# A Systematic Literature Review of the Pecking Order Theory on Financing Decisions

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Abstract: This study is a Systematic Literature Review (SLR) that aims to evaluate the application of Pecking Order Theory (POT) in corporate financing decisions published between 2020 and 2025. The article selection process was conducted using the PRISMA 2020 protocol, with relevant articles selected through a search in the Scopus database, based on inclusion criteria that included: time range (2020–2025), field of study (Business Management and Accounting), document type (article), keywords (Pecking Order Theory), language (English), and open access status. Of the total 1027 articles found, 31 articles met the inclusion criteria and were used as research objects. The results showed that POT theory remains relevant in explaining corporate financing behavior, especially in developing countries, although some findings indicate a combination with other theories, such as Trade-Off Theory (TOT). Empirical findings reveal that factors such as profitability, liquidity, company growth, and tangible assets have a significant influence on the order of corporate funding preferences, which begins with the utilization of internal funds, followed by debt, and finally the issuance of new shares. This study also reveals that although POT is widely applicable, its application shows variability influenced by factors such as economic context, regulations, and company characteristics.

**Keywords:** Pecking Order Theory (POT), Financing Decisions, Capital Structure, Trade-Off Theory (TOT), Systematic Literature Review (SLR).

#### 1. INTRODUCTION

Financing decisions are one of the fundamental aspects of financial management that determine how companies obtain funds to support their operational and investment activities. According to classical finance theory, financing decisions are directly related to a company's capital structure (Rocha & de Camargos, 2024). Capital structure is defined as the relative proportion between long-term sources of funds, both from own capital and external loans (Durand, 1952; Modigliani & Miller, 1958). Capital structure is an important aspect of corporate financial management because it is directly related to financing decisions, risk, and the future value of the company. The right combination of debt and equity can affect the cost of capital, rate of return, and financial stability of an entity.

The debate regarding the relevance of financing decisions to company value has been ongoing for a long time in financial literature. The traditional approach proposed by Durand (1952) and Modigliani and Miller (1958) states that capital structure affects company value due to differences in costs and risks between the use of debt and equity. Conversely, Modigliani and Miller (1958) argue that in perfect market conditions without taxes and bankruptcy costs, capital structure is relevant to company value because company value is determined solely by its ability to generate cash flow and its business risk. However, in

practice, market conditions are not always perfect, and the information available to managers and investors is often asymmetrical.

This information asymmetry is the basis for the emergence of new theories such as the Trade-Off Theory (TOT) and the Pecking Order Theory (POT). TOT introduced by Kraus and Litzenberger (1973), explains that companies seek a balance between the tax benefits of using debt and the costs of bankruptcy. Meanwhile, POT was proposed by Myers and Majluf (1984). This theory explains that companies have a hierarchy of preferences in choosing funding sources: first, using internal funds (retained earnings). Second, using debt, and finally, issuing new shares. This preference is driven by management's desire to avoid negative signals that may arise from issuing shares, as investors may interpret this action as an indication that the company's shares are overvalued. Thus, financing decisions are not only technical in nature, but also contain dimensions of information and market perception. These two theories are the most dominant in explaining corporate financing decisions and capital structure.

Over the past two decades, POT has been the subject of empirical research in various countries, including Asia, the Middle East, Europe, and Latin America. Although the basic principle is simple, empirical evidence shows diverse and contextual results, depending on the economic structure, financial regulations, and company characteristics. Therefore, this study aims to compile a systematic literature review (SLR) of the empirical results of POT published

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between 2020 and 2025, in order to assess its consistency in explaining corporate financing behavior.

#### 2. LITERATURE REVIEW

#### 2.1. Pecking Order Theory (POT)

POT was first introduced by Myers and Majluf (1984) as a response to the weaknesses of the perfect market assumption put forward by Modigliani and Miller (1958). This theory is based on the existence of information asymmetry between company managers and investors, whereby managers have better information about the value and prospects of the company than outsiders. As a result, every financing decision made by a company contains certain signals that will be interpreted by the market. According to this theory, companies do not have an optimal capital structure in the traditional sense, but follow a hierarchy of preferences in selecting sources of financing. The hierarchy begins with the use of internal funds (retained earnings) as the first choice, because it does not incur information costs and does not pose a risk of loss of control or ownership. If internal funds are insufficient, the company will then use debt as the second choice, because the issuance costs are lower and do not cause too many negative signals to the market. Issuing new shares is the last choice because investors often interpret the issuance of shares as a signal that management considers the company's shares to be overvalued, which can lower the share price in the market (Rahman et al., 2024).

The POT theory is used to analyze corporate funding preferences in Brazil, emphasizing that financial decisions are not solely influenced by capital structure targets, but rather by the availability of internal funding sources and market risk perceptions. The study confirms that companies tend to avoid issuing new shares and prefer internal funding sources or short-term debt first. This shows that corporate financing behavior in emerging markets remains consistent with POT principles, where information asymmetry and agency costs play a major role in determining the financing order (Rocha & de Camargos, 2023). In addition, POT theory also highlights the importance of agency costs in financing decisions. Managers may be reluctant to issue new shares for fear of losing control over the company's strategic decisions. Therefore, the preference for internal funds is not only due to cost efficiency but also for reasons of managerial control. This theory is relevant in explaining companies' more conservative behavior towards the use of external financing, especially in countries with low market transparency and high information asymmetry (Guizani, 2020).

However, in the research by Stereńczak and Kubiak (2023), high stock liquidity can reduce the negative effects of information asymmetry, as stock prices become more informative and transparent regarding the company's condition. As a result, companies with more liquid stocks are less reliant on debt to cover their financial deficits. Thus, the POT theory remains an important foundation in explaining the financial behavior of modern companies, especially in emerging markets that still face limitations in transparency and access to capital.

#### 2.2. Trade-Off Theory (TOT)

Unlike POT, TOT is rooted in the thinking of Modigliani and Miller (1963), who introduced the concept of tax shields from the use of debt. TOT states that companies strive to achieve an optimal capital structure by balancing the tax benefits of debt and the costs of bankruptcy or financial distress. According to this theory, the use of debt can increase the value of a company because interest on debt is tax deductible. However, the higher the level of debt, the greater the risk of bankruptcy borne by the company. Therefore, companies will try to find a balance point where the additional benefits of using debt are equal to the additional costs caused by increased financial risk.

In the context of the study by Rocha and de Camargos (2023), TOT is interpreted as the basis for companies to adjust their capital structure towards a certain equilibrium based on changes in market conditions and capital costs. The study shows that some companies in Brazil exhibit behavior that is close to the target adjustment model, where companies with low leverage tend to increase their debt, while companies with high leverage seek to reduce their debt levels. These results align with TOT predictions, which emphasize the importance of balancing risk and return in long-term financing decisions.

In addition, TOT also recognizes the existence of indirect bankruptcy costs, such as loss of customer trust, decreased employee productivity, or increased capital costs due to a decline in credit ratings. All of these factors reinforce the argument that companies will not rely entirely on debt, even though debt provides tax advantages. Thus, companies need to consider a capital structure that can minimize total capital costs and bankruptcy risk simultaneously (Rahman et al.,

#### 2.3. Synthesis of POT and TOT in Financing **Decisions**

provide These two theories complementary perspectives in understanding financing decisions. TOT explains that companies have optimal capital structure targets that are achieved by balancing the benefits and costs of debt, while POT emphasizes that financing decisions are based more on order of preference rather than on the search for a specific capital structure. In practice, corporate financing behavior often exhibits characteristics of both theories.

Research conducted by Rocha and de Camargos (2023) confirms that although there is strong evidence supporting POT, some corporate behavior can also be explained by TOT, especially when companies face the need to adjust to long-term leverage targets. Thus, understanding these two theories is important for explaining the dynamics of corporate financing decisions in the context of imperfect and high-risk markets such as those in developing countries.

#### 2.4. Determinants of Capital Structure

In general, research shows that factors such as profitability, company size, tangibility (tangible assets), growth, and liquidity are closely related to financing decisions. Profitability has a negative effect on leverage in many studies, indicating that more profitable companies tend to use internal funds first (Nga & Nguyen, 2020).

#### 1. Profitability

Profitability is defined as a company's ability to generate profits from its operational activities. In the context of capital structure, companies with high profitability tend to use internal financing (retained earnings) before seeking external sources. According to POT, the greater the profit earned, the less the company needs debt. This is because high profits reduce dependence on expensive external financing and the risk of information asymmetry.

#### 2. Firm size

Firm size describes the scale of operations or the total assets owned. Large firms tend to have easier access to external financing because they are considered more credible and have a lower risk of default. However, in POT, firm size also affects the level of information asymmetry: small firms find it more difficult to obtain external financing because their financial information is less transparent.

#### 3. Tangible Assets

Tangible assets refer to the proportion of fixed assets (such as buildings, machinery, or land) that can be used as collateral to obtain debt.

According to TOT, the higher the value of tangible assets, the greater the company's ability to bear debt risk because these assets can be used as collateral. However, in the POT framework, tangible assets have a dual role. High tangible assets can reduce information asymmetry and increase the company's credibility, making it easier to obtain funds at a low cost.

#### 4. Growth

Company growth is measured by increases in sales, assets, or profits over a certain period. In POT, companies with high growth rates usually face greater funding needs to support expansion. Since internal funds are not always sufficient, companies with rapid growth tend to increase their use of debt. However, Myers (1984) also states that fast-growing companies often avoid long-term debt due to the risk of future bankruptcy.

#### 5. Liquidity

Liquidity reflects a company's ability to meet its short-term obligations through current assets. In the POT framework, high liquidity means that a company has sufficient internal funds, so it does not need to seek external financing. In other words, a liquid company will have a lower debt ratio. A study by Stereńczak & Kubiak (2023) found that stock liquidity also plays a role in capital structure decisions—the more liquid a company's stock is, the greater the tendency to issue equity due to lower information costs.

#### 3. METHODOLOGY

This study used a Systematic Literature Review (SLR) approach with reference to the PRISMA 2020 protocol. The literature search process was conducted on the Scopus database. This can be seen in Figure 1 below:

Of the total 1027 articles found, 31 articles met the inclusion criteria and were used as research objects. This selection process followed the PRISMA flowchart, which ensured transparency and objectivity in the selection of articles. A total of 31 articles met the criteria, covering research in Asia (Indonesia, Vietnam, Malaysia, Saudi Arabia), Europe (United Kingdom, Portugal, Kosovo), and Latin America (Brazil, Mexico, Peru). The analysis was conducted using a thematic and comparative cross-regional approach to identify the consistency of the theory and the context of its application.

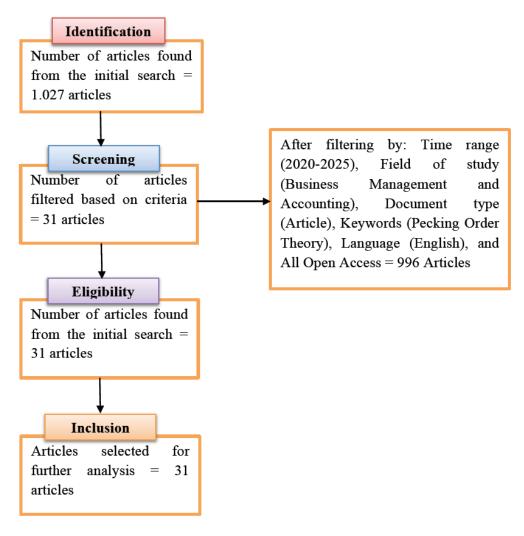


Figure 1: Inclusion criteria.

The inclusion criteria in the figure above include:	
Time Range	: Articles published between 2020 and 2025.
Field of Study	: Articles focused on Business Management and Accounting.
Document Type	: Only journal articles are accepted.
Keywords	: Articles containing the keyword "Pecking Order Theory".
Language	: Only articles written in English are included.

#### 4. RESULTS AND DISCUSSION

### 4.1. Research Trends on Pecking Order Theory (2020-2025)

Over the past five years, the number of scientific publications discussing Pecking Order Theory (POT) has increased significantly. Based on a review of 31 articles, most of the research is concentrated in developing countries, such as Indonesia, Malaysia, Vietnam, Saudi Arabia, Brazil, and Mexico, as well as in countries undergoing economic transition, such as Kosovo and Portugal. This indicates a strong academic interest in testing the validity of classical theory in contexts undergoing structural development of financial markets.

According to Pinillos et al. (2025), companies in Latin America show partial support for the Pecking Order theory, where internal funding sources are still prioritized. However, the rate of correction towards an optimal capital structure is slow, only about 5-6% per year. This is due to limited access to long-term financing and dependence on domestic markets. Meanwhile, Rocha and Camargos (2023) in a study in Brazil found that corporate financing decisions are influenced by debt capacity and capital market conditions. When internal profits are insufficient, companies prefer short-term debt over equity, in accordance with the POT preference order. However, this behavior is not universal because some large companies with good reputations have begun to incorporate TOT principles in the long term.

In Southeast Asia, Yulianto et al. (2023) emphasize that information asymmetry is the most dominant factor in explaining the financing behavior of Indonesian companies. Empirical results show a strong negative relationship between profitability and leverage, proving that retained earnings are used first before debt or equity is issued. The same was found in Nga and Nguyen's (2020) study in Vietnam, where construction sector companies showed that high leverage reduced profitability, so financing decisions were directed to avoid excessive debt risk. Overall, from the entire 2020-2025 research period, the majority of empirical results support the basic POT assumption, although many studies also show a combination of hybrid behavior between POT and TOT. This phenomenon shows that modern financing decisions are no longer linear, but rather dynamic and contextual.

#### 4.2. Internal Factors Determining Capital Structure

#### 1. Profitability

Profitability is the variable that most consistently shows a negative relationship with leverage. These results support the basic argument of Myers and Majluf (1984), that companies with high profits prefer to use internal funds to finance their investments.

Research by Qerimi et al. (2024) on SMEs in Kosovo shows that companies with high net profits tend to reduce their debt ratios because they are able to finance their working capital needs from retained earnings. Research by Pinillos et al. (2025) in Latin America also supports this finding, where profitability has a significant negative effect on leverage in almost all industrial sectors. High-performing companies choose internal funding sources because the cost of capital is lower and the risk of information asymmetry is reduced. However, Shaik's (2024) study of Saudi Arabian energy companies provides a different perspective. In the context of energy industry, profitability actually increases the proportion of long-term debt because this sector has large tangible assets that can be used as collateral. These findings indicate that the effect of profitability on capital structure also depends industry on characteristics and country context.

#### 2. Firm size

Firm size has a significant effect on the ability to obtain external financing. In the Pecking Order theory, large companies have lower information asymmetry, making it easier for them to obtain loans with lower capital costs.

The results of research by Stereńczak and Kubiak (2023) show that large companies with liquid shares on the stock exchange are more likely to use equity, while small companies still rely on bank financing. Research by Djabang & Shubita (2025) on British SMEs found that 89% of respondents preferred the funding order of internal, debt, equity, as predicted by POT. However, large companies showed variations in behavior, where access to capital markets meant that issuing equity was not always avoided. Similar results were found by Pham & Hardy (2023) in Portugal, who observed medium-sized family businesses. They showed that size is positively related to leverage because larger companies have high credibility in the eyes of lenders. Thus, the company size variable shows a dual relationship: positive towards leverage in the large sector, but negative in the SME sector.

#### 3. Tangible assets

Tangible assets have a strong influence on financing decisions, as they can be used as collateral to obtain loans. Research by Mateev et al. (2013) and Nga & Nguyen (2020) shows that companies with a high proportion of fixed assets have greater leverage. This is because tangible assets reduce creditor risk and strengthen the company's bargaining position in the capital market. However, Rocha & Camargos (2023) found that in companies with modern and transparent accounting systems, tangibility actually reduces debt requirements because capital efficiency increases. In the context of developing countries, the effect of tangibility tends to be stronger due to the limitations of non-collateralized financing instruments. Botta's (2022) study on the dynamics of non-linear capital structure in Europe also shows that the effect of tangibility is asymmetric: it increases during phases of economic expansion but weakens during periods of financial crisis.

#### 4. Growth

Companies with high growth rates require large amounts of capital for expansion, which is generally obtained through debt when internal funds are insufficient. Research by Qerimi *et al.* (2024) proves that growth has a positive effect on leverage, supporting the POT assumption that funding needs increase with expansion. However, Yulianto *et al.* (2023) found different results in Indonesia, where growth did not have a significant effect on leverage. This is due to companies' preference for internal funding and

financial conservatism due to macroeconomic risks. The results of Gutiérrez-Ponce (2024) on sustainability-oriented SMEs in Latin America show that companies with sustainable growth tend to optimize the combination of internal and external funds, leading to a hybrid pattern between POT and TOT.

#### 5. Liquidity

Liquidity describes a company's ability to meet its short-term obligations. According to POT, companies with high liquidity tend to rely on internal funds. This is evident in the studies by Qerimi et al. (2024) and Stereńczak & Kubiak (2023), which found a negative relationship between liquidity and leverage. However, in large and public companies, stock liquidity has a positive effect on the ability to access capital markets. This study confirms that liquidity does not only reflect cash conditions, but also market confidence.

#### 4.3. External and Contextual Factors Determining **Capital Structure**

In addition to internal factors, macroeconomic conditions, government policies, and financial systems also influence the relevance of POT. Botta's (2022) research in Europe shows that institutional factors and differences in national legal systems cause significant variations in funding behavior. Countries with strong creditor protection are more likely to support the TOT model, while countries with weak capital markets follow the POT pattern. In the Middle East, Shaik (2024) identified the significant influence of oil prices and fiscal policy on the funding decisions of energy companies in Saudi Arabia. When oil prices fall, companies tend to rely on retained earnings and internal cash, while in periods of expansion they increase leverage.

Guizani's (2020) research on Saudi Arabian sharia companies shows that sharia-based financing structures (murabahah and ijarah) form a version of Islamic POT, where interest-free financing is a top priority. In Asia, Nga & Nguyen (2020) and Yulianto et al. (2023) confirm that financial culture and government policy factors also reinforce the application of POT because companies still face high information and regulatory barriers.

#### 5. IMPLICATIONS

#### 5.1. Theoretical Implications

Based on the results of a review of 31 Scopus-indexed articles, it can be concluded that POT theory is still a relevant theoretical framework for explaining corporate financing behavior, especially in developing countries. However, its application is not universal. POT has been found to be most applicable to small and medium-sized enterprises (SMEs), as well as to economies with high levels of information asymmetry and limited access to capital markets. A number of studies, such as Yulianto et al. (2023) in Indonesia and Qerimi et al. (2024) in Kosovo, confirm that companies with high profits prefer internal funds, so that profitability is negatively related to leverage. Meanwhile, studies by Pinillos et al. (2025) in Latin America and Shaik (2024) in Saudi Arabia show that in capital-intensive sectors, such as energy manufacturing, large companies continue to utilize debt due to the ability of their assets to be used as collateral. An important theoretical implication of these results is the need for a dynamic model that can explain cross-sector and cross-country variations. Such a model needs to integrate elements of agency theory, TOT, as well as institutional and corporate governance aspects. Thus, POT is no longer viewed as a static concept, but rather as an adaptive theory that evolves in line with the global economic structure and financial regulations.

#### 5.2. Practical Implications

From a managerial perspective, the findings of this study provide strategic guidance for capital structure decision-making. Financial managers need to consider the order of financing based on capital cost efficiency and information risk. In conditions of high profitability, the use of retained earnings is the optimal choice to avoid stock issuance costs and interest expenses. Conversely, when profits decline, the use of low-interest medium-term debt becomes the best alternative before considering the issuance of new equity. Research by Rocha and Camargos (2023) in Brazil shows that financing decisions that follow POT principles can reduce profit volatility and maintain the stability of a company's cash flow. Similarly, Stereńczak and Kubiak (2023) found that companies with high stock liquidity can balance internal and external funds without disrupting the ownership structure. By understanding this funding hierarchy mechanism, managers can optimize leverage, maintain the company's reputation in the eyes of investors, and minimize the risk of bankruptcy.

#### 6. CONCLUSION

This systematic review concludes that POT still has strong explanatory power over corporate financing behavior in various contexts, especially in developing countries. Empirical evidence shows that profitability, liquidity, and growth variables are the most dominant factors determining the order of financing. Meanwhile, firm size and tangibility influence flexibility in accessing external sources (Grau-Vera & Sogorb-Mira, 2024). However, this theory is not absolute, as many companies exhibit hybrid financing behavior, which is a combination of POT and TOT principles, depending on market conditions, industry risk, and institutional factors (Colombo et al., 2023). Therefore, POT should be understood as an adaptive conceptual framework, not a rigid model. With this understanding, the theory remains an important foundation in modern finance and accounting research, as well as a practical guide for financial managers in managing an efficient, sustainable capital structure that is appropriate to the economic context of each country.

## 6.1. Research Limitations and Future Research Directions

Although this review covers 31 articles from various regions, there are still limitations that need to be considered. First, most studies use a quantitative approach with linear regression models, which do not capture the non-linearity and time dynamics in funding decisions. Second, there are not many studies that examine the integration of POT theory with non-financial factors such as reputation, organizational culture, and environmental governance. For future research, it is recommended that:

- Dynamic panel data methods (such as GMM and quantile regression) be used to test changes in capital structure over time.
- A cross-regional meta-analysis be conducted to measure the strength of POT consistency in developed and developing countries.
- Integrate ESG variables, digital finance, and corporate governance as moderating factors in the Pecking Order model.
- Increase the number of qualitative studies that can explain the context of managerial behavior behind funding decisions.

With this research direction, POT can be expanded into a more comprehensive conceptual model that is relevant to the dynamics of the modern global economy.

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