

## Research Article

# The Influence of Mental Budgeting on the Decision to Buy Share by Millenials

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**ORCID**Tetty Rimenda: <https://orcid.org/0000-0002-1402-3962>**Abstract.**

The trend of stock investment has recently gained popularity among the public, especially the millennial generation. People are interested in investing in the stock market due to its potential for high returns and passive income. However, stock investment also entails decision-making risks. Investor mental budgeting is one of the factors influencing stock purchase decisions. This behavior leads investors to categorize their investment portfolios, such as for retirement or general investment. Previous research empirically established that mental budgeting impacts investor decisions. Employing quantitative methods, this study collected primary data through questionnaires from 119 respondents categorized as millennials. The analysis employed partial least squares-structural equation modeling (SEM-PLS) and SmartPLS software version 3. The results indicated that earmarking and labeling of income and downside and upside protection significantly influence stock purchase decisions in the millennial generation. Consequently, millennials are advised to adopt a mental budgeting approach when making investment decisions.

**Keywords:** decision investment, downside and upside protection, earmarking and labeling of income, mental budgeting, purchase decision

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## 1. Introduction

The current stock investment trend is increasingly popular among people, especially the millennial generation. Investing in shares is not an easy decision. Customers usually do mental budgeting to choose commitments from the available options [1]. Mental budgeting makes things easier for someones because choices are simpler, so decision can be made more quickly [2] Mental budgeting is an effort to group money based on specified labels [3, 4] Hoque also creating consumption pattern [1]. Money does not come with labels, so people put label on it. We have designation for money such as easy money, free money and so on. People use financial budgets to keep track of and control their spending [5] The brain uses mental budgets to associate the benefits with the costs, consider the pain (or costs) associated with the pain of financial losses.

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Similarly, the joy (or benefits) is like the joy of financial gains. Mental budgeting matches the emotional pain to the emotional joy [6]. Mental budgeting also helps people to compare the returns (incomes) in return for their investment [7]. By preparing mental budgeting investors are able to consider the gains and losses they will face in investing. Furthermore, this study indicates that each generation has its perceptions and beliefs with regard to their financial investment decision behaviour.

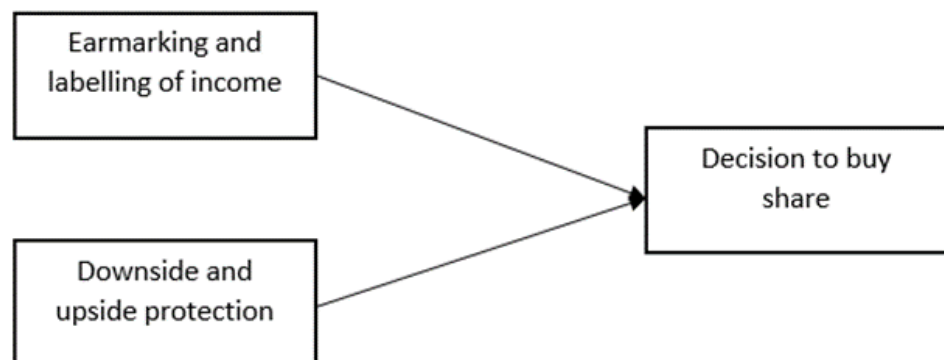
Data supported by PT Kustodian Sentral Efek Indonesia (KSEI) is a depository and settlement institution in the Indonesian Capital Market, the largest number of investors in capital market in Indonesia is dominated by the millennial generation under the age of 30 with a percentage of 58.39% with assets of 52.73 Trillion, in second place is the millennial generation with an age range of 31-40 years with assets of 22.63% with assets of 106.76 Trillion (Otoritas Jasa Keuangan, 2022). This reflects that there is already awareness in the millennial generation to invest in stocks. In addition, stock investment also involves risks and decisions that are important for investors to make in personal financial management. Millennials are being frugal in their expenses, optimizing their savings, and expanding their investment portfolios. An interesting thing is mental budgeting can optimize their investment while still being able to balance gains and losses also what strategy they use. Personal financial management has a positive influence on mental budgeting [8]. Within the framework of personal financial management, there is a positive impact of mental budgeting practices that include a mindset towards managing funds and spending patterns that avoid spending beyond a certain limit [4].

Stock transactions are highly associated with risk. In prospect theory, it is explained that everyone has a tendency to feel more sensitive to losses than to gains in situations involving risk [9]. To minimize losses, mental budgeting uses downside protection and upside protection to provide assistance to millennials as young investors in overcoming the impact of losses [9]. Where appropriate, risks may be taken in light of offsetting benefits. Furthermore, to take decisions it is necessary to balance the risks and benefits [9]. One example of the application of downside is "don't put all your eggs in one basket" as one of its important investment principles. This is the basic principle of investment diversification which means that you should not invest all your money in one asset or one single type of investment [10]. Losses can be accepted by setting the level of downside risk which takes into account how far the decline is acceptable in management investment fund [11]. Furthermore, past downside is a good predictor of future down market movements, except for stocks that are extremely volatile [12]. Risk proxy assumes that investors have symmetric risk preferences, with the same

upward and downward deviations. However, responsible investors want to increase profit potential while ensuring an adequate level of loss protection, so downside protection becomes important in stock purchases [13]. In stock trading, stock prices are very volatile, for this reason there must be upside protection which determines the upper limit for buying/selling shares and the downside protection for selling/buying shares. There must be an upside or downside point where decision must be made. Having downside and upside protection making people are more carafull in making investment decision [13].

Millennials can also adopt earmarking and labelling practices which are part of mental budgeting on income to support efforts to maintain and manage finances [14]. The application of Earmarking and labelling of income is labeling income which can then also allocate the income to buy shares. People will be more motivated to preserve savings that have been earmarked for “responsible” goals than savings that have been earmarked for less responsible goals [15]. Share purchase decisions are decisions made by individual or institutional investors to acquire shares of a company as a component of their investment portfolio, taking into account stock performance, market situations, and desired investment objectives. Individuals have a smaller risk if the fund allocated have been earmark for certain purposes [7]. Besides that labeling and earmarking effects can substantially increase participants’ willingness to contribute in paying taxes

In this study, researchers want to find out whether mental budgeting has an influence on millennial generation investors. Therefore, a framework is formed in Figure 1. Therefore, a framework of thought is formed in Figure 1.



**Figure 1:** Conceptual framework.

Earmarking and labelling of income is thought to help millennials make regular share purchase decisions to achieve future financial goals. The application of downside and upside protection as a strategy is thought to be a solution for the millennial generation in making share buying decisions in the millennial generation.

## 2. Methods

The approach used in this research is quantitative, the data collection method is carried out through a survey by circulating questionnaires through online media using Google Forms, which are distributed through several social media platforms such as communities on Telegram, Twitter, and Instagram. Each stage of the questions in the questionnaire is equipped with filtering questions, a total of 11 questions which are measurement indicators of X and Y, In this study, a quantitative approach was used with data collection methods through surveys. The questionnaire was distributed through online media using Google Forms, spread across the Telegram, Twitter, and Instagram communities. The questionnaire had 11 questions as measurement indicators of X and Y variables.

The questions in the questionnaire involved filtering, with a focus on earmarking and labeling of income as many as 3 questions covering income allocation and labeling [4]. Furthermore, downside and upside protection in mental budgeting of 4 questions describes efforts to protect oneself from financial risks [4]. In addition, there are 4 questions regarding stock investment decisions [16]. This study focused on the millennial generation as the main population with the criteria of being born between 1982 - 2004, having experience investing in stocks, and having received education about stock investment from various sources. Since the number of millennial generation investors is unknown, sampling can be done using the calculation method by multiplying between 5 to 10 times the number of indicator variables. Therefore, the minimum number of respondents in this study is 95 respondents [17].

Furthermore, respondents will be given several questions via google form either through a smartphone or laptop device on various platforms such as the Facebook community, telegram or Instagram so that it is easier to spread questions that match the criteria and make it easier for respondents to participate in this study. The respondents had access to the questionnaire, The questions raised include whether respondents set aside a portion of their income for investment and whether they use money according to the designated label or budget. Both of these questions serve as indicators measuring the practices of earmarking and labeling in income management. Furthermore, to measure indicators of downside and upside protection, the questions posed involve whether respondents, when making decisions, consider protection against potential risks and whether they are capable of identifying potential gains and leveraging them.

There were 136 participants in this study who initially met the predetermined criteria. However, after going through the screening process, 17 respondents did not meet the research requirements and were removed. As a result, the total responses used in the analysis were 119 respondents. Furthermore, the data analysis method applied in this research is Structural Equation Modeling (SEM). Structural equation modeling (SEM) is a technique or approach that allows researchers to reveal the relationship between various variables contained in the study. In this case, the software used by researchers to manage data results is SmartPLS version 3. Data analysis is carried out in two stages: measurement model analysis (outer model) to test the validity and reliability of latent variables, and measurement model analysis (inner model) to analyze the effect of exogenous variables on endogenous variables. In this analysis, using the R<sup>2</sup> value to assess the predictive power of the model and the path coefficient to evaluate the significance of the relationship between variables using the t-test and p-value from bootstrapping [18].

### 3. Results

Respondents passed the screening as many as 119 respondents. Respondents in this study provided demographic information, the majority of respondents were female by 61%, aged 19-24 years by 21% domiciled in Jakarta and were students who earned between Rp 1,000,000 - Rp 3,000,000 each month. The first stage is the measurement model test in Figure 2. The measurement model (outer model) maps the link between exogenous variables (factors from outside) and endogenous variables (internal factors). The applied measurement model is evaluated through examining convergence validity, discriminant validity, and composite reliability.

From the results of the measurement model analysis, all manifest variables have factor loading values  $< 0.7$ , so it meets the rule of thumb, so there are no manifest variables that must be removed from the model [19]. The test results for exogenous and endogenous variables for reliability testing using composite reliability are  $> 0.7$ . Therefore, it can be concluded that the variables tested are valid and also reliable, and therefore can be continued to test the structural model.

The structural model or inner model is used to test the effect of exogenous variables on endogenous variables. The bootstrapping procedure was chosen to assess the influence between variables, with a significant t-value of 1.96.

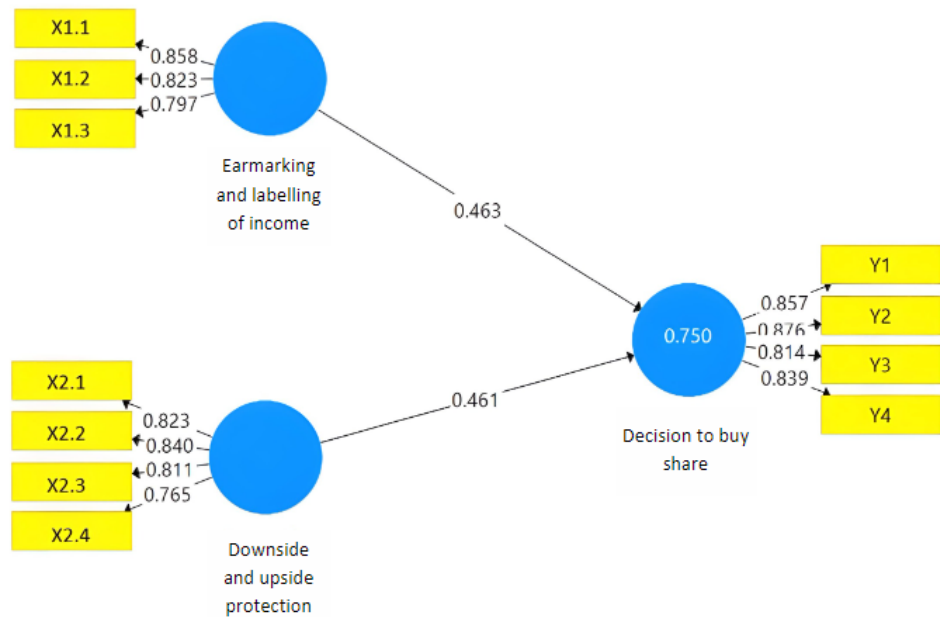


Figure 2: Measurement model testing.

TABLE 1: Reliability and validity constructs.

	Composite Reliability	Average Variance Extracted (AVE)
Downside and upside protection	0.884	0.656
Earmarking and labelling of income	0.866	0.683
Decision to buy share	0.910	0.717

TABLE 2: Path coefficient measurement.

	Original Sample (O)	Sample Mean (M)	Standar Deviation (STDEV)	T Statistics(O/STDEV)	P Values
Downside and upside protection -> Decision to buy share	0.461	0.469	0.104	4.425	<b>0.000</b>
Earmarking and labelling of income-> Decision to buy share	0.463	0.456	0.095	4.873	<b>0.000</b>

The path coefficient table shows that downside and upside protection positively and significantly affects the decision to buy shares, with a probability value (0.000) < 5% alpha and a coefficient of 0.461. So, it can be concluded that downside and upside protection can encourage stock purchase decisions. Furthermore, earmarking and labeling of income also have a positive and significant effect on stock purchase decisions, with a probability value (0.000) < alpha 5% with a coefficient of 0.463. Therefore, it can be

concluded that earmarking and labeling of income can also encourage the decision to buy shares.

## 4. Discussion

The results of this study have important implications for the understanding of stock investment trends among millennials and also potentially provide valuable contributions to ongoing and future research in this area. Stock investment for millennials can be a strategy to achieve “financial freedom” by saving stocks, which is buying company shares regularly every month [20]. In order to minimize risk, understanding the mental budgeting is a right step. Mental budgeting can be done with upside-downside and earmarking-labelling protection. These findings strengthen the opinion that earmarking and labeling can reduce individual investment risks [14]. Earmarking and labeling are applied to a person’s income by setting aside and allocating monthly income to buy shares. This results are in line with previous research that earmarking and labeling income is a factor that has a big impact on the financial management of small entrepreneurs also conclude that financial management that applies the indicator ‘using funds according to their designation or label’ has a significant influence [4]. Furthermore prove previous research which states that people will be more motivated to preserve savings that have been earmarked for “responsible” goals than savings that have been earmarked for less responsible goals [15]. This reinforces the understanding that investment decisions are not based solely on financial analysis but are also influenced by individual psychological and behavioral factors.

Downside and Upside protection is a method applied to reduce potential risk in investments by breaking down financial assets into various financial instruments [21]. In stock investing, this includes evaluating the number of shares of each company in the portfolio as well as the importance of conducting careful research and in-depth understanding of the company in which the investor is investing. The results show that millennials use stock diversification as downside protection and utilize stock dividends as upside protection to get an additional source of income.

From a theoretical perspective, the results of this study support and complement previous research linking mental budgeting to entrepreneurs’ financial planning [4]. This reinforces the idea that the concept of mental budgeting has broad relevance including in the investment context and can be applied to millennials as well as society at large. The importance of these results can also be felt in the context of ongoing and

future research. Researchers investigating similar topics can use these findings as a foundation to go deeper. They could expand the methodology, delve deeper into the mechanisms underlying the relationship between mental budgeting and stock purchase decisions, and perhaps also examine how other factors such as education, experience, or economic conditions affect this interaction.

## 5. Conclusion

Based on the results of the analysis, it shows that mental budgeting has an influence on stock investment decisions in the millennial generation. Mental budgeting indicators, namely earmarking and labeling of income and downside and upside protection, have an influence on the decision to buy shares in the millennial generation. Earmarking and labeling of income helps make financial decisions so that inequality does not occur [21]. In this study we examine how earmarking and labeling of income influence the decision to buy shares in the millennial generation. The results show that earmarking and labeling of income help millennials buy stocks by adjusting the millennial generation's income. The results of this study thus not only provide deep insights into the role of mental budgeting in millennials' stock investments, but also pave the way for further research that can develop and enrich our understanding of the psychological factors that influence investment decision-making.

For future research, these findings provide a platform to further explore the role of psychological factors in the investment context. Further research could consider additional variables, such as social or emotional factors, that may also influence investment decision-making. Also, considering the evolving world of investing, this kind of research could provide valuable guidance for the development of more effective investment education strategies, especially for millennials who are increasingly involved in the stock market.

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