

MODERATING EFFECT OF FIRM SIZE ON THE EFFECT OF PROFITABILITY ON CAPITAL STRUCTURE IN THE PECKING ORDER THEORY PERSPECTIVE

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Keywords :

Profitability, Capital Structure, Leverage , Firm Size, Pecking Order Theory .

Abstract

This paper aims to examine (1) the effect of profitability on capital structure and (2) the moderating effect of firm size on the effect of profitability on capital structure in the perspective of Pecking Order Theory . Based on the Pecking Order Theory , when a company needs funding to finance its investment, the company will prioritize its internal funding sources (retained earnings) first, and when the internal funding sources are insufficient, then the company will use external funding sources. When a company uses external funding sources, the company will prioritize sources of funding from debt, only then will the company use equity shares. In the perspective of Pecking Order Theory , profitability has a negative effect on capital structure (level of leverage or level of use of debt), which means that the higher the profitability of the company, the lower the level of leverage of the company. The theoretical explanation is that the higher the company's profitability, the higher the company's retained earnings potential. Companies that have high retained earnings potential will tend to finance their investments using retained earnings, so these companies will have a low level of leverage or level of debt use. In the perspective of the Pecking Order Theory , firm size will weaken the negative effect of profitability on the level of leverage . Companies with large sizes have low information asymmetry so that it is easier to get external funding from debt. Therefore, the negative effect of profitability on the level of leverage will be weaker in large companies compared to small companies.

I. INTRODUCTION

Financial management is good fund management related to efforts to allocate funds in various forms of investment as well as efforts to collect funds for investment financing. Financial management plays a very important role in a company because all functions in a company, including marketing, human resources, production and other functions, always have financial implications, Brigham & Houston (2004:6). Therefore, all companies need to carry out financial management properly.

In the perspective of financial management, the company's goal is to maximize the value of the company, which also means maximizing shareholder wealth. The company will try to maximize the wealth of its shareholders by carrying out activities that can increase its share price (Ross et al., 2002). In a company that has *gone public*, the value of a company is reflected in the price of its shares traded on the stock exchange. If the stock price of a company increases, the value of the company also increases, so does the wealth of its shareholders. Conversely, if the company's stock price decreases, the value of the company decreases and the wealth of its shareholders also decreases. The goal of maximizing corporate value must underlie all decisions taken within the company.

One of the important decisions that must be made by a financial manager in achieving the goal of maximizing firm value is the funding decision (Damodaran, 2001: 8). The funding decision is a decision regarding how much debt is used compared to equity in financing a company's investment. The purpose of the funding decision is to determine the optimal level of capital structure, namely the level of debt and equity mix that can maximize the value of the company. In taking a capital structure policy, a company needs to consider various factors in order to obtain a level of capital structure that can maximize firm value.

One of the important factors influencing the company's capital structure decisions is profitability (Setiawan et al., 2022; Mangesti Rahayu And Saifi, 2020; Chen et al., 2021). Profitability is one of the important financial ratios for a company, which shows how much the company's ability to generate profits. The higher the profitability of a company, the greater the company's ability to generate profits. Companies that have large profits will be able to provide internal sources of funds in the form of retained earnings which can be used to fund their investments when the company has good investment opportunities.

One theory that can be used to build a logical argument for the effect of profitability on capital structure is the Pecking Order Theory . This paper intends to examine the issue of the effect of profitability on the company's capital structure in the perspective of the Pecking Order Theory. Using the Pecking Order Theory to analyze the effect of profitability on capital structure is interesting because so far most of the analysis of the effect of profitability on capital structure is based on the mainstream theory , namely Static Trade-off Theory , while the Pecking Order Theory is an alternative theory to analyze the effect of profitability on capital structure.

The second issue studied in this paper is the moderating effect of firm size on the influence of profitability on capital structure in the perspective of Pecking Order Theory . Large company size can reduce company information asymmetry , so companies with large sizes will find it easier to obtain sources of funds from debt at low cost. Therefore, company size will be able to moderate the effect of profitability on

capital structure. In other words, the effect of profitability on capital structure will be different for companies of different sizes.

II. LITERATURE REVIEW

Profitability

Profitability is a measure of company performance that shows the company's ability to generate profits by using its resources. The higher the company's profitability, the greater the company's ability to generate profits. One measure of company profitability that is often used is return on assets (ROA) and returns on equity (ROE) (Setiawan et al. , 2022; Mangesti Rahayu and Saifi , 2020; Chen et al., 2021; Setiawan and Gestanti , 2022; Serghiescu and Vaidean , 2014; and Ali, 2011). ROA is the ratio of net profit divided by total assets, which shows how much a company's ability to generate net profit through the use of its assets. Meanwhile, ROE is the ratio of net profit divided by the company's total equity, which shows how much the company's ability to generate net income from the use of company equity.

Companies that have high profitability are able to utilize and use their assets effectively and efficiently in generating net profit. Conversely, a company that has low profitability indicates that the company is unable to utilize and use its assets effectively and efficiently in generating net profit. Because companies with high profitability are able to generate large amounts of net profit, companies with high profitability will be able to provide internal funding sources in the form of large amounts of retained earnings as well. Therefore, companies that have high profitability have potential sources of internal funds in the form of large retained earnings.

Capital Structure

The capital structure is a mix between debt and equity in funding the company's assets. The size of the capital structure that is commonly used is the leverage ratio or the ratio of the level of use of debt to equity in financing company assets (Mangesti Rahayu And Saifi , 2020; Chen et al., 2021; Serghiescu and Vaidean , 2014; Ali, 2011; and Gosh et al. , 2000). The higher the level of company leverage , the higher the level of use of debt compared to equity in funding company assets. Some leverage ratio measures are debt to equity ratio (DER) and debt to asset ratio (DAR). DER shows the ratio of total debt divided by total equity, which shows the level of use of debt compared to the company's equity. Meanwhile, DAR shows the ratio of total debt divided by total assets, which shows how much debt is used to fund company assets.

Debt is a loan given by creditors to companies . The characteristic of debt is that it has a maturity date and provides fixed income in the form of interest income to creditors. From the company's point of view, debt creates a fixed burden, namely the interest expense paid by the company to creditors. Because the company provides fixed interest income to creditors, creditors bear a low risk of investment in the form of lending to the company. Therefore, financing through debt has a low cost of capital. Meanwhile, equity is a source of funding originating from the issuance of shares and accumulated retained earnings. The characteristic of equity is that it has no maturity date and provides variable income in the form of dividend income and *capital gains* . Funding through the issuance of new shares has a high cost of capital because the income received by stock investors for their investment in the form of ownership of

company shares is not fixed.

Pecking Order Theory

Although *the trade-off theory* has dominated capital structure theories for a long time, in reality there are often phenomena that contradict *the trade-off theory*, namely the number of companies that have high profitability, but have a low *debt ratio* (Brigham & Houston, 2004:488). Therefore, there is another alternative capital structure theory that has received a lot of attention to explain this phenomenon, namely *the pecking order theory*. *Pecking order theory* put forward by Myers (1984) in A article entitled " *The Capital Structure Puzzle* ". For understand theory this, considered that a manager finance faced on reality that company need new capital For finance the investment.

According to *pecking order theory*, there is two rule important thing to do done manager company in determine source financing company. (1) use source more internal financing formerly and (2) publish surat the safest value especially before (Ross, at al., 2002: 439). With thus, when company faced on problem financing, then should company use financing from more internal sources first, new use debt And final publish share new. Financing through internal source of profit detained have lowest cost of capital. From the corner From an investor's point of view, debt relatively more No risky compared stock. With Thus, the cost of debt capital is borne company Also more low compared the considered cost of share capital more risky.

Pecking order theory This based on four observation And or assumption about behavior finance company (Megginson, 1997: 339). Four assumption the namely: (1) policy dividend is difficult policy, (2) company more like internal financing from profit detained And depreciation compared financing external Good from debt nor equity new, (3) If A company must take financing external, preferably choose more securities _ safe especially first, (4) If company required use financing external, then company should choose letter valuable based on order *pecking order* as following: very debt _ safe (*very safe debt*), risky debt (*risk debt*), *convertible securities*, shares preference, and share normal.

Myers & Majluf (1984) provide justification theoretical For *pecking order theory* based on *asymmetric information*. Myers & Majluf (1984) added two assumption key again, namely (1) the manager company know more Lots about profit moment This And chance investment company compared with outside investors, and (2) managers considered Act in accordance with interest best for holder stock. Implications from two assumption This is company will difficult get source of funds from outside because of outside investors No believe on the information provided manager about prospect company. If of course company forced must take fund from source external, then company will bear large capital costs. By Because That company more like *financial slack*, that is availability cash And *marketable securities* in large amount.

Ada three implication from *pecking order theory* (Ross, at al., 2002: 440). Three implication these, namely:

- (1) *leverage* level targeted by the company. Different with *trade-off theory*, in *pecking order theory* No there is level targeted *leverage* _ company. Each company determine level its *leverage* _ based on need financially, no based on

the desired target achieved . If company use debt in amount A little No means the *leverage* target low but Because need fund externally low because its internal funding sources big .

- (2) Companies with high profitability will use low debt. Companies that are able to generate high profits will need less external financing. As a result, the company will have a low level of debt. This is different from the implications of *the trade-off theory* , which states that the higher a company's profitability, the greater its capacity to use debt so that it will tend to increase its debt to benefit from tax savings.
- (3) Companies like *financial slack* . *The pecking order theory* is based on the assumption that it is difficult to get financing at a reasonable price. Skeptical (suspicious) investors think that the stock price *is overvalued* if the manager issues a large number of new shares, so this will cause the stock price to fall. Therefore, the company will first use debt. However, the company can only use debt financing before it faces financial difficulties. Therefore, companies like *financial slack* , namely conditions where companies have a large amount of internal cash, so they are not dependent on external financing.

III. DISCUSSION

The Effect of Profitability on Capital Structure in the Pecking Order Theory Perspective

Pecking Order Theory perspective states that in making capital structure decisions, companies will prioritize internal sources of retained earnings compared to external sources of funds either through debt or the issuance of new shares. Therefore, in making capital structure decisions in funding company investments, companies will follow a certain sequence, namely using internal funding sources (retained earnings) first, and if internal funding sources are insufficient, the company will take external funding sources. . If the company takes external funding sources, the company will take funding from debt, and then take funds from the issuance of new shares. Debt funding sources take precedence over the issuance of new shares because from an investor's point of view (owners of capital), investing in debt securities is lower in risk than investing in stocks, so the cost of capital for funding from debt is cheaper than the cost of capital from shares.

In the perspective of Pecking Order Theory , companies that have high profitability are able to provide large internal funding sources in the form of retained earnings because companies that have high profitability are able to generate large amounts of net profit. The greater the amount of net profit that can be generated by the company, the greater the potential retained earnings owned by the company. Retained earnings are a source of internal funds owned by a company to fund its investment. Companies that have a large number of internal funding sources will tend to have a low level of debt (*leverage*) in their capital structure because companies will use more of their internal funding sources to fund their investments, rather than using debt funding sources. Therefore, in the perspective of the Pecking Order Theory , profitability has a negative effect on the capital structure (level of leverage or level of use of debt) of a company. The higher the profitability of the company, the greater the potential for

retained earnings it has, and the lower the level of use of debt owned by the company.

The results of empirical research that support the Pecking Order Theory include Setiawan et al. (2022), Mangesti Rahayu And Saifi (2020), Chen et al. (2021), Serghiescu and Văidean (2014), Ali (2011), Huang and Song (2006), Delcoure (2006), Zou and Xiao (2006), Gaud et al. (2006), Tang and Jang (2005), Du and Dai (2005), Tong and Green (2005), Nivorozhkin (2005), Deesomsak et al. (2004), Omet and Mashharawe (2003), Chen (2004) and Pandey (2001). In these studies, the company's capital structure is measured using the leverage ratio, which is a financial ratio that shows how much debt is used to fund company assets. Therefore, the statement that profitability has a negative effect on capital structure means that profitability has a negative effect on the level of leverage or the level of use of corporate debt.

Mangesti Rahayu And Saifi (2020) examines the effect of profitability on the capital structure of companies in Indonesia. The research sample used in this research is a manufacturing company on the Indonesia Stock Exchange in the 2008-2015 period. The results of their research indicate that profitability has a negative effect on capital structure. Setiawan et al. (2022) also found that profitability has a negative effect on capital structure. Chen et al. (2021) examined the effect of profitability on the capital structure of firms in Argentina. Their research used a sample of 181 companies in Argentina during the 2016-2018 period, and found empirical evidence that profitability has a negative effect on capital structure. Meanwhile, research by Ali (2011) found that profitability has a negative effect on the capital structure of textile companies in India.

Research of Gaud et al. (2006) examined the effect of profitability to capital structure in companies in countries Europe. The sample used is companies in 13 countries _ proceed member *European Union And European Free Trade Association*, that is United Kingdom, France, Germany, Sweden, Italy, Netherlands, Switzerland, Norway, Denmark, Spain, Belgium, Finland and Australia. Amount company to be sample as many as 5074 companies during in 1988-2000. With analysis multiple linear regression obtained results that profitability _ as measured by ROA effect negative significant to capital structure .

Serghiescu and Văidean (2014) examined the effect of profitability on firms in Romania. The sample used is a construction sector company registered in Bucharest Stock Exchange period 2009-2011. The results of this study found that profitability has a significant negative effect on capital structure. Delcoure (2006) researched profitability effect to capital structure in four country Central Europe and East (*Central and Eastern European*) who experienced transition economy from economy centralized to economy market , that is Czech Republic , Poland , Russia And Slovak Republic . The sample used 22 companies in Czech, 61 companies in Poland , 33 companies in Russia and 13 companies in Slovak on period 1996-2002. With use analysis multiple linear regression obtained results that profitability influential negative significant to capital structure .

Huang & Song's (2006) study examines the effect of profitability to capital structure of companies in China . _ With take sample as many as 1200 companies during period 1994 – 2003 obtained results that profitability as measured by ROA effect negative significant to capital structure . Zou & Xiao (2006) researched influence on profitability capital structure of companies in the People's Republic of China. The sample used is companies listed on the *Shanghai Stock Exchange And Shenzhen Stock*

Exchange period 1993-2000 . With analysis multiple linear regression obtained results that profitability influential negative significant to capital structure . Chen (2004) investigated the influence of profitability on capital structure in China. Sample study are 88 listed companies _ on *Shanghai Stock Exchange* And Incoming *Szenzhen Stock Exchange* in “ *The Dow-China 88 Index* ”. Results study it shows that profitability influential negative significant to capital structure .

Research of Tong & Green (2005) examined influence on profitability capital structure . Sample company used _ are 50 companies board of those listed on *the Shanghai and Shenzhen Stock Exchange* period 2001-2003. Results study show that profitability influential negative significant to the capital structure . Tang & Jang (2005) examined the effect of capital structure on *software firms* (companies providing information technology software). The samples used were 27 *software firms* during period 1997-2003. Results study on *software firm* , shows results that profitability have influence negative significant to the capital structure .

Du & Dai (2005) researched influence of profitability on the capital structure of companies in East Asia . Sample study This is nine companies _ East Asian countries which include Hongkong, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand during period 1994-1996 (before happening crisis monetary in Asia). Study This produce findings that profitability influential negative to capital structure .

Deesomsak at al. (2004) examined the influence of profitability on the capital structure of companies in the Asian region Pacific. The sample used is company in four the Asia Pacific countries that comprise it of 294 companies in Thailand, 669 companies in Malaysia, 345 companies in Singapore and 219 companies in Australia during period 1993-2000. With analysis multiple linear regression obtained results that profitability have influence negative significant to capital structure . Pandey (2001) researched influence on profitability capital structure of companies in Malaysia. Sample used as many as 106 companies listed on the *Kuala Lumpur Stock Exchange* during period 1984-1999. Results study show profitability s influential negative significant to capital structure .

Omet & Mashharawe (2003) examined the effect of profitability on capital structure in Middle Eastern countries consisting of Jordan, Kuwait, Oman and Saudi Arabia. The research samples were 51 companies in Jordan, 30 companies in Kuwait, 38 companies in Oman and 29 companies in Saudi Arabia during the period 1996-2001. The results showed that profitability had a significant negative effect on capital structure.

Moderating Effect of Firm Size on the Effect of Profitability on Capital Structure in the Pecking Order Theory Perspective

Based on the Pecking Order Theory , the existence of information asymmetry will cause companies to prioritize the use of internal sources of funds from retained earnings compared to external sources of funds from debt and issuance of new shares (Myers & Majluf , 1984 ; Setiawan et al . al . , 2022; Chen et al., 2021; Serghiescu and Văidean , 2014) . The existence of information asymmetry will cause companies to bear higher capital costs than they should when companies use external funding sources from debt and issuing new shares. This condition will cause companies that have high



information asymmetry to experience financial constraint , namely the condition in which the company faces financial constraints in obtaining external funding at a reasonable cost.

Large companies have a low level of information asymmetry because large companies are generally very well known by the public and have a lot of information that is widespread in the community. Therefore companies with large sizes, will face financial levels low constraints . Large companies will be better able to obtain external sources of funding at a reasonable cost, both from debt and from issuing new shares. Investors will not require a higher rate of return than they should when they invest their money in large companies either in the form of loans or equity investments. In other words, large companies will bear lower capital costs than small companies .

In the perspective of the Pecking Order Theory , firm size weakens the negative effect of profitability on capital structure. Companies with large sizes have a low level of information asymmetry, so they face low constraints when taking external funding through debt. Large companies are able to obtain external financing from debt at a reasonable cost when their internal funding sources are insufficient to fund their investment projects. Therefore, the negative effect of profitability on the level of use of debt in the company's capital structure will be weaker in large companies than in small companies.

IV.CONCLUSION

Profitability is one of the important factors considered by management in making decisions on the company's capital structure, namely the decision to take funding sources whether from debt or company equity to fund company assets. Profitability is a financial ratio that shows a company's ability to generate profits, which is usually measured by return on assets (ROA and returns on equity (ROE). The capital structure is the mix between debt and equity in funding the company's assets, which is usually measured by the leverage ratio or the ratio of the use of debt, namely debt to assets ratio (DAR) and debt to equity ratio (DER). The higher the level of leverage , the higher the level of use of debt in the capital structure.

In the perspective of the Pecking Order Theory , companies that have high profitability will tend to have low levels of debt. The argument built is that companies that have high profitability are able to generate large amounts of net profit, so that they have the potential for retained earnings as a source of large amounts of internal funds as well. Companies that have large internal funding sources will tend to use their internal funding sources first when owning and implementing profitable investment projects. Therefore, companies that have high profitability will tend to have a low level of debt in their capital structure because companies will tend to use internal funding sources to fund their investments, and not use debt. Thus, in the perspective of the Pecking Order Theory , profitability has a negative effect on capital structure (leverage).

In the perspective of the Pecking Order Theory , company size weakens the negative effect of profitability on the company's capital structure (leverage). This means that the negative effect of profitability on capital structure is weaker in large companies than in small companies. The argument built is that large companies have a low level of information asymmetry, so they are able to obtain external funding through debt at a lower cost than small companies. Companies with large sizes have low

financial constraints because information about large companies is generally widely available in the community and easily accessible to investors in the capital market.

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