence level is 99%

** is significant at the 0.05 level, the confidence level is 95%

Based on the analysis between the leverage and the growth opportunities, this study found that there is an insignificantly positive relationship between both variables with a t-significant value of 0.359. It means that growth opportunity does not influence the leverage in the companies' capital structure. The coefficient estimate of growth opportunity is 0.000. This means that 0.000 positively in growth opportunities will not influence the leverage of the companies' capital structure.

For the Gurcharan (2010) study, he found that there is a negative relationship with leverage, and it is

statistically significant for all the ASEAN countries with the exception of Indonesia. The negative relationship supports the predictions of the agency theory that high-growth firms use less debt since they do not wish to expose themselves to possible restrictions imposed by lenders.

From Table 4.3 above, it can be observed that there are five variables that are significant there is profitability (0.039), size of the firm (0.000), tangibility (0.038), volatility (0.021) and liquidity (0.000). On the other hand, the growth opportunity is not significant, and the values are more than 0.05 (0.359).

Looking to the analysis between leverage and profitability, this study found that there is significantly negative relationship between both variables with t-significant value stand at 0.039. It means that when the companies have high profitability, the leverage is being use by the companies. The coefficient estimate of profitability is -0.087. It means 0.087 negatively in profitability will lead the companies in leverage.

The result is similar to Gurcharan's (2010) study, whereby he found a negative relationship between leverage and profitability for the ASEAN countries. It is statistically significant for Indonesia, Philippines and Thailand but insignificant for Malaysia.

The negative and significant result was consistent with the prediction of the pecking order theory, which shows that firms prefer to use internal sources of funding when profits are high. Most previous studies (Rajan & Zingales, 1995; Booth et al., 2001; De Jong et al., 2008) report a significant negative effect of profitability on leverage.

For the size of the firm, it shows positive and significantly related to influence the leverage with the t-significant value is 0.000. It means that when the size of the firm is increase or big, the leverage is also increase and big. The coefficient estimate of the size of the firm is 0.025. This indicated that 0.025 positively in size of the firm will lead the companies in leverage.

The Gucharan (2010) study found the relationship between size and leverage to be ambiguous, as Indonesia and the Philippines have a positive correlation, whereas Malaysia and Thailand have a negative correlation. The trade-off and agency theories suggest that larger firms tend to have better borrowing capacity relative to smaller firms. Larger firms are more diversified and fail less often, so size may be an inverse proxy for the profitability of bankruptcy. If so, size should have a positive impact on the supply of debt.

Based on the analysis between leverage and tangibility, this study found that there is significantly positive relationship between both variables with t-significant value at 0.038. It means that tangibility influences the leverage in the company's capital structure. The coefficient estimate of tangibility is 0.070. This means 0.070 positively in tangibility will influence the leverage in the company's capital structure.

It supports the trade-off theory and according to the trade-off hypothesis, tangible assets act as collateral and provide security to lenders in the event of financial distress. (Liufang Li, 2010). Without collateralized asset such guarantees do not exist. Firms with tangible assets that can be used as collateral are expected to issue high level of debt because they can borrow on favorable terms. Hence, the trade-off theory predicts a positive relationship between leverage and the proportion of tangible assets.

The positive relation between tangibility and leverage was found in the majority of empirical studies, such as Chen (2004), which confirms a significant positive relationship between tangibility and leverage in China. It shows that asset tangibility is an important criterion in banks' credit policy, and this is particularly true for long-term loans. Other studies are; Marsh (1982), Long and Malitz (1985), Friend and Lang (1988), Titman and Wessels (1988), Harris and Raviv (1990), Rajan and Zingales (1995), Deesomsak et al. (2004), Akhtar (2005), Supanvanij (2006), Bradley et al. (1984), Wedig et al. (1988), MacKie-Mason (1990), Shyam-Sunder and Myres (1999), Hovakimian et al. (2004), Williamson (1988), Chen (2004), Huang and Song (2006), Zou and Xiao (2006), Viviani (2008), Jong et al. (2008), Serrasqueiro and Rogao (2009) and Akhtar and Oliver (2009).

For the volatility variable, the study found that there is a significant NEGATIVE relationship between both variables with a t-significant value of 0.021. This means that volatility influences the leverage of a company's capital structure. The coefficient estimate of volatility is -8.0217. This means that 8.0217 negatives in volatility will lead to leverage.

It supports the pecking order theory and, according to the pecking order hypothesis, that the risky firms are more likely to suffer from information asymmetries and they are expected to have higher levels of leverage. (B. Wanrapee, 2010). This supports a significantly positive relation between volatility and leverage as shown in Booth et al. (2001), Bennett and Donnelly (1993) Cools (1993) and Deesomsak et al. (2004).

Liquidity is negatively significant relationship to the leverage with t-significant value stand at 0.000. It means that liquidity is influence the leverage of the companies' capital structure. Next the coefficient estimate of liquidity is -0.010. This means 0.010 negatively in liquidity is influence the leverage of the companies' in the capital structure.

It supports the pecking order theory and, according to the pecking order theory, predicts a negatively significant relationship between liquidity and leverage because a firm with greater liquidities prefers to use internally generated funds while financing new investments. A few empirical studies have shown their results consistent with the pecking order hypothesis (Deesomsak et al., 2004; Mazur, 2007 and Viviani, 2008).

4.3. Correlation Coefficient

Table 4.4: Correlation Coefficient

	Leverage	Growth	Profitability	Firm Size	Liquidity	Tangibility	Volatility
Leverage	1.000						
Growth	0.009	1.000					
Profitability	0.034	0.024	1.000				
Firm Size	0.334	-0.005	0.130	1.000			
Liquidity	-0.056	0.006	0.027	0.239	1.000		
Tangibility	0.245	-0.086	0.196	0.463	0.170	1.000	
Volatility	0.002	0.014	0.052	0.159	-0.029	0.092	1.000

The table demonstrates a correlation matrix among the independent variables, including growth opportunities, profitability, size of the firm, liquidity, tangibility and volatility. Since none of the variables has a correlation greater than 0.800, there is no

multicollinearity problem. Thus, all of the independent variables are appropriate for testing the capital structure determinants of real estate investment trusts and property companies in Malaysia.

From the multiplier regression model, we can found that the profitability, size of the firm, tangibility, volatility and liquidity were significant to the leverage, but the growth opportunity was insignificant to the leverage.

For the independent variable that are insignificant, we analyze by using the correlation analysis. The correlation measures the relationship between dependent variable and independent variables and the strength or degree of correlation. The strength of correlation can be strongly correlated, moderately strong correlated or weekly correlated.

From the table 4.4, we can conclude that the correlation between leverage and growth opportunities is 0.009. It indicates that there is weekly positive correlation between these two variables.

As a conclusion, a growth opportunity is not important to the dependent variable and to the independent variables itself.

4.4. Collinearity Statistics

Table 4.5:Collinearity Statistics for the Dependent Variables

Variables	Collinearity Statistics	
	Tolerance	**VIF**
Growth Opportunities	0.984	1.016
Profitability	0.858	1.165
Firm Size	0.380	2.630
Tangibility	0.725	1.379
Volatility	0.944	1.059
Liquidity	0.933	1.072

According to the result in Table 4.5, the result of VIF Collinearity shows a value of less than 10 and a tolerance of more than 0.1. This means that there is no collinearity among the variables that should be placed between paragraphs. Please do not change any of the above-mentioned page, paragraph and font settings.

4.5. Durbin Watson

Table 4.6:Durbin Watson (Autocorrelation)

Durbin Watson	0.959

The Durbin-Watson statistic for this sample is 0.959. It means that, there is nearly positive correlation. This is because the value is near to the 0 which is strongly positive correlation.

5.0. DISCUSSION

The purpose of this study is to investigate the relationship between market variables and leverage in order to identify whether they have a positive or negative relationship. The specific objectives are to know the significant level between market variables and leverage, what the determinants of market variables to the leverage are, and whether it has an impact on the real estate investment trust and properties companies' capital structure or not.

By using 14 samples from real estate investment trust companies and 40 samples from properties companies and available data for the period from 2001 to 2010, it were proven that this industry have different determinant of capital structure. The samples are financial data taken from real estate investment trust (REITs) and properties companies listed in Bursa Malaysia.

The independent variables and dependent variables of these samples were analyzed by using Multiple Regression Analysis. The capital structure was indicated by leverage as proxy variables for independent variables. The growth opportunities, profitability, size of the firm, tangibility, volatility and Liquidity respectively as the independent variables.

The first research question was about the relationship between market variables and the capital structure of REITs in Malaysia. The growth opportunities have a positive relationship with the leverage level of the firm. It confirms the pecking order theory that there is a positive relationship between growth opportunities and leverage. Michaelas et al. (1999) said that growth opportunities would be positively related to leverage. Another researcher also found a positive relationship between growth opportunities and leverage (Kester, 1986; Titman & Wessels, 1988; Barton et al., 1989; Kremp et al., 1999; Chen, 2004). Cassar and Holmes (2003), Hall et al.

(2004), and Pandey (2001) showed a positive association between growth and both long-term debt and short-term debt ratios in Malaysia.

For the profitability, the result shows that there are negative correlations with the leverage. This result was supported by the pecking order theory that predicts a negative relationship between leverage and profitability (Akhtar,2005). Akhtar (2005) supports this theory by using multivariate Tobin regression. Among others, are most notable researchers that corroborate the negative relationship between leverage and profitability are: Hovakimian (2004), Grier and Zychowicz (1994), Fama and French (2002), Baker and Wurgler (2002), Frank and Goyal (2003), Toy et al. (1974), Friends and Lang (1988), and Titman and Wessels (1988), Rajan and Zingales (1995), Wald (1999), Booth et al. (2001), Bauer (2004), Tong and Green (2005), Huang and Song (2006), Zou and Xian (2006), Viviani (2008), Jong et al. (2008), Serrasqueiro and Rogao (2009) and Antoniou et al. (2007) confirm the finding. Other studies also confirmed the relationship (Kester, 1986; Gonedes and others, 1988; Friends & Hasbrouck, 1989; Barton et al., 1989; Van der Wijst & Thurik, 1993; Chittenden et al., 1996; Jordan et al., 1998; Shyam-Sunder & Myres, 1999; Mishra & McConaugh, 1999; Allen, 1991; Deesomsak et al., 2004; Supanvanij, 2006; Kim & Berger, 2008; Akhatar & Oliver, 2009; and Michaleas et al. 1999).

For the size of the firm, the result found that there is a positive relation with the leverage, and it confirmed the trade-off theory. It also confirms the research of Wald (1999), Booth et al. (2001) Barclay and Smith (1996), Friens and Lang (1988), MacKie-Mason (1990), Kim et al. (1998), Al-Sakran (2001), Hovakimian et al. (2004), Agrawal and Nagarajan (1990), Chkir and Cosset (2001), Deesomsak et al. (2004), Buferna et al. (2005), Supanvanij (2006), Akhtar and Oliver (2009), Martin et al. (1988) and Antoniou et al. (2007) generally find that leverage is positively significant related to company size. Their results suggest that smaller firms are more likely to use equity finance, while larger firms are more likely to issue debt rather than equity. Most of the empirical studies find a positive relationship between leverage and size. Wiwattanakantang (1999), Booth et al. (2001), Pandey (2001) and Huang and Song (2002) find a significant positive relationship between the leverage ratio and size in developing countries.

Most empirical studies observe a positive relationship between leverage and tangibility, and it confirms the trade-off theory. The positive relation between tangibility and leverage is found in the majority of empirical studies, such as Chen (2004) confirms a significant positive relationship between tangibility and leverage in China. It shows that asset tangibility is an important criterion in banks' credit policy, and this is particularly true for long-term loans. Other studies are; Marsh (1982), Long and Malitz (1985), Friend and Lang (1988), Titman and Wessels (1988), Harris and Raviv (1990), Rajan and Zingales (1995), Deesomsak et al. (2004), Akhtar (2005), Supanvanij (2006), Bradley et al. (1984), Wedig et al. (1988), MacKie-Mason (1990), Shyam-Sunder and Myres (1999), Hovakimian et al. (2004), Williamson (1988), Chen (2004), Huang and Song (2006), Zou and Xiao (2006), Viviani (2008), Jong et al. (2008), Serrasqueiro and Rogao (2009) and Akhtar and Oliver (2009).

Volatility has a negative relation with leverage. It confirmed the trade-off theory that there is a negative relationship between leverage and volatility. It also indicated by Bradley, Jerrell and Kim (1984), Harris and Raviv (1991), Jensen, Solberg and Zorn (1992), Fama and French (2002), Jong et al. (2008), Psillaki and Daskalakis (2008) and Akhtar and Oliver (2009) in their research. There is also a negative relation between liquidity and leverage, confirmed by the pecking order theory. It also confirms the previous study by Myres and Rajan (1998), Deesomsak et al. (2004), Mazur (2007) and Viviani (2008).

The second research question is what the significant determinants of capital structure of REITs in Malaysia are, whether all the market variables (growth opportunities, profitability, size of the firm, tangibility and liquidity, respectively, as the independent variables) are significant in the leverage or not. The regression analysis showed the result that the significant variables in determining capital structure by using leverage were profitability, size of the firm, tangibility, volatility and Liquidity. It confirms the research of Petersen and Rajan (1994), Mackay and Philips (2001) and Hant and Moore (1995) found a significant relationship between profitability and leverage. Wald (1999), Booth et al. (2001) Barclay and Smith (1996), Friens and Lang (1988), MacKie-Mason (1990), Kim et al. (1998), Al-Sakran (2001), Hovakimian et al. (2004), Agrawal and Nagarajan (1990), Chkir and Cosset (2001), Deesomsak

et al. (2004), Buferna et al. (2005), Supanvanij (2006), Akhtar and Oliver (2009), Martin et al. (1988) and Antoniou et al. (2007) generally find that leverage is significantly related to company size.

It is also supported by the research by Chen (2004), which confirms a significantly positive relationship between tangibility and leverage. Other studies are; Marsh (1982), Long and Malitz (1985), Friend and Lang (1988), Titman and Wessels (1988), Harris and Raviv (1990), Rajan and Zingales (1995), Deesomsak et al. (2004), Akhtar (2005), Supanvanij (2006), Bradley et al. (1984), Wedig et al. (1988), MacKie-Mason (1990), Shyam-Sunder and Myres (1999), Hovakimian et al. (2004), Williamson (1988), Chen (2004), Huang and Song (2006), Zou and Xiao (2006), Viviani (2008), Jong et al. (2008), Serrasqueiro and Rogao (2009) and Akhtar and Oliver (2009). Research by Wanrapee (2010), Booth et al. (2001), Bennett and Donnelly (1993), Cools (1993), and Deesomsak et al. (2004) support a significant relationship between volatility and leverage. It also confirms the suggestion that there is a significant relationship between Liquidity and leverage by Deesomsak et al., 2004; Mazur 2007 and Viviani, 2008.

For model summary, it indicates that the coefficient correlation of leverage equal to 0.423. However, in term of coefficient determination (R^2) for leverage was 17.9% the indicators explained the capital structure.

6.0. RECOMMENDATION

Based on the findings and the conclusion, several alternatives developed are recommendations to contribute to giving and providing information to the other researcher. The results of this study are based on limited data and a short time period. There are a few logical reasons that encourage more academicians to get involved in the investigation of various academic fields. The purpose is to gain knowledge and interpretation skills and keep informed of the latest issues in Malaysia scenario.

Many factors should be considered to make this study more comprehensive. One of that, the researcher should fully utilize the time given for completing the study. If the work done properly and follow its schedule, the result will be better. The proper allocation of time tends to provide better result of the study and reduce the discrepancy of the findings.

Next, research should add more variables to the study. In this study, only six variables have been used. The variables are growth opportunities, profitability, size of the firm, tangibility, volatility and Liquidity. In the future, other variables such as non-debt tax shield, ownership and control, operating risk, cost of debt, interest rate and agency cost should be included, which can have a significant impact on the capital structure for real estate investment trusts (REITs) and property companies.

Future researcher also should expand the period of study. A good result should be expected when the longer the period and choose the latest period of study. The length of the period used in this study is only 10 years. It is more accurate if the study expands more than 10 years.

Reference

Agrawal, A. and Nagarajan, N.J. (1990). Corporate capital structure, agency costs and ownership control: The case of all-equity firms, *Journal of Finance*, Vol. 45, No. 4, pp. 1325-1331.

Akinlo O., (2011). Determinants of Capital Structure: Evidence from Nigerian Panel Data, *African Economis and Business Review*, Vol. 9, No. 1.

Amarjit, G. and Neil, M. (2011). Factors that Influence Financial Leverage of Canadian Firms. *Journal of Applied Finance & Banking*, Vol. 1, No. 2, pp. 19–37.

Shah. A and Khan, S. (2007). Determinants of Capital Structure: Evidence from Pakistani Panel Data. *International Review of Business Research Papers*, Vol. 3, No. 4, pp. 265-282.

Christina and Halim, J. (2008). Analysis of Relationship between Determinants of Capital Structure Across Industries at Jakarta Stock Exchange. *Journal Applied Finance and Accounting*, Vol. 1, No. 1, pp. 99-115.

Rasiah, D. and Kim, P. K., (2011). A Theoretical Review on the use of Static Trade Off Theory, the Pecking Order Theory and the Agency Cost Theory of Capital Structure, *International Research Journal of Finance and Economics*, Issue 63.

Teker, D. et al. (2009). Determinants of Capital Structure for Turkish Firms: A Panel Data Analysis. *International Research Journal of Finance and Economics*, Issue 29.

Karadentz, E. et. Al. (2011). Firm Size and Capital Structure Decisions: Evidence From Turkish Lodging Companies. *International Journal of Economics and Financial Issues*, Vol. 1, No. 1, pp. 1-11.

Fakher Buferns et. al. (2005). Determinants of Capital Structure Evidence from Libya, *Research Paper Series*, University of Liverpool.

Faris, M. A. M. (2011), The Determinants of Capital Structure of Palestine Listed Companies. *The Journal of Risk Finance*, Vol. 12, No. 3, pp. 226-241.

Morri, G. and Beretta C. (2008). The Capital Structure Determinants of REITs. It is peculiat industry? *Journal of European Real Estate Research*, Vol. 1, No. 1, pp. 6-57.

Morri, G. and Cristanziani, F. (2009). What determinants the capital structure of real estate companies? An analysis of the EPRA/NAREIT Europe Index. *Journal of property Investment & Finance*, Vol. 27, No. 4, pp. 318-372.

Gurcharan S. (2010). A Review of Optimal Capital Structure Determinants of Selected ASEAN Countries. *International Research Journal of Finance and Economics*, 47, pp. 1450-1462

Imed, E. Chkir and Jean, C. Cosset, (2002). Diversification Strategy and Capital Structure of Multinational Corporations. *Working Paper*, University of Laval.

Jasir Ilyas', (2000). The determinants of Capital Structure: Analysis of Non-Financial Firms Listed in Karachi Stock Exchange. *Journal of Managerial Finance*, Vol. 24. No. 21, pp. 121-144.

Jean J. Chen, (2003). Determinants of Capital Structure of Chinese Listed Companies. *Journal of Business Research* 57, pp. 1341-1351.

Jensen, M.C and Meckling, W.H (1976). Theory of firm managerial bahaviour, agency cost an ownership structure. *Journal of Financial Economies*, pp. 323-339.

Joshua Abor, (2008). Determinants of the Capital Structure of Ghanaian Firms. *AERC Research Paper 176*, University of Ghana Business School.

Juan, J. Duran and Fernando, Ubeda, (1999), The Capital Structure of the Spanish Multinational Firms: A Pecking Order Strategy, *Working Paper*, University Autonoma de Madrid.

J. Edward Graham, Jr. (1998), Domestic and Multinational Capital Structure: Theory and Evidence, *Working Paper*, University of Chicago.

K. Micheal Casey , Glenna, S. and James, P. (2006), "REIT Capital Structure: Is it market imposed?", *Journal of Managerial Finance*, Vol. 32. No. 12, pp. 981-987.

Keshar J. Barel, (2004), "Determinants of Capital Structure: A Case Study of Listed Companies of Nepal", *The Journal of Nepalese Business Studies*, Vol. 1, No. 1.

Lee, K.C and Kwok, C.C.Y (1988), Multinational Corporation vs. Domestic Corporation: International Environmental Factors and Determinant of Capital Structure. *Journal of International Business Studies*, pp. 195-217.

Mary Hany A.K. Dawood et. al. (2011), The Determinants of Capital Structure in Listed Egyptian Corporations. *Middle Eastern Finance and Economics*, Issue 9.

Modigliani, F and M. Miller (1958). The Cost of capital, Corporation Finance and the Theory of Investment. *American Economic Review* 48, pp. 261-297.

Myres, S.C (1984). The capital structure puzzle. *Journal of Finance*, Vol. 39, pp. 575-592.

Patrik Bauer, (2004). Determinants of Capital Structure: Empirical Evidence from the Czech Republic. *Journal of Economies and Finance*, Vol. 54, pp. 2-21.

Nadeem Ahmed Sheikh and Zongjun Wang, (2011). Determinants of Capital Structure: An empirical study of firms in manufacturing industry of Pakistan. *Managerial Finance*, Vol. 37, No. 2, pp. 117-133.

Newell, G., & Osmadi, A. (2009). The development and Preliminary performance analysis of Islamic REITs in Malaysia. *Journal of Property Research*, 26(4),329-347.

Nurul Syuhadah Baharuddin et. al. (2011). Determinants of Capital Structure for Listed Construction Companies in Malaysia. *Journal of Applied Finance and Banking*, Vol. 1, No. 2, pp. 115-132.

Ong, T. S., Teh, B. H., & Chong, M. P. (2011). A Study On The Performance Of Malaysian Real Estate Investment Trusts From 2005-2010 By Using Net Asset Value Approach. *International Journal of Economics and Research*, 2(1), 1-15.

Rajan, R. and Zingales, L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data. *Journal of Finance,* Vol. 50, pp. 1421-1460.

Gropp R. and Heider Florian., (2009). The Determinants of Bank Capital Structure. *Working Paper Series*, European Central Bank.

Shumi Akhtar, (2005). The Determinant of Capital Structure for Australian Multinational and Domestic Corporations", *The Australian Journal of Management*, Vol. 30, No. 2, pp. 321-341.

Titman, S. and Wessels, R. (1988). The Determinants of Capital Structure Choice. *Journal of Finance*, Vol. 43, pp. 1-18.

T San Ong, BH Teh, CH Soh, YL Yan (2012). Malaysian real estate investment trusts: a performance and comparative analysis. *International Journal of Economics and Finance* 4 (5), p73

Wafaa Sbeiti, (2010). The determinants of Capital Structure: Evidence from the GCC Countries. *International Research Journal of Finance and Economics*, Issue 47.

Wanrapee banchuenvijit, (2010). Capital Structure Determinants of Thai Listed Companies. *Conferences Paper*, University of the Thai, chamber of Commerce.

Wenjuan Ruan, et. al. (2011). Managerial Ownership, Capital Structure and Firm Value: Evidence from China's Civilian run Firms. *Finance Journal*, Vol. 5, No. 3, pp. 73-92.