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IS ACCOUNTING INFORMATION RELEVANT AS AN EARLY WARNING SIGNAL?

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Abstrak – Relevankah Informasi Akuntansi sebagai Sinyal Peringatan Dini?
Tujuan Utama – Studi bertujuan menganalisis peran informasi akuntansi sebagai sinyal peringatan dini bagi investor.
Metode – Studi ini menggunakan metode wawancara terstruktur dan regresi linear berganda. Adapun sampel studi adalah perusahaan yang terdaftar di Indeks IDXHIDIV20 periode 2014-2019 dan komunitas investor saham pemula.
Temuan Utama – Studi membuktikan bahwa informasi akuntansi mengandung nilai prediktif sebagai sinyal peringatan dini bagi investor. Keputusan investasi seringkali dipengaruhi perilaku investor yang terkadang sulit dianalisis secara rasional. Kualitas keputusan tergantung pada pengetahuan dan pengalaman yang dimiliki investor.
Implikasi Teori dan Kebijakan – Hasil studi mendukung teori sinyal, bahwa informasi akuntansi mengandung nilai prediktif yang bermanfaat bagi investor. Walaupun demikian, perilaku investor terkait dengan pemanfaatan informasi akuntansi tergantung pada kemampuannya menangkap dan menganalisis sinyal tersebut.
Kebaruan Penelitian – Studi ini menerapkan mixed method untuk membuktikan nilai prediktif dari informasi akuntansi dan mengungkapkan makna manfaat yang terkandung didalamnya bagi investor.

Abstract – Is Accounting Information Relevant as an Early Warning Signal?
Main Purpose – *This study aimed to analyze the role of accounting information as an early warning signal for investors.*
Method – *This study used a structured interview method and multiple linear regression. The study samples were companies listed on the IDXHIDIV20 index for the 2014-2019 period and the beginner stock investor community.*
Main Findings – *This Study proved that accounting information is predictive as an early warning signal for investors. Investment decisions are often influenced by investor behaviour which is sometimes difficult to analyze rationally. Therefore, the decision's quality depends on the investor's knowledge and experience.*
Theory and Practical Implications – *The study results support the signal theory that accounting information contains a predictive value that benefits investors. However, investors' behaviour related to the use of accounting information depends on their ability to capture and analyze these signals.*
Novelty – *This study applies a mixed method to prove the predictive value of accounting information and reveal the meaning of the benefits contained therein for investors.*

Decision-making addresses a problem and determines its follow-up based on the best alternatives to some identified problem-solving solutions (Abernathy et al., 2020). Investment decision-making is a complex process in investment activities in the capital market. Investors need accounting information related to the company's performance assessment as a consideration process to decide on investment. Based on the perspective of signaling theory, the company's financial reporting that contains information about accounting policy is seen as having a predictive value which has expected to provide an early signal that warns some investors so that the investment decisions they make will generate future profits (Abdel-Meguid et al., 2019; Bartov & Konchitchki, 2017; Feng & Kim, 2021; Johnstone, 2021; Oluwagbemiga, 2019). Investors tend to make decisions to invest their funds in shares of companies with good financial performance. If a company is considered to have good performance, then the company's shares tend to be in demand by investors. A company financial report that contains financial condition information can appraise the company's performance. The accounting information is considered able to provide an early warning signal in processing information about their investment. If financial information presents good performance, it should be a better indication to the investors concerning the future enterprise's prospects, so they will be concerned about investing their funds in the company's shares and vice versa.

The development of science in this study emphasizes signaling theory, which requires understanding theoretically and empirically connected investment trading activities in the capital/stock market. This study tried to reveal the investor's behaviour in understanding and interpreting signals of the meaning of accounting information to warn them in the earlier processing of investment decisions. This objective corresponds to the relevance of accounting information, which states that the ability of the numbers listed in the financial statements and their disclosures can help make investment decisions for investors. A portion of the information is relevant if the information influences the person's informative decisions to forecast the subsequent event and confirm or revise the early expectations. In other words, the information contains a predictive value. This means that accounting information is considered capable of providing signals for interested parties, including investors (Badru & Ahmad-Zaluki, 2018; Drake et al., 2020; Gödker & Mertins, 2018; He at al., 2020; Indriani & Amalia, 2019; Naveed et al., 2020; Nurul & Hamidah, 2021; Puspitaningtyas, 2012; Puspitaningtyas et al., 2020).

The notion of signalling information, the accounting relevancy, and the efficient market hypothesis indicate that investors do not fully utilize accounting information as a functional value when making and implementing investment decisions, especially those who use technical analysis and other non-fundamental analyses. The sophistication of investors in the analysis of accounting information (naive investors) also affects investors, so they tend not to consider the signals in accounting information. The financial theory assumes that investment decisions are aligned between perceptions and rational access to information (Appiah & Acheampong, 2019; Banerjee & Deb, 2017; Church et al., 2019; Dyer, 2021; Elkins et al., 2021; Ma & Jeong, 2022; Puspitaningtyas, 2019; Yildiz et al., 2019). However, financial theory cannot answer the anomalies and irregularities in the capital market.

Several empirical studies have proven that predictive accounting information matters statistically by explaining the relevance of financial figures and market values (Blankespoor et al., 2019; Figlioli et al., 2020; Kang et al., 2021; Mechelli & Cimini, 2021; Puspitaningtyas, 2019, Puspitaningtyas et al., 2020; Wang et al., 2019). However, the predictive model formed shows an inconsistent composition, so it is suspected that it will cause different signal meanings for each investor. There are differences that illustrate the inconsistency of several previous studies in explaining the relevance of financial figures and market values, indicating that studies on the relevance of accounting information still need to be carried out to determine the usefulness of accounting information as an early warning signal for investors in making investment decisions. Through these signals, investors are expected to be able to predict the performance of a company's shares which can influence them in making investment decisions. This background underlies this study, which intends to explain how investors as investment actors understand and interpret accounting information as an early warning signal when considering making an investment determination.

These initiated an investigation to explain that investment decisions can deviate due to investor behaviour factors. The outcome of this research is expected to contribute to academia and practice, including a general view that, theoretically, information in the financial report with a firm accounting policy has a forecasting value. It signals investors to use it to determine the alternative decision for their investment and reveals whether the theoretical study is consistent in the empirical domain.

METHOD

This study used a mixed-method approach consisting of two stages. The first stage was intended to analyze the content of the predicted value of the accounting information. The accounting information intended was financial ratios. The independent variables included the current ratio (CR), debt-equity ratio (DEB), total assets turnover (TATO), sales growth (SG), and the ratio of return to equity (ROE). These variables were proxied by the price-to-earnings ratio (PER).

Table 1. Determination of the Total Observation Data

Description	Total
Companies listed in the IDXHIDIV20 Index period 2014 to 2019	20
Companies that do not get a positive net profit and do not increase over the last three years	(12)
Companies that do not distribute cash dividends regularly	(2)
Number of companies selected as sample	6 Companies
Number of years of observation	6 Years
Total observation data	36 Samples

Figure 1 shows the conceptual framework. Based on Figure 1, the conceptual equation is:

$$PER = \beta 1CR + \beta 2DEB + \beta 3TATO + \beta 4SG + \beta 5ROE + e \quad \text{(i)}$$

One of the objectives of financial ratio analysis for investors is to obtain an overview of a company's performance based on the financial statements for a certain period. These data were from the summary of the company's financial reporting. Determining the predicted value's content was carried out through regression analysis with multiple variables. Regression analysis was used to form a prediction model that partially described the five predictor variables' influence on the criterion variable (proxied with the price-to-earnings ratio as an indicator of the company's value variable).

There were 20 companies involved as the study population. These companies were listed in the IDX High Dividend 20 Index (IDXHIDIV20 Index) with a base year of January 30, 2009, consecutively during the 2014 to 2019 period. Furthermore, six companies were selected as samples using the purposive sampling technique. The IDXHIDIV20 Index is a stock index targeted by investors because most of the stocks included in it are stocks with market capitalization (big caps) with good financial reports and are often considered blue chip stocks. This index measures the price performance of 20 stocks that have distributed cash dividends for the last three years and have high dividend yields.

Table 1 shows the sample data selection. The samples were determined by looking at the companies listed in the IDXHIDIV20 index consecutively during the analysis period of January 2014 to December 2019 without being delisted. The aim was to determine whether there is a difference between predicted and real firm value.

The second stage was intended to reveal the meaning of accounting information as an early warning signal for investors' investment decisions. It was conducted through structured interviews with selected informants, namely five investors from the Community of Novice Stock Investors (presented in Table 2). The analysis was done using exploratory design. The informants were determined intentionally. The selected informants were assumed to have understood the field of stock investment they were involved in. The following are the criteria for determining the informant as the data collection method for this study: someone who has been in the community

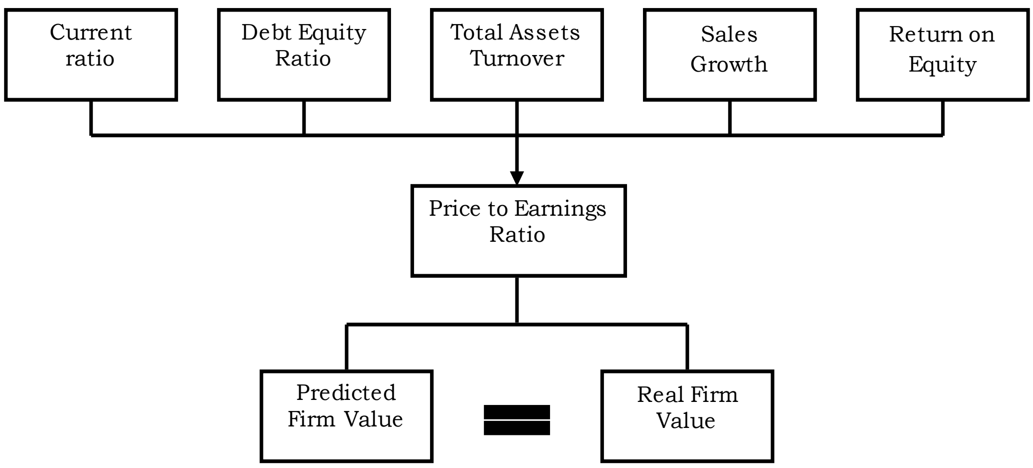

Figure 1. The Conceptual Framework

Table 2. The Informants' Data

Name	Member Since
Ariel	September 2018
Fahmi	September 2018
Bagus	January 2019
Fajrul	February 2019
Anindya	Mei 2019

for more than one year, is knowledgeable in the field of stock investment, and has experience in making stock investment decisions.

The world of stock investment in Indonesia is in a phase of increasingly better growth, proven by the various backgrounds of individuals who are now curious about entering the trading activity in the market. New players in the field of stock investment, commonly referred to as novice stock investors are increasing daily. An increasing number of investors have had SII (single investor identification) in the Indonesian stock market since the beginning of 2020, when the capital market becomes more volatile. This phenomenon can certainly illustrate how the world of stock investment is starting to get attention from many novice stock investor players. To invest carefully and wisely, novice stock investors tend to choose to join several stock investment communities, one of which is the Novice Stock Investor Community. The Novice Stock Investor Community is a place to share knowledge and experience, especially with potential stock investors looking for knowledge about the capital market. This community is a social movement engaged in financial literacy, especially the capital market, which aims to advance the capital market in Indonesia based on smart domestic investors.

RESULTS AND DISCUSSION

The early warning signal concept refers to the early warning system used to evaluate the insurance company's financial performance and conditions. Barradale et al. (2022) state that the insured and insurer are the parties involved in insurance transactions. The insured is guaranteed to get paid by the insurer if the insurance risk contained in the insurance coverage clause occurs. Therefore, a particular portion of insurance premiums must be settled by the insured to the insurer periodically. So, insurance aims to protect against financial losses caused by previously unforeseen events. The basis of these reasons is that the insured is interested in knowing the insurance company's financial condition. The assumption underlying the early warning system is that the fundamental factors of insurance companies are reflected in financial ratios. Fundamental factor analysis is based on the periodic financial reporting information of the companies through the analysis of financial ratios, such as: claims expense ratio, liquidity ratio, and premium growth ratio (Al-Shattarat et al., 2018; Dordzhieva et al., 2022; Meder et al., 2019; Oluwagbemiga, 2019).

The early warning system is a benchmark for calculating estimates such as assets, debt, capital, and company profits for a period. The financial performance inherent in the companies can be calculated by analyzing the firm financial ratio. Many countries use the calculation of the early warning financial system in scrutinizing the financial condition of an insurance company because the outcomes of these analyses of this technique deliver an early warning financial condition signal to a company (Bartov & Konchitchki, 2017; Dyer, 2021; Feng & Kim, 2021; Puspitaningtyas, 2019). This study conceptualizes the early warning signal, which refers to the early warning system. The underlying assumption is that the accounting information presented in the published financial statements reflects the company's performance. Suppose the information is captured as a signal by investors and can influence it in making investment decisions. In that case, the accounting information presented in the financial statements can be said to contain benefits for investors.

Firm value analysis is needed to determine the company's performance in a period. The results of the analysis are expected to provide an overview of the value of the company. It includes its internal characteristics, the quality of the company and its management performance, and of course, the prospects of the company in the future so that it can be used as a consideration in determining whether a company's shares are worthy of being selected as an alternative investment (Dordzhieva et al., 2022; Gödker & Mertins, 2018). Corporate financial management desires to maximize the investors' wealth with increasing value. Therefore, the value of the stock can reflect the company's financial investment and dividend policy. In the study of corporate financial management, both theoretically and empirically, the variables that are often used in financial accounting and capital market studies to represent company value are stock prices with various types of indicators, including stock returns, common stock prices, abnormal returns, price to earnings ratio, and other indicators that represent the price of ordinary shares in the capital market. Thus, the company's value is a measure of the objective value by the market and orientation to the company's survival (Indriani & Amalia, 2019; Puspitaningtyas et al., 2020).

Table 3. Multiple Linear Regression Results

Variables	Test Results
Constant	24,960
	(0,004)
Current Ratio	6,236
	(0,001)**
Debt-Equity Ratio	-5,474
	(0,001)**
Total Assets Turnover	-20,369
	(0,005)**
Sales Growth	0,032
	(0,075)
Return on Equity	0,780
	(0,003)**

It has been mentioned that the value of a company is reflected in its share price. Firm value reflects how investors assess the company's financial performance in a period (Blankespoor et al., 2019; Dyer, 2021; Kang et al., 2021; Puspitaningtyas et al., 2020). The assessment consequences become an alert in investing decisions by potential or existing investors. One indicator of measuring the company's value in the scope of the stock valuation ratio is the price-to-earnings ratio. Price-to-earnings ratio measures the comparison between the company's stock price and the profits earned by shareholders. Several previous studies have stated that firm value influenced by a periodic financial statement that's contained information about a firm accounting policy. This information becomes the basis for financial ratios analysis, which generally consists of liquidity, leverage, activity, growth, and profitability variables. The following describes the results and discussion of this study.

Formation of prediction model using multiple linear regression analysis. Accounting information is a collection of financial data sourced from the company's financial statements, which act as one of the essential media in the investment decision-making process (He et al., 2020; Puspitaningtyas, 2019). In other words, accounting information is contained in the company's financial statements. Financial statements describe how management manages company finances. Financial statements also function as management accountability reports to investors. All financial transactions carried out by the company in running the business are presented in the financial statements. Therefore, the financial statements reflect the company's financial performance. Accounting information is said to have predictive value if the information can be used as input by investors to predict future performance. Financial statements become relevant for investors concerning investment decision-making. Through the analysis of financial statements, investors can identify the risks to be faced and the expected returns to be received from the investment activities undertaken. A financial ratio analysis derived from information in a financial report can obtain an overview of a company's financial conditions. Financial ratio analysis generally consists of liquidity, leverage, activity, growth, and profitability variables (Lerman, 2020).

Table 3 shows the multiple regression results. Based on Table 3, the prediction model's formulation was as follows:

$$PER = 24{,}960 + 6{,}236CR - 5{,}474DER - 20{,}369TATO + 0{,}780ROE + e \quad (i)$$

Based on the results of the equations and the test in Table 3, it can be seen that almost all independent variables have a significant effect on PER. Only sales growth variable cannot trigger PER.

Effect of accounting information on corporate value. The consequences of this examination proved that the analysis of accounting information contained in financial statements, namely the current, debt equity, total assets turnover, and returning equity ratio, are significant predictors to signify the price-to-earnings ratio as an indicator of a firm value. Although theoretical and some empirical evidence from previous studies support the belief that sales growth (as one of the independent variables in this study) affects firm value, this study statistically showed that sales growth did not affect firm value. This means that sales growth is not an important predictor for predicting the price-to-earnings ratio. Sales growth describes the company's ability to maintain its economic position by increasing the number of sales all the time. A company can be said to be experiencing growth if the primary operating activities of the company increase consistently. Sales growth reflects past investment success and can be used as a prediction of future growth. Also, at the industry level, the increasing competitiveness and demand reflect sales growth (Chen et al., 2021). However, the results of this study show results that are inconsistent with this statement. This is because, in the study period, the company's condition was not in a growth period that focused on increasing the number of sales, so during this time, sales growth was not an essential predictor for predicting company value.

Regardless, the outcomes of this study support the notion of the relevant quality of accountancy, that the published financial information contains facts that reflect the performance and opportunities of a company. The value relevance is the power of accounting reports to convey company importance to investors (Dyer, 2021; Feng & Kim, 2021; Puspitaningtyas et al., 2020). The information content reflects in the influence test results, which proves that the current ratio, debt-equity proportion, assets turnover, and equity return affect the price-to-earnings ratio. These results strengthen the purpose of financial statement analysis, which is to forecast the company's value condition.

The concept of accounting information value is relevant in that it discusses miscellaneous substances and criteria related to accounting information. This concept refers to one of the purposes of financial reporting in the statement of financial accounting that financial statements should furnish information to help investors-creditors, and other potential users in forecasting the uncertainty, quantity, and timing of future cash recipients of dividends or claim and the payoffs from their sale, loan or security redemption or maturity. Thus, the presentation of financial statements should consider the accounting information its users need. As presenters of financial statements, accountants should adjust the accounting details suggested in financial declarations to the needs of their users to produce the right decisions. In this way, the accounting information presented in financial statements will have value relevance and become more valuable (Badru & Ahmad-Zaluki, 2018; He et al., 2020; Nurul & Hamidah, 2021; Puspitaningtyas, 2012).

Information provided by accounting is proven to have relevant value because the information contained in accounting is reflected in market value statistically. This statement supports the characterization of information accounting value relevancy, that accounting datum should explain the firm's value. Valuing a company is the current picture of expected returns in the future. The stock price can be considered one of the company value frames. The investors assess the company's financial condition to determine investment interest. Therefore, the company's value is one of the considerations in determining decisions for investors to invest. The questioning investment decision varies from buying, selling, or maintaining stock ownership in the market. Selling and buying a financial asset in the stock market is crucial to investors because it affects the opportunity to earn a future return. The issuer should consider having good performance prospects when its stock price increases. This implication is that if the shares sell out, investors will get capital gains, earn dividends, or even get both. The direction of value relevance investigated the stock market values and information in the financial report empirically, indicating the usefulness of any accounting information in the company fundamentals study. The consequence of this theory is that information in financial statements must have relevant value and can provide valuable benefits to its users in decision-making. Investors require accounting information to decide, determine and analyze the investment alternative or potential. Relevant and reliable accounting information allows investors to make rational decisions to achieve the expected results (Bouteska, 2019; Elkins et al., 2021; He et al., 2020; Indriani & Amalia, 2019; Puspitaningtyas, 2012).

The usefulness of accounting information in predicting firm value. The prediction of firm value is an important consideration in stock investment decisions, aiming to optimize returns and minimize risks. The data analysis in this study verified that there was no difference between predicted and actual firm value, indicating that the financial report based on accounting contains predictive meaning to forecast the firm value in the next period. These findings were verified by the analysis of structured interviews with five selected investors who are members of the Community of Novice Stock Investors. It indicated that analyzing information from the periodic financial statements provides a signal for investors that is useful for predicting the value of the company in the future. Of course, the ability to catch signals depends on each investor's level of knowledge and experience.

The following are excerpts from interviews with informants regarding the meaning of accounting information as an early warning signal to predict a firm value and its benefits considering alternative processes in deciding purposing investment. Furthermore, Ariel explained it in the following statement:

> "Information in the financial statements becomes a signal that describes the company's performance achievements in a period. The information is quantitative and useful for projecting the company's value, both in the past, present, and future. The decisions taken depend on how well we (as investors) receive and analyze these signals. The hope is, of course, that the investment decisions taken will provide optimal returns with a minimal level of risk. Before deciding to invest

> in stocks, it's a good idea for potential investors to understand the purpose of investing in stocks. Because, the character of individuals is different, some tend to be traders (short-term), and some tend to be long-term investors. These characteristics can be seen based on the risk profile of an individual. Potential investors need to understand why they choose to invest in stocks, how to think that someone can become a company owner instead of just being a consumer, how to become a stock investor, and so on. What advantages to expect from investing in stocks? Shares can provide returns in the short and long term through capital gains (the difference between the selling price and the buying price); stock investors also have the opportunity to get dividends (part of the company's profits are distributed to their investors), besides that stock investors are also entitled to participate in the general meeting of shareholders only by owning 1 lot (100 shares) of their company's shares. Nevertheless, investments also contain risks. Risk is closely related to the rate of return, like two sides of a metal chip. Behind the risks of investing in stocks, a potential return will be received in the future. The greater the risk, the greater the potential return that will be received, and vice versa. Although risks cannot be avoided, risks can be minimized with adequate planning and understanding. One of them is choosing an investment instrument that is adjusted to the level of acceptance of risk. In the community, we often share knowledge, experiences, and the latest information that may affect stock investment decisions" (Ariel).

This statement implies that he was normative of the view that the information suggested in the financial statements describes the financial condition of an enterprise at a specific time or period through the accounting process. As a medium of communication, the financial data presented in the financial statements give signals about the company's activities to interested parties and is assumed to affect its expectations. Therefore, the information signals in the financial statements can be used as considerations in the decision-making process by investors, potential investors, and the company's management. This statement supports Signaling Theory, which explains how the company gives signals containing relevant information to external parties (investors and/or potential investors). Furthermore, the receiving party of the information will analyze the signals and adjust its interpretation for decision-making. Investors will make a trade-off between risk and return based on the signals it receives. Investors or potential investors must understand the possible risks they will face from stock investment activities (Blankespoor et al., 2019; Chichernea et al., 2017; Dyer, 2021; Gao et al., 2022; Kang et al., 2021).

How investors perceive risk and how much risk can be accepted is referred to as a risk profile, which is understood as how high an investor's tolerance level is for losses on the investment. In this context, potential investors recognize their ability to account for risks. The risk, in this case, is a loss. Cheng et al. (2022) state that individual has different risk profile depending on their knowledge and experience. Some investors like to determine the instrument type with an increased risk level, some investors do not like high risk, and some do not like high risk. For investors, the important thing is how to choose an investment instrument to still be able to provide returns. This ability to bear risks is usually also related to the percentage of idle funds held to invest. Several previous studies have proven that perceived risk affects investment decision-making, such as studies by some researchers (Appuhami, 2018; Bouteska, 2019; Cao et al., 2019; Madsen & Niessner, 2019; Weichao et al., 2018). In addition, Fahmi explained the explanation in the following perspective:

> "We study the information contained in the financial statements, and there are many signals in it that we must analyze. Fundamental and technical analysis are equally important because stock price movements tend to fluctuate, so we must analyze the factors causing it. Before making a decision on which stock to buy, sell, or hold, it is necessary to carefully consider the advantages and disadvantages, and we must know the trend of a stock. However, we have to be quick in analyzing it because we also compete in making decisions with other market participants, especially when market conditions are bullish, an increase follows, namely conditions where market value is appreciating, rising stock prices in stock trading volume" (Fahmi).

This statement indicates that he believed accounting information contains a predictive value. Based on the relevancy of accounting information, predictive value means the ability of information to assist users in obtaining profits in the future. That is, the user's expectations of the outcomes of a past or future event will occur. Thus, the meaning of accounting information for investors is to signal that the enterprise has good opportunities in the hereafter (good news), and the signal helps determine investors' stock investment decisions.

The traditional financial theory reveals that rationality is the basis for investors, so the decisions taken are rational because the stock price reflects the latest information in the market. The quality of information influenced the accuracy and speed of investors in receiving, managing, and analyzing existing information that would be useful for making an investment choice.

Based on the signals, the investor will consider the expected return and risk of their investment decision. As rational individuals, investors tend to make investment decisions that offer the highest level of return at a certain level of risk and vice versa. The three classifying of investors' conception of investment risk behaviour could be taking a risk, averting risk, and moderate risk. Risk takers are investors who tend to like high risks in the hope of getting a high level of return as well. Taking the risk, investors tend to be speculative and always want to get high returns in a relatively short time.

Risk-averse is a type of investor who does not like risk and tends to be conservative in choosing their investment instruments. For them, the important thing is that investment activities still provide returns, even with a relatively small level, as long as the investment funds remain safe and intact. The character of this investor prioritizes the safety factor of their funds. Risk moderate is someone who tends to dare to take greater risks yet they are careful about taking investment instruments. Generally, they will limit the amount of investment in risky instruments (Bouteska, 2019; Lerman, 2020; Martin, 2019; Puspitaningtyas, 2012). In detail, Bagus explained this argument in the following statement:

> "There are many things that investors must consider in the investment decision-making process. The first thing to consider is knowing or getting to know the targeted companies by browsing various trusted sources and analyzing company financial statements. At this stage, investors must be able to capture the signals in that report because the results of the analysis of these conditions will be powerful in predicting the value of the company so that investors can project whether the company has good prospects in the future. Based on these projections, investors will make investment decisions. The assumption, the investor is a rational individual and his decision-making is not speculative." (Bagus).

The interpretation of this statement is that Bagus agrees that the investor is a rational individual. Rational is a mindset in which a person behaves and acts according to human logic and reason. Thus, behaving rationally is to think before acting to distinguish what is right and wrong from what is and is the real thing. If the predicted stock can't provide the expected rate of return and the investor still chooses to invest in this stock. Investors drive by irrational factors that have been affected by unpredictable psychological impacts (such as belief, feeling, presumptuousness), originated company factors, rumours, and other unpredicted situations (conditions). Based on the traditional paradigm,

Financial theory states that the return on stock investment depends upon the risk, where high risk can mean a high return and vice versa. Traditional finance theory seems very simple. The stock market was out of the ordinary in the mind of investors. They did an unusual act to capture the market condition and make an irrational decision to deal with it. Most investors compromise with that statement. It means that investors' beliefs and opinions are not in sequence with the condition of market activities. They understand that low-risk stocks do not provide high returns but prefer choosing lower ones. So, most investors overlook being chance averse than taking the risk because they enjoy cheap stocks over higher stocks (He et al., 2020; Lerman, 2020; Ma & Jeong, 2022). Related to this, Fajrul explained in more detail in the following statement:

> "Financial reports are a source of information for investors in the investment decision-making process. The information therein provides a signal for investors to predict the company's value through the analysis of financial ratios. Accounting information is historical, so it is necessary to project analysis by comparing the items in the financial statements. In this way, the signals contained in financial statements can be useful for investment decision-making for investors" (Fajrul).

The implied meaning of the statement is that the signals that investors receive should be analyzed. The goal is to reduce uncertainty until a rational explanation is obtained. This is done by collecting relevant information that has the potential to influence decision-making. Basically, information has become available in the market. However, investors' ability to receive and analyze the available information is very diverse. In this case, there are two kinds of investors: informed and uninformed. The informed are investors who can seize information about their alternative decision-making process. The uninformed investors do not have the understanding or proficiency in capturing and utilizing the knowledge available in their decision-making strategy.

To be informed is an individual aspect. Someone will probably deliver additional responses to the identical origin of information (Lerman, 2020). After that, investors will revise their beliefs sequentially in a continuous process through analysis of the signals contained in published accounting information and have the potential to influence investment decisions taken (Bouteska, 2019; Mita et al., 2018). Related to this, Anindya explained in more detail in the following statement:

> "Accounting information is an important parameter in analyzing the company's financial performance. This information provides a signal to predict the profits and risks that may occur and project the company's growth opportunities in the future. Therefore, investment decisions in the financial markets are subjected to risk and uncertainty. Usually, investment decisions are made based on three analysis results that rational investors should carry out: fundamental analysis, technical analysis, and analysis related to rumours or news that appear in the market. So, in addition to knowledge about investment, strong instincts are also needed to be able to read and observe stock market conditions" (Anindya).

Instinct is a form of feeling good as a non-formal primitive method inherent in every human being, which is often proven true. Instinct comes from our own rationale when choosing an alternative that we think is right. Therefore, instinct should not be ignored because t is a different kind of reasoning that can consider how decisions can be fulfilled, not just numbers as a mathematical relationship. It could be that the anomalies that occur in the market as a result of decision-makers who often ignore the intuitive values that underlie one's personality for the decisions taken. In fact, instinct is formed from interaction, and at the same time, it is part of deep knowledge. That is, instincts are formed from a long journey process from an individual based on experience, knowledge, personality, religion, and environment (Abernathy et al., 2020; Liu et al., 2020). Instincts will be trained if individuals are directly involved in their investment activities, interact with people with diverse expertise, are open-minded, are not afraid to take challenges and risks, and dare to make breakthroughs.

There are limitations in making investment decisions using formal analytical methods that were previously believed to be able to produce the right choices, thus leading decision-makers to use gut feeling or gut reaction alternatives or instincts. Instinct is something that looks good that is formed from a pattern of behaviour and reaction to a stimulus that is often proven true. The role of instinct can help investors make decisions based on hunches regarding complex behaviour patterns and responses, not directly learned, which just emerge from a person's personality (Abernathy et al., 2020; Liu et al., 2020). When rational investors make decisions, the actions they choose are expected to produce the highest utility. When faced with uncertainty in decision-making, investors will select and analyze the information signals they receive. For investors, information is a signal that functions as a stimulus that affects cognitive processes because it informs the company's financial performance, opportunities, uncertainty, standards of management accountability to stakeholders, and desired value. In the selection and analysis process, the instinctive strength of the individual can act as a supporting factor for decision-making. Therefore, instinct has a position as a supporter of investor thinking in decision-making. The quality of decisions depends on the decision maker's instinctual strength. Therefore, investment activity often plays an influential role in intensifying the investor's financial status, contributing to increasing wealth. In general, the individual does not know his decision is right until he realizes that his decision produces the level of utility as expected (Cascino, 2019).

Based on the results of structured interviews with the informants, it can be concluded that investors as investment actors understand the content of accounting information in publicly available financial statements. Investors understand that this information provides an early warning indication regarding the prediction of the company's value in the future.

The efficient market hypothesis assumes that investors are rational beings, so the signals in financial statements tend to change their beliefs in the investment decision-making process. When an investor receives a signal that comes from published accounting information, then armed with their knowledge and experience, they will perform a fundamental analysis or technical analysis based on price movements and stock volume in the hope that they will be able to identify the line of business and project the future enterprise value. The analysis effect would increase understanding for making decisions in processing investments.

It shows that the outcomes of this analysis reinforce the Signaling Theory, in which the management, as the information sender, delivers a sign in informing accounting form that deliberates the company's performance that is useful for investors (as the recipient of information) for making investment decisions. The publication of financial statements contains information that is useful for predicting the company's future value. The content of this information acts as an early warning signal for investors. Based on these signals, investors conduct analysis to project the company's future value. If the prediction results show that the company's value will increase in the future, then the signal is positive, and vice versa. The analysis is driven by the motivation of investors to earn profits from their investment activities. Consequently, investors tend to avoid investing in companies with low firm-value shares. Signalling theory describes the behaviour between the two parties involved in the interaction: the management (agent) as the signaler and the investor (principal) as the signal recipient. This theory explains why management has the urge to provide information through the publication of financial statements to external parties. One of the impetuses is that management is interested in reducing information asymmetry so that external parties (investors) get adequate information regarding the company's financial performance. Hopefully, investors will be interested in investing in company shares. Therefore, the management will provide relevant information as a signal that is expected to be utilized by investors. This presented information is usually in the financial report that periodically reflects a company's financial performance. This presented information is usually in the financial report that periodically reflects a company's financial performance. Furthermore, the investor will revise his decision following his understanding of the information received as a signal. In other words, investors will analyze the content of information shown in the financial statements so that an overview of the obtaining company's performance in a period. The signalling hypothesis underlines the information content essence informed by management to support processing investment decisions by investors (Dyer, 2021; Indriani & Amalia, 2019; Puspitaningtyas, 2019).

Information is an essential element for investors because information essentially presents data that describes a condition in the past, present, or future. Investors need relevant and reliable information for the sake of making investment decisions. The efficient-market hypothesis remarks that stock markets imply current prices if information availability is reflected in stock prices. Three forms of the efficient market hypothesis are weak-form, semi-strong form, and strong-form. The weak form expresses the availability of past publicity information and reflects in the traded share prices. The semi-strong form notes that the volatility of stock price changes reflects past and new publicity information. Strong form argues that prices instantly reflect in the market conditions, even hidden or from insider information (Guttman & Meng, 2021; Lerman, 2020). Increasing trust by individual investors shifted their trading method to online trading that was traded by phone previously. Information and controlling level to accessing it is the main reason to do this. Therefore, investors who switched methods received a higher yield than those who didn't. The accounting information presented in the published financial statements will provide a signal for investors that reflects the company's performance in a period. When management announces its financial statements, it gives a signal to the market. Upon receiving the signal, investors will analyze it and classify it as good news or bad news. Next, the market will react. If investors translate the signal as good news, it will have a positive impact, usually indicated by an increase in stock prices and trading volume, and vice versa (He et al., 2020; Ma & Jeong, 2022; Puspitaningtyas, 2012). Thus, accounting information published by management can perform as an early financial warning to signal investors to process information to invest funds in the stock market.

The study's findings also support the statement of some researchers that announcement of publishing financial information was providing a signal as an alternative decision for investors in completing their investment (Al-Shattarat et al., 2018; Bartov & Konchitchki, 2017; Dordzhieva et al., 2022; Feng & Kim, 2021; Meder et al., 2019; Oluwagbemiga, 2019). Suppose the announcement contains a positive value, expecting the market to react when it receives the announcement. When the announcing information and all market players have acquired it, they will first consider it good or bad news. If the announcing information signals a good to investors, there will be a direction in stock trading transactions, where investors will tend to invest in high-value stocks. On the other hand, if the adverse (or unfavourable) signal notification of accounting information is received, it will affect investor confidence in investing in the company's shares.

Information derived from accounting that is useful for decision-making emphasizes the content of the information and the timeliness of its publication (Oluwagbemiga, 2019). However, in terms of investment decisions taken depends on the beliefs (behaviour) of individuals as decision makers because the information is individual. This opinion refers to the statement of Maharani (2014) that each individual may react differently to the same source of information as a response to any new information by the rational behaviour of the investor. Investors analyze information, considering their stock holding, tolerancing risk, timing the horizon, and financing capacity to invest. Investors evaluate the information quality according to their expectations and deliver more significance to information that would impact the stock prices and market trading volatility. Thus, there is permanently a distinction between interpreting and availability to access current information. Nevertheless, all investors have a similar opportunity to access needed information. Rationality or uniformity is not a subject reaction to each investor. They all face distinctive information biases based on the investor's unique situation in the ability to take a risk, understand, think of possible opportunities, and return expecting (Linardi, 2017; Rusydi & Djakman, 2016; Zhong et al., 2017).

When an investor receives information, he will revise his beliefs sequentially in an ongoing process by receiving information contained in the published financial statements as well as from other sources of information that may influence his decisions. At this stage, the ability to capture signals and analyze the meaning of the information contained in these signals depends on each investor's level of knowledge and experience. Therefore, investors need analysis based on accounting information in published financial statements in investment decision-making. However, investment decisions taken are often influenced by the behaviour of investors themselves, which is sometimes difficult to analyze rationally. With aspects of investor behaviour in making investment decisions, such as investors' perceptions of the company's future profits, this sometimes results in the stock price not reflecting its fair price (value). This phenomenon illustrates that investors respond to financial statement information and have limited cognitive capabilities in interpreting and analyzing the received information. Thus, investors may behave naively and irrationally based on information rumours, issues, speculative or risky behaviour, taking information impulsivity, loss-control action, and unusual mass behaviour. That, however, will have some consequences.

First, if the investor makes a mistake during decision-making, the stock in question is judged incorrectly, and the market appears fooled by the information that needs to be interpreted. Second, it affects the behaviour of investors who obey more words of heart, so that experiencing high risks in considering investment decisions. It is because the perception of the interpreting object becomes a misinterpretation or irrational. Third, to get capital gains, investors will behave as taking a profit. This shows that investors like speculative behaviour, short-term investments, and much more. It can be concluded that investors need to clearly consider information on an economic event when making investment decisions because this action is carried out to estimate the relationship of information with changes in the price of existing shares. That way, the investment decisions taken will provide optimal and maximum satisfaction (utility). Whatever it is, referring to the statements of Blankespoor et al. (2019) and Kang et al. (2021), that investment decision-making by investors tends to be done rationally to maximize its utility, it will take advantage of the signals given by the company's management through the publication of financial statements. When faced with uncertainty-related financial (investment) decisions, individuals tend to prioritize their rationality.

Figure 2 shows a model that describes the meaning of accounting information signals for investors in making investment decisions. Baed on Figure 2, the relevancy and usefulness of financial reports enhance accounting information efficiency, which is essential for stakeholders to make decisions depending on it (Martin, 2019; Pascual-Ezamaet al., 2018). Thus, it can conclude that the analysis results reinforce empirical findings that prove the meaning of accounting information as an early warning signal for investors in making investment decisions. In addition to the signals in accounting information, investors' knowledge and experience also influence decision-making. Accounting information signals become meaningless if they are not based on qualified knowledge and experience (Blankespoor et al., 2020; Eierle et al., 2018; Hamilton & Winchel, 2019). The results of this study provide a theoretical contribution

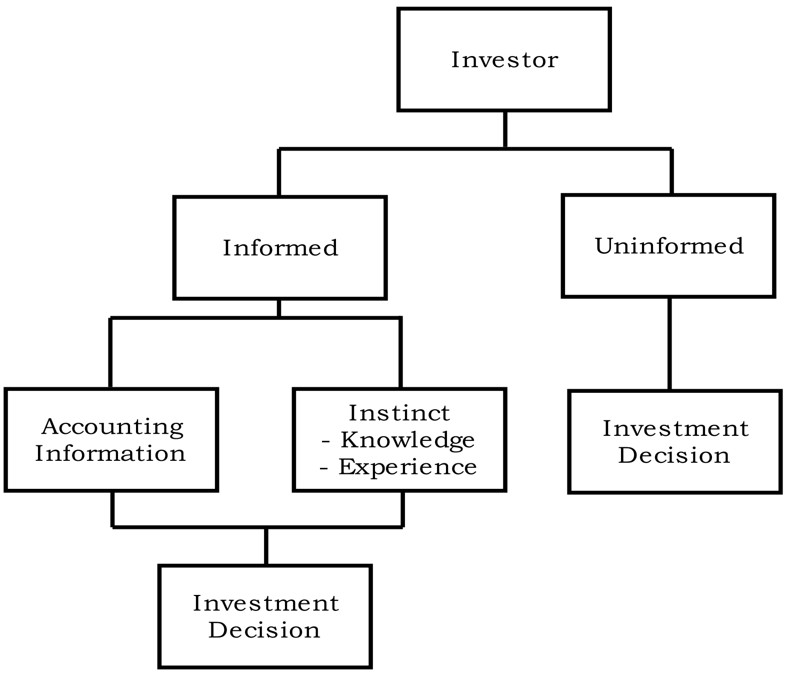

Figure 2. Investment Decision-Making Process

to the implementation of Signaling Theory, along with supporting theories such as financial statement analysis. The results of this study provide evidence regarding the meaning of accounting information as an early warning signal for investors in making investment decisions. The accounting information in the financial statements contains a predictive purpose that is useful for its users in making investment decisions. Therefore, the findings of this study strengthen the explanation of the relationship between accounting information and firm value so that it can be helpful as a consideration in making investment decisions for its users. The research findings construct

The key to investing is routine and regular. Risk and financial asset return are essential to making an investment decision. Options techniques and strategies support an appropriate method to offset the trade-off between return-risk. Investor decisions comprehensively rely on perceived information after all screening processes (Banerjee & Deb, 2017; Chichernea et al., 2017). The more often the investor invests, the more adept they are at doing it. Updating knowledge can be done by following the development of news related to capital market movements, such as economic agreements between countries, economic conditions, challenges experienced by specific industries, or policies that have a global impact. It can determine the rise and fall of stock prices. Thus, in addition to knowledge, experience factors influence investment decision-making.

CONCLUSION

The overall conclusion of this study shows that accounting information contains predictive value as an early warning signal for investors and is valuable for investment decision-making. In addition, the study also found that the quality of investment decisions depends on the ability of informed investors to interpret and utilize the signals contained in accounting information. The ability reflects the level of knowledge and experience of knowledgeable investors. The study's finding provides empirical evidence related to the support for Signaling Theory that the predictive value in published accounting information provides a signal for investors. However, investor behaviour related to utilization in investment decision-making depends on their ability to capture and analyze these signals.

For informed investors, information is an essential commodity in their investment activities. Whether a piece of information is valid or not depends on the individual receiving it. It is because the information is not always beneficial for the recipient. Only relevant information will be processed and analyzed to produce the best decision, which is expected to provide the highest utility value. Even if investors receive the same information, in practice, the responses and reactions of each investor may vary. It is due to differences in their behaviour due to various factors, including the level of knowledge and experience they have. Thus, in the end, the quality of investment decisions will be primarily determined by the quality of investors.

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