

The Effect of Capital Structure on Firm Survival during Covid-19 Crisis of Listed Companies in Thailand

By

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Abstract

Purpose

The objective of the research is to examine the effect of the capital structure flexibility on firm survival by using the secondary financial data of SET50 in Security Exchange in Thailand (SET) between 2010 to 2021.

Theoretical Framework

This research originally uses the Modigliani and Miller (M&M) theory of capital structure and its application from modern capital structure theories to explain the conceptual framework. These modern capital structure theories include the trade-off theory, the pecking order theory, the market timing theory, the agency theory and the stakeholder co-investment theory.

Design/Methodology/Approach

A researcher reviews the firm survival literatures for creating conceptual models and measuring the variables and uses regression testing the effect of the capital structure flexibility on firm survival.

Findings

A researcher finds that the capital structure flexibility, representing by earnings before interest and tax (EBIT) on total assets ratio, has a significantly positive affected on the firm survival that the firm survival is measured from the probability of survival in firm.

Research, Practical And Social Implications

This finding encourages practitioners to focus on their best efforts of budget allocation in total assets investments that can be affecting from the arrangement of firms' capital structure in all future tendencies of crisis. Consequently, firms will become a profitable firm that lead them to be survival for sustainability.

Original/Value

This research is investigated on how firm survival is affected by the capital structure flexibility demand that a researcher measures the firm survival from the probability of survival and Altman's Z-score. This research offers how CFOs can modify their capital structure in firms responding to all tendencies of crisis that it is important whenever firms are facing hard time like war or epidemic events.

Keywords: Capital structure flexibility; Firm survival; The probability of survival; The Altman's Z-score

Introduction

During covid-19 crisis, the world economy was not just recession, badly it was down to break the movement of economy due to the work from home for avoiding the spread of the virus. Worst, it could be the curfew announcement in each country for some long period to force the population to stay home and not allow to go outside during the curfews. As the result, the GDP of the country went down and people have been employed by working from home while many others lose their job due to the unemployment caused by the crisis. In Thailand as well, many people have no job since a firm could not face the high expense of workforce and another expenses while they have low or even down to no revenue due to the crisis. Thus, many firms in Thailand have been facing the distress during the crisis event that CFOs must afford hardly to save a firm to be survival as much as his capacity be. However, to be survival in all situations, CFOs need to pay much more attention on how firms could get sources of fund and invest carefully on the allocation of investment in assets. Under the covid-19 situation as well, it should be the best if firms able to avoid the heavy investments on assets due to the broken economy. Instead, CFOs should give heed to manage its source of funds carefully. Accordingly, CFOs must prepare the suitability and the flexibility of firms' financing that could be encourage a firm to be survival in all kinds of situations since two sources of funds, "Debt" and "Equity", have the impact to firm survival differently.

Under the traditional theory of the capital structure in early age, Modigliani and Miller is the first capital structure theory that specify the sources of funds and offer that there is no any factor affecting the value of the firm (Modigliani and Miller, 1958). Later, many researches have proven that financing in a differ portion between debt and equity in a firm clearly be matter to firm value. Accordingly, it matters because firm would gain advantage of taxes saving and of differing in information and agency costs. Consequently, these advantage saving and cost have confirmed and created acceptably for new age theories of optimal capital structure such as (1) the tradeoff theory offers that taxes are the major factor that caused the difference between debt and equity that it should be concentrated on. (2) the pecking order theory suggest that the optimal capital structure should be based on the difference in information between two sources (3) the free cash flow theory focus on agency costs that it should be the main affection to capital structure (Myer, 2011). Recently, a researcher also has investigated on the connection among financing factors that a firm would gain advantage from the difference in capital structure. For example, Harris and Raviv (1990) found several issues of the debt contract that have important significances for determining capital structure. Therefore, the leverage-increasing transactions represent a CFO's confidence in the level of future earning that reflect reductions in business risk and increases in target debt ratios. These issues include the bankruptcy provision, convexity of payoffs of levered equity, the effect of debt on managerial equity ownership, and the relative insensitivity of debt payoffs to firm performance. Consequently, the most profitable firms are more likely to get funds from external sources less while the least profitable seem to borrow more within an industry. Significantly, Kester (1986) explained that return on assets is the most representative variable for actual debt ratios in an extensive study of debt policy in United States and Japanese manufacturing corporations. Similarly, Baskin (1989) gets exactly same results and cites more other confirmative studies that shows higher profits. On the other word, the more money for debt service and the more taxable income to shelter, it should indicate higher target debt ratios.

However, a research on the optimal sources of funds are still unclear direction that which source could be better than another between financing by debt and by equity. Therefore, many theories are associated on the capital structure and used to explain how firms finance its

funding differently. Firstly, the pecking order theory, it suggests that firms are more preliminary favor to finance their activities by using retained earnings before they turn to finance by using debt. Additionally, the packing order theory also support that the debt will be necessary only when in case of the retained earnings are insufficient. Similarly, Frank and Goyal (2003) suggest that equity financing is the last alternative resort for firms. Secondly, the market timing theory, it is the theory of how firms design whether to finance their investment with equity or with debt. Frankly, a firm affords to time the market by using debt when it is low price and equity when it looks like cheap market (Huang and Ritter, 2005). Thirdly, the tax/bankruptcy tradeoff theory, this theory encourages firms' tradeoff by saving from the tax benefits of debt with the loss of the expected deadweight of bankruptcy (Frank and Goyal, 2008). In the other word, the tradeoff theory is used to explain the payoff of the cost with the benefit of debt. Fourthly, the agency theory, it recommends that CFOs may be halted to overspend their free cash flow and thus the high debt is helpful to control this overspending stimulant (Berger and Di Patti, 2006). Thereby, the agency theory is used to confirm that the additional debt encourages the opportunity for firms to pay off the deadweight bankruptcy loss that there might be caused agency conflicts between debt holders and equity holders. Lastly, the stakeholder co-investment theory, it is associated with a firm's investment that some firms favor to use small debt when compared to other firms in order to secure the willingness of all stakeholders, either employees or business partners, for increasing value (Frank and Goyal, 2008).

Up to here, since there are both advantage and disadvantage from financing with either debt or equity, there is no specific theory of capital structure in present, and no reason to expect one for now that it could not be stated that which source should be better than another. Therefore, to be survival, especially in future contingencies, the CFOs should be concentrated on how much the capital structure could be flexible as much as possibility as instead. On the other word, the optimal capital structure could be resilient. It could be able to change and to modify easily for fitting all future contingencies like covid-19 or war, for instance. Thus, this research will be identified the capital structure flexibility demand, representing the possible importance of leverage ratio changes in a firm under any factors that assist a firm to be survival. Additionally, a researcher will use statistic to test these significant factors that they are really effect of the capital structure of the flexibility demands on the firm survival. For relevant results, it could be useful for CFOs to manage a firm's source of funds to be flexible to any kinds of future contingencies. This must be value for practitioners to encourage a firm to be survival during crisis.

Theories and Hypotheses

The effect of Firm Survival Through Theories

Trade-off theory

As of the original theory capital structure, the Modigliani and Miller (M&M) theory suggests that the firm value is the formal present value of its future earnings and its reference assets (Modigliani and Miller, 1958). Although they indicate that a firm value is independent from its capital structure, it looks like that it is the grand opening gate to attract later researchers to find out the relationship between the capital structure and firm value. Recently, researches have confirmed that the capital structure does concerned a firm value in all kinds of situations, especially during the global economic crisis. Accordingly, a researcher indicates that the capital structure of large company could be maximized through three kinds of strategy as operational strategy, investment strategy, and financial strategy (Rappoport, 1998). Especially, for the financial strategy, a firm is responsible directly for managing its capital structure, which

encourages firms to primarily reach the maximum value by business strategy and investment strategy. Therefore, many researchers attempt to gather the factors that indicates the linkage of capital structure to a firm's value and creates their own theories. As well as the trade-off theory, it is the theory of the capital structure that created by applying the work of Modigliani and Miller. The trade-off theory suggests that the optimal capital structure is a reconcile between the benefit of debt in term of corporate tax advantage, and the cost of debt in terms of the financial distress caused by the deadweight loss of bankruptcy (Kraus and Litzenberger, 1973) and agency costs (Jensen and Meckling, 1976). Likewise, Booth et al. (2001) find that the capital structure decision making is affected by the exactly same variables as in developed countries. Moreover, Mayer et al. (2001) also confirms that the investments from external sources as debts allows a firm to get advantage from tax. Indeed, it encourages a CFO in firms to seek funds by creating more debt. Similarly, Abor (2005) specifies that getting external sources of funds from debt may raise an advantage to a firm but it should be limited in some point of time. At this points, the debt would finally provide a damage caused problems to firms. However, professor James T. Tobin offers the Tobin's Q value, discussing on firm's market value that is basically calculated the firm's assets with replacement costs, which come from the value of shares in the hand of equities and liabilities (Lindenberg and Ross, 1981). In the other word, this Tobin's Q value must be implied that a firm value that is calculated from an expectation of future investment caused by the decision making in capital structure. Indeed, Chung and Pruitt (1994) confirms that the market value based on Tobin's Q should be acceptable because its results is closed to the principle of Lindenberg and Ross in 1981. Therefore, the application of M&M theory, as known as the trade-off theory, should be used to explain that the decision making of the capital structure should refer to the firm future investment and really create a firm value.

Packing order theory

The packing order theory has long foundations in the descriptive literature that it is clearly complied by Myers (1984). This theory offers that a firm formally raises its funds from three alternative sources which are; retained earnings, debt, and equity. Deeply, the packing order theory suggests that retained earnings is the most relevant sources that avoid the least problems while equity is the most disgusted source of the group and debt has only little adverse selection problems. Thereby, the debt financing will be used only when in the case of there is an inadequate amount of retained earnings, and then only in extreme conditions the financing from equity is used. Although the packing order theory is a theory of leverage in which there is no conception of an optimal leverage ratio, it has been observing that leverage is significantly linked to firm value in somehow as confirmed in researches by the tests of the pecking order hypothesis that include Shyam-Sunder and Myers (1999), Fama and French (2002) and Frank and Goyal (2003). These researches show that the pecking order theory indicate "the less leverage firm will have more profitable firms and it also specify the linkage to the firm size". Even through the scopes on firm size variables are not much obvious but it clearly indicates that larger firms must have more assets in hand and thus a greater damage is convicted by adverse selection as mention in Myers and Majluf (1984). Similarly, Fama and French (2002) also verify that larger firms may have less asymmetric information and thus will suffer less damage by adverse selection that firm size must be matter. Indeed, the test of the packing order theory also confirm that capital expenditures perform as firm's outflows that it is directly cumulating the financing deficit as discussed in Shyam-Sunder and Myers (1999). Thereby, capital expenditures should be positively related to debt under the pecking order theory.

As mention earlier, debt ratios change when an imbalance of internal cash flow occurs because highly profitable firms must limit investment opportunities and work down to a low

debt ratio. Thereby, firms which investment opportunities on board generally are force to drive funds by borrowing more and more. Accordingly, this pecking order theory provides an immediate explanation for the negative correlation of the effect on profitability from leverage within industry as the imbalance of cash flow. Likewise, the pecking order theory finely explains why equity issues reduce stock price, but conversely debt issues do not. For illustration, if the probability of default is low, then CFO would concern that funders would likely be buyers of a debt issue and vice versa for equity issuance. However, for the future investment, it is hardly predicted and find difficulty to measure as the possibility because of the fluctuation of funders 'cost in all times. Therefore, it seems like that at any point in time firms' observed leverage may not be strictly optimal, and that firms vary in their rapidity of adjustment upon the optimal capital structure, which itself may be changing over time for the same firm (Banerjee et al., 1999). Accordingly, Banerjee et al. (1999) also find that firms typically have capital structures that are not at any fixed target, and that, it should be always adjusted very slowly towards the target. Therefore, the pecking order theory could be best used to explain the connection between the capital structure and the firm value as stock price caused by a firm's profitability. Indeed, it also explicates that the optimal capital structure could be flexible and able to change or to modify overtime depends on the situations.

Market Timing Theory

Lucas and MacDonald (1990) applied the component of the pecking order theory, then combined it with the market timing idea based on the discussion by Myers (1984), and created new theory as known as the market timing theory. Regarding the surveys by Graham and Harvey (2001), they show that CFOs continue to offer at least some support for the idea consistently under the market timing behavior. Accordingly, the research by Hovakimian et al. (2001) also indicates that when the value of their stock has increased, it must be the time that firms are more likely to issue equity. In contrast, Baker and Wurgler (2002) argue that the financing in firms should be the collection of past attempt that affects to time of the market in which CFOs must look at current conditions in both debt markets and equity markets. Under this current condition, as of the time either favorable or unfavorable market, it will be guided for a firm what to do for its financing. Frankly, if current conditions look unusually favorable, funds may be raised even if they are not currently required. For illustration, if the market has been relatively favorable, then firms will tend to funding from that sources. On the other word, if the equity market is favorable, firms will prefer to raise funds from equity. Conversely, if the equity market is unfavorable, a firm will rather do debt financing and reduce equity market and vice versa. Thereby, in a recession of economy such as war or epidemic events, firms probably trend to become more leveraged since the debt should request lower cost and become more favor than equity. In conclusion, the level of capital structure could be modified overtime depend on the current market situation. Under the market timing theory, it is useful to explain the importance of the capital structure flexibility that firm would be able to adapt its capital structure appropriately to which the current market situation is up to.

Agency Theory

In 2019, Jensen and Meckling (2019) have offered the empirical work that examine the effect of firm's financial leverage on firm performance by focusing on the agency cost. The agency cost hypothesis explain that there are conflicts of interest between the firm's shareholders and CFOs. Generally, the CFOs expect their own personal benefits on the allocation in firms 'investment rather than maximize the firm value (Jensen, 1986). Thereby, the CFOs usually like to control their firm and often complain to resist liquidation despite it being in the best interests of shareholders (Harris and Raviv, 1988). Consequently, it is force a firm to use the debt in capital structure that it can relieve agency costs by restricting or

supporting CFOs to care more on the interests of shareholders by controlling CFOs' the choices of investment (Myers, 1977) and the amounts of risk undertaken (Jensen and Meckling, 2019) as well as the conditions under which firm can resort to liquidation (Grossman and Hart, 1982; Harris and Raviv, 1990). Additionally, increasing leverage can also alleviate agency costs and have a positive effect on profitability and thus firm performance that reply to the interests of shareholders' need. Indeed, there are a number of empirical studies provide evidence suggesting this positive relationship between debt level and firm's performance. For instance, Taub (1975) finds that the firm's choice of a debt-equity ratio significant positive association with profitability for US companies. Similarly, Grossman and Hart (1982) confirms that high leverage really reduces agency costs and truly increases firm value because it is forces CFOs to pay more attention to the interests of equity holders. Significantly, Roden and Lewellen (1995) also find positive association between profitability and total debt as a percentage of the total buyout-financing package in their study on firms' leveraged buyouts. Similarly, the results are documented by Hadlock and James (2002) for a set of companies in US and by Lara and Mesquita in the case of Brazilian companies. Deeply, Margaritis and Psillaki (2010) also investigates the relationship between efficiency, leverage and ownership structure by using a sample of French manufacturing firms and finds that higher leverage is also associated with improved efficiency over the entire range of observed data.

While increased leverage in the capital structure reduces the agency conflicts between shareholders and CFOs, it can also bring with it the commitment for future cash outflows resulting in higher expected costs of financial distress or bankruptcy. Such as, Jensen and Meckling (2019) suggest that the effect of leverage not only on total agency costs when firms are at the low level of leverage but also on the bankruptcy and distress when firms face high losses of negative net present value projects. Consequently, when firms are facing close to bankruptcy and distress, it means that further increases in leverage can result in higher total agency costs leading to a negative effect on profitability and firm performance. Indeed, the agency theory is the useful theory to explain that the leverage level could affect firm value through the agency cost that caused by the effect of firm's profitability and's performance. On the other word, the agency theory encourage how the capital structure link a firm value that it would differ when the leverage ratio could have modified follows the tendency of crisis.

Stakeholder Co-investment Theory

Based on the stakeholder co-investment theory, a stakeholder could be stated to anyone who has earn or loss benefits by firms' consequence in the continued success of the firm such as managers, shareholders, debtholders, employees, suppliers, customers, and so forth. Therefore, all of the stakeholders must find their interests to continue participating in the firm when firms trend to be growth. However, stakeholders can also lose their firm-specific investments as well in a bankruptcy that it can also be occurred when a firm reorganizes its business in an effort to cope with these difficulties. Thus, a capital structure can be display as the role that causes firm-specific investments to appear to be insecure, generally few such investments by the stakeholders. Accordingly, firms' stakeholder co-investment is critical and debt will be low while for other firms which physical capital is more important and thus debt will be higher. Hence, the stakeholder co-investment theory can be used to explain the cross-sectional differences in leverage in which some industries such firm-specific investments are important and debt would be relatively low while in other industries, physical capital may be more important and debt would also be higher. Similarly, Myers (1984) notices that the level of debt is determined not just by the value and the risk of a firm's assets, but also by the type of assets it holds. Thereby, due to the set of assets, it refers to firms' investments and types of assets imply to the types of assets hold as well. Regarding to Myer, the types of assets as firms

makes investment should be affected to firms' level of debt. For example, the investment in production, Titman (1984) suggest that if firms make unique products, they will lose their customers as long as their product appear likely to fail. Thereby, firms in unique industries are likely to have more specialized labor with high R&D and specialized equipment, which results in higher financial distress costs and consequently less debt to protect unique assets. Significantly, the investment in production can be directly affected to the level of leverage. In the other word, the leverage affects a firm by stimulating a firm to offer a high quality product (Maksimovic and Titman, 1991). Similarly, other than investment in short term assets, firms must be careful on the investment in long term assets as firms' capital as well. Accordingly, Jaggia and Thakor (1994) and Hart and Moore (1994) offer the importance of managerial investments in human capital for firms' growth since human capital can be implied as low debt. Thereby, in order to encourage co-investment, a fast growing firm must have low debt as recommendation as investment in human capital. Indeed, the stakeholder co-investment s theory also concern risk that risk is deleterious for firms' co-investment. Therefore, by measuring of risk such as the Z-Score, it should be due with the reduction of firms' leverage that it depends on the view taken of the stock market in which high stock returns might imply lower risk and thus, in a safe environment, the firm can afford more debt. In the other word, Z-score can represent the level of risk caused by co-investment that it can affect firm survival and it also associated with firms' leverage. Thus, the stakeholder co-investment s theory should be the useful theory that can be explaining the difference in leverage link a firm survival that can be caused by risky from the co-investment.

Firm Survival

Fang, Noe, and Tice (2009) offers that there is the connection between firm liquidity and firm performances. They find that firm liquidity could create the high volume of firm performance because a firm is able to control risk in some levels. Similarly, Cheung, Chung, and Fung (2015) suggest that a firm liquidity is a result of a good corporate governance that it is attracting the investors' good views. Consequently, a firm liquidity result will push the higher bid-ask spread price and let the firm becomes higher value caused by the bid-ask spread value (Chakravarty and Asani, 1999). Therefore, it can imply that a firm liquidity can create firm value in some way (Du et al, 2016; Zuhroh, 2019; Chia et al, 2020). However, Brockman and Chung (2003) confirm that firm liquidity is significantly affected by investor protection in which a firm prefers to hold liquid assets for individual patterns of firm liquidity forms. Frankly, the liquidity assets that a firm holds also depends on its capital structure according to a firm characteristic (Myers,1977). Generally, besides the liquidity assets, a firm must hold illiquidity assets as well. By holding the illiquidity assets, Amihud and Mendelson (1986) propose that investors must require a return premium to compensate for illiquidity costs. And, this return premium must depend on investors' holding-period clientele and must be exceeds the expected illiquidity costs caused by the limitation of funding. Consequently, firm liquidity and illiquidity assets' holding can affect firm's financing in somehow. In contrast, the previous researches also show that the firm sizes significantly have positive effect on firm survival (Audretsch and Mahmood, 1995; Mata and Portugal, 2002). Frankly, a firm's growing big size will finally get advantage by cutting cost of quantity funds raising and of quality labors seeking that it allows firm to gain advantages from its economy scale (Shalit and Sankar, 1977). Hence, it is simple that growth is a process, and growth is the differential outcome between two points or among at least two points in time (Delmar et al., 2003; Penrose, 1959). Significantly, previous research shows that the workable differences of time periods are used with many of the most common ones being 1-, 3-, or 5-year periods (Delmar et al., 2003). Deeply, many difference of growth have been measured from sales levels, profitability, number of employees, and market share (Gilbert et al., 2006; Shepherd and Wiklund, 2009; Storey, 1994). However,

the use of sales growth is the most effective growth variable as it translates easily across countries and industry contexts, and apparently also is the metric of choice for entrepreneurs (Delmar et al. 2003; Hoy et al, 1992).

Frankly, the growth indicates the sustainability in firm in all advantages in some ways by having larger sales, higher profitability, bigger market share, more number of employees, and so forth. Consequently, firm sustainability encourages a firm for being survival from its good financial development that a firm can gain by being a good investment allocation (Tsoukas, 2010). Furthermore, for firm sustainability, a firm must be able to compete, to beat, and to block rival firms in business for creating its value in long run in future (Naver and Slater, 1990). Thereby, the developments in the sustainability must be included as the strategic decision-making process for firms as the sustainability challenges that it must require the well revision of current management practices (Schrettle et al., 2014). Under these sustainability challenges, CFOs must assess the competences of the firm including financial strategy, participate further developments to define strategy including a decision on capital structure (Schweiger et al., 1986; Iaquinto and Fredrickson, 1997; Ferrier, 2001). Therefore, strategic decisions in capital structure can be defined as one of important tasks in terms of the actions taken, the resources committed, or the precedents set that signal firms' existence in future set (Mintzberg et al., 1976). Indeed, those decisions are infrequent decisions made by the top CFOs of a firm that critically affect firm health and survival (Eisenhardt and Zbaracki, 1992). In conclusion, the relationship between firms' sustainability and firm value are parallel and much possible to occur because firms with sustainability must attract an investor's confidence and finally increase firm value (Janggu et al., 2014). In this study firm sustainability is closely considered as firm survival in all situations that may cause firm to be failure in business including in all crisis in long run. Unfortunately, the survival of firms is also a consequence of financial development that is the firm will benefit from financing as well as firm development (Tsoukas, 2010). Therefore, to be survival firm, a firm must be caused by how capital structure can be arranged and flexible in all events both favor and adverse situations.

The effect of Firm Survival through Capital Structure Flexibility

Capital Structure Flexibility

Capital structure flexibility basically refers to a firm's capacity to gather, to modify, or even to adjust its financial resources at any time to uncertain future. Under the circumstance of financial flexibility positions, firms may not only put themselves into a safe zone for protecting their value, but they must preserve valuable options to deal with future contingencies. Thus, CFOs must flight on financial flexibility in their capital structure decisions that the CFOs may not only react to financing frictions when they occur, but they also modify their firms' financial policies in order to minimize the future impact of these frictions as well (Almeida et al, 2006). Under this modification, the costs of leverage must be occurred as the opportunity cost of its consequent future that a firm may be inability to borrow and vary with firms' financial conditions and needs in the future (DeAngelo et al, 2011). Accordingly, the effect of capital structure flexibility on financial decisions requires concurrent attention to investment opportunities in term of saving cost of capital, financing limits on raising additional capital, expecting cash flows, and mostly surviving for all unexpected crisis. Thus, managing the optimal capital structure is a CFOs' challenge because firms are always facing shortfalls in cash flows over time. Alternatively, a little debt may cause them to be in financial distress because debt financing incurs fixed payments. Consequently, for a firm with low cash flow and high demand for additional capital, it implies further loss of capital structure flexibility by issuing risky debt as well. Thereby, the limitation on debt issuance that results from the risk of

asset substitution is more important for such firms (Jensen and Meckling, 2010). On the other hand, CFOs must reduce the benefit from debt that it limits the scope of over-investment whenever firms face lacking of investible funds, and then they must have little free cash flows perquisites (Jensen, 1986; Stulz, 1990; DeAngelo and DeAngelo, 2006). Also, debt financing renders firms with little capital structure flexibility and become weak to have powerful strategies, such as price wars by established firms that debilitate less capital structurally flexible firms, thus further becoming less and less capital structure flexibility (Poitevin, 1989). In addition, debt roles often bring on the limitations on financing and investment decisions that are especially hard for firms with lack of capital structure flexibility. Therefore, debt financing is always costly to the CFOs of a firm because it surrenders all project choices to investors (Faulkender et al, 2007).

In contrast, equity financing may cause higher issuing costs than debt financing but it provides greater financial flexibility. Thereby, firms must prefer to gather funds from equity whenever they needed cash, and thus maintain low leverage. However, DeAngelo and DeAngelo (2006) argue that firms can develop potential sources of capital structure flexibility through cash collection and the preservation of debt capacity. Similarly, Bolton and Feixas (2000) also offer that small firms may need to reduce information dilution costs by funding their investments through a bank loan or a bond issue but are too risky to be able to obtain such loan or bond. Thus, the only option for these firms is equity financing, which incurs greater dilution costs but is more feasible, and then these small firms cause a reduction in leverage automatically (Barclay et al, 2006). Furthermore, Boot and Thakor (1993) and Fulghieri and Lukin (2001) show that firms prefer to issue equity that generally give more informationally sensitive security rather than debt in order to stimulate information production. Similarly, De Meza and Webb (1987) also show that asymmetric information regarding firm risk makes equity is better the optimal choice for financing more than debt. Accordingly, when firms assess a sufficiently high probability that future funding needs would force them to incur higher equity issuance costs in a present value sense because borrowing today leaves the firm with inadequate debt capacity. Thereby, they must forgo issuing debt and instead issue costly equity now to meet an immediate funding need. Furthermore, Kaplan and Stromberg (2003) find that small growing firms must face not only different types of contracts but also significantly more restrictive agreements within the same debt financing contract than large firms. Similarly, Billet et al (2007) report that firms with more growth options face more restrictive covenant protections.

In conclusion, while firms are facing the greatest need of capital financial flexibility and preferring financial choices, they must enhance their ability to deal with future contingencies. Generally, firms have little concern for agency costs of free cash flow while facing constraints in borrowing because of lacking in credit history and expecting low cash flows. Thereby, they collect cash through equity financing in order to increase financial flexibility for future contingencies that equity issuances do not only require collateral or restrictive covenants but it also erases hazard problems associated with leverage or press down the probability of financial distress. In the other word, firms must issue more equity and maintain lower leverage. Summarily, debt financing may be relevant for firms to be survived and grown but in some hard time, it may be horrible since it comes with fixed cost. Therefore, the capital structure should be flexible and modify to fit the future contingencies. Consequently, the capital structure flexibility should be related to firm survival from future contingencies that the opportunity of failure which is measured by Altman's Z-score as explained by stakeholder co-investment theory. Thus, the hypothesis should be stated as following.

H₁: The higher the capital structure flexibility, the more likely that firms will gain greater firm survival as the higher probability of survival.

H₂: The higher the capital structure flexibility, the more likely that firms will gain greater firm survival as the lower Altman's Z-score.

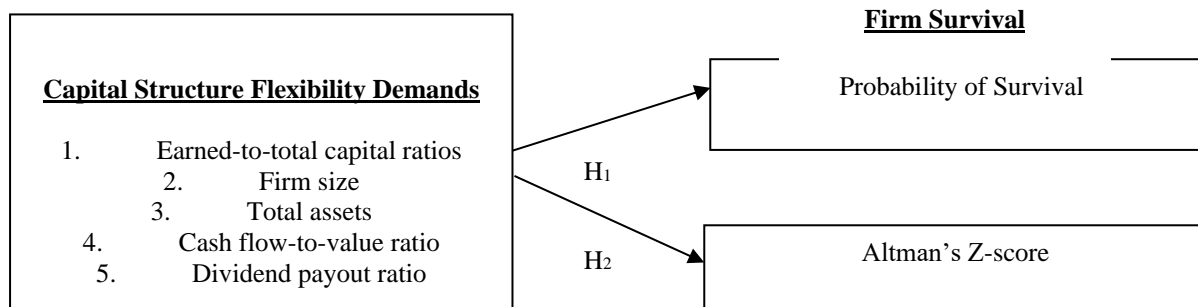


Figure 1: The conceptual model on relationship of the capital structure flexibility and firm survival

Methods

Sample Selection and Data Collection Procedures

In this research, researcher collects secondary data of leading firms from the SET50 in Thailand which this data is a financial performance during 2010 and 2021 from the Securities Exchange of Thailand (SET). The selection of the SET50 firms during this period should be relevant because this sample must be large enough to indicate the effect of capital structure flexibility on firm survival. Moreover, the covid-19 is getting better in early 2022 and researcher believe that year 2021 is also representing a fiscal year for the ending period that this crisis is back closely to normal. Accordingly, firms in SET50 are large firm and have been operating for long time period. However, researcher takes off 4 companies out from SET50 due to the merger and acquisition during 2010 and 2021 that it caused unappropriated for firm survival analysis individually. However, to be successful in firms' performance, CFO of SET50 firms would afford to represent the high visibility of his best judgment on the capital structure in a firm that it would be influenced firm survival for all future contingencies. Therefore, CFO must have enough funds to create wealthy affair for firms as his vision and fit to a firm's target. Unfortunately, the decision making in the capital structure in SET50 firms could be suitably used to test the affection on a firm survival.

Variables Measurements

This research employed a measurement of variables based on the literatures that researcher measures each variable by using the following formula and subtract the number from secondary data of SET50 firms.

Dependent variable

There are various ways to measure of leverage such as accounting based measures, market-value measures, or quasi-market value measures. However, the accounting based must be the most useful and relevant one, especially for this research because the market values of leverage may be difficult to obtain while accounting based measures are often applied as proxies. Previously, Rajan and Zingales (1995) suggest the choice of measuring the leverage based on the accounting that it should be on the objective of the analysis. Like measuring the leverage, the ratio of total liabilities to total assets can be considered since the total liabilities is something left for shareholders after liquidation. However, it might not be a good indicator for measuring the firm's risk of default in the near future. Accordingly, the total liabilities usually include the accounts payable which normally are used for transactions purposes rather

than for financing, and thus it may overstate the amount of leverage. Thereby, this accounts payable and other liabilities should be subtracted from total liabilities for improvement. Similarly, there is also other accounts that make the measurement of leverage containing total liabilities error such as any kinds of irrelevant accounts to financing, for example, pension liabilities, and thus underestimating the size of leverage. Finally, the ratio of total debt to capital, where capital is defined as total debt plus equity, is assumed to solve this problem and can be seen as the best accounting based proxy for leverage's measurement.

Firstly, regarding to total liability as mentioned, Modigliani and Miller state that in efficient markets the debt-equity choice is irrelevant to firm value and firm will take benefits by using debts to compensate with decrease of companies' stock. Prior to MM theory, it has believed that using financial leverage must increase company's value because there is an optimized capital structure that minimizes capital costs. In a subsequent paper, Modigliani and Miller (1963) erased the conditions and showed that under capital market imperfection where interest expenses are tax deductible, and thus firm value will increase with higher financial leverage. Thereby, the models are built based on the impact of tax and it always be associated with firms' profitability. Consequently, firms with more debts must have more need for tax management in corporation's profit as well. Thus, by increasing debt, it is also take a firm to result in an increased probability of bankruptcy. In the other word, the optimal capital structure must represent a level of leverage that can balance the bankruptcy costs from the benefits of debt finance. As mentioned by trade-off theory, a firm's optimal capital structure will involve the tradeoff among the effects of corporate and personal taxes, bankruptcy costs and agency costs, etc. (Jensen and Meckling, 1976). Therefore, to measure the total debt of a firm, authors of previous empirical studies such as Rajan and Zingales (1995) have used different classical measures of the capital structure in which usually overestimates the level of leverage. Also, the pecking order theory predicts a negative correlation between the profitability of a company and its total level of debt based on the idea that companies first turn towards internal financing resources like the profit (Myers and Majluf, 1984). Even though the trade-off theory establishes a positive correlation between these variables given that a higher profitability implies a higher income that can be exempt from taxes (Kraus, and Litzenberger, 1973), and most empirical studies have indicated a negative influence of the profitability on the capital structure (Mazur, 2007). Therefore, firms with low earned-to-total capital ratios are likely to be developing firms with great need of capital structure flexibility, whereas firms with high earned-to-total capital ratios are likely to be mature firms. Thus, a firm's capital structure flexibility should be formulated based on the ratio of firms' profitability which the adjustment the total liability to any kinds of costs, representing by EBIT, with its total assets that can be represented by this following formula.

$$\text{CSF}_i = \frac{\text{EBIT}_i}{\text{Total assets}_i} \quad (1)$$

Secondly, Titman and Wessels (1988) suggest that the size of a company and the extent to which it is indebted are also positively correlated. Indeed, the motivation in large companies have more diverse activities and less risk of bankruptcy, and thus it allows them to reach and maintain a higher level of debt. These empirical results of the study support the pecking order theory which a profitable enterprise with a high level of liquidity will have a reduced level of debt. In the other word, based on the capital structure literatures, they show that the capital structure flexibility could be on several characteristics including firm size. Hence, firm size could be representing the firm's leverage in some ways. Accordingly, DeAngelo et al, (2006, 2007) argue that firms with low earned capital relative to total capital tend to be in the capital infusion stage, whereas firms with greater earned capital tend to be more mature with ample

cumulative profits that make them largely self-financing. Thus, firm size is also related to capital structure flexibility demand that small firms are more likely to have many growth opportunities but with less available funds than large firms. Thereby, small firms are also likely to have more constraints with regard to access to capital markets, causing them to concern for capital structure flexibility in order to cope with future contingencies. In contrast, large firms are often better diversified than small firms and have the inherent capability to endure future contingencies because each line of their business represents an open option. In conclusion, the capital structure flexibility demand could be measured from the size of firm as this following equation;

$$CSF_2 = \text{Firm size} \quad (2)$$

Unfortunately, as mentioned, the size of a firm are explanatory variables positively correlated with the level of debt. However, in firms, they prefer to invest in total liquidity assets and illiquidity assets as fixed assets. Inside this fixed assets, it contains the kinds of tangible assets that it is a well indicator for firm leverage in firm. Similarly, Robert and Hunter (1995) and O'Brien and Vanderheiden (1987) have studied the influence of this indicator on the debt ratio in firms. They find that firms alternatively own fixed tangible assets because firms would like to appreciate creditors as guarantee that it will allow them to recover their funds in the case of financial distress experienced by the borrower corporation. Therefore, increasing the percentage of tangible assets in the total assets will be extending the level of debt in this situation would be something perfectly normal (Nivorozhkin, 2005). Additionally, according to the pecking order theory, firms with high liquidity levels can normally use their liquidity to finance their investments that the liquidity of a company should exercise an impact on the debt ratio (Ozkan, 2001). In conclusion, the investment in all kinds of total assets could represent the capital structure flexibility as well. Therefore, the equation for measurement of the capital structure flexibility should be stated as following:

$$CSF_3 = \text{Total assets} \quad (3)$$

Fourthly, firms' demand for capital structure flexibility is also associated with cash holdings relative to total assets. Indeed, Keynes (1936) describes the benefits of holding cash as the transaction cost motive and the precautionary motive. The transaction cost motive implies that by holding cash, a firm can save transaction costs to raise external capital or can avoid having to liquidate assets (Opler et al, 1999). The precautionary motive implies that cash holdings safeguard against the inability of constrained firms to obtain funds when valuable opportunities arise (Almeida et al, 2004; Almeida and Campello, 2006; Faulkender and Petersen, 2006) or when debt payment is due (Acharya et al, 2007; Faulkender and Petersen, 2006). But large cash holdings incur higher costs since normally cash have no additional return to the opportunity costs forgone. However, they are exposed to a risk of inefficient uses when the firm does not have enough investment opportunities (Jensen and Meckling, 1976). Thus, firms would balance the costs and benefits of holding cash. The marginal value of cash will be very high for developing firms that have uncertain future investment opportunities while having low internal funds and facing greater financing constraints. Consistently, with this argument, previous studies find that firms with more growth opportunities, riskier cash flows, and limited access to capital markets hold more cash. Therefore, cash flow-to-value ratio as the operating cash flow divided by market value of assets as a proxy for the demand for capital structure flexibility. Growth firms with many investment opportunities are likely to have low cash flow-to-value ratios, while mature firms are likely to have high cash flow-to-value ratios due to large operating cash flows and diminishing growth opportunities.

$$CSF_4 = \frac{\text{Operating Cash flow}}{\text{Market value}} \quad (4)$$

Finally, a firm's dividend payout ratio as a proxy for its capital structure flexibility demand as well. DeAngelo et al., (2007) suggest that large dividend payouts serve as an empirical indicator of a mature firm that generally not be feasible for firms, and thus have not attained high profitability. Grullon et al., (2002) also present a maturity hypothesis which suggests that a dividend increase indicates a firm's maturity. In contrast, Fazzari et al., (1987) document that firms with limited of financing have significantly lower payout ratio. Therefore, by measuring the dividend payout ratio could represent the capital structure flexibility that it could be stated as this following equation.

$$CSF_5 = \frac{\text{Dividend}}{\text{EAT}} \quad (5)$$

Independent variable

By measuring independent variables, researcher applies the formulas based on the previous researches from literatures reviews of the firm possibility in distress. Researcher finds that there is a significantly positive impact of firm sustainability performance on firm value in term of the migration of environmental and social responsibility into corporate strategies and practices, and thus reduced firm risk and promotes long-term value creation (Yu and Zhao, 2015). However, a firm's capital structure also impacts a firm sustainability that it could be represented by debt ratio. Accordingly, a firm could alter its optimal debt levels, operate at the higher efficiency of sustainability with access to cheaper capital, and help manager maximize firm value (Lindkvist, 2020). Also, the capital structure is the one of the financial factors influenced in the sustainability of firm growth (Badokina et al., 2021). Thereby, firm sustainability has become a widely accepted in both companies and society in general that it is set up as the main objective of management by corporate governance. The objective of firm sustainability is to substitute the primary target of increasing the sustain value of the enterprise from the sustainable value creation. Thus, the measurement of firm sustainability should refer to a time dimension and a scope dimension (Gunther et al., 2016). For time dimension, it refers to meet the current needs without the compromising the ability of future generations to its own needs (Gleibner et al., 2022) while it must ensure that both organizations and individuals adequately address all three goals for scope dimension including social, ecological, and financial sustainability (Elkington, 2004). However, the social and ecological not only captures environmental and issues but also those of governance. Unfortunately, the firm sustainability should be measured as financial sustainability in this research.

The probability of survival

As mentioned about sustainability management, a measurement concept for financial sustainability is much important for risk management (Lenssen et al. 2014), especially for the strategic risk governance approach (Stein and Wiedemann, 2016; Hiebl et al. 2018; Hiebl 2019). Nowadays, risk management has been evaluated in terms of its contribution to firm value (Grace et al., 2015; McShane et al., 2011), and thus firm value only partially records risk management goals because it does not incorporate risk-limitation goals. Similarly, Gieibner et al. (2022) propose a measurement concept for financial sustainability that is derived from the general understanding of the term of risk-averse economic agents with an affinity towards sustainability that assume long-term oriented and examine how high financial sustainability affects stock returns. Thereby, the measurement of firm sustainability should be based on the company's ability to survive such for long term that researcher focuses on a method of estimating the probability of failure as the rating of forecast. For the research project, researcher measure the probability of survival by referring to the empirical study by Blum et al. (2005) and Bemann (2007), that a logistical function is basically based on the previous research findings by comprising two indicators which are the equity ratio (ER) and the total return on capital employed (ROCE) to estimate the probability of failure. However, for

adaptation of this empirical study, the probabilities of survival should be the probability that left over from the probability of failure that it could be state as this following formula;

The probabilities of survival

$$= 1 - 0.265 \\ 1 + e^{-0.41 + 7.42(ER) + 11.2(ROCE)}$$

The Altman's Z-score

Altman's Z-score is widely acceptable measurement of firm future position as explained by the stakeholder co-investment theory. Accordingly, Svabova and Durica (2019) indicates that firms' activities basically lead firms for being exist in sustainability that Beaver (1966) has distress prediction calculation through ratio analysis and applied univariate analysis which is traditional method for interpretation of financial ratios. Later version, a statistical tool as multivariate discriminant analysis has been used more efficiency with five ratios to measure a firm's failure, called "Altman's z-score" (Altman, 1968). According to Altman's z-score, it is found as the most significant variable to explain the distress position of firms (Affes and Hentati-Kaffel, 2019) because it represents the deviation of firm's ability for survival in future position. Continuously, Altman' Z-score model has been often updated by Altman (1983) that recently, the market value is replaced by book value of equity that it has been examined in this updated model, that it is an accuracy of the model is 96% (Affes and Hentati-Kaffel, 2019). Therefore, in this research, researcher uses the Altman's Z- score to measure firm survival as known that Altman's Z-score is the most acceptable during this decade. Inside the model, it is implied the five variables based on financial ratios that covers the measurement of a firm's level of earnings risk exposure and a firm's attractive risk profile. The Altman 's z-score model is represented as this following formula.

The Altman 's Z-score

$$= 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.420X_4 + 0.998X_5$$

Which are; X_1 = Working capital/Total assets, X_2 = Retained Earnings/Total Assets, X_3 = Earnings before interest and taxes/Total assets, X_4 = Book value of equity/Total Liabilities, X_5 = Sales/Total assets (Altman, 1983).

Statistic Techniques

Statistics

This research is employed several statistic techniques with correlation analysis and simple regression analysis. The models of the relationships are depicted as follows.

$$\text{Eq. 1: } CSF_1 = \alpha_1 + \beta_1 PS + \beta_2 AZ + \varepsilon$$

$$\text{Eq. 2: } CSF_2 = \alpha_2 + \beta_3 PS + \beta_4 AZ + \varepsilon$$

$$\text{Eq. 3: } CSF_3 = \alpha_1 + \beta_5 PS + \beta_6 AZ + \varepsilon$$

$$\text{Eq. 4: } CSF_4 = \alpha_1 + \beta_7 PS + \beta_8 AZ + \varepsilon$$

$$\text{Eq. 5: } CSF_5 = \alpha_1 + \beta_9 PS + \beta_{10} AZ + \varepsilon$$

Results

Descriptive Statistics and Correlations Matrix

As results, the descriptive statistics and correlations among variables are shown in Table 1. It shows that there are not the potential problems relating to the multicollinearity in the intercorrelation among explanatory variables since all values are less than .80 (Berry and Feldman, 1985). Based on the statistical results, the correlation matrix reveals significantly relationship among dependent and independent variables that capital structure flexibility demand of earned-to-total capital ratios correlated with probability of survival ($r = .425, p < .01$).

Table 1: Correlations

		EC	FZ	TA	CF	DR	PS	AZ
	Mean	.045	37.128	485509.195	.392	3.203	.055	.556
	S.D.	.041	.280	850984.992	.280	1.983	.119	.541
EC	Earned-to-total capital ratios	1						
	Sig. (2-tailed)							
FZ	Firm size	-.111	1					
	Sig. (2-tailed)	.465						
TA	Total assets	-.298*	.512**	1				
	Sig. (2-tailed)	.044	.000					
CF	Cash flow-to-value ratio	.054	-.356*	-.332*	1			
	Sig. (2-tailed)	.723	.015	.024				
DR	Dividend payout ratio	-.003	.211	.107	.011	1		
	Sig. (2-tailed)	.987	.159	.477	.945			
PS	Probability of survival	.425**	.052	-.075	.068	.150	1	
	Sig. (2-tailed)	.003	.732	.619	.655	.321		
AZ	Altman's Z-score	-.007	-.180	-.204	.058	-.044	-.129	1
	Sig. (2-tailed)	.963	.231	.174	.704	.772	.394	

*. Correlation is significant at the 0.05 level (2-tailed).
 **. Correlation is significant at the 0.01 level (2-tailed).

Simple Regression Analysis

As mention earlier, researcher employs the simple regression analyses to test the hypotheses. Researcher conducts simple regression analyses by comparing capital structure flexibility demand as earned-to-total capital ratios, firm size, total assets, cash flow-to-value ratio, and dividend payout ratio with the probability of survival and of Altman's Z-score as shown in Table 2. Regard to Model 1, the regression result shows that the capital structure flexibility as earned-to-total capital ratios significantly positive related to the probability of survival ($\beta_5 = .147$, $p < .01$), which it confirms partly in support of Hypothesis 1. The result of statistic in Model 2, 3, 4, and 5 also confirms that the capital structure flexibility has insignificantly related to probability of survival and Altman's Z- score. Therefore, the result of statistic does not support Hypothesis 2.

Table 2. The standardization of coefficient value from simple regression analysis of Firm survival

	EC	FZ	TA	CF	DR
	Model 1.	Model 2.	Model 3.	Model 4.	Model 5.
Constant	-.091	50.806	640017.866	.033	3.478
The Probability of Survival: PS	.147**	37.803	-	.144	2.625
	.003	.616	.742	.692	.304
The Altman's z-score: AZ	-.005	-20.752	-	.026	-.236
	.654	.215	.196	.747	.674
R-Squared	.146	-.007	.044	-.039	-.019
N	46	46	46	46	46

EC = Earned-to-total capital ratios

FZ = Firm size
TA = Total assets
CF = Cash flow-to-value ratio
DP = Dividend payout ratio

Discussion and Limitations

In this research, a researcher offers the understanding of how firms can apply the flexibility knowledge in firms' capital structure for survival that a researcher finds that; Firstly, the capital structure flexibility demand as earned-to-total capital ratios affect the firm survival positively with the probability of survival. Accordingly, a probability of survival indicates the chance of outstanding in business in long time that several authors have related firms' investments to leverage. For instance, Whited (1992) states that firm investments are more sensitive to cash flow in firms with high leverage than in firms with low leverage same as the study by Cantor (1990). Cantor confirms that investment is more sensitive to earnings for highly levered firms while Opler and Titman (1994) find that sales growth is lower for firm, especially when a firm is so lying within distressed industries. These researches may significantly support that a high leverage may be caused a high chance of survival in long run but in contrast, there is no specific what level of leverage should be the optimal that it must be vary in individual industries. Possibly, the flexibility of capital structure should be pushing a firm to reach the high rate of earned-to-total capital ratios that finally, take a firm to a high probability of survival as research results.

Secondly, the capital structure flexibility demand as earned-to-total capital ratios does not affect the firm survival based on the Altman's Z-score. Accordingly, Edward Altman published about the predictor of bankruptcy that the predictor is a statistical model that combines five financial ratios to produce a product, called a Z-score. However, Altman also cautions that his model has limitations in its applicability to different business entities with the same prediction accuracy (Altman and Hotchkiss, 1993). Therefore, it is possible that the results may exist differently because the mixture industries of sample as SET50 are selected from vary businesses. Additionally, as literature reviews, Altman's Z-score model can also be applied to modern economy to predict distress and bankruptcy as short period as one, two, or three years in advance (Anjum, 2012). However, the measurement for firm sustainability in this research, it takes secondary data longer than three years in advance. Consequently, it indicates that Altman's Z-score model should not be used for prediction the failure in sustainability which it should not be more than three years in advance.

Thirdly, the capital structure flexibility demand as firm size does not affect the firm survival with the probability of survival and with the Altman's Z-score. Frankly, there is little evidence that the ability of firms to survive subsequent its entrance. Accordingly, Hall (1987) and Evan (1987a; 1987b) find that there is not only do smaller firms have significantly higher growth rates, but they also have a substantially greater weakness to exit industry than do their larger ones. Thereby, firm survival tends to add more enterprise age (Phillips and Kirchoff, 1989), and thus this research, a sample of large aging firm has been used to test a firm survival. Consequently, it may indicate a lower growth rate but still stand in business that enterprise age firm may be insignificant relate firm size to firm survival.

Fourthly, the capital structure flexibility demand as total asset does not affect the firm survival with the probability of survival and with the Altman's Z-score. Possibly, the existence of financial limits can obviously have important effects on the firm's ability to grow and

maintain in business. Regarding to the study by Carpenter and Petersen (2002), they find that asset growth is indeed limited by the availability of internal finance, and thus firms have to raise funds from external resorts. In fact, it could represent a higher growth rates of assets but not in the views of financial resorts. Thus, the capital structure flexibility demand as total asset does not always show the relationship on the firm survival with the probability of survival and with the Altman's Z-score since it displays only total assets sides but not represents the sources of funds.

Fifthly, the capital structure flexibility demand as cash flow-to-value ratio does not affect the firm survival with the probability of survival and with the Altman's Z-score. Accordingly, the study by Devereux and Schiantarelli (1990), which reports a higher cash flow coefficient for larger firms, even after controlling for sector heterogeneity. However, it is only with the work by Kaplan and Zingales (1997) that the usefulness of investment-cash flow sensitivity as a measure of financial constraint has been definitely questioned. Additionally, by exploiting qualitative information from financial statements of firms classified as constrained in Fazzari et al. (1988), the authors show that less constrained firms display substantially higher investment-cash flow sensitivity. They conclude that the latter can no longer be regarded as a useful measure of financial constraint. Since then, other authors have reported evidence of a negative relation between investment-cash flow sensitivity and financial constraints such as Kadapakkam et al. (1998); Cleary (2006)). Possibly, the cash flow-to-value ratio may not be clearly show the obvious direction between the capital structure flexibility and firm survival.

Lastly, the capital structure flexibility demand as dividend payout ratio does not affect the firm survival with the probability of survival and with the Altman's Z-score. Accordingly, Fazzari et al. (1988) claim that firms with limitation of dividend payout ratios display higher investment-cash flow sensitivity. They also claim that dividends are a residual decision in firm strategy and, under the assumption that external finance is costlier than internal funds, paying high dividends in the presence of profitable investment opportunities is not consistent with profit maximization. Hence, high dividend payout ratios signal the absence of financial constraints. Big and mature firms are likely to find easier access to external funds, as it should be easier to collect information on them compared to young and small enterprises. Similarly, membership in a larger conglomerate should facilitate market access both because of the signaling exercised and because the single firm can likely receive funds from its headquarters. Also, the mere existence of a bond rating (even irrespective of the rating itself) can signal a commitment of the firm vis-à-vis financial markets. Similarly, the existence of a dominant shareholder is seen as a way to reduce the agency problem with management and therefore to act as a guarantee toward external investors. Other papers, namely Becchetti and Trovato (2002) and Savignac (2006), use survey data whereby firms themselves give a self-assessment of their difficulty to access external financial funds. Therefore, the capital structure flexibility demand as dividend payout ratio may not indicate the clarify relationship on the firm survival with the probability of survival and with the Altman's Z-score.

Conclusion

In summary, capital structure flexibility could be critical procedure to lead a firm for being survival from the probability of survival. Researcher offers knowledge associated with the antecedences of capital structure flexibility and firm survival. This finding suggests that firms' CFO require to understand the flexibility of optimal capital structure to save a firm for survival in future contingencies. As result, a firm would be survived by modify it capital structure that must be appropriated for the best optimal at any unplanned events such as covid-

19 crisis or any crisis. Hopefully, this manuscript will be benefit and offer to an ongoing discussion on utilizing new way of the antecedents of capital structure providence in a firm.

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