Trends in corporate financial strategies: Analyzing investment efficiency among listed Indonesian companies

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DOI: https://doi.org/10.24123/jati.v17i2.6604

Abstract

The main objective of this study is to investigate the impact of conservatism, debt maturity, and debt covenants on investment efficiency in Indonesian firms, with a focus on the food and staples retail and food and beverage sub-sectors. This study aims to address information asymmetry between agents and principals, using agency theory as the theoretical framework. A quantitative approach is used using secondary data sourced from financial reports available on the IDX website and company websites. This study took a sample of 329 companies using non-probability sampling technique. Data processing using linear regression method. The results show that conservatism significantly improves investment efficiency, while debt maturity and debt covenants do not show a significant effect. This study underscores the importance of conservative financial reporting practices in improving investment efficiency in the Indonesian corporate sector.

Keywords: Capital Market; Conservatism; Debt Covenants; Debt Maturity; Investment Efficiency.

Abstrak

Tujuan utama dari penelitian ini adalah untuk menginvestigasi dampak konservatisme, jatuh tempo utang, dan perjanjian utang terhadap efisiensi investasi pada perusahaan-perusahaan di Indonesia, dengan fokus pada sub-sektor ritel makanan dan bahan pokok dan sub-sektor makanan dan minuman. Penelitian ini bertujuan untuk membahas asimetri informasi antara agen dan prinsipal, dengan menggunakan teori keagenan sebagai kerangka teoritis. Pendekatan kuantitatif digunakan dengan menggunakan data sekunder yang bersumber dari laporan keuangan yang tersedia di situs web BEI dan situs web perusahaan. Penelitian ini mengambil sampel 329 perusahaan dengan menggunakan teknik non-probability sampling. Pengolahan data menggunakan metode regresi linear. Hasil penelitian menunjukkan bahwa konservatisme secara signifikan meningkatkan efisiensi investasi, sedangkan debt maturity dan debt covenant tidak menunjukkan pengaruh yang signifikan. Studi ini menggarisbawahi pentingnya praktik pelaporan keuangan yang konservatif dalam meningkatkan efisiensi investasi di sektor korporasi Indonesia.

Keywords: Debt Covenants; Debt Maturity; Efisiensi Investasi; Konservatisme; Pasar Modal.

Article history
Artikel masuk : 21 June 2024
Artikel direvisi : 17 July 2024
Artikel diterima : 22 July 2024

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Febiyanti, A., & Venusita, L. (2024). Trends in corporate financial strategies: Analyzing investment efficiency among listed Indonesian companies. *Akuntansi dan Teknologi Informasi*, *17*(2), 109-134. https://doi.org/10.24123/jati.v17i2.6604

INTRODUCTION

In the current era of global economy and capitalist world, companies have a major role because their performance becomes an important issue that gets some attention from many important stakeholders such as creditors, employees, vendors, shareholders, and the government. (Abiodun, 2013; Bhayani, 2015; Madrid-Guijarro et al., 2007). In fact, the company's existence and performance have been instrumental in providing a contribution to the national economic rebound due to the Covid-19 pandemic (OJK, 2022). The Indonesia Stock Exchange has also exposed that the Covid-19 pandemic has resulted in a simultaneous decline in share prices worldwide (Fauziah & Venusita, 2021). Therefore, the contribution of the existence and performance of companies in Indonesia throughout the Covid-19 pandemic has been demonstrated by the number of stock market investors which has increased significantly to 7.49 million as of December 31, 2021 or an increase of 92.99% from the end of 2020 which was recorded at only 3.88 million (OJK, 2022). This phenomenon can be clear evidence that the existence of companies also has an essential part to play in the nation's economic development.

A study states that the essence of the enterprise's existence is to obtain benefits and increase profits (Ahalik et al., 2021; Fajriani et al., 2021). As previously known, investment is one of the ways most often done by companies to increase their profit value (Abel, 1983; Hayashi, 1982; Samet & Jarboui, 2017). The company will proceed with the investment unless the marginal benefit incurred exceeds the cost of the project (Abel, 1983; Hayashi, 1982; Samet & Jarboui, 2017). Thus, the company can be said to have made an efficient investment if the company does not experience investment problems (underinvestment and overinvestment) and deviations from the expected optimal investment level (Nathaniel & Butar, 2019; Samet & Jarboui, 2017). However, it is unfortunate that the trend of investment efficiency that occurs in enterprises in Indonesia still cannot be said to be efficient as a whole (Aulia & Siregar, 2018).

Based on existing data, investment conditions in companies in Indonesia still have a fairly low level of efficiency (Fajriani et al., 2021; Nathaniel & Butar, 2019; Saputra et al., 2022). Through the scope of enterprises in Indonesia, it was discovered that the majority of companies in Indonesia tend to experience overinvestment problems, but there are still some companies that experience underinvestment. This phenomenon occurs in non-financial sector companies in Indonesia (Aulia & Siregar, 2018). Similar results are also shown by the data

generated from the calculation of the ICOR (Incremental Capital Output Ratio), which shows that investment efficiency in Indonesia is still relatively poor (Asmara, 2020; Aulia & Siregar, 2018; Fajriani et al., 2021).

The ICOR ratio was developed specifically and became one part of descriptive statistics which was then used in macroeconomic investment studies (Masloman, 2020). This ICOR ratio has a close relationship with economic growth. Furthermore, according to data obtained from the Indonesian Central Bureau of Statistics, the rate of Indonesia's ICOR touched a ratio of 6.2% in 2022. This ICOR figure is 1.96% lower than in 2021, which reached a ratio of 8.16% (BPS, 2022). Meanwhile, the median ICOR value of ±70 developing countries is in the range of 3.0 to 3.5 (Yulianita et al., 2019). Meanwhile, the range of efficient (ideal) ICOR figures is between 3.0 and 4.0 (Suandi & Delis, 2020). Therefore, Indonesia's ICOR value, which touched 6.2% in 2022, shows a fairly high ICOR number, which can be a signal regarding the possibility of inefficiency in investment activities in Indonesia (Purwadi & Jamaluddin, 2020). Conversely, the lower the ICOR value can signal the possibility of efficiency in the use of capital (Munifah, 2019).

Today, the transparency and timeliness of corporate financial reporting have become increasingly important due to the expanding globalization and internationalization of capital markets (Neag & Maşca, 2015). This causes investment activities to be carried out not only by domestic agencies or parties, but agencies and parties from abroad can also invest in Indonesia. Therefore, it is important for companies to pay attention to the quality of their financial reporting environment by making a more selective choice of accounting methods to be used. Improving the quality of the financial reporting information environment, one of which can be done by applying conservatism (García Lara et al., 2016; Ma & Jeong, 2022; Saputra et al., 2022). The topic of conservatism was first debated on by Gilman and Kenneth MacNeal in 1939 (Neag & Maşca, 2015). Ross Watts, in 2003, emphasizes that the origins of accounting trace back to contraction, which inherently implies conservatism. Sudipta Basu's research in 1997 indicates evidence of accounting conservatism being observed in commercial partnerships since the 15th century, highlighting its longstanding practice in early trade relations (Basu, 1997; Neag & Maşca, 2015). In his research, Sudipta Basu also put forward another definition of accounting conservatism, that "earnings that reflect bad news faster than good news" (Basu, 1997). Then the definition is widely used in subsequent studies that discuss conservatism.

In 2016, Garcia Lara and colleagues in their research found several advantages of applying the principle of conservatism, such as decreasing credit risk, minimizing the cost of excess cost of capital, as well as reducing information uncertainty about the company and increasing information asymmetry (Lara et al., 2016; Ma & Jeong, 2022). In simple terms, accounting conservatism can be a guideline for companies to be more careful in overestimating the company's profits and assets in the financial statements (Watts, 2003). In other words, accountants must present the profits and assets obtained in the company's financial statements in accordance with those amounts that have been realized. Accountants should also be able to present information about expenses and losses that will be received by the company sooner in financial reporting. Although the application of conservatism feels like it adds problems by not disclosing the true value appropriately, there are still many accountants who apply this principle (Savitri, 2016). The reason conservatism still survives is that the benefits of conservative reporting can still be felt by its users, one of which is being able to limit the self-opportunistic attitude of managerial parties (Savitri, 2016; Watts, 2003). In addition, the application of conservatism is also known to suppress the problem of corporate investment inefficiency, such as overinvestment and underinvestment (Ma & Jeong, 2022). This is further strengthened by the findings of previous studies which explain that these higher accounting conservatism levels applied within the enterprise, the smaller the level of overinvestment problems caused by the opportunistic attitude of managerial parties (Ahmed & Duellman, 2011). In addition, to avoid risk and maintain financial flexibility, companies that are conservative in investment will choose a shorter debt term (Roberts & Sufi, 2009).

The use of shorter maturity loans in investment financing can serve as a mitigation in preventing investment inefficiency (Aulia & Siregar, 2018; Cutillas Gomariz & Sánchez Ballesta, 2014; Flannery, 1986; Ortiz-Molina & Penas, 2008). Similar to the benefits of conservatism, short debt maturity is also useful for reducing information asymmetry problems (Aulia & Siregar, 2018). Because, when viewed from the perspective of lenders, shorter maturity allows lenders to have better control and observation of managers' behavior (Gomariz & Ballesta, 2014; Diamond, 1991, 1993). Thus, debt maturity is an important tool to control managerial behavior which would help to improve the firm's investment inefficiency. In addition to having a maturity, the loan taken by the firm is also likely to have

an agreement or contract that will bind the firm and the lender. Usually, in the context of debt, these agreements are referred to as debt covenants.

Basically, debt covenants are the main explanation for the existence of accounting conservatism (Ma & Jeong, 2022). As previously explained, the application of conservatism is known to suppress the problem of investment inefficiency by reducing and correcting information asymmetry problems in a corporate environment (Lara et al., 2016). In response, a study explains that debt covenants can be a monitor device to monitor and limit the opportunistic attitude of shareholders, making it possible to protect the rights and benefits of creditors (Ahmed et al., 2002; Nikolaev, 2010). Then in the debt-equity hypothesis, it is explained of the tendency of firms with a high debt financing structure to use appropriate accounting methods with the aim of helping to fulfill credit agreements (debt covenants) with creditors (Watts & Zimmerman, 1990). Although managers work under the control of shareholders, they still have a tendency to increase profits for themselves rather than prioritizing investment cooperation that will increase investor and shareholder profits (Jensen & Meckling, 1976). Hence, employing accounting methods that can oversee managerial behavior and mitigate managerial self-interest is essential. This approach aims to improve information dissemination and minimize the potential for information asymmetry.

In this study, the researcher utilized a 7-year observation period from 2016 to 2022 to examine how non-financial sector companies in Indonesia, particularly those in the food and beverage production sectors, responded to global phenomena impacting their industry development and performance. One significant event during this period was the COVID-19 pandemic in 2019, which affected various sectors, notably the economic sector. The pandemic heightened economic uncertainty in Indonesia (Dinata, 2023), leading to income cuts and changes in employment relationships. Consequently, households became more cautious in budget management (Dinata, 2023), resulting in reduced consumer demand and negatively impacting corporate profits, especially for companies listed on the Indonesia Stock Exchange. This phenomenon eroded investor confidence and reduced investment volumes, inevitably leading to stock price depreciation.

Beyond COVID-19, other events such as international conflicts, like the Russia-Ukraine conflict in 2022 amid the pandemic recovery phase, also influenced stock prices and investor behavior in the capital markets. This conflict had profound global implications, including in Indonesia, causing energy shortages, food crises, global inflation, soaring wheat

prices, high oil prices, weakening exchange rates, and reduced export-import activities (BRIN, 2022; Zehfri, 2022). Indonesia also faced increased crude oil prices due to the Israel-Palestine conflict, impacting not only oil prices but also gold and dollar prices.

Thus, the researcher aims to observe how the Indonesian capital market and companies in the food and beverage sector respond to such significant phenomena. The study also seeks to explore how the independent variables used can address information asymmetry issues between principals and agents and contribute to explaining investment efficiency. Therefore, the researcher chose to investigate "The Influence of Conservatism, Debt Maturity, and Debt Covenants on Investment Efficiency in Indonesia from 2016 to 2022", hoping to provide empirical evidence on factors contributing to the persistently poor investment efficiency in Indonesia and offer insights for stakeholders, including the government, to address inefficiencies in certain Indonesian companies.

LITERATURE REVIEW

Theory of Agency

The theory of agency was first explicitly presented by two experts, Stephen Ross and Barry Mitnick around 1973 (Mitnick, 2019). In other studies, it is stated that the agency relationship is defined as a relationship that occurs due to an agreement (contract) made between company owners (the principals) and managers (agents) which aims to make managers (agents) help resolve some of the interests of company owners (Jensen & Meckling, 1976). So in brief, the theory of agency is the theory that describes a certain relation among the principals (the owner of the company) and the agents (the managers). One of the problems that needs to be considered that may occur and can threaten the relations which exist between the principal and the agent is information asymmetry (Hoenen & Kostova, 2015; Omar et al., 2017). If this information asymmetry problem occurs continuously, it will cause new problems in a company's investing activities, namely overinvestment and underinvestment (Ma & Jeong, 2022). Even an investor is also very concerned about the information provided by the company and will consider the information obtained to be included in the stock price (Wahyuni & Bhilawa, 2022). Hence, this theory comes to aid the application of a broad range of governance mechanisms to rein in the actions of agents in a jointly owned company (Panda & Leepsa, 2017).

Positive Accounting Theory

According to the theory, positive accounting was first developed by William H. Beaver in 1968, through the published article which is entitled, "The Information Content of Annual Earnings Announcements" (Jensen & Meckling, 1976; Wiratama & Asri, 2020). The purpose of the existence of the theory of positive accounting in order to provide an explanation (to explain) and explain the prediction (to predict) of accounting practices that are being observed (Wiratama & Asri, 2020). Further explanation of positive accounting theory and its development was explained by Ross L. Watts and Jerold L. Zimmerman in their 1986 research which revealed that Positive Accounting Theory has 2 main components, namely assumptions and hypotheses. Then in 1990, both of them explained 3 hypotheses from the theory of positive accounting. Firstly, the bonus plan hypothesis suggests that managers select accounting methods that accelerate income recognition to the current period to attain bonuses. Secondly, the debt covenant hypothesis posits that managers facing potential violations of debt agreements may opt for accounting techniques that boost current-period income to prevent breaches. Lastly, the political cost hypothesis proposes that highly profitable companies may defer income recognition to future periods to mitigate potential political costs.

Theory of The Firm

The motivation for establishing every firm is to generate profits and maximize the wealth of the firm's owners (Adenugba et al., 2016). It is in line with the principle of the Theory of the Firm, that states the existence of a company is to maximize profits (Murphy, 2020). Profit maximization remains a fundamental objective for firms, as it directly correlates to the creation of value for shareholders. According to the traditional Theory of the Firm, businesses operate to achieve the highest possible returns on investments, which in turn leads to wealth accumulation for the firm's owners. This principle not only drives strategic decisions but also shapes corporate policies aimed at optimizing resources and improving efficiency. However, in modern economies, firms are also increasingly balancing profit objectives with broader responsibilities such as corporate social responsibility (CSR) and sustainable growth. In this context, firms are expected to integrate ethical considerations and environmental sustainability into their business models, ensuring long-term success alongside profitability.

Conservatism and Investment Efficiency

A topic of conservatism has been debated and numerous research papers have been executed using various populations to determine its effect on firms. A literature reveals in which conservatism can favorably affect the efficiency of investment in two different ways. Furthermore, accounting conservatism is able to suppress the company's overinvestment problem by limiting overinvestment activities that can harm the interests of creditors (Ma & Jeong, 2022). Second, the application of accounting conservatism can encourage underinvestment because it can increase the cost of capital, causing the company to experience a shortage of funds and be forced to reduce investment even in investments or projects with positive NPV (Ma & Jeong, 2022). Therefore, the existence and application of accounting conservatism have a complex effect on the firm's investment efficiency. Later, Garcia and his colleagues extended the research by making the same hypothesis, and found a positive association of conservatism and investment efficiency, especially on overinvestment (Lara et al., 2016).

H_1: Conservatism positively affects investment efficiency.

Debt Maturity and Investment Efficiency

The previous research shows that short term debt maturity can mitigate the information asymmetry problem that occurs between the principal and the agent (Berger & Udell, 1998; Ortiz-Molina & Penas, 2008). Essentially, the utilization of shorter debt maturities will make the company renegotiate more frequently with creditors (Aulia & Siregar, 2018). Thus, this will limit the space for managers to be opportunistic, more frequent renegotiation activities can also be a signal or sign for the company that the company is a company with good quality. On the other hand, research from Gomariz & Ballesta (2014) can be evidence that the use of shorter-term debt maturities can decrease the level of corporate investing inefficiency and help companies avoid overinvestment and underinvestment problems (Gomariz & Ballesta, 2014).

H_2: Debt maturity positively affects investment efficiency.

Debt Covenants and Investment Efficiency

Debt covenants have a strong relationship with positive accounting theory and conservatism. Based on positive accounting theory, companies that use debt funding with a high ratio, will encourage the tendency of managers to choose certain accounting methods

that can help them to increase earnings and fulfill debt agreements that have been agreed with creditors (Watts & Zimmerman, 1990). However, based on some previous research results, it is found that the application of debt covenants, which is known for its strict requirements, negatively influences on the efficiency of firm's investment, which in turn has an impact on company performance.

Through research from James et al. (2023), it is explained that the existence of covenants has the potential to affect the company's investment activities through restrictions on investment decisions that can be taken by management. As a result, these binding constraints may affect the company's otherwise optimal strategy or investment decisions, and this may even negatively reflect on the firm's overall business performance (James et al., 2023). Therefore, the existence of covenants can limit the company's financial flexibility and encourage conservative behavior that has the potential to reduce the efficiency of resource allocation for investments that should support company growth.

H_3: Debt covenants have a negative influence on investment efficiency.

METHOD

Research Design

The two commonly used types of research are qualitative and quantitative methods. Referring to the explanations of these types of research, this research was decided to use the quantitative method. Since in this data processing process, the study applies statistical calculations to calculate data related to the company's annual report and financial statements.

Table 1. Research Samples

Description	Total
All public listed firms on the IDX from 2016-2022	828
Non-cyclical consumer sector firms that are registered on the IDX 2016-2022	113
Sub-sector companies from consumer non-cyclicals other than food & staples retailing and food & beverage sub-sectors	(16)
Companies that do not present annual reports or financial reports as well as the required research data in full from 2016-2022	(50)
Total sample of companies	47
Final Samples	329

Meanwhile, in this research, the kind of data used is secondary data. The secondary data used in this research comes from a yearly report and financial statements published or published by companies in Indonesia sourced from the IDX website or from an official corporate website. In this study, the research population used is all of Indonesia's companies that have been listed on the IDX from 2016-2022. Meanwhile, the research sample in this study used non-probability sampling techniques through purposive sampling due to the need and suitability in helping the sampling of this research. Thus, the following are the requirements samples in this study.

Research Variables and Operational Definitions

Conservatism

The measurement of the company's conservatism level in this study uses a measurement adapted from Givoly and Hayn (2000) which uses conservastism based on accrued items (Givoly & Hayn, 2000). In this study, the conservatism value is derived from accrued items, which measure earnings or accruals. Accrual values prioritize the recognition of losses over gains, resulting in periodic negativity and a tendency towards cumulative understatement (Handojo, 2012). Therefore, a negative conservatism value ratio indicates that the company's financial statements adhere to the principle of prudence in terms of disclosure and preparation. This the following is the calculation model of conservatism:

$$\textbf{CONACC} = \frac{(\textbf{NIO}+\textbf{DEP}-\textbf{CFO})\ \textbf{x}\ (-\textbf{1})}{\boldsymbol{TA}} \quad \textbf{..... (1)}$$

Description:

CONACC : Conservatism of earnings based on accrued items

NIO : Operating profit for the year-t

DEP : Depreciation of fixed assets for the year-t

CFO : Total net cash flow from operating activities for the year-t

TA : Book value of total closing assets for the year-t.

Debt Maturity

This study uses short-term debt maturity as a proxy for the debt maturity variable. Therefore, to present evidence related to the function from maturity debt to the efficiency of investment, here is a measurement of debt maturity used throughout this paper by adapting a measurement from Aulia & Siregar (2018).

$$\textbf{STDebt} = \frac{\textbf{Short Term Liabilities}}{\textbf{Total Liabilities}} \quad \textbf{..... (2)}$$

Debt Covenants

This research calculates the debt covenant using an adaptation of the measurement from Al-Slehat's research (2020). This measurement uses financial leverage on a proxy to calculate debt covenant. The following is the formula for measurement.

$$\textbf{Financial Leverage} = \frac{\textbf{Total Debt}}{\textbf{Total Capital}} \quad \textbf{..... (3)}$$

Investment Efficiency

The regression equation model used to measure Conservatism of earnings is an adaptation of Biddle et al. (2009) using sales growth. This model evaluates the anticipated level of investment by the company, crucial for assessing whether the company's investment aligns with expectations. The anticipated investment rate is determined based on factors such as the company's sales and investment growth, thereby offering a more precise assessment of investment effectiveness. Below is the model of investment efficiency regression equation:

$$\textbf{Investment}_{t+1} = \beta_0 + \beta_1 * \textbf{Sales Growth}_{i,t-1} + \varepsilon_{i,t+1} \quad \textbf{.....(4)}$$

Equation (4) is a regression model aiming to understand the model on investment efficiency (Investment $_{t+1}$). In this equation, Investment t+1 is the dependent variable representing investment efficiency performance, while β_0, β_1, Sales Growth $_{i,t-1}$, $\varepsilon_{i,t+1}$ are independent variables. Investment $_{t+1}$ is purchases on fixed assets less sales of fixed assets, and divided into the previous year's total assets, Sales Growth $_{i,t-1}$ is difference of this year's sales minus last year's sales and divided by last year's sales, and $\varepsilon_{i,t+1}$ represents the error or residuals.

The residual value obtained from the calculation of this regression model will reflect the company's expected investment and become a proxy to see the company's investment efficiency level (Gomariz & Ballesta, 2014). A positive value of residual illustrates that the firm invests at a higher leslevel than expected, as a result the firm experiences overinvestment (Gomariz & Ballesta, 2014). Meanwhile, a negative residual value reflects that the company invests at a lower level than expected, so the company experiences underinvestment (Gomariz & Ballesta, 2014). Therefore, the residual value serves as a crucial indicator for evaluating whether a firm is utilizing its resources optimally or facing inefficiencies in its investment decisions.

Methods of Data Analysis

Analytical test which will be applied in the present study is a multiple linear regression which is computed by utilizing SPSS (Statistical Package for Social Sciences). The appropriate analysis test for this research is the multiple linear regression analysis test since the analysis test is a regression model which includes multiple independent variables. Before conducting hypothesis testing, researchers will conduct an analysis requirement test consisting of descriptive statistical test, normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test. The test of analytical requirements in research aims to determine whether the data has met the requirements of the technique used or not. So that a regression model for this research can be seen from the explanation below:

$$\mathbf{EI = \beta_0 + \beta_1\ CONS_{i,t} + \beta_2\ DEBT\_MAT_{i,t} + \beta_3\ DEBT\_COV_{i,t} + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (5)}$$

Equation (5) is a regression model aiming to determine whether the data has met the requirements of the technique used or not (EI). In this equation, EI is the dependent variable representing data has met the technical requirements used or not, while β_0, β_1 CONS $_{i,t}$, β_2 DEBT_MAT $_{i,t}$, β_3 DEBT_COV $_{i,t}$, ε are independent variables. EI is investment efficiency, CONS $_{i,t}$ is conservatism of company I's financial statements in year t, DEBT_MAT $_{i,t}$ is total debt to total capital of company I in year t, β1, β2, β3 is regression coefficient, ε represents the error or residual, i represents the company, and t represents the time.

RESULTS AND DISCUSSION

Descriptive Statistics

The information contained in the descriptive statistical test results can be used as an initial screening of the research data and justification for the initial analysis which can be seen from comparing the average value with the minimum and maximum values in the test results. The following are the results of descriptive statistical tests in this study.

Table 1. The Results of Descriptive Statistic Test

Variables	N	Minimum	Maximum	Mean	Std. Deviation
EI	313	-0.495	0.711	-0.044	0.167
KONS	313	-1.359	1.108	-0.017	0.173
DEBT_MAT	313	0.082	5.102	0.648	0.351
DEBT_COV	313	-45.959	41.215	1.878	5.052

Table 1 shows several variables of this study that are included with the data distribution. In the first row, there is information about the data distribution of the EI or Investment Efficiency variable which is the dependent variable of this study. The value of investment efficiency is measured by the residual value obtained from the calculation of Biddle et al. (2009) regression model, which uses the calculation of sales growth. In table 1. The table shows the minimum value of -0.495456 and the maximum value of 0.711182, each of which is found in the SKBM (Sekar Bumi Tbk) company in 2020 and AISA (FKS Food Sejahtera Tbk) in 2017. Then, the average value of the investment efficiency variable is -0.0439, which can be interpreted that the level of investment efficiency in companies that are research samples is relatively small or low by looking at the proximity of the average value to the minimum value. Furthermore, the standard deviation which is 0.16706429 can be interpreted that the data variance is relatively large by looking at the far average value and standard deviation on the dependent variable of this study.

In table 1. also presents the test results of the independent variables in this study, namely CONS (Conservatism), DEBT_MAT (Debt Maturity), and DEBT_COV (Debt Covenants). In the second row of table 1. there is data information related to conservatism. The proxy used to measure conservatism is a calculation model adapted from Givoly & Hayn (2000). The calculation uses the calculated result of operating profit added by depreciation of fixed assets and then reduced by the net amount of cash flow from operating activities, which is then multiplied by -1 and divided by the company's total assets in that year. The distribution of KONS data shows a minimum value of -1.358797 with a maximum value of 1.108238, each owned by SKLT (Sekar Laut Tbk) in 2022 and AISA (FKS Food Sejahtera Tbk) in 2017. It also shows an average value of -0.0165659, which can be an initial conclusion that the level of conservatism in the companies that are the research sample is relatively small by looking at the proximity of the average value and the minimum value. Meanwhile, through the standard deviation value of 0.17287137, it means that the variance of data from KONS is relatively small because it looks at the proximity of the standard deviation value to the average value.

The DEBT_MAT (Debt Maturity) variable in this study is measured using a calculated proxy adapted from Aulia & Siregar's research (2018). In this study, using short-term debt maturity as a proxy is calculated by calculating the result of the division between short-term liabilities and the company's total liabilities in that year. It can be seen that the

minimum and maximum values of DEBT_MAT are 0.081692 and 5.102339, respectively owned by DPUM (Dua Putra Utama Makmur Tbk) 2021 and ADES (Akasha Wira International Tbk) 2016. Then through the average value of 0.6484519, and seeing this value closer to the minimum value, it can be said that the companies in the research sample that use short-term debt maturity have a relatively low level. Furthermore, the standard deviation is 0.35101845, meaning that the data variance is relatively large due to the far standard deviation value and the average value of DEBT_MAT.

The third independent variable in this study is Debt Covenants (DEBT_COV). The calculated proxy used to measure the debt covenants variable is financial leverage adapted from Al-Slehat's research (2020). This calculation model uses the results of the sum of total debt divided by the company's total capital. In table 1. there is information about the minimum and maximum values of DEBT_COV which amount to -45.95937 and 41.21541 respectively. This value is respectively obtained from the calculation results of the 2017 UNSP (Bakrie Sumatera Plantations Tbk) and 2016 CPRO (Central Proteina Prima Tbk) companies. Then the average value of 1.8777255, can mean that the level of debt covenants in companies that are research samples is relatively large because it looks at the proximity of the average value to the maximum value of DEBT_COV. Meanwhile, the standard deviation value which is 5.05156233, can illustrate that the data variance is relatively large by looking at the far average value with the standard deviation of DEBT_COV.

Classic Assumption Tests

The results of the normality test will help researchers to determine whether the spread of research data is distributed normally or not (Ghozali, 2021: 196). A normality test can be carried out through various statistical tests, one of which is the Kolmogrov-Smirnov test as shown in this research.

After removing some outliers, the Asymp. Sig. (2-tailed) or probability of significance is 0.081 whose value is greater and is far above the significance value of 5% or 0.05. So in accordance with the testing data, it can be seen that the research data used is normally distributed. The same results are also shown in the results of the analysis using the normal probability plots graph. In the figure, the distribution pattern of the data can be seen to follow the straight diagonal line. This indicates a normal distribution of the data. These findings

confirm the assumption of normality, which is essential for the validity of further statistical tests and analyses.

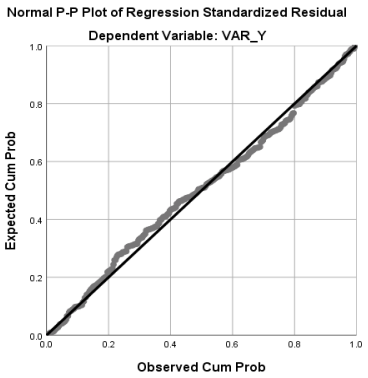

Figure 1. Normal P-Plots

Referring to the explanation from Ghozali (2021) in his book, he states that a better research regression model is a research model whose independent variables are not correlated with each other or do not experience multicollinearity problems so that they are included in orthogonal variables (Ghozali, 2021: 157). In this study, the VIF and tolerance values were used as the basis for decision making. Based of the results of the multicollinearity testing, it is evident that the VIF values of all independent variables in this study are <10 with a tolerance value >0.10. Thus, based on these results this can be inferred that the independent variables in the research regression model do not experience multicollinearity problems.

Autocorrelation problems often occur in studies that use time series research data (Ghozali, 2021: 162). For the autocorrelation test used is a Durbin-Watson test. Autocorrelation test with Durbin-Watson has a basis for decision making, that is du < dw < 4-du. This a result is obtained as follows; 1.82672 (du) < 1.849 (dw) < 2.17328 (4-du). So, from these nominal results can be concluded that this research is free from the symptoms of autocorrelation. A heteroscedasticity test serves for seeing the existing or not inequality of varities for all residuals of the research regression model (Ghozali, 2021: 178). There are several statistical tests to see symptoms of heteroscedasticity, one of which is the Glejser test as used in this study. The decision-making basis of the Glejser test to examine heteroskedasticity symptoms is the probability value of significance above 5%. So, the test results of SPSS for this data research indicates that none of the variable independent has significance on the dependent variable absolute value (abresid). This is indicated by the

acquisition of the significance of each independent variable which is above the 0.05 confidence level.

Coefficient Determination Test (R^2)

Hypothesis testing using the R-Square (R2) test serves on seeing and measuring how much the regression model used in explaining the dependent variable (bound) of this study (Ghozali, 2021: 147). The lower the adjusted R2 value, the less effective the regression model is in explaining the dependent variable of the study (Ghozali, 2021: 147).

Based on the SPSS output display, it is noted on the adjusted R square value is equal to 0.047. This implies that 4.7% variation of the efficiency of investment as the dependent variable is partially exemplified by the three independent variables, namely conservatism, debt maturity, and debt covenant. Whereas the remaining 95.3% is described by another variable beyond the independent variables applied in this study.

F Statistical Test

In simple terms, a F test which is a statistical test utilized as an indication of seeing the relationship between the entire independent and dependent variables which can later be used to see a partial t test (Ghozali, 2021: 148). There are two methods to interpret the results of the F statistical test. The first method involves a quick assessment, while the second method compares the calculated F value with the critical F value from the table (Ghozali, 2021: 148). The decision criteria for the F-test using a significance level of 0.05.

Regarding the results of the Anova significance testing, it is evident that the anova testing of this research variable shows a significance probability score of 0.000, and it is well below the 5% or 0.05 significance level. Hence, it can be inferred that the regression model can be used as an explanatory model of EI (Investment Efficiency). This result also shows that all or one of the independent variables (CONS, DEBT_MAT, DEBT_COV) will have a substantial influence on the dependent variable EI (Investment Efficiency).

Partial Significance t Test

The function of this t-test regression model is to investigate whether the independent variables are significantly related to the dependent variable in this study. Decision-making based on the t statistical test can be approached in two ways: through a quick assessment and by comparing the t statistic with the critical values from the t table (Ghozali, 2021: 149). The

significance level typically used in the quick assessment of the t-test is 5% (or 0.05). Table 2 shows the t-test results of this research model regression.

Table 2. Statistical Test t, ANOVA & R^2

Statistical Test t Result						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-0.041	0.020		-2,046	0,042
	KONS	0.212	0.054	0.220	3,947	0,000
	DEBT_MAT	-0.006	0.026	-0.012	-0,211	0,833
	DEBT_COV	0.002	0.002	0.064	1,150	0,251

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0,486	3	0,162	6,094	0.000
	Residual	8,222	309	0,027		
	Total	8,708	312			

Test Coefficient of Determination (R2)				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.236	0,056	0,047	0,163117

Based on the output of the t-test that has been carried out, it can be seen that there is only 1 of the variable that significantly influences the dependent variable, namely conservatism (CONS). Conservatism has a probability value of significance that is much lower than 0.05, namely 0.000. Meanwhile, the debt maturity variable (DEBT_MAT) and debt covenant (DEBT_COV) have no significant effect on Investment Efficiency (EI) as evident from the respective variable values whose significance is much more than 5%, which are 0.833 and 0.251. So if shown with a mathematical equation it will be as below.

$$\mathbf{EI = - 0.041 + 0.212\ CONS_{i,t} - 0.006\ DEBT\_MAT_{i,t} + 0.002\ DEBT\_COV_{i,t}}$$

Based on the mathematical equation provided, the analysis yields several key findings regarding the relationship between the independent variables (CONS, DEBT_MAT, DEBT_COV) and Investment Efficiency (EI). Firstly, the constant value of -0.041 suggests that if all independent variables are zero or held constant, the predicted value of EI would be -0.041. Secondly, the regression coefficient for CONS is positive at 0.212, indicating that an increase in CONS leads to a corresponding increase in EI by 0.212 units. Conversely, the regression coefficient for DEBT_MAT is negative at -0.006, indicating that an increase in DEBT_MAT results in a decrease in EI by 0.006 units. Lastly, the regression coefficient for DEBT_COV is positive at 0.002, indicating that an increase in DEBT_COV leads to an

increase in EI by 0.002 units. These results provide insights into how each independent variable influences Investment Efficiency, highlighting both positive and negative impacts across the variables considered in the study.

Discussions

Conservatism and Investment Efficiency

Based on the output of the hypothesis test that has been carried out, it is known that the conservatism variable has a t-test value of 0.000 with a beta coefficient value of 0.212. This explains that conservatism has an influence on investment efficiency with a significance that is far below the 0.05 confidence level. Thus, H1 can be accepted, namely conservatism has an influence with a positive direction on investment efficiency in companies in Indonesia. So with a positive direction of influence, it can be concluded that the greater the value of the KONS ratio, the greater the level of EI (Investment Efficiency) of the company.

The findings that have been made directly support the findings and research of Lara et al (2016), Juliani & Wardhani (2018), (Munifah, 2019), Saputra et al (2022), Aminu & Hassan (2017), Ma & Jeong (2022), Abd-Elnaby & Aref (2019); Balakrishman et al (2016); Cho & Choi (2016), which state that conservatism has a significant positive effect on investment efficiency. As stated by Juliani & Wardhani (2018) in their research, the application and existence of conservatism in financial statements plays an important role as a basis for making investment decisions made by the company. Through the results of this study, it also supports the research of Biddle et al. (2009) which explains that companies that are more conservative have a tendency to have good quality financial statements. Thus, through the quality of good financial statements, it will be able to reduce the problem of information asymmetry which according to agency theory usually occurs between the principal and the agent relationship, thus the company will be able to realize the investment efficiency expected by the company (Biddle et al., 2009; Lara et al., 2016). Therefore, based on hypothesis testing results and associated with agency theory, conservatism proves effective in reducing information asymmetry between stakeholders and managers by enhancing information transparency in company financial statements. This aligns with the fundamental goal of agency theory, which emphasizes the implementation of governance mechanisms to oversee and regulate agent behavior within organizations (Panda & Leepsa, 2017).

The existence of conservatism in financial statements can improve the quality of the financial reporting environment by providing better information flow facilities between internal and external parties of the company (Saputra et al., 2022). Through conservatism, more conservative companies can find out immediately about investments with unfavorable values or risky investments (Saputra et al., 2022). Thus, companies can allocate more targeted funds to projects that have profitable value. If it is associated with the phenomenon of high ICOR values in Indonesia, the application of conservatism in the financial statements of companies in Indonesia can be a small step that can be taken by companies as an effort to improve the quality of financial statement information so that the information received by shareholders is in accordance with actual conditions, and it is hoped that its application can provide companies with the ability to detect forecasts of economic losses earlier and help companies to improve their investment performance.

Debt Maturity and Investment Efficiency

The results of hypothesis testing through t-test show that debt maturity has a t-test value of 0.833, which is higher than the significance confidence level of 0.05. So this indicates that debt maturity has no influence on investment efficiency which is the dependent variable in this study. Thus, the alternative hypothesis H2 of this study is rejected.

Based on the results of the hypothesis testing that has been carried out, it can be concluded that this study supports the findings of research conducted by Fransiska & Triani (2017), Rahmawati & Harto (2014), Aulia & Siregar (2018), and Heidari et al. (2015) which state that debt maturity has no effect on investment efficiency. The use of short debt maturity in funding the investment made by the company does not have an important role that can have an influence on the investment made. This is because the company has several other funding sources that can be used to finance the company's investment. Thus, the results of this study do not support the statements of Diamond (1991 & 1993) and Gomariz & Ballesta (2014). So that through this study it can be one of the evidence that the use of short debt maturity cannot help companies to avoid investment inefficiency problems. Through this research, it becomes evident that the utilization of short-term debt maturity fails to address investment inefficiency issues within companies. Furthermore, when viewed through the lens of agency theory, it suggests that short-term debt does not effectively monitor or mitigate the self-opportunistic tendencies of management. Additionally, it does not alleviate the

information asymmetry problems between management and stakeholders, particularly in the companies examined in this study. Even frequent meetings and renegotiations between creditors and borrowers regarding short-term debt usage do not guarantee the prevention of managerial self-interest. Consequently, based on agency theory, the application of debt maturity does not improve information flow or the financial reporting environment, potentially leading to information asymmetry within corporate settings.

The study measures the DEBT_MAT ratio using short-term debt maturity, which illustrates the scenario when companies rely heavily on debt in their capital structures. This reliance tends to influence managers to favor projects with positive Net Present Values (NPVs). However, the research findings indicate that short-term debt in the sampled companies does not enhance investment efficiency. Specifically, some companies classify long-term liabilities due within a year as short-term debt. For instance, PALM, GZCO, and SSMS had significant proportions of long-term liabilities due within a year, with PALM recording the highest at 74% in 2018. Consequently, after adjusting for long-term liabilities due within a year, short-term debt contributes only minimally to total debt, such as 7.05% in PALM's case. This reliance on long-term debt sources inhibits cash inflows from debt for immediate investments or projects with positive NPVs. Therefore, the short-term debt data analyzed in this research cannot adequately explain the dependent variable of investment efficiency.

Debt Covenants and Investment Efficiency

The results of hypothesis testing using the t-test show that DEBT_COV (Debt Covenants) has a probability value of 0.251, whose value is greater than the significance confidence level of 0.05. Thus, with the results of the t-test value of DEBT_COV which is higher than 0.05, the alternative hypothesis H3 of this study is rejected. Thus, it can be stated that debt covenants do not have an influence in a positive or negative direction on investment efficiency in the companies sampled in this study.

In this study, debt covenants are evaluated by calculating the ratio of total debt to total company equity. This measure is a representation of financial leverage. The inclusion of financial leverage aims to analyze the balance between a company's debt and equity components. Consequently, these calculations enable an assessment of how extensively the company relies on external funding for its business operations (Modigliani & Miller, 1958).

The findings of this study corroborate the research outcomes of Solikahan et al. (2013), Amelia Putri et al. (2023), and Dewi et al. (2024), indicating that debt covenants assessed through financial leverage do not impact corporate investment efficiency. The ineffectiveness of leverage on investment stems from the diversified sources of company funding, which include not only external debt but also internal equity (Solikahan et al., 2013). A high level of financial leverage signifies heightened risk due to substantial debt obligations. Conversely, a low financial leverage suggests a more secure capital structure where company funding is less reliant on external debt (Amelia Putri et al., 2023).

Based on the analysis of debt covenants using financial leverage, it was observed that among 180 sampled companies, the total debt exceeded the equity owned by the company. Researchers subsequently identified the top 5 samples with notably high financial leverage values through data processing. These companies include CPRO (Central Proteina Prima Tbk) in 2016, JAWA (Jaya Agra Wattie Tbk) in 2022, WICO (Wicaksana Overseas International Tbk) in 2022, and MPPA (Matahari Putra Prima Tbk) in both 2020 and 2022. CPRO (Central Proteina Prima Tbk) recorded the highest financial leverage percentage in 2016 at 4122% or 41.21542. The utilization of debt exceeding equity can have varied impacts on the company, including the potential risk of creditors gaining management control rights (Myers, 2001).

Based on the findings of this study, it is evident that the magnitude of a company's leverage, whether large or small, does not accurately indicate the extent to which the company's assets are financed through debt (Dewi et al., 2024). Moreover, the level of leverage cannot predict whether the company will use debt financing for future investments. In the context of agency theory, the debt covenants examined in this study do not effectively foster a conducive financial reporting environment within companies. Consequently, stringent covenant requirements have not succeeded in constraining managers who prioritize their own interests.

From an agency theory perspective, which examines the problems arising between principals and agents, the inclusion of covenants in financial statements does not eliminate the possibility of information asymmetry or inequality between those receiving and providing information. Consequently, the investment activities undertaken by the company may suffer from inefficiencies due to the inability of these debt covenants to compel managers to exercise greater caution in selecting and funding projects.

Therefore, managers should focus on effectively and efficiently managing the company's debt, ensuring timely repayment to creditors to avoid the risk of creditor control. Additionally, management needs to formulate investment policies, strategies, and decisions carefully, as the scale of company funds does not determine the company's investment choices. Ultimately, this study concludes that regardless of the company's leverage magnitude, it does not influence the company's decision-making understanding or strategy regarding future investments.

CONCLUSION

The implications drawn from the research encompass significant insights for stakeholders involved in Indonesian corporate governance and economic policy. Firstly, the study underscores the positive impact of conservatism on investment efficiency within Indonesian companies. By adopting conservative accounting practices, firms can enhance the transparency and accuracy of their financial reporting. This improvement mitigates information asymmetry between stakeholders and managers, aligning managerial incentives with shareholder interests. Such practices are crucial in fostering a conducive environment for sustainable economic growth and investor confidence amidst global uncertainties.

Conversely, the research findings indicate that debt maturity and debt covenants do not significantly influence investment efficiency among the sampled companies. Short-term debt maturity fails to effectively monitor or mitigate managerial self-interest, nor does it alleviate information asymmetry problems. Similarly, debt covenants assessed through financial leverage do not impact corporate investment efficiency as anticipated. These findings challenge previous assumptions and highlight the complexity of financial decision-making within Indonesian firms.

In conclusion, the study provides valuable empirical evidence that can inform policymakers, investors, and corporate management in Indonesia. Addressing the findings can lead to more targeted regulatory measures and governance practices aimed at improving investment efficiency. By refining strategies related to conservatism and reevaluating the role of debt maturity and covenants, stakeholders can better navigate the challenges of global economic volatility and enhance long-term economic resilience. Thus, the study contributes to advancing understanding and practices that promote efficient investment allocation and sustainable economic development in Indonesia.

Meanwhile, through a series of research conducted by scholars, it has been identified that there are several limitations inherent in this study. Firstly, the use of short-term debt as a measure of debt maturity primarily consists of long-term debts maturing within a year. Hence, debt maturity fails to serve as a meaningful predictor of investment efficiency. Secondly, the coefficient of determination (R2) from the tests is notably small, standing at just 0.047. Therefore, future researchers are encouraged to extend the study period and explore alternative proxies or computational methods for assessing research variables, aiming to achieve more robust research outcomes.

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