

Market Timing and Capital Structure: A Critical Literature Review

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Abstract

Capital structure is a vital area under discussion for firms since the cost of financing is fundamental to the company's ability to be competitive. The cost of debt and cost of equity does not follow the same patterns, and the implication thereof affects the firm's cost of capital, manoeuvrability and risk profile, including both distress risk and take-over risks linked to the subject are also ownership structures and value creation for shareholders given the diversification between the residual claimants and debt-holders. The purpose of this paper was reviewing the existing literature on the relationship between capital structure and the Market Timing theory of capital structure in the context of emerging markets. The findings of the study indicated that there are several mixed results among the researchers on the subject and this has put forward areas of future research in the context of developing markets.

Keywords: Capital structure, Market Timing Signaling theory, Agency Cost Theory, Pecking Order Theory, and Tradeoff Theory

1.1 Background of the Study

As Myers (2001) aptly notes, "Even 40 years after the Modigliani and Miller research, our understanding of these firms' financing choices is limited". Myers and Majluf (1984) presented a paper on the significant development of the Pecking order theory (Myers and Majluf 1984). The Pecking order together with the Trade-off theory is well-established regarding capital structure choices. However, there is a more modern addition that has recently found its way to the textbooks. The general market condition when a firm search for financing can affect the capital structure outcome hence leading to different capital structure result regarded as optimal for similar companies.

One of the recent efforts to understand the capital structure decisions is based on "market timing" theory proposed by Baker and Wurgler (2002) following Stein (1996). This theory attempts to answer the question by stating that; "capital structure is a cumulative outcome of past attempts to time the equity market" Baker and Wurgler (2002). The primary focus of this theory is the market's valuation of the company about management's view of the firm's intrinsic value. Hence the firm is inclined to issue equity when it is highly valued. Market timing theory suggests that managers can increase current shareholders' wealth by timing the issue of securities. Accordingly, firms are likely to issue equity when the stock prices are overvalued and repurchase equity when the market undervalues stock prices.

Baker and Wurgler (2002) presented this theory with evidence from US firms. The theory has been tested with evidence from the G-7 countries (Mahajan and Tartaroglu 2007), Dutch firms (Bie and Haan 2007), Shenzhen, China firms (Tian, et al.; 2008) and further evidence from US firms (Elliott, et al.; 2007). Notably, these investigations have been recently published indicating that this defines the scientific border of today. The finding shows that on short-term market timing effects can be proven. However, the long-term persistence differs considerably. While the short-run impact of market timing is well documented in the literature, (for instance, Taggart, 1977; Ikenberry et al.; 1995), which Baker and Wurgler (2002) were the first to draw attention to the long-term effects of market timing on capital structure. The lack of consensus constitutes a knowledge gap. The researchers did not consider what happens in markets where repurchase of share is not allowed.

1.1.1 Market Timing

Equity market timing is one of the primary factors that shape corporate financing decisions. The market timing (or windows of opportunity) theory, states that firms tend to prefer external equity when the cost of equity is low and prefer debt otherwise. According to market timing theory, corporate executives sometimes perceive their risky securities as mispriced by the market. In a situation when the firms need to finance a particular project, they issue equity when they perceive the relative cost of equity is low, and issue debt when they also perceive that the cost of equity is high. How do the firms judge the relative cost of capital? On the one hand, they may know

themselves or their industries well. On the other hand, they may follow certain psychological or market patterns. For example, reference points, as suggested by prospect theory, may play an important role. Casual conversations with investment bankers suggest that when they advise their clients on the choice between debt and external equity financing, the most important factor they consider is whether their clients' share prices are at a 52-week high.

This study is a critical literature review of the impact of market timing on the capital structure of listed firms. Therefore there is need to identify the context of the study and the objective in this chapter.

1.1.2 Capital Structure

Capital structure refers to the firm's financial framework, which consists of the debt and equity used to finance the company. Capital structure is one of the favourite topics among the scholars in the finance field. The ability of firms to carry out their stakeholders' needs is tightly related to capital structure. Capital structure in financial term means the way company finances their assets through the combination of equity, debt, or hybrid securities Saad, (2010). Hence proper capital structure maximises the profitability and the long-term value of the firm for its shareholders. There is a high awareness among researchers to carry out the researchers in the area of the corporate capital structure. There are limited studies on the impact of market timing on the capital structure of listed firms available in the developing markets. There is a need to conduct research in the developing market to empower investors and enterprises to access information about the capital market.

The subject of the capital structure remains interesting and puzzling topics, in which debt and equity are critically important to firms' performance, and this is the responsibility of managers to make the best mix of securities to maximise firm value. Baker and Wurgler (2002) refer capital structure as the cumulative outcome of past attempts to 'time the market', i.e. issuing shares when equity is overvalued and purchasing shares in the case when they undervalue.

1.1.3 Relationship between Market Timing and Capital Structure

Market timing is based on the assumption that firms time the market when to issue equity subscription by the public. The theory argues that new shares are only issued at a time when the share prices are high and repurchase when the prices are lower. There are two versions of market timing theory that have led to dynamics in capital structure as follows: First is the assumption that economic agents are rational Myers and Majluf, (1984). Firms issue equity directly after a real information release that reduces information asymmetry problem between the management of the enterprise and stockholders. Then the reduction in asymmetry coincides with a rise in the stock price.

This triggers firms to create their timing opportunities. The second theory assumes irrationality of economic agents Baker and Wurgler, (2002) which results in time-varying mispricing of a company's stock. More specifically, managers synchronise their financing decisions with the equity market, that is, the company issues equity when the equity value is high and repurchase when equity value are little. As a consequence, the firm's cost of capital will decrease, and the current shareholders will benefit from this situation. Baker and Wurgler (2002), provide supportive evidence that equity market timing has a persistent effect on the firm's capital structure. Their study defines a measure for market timing as a weighted average of external capital needs over a few past years, where the weights used are a market to book values of the firm. Their finding was that changes in leverage are vigorously and positively related to their market timing measure, so their conclusion was that a company's capital structure was a cumulative outcome of attempts in the past to time the equity market.

After Baker and Wurgler (2002), studies on the impact of market timing on capital have gained momentum. Some papers confirm the influence of market timing on capital structure (e.g. Jenter, 2005; Elliott et al., 2007, Huang and Ritter, 2009). Therefore, empirical support for the market timing theory comes not only equity market but also debt market (Bancel and Mittoo, 2004; Henderson et al., 2006). The historical market values are strongly related to capital structure, and this leads to the conclusion that, capital structure is the cumulative outcome of past attempts at equity market timing Baker and Wurgler (2002).

Their results demonstrate that market timing does have an impact on the capital structure, but the effect does not persist for a long time. Some recent studies have examined whether historical securities issues have robust and long-lasting effects on capital structure, Kayhan and Titman (2004). We find that the adjustment speed toward target leverage is slow, and past securities issues have dynamic and long-lasting effects on capital structure, after controlling for firm characteristics that determine target leverage. The lack of local studies on the impact of market timing on capital structure locally and the mixed findings in the developed market need to be investigated in the further research using the locally available data to close the knowledge identified through this technical

literature review.

1.2 Statement of Problem

The subject of capital structures has been highly debated for decades and hence the vast amount of papers supporting different details of the established theories that can be found. However, the Market Timing Theory is relatively modern and less investigated. In this thesis we do not attempt to find a universal answer to Myers (1984) question on how firms choose their capital structure, nor did Baker and Wurgler (2002). They recognise all established forces that simultaneously affect a company's capital structure as valid, but they found proof of that the Market Timing out powered them in impact and importance regards their sample of US firms. Miller and Modigliani (1958) initiated the debate by presenting a static and partial equilibrium analysis with the assumption of, more or less, entire markets. They made these drastic simplifications to "come to grips with the problem at all" Miller and Modigliani (1958). They encouraged other researchers to follow them in investigating the field in the direction of greater realism and relevance.

The developing market, which is the focus of this technical literature review, has its history and some characteristics, i.e. industries, ownership structures, bank spheres, the proportion of large firms and its maturity profile as well as governmental monetary policies (Oxelheim and Forssbaeck 2003). Compared to previous studies conducted developed market these characteristics differ quite dramatically. The ownership structures in the US are highly dispersed in opposition to the often-concentrated ownership that exists in the developing market. The secure connection between ownership structures and capital structures emphasize the vast potential contribution of an investigation of this geographic area. Another mean difference to earlier studies of market timing in the US is the presence of bank spheres in the developed market. This fact adds influence to the debt holders and hence affecting the capital structure in ways that not will occur in countries with weaker banks, (Clarke 2007).

These variations between regions previously investigated regarding market timing make the developing market attractive in the sense that the generality of market timing can be further tested and this would contribute to the available on corporate performance in the developing markets. The tribute aimed is to recommence further investigation to what extent Market Timing does out power other forces, as shown by a sample of the firms from developing, – or not.

The possibility to access international cost of capital regarding both debt and equity during the time span of this investigation is however provided by the financial markets and is affected but not decided or controlled by politics. Even so, the relevance of investigating markets separately enhanced by some of the conclusions found in Oxelheim and Whilborg (2008) where it is stated that there is not yet one single European money market, and path dependency and actual lock-in effects still prevail.

Furthermore, most of the studies on the impact of market timing on the capital structure were conducted in the developed market and no local studies, which have attempted to address similar effects of market timing on capital structure in the developing market. Therefore the lack of research in developing market is the biggest problem that needs to be filled by theoretical literature review. The macroeconomics environments from developed and developing market are completely different in term of advancement as the developing market still at its infancy stage. There is also an issue of the repurchase of shares, which is not allowed in some developing market like Kenya. This is why it is importance to conduct studies locally to inform policy makers whether repurchase of shares to the firm performance.

Emerging from these studies is the knowledge gap on the degree of impacts of market timing on the capital structure of developing market e.g. East Africa financial markets. This theoretical literature review seeks to fill those gaps. This study seeks to critically review capital structure theories and issues related to the impact of market timing on capital structure.

1.3 Objectives of the research

The broad purpose of the study is to conduct a review of existing literature to determine the impacts of market timing on the capital structure of the firms. The specific objectives generated from this general aim include

- (i) To establish the effect of market timing on capital structure in developing the market.
- (ii) To conduct a literature review to determine whether market timing has a long-run persistent effect on capital structure in developing the market.
- (iii) To establish the relevance of market timing on the capital structure of firms in developing the market.

- (iv) To draw conclusion and market relevant policy recommendations based on the findings from the existing literature and fill the gaps in the developing market.
- (v) To determine the knowledge gaps on the degree of impacts of market timing on the capital structure of firms in developing markets.

1.4 Significance of the research

This theoretical review contributes to the available literature on the market timing and capital structure of the company from difference markets using available literature to identify knowledge gaps. Identifying the existence of equity market timing in this area tests the ability to generalise the concept of the market timing to different contexts. It is hoped that the reviews will suggest significant policy interventions through its recommendations that should help policymakers to come up with appropriate strategies to address the challenges that firms often encounter as a result of making inappropriate financing decisions. A company's capital structure decision is at the heart of many other decisions in the area of corporate finance. A study by Collier and Gunning (1999) established that most firms in Africa are still in an infancy stage and experience slow growth due to lack of information available. One factor, which has been identified, to contribute to this state is inappropriate capital decision making.

Through the knowledge gaps identified from the existing literature, academicians and practitioners may use the theoretical literature review as the cornerstone for future research that could help in the development of corporate finance as investors are in need of more information for appropriate financing decisions with less transaction and cost of capital.

The theoretical literature is expected to make a valuable contribution to the body knowledge in the area of financial economics. Since previous studies in this area in Kenya (Gachoki, 2005; Kiogora, 2002; Nyangoro, 2003) majorly focused on the relationship between firms specific factors and capital structure while ignoring the possible implication of market timing on the capital structure of the companies. This review intended to act as a critical tool in decision making by policy makers by providing knowledge to help in the future projection of a company's capital structure. Hence the study will be useful in providing exposition on the impact of market timing on capital structure.

2.1 Theoretical Literature Review

This section presents literature review related to the capital structure of firms' to set the foundation for the analysis of the impact of market timing on capital structure.

2.2 Theoretical Framework

There are several supporting theories utilised in the original Market Timing Theory proposed by Baker and Wurgler (2002). Furthermore, their followers have established these supporting theories as they are in all the other studies of market timing. The consensus is reached regarding the theories from Miller and Modigliani as well as the pecking order and the trade-off theory as a necessary framework to visualise the effects of market timing. The research in the field of corporate finance regarding capital structure utilises these theories to sort out and position almost every offspring or aspect thereof that they look into.

2.2.1 Market Timing Theory

The seminal work of Baker and Wurgler (2002) put some light on the capital structure issue. The authors suggest that it was difficult to explain the choice of financing within the traditional theories. As it is based on empirical findings of the window-of-opportunities hypothesis, they propose the market timing theory, which states that capital structure evolves as the cumulative outcome of past attempts to time the equity market. The firm can choose to issue equity when their shares have high market values relative to their book and previous market value. This always lowered the firms' costs of capital and benefited current shareholders at the expense of new shareholders. When shares are undervalued the firm conducts repurchases when both debt and equity markets are unusually favourable, managers will raise funds even though the company has no need for financing currently. This theory also states that market timing of equity issues has enormous and persistent impacts on the leverage ratio.

There are two forms of the market timing theory. The first one comes from the dynamic model of Myers and Majluf (1984), which assumes that managers and investors are rational and adverse selection varies across firms or over a particular period. When positive information is released to the market firms issue shares immediately, it reduced information asymmetric between the managers and shareholders. The decrease in information asymmetry is related to the increase in stock price and leads to more equity financing. Thus, firms create their

timing opportunities.

The second form of market timing theory assumes that managers and investors are irrational which results in mispricing perception. According to Baker and Wurgler (2002), managers issue equity when the cost of capital is ridiculously small and repurchase equity when the costs of it believed irrational high. The second form does not require that the market is insufficient. In fact, the market can still be efficient while managers think they can time the market. Equity-issuing firms are those with a high market value about book values and those that earn positive abnormal returns before raising capital. Baker and Wurgler (2002) state that market-to-book ratio can be a proxy to explain market timing effects in both adverse selection and perceived mispricing; Baker and Wurgler (2002) could not differentiate which form dominates. To conclude, according to market timing theory, capital structure decisions are taken based on capital market conditions. Share prices and interest rate levels are driving forces for equity and debt issuance decisions respectively. The optimal leverage ratio does exist according to the market-timing hypothesis.

2.2.2 The Miller and Modigliani Capital Structure Theory

This theory is the cornerstone of the modern theory of capital structure; Miller and Modigliani (1958) argue that the valuation of the firm will be independent of its capital structure using some fundamental assumptions. The researchers put it clearly that the value of the business depends on its profitability of its assets than on the way in which those assets are financed through debt or equity. According to Miller and Modigliani (1958), where there are no transaction costs, no information asymmetry, no bankruptcy cost, investors can borrow fund at the same rate as corporation and managers act in their interest than that one of the shareholders. In the case of such situations, internal and external sources of financing are not realistic. Once the fundamental assumptions are relaxed, capital structure may become more relevant to the firm. These will be relaxed through the following theories of capital structure and explain their consequence.

2.2.3 The Trade-Off Theory

The composition of the capital structure under capital market imperfections has an impact on firms' value (Kraus & Litzenberg, 1973). On the other hand, debt financing increases companies' value by the cost of financial distress. The trade-off theory indicated that the optimal level of debt balances the corporate tax shield advantage of the debt financing and financial distress. The cost of financial distress was the results of bankruptcy risks (Kraus and Litzenberg, 1973), the agency costs (Jensen Meckling, 1976; Myers, 1977; Stulz, 1990; Hart and Moore, 1995), and costs of signaling (Ross, 1977). Myers indicated that firms following the theory try to have their target debt-to-equity ratio and to achieve this rate for having an optimal capital structure. This is the so-called the static trade-off theory. Therefore, the costs of adjusting capital structure constraint the adjustment speed towards the target debt ratio.

As explain by Fischer et al. (1989) and Leland (1994) develop the dynamic trade-off model in the presence of capitalisation costs. Firms allow their true leverage ratio to deviate from the target rate by the different percentage of capital amounts. Given the results, companies do not adjust their speed towards the target if adjustment costs exceed the value lost to the suboptimal capital structure. Most of the empirical literature have to dwell on the analysing determinants of capital structure, which are identified by theories as essential to inference about the importance of capital structure theories in corporate finance development. Most of the studies predominantly support the trade-off theory by documenting the capital structure to be influenced by the firm's factors such as size, growth opportunities, assets tangibility and corporate tax rate. The results were consistent with the predictions of the trade-off hypothesis (Titman and Wessels, 1998; Rajan and Zingales, 1995; Deesomsak et al. 2004; Frank and Goyal, 2009). However, the negative correlation between debt and profitability found in some research does not support the theory (Rajan and Zingales, 1995; Fama and French, 2002; Frank & Goyal, 2009; Nguen et al., 2012).

Several studies that support trade-off theory shows that firms have an optimal capital structure ratio. But may slightly differ from such target and seek to adjust their capital structure towards it (Marsh, 1982; Jalilvand and Harris, 1984; Leary and Roberts, 2005; Kayhan and Titman, 2007; Antoniou et al., 2008). Most of the studies document the importance of an understanding of capital structure decisions in dynamic corporate settings. However, some studies report that adjustment is relatively quick towards their target ratio Jalilvand and Harris, (1984) and some of the recorded literature states that the speed of change to the target ratio very slow (Fama and French, 2002; Huang and Ritter, 2009).

2.2.4. The Pecking Order Theory

The popular alternative to the trade-off model is the pecking order theory of capital structure. Myers (1984) and

Myers and Majluf (1984), this approach work based on assumptions of asymmetric information, which stated that managers know more details about their firms than outsiders (investors). Most companies issue shares when stocks seem to be overstated. Investors are well aware that when stock price always declines following the announcement of the fresh share issue. In other words, internal funding sources do incur any floatation costs neither disclosure requirements from regulatory bodies. The pecking order theory recognizes the information asymmetry between managers and investors and differential cost of various sources of financing and asserts that firms will raise funds in the following pecking order – private funds followed by debt and then equity.

According to the pecking order theory, corporate financing choices are driven by the cost of adverse selection that arises from the asymmetric information. Retained earnings have no adverse selection costs as it an internal source of fund, while debt is subject to some cost and equity is associated with severe adverse selection problems. Firms used internally generated funds to finance their operations. If the companies still need more money, the company will use debt to fund their operations, and equity is use as a last resort as a financing source. Because of the assumptions of pecking order theory states that firms do not have a target or optimal leverage. The debt ratios are just merely the historical accumulation of external funding requirements of the companies.

As the empirical literature indicated, there is mixed evidence of pecking order theory. In the testing of pecking order theory, Shyam-Sunder and Myers (1999) were among those who test the pecking order hypothesis. The researchers investigate the relationship between firms' net debt issues and financing the deficit and find that companies mainly use debt investment to offset their financing deficit, which is consistent with the pecking order theory assumptions. Booth et al. (2001) studies of 10 developing countries indicated that the more effective the firm, the lower the debt ratio which in line with the pecking order hypothesis. The applicability of the pecking order theory as presented in Beattie et al. (2006) when testing the capital structure of UK firms and a survey by Broumen et al. (2006) explain the presence of the pecking order theory for various European countries, which is not motivated by information asymmetry. There are some of the studies that find counter-evidence for the pecking order theory assumptions (Fama and French, 2002; 2005; Frank and Goyal, 2003).

Frank and Goyal, (2003) documented that, net equity issues track the financing deficit very carefully more than net debt problems, which in turn contradict to predictions of the pecking order theory of capital structure. As pointed out in Fama and French (2005) that the capital structure decisions of the firms often violate the basic predictions principle of pecking order hypothesis. Gaud et al. (2007) examines capital structure decisions in European countries and argue that neither the pecking order hypothesis nor the simple trade-off theory can adequately explain their results. In the studies of Seifert and Gonenc (2008) find little support for the pecking order theory when testing using a sample of UK and US firms.

However, in most studies around the world indicated that none of the theories mentioned here could fully explain the capital structure policies of the firms. In fact they are considered to be complementary to each other (De Haan and Hinloopen, 2003; Fama and French, 2005; Gaud et al., 2005; Bharath et al.; Leary and Roberts, 2010; De Jong et al. 2011). In the work of Rajan & Zingales (1995) indicated that determinants of leverage are in line with the predictions of the theories mentioned. Similar results are found in other studies like (Deesomask et al., 2004; Antoniou et al., 2008; Frank and Goyal, 2009). Hovakimian et al. (2004), Leary and Roberts (2005) and Kayhan and Titman (2007) find that firms have target debts ratios but still follow the pecking order theory when companies adjust towards the target leverage ratio of the capital structure of the enterprise. De Jong (2011) indicated that the pecking order theory is the better descriptor of companies' issue decision than static trade-off theory of capital structure; in contrast, when focusing on repurchase decisions, the researchers find that the static trade-off is a better predictor of firms' capital structure ratio decisions.

Fama and French (2002) argue that it 's hard to distinguish between trade-off theory and pecking order theory in term of variables used in one model are also relevant in the other model. When shared predictions are confirmed such as firms with more volatile earnings carry less debt, there is no evidence that the results of the study are due to trade-off forces, pecking order effects or other factors overlooked by the researchers. In this case, some of the studies indicated that firms follow the modified pecking order assumptions of retained earnings, equity, bank and possibly market debt for the case of emerging markets. There are always different institutional settings in very country which include Legal system, banking system, shareholders and bondholders' right protections, corporate governance drive firms to issue equity for long-term financing for the business. Lemmond and Zender (2010) provide further evidence of a modified version of the pecking order theory by incorporating the concept of debt capacity. The preference of the small and high-growth firms for equity finance is explaining by their growth opportunities and restrictive debt capacity constraints of the companies.

According to Brealey et al. (2006), the pecking order theory works best for large and mature firms that have access to public bond markets, prefer private financing and rarely issue equity. In the case of smaller growth companies, the pecking order theory seems to be inconsistent with empirical studies. Brealey et al. (2006) mention that when external financing is required these little companies are more likely to rely on equity issuance, which is against the theory of Pecking Order.

2.2.5 The Signaling Theory

The signaling theory was documented by Ross (1977) based on the asymmetry information assumption between managers and investors. Considering that insiders know the real distribution of firms' return as investors do not have any knowledge, the theory states that market derives from an increase in debt that companies are better off, leading to an increase in share price. The market derives conversely from a decrease in debt, implying a share price fall within a particular time. Consequently, managers can release information to the market when they change corporate leverage.

Therefore, more profitable companies and those with the better perspectives for future growth use more debt as sources of the fund than less profitable firms and those with fewer perspectives for growth. In the developed markets, several studies have investigated the important of signaling theory in the development of corporate capital structures. In consensus with the hypothesis of the signaling theory, Giner and Reverte (2001) find evidence in support of the debt is positive signaling effects related to corporate financing decisions and finance that industry average debt ratio has a positive signaling effect for medium systematic risk firms. In most of the empirical literature have most commonly cited the explanation of signaling theory, (Fried, 2009; Rau and Vermaelen, 2002; Baker et al., 2003; Luis and White, 2007).

In Fried (2000) work, cash distributed to public shareholders through three difference ways that are dividends, open market repurchases and repurchases tender offer rather than open market repurchases or dividend is that managers intentionally signal of undervaluation. In the study of the Australian environment, Mitchell and Dharmawan (2007) find the incentives for on-market buy-back are related to not only signaling of undervaluation but also signaling of reducing agency cost and information asymmetry in the market. This in agreement with Peyer and Vermaelen (2009) finds that there is evidence of positive long-term abnormal returns after repurchase announcement; the finding is in line with the survey results of Brav et al., (2005). The empirical evidence supports such predictions of signaling theory as an adverse market reaction on leverage-decreasing transactions and positive response on leverage-increasing transactions (excluding debt issues). The evidence is not supportive regarding market response to debt problems and a negative correlation between debt and profitability.

Also how to explain that shortly after the issue firms issuing equity have better operating performance than non-issuing businesses and in the long run they tend to underperform those firms? Many ideas have been developed to explain why high-profit firms may use equity as a signal. These include signaling small variance of earnings, signaling medium-level gains in the model with three types of companies, signaling in a model that combines asymmetric information with agency problems (Brick, Frierman & Kim 1998, Noe 1988, Noe & Rebello, 1996), etc. A challenge for researchers today is to find a model that will be able to explain several significant empirical phenomena simultaneously. From our perspective, two directions can be considered as most prominent: dynamic extensions of signaling models and security design patterns.

2.2.6. The Agency Cost Theory

The agency cost theory proposed by Jensen and Mackling, (1976) and Jensen (1986), to explains the corporate capital structure decisions based on an agency problem between the shareholders and managers of the firm. Agency theory identifies two types of conflicts: a) conflicts between managers and shareholders, and b) disputes between debt holders and equity holders. The former arise because managers hold less than 100% of remaining claims. Therefore they have the incentive to transfer substantial resources to their personal benefit.

The recent conflicts arise because the debt contract gives equity holders an incentive to invest in a manner detrimental to the debt holders' interest because of the different risk-sharing characteristics of equity and debt. The term "agency" derives from the fact that corporate decisions delegated to agents who perform on behalf of other parties. Agency theory considers the firm as a nexus of contracts. The resolving of agency problems through contractual arrangements leads to the evolution of corporate finance. When companies use debt as sources of financing, conflict of interest kick in between shareholders and bondholders given the remoteness between the interest groups and in this case, firms' debt financing, has two effects. It decreases the agency costs between shareholders and bondholders. The shareholders expropriate value from bondholders by selecting risky

portfolios. If the firms invest in a risky portfolio, the debt holders require a higher return for their financing. Therefore, the gain from the project will accrue to debt holders rather than shareholders.

Chung (1993) examines the empirical relationship between firm's assets characteristics and financial leverage, based on the hypothesis derived from the agency theory literature. His study includes 1449 companies (out of which 319 are in regulated industries) and covers a five years period 1980- 1984. Since both equity and debt incur agency costs, the agency cost theory states that an optimal corporate capital structure determined by reducing the costs arising from conflicts between the involved parties. The effect of ownership structure and managerial traits in reducing agency costs also emphasised in the empirical literature.

Anderson et al. (2003) find that founding family firms have incentive structures that lead to fewer agency conflicts between shareholders and debt holders as compare with the public companies. As a result, a lower cost of debt financing achieved. As indicated by Parrino et al. (2005) that risk-averse managers are biased against risky projects in spite of the fact that they could gain benefits from higher project risk. The researcher found that confident or overconfident managers choose higher debt levels than rational executives, while biased administrators' decisions could increase the value of the firm by reducing shareholders and bondholders' conflicts of interest given the remoteness of the relationship between them and the managers.

3.1 Empirical studies

Although the market timing theory is new capital structure theory, the idea is long rooted in the literature. Some other early papers document the support of market timing hypothesis (Marsh, 1982; Lucas and McDonald, 1990; Ritter, 1991; and Loughran et al. 1994). In the survey of European firms, Bancel and Mittoo (2004) found that managers are more active in selecting the timing of equity issues, and issuing shares after an increase in the firm's stock price is a crucial factor

Marsh (1982) investigates security issues of UK businesses, and the results reveal that companies are strongly affected by market situations and history of security prices when considering between financing sources instruments. In the work of Lucas and McDonald (1990) presented a model, which predicts that equity issues on average preceded by an abnormal positive return on the share or an equity rise in the market. Mahajan and Tartaroglu (2007) found that in all G-7 countries leverage of firms is negatively correlated to the historical market-to-book value, which is in line with the market timing theory.

Most studies show that companies that are issuing shares whether IPOs experiences poor performance (Ritter, 1991; Loughran et al., 1994; Longhran and Ritter, 1995; Spiess and Affleck-Graves, 1995). These findings show that firms took advantage of windows of opportunities when the share prices overstated. Some of the studies documented the relationship between market-to-book ratio and capital structure in G7 countries and found that market-to-book ratio correlated to average. The researcher presented this as an evidence of market timing despite the unclearly theoretical underpinning of these correlations among them. In similar cases, Pagano et al. (1998) find that among determinants of going public decisions in a sample of Italian companies for the period 1982-1992 industries market-to-book is the most crucial one.

The survey conducted by Graham and Harvey (2001) supported the evidence of market timing. The study reveals that market timing is a primary concern of CFOs in their financing decisions among the sources. In this case, firm issues short-term debt in an effort to time market interest rates, and managers are reluctant to issue equity when a company is considered undervalued or stated.

Hovakimian et al. (2001) test both equity and debt issuance decisions in the light of prevailing theories of capital structure that is trade-off theory and pecking order theory of capital structure among others. However, the study documents that share prices play a crucial role in determining the choice of firms' of financing sources. Businesses that experience stock prices increases are more likely to issues equity and retire debt than are the companies that experience share price decreases. Most managers are reluctant to issue equity when companies' stock prices are understated.

As indicated in Huang Ritter (2009) companies fund their deficit by net external equity when the cost of capital is lower. The other support of market timing theory documented as the historical values of the cost of equity capital has persistence influence on firms' capital structures, even after controlling for firm features that have recognised as the most significant determinants of capital structure. The relevancy of the market timing theory verified in different institutional settings. Several studies find a negative relationship between marketing timing measure and leverage for the Netherlands, France and 13 European countries respectively, De Bie and De Haan

(2007), Bougateg and Chichti (2010) and Gaud et al. (2007). Several papers indicated that security issuance decisions in developing countries are motivated by the market timing theory (Henderson et al., 2006, Cohen et al., 2007; Bo et al., 2011).

The seminal work Baker and Wurgler (2002), studies on market timing generated a lot of interest in the area of the capital structure. Most of the literature could consider as reactions to the finding of Baker and Wurgler (2002), which defined the capital structure as a cumulative outcome of attempts to time the equity market, and the effects of historical market values on capital structure are a long lasting impact. According to Taggart (1977), the paper suggests evidence that is movements in the market values of long-term debt and equity are important determinants of US firms' security issuance decisions.

Several studies indicate the existence of market timing theory persistent impact on capital structure decisions. The study by Jenter (2005) of managerial timing provides evidence of market timing both at a corporate and administrative level in which firms with low market-to-book ratio are considered as value businesses; while companies with the high market-to-book ratio considered as growth companies. Managers in these enterprises purchase equity on their own, and repurchase for their businesses.

Elliott et al. (2008), uses the residual income model to measure the effect of the misevaluation of equity and the impact of market timing on corporate financing decisions by firms. The results are consistent with Baker and Wurgler (2002) as companies are most likely to issue equity to finance their deficit when equity overvalued. More evidence of market timing theory does not only come from the investment but also debt markets of the results of capital structure choices of firms. As documented by Bancel and Mittoo (2004) and Baker et al. (2003) evidence of forwarding-looking market timing. When predicting the future interest rate reduces, managers tend to make short-term debt issuance decisions, whereas when predicting the increases in future interest rate, they tend to make long-term debt issuance decisions. Barry et al. (2008) find evidence of backward-looking market timing that firms issue more debt about investment spending and equity when interest rates are low compared with historical values. Henderson et al. (2006) examine both equity and debt market timing internationally.

The findings indicated that market timing is particularly important in security issuance decisions by firms' management. When interest rates are lower, companies tend to issue long-term debt and before the increase in the interest rate. Doukas et al. (2011) indicated that perceived capital market situations as favourable lead companies to issue more debt in hot than in cold market periods. Furthermore, there is a lasting hot-debt market impact on the capital structure of debt issuers. There are two criticisms against the work of Baker and Wurgler (2002). Firstly, given many consensuses on the temporary effect of market timing on capital structure, the persistent impact of this situation remains unconvincing as stated in several studies (Leary and Roberts, 2005; Alti, 2006; Flanner and Rangan, 2006; De Bie and De Haan, 2007; Kayhan and Titman, 2007; Nguyen and Boubaker, 2009). Alti (2006) put more emphasis on a single financing source as an initial public offering; this is an attempt to capture market timing and its impact on the capital structure. The author defines market timers as the firms that go public in the "hot issue market, which is high market valuations and strong IPO volume regarding some issuers.

Alti (2006) findings show that hot-market issuers have lower leverage ratios than cold-market firms do. These results lead to the conclusion that market timing is a crucial determinant of financing activity in the short-run, but its long-run effects are limited. In support of Alti (2006), Flanner and Ranagan (2006) confirmed the existence of the market timing for security issuance but did not support Baker and Wurgler (2002) position on the persistence of the impact of market timing on capital structure. The volatility in share prices are found to have a short-term impact on debt ratios, but efforts to reach the target leverage ratio offset these transitory effects within a few years.

The study conducted by Kayhan and Titman (2007) find adverse effects of actual market-to-book ratio on US corporate leverage, but do not confirm its long-term persistence. The findings indicate although firm's history strongly affects their capital structure decision; financing choices tend to move towards targets debt ratios over time, which is consistent with the trade-off theory. The findings are supporting Leary and Roberts (2005) position as they argued that firms actively rebalance their leverage so that the impact of market timing disappeared within three to five years following equity issuances by businesses.

The study conducted by Hovakimian (2006) question Baker and Wurgler (2002) conclusion that capital structure is the cumulative outcome of past attempts at equity market timing. There was no significant evidence found by the author about equity market timing for the debt issues and debt reduction in firms' capital structure choices.

Although equity transactions may conduct to time equity market situations, they do not have significant, long-lasting effects on the capital structure. The study also finds that the impact of market-to-book ratio on leverage is not due to equity market timing but reveal growth opportunities of the firms.

Secondly, The problem of the market timing is the inappropriate use of historical cost market-to-book ratio to appropriately proxy for a company's market timing attempts. Although this issue is raised by Baker and Wurgler (2002) in their study and there have been claims by authors that they believe their findings are consistent with equity mispricing in the presence of irrational investors or managers, there are alternative interpretations. The use of market-to-book to test market timing is overwhelmed with difficulties. Such difficulties result from the multiple interpretations of what the ratio captures, for example, asymmetric information, growth options, and debt overhang problems (Elliott et al., 2007). Hovakimian (2006) and Kayhan and Titman (2007) indicate that the driving force behind the findings of Baker and Wurgler (2002) is not past equity market timing, but the growth opportunities for the firms. Many studies are using different methods to measure market timing compared with Baker and Wurgler (2002) to examine the market timing theory.

Jorgensen and Terra (2002) conducted their studies in seven Latin American countries in which they investigate the effect of the tangibility, size, profitability, growth opportunities, taxes, and business were studied in each country. In their studies, the impact of macroeconomics and institutional factors were examined using pooled regression analysis. As the results indicated that profitability was only the one shows consistency negative behaviour, and limited support was found for business risk.

There is empirical evidence from different studies that shed more support for a positive relationship when book value leverage was used, but the sign of the relationship turned negative when the market value leverage are utilised by the firms. The findings of pooled country estimation also indicated that the profitability is the only one that showing negative consistency across the different components of the capital structure. The impact of real GDP growth and inflation were found to be negative, while their combined explanatory power was not remarkable. But the most significant findings of the study by Jorgensen and Terra (2002), the explanatory strength of the firm-specific factors outweighed the explanatory strength of the institutional and macroeconomic factors that are external to the firms.

Green and Mutenheri (2002) in their study of the impact of economic reform programme on financing choices for listed companies in Zimbabwe came to the conclusion that Zimbabwean firms relied heavily on the external funding sources. While long-term bank loans were found to make little contribution to the financing of the corporate sector, the share market was considered to contribute significantly. Asset tangibility, tax rate, growth opportunities, earnings volatility and bank liquidity, were found to be significant determinants of capital structure. The study also found that economic reform programmes had little success in opening up the financial markets and improving transparency of financing behaviour of firms.

Ngugi (2008) conducted studies of capital investment behaviour of listed companies on the Nairobi Security Exchange (NSE). Accordingly the study use sample of 22 firms for the period of 1990 to 1999 and using modified static trade-off and pecking order models, her findings shows that the primary determinants of capital financing behaviour of listed firms on Nairobi Security Exchange are information asymmetry, non-debt tax shields and local capital market infrastructure.

Nyang'oro (2003) study comprised a sample of 20 listed non-financial firms for the period from 1993 to 2001 in which the results were contradicting to the previous findings by other researchers. His findings show that tax rate was significant in explaining leverage, but with a wrong negative sign. Non-debt tax shield was insignificant in explaining force. In other hands, profitability, tangibility and growth opportunities were found to be significant in explaining the capital structure of the sampled firms drawn from the study.

Abor and bike (2005) conducted a study on the determinants of the capital structure of listed companies, large unlisted firm and small and medium enterprises (SME) in Ghana using panel data analysis for the period 1998 to 2003. Their findings for listed large and unlisted firms had higher debt ratios as compared to SMEs. The findings revealed that total debt constituted more than 50% of the capital structure of the sampled firms. The study also found that profitability, the age of the firm, the size of the firm, asset structure and risk were significant in influencing decisions on capital structure in Ghana. The market timing has persistence effect on capital structure.

Negash (2002) conduct a study on the relationship between corporate tax and a firm's capital structure. He obtained a sample of 64 industrial sector firms listed on the Johannesburg Stock Exchange (JSE) for the period

1991-1998 in South Africa. He ran an OLS on leverage model and found a negative relationship between tax rate variables and extent of leverages. There was no relationship between investment related tax shields and debt related shield that is consistent with Titman and Wessels (1998) but a direct contradiction of proposition by De Angelo and Masulis (1980). Negash found the primary determinants of leverage to be its lagged variable. Liquidity of assets, asset tangibility, size and actual taxes paid were also found to significantly explain leverage.

The study conducted by Chen (2004) on capital structure determinants of listed firms in China using panel data regression and the findings of the study were different from those of developed countries due to institutional differences among countries. He concluded that Chinese firm neither followed the pecking order nor the trade-off theory. Also found that instead to follow what he termed as "new pecking order" in which a firm's preference for funds is retained earnings first followed by equity and then long-term debt. He argued that while western models that sought to concentrate on firm characteristics as determinants of capital choices, models that tend to explain the behaviour of determinants of capital structure in China needed to look at institutional factors as these also played a critical role.

The study conducted by De Jong et al. (2008) analysed the direct and indirect impacts of firms specific and macroeconomic factors on the corporate capital structure for some companies from developed and developing countries. Their findings revealed that tangibility and company's size in the some of the countries had a positive effect on long-term debt ratios at market value, whereas growth opportunities and profitability had an adverse effect. Bie and Haan (2007) evidence of market timing is found, but there is no long-lasting persistence of the effect. The same result found in the Shenzhen market in the study conducted by Tian, Shao and Luo (2008). In most of the studies that conducted on the market timing and capital structure have not talked about the issues of other countries that do not allow repurchase of share, for example, Kenya do not allow repurchase of shares.

3.2 Summary of the study

The empirical studies reviewed reveal that market timing affects capital structure and firms performance. What comes out clearly is that its impact and magnitude on capital structure not clearly stated as different studies reveal mixed results. One set of results from empirical studies reveals that can create distortion of the capital structure of the firms in the market while the other set claims that the impact of market timing on capital structure is not persistent. The reason for this inconsistency not known from the current literature and empirical studies is subject to further future research. The exact through which market timing affect capital structure has not been clearly identified, and neither is the timing or management aspect of the firms.

3.3 Conclusion

In the review of the theoretical literature and empirical studies, it is evident that academic research on market timing and capital structure still give controversial and mix finding which shows that there is still need to do more research on the impact of market timing on capital structure. Through the lack of consensus, therefore objective one and two could not be achieved. These points bring the existence of a knowledge gap on the persistent impact of market timing on the capital structure of the firms.

In light of the mixed evidence, there is need to test the dynamic trade-off model under several assumptions. First, we assume that the target debt-equity ratio follows an AR (1) process. Second, we assume that the target debt-equity ratio is constant. Finally, as a robustness check, we also consider a third scenario, under which the target debt-equity ratio follows a random walk process, making the target debt-equity ratio completely unpredictable based on previous information. Therefore, there is still room to close the gaps by academic researchers and consultancies to come up with more robust research to create a competitive advantage for firms to achieve optimal capital structure using market-timing strategy. Empirical studies also show no consensus since studies conducted locally arrived at mixed conclusions as per the case of (Ngugi, 2008, and Nyangoro, 2003) and many others. This problem has resulted in the loss of investors' wealth and confidence in the stock market. Studies on the relationship between various financing decisions and performance have produced mixed results. It is against this background that this technical literature review conducted.

3.4 The research gaps identified

On critically evaluating the existing literature, it observed that most empirical studies on the impacts of market timing on the capital structure are shown a lack of consensus, which continues to give mixed findings. Empirical studies also provide no consensus since even studies conducted within emerging market arrive at different conclusion or results as shown in Ngugi, (2008), and Nyangoro, (2003), which they did not consider the market timing as one aspect of their variables.

Therefore, most of the studies were focusing on the countries specific factors, and others emphasis on institutional factors as well as macroeconomic factors to assess the effect of country-specific factors on the capital structure firms in developing markets. The other studies have shown that the impacts of market timing on capital structure are the same across developed and emerging markets. This implies that variables used in the developed markets are also applicable in the developing markets regardless of macroeconomic environments. Furthermore, the Market Timing Theory is relatively modern and less investigated in the developing market, especially African markets. This lack of studies in the developing market is the knowledge gaps plus inconsistency documented by research in the developed market. This could be tested in the future using the available data in the developing market like Kenya. This inconsistency and mixed findings constitute knowledge gaps, which this review seeks to fill these gaps.

3.5 Future Research

This study has laid a good platform for conducting further research, which includes,

To establishment of the findings on the differential impact of market timing on the capital structure of firms in the developing markets which can lead to further insights into socioeconomic connections and provide useful information to investors.

To inform policy makers for further policy reforms to stabilize the returns on shareholders wealth and also determine ways of increasing policy coordination to achieve the desired relationship between market timing and capital structure in developing markets.

Further research can be recommended to determine what constitutes significant adjustments for the optimal capital structure of firms to align their cost of capital policies and allow a period of the market timing system coordinate sustainable firm performance in developing markets. The area of future research on the impact of market timing on capital structure in emerging market should be conducted using available data from developing markets to compare the outcome with those of developed markets. Studies on the relationship between various financing decisions and performance have produced mixed results. It is against this background this study conducted.

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