



TECHNOLOGY 4.0 ERA INVESTMENT DECISIONS FOR MILENIALS AND GENERATION Z

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Abstract

Almost nearly 60% of all investors in Indonesia's capital market are members of Generation Z, or millennials, who are under 30 years old. The development of Era 4.0 technology has made it easier to obtain information and current trends. As a consequence, the aim of this study is to examine in detail how to make investment decisions in the technology era of 4.0. According to the study, the research method used is qualitative research with the Grounded Theory Approach, which utilizes a number of methodical phases to develop theory, including Approach Stages, Theoretical Sampling, Constant Comparative Data Analysis Approach, A Core Category, Theory Generation, and Memo. According to the findings of a review of 21 literatures, there are three key steps that should be taken to increase financial behavior: (1) increasing financial literacy, which involves learning financial terms and ideally integrating them into institutions or promoting them through training; (2) understanding and knowing the company's portfolio; and (3) increasing financial behavior, which involves increasing experience in investing so that it is more instinctive.

Keywords : *Investment decisions, financial literacy, company probability, and financial behavior*

1. INTRODUCTION

Investment is a promising thing for now, there are many economic paradigm shifts, especially in the investment world, the investment trend is becoming a trust issue in participating in economic development, Baihaqqy, et.al (2019) and Desky, et.al (2022) explain the shift in names Stocks or also known as investments, developments in the investment world are very useful for the future but there can also be an increase in the risk appetite of global investors reflecting a desire to invest in riskier assets, for example stocks and government bonds in developing countries. This explanation states that investment is growing rapidly with development and freedom in the economy, this indicates that the community can be involved, both adults and teenagers, but several things must be considered in making investment decisions.

The theory used in making decisions is General Theory, in Keynes General Theory of 1936 as "fundamental uncertainty", so this General Theory's important point relates to the additional contribution of evidence about probability relationships providing an important counterpoint to the standard mainstream model of probability estimation which is based on data cross-section or time-series. Sen (2020) points out the limitations of using ergodic probability approaches in current investment practice highlighting the relevance of the above alternative formulations in the Keynesian tradition, as shown, such critiques are relevant in understanding the recurrence of the financial boom, as well as the associated turbulence and apparent stagnation. The consequence thus turns out that the extension of the series to a wider time span or a higher number of observations does not necessarily result in more accurate probability estimates.

Investment decisions are the most important thing in participating without experiencing a lot of risk. There are several things that must be considered in making a decision. A lot of research has been done to decide on an investment, there are several things to pay attention to first when participating in making investment decisions and are very closely related to making decisions, namely the condition of the management of the company to be addressed, especially the financial condition of the company. Mulyadi (et.al) explained clearly that investment decisions are a

function of the company's financial management related to the allocation of funds, both internal and external funds. When the amount of a company's debt increases, it is most likely that the company is unable to pay its obligations, one of which is the Price Earning Ratio (PER), PER is an indicator used to measure a company's investment decisions and reflects an assessment in the company's capital market in generating future profits this is also confirmed by Prasetya (2021) who explains that Profitability has a significant positive effect on investment decisions. Growth opportunities are proven to be able to mediate the effect between cash flow on investment decisions and the effect between profitability on investment decisions. The conclusion of this study is that the reduction in company investment decisions can be minimized by increasing company profits and supported by the company's growth opportunities in the future. This first part emphasizes that making the most important decision is knowing the condition of the company, especially involvement in the capital market and the company's financial condition to the sustainability of the company.

The millennial community is currently also making investment decisions, based on Bahana CTW explaining that demographically, currently productive groups of people, especially millennials and generations Y and Z are the group with the largest number, but still experience many deficiencies in making investment decisions, so many things also What happens in investing, this was revealed by Senda et.al (2020) which is the first problem in investment is the tendency of people with low levels of literacy to make mistakes in allocating resources (money), the tendency for them to be unable to set aside resources for planning better economic conditions in the future and Bessari et.al (2021) also confirms that investment activities are future activities by managing finances to be used for the future and Kengatharan, et.al (2020) explains that knowledge about finance has a relationship closely related to investment decisions and satisfaction in managing finances properly and correctly.

Millennials and Generation Z, especially in Indonesia, are registered. Member of the Board of Commissioners concurrently serving as Chief Executive of the OJK Capital Market Supervision, Inarno Djajadi said that almost 60% of the total number of investors in the capital market are millennials and generation Z who are under 30 years old, this data is strengthened With the distribution of data for 2022, the Indonesian Central Securities Depository (KSEI) explained, that until August 2022 the number of capital market investors had reached 9.54 million investors, that number shot up 27.38% compared to December 2021 which totaled 7.48 million investors. , the increase occurred in the number of capital market investors, mainly supported by the number of mutual fund investors which jumped 29.56% to 8.86 million investors in August 2022 and the number of Investors in Government Securities (SBN) which shot up 24.53% to 761,045 investors, and investors in shares and other securities rose 19.89% to 4.13 million investors (Malik, 2022).

This increase is an interesting concern to study in a literature review about important points that must be used in making investment decisions for Millennials and Generation Z. The purpose of this research is to examine in detail how to make investment decisions in the Technology Era 4.0.

2. IMPLEMENTATION METHOD

This research was conducted using a qualitative method, with a focus on reviewing the literature on investment decisions. This research approach uses the Grounded Theory Approach which is a qualitative research method that uses a number of systematic procedures to develop theories according to the study. The criteria referred to are the existence of significance, compatibility between theory and observation, generalizability, re-examination, accuracy and accuracy, and can be proven. The data used are primary data contained in scientific articles and secondary data from news sources.



The procedure carried out in this study is as follows:

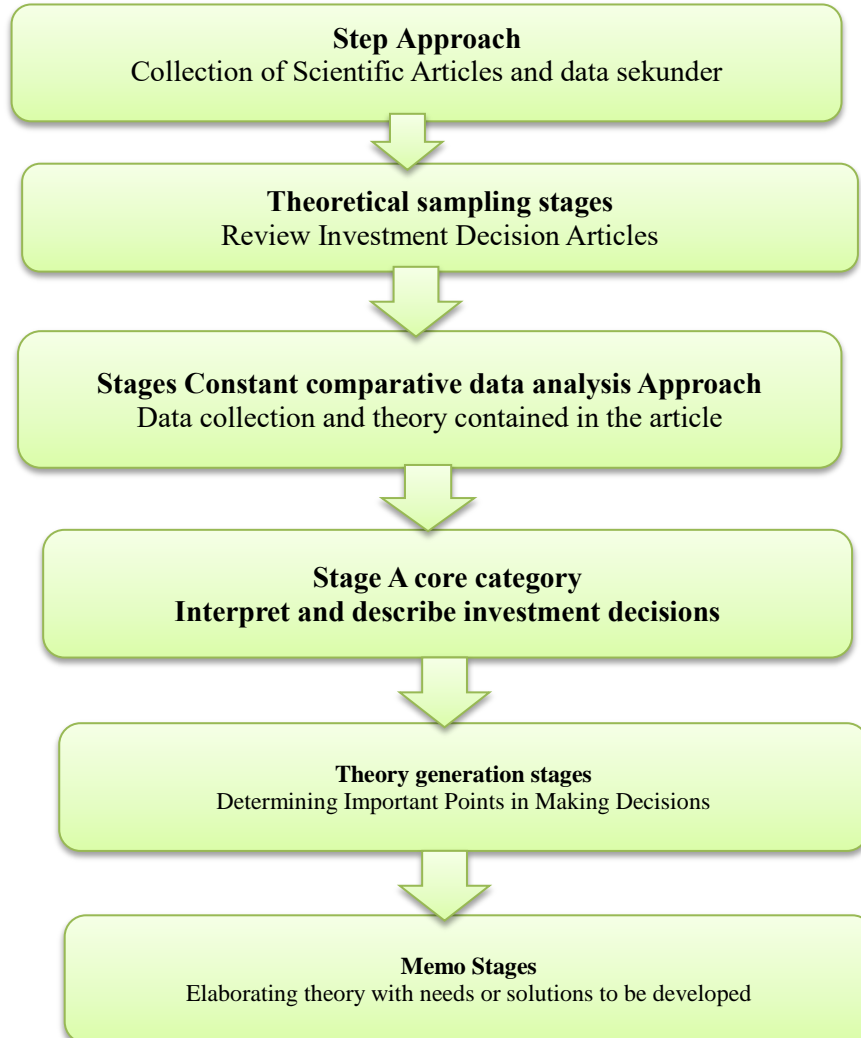


Figure 1. Research Implementation Procedures

3. RESULTS AND DISCUSSION

Research Result

The results of the discussion of the literature clearly show that currently most Indonesian investors are owned by millennials and generation Z, so that investment in shares is developing very rapidly, people do not need to study at school or at university to determine which stocks to target, even though in making decisions it takes some appropriate ways and the right knowledge in determining a company that is able to survive in the future. Thomson and Wiliam (in Sen, 2019) explain that investment decisions in the stock market often depend on the call-put option price formula, mainstream economics is recommended as a tool for deciding to invest in short-term or long-term projects. Assuming a "rational choice" on the part of economic actors in a free market, this model excludes uncertainty in the decision-making process. The theory that determines the existence of a company that must be considered in making investment decisions is the leverage irrelevance theory by emphasizing that companies prioritize their financing sources according to the cost of financing following asymmetric information (Thi, et.al, 2019).

Furthermore, the theory that forms the basis for making investment decisions is General Theory which focuses on probability relationships, this is very clearly also stated by Sen (2020) who emphasizes probability in making investment decisions which provides additional evidence in any estimate, while adding weight, can actually contributing to a decrease in the level of probability, this was also stated by Mulyadi et.al (2021) investment decisions are focused on decisions that not only address the problem of the company's ability to acquire assets, but also discuss all decisions that have been designed by the company, things that need to be considered too commitment to managing large amounts of funds today, and then creating additional funds for the future (Hendra et. al., 2020), is further strengthened by Prasetya (2019) The conclusion that can be drawn from the results of this study is that cash flow has a significant negative effect on investment decisions, investment opportunities have no effect on investment decisions, profitability has a significant positive effect on investment decisions, growth opportunities significantly moderate the effect of cash flows on investment decisions, growth opportunities significantly moderate the effect of investment opportunities on investment decisions, and growth opportunities significantly moderate the influence profitability of investment decisions, but Anggelika, et.al (2021) explains that Investment decisions do not affect Company Value in the Consumer Goods Industry which are listed on the Indonesia Stock Exchange for the 2015-2019 period. Developed countries place great importance on company profitability in determining investment decision-making, in this case requiring that the Indonesian Millennials and Generation Z must be able to increase company profitability capabilities.

Another thing that needs to be considered is the ability in financial literacy to be able to manage finances properly. D. Philippas & Avdoulas (2019) emphasized that according to the results of their research there are three pillars needed for Generation Z to make investment decisions, especially by understanding financial literacy, D.Philipas and Avdoulas explain that financial literacy is the ability to understand and analyze financial options, plan future, and respond to events appropriately. Rosdiana (2020) explains that based on the results of data analysis obtained through that financial literacy has a positive effect on investment decision making, the better the level of financial literacy of respondents, the better investment decisions and herding behavior has a positive effect on student investment decisions, students are millennials. and generation Z, so that financial literacy according to the World Bank is very necessary so that people are able to know information, awareness and knowledge about financial products, institutions and terms related to daily decision-making such as interest rates, inflation, savings, loans, risks, returns and practical knowledge of products and financial terms (Noor, et.al, 2020).

Senda et.al (2020) The results of the study show that financial literacy influences investment decisions. These results also show a pattern similar to research in developed countries and emerging market countries, but show inconsistency with other studies in Indonesia. This is also confirmed by the explanation of Bessari et.al (2021) which emphasizes that for generations X and Z or millennials, especially students who have the desire to invest in the capital market to increase self-motivation, deepen their understanding of investment by utilizing financial literacy and learning terms in the capital market and this is also in line with the future. D.Philipas and Avdoulas (2019) provide solutions in determining investment decisions by concluding three pillars, including:

- 1) The first pillar of increasing financial literacy starts from the power of mathematics and continuous reading, especially for certain groups and building a national financial literacy index can be the first step in identifying actual financial behavior.
- 2) The second pillar refers to the adoption of a new financial education program that will mainly be implemented in primary and secondary schools. Financial education should start from elementary school. Young students should be educated about financial matters as early as possible in their lives to form a new generation of citizens who are financially educated and have a culture of effective saving and investment and financial development.



- 3) The third pillar refers to actions that should be promoted to provide relevant and easy-to-use financial information to the public, especially for parents, while free information services should be developed by formal policy makers in coordination with specialist organizations. By considering these principles we are very conscious.

Emphasizing the opinion of the importance of financial literacy is that the pattern of financial literacy on investment decisions also has the same influence as developed countries. Even research in developed countries has focused on children, this shows that financial literacy consistently influences investment decisions in both developing and developed countries although there is a different pattern in Indonesia, where there is an inconsistency in the effect of financial literacy on investment decisions. Baihaqqy, et.al, (2020). What needs to be improved in financial literacy is conducting training on finance because there are many millennial and generation Z investors who do not have economic education either at vocational or undergraduate schools, this is also emphasized by Bongomin, et.al (2020) who provides a solution by providing financial literacy clinics, workshops and seminars where the poor can learn about personal finance using a hands-on approach. This will help them to make wise financial decisions and choices regarding the consumption of complex financial products offered by rural-based financial institutions, so that developing countries like Indonesia have the right knowledge in making investment decisions and this was also stated by Zhang, et.al (2021) financial education efforts can be better designed to increase the acquisition of actual knowledge and make efficient investment decisions, policy makers, both public and private, must be aware of and provide resources that facilitate these decisions and Pangestu et.al (2020) also emphasizes Institutions in Indonesia to integrate financial literacy in every learning activity, so that Generation Z, which has the privileges and convenience of obtaining information on financial developments, can save through making investment decisions.

In addition to company profitability and financial literacy, what needs to be considered in making investment decisions is experience, this was revealed by Putri, et.al (2021) confirming that the more investment experience a person has, the more profitable the investment decision will be, one of the keys to getting investment experience is to be willing to try, given the fact that every employee will be faced with many choices of investment decisions such as the types of investment assets, this is also emphasized by Istina (2020) Financial Behavior or Financial Behavior is further developed by increasing educational financial behavior so that investors can develop their knowledge about making better investment decisions, if every investor can manage good finances behavior or financial behavior can be formed then investment decision making can be managed by both so that the level of significance remains good and financial behavior must be maintained so that it remains real or can contribute to improving investment decision making, further corroborated by Lei (2019) showing that it is necessary that several financial advisors play an important role in shaping asset ownership decisions, financial educators may consider providing appropriate education for individuals to distinguish different expertise of financial advisors, financial planners for advice other than direct stock investment.

This is a concern, by determining the framework for making decisions that have been carried out by Paskaramoorthy et.al (2020) confirming that there are several frameworks including feature selection by selecting factors that can determine strategic returns and information that can affect active returns; Selection of the investment universe by selecting a subset of registered shares or other appropriate assets and instruments which may consist of a universe of investable assets; Filter estimates and predictions by deciding on the appropriate online estimation and prediction prochoice; Choose the optimal portfolio that is subject to constraints at time t that will be held up to time $t+1$; Go back to step 1., and repeat, because of the modularization of the workflow, the output of each component is assessed using component-specific metrics rather than evaluating its impact on meeting investor objectives (i.e. process-level analysis) and Predictions and rebalancing frequency: choose how often the model and predictions will be updated, and what horizon expectations are formed, and decisions have to be made as well as Portfolio selection with defined

choice of constraints and adjustments for trading costs given the objective function, features, investable universe, horizon, and modeling framework.

Research Discussion

Indonesian people who are in developing countries, it is very easy to follow trends, especially in investing both physically and financially in assets, many people are directly involved in the digital economy, especially as investors, when companies offer low prices, people easily take them without looking at the risks to be faced. The studies that have been carried out above confirm that every investment decision-making really requires readiness in determining the company to go to, from this literature the Millennials and Generation Z of Indonesia must prioritize three knowledges in determining investment in companies, including:

- 1) Financial Literacy. In this case, it is closely related that people who invest always consider and understand every information before making an investment, consistently in both Indonesia and emerging market countries showing that financial literacy influences investment decisions. This indicates that investors are able to be careful, by understanding information, awareness and public knowledge about financial products, institutions and terms related to daily decision-making such as interest rates, inflation, savings, loans, risks, returns and practical knowledge about financial products and terms.
- 2) Company Probability, being a benchmark for choosing a company to go to, probability, as mentioned in the treatise, is connected to the uncertainty domain. This is by dealing with the unexpected from unforeseen events, so as to be able to invest their assets both in real and financial assets
- 3) Financial Behavior (Financial Behavior). In this case increasing the investment experience by wanting to try various types of investment decision options, both in real and financial assets, while still considering the Possibility of Return and Risk of Investment Decisions, thus investment decisions are expected to be more prudent and profitable, not just following the trend of investing in financial investment form.

Thus, it can be described for millennials and generation Z in making investment decisions, the picture can be seen in Figure 2 as follows:

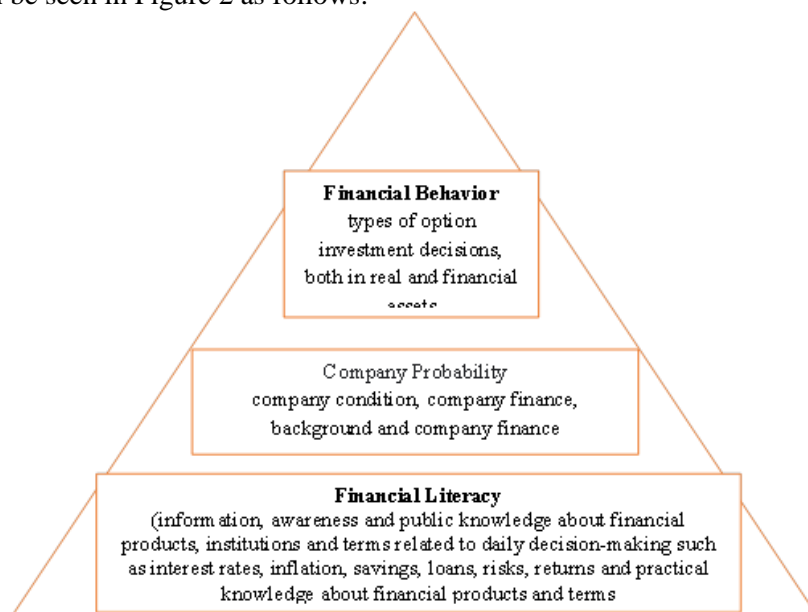


Figure 2. Solutions in Making Investment Decisions



4. CONCLUSION

Indonesia Developing countries are countries that easily receive access to information, especially ongoing trends, one of which is the investment trend, from 2020 - 2022, almost 60% of the total number of investors in the capital market are millennials and generation Z who are under 30 years old, From the characteristics of the shareholders, it is clear that the public does not have the knowledge to determine and make investment decisions.

Based on the literature review, it is clear and it can be concluded that as a solution, three important things are needed in making decisions, including financial literacy, company profitability and financial behavior.

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