

# Trade-Off and Pecking Order Theory of Capital Structure in Indonesia: Systematic Literature Review

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## Abstract

This study aims to determine the optimal capital structure that increases firm value, which leads to trade-off theory and pecking order theory in Indonesia with a research period of 20 years.

Research Methodology, Systematic Literature Review. With inclusion restrictions obtained 140 articles, from data from Google Scholar 1,678 articles from 2000 to 2020. We received 114 studies focused on Trade-off Theory and Pecking Order Theory listed on the Indonesia Stock Exchange. We collect data from various national, international journal sites and those indexed by Sinta and Scopus. The data were re-selected for exclusion with notable exceptions, resulting in 12 relevant articles.

The study results indicate that there are differences in management in determining the capital structure in Indonesia. There are also differences in empirical studies of the two theories. It is also known that several factors influence the capital structure in determining the TOT or POT by financial managers in Indonesia.

The conclusion is obtained that a financial manager will choose the trade-off theory when considering the optimal capital structure. When a family manages, the company tends to select the pecking order theory. Recommendations for future researchers to focus on managerial ownership refer to more in-depth agency theory.

**Keywords**— Capital structure, pecking order theory, trade-off theory, debt ratio, systematic literature review.

## 1. INTRODUCTION

Calculation of the optimal capital structure is a topic of discussion among practitioners and academics. Considering that the optimal capital structure can impact increasing firm value (Septantya et al., 2015), a capital structure theory tries to explain the optimal resources between debt and equity because each income has different consequences for the financial manager to consider. Determinants of optimal capital structure are often used among practitioners and academics. This debate is fundamental because optimal capital can increase firm value. There is a theory about the capital structure that seeks to explain the best

financial system between debt and equity because each source has different consequences in financial manager decisions (Sutomo et al. 2020).

In terms of making financing choices, the role of financial managers becomes more critical in the capital structure. The optimal financing mix is not the same from one business to another; according to Umdiana & Sari (2020), the funding pattern can be described theoretically. There are two main theories regarding capital structure: the pecking order theory and the trade-off theory.

A lot of research pecking order and trade-off theory whose results are inconsistent. Gerardo

[2014], Zhang et al, [2007], Azeem et al, [2007], Jarallah et al, [2018], Borgia et al, [2012], Arqawi et al., [2014]. Research that tests the idea of trade-offs and pecking orders, among others, Octavia et al., (2021), (Harjito, 2011), (Culata & Gunarsih, 2012), (Oktavina & Manalu, 2018), (Umdiana & Sari, 2020), (Octavia et al., 2021a), (Chandra et al., 2021), (Hastuti, 2016), (Ratih, 2019), (Mangesti Rahayu et al., 2019), (Simatupang et al., 2019), (Sari et al., 2015), (Neves et al., 2020), (Guizani, 2020), (Wolmarans, 2020), (Nguyen et al., 2020), (Agyei et al., 2020), (Bajaj et al., 2020), (Guizani & Ajmi, 2021).

The motivation to conduct research using a systematic literature review is to collect various previous researchers from fragmentary information from existing research in Indonesia on the structure of funding capital. Second, because of the diversity of research results and test methods, that leads to different conclusions. The variety of research results regarding the explanation of financing behavior in a country causes further testing to be carried out. It is testing the pecking order theory and trade-off theory several times. Research on capital structure in Indonesia dominates the discovery of determinant factors (Tirsono, 2008; Wardianto, 2012; Sari, 2014; Waskito, 2008) and testing of the pecking order theory (Christianti, 2008; Ruslim, 2009). This partially tested the trade-off and pecking order theories and tested both approach's equation. The diversity of testing methods makes various conclusions how to draw from the results of research conducted by researchers, among others; Vanacker & Manigart, 2008; Moy et al. (2013) and approaches by Shyam-Sunder & Myers (1999) and Flannery & Rangan (2006).

Testing the pecking order theory uses a study of the relationship between variables, but it has a weakness because by only looking at the effect of the determinant variable on the capital structure, it cannot assume that the pecking order exists; Furthermore, when there is an inconsistency of influence between variables, conclusions are difficult to realize (Vasiliou, Eriotis, & Daskalakis, 2009). The Shyam-Sunder & Myers (1999) approach underlies the

firm's funding deficit model. If the company has an internal funding deficit, the company will create debt. The funding deficit stems from a lack of internal sources to fund investments and commitment to distribute dividends. Flannery & Rangan (2006) apply a theoretical trade-off test using an adjustment model to determine how quickly the tested company adjusts its debt level. This test uses the approach of Flannery & Rangan (2006) and Shyam-sunder & Myers (1999) to draw theoretical conclusions that better explain the financing behavior of companies listed on the IDX. (Wiagustini et al., 2017).

To explain the behavior of sources, the authors present a systematic literature review on capital structure with trade-off theory and pecking order theory in public companies listed on the Indonesia Stock Exchange from 2000 - 2020 with research; First, the structure of management capital structure in Indonesia is different. Second, there are variations in empirical studies on the two theories. Third, to determine the factors that determine the source of decisions in the company's capital structure. With the explanation above, the research questions (RQ) are as follows:

RQ1: What causes differences in management capital structures in Indonesia?

RQ2: Is there a diversity of empirical study results in trade-off theory and pecking order theory?

RQ3: What factors influence the capital structure in determining the manager's TOT and POT according to finance?

## 2. THEORETICAL REVIEW

MM theory (1957 & 1963) became the basis for trade-off theory and pecking order theory. Based on MM theory with two assumptions: agency theory and information asymmetry. Trade-off theory is the basis of agency theory, Hastuti (2016), while pecking order theory is based on information asymmetry. By understanding the behavior of the funding system, the two approaches provide different views.

## 2.1 Structure Capital

According to Honkanen (2019), the company's management continues to maximize its value by deciding whether to finance its operations with internal or external funds. Capital structure theory explains business management basics that make decisions to achieve a capital structure that maximizes firm value. The capital structure is optimal when equity and liabilities are in such a proportion that it maximizes substantial value substantially is very important in determining the value of a company. Modigliani and Miller's theory assumes that firms operate in a perfect market without paying taxes, bankruptcy fees, or trading fees. Moreover, in the trust method, the cost of debt is the same for companies and individuals. Because of this strict assumption, this theory has received a lot of criticism.

Modigliani and Miller's analysis of capital structure yields two different propositions. (Frank & Goyal, 2007). The first is the no-tax proposition which states that it makes no difference whether a company chooses to finance its operations with equity or debt. The assumption is that the company's value without leverage is the same as the value of the company's debt (Ross, Westfield & Jordan 2010, 515 - 516). Second, the no-tax proposition does not affect the weighted average cost of capital (WACC). This means that the value company value remains the same because the company's total debt will grow in the same proportion as the return on equity ratio. (Arnold, 2007)

Due to criticism from various quarters, Modigliani and Miller were forced to revise their theory. In 1963, they relaxed assumptions through the existence of taxes. The results of this revision indicate that the capital structure positively affects profitability. That is, the greater the debt used, the more profitable it. The study outlines the pros and cons of capital structure and its relationship to profitability. Trade-off theory and pecking order theory are two types of theories that are widely used to answer this relationship. Yang et al, (2010) (Chandra et al., 2021).

## 2.2. Trade-Off Theory

The theory developed by Modigliani and Miller is the trade-off theory, Octavia et al. (2021), and the MM theory introduced by Miller (1977), which states that the optimal application of capital can maximize the balance of costs and benefits of debt. The company will continue to increase its debt with more significant tax reductions than the estimated agency costs. Companies must add after-tax debt reductions to use less debt than the estimated agency costs. Otherwise, the company will face a financial crisis (Buvanendra et al., 2016). The proper financing structure can increase the value of the company. Taxes, bankruptcy risk, and use of debt are all factors considered in the trade-off hypothesis. In this situation, debt can act as a tax shield because it can reduce the company's taxes that pay interest to the party providing the debt. They reduce the amount of tax that must be paid by the company (Chirinko et al., 2000).

According to Myers (2015: 481), the trade-off theory is a theory of deciding whether to utilize debt or equity as a trade-off between interest tax shields (debt income) and bankruptcy costs Umdiana & Sari, (2020). According to Brigham (2016: 486), the trade-off theory is defined as follows: "The theory of capital structure that companies exchange tax benefits from debt financing with the risks posed as potential bankruptcy." Given the trade-off principle above, it can be concluded that if a business finances investments with debt, it can benefit from tax advantages on interest payments, which can lower the amount of tax paid by the company. When interest is calculated as an expense and deducted from taxable income, the result is a reduction in taxable income. In addition to the benefits of tax relief, businesses face the possibility of bankruptcy due to too large a debt.

To avoid bankruptcy, a suitable source of money is needed. There are two types of funding sources: internal and external sources. Internally sourced funds are money or capital generated from business operations, such as retained earnings and depreciation. Financial sources originating from outside the business

provided by creditors with equity participation in the company are external sources. In making this choice, financial management should consider and develop a mix of cost-effective sources of money for the company to finance investments and business needs. Kasmir (2010), financial choices regarding the number of funds a business provides, either through credit or equity. Sudana (2011:3) asserts that decisions about the source of money are used to buy assets when it comes to financial decisions. There are two types of sources of money: (1) credit funds, such as bank loans and bonds, and (2) equity, such as retained earnings and stocks. Loans and stock funds are examples of sources of funds originating from outside the business, while retained earnings are examples of sources of funds created from within the organization. Meanwhile, according to Van Horne et al. (2009:3), the choice of external financing as a capital structure policy. Financial managers need to examine and analyze a company's mix of cost-effective financial sources to finance its investment needs and business operations. The previous definition can be used to conclude that financing includes identifying the origin of the money to be used and deciding the best considerations in finding the most profitable source of funds for the decision.

### **2.3. Pecking Order Theory**

Myers (1984) first initiated the pecking order theory when considering the problem of information asymmetry between managers and stakeholders. This theory predicts that companies will prefer to use internal funds to generate profits. If necessary, the company requires external debt. Sardo et al., (2016). If a company uses internal funds to experience a financial deficit, they will prefer to use safe funds, namely debt from equity Morri, (2009) Octavia et al., (2021).

In line with research (Sutomo et al., 2020), Syam-Sunder and Myers (1999) found strong support for the pecking order theory, in contrast to Frank and Goyal (2003). They document weak evidence for the pecking order theory. Pecking order theory from Myers and Majluf (1984) and Myers (1984) extension of POT

theory (Lucas and McDonald, 1990) studies asymmetric information between managers and investors. Managers have more detail about the company's actual value and risk than outside investors. According to Myers (1984), companies finance their activities with retained earnings whenever possible. If the income is not sufficient, then use debt. Only in extreme cases will the company issue new equity financing. Thus can use the order of financial sources; internal sources of funds from current income, short-term securities, debt, preferred stock, and common stock. The pecking order theory predicts that the issuance of common stock is the last alternative source of funding.

Myer's (1984) pecking order theory suggests that firms, first of all, prefer internal sources of finance, and they adjust their target dividend payout ratios to investment opportunities. Suppose a company seeks external finance because of a generous dividend policy, fluctuations in profitability, or unexpected investment opportunities. In that case, it will choose debt (as the safest instrument), hybrid securities such as convertible bonds, and then equity as a last resort. Pecking order theory generally explains why firms rationally let cash flow determine leverage. This suggests that companies turn to debt funds under pressure from internal funding shortages.

An essential survey from Meyers (2003, pp.235) Tusji (2011) documented the pecking order theory with the choice of management financing as follows: (1) Firms prefer internal finance over external (information asymmetry is considered relevant only for external financing), (2) Dividends are "sticky" so dividend cuts are not used to finance capital expenditures, and changes in cash requirements do not affect changes in short-term dividends. Changes in free cash flow (operating cash flow minus investment) appear as changes in external financing, (3) If external funds are required for investment, the company will issue debt before equity. As a requirement for external financing, companies will lower the pecking order, from safe to risky debt and finally equity as a last resort, when the company is sufficiently threatened by financial

distress. If the cash flow generated internally exceeds the capital investment, the company runs a pecking order or hierarchy. Excess cash to pay debts rather than repurchase and discontinue equity, and (4) A firm's debt ratio, therefore, reflects the cumulative requirement for external financing.

### 3. METHODOLOGY

Webster and Watson's (2002) literature review aids theoretical progress, highlighting research studies that reveal areas that require future research (Bajaj et al., 2020). The systematic literature review (SLR) describes the process of conducting a comprehensive review within the scope of the objectives studied by Fink (2005). To overcome the inherent limitations of a general literature review. The SLR helps gather structured results from the existing literature to identify new emerging themes. The SLR technique helps assess the current literature and uncovers considerable gaps for further investigation. Furthermore, the SLR technique helps reduce unwanted bias (Bimrose et al., 2005).

The SLR methodology according to Jabbour (2013), Jesen et al. (2016), Silva et al. (2017), Paul and Singh (2017), Kumar et al. (2017), Prakash et al. (2017), Mahajan et al. (2017) and Tamilmani et al. (2018). suggest steps for using SLRs: first, published articles on the concepts they will consider should be explored in the related databases. Second, reports should be classified according to some rational/logistics code. They design a conceptual framework using classification. Third, the observations derived from the framework should present the main findings using a logistic code. The final and most crucial research gap should be acknowledged to pave the way for prospective studies.

Scientific writing follows the international scientific writing rules of Darmalaksana (2020). To meet international writing standards, use applications that can be applied in scientific

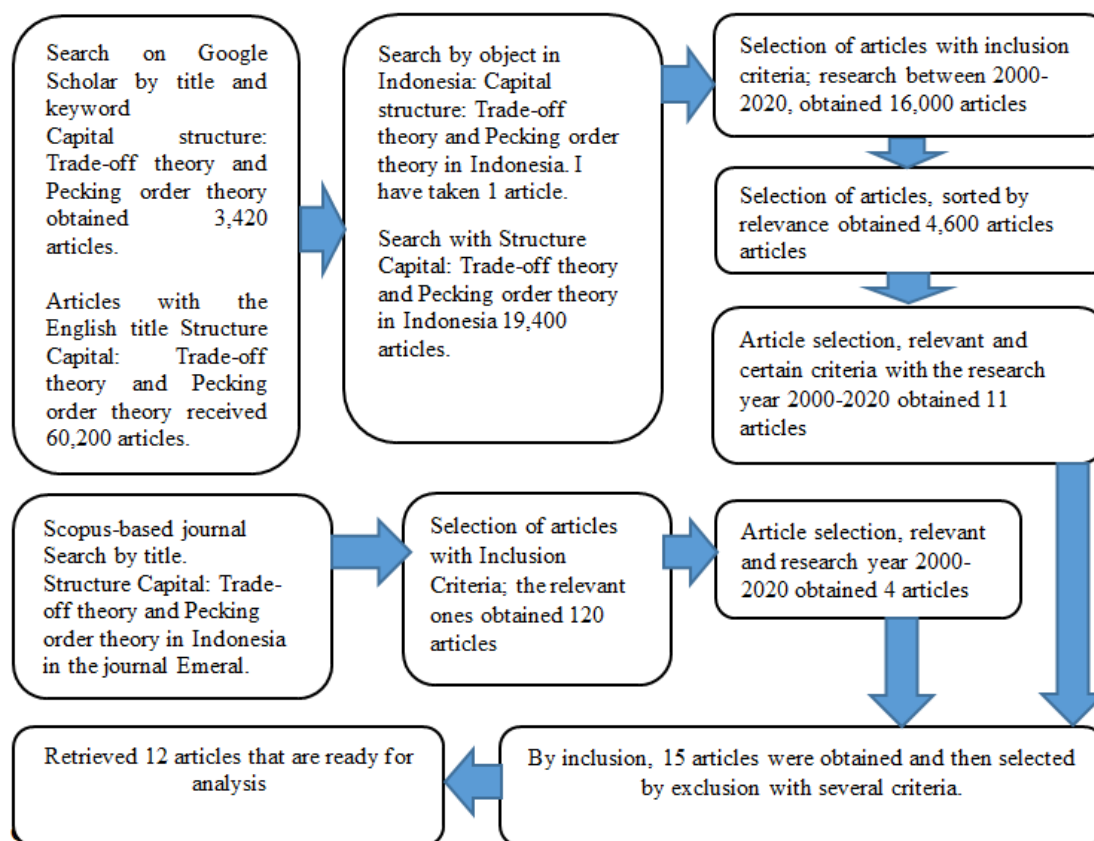
citations to academic writing. Academic writing includes scientific sources to references. The use of the latest reference citation applications such as Mendeley and Zotero in academic essays according to international standards to meet reference citations in scientific papers according to international standards (Eve, 2020). The advantage of Mendeley's and Zotero's reference apps is that they provide an automated method for writing a list of references when citing our articles.

To get examples of articles relevant to capital structure theory that focus on trade-offs and pecking orders, they took papers from journals published in national and international journals indexed on Google Scholar and Scopus. The data sample of 114 research articles was obtained in 2000-2020, a period of 20 years. Journal sources take the fields of management and accounting. Next, sort out irrelevant articles. The search uses keywords and titles to search for capital structure journals that focus on trade-offs and pecking order theory. Due to the limitations of Scopus indexed journals that research the Indonesia Stock Exchange with the scope of trade-off and pecking order theory in Indonesian companies, the sample data obtained is very minimal to analyze and study, resulting in 12 articles after being excluded from selection.

To report the analysis results with the database, obtain a report that clearly explains and shows the information needed for a literature review related to capital structure. Characteristics such as several papers indexed on Google Scholar and Scopus, published from 2000 to 2020, type of publication in accounting and management journals, Indonesian and English, country of publication, citations, and the most relevant journals and authors were collected. Then an analysis is carried out based on the development of the leading theory in each empirical study.

Stages of data collection Systematic Literature Review (SLR)

Figure 2. The process of selecting articles for the Systematic Literature Review (SLR).



#### Inclusion:

Examples of articles are classified based on the following parameters;

- 1) Articles by searching through Google Scholar refer to the title and theme of Capital Structure: Trade-off theory and Pecking order theory.
- 2) Scopus article with the title and theme Capital Structure: Trade-off theory and Pecking order in the Emerald journal.
- 3) Research articles must be relevant to the theme and or title raised.
- 4) Research year between 2000 – 2020
- 5) Articles sourced from Google Scholar and Scopus (Emerald) found 12 relevant articles and advanced extraction.

#### Exclusion:

To assess the existing research studies, all selected articles were classified according to the following parameters;

- 1) Type of Study,
- 2) Year of publication.

- 3) Companies in Indonesia listed on the Indonesia Stock Exchange for the research year 2000 - 2020.

- 4) Theory support
- 5) Topic theme
- 6) Key aspects
- 7) Citation analysis.
- 8) Articles are in Indonesian and English

## 4. RESULTS

### 4.1. Citation Analysis

Academic writing aims to meet international scientific writing norms. To use scientific citations in academic writing that meet international writing standards, use the scientific authority application tool for references. Citation analysis states the importance of reviewing cited material such as; reference sources, article topics, journal articles based on specific patterns, etc.

Citation analysis works by recording and detailing a list of references in the journal being studied. After the data is collected, it is then grouped by following the inclusion and exclusion criteria that have been set for extraction. The results of article citations for

analysis are presented in the following list. The list of reviewed articles is shown in Table 1.

Table 1. Results of articles that meet the categories.

Cite	Journal Category
Harjito, (2011). Teori Pecking Order dan Trade-off dalam Analisis struktur modal di bursa efek Indonesai. Jurnal siasat bisnis, 15(2), 187-196. <a href="https://doi.org/10.20885/jsb.vol15.iss2.art3">https://doi.org/10.20885/jsb.vol15.iss2.art3</a>	National Journal <a href="https://journal.uui.ac.id/JSB/article/download/3215/2913">https://journal.uui.ac.id/JSB/article/download/3215/2913</a>
Caluta & Gunarsih, (2012). Pecking Order Theory and trade-off Theory of Capital Structure: Evidence from Indonesian Stock Exchange. <i>the winners</i> , 13(1),40. <a href="https://doi.org/10.21512/tw.v13i1.666">https://doi.org/10.21512/tw.v13i1.666</a>	SINTA 3 Indexed National Journal. <a href="https://SINTA.ristekbrin.go.id/journals/detail?id=261">https://SINTA.ristekbrin.go.id/journals/detail?id=261</a> <a href="https://journal.binus.ac.id/index.php/winners/article/download/666/643">https://journal.binus.ac.id/index.php/winners/article/download/666/643</a>
Sari, & Djazuli, (2015). Pengaruh profitabilitas, ukuran perusahaan, pertumbuhan penjualan, struktur asset, Non-Debt tax shield dan usia perusahaan terhadap struktur modal (studi pada perusahaan makanan dan minuman di BEI). <i>Ekonomi Bisnis</i> , 20(1), 22–32. <a href="https://doi.org/10.17977/um042v20i1p22-32">https://doi.org/10.17977/um042v20i1p22-32</a>	SINTA 4 Indexed National Journal. <a href="http://journal.um.ac.id/index.php/ekobis/article/viewFile/6465/2748">http://journal.um.ac.id/index.php/ekobis/article/viewFile/6465/2748</a>
Hastuti, (2016). Kebijakan Hutang, Kepemilikan Saham Manajerial, dan Penguasaan Saham Investor Institusi dalam Perspektif Teori Agency. <i>Jurnal Ilmiah</i> , Vidya 24(1), 17–28. JURNAL ILMIAH – VIDYA Vol. 24 No. 1 <a href="http://vidya.wisnuwardhana.ac.id/index.php/vidya/issue/view/3">http://vidya.wisnuwardhana.ac.id/index.php/vidya/issue/view/3</a>	National Journal Jurnal Vidya, ISSN 0854-414X. Vol. 24 No.1 (2016) Published: 2016-04-03; 17-28 <a href="http://vidya.wisnuwardhana.ac.id/index.php/vidya/article/view/93">http://vidya.wisnuwardhana.ac.id/index.php/vidya/article/view/93</a>
Wiagustini, et al. (2017). Indonesia's Capital Structure: Pecking order Theory or Trade-off Theory. <i>International Journal of Applied Business and Economic Research</i> , 15(16), 119–131.	International Journal <a href="https://simdos.unud.ac.id/uploads/file_penelitian_1_dir/1e6dd19f41c735c23fff61a89269f1a5.pdf">https://simdos.unud.ac.id/uploads/file_penelitian_1_dir/1e6dd19f41c735c23fff61a89269f1a5.pdf</a> <a href="https://www.scimagojr.com/journalsearch.php?q=21100218545&amp;tip=sid&amp;clean=0">https://www.scimagojr.com/journalsearch.php?q=21100218545&amp;tip=sid&amp;clean=0</a>
Oktavina & Manulu. (2018). Pecking order and trade-off theory in capital structure analysis of family firm Indonesia. <i>Jurnal Keuangan Dan Perbankan</i> , 22(1). <a href="https://doi.org/10.26905/jkdp.v22i1.1793">https://doi.org/10.26905/jkdp.v22i1.1793</a>	SINTA 2 Indexed National Journal. <a href="https://SINTA.ristekbrin.go.id/journals/detail?id=749">https://SINTA.ristekbrin.go.id/journals/detail?id=749</a> <a href="https://lppm.unmer.ac.id/webmin/assets/uploads/lj/LJ201904241556088366406.pdf">https://lppm.unmer.ac.id/webmin/assets/uploads/lj/LJ201904241556088366406.pdf</a>
Ratih (2019). Equity market timing and capital structure: evidence on post-IPO firms in Indonesia. <i>International Journal of Emerging Markets</i> . <a href="https://doi.org/10.1108/IJOEM-04-2018-0197-emerald">https://doi.org/10.1108/IJOEM-04-2018-0197-emerald</a>	International Journal, indexed by Scopus Q2. <a href="https://www.academia.edu/download/60892635/10-1108_IJOEM-04-2018-019720191013-1566-1tiuirg.pdf">https://www.academia.edu/download/60892635/10-1108_IJOEM-04-2018-019720191013-1566-1tiuirg.pdf</a>
Rahayu et al. (2019). The reciprocal relationship between profitability and capital structure and its impacts on the management values of manufacturing companies in Indonesia. <i>International Journal of Productivity and Performance Management</i> , 69(2), 236–251. <a href="https://doi.org/10.1108/IJPPM-05-2018-0196-emerald">https://doi.org/10.1108/IJPPM-05-2018-0196-emerald</a>	International Journal, indexed by Scopus Q2. <a href="https://www.emerald.com/insight/content/doi/10.1108/IJPPM-05-2018-0196/full/html">https://www.emerald.com/insight/content/doi/10.1108/IJPPM-05-2018-0196/full/html</a>
Simatupang et al. (2019). Determinants of capital structure based on the pecking order theory and trade-off theory.	National Journal, indexed by SINTA 2. <a href="https://pdfs.semanticscholar.org/695a/800f220cd2a95c23680fd41cface7ca8a46b.pdf">https://pdfs.semanticscholar.org/695a/800f220cd2a95c23680fd41cface7ca8a46b.pdf</a>

Jurnal keuangan dan perbankan, 23(1).

<https://doi.org/10.26905/jkdp.v23i1.2579>

Umdiana, & Sari, (2020). Analisis Keputusan Pendanaan Terhadap Struktur Modal Melalui Trade-off Theory, 8(2), 143–155. National Journal, indexed by SINTA 4. <https://SINTA.ristekbrin.go.id/journals/detail?id=5566>  
<https://core.ac.uk/download/pdf/337609137.pdf>

Octavia et al. (2021). Empirical testing of trade-off theory and pecking order theory on companies in the LQ45 index on the Indonesian stock exchange. National Journal  
<https://eudl.eu/doi/10.4108/eai.4-11-2020.2304563>  
<http://eprints.eudl.eu/id/eprint/3387/>  
ICONEBS 2020, November 04-05, Madiun, Indonesia Copyright © 2021 EAI  
DOI 10.4108/eai.4-11-2020.2304563

Chandra et al. (2021). The impact of co-structure of capital, profitability, and management growth opportunities on the stock exchange in Indonesia. International Journal, indexed by Scopus Q2. <https://www.emerald.com/insight/content/doi/10.1108/JEAS-08-2019-0081/full/html>  
Journal of Economic and Administrative Sciences, ahead-of-print (ahead-of-print).  
<https://doi.org/10.1108/jeas-08-2019-0081>

\*SINTA: is a reputable national journal accredited by Dikti in Sinta, <https://sinta.ristekbrin.go.id/journals>

\*Scopus: is a reputable international journal indexed on Scopus.com

4.2. Research results that answer the first and second research questions (RQ1 & RQ2).

The results of the study showing the causes of differences in capital structure in Indonesia and the diversity of empirical studies in determining the trade-off theory and pecking order theory are presented in table 2.

*Table 2. Differences in capital structure management in Indonesia and the diversity of empirical studies of Pecking Order Theory and Trade-Off.*

Author	Main Theory
Harjito (2011)	High GROWTH of funding - Pecking Order Theory ASSET of the company is increasing - Trade-off Theory (TO). HIGH SIZE - Trade-off Theory. High PROFIT -Pecking Order Theory.
Culata & Gunarsih (2012)	Debt - Trade-off Theory
Sari et al. (2015)	<ul style="list-style-type: none"> <li>Profitability and company age - negative effect on capital structure.</li> <li>Company size, asset structure, and sales have a positive effect on capital structure</li> <li>Non-debt tax shield does not affect capital structure</li> </ul>
Hastuti (2016)	Debt - Trade-off Theory
Wiagustini et al. (2017)	Non-financial companies - Trade-off theory.
Oktavina et al. (2018)	A family company at - Pecking Order Theory
Ratih (2019)	Issuance of equity - Pecking Order Theory
Rahayu et al. (2019)	Asymmetric Information - Pecking Order Theory New Profit, Debt and Right Issue - Pecking Order Theory
Simatupang et al. (2019)	<ul style="list-style-type: none"> <li>Tangible assets, funding surplus, and profitability – determinants of capital structure.</li> <li>Sales growth, tangibility assets, and funding surplus have a positive influence on capital structure,</li> <li>Non-debt tax shield sales growth does not affect capital structure</li> </ul>



Umdiana & sari, (2020)	<ul style="list-style-type: none"> <li>• Profitability does not affect funding decisions.</li> <li>• Asset structure influences funding decisions.</li> <li>• Fixed assets - Trade-off theory.</li> <li>• Debt - Trade-off theory.</li> </ul>
Octavia et al. (2021)	Internal funds – Pecking Order Theory.
Chandra et al. (2021)	<ul style="list-style-type: none"> <li>• Factors influencing capital structure include effective tax rate, financial flexibility, growth, uniqueness, asset utilization, firm size, and tangibles;</li> <li>• Factors that affect profitability include liquidity, growth, company age, uniqueness, tangibles, volatility, advertising, and asset turnover;</li> <li>• An increase in growth opportunities as depreciation increases will not be used as collateral for managers to increase debt. This increase in debt will result in reduced growth opportunities;</li> <li>• Profitability and capital structure have a two-way causal relationship.</li> <li>• Capital structure and growth opportunities have a negative reciprocal relationship.</li> </ul>

Empirical results show diversity in the management of capital structures in Indonesia. And the causes of this diversity are mentioned in table 2 above.

4.3. The study results answered the third Research Question (RQ3).

The study results showing the factors that influence the capital structure in determining the trade-off theory and pecking order theory are presented in table 3.

*Table 3. Factors influencing capital structure in determining TOT and POT*

<b>Factors affecting capital structure</b>	<b>References</b>	<b>Funding decisions TO</b>	<b>Funding decisions PO</b>
Growth	Harjito,(2011),	-	<b>v</b>
	Chandra et al. (2021)	-	-
	Oktavina et al. (2018)	-	<b>v</b>
Tangibel asset	Harjito,(2011),	<b>v</b>	-
	Simatupang et al. (2019)	-	-
	Chandra et al. (2021)	-	-
Size	Harjito,(2011),	<b>v</b>	-
	Sari et al. (2015)	-	-
	Chandra et al. (2021)	<b>v</b>	-
	Oktavina et al. (2018)	-	<b>v</b>
Profitability	Harjito,(2011)	-	<b>v</b>
	Rahayu et al. (2019)	-	<b>v</b>
	Oktavina et al. (2018)	-	<b>v</b>
	Chandra et al. (2021)	<b>v</b>	-
	Ratih (2019)	-	<b>v</b>
Financing with debt	Culata & Gunarsih,(2012),	<b>v</b>	-
	Hastuti	<b>v</b>	-
	Rahayu et al. (2019)	-	<b>v</b>
	Umdiana & Sari, (2020)	-	-
	Wiagustini et al. (2017)	<b>v</b>	-

	Chandra et al. (2021)	v	-
Managerial share ownership	Hastuti (2016)	v	-
Business Risk	Oktavina et al. (2018)	-	v
ROI	Rahayu et al. (2019)	-	v
ROE	Rahayu et al. (2019)	-	v
Surplus funding	Simatupang et al. (2019)	-	-
Likuiditas	Chandra et al. (2021)	v	-
Effective tax rate	Chandra et al. (2021)	-	-
financial flexibility	Chandra et al. (2021)	-	-
Uniqueness	Chandra et al. (2021)	-	-
Use of internal funds	Octavia et al. (2021)	-	v
ROA	Octavia et al. (2021)	-	v
Family company	Hastuti (2016)	-	v
	Oktavina et al. (2018)	-	v
Equity	Ratih (2019)	-	v
	Rahayu et al. (2019)	-	v

The factors that influence the capital structure in the trade-off include:

Tangible asset, Size, Profitability, Financing with debt, Managerial share ownership, Likuiditas,

Factors that affect the capital structure in pecking orders include:

Growth, Size, Profitability, Financing with debt, Business Risk, ROI, ROE, Use of internal funds, ROA, Family company, Equity.

## 5. DISCUSSION

Systematic Literature Review this research analyzes articles that have by previous researchers with a unique theme of trade-offs and pecking order theory in funding capital structure in Indonesia. As Tranfield et al. (2003) mentioned in (Kumar et al., 2020), SLR aims to systematically search and locate studies to critically assess the literature to identify possible research gaps. The results of this research review add empirical evidence regarding the understanding of financial theory, especially trade-off theory and pecking order theory, in the analysis of funding capital structure. This research review wants to know the differences in the results of empirical studies from several researchers and differences in determining capital structure. Also, to find out the determinants of funding policy in Indonesian companies' capital structure, leading to a trade-off or pecking order theory.

The study results indicate differences in capital structure management in Indonesia, where financial managers' decisions in funding policies are based on company goals. When financial managers aim to increase firm value by optimizing debt, the decision leads to trade-off theory. Furthermore, when financial managers seek to improve the welfare of investors by providing an increasingly positive or increasing dividend value, it will increase investor confidence to invest their capital in the company. The funding capital structure is more directed to the pecking order theory. Thus, each company has a policy of deciding how to finance its business with the primary objective of maximizing its value and reducing its financial risk. In the financial management literature, capital structure theory is one of the most perplexing issues.

The study results show that the diversity of empirical studies in the theory of trade-off and pecking orders are influenced by the policies and characteristics of the company itself so that each company is different in determining the optimal capital structure that increases the value of the company. The results of the study show the factors that influence the capital structure in determining the TOT and POT as follows; Factors that affect the capital structure in the TOT policy are influenced by; Tangible assets increase, large size, financing with debt, managerial share ownership, and minimal allocation of internal use of funds. Factors that affect the capital structure in the POT policy are

influenced by; high growth and profit and share ownership from the family. Financial managers can use this to determine the funding capital structure.

This research implies that the form of capital structure theory, as proposed by Modigliani and Miller (1958), is the basis of modern thinking on the funding capital structure. Because of the essential factors that can determine capital structure decisions as a purely theoretical outcome, they argue that capital structure is irrelevant except in a perfect market, so imperfections in the real world must be the cause of its relevance. Capital structure theories such as trade-off theory and pecking order try to show this imperfection with the assumptions made in the MM model.

The limitation of this research is still only in Indonesia, which leads to a tendency towards the trade-off theory or pecking order theory in companies listed on the Indonesian stock exchange. Capital structure theory in companies listed on the IDX can be the same for MSMEs in Indonesia; this needs further research. The study's limitations in Indonesia included in the Scopus journal are a different obstacle in finding these articles. Suggestions to additional researchers can use comparisons between Indonesia and other countries to compare knowledge in applying Trade-Off & Pecking Order theory with different countries. Research in the field of Capital Structure with a unique topic of Trade-off Theory, And Pecking Order Theory in Indonesia using SLR is still scarce.

## 6. CONCLUSION

The conclusion is that when families lead managers, preferring the pecking order theory in funding where internal funds use retained earnings, the financial manager who focuses on increasing company value and is more concerned with the welfare of investors is more likely to use pecking order theory.

Conversely, when managers focus more on optimal funding, they tend to use trade-off theory; we are funding a project funded from debt in a balanced proportion so that the company's value increases.

Suggestions for the future, researchers can use the basis of share ownership controlled by managers in companies that are more controlled by families or the public to find out where the focus of financial managers in funding tends to lead by deepening the study of Theory Agency. The method used can use a qualitative approach with a more in-depth analysis. Currently, research in the field of Capital Structure is still scarce, with a unique topic of Trade-off Theory, And Pecking Order Theory in Indonesia using SLR. Need further development in this field.

## Acknowledgment

The author would like to thank the University Negeri Malang and Wisnuwardhana University, who have provided significant support for this work until it was published. The authors would also like to thank the anonymous referee for constructive comments on the initial version of this paper.

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