

## The Psychology of Generation Z Investors: Mental Accounting, Loss Aversion, and Gender Dynamics in Greater Bandung

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### Abstract

The growth of young investors supported by digital technology has not always been followed by the quality of completely rational investment decisions. This study aims to analyze the influence of mental accounting and loss aversion on Generation Z's investment decisions in the Greater Bandung area and test gender as a moderation variable. The research uses a quantitative approach with a cross-sectional survey design. Data was obtained through questionnaires from 115 Generation Z respondents who are domiciled in Greater Bandung and have investment experience. Samples were selected based on research criteria, while analysis was conducted using descriptive statistics, multiple linear regression, and Moderated Regression Analysis with IBM SPSS Statistics 25. The results show that mental accounting has a negative and significant effect on investment decisions. Loss aversion is negative but not significant, while the interactions of mental accounting with gender and loss aversion with gender are also not significant. The model explains 52.1% of the variance in investment decisions (Adjusted  $R^2 = 0.521$ ). Theoretically, the findings indicate that cognitive and emotional biases do not exert equal explanatory power in Generation Z investment decisions and that gender does not necessarily condition these relationships. Practically, the results support portfolio-level evaluation tools and behavioral-finance education that help young investors distinguish useful fund discipline from rigid mental accounting.

### Keywords:

Mental accounting; Loss aversion; Investment decisions; Generation Z; Gender.

## 1. INTRODUCTION

The development of financial technology and digital investment platforms has expanded people's access to the capital market. Data from the Indonesian Central Securities Depository shows that the number of Single Investor Identifications increased from 3,880,753 in 2020 to 14,871,639 in 2024. By the end of 2024, the investor group aged 30 years and below will account for about 54% of individual investors, so the younger generation has become the dominant part of the national investor structure (KSEI, 2024). Investor concentration also still rests on the island of Java. West Java occupies an important position with a high number of investors, while Greater Bandung is a center for education, economy, and digital activities inhabited by a large number of young populations (OJK, 2024). This condition makes Generation Z's investment decisions in Greater Bandung relevant to be studied, not only in terms of participation, but also in terms of the quality of the decision-making process.

Generation Z grew up with routine access to the internet, social media, financial applications, and real-time information. This environment makes it easier to compare instruments, monitor markets, and transact quickly, but it also exposes investors to social-media cues, trend pressures, and short-term information that can shape investment decisions (Hidayat et al., 2023; Maziyah, 2025). Therefore, the rapid growth of young investors needs to be accompanied by an understanding of the psychological factors that shape risk assessment, instrument selection, and transaction timing.

Behavioral finance explains that investors do not always act as completely rational decision-makers. Market information is processed through cognitive limitations, experiences, emotions, and behavioral biases. Pompian (2012) distinguishes cognitive biases related to the way individuals process information and emotional biases that arise from emotional responses. Two important biases are mental accounting and loss aversion. Both can affect how investors label funds, form benchmarks, assess gains and losses, and maintain or change investment choices. Komara et al. (2023) show that cognitive bias and emotional bias are simultaneously associated with young investors' investment decisions, although the partial influence of each type of bias can be different.

Mental accounting describes an individual's tendency to group money based on a specific source, purpose, or rule. Thaler (1999) explains that individuals form mental accounts to organize, assess, and monitor financial activities. In investment, funds from salaries, bonuses, savings, or profits can be treated differently even though they are economically equivalent. This grouping can help with budget discipline, but it also gives rise to narrow framing when each account is evaluated separately from the overall condition of wealth and portfolio (Muehlbacher & Kirchler, 2019; Silva et al., 2023). Investors can hold on to certain instruments because they are tied to a fund label or account target, although other alternatives are more suited to the objectives and risk profile.

Loss aversion is rooted in behavioral finance which states that losses are felt more strongly than gains of the same value (Kahneman & Tversky, 1979). Investors who are sensitive to losses may choose highly safe instruments, reject opportunities with higher potential returns, or hold losing assets for too long. Although loss aversion is different from risk aversion, both can appear together in investment evaluation. Modern risk profile measurements also show that the response to losses is a characteristic that needs to be distinguished from general risk tolerance (Van Dolder & Vandenbroucke, 2024). In young investors, rapid market access can increase the frequency of short-term evaluations and increase attention to price fluctuations. In the context of Generation Z in Cimahi City, Febianti and Simatupang (2025) found that loss aversion has a positive and significant effect on investment decisions, so that responses to losses remain relevant in explaining the behavior of young investors.

The empirical evidence regarding these two biases has not been consistent. Adiputra et al. (2024), Pandji et al. (2024), Aulia and Achyani (2026), and Wilson et al. (2026) report significant effects of mental accounting on investment decisions, while Komara et al. (2023) and Tang and Asandimitra (2023) show that mental accounting or loss aversion does not always have a significant partial effect on young investors. Different findings are also reported by Febianti and Simatupang (2025), who found a positive and significant effect of loss aversion on Generation Z's investment decisions in Cimahi City, whereas Satria et al. (2025) found a negative direction for mental accounting. These inconsistencies indicate that respondent characteristics, regional settings, investment experience, instrument ownership, and information-processing patterns can alter the relationships between behavioral biases and investment decisions.

Gender is considered as a moderation variable because differences in the characteristics of male and female investors have the potential to shape different ways of assessing risk, selecting instruments, and responding to investment opportunities. Male investors are generally described as having a higher level of confidence and risk tolerance, so they are relatively more courageous to choose instruments with greater risk potential and returns. In contrast, female investors tend to be more cautious, more sensitive to potential losses, and place more emphasis on security and long-term financial planning; This tendency can form a more conservative investment pattern. Purba et al. (2025) show that gender differences also affect the way individuals respond to technological developments and ease of access to investment. However, this pattern is not absolute because Supriadi et al. (2022) found that the investment decision behavior of men and women does not always differ significantly, especially when the level of financial literacy and access to information is increasingly equal.

Empirical findings regarding the role of gender as moderators are also not uniform. Satria et al. (2025) found that gender moderates the influence of mental accounting and loss aversion on novice retail investors, while Mubarakah and Rita (2020) and Wijayanti and Santoso (2022) show that gender does not always change the influence of mental accounting on financial behavior. These differences in results suggest that gender roles may depend on sample characteristics, investment experience, and equal access to information and digital platforms.

This study addresses these empirical and contextual gaps by testing mental accounting and loss aversion simultaneously among Generation Z investors in Greater Bandung and by placing gender as a moderating variable. Recent Indonesian studies continue to report different directions and levels of significance for behavioral-bias effects across regions and samples, while findings on demographic moderation remain mixed (Aulia & Achyani, 2026; Satria et al., 2025; Wilson et al., 2026). Investment decisions are assessed through risk-return considerations, instrument selection, and decisions to buy, hold, or sell. The novelty of this study lies in examining a cognitive bias (mental accounting), an emotional bias (loss aversion), and a demographic moderator within one model in a regional Generation Z population characterized by intensive access to digital investment information.

Accordingly, this study aims to: (1) analyze the influence of mental accounting on investment decisions; (2) analyze the effect of loss aversion on investment decisions; (3) examine the role of gender in moderating

the relationship between mental accounting and investment decisions; and (4) examine the role of gender in moderating the relationship between loss aversion and investment decisions among Generation Z investors in Greater Bandung. Theoretically, the study re-examines behavioral finance and prospect theory in a digitally intensive young-investor context. Practically, it provides evidence for securities companies, digital investment platforms, and financial education providers to emphasize portfolio-wide evaluation, risk management, and behavioral-bias control rather than merely expanding transaction access.

## 2. RESEARCH METHOD

This study uses a quantitative approach with causal design and cross-sectional surveys. The object of the study was the investment decisions of Generation Z which were influenced by mental accounting and loss aversion, with gender as a moderation variable. The research area includes Bandung City, Cimahi City, Bandung Regency, West Bandung Regency, and Sumedang Regency. Respondents must meet three criteria, namely including Generation Z who were born in the range of 1997-2012, domiciled in Greater Bandung, and have investment experience in at least one instrument.

The minimum sample size is determined through statistical power analysis using GPower. The calculation used an effect size of 0.15, a significance level of 0.05, a power of 0.90, and four predictors resulting in a minimum requirement of 108 respondents. The power analysis approach is used to ensure that the number of samples is sufficient to detect the influence in the regression model (Cohen, 1988; Lakens, 2022). After checking the completeness of the answers, as many as 115 questionnaires met the criteria and were used in the analysis. The selection of respondents was carried out purposively according to the research criteria because the distribution of questionnaires was carried out online to prospective relevant respondents.

Primary data is collected using Google Forms which is disseminated through WhatsApp, Instagram, Telegram, communities, and investor forums. In the first part of the questionnaire, respondents received an explanation of the research objectives, voluntariness of participation, use of data for academic purposes, and confidentiality guarantees. The instrument uses a five-point Likert scale. Mental accounting is measured through nine items, loss aversion through nine items, and investment decisions through ten items. Gender is encoded as a dummy variable, i.e. male = 1 and female = 0. A summary of the operationalization of the variables is presented in Table 1.

Table 1. Operationalization of Research Variables

| Variabel                | Dimensions                                                                 | Key Indicators                                                                                                                                              | Scale    |
|-------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Mental accounting (X1)  | Pooling of funds; separate evaluation; Purpose and rules of decision       | Segregation of funds by purpose/source, assessment of each investment separately, limits on the use of funds, and adjustment of risks to account objectives | Interval |
| Loss aversion (X2)      | Sensitivity to loss; risk avoidance; Unwillingness to Accept Losses        | Psychological weight of loss, choice of safe instruments, rejection of risky opportunities, delay in sale of losing assets                                  | Interval |
| Investment decision (Y) | Risk-return considerations; instrument selection; Investment Time Decision | Risk and return assessment, suitability of instruments for purpose, confidence of choices, time to buy, hold, and sell                                      | Interval |
| Gender (W)              | Gender                                                                     | Male = 1; female = 0                                                                                                                                        | Nominal  |

Source: Research data processed, 2026.

The mental accounting instrument is arranged based on three dimensions. Fund grouping measures the habit of separating investment, consumption, and savings funds and distinguishes the treatment of the source of funds. Separate evaluations measure the tendency to assess the returns of each investment individually and less associate it with portfolio performance. The purpose and rules of decision measure the use of limits, targets, and risk rules for each group of funds. The loss aversion instrument also includes three dimensions, namely sensitivity to loss, avoidance of risky alternatives, and unwillingness to realize losses. Investment decisions are measured through risk-return considerations, instrument selection, and investment timing decisions.

Before analysis, the answers were checked to ensure the suitability of the respondents' criteria, completeness of filling, and consistency of the data. Descriptive statistics use frequency and mean distributions. Because the mental accounting and loss aversion scales in the questionnaire were directed to capture the level of approval of biased statements, the descriptive interpretation focused on the respondents' behavioral tendencies. Meanwhile, causal testing uses a composite score of each variable so that the relationships between variables can be analyzed at the construct level.

The analysis was conducted with IBM SPSS Statistics 25. Before hypothesis testing, the quality of the measurement instrument was assessed using the 115 eligible responses. The instrument structure followed the dimensions and indicators presented in Table 1. Item validity was examined using item-total correlation, with an item declared valid when the calculated *r* exceeded the *r*-table value of 0.1541. Internal consistency was

evaluated using Cronbach's Alpha, with a minimum reliability threshold of 0.70. After the measurement-quality checks, classical assumption tests were conducted, including residual normality, multicollinearity, and heteroscedasticity. Normality was evaluated using Kolmogorov-Smirnov with an exact significance value; multicollinearity using tolerance > 0.10 and VIF < 10; while heteroscedasticity was tested through the Glejser test with  $p > 0.05$ .

Direct influence was tested through multiple linear regression with equations  $Y = 53.274 - 0.561MA - 0.100LA + e$ , while the role of moderation was tested using Moderated Regression Analysis by forming MA x G and LA x G interactions. The model was also evaluated through the Adjusted R Square to measure the proportion of variation in investment decisions that could be explained by mental accounting, loss aversion, gender, and moderation interactions.

### 3. RESULTS AND DISCUSSION

#### 3.1. Results

##### 3.1.1. Characteristics of Respondents

A total of 115 respondents met the research criteria. The composition of respondents was relatively balanced according to gender, although women were slightly more dominant. The majority of respondents are 21-25 years old, have student status, and have a monthly income of IDR 1,000,000-IDR 5,000,000. This characteristic shows that the sample mainly represents young investors in the higher education phase or early career who have used investment instruments.

Table 2. Respondent Characteristics (n = 115)

| Features      | Category                     | Quantity | Percentage |
|---------------|------------------------------|----------|------------|
| Gender        | Male                         | 52       | 45%        |
| Gender        | Women                        | 63       | 55%        |
| Age           | 17-20 years old              | 17       | 15%        |
| Age           | 21-25 years old              | 79       | 69%        |
| Age           | 26-30 years                  | 19       | 16%        |
| Jobs          | Students                     | 3        | 3%         |
| Jobs          | Students                     | 71       | 62%        |
| Jobs          | Civil servants               | 4        | 3%         |
| Jobs          | Private employees            | 33       | 29%        |
| Jobs          | Others                       | 4        | 3%         |
| Revenue/month | IDR1,000,000-IDR 5,000,000   | 64       | 56%        |
| Revenue/month | IDR 5,000,001-IDR 10,000,000 | 41       | 36%        |
| Revenue/month | IDR10,000,001-IDR20,000,000  | 6        | 5%         |
| Revenue/month | >Rp20.000.000                | 4        | 3%         |

Source: Research data processed, 2026.

The dominance of the age of 21-25 years and the status of students need to be considered in reading the results. This group is generally in the early phases of income formation, financial goals, and investment experience. The income of the majority of respondents is also in the range of IDR 1,000,000-IDR 5,000,000 per month. Therefore, investment decisions are likely to be related to the limited funds that can be allocated, the investment horizon that is still evolving, and the need to maintain liquidity. However, the representation of men and women is relatively balanced, making it adequate to test gender interactions in the moderation model.

##### 3.1.2. Descriptive Statistics

Table 3. Descriptive Statistics Summary

| Variabel             | Number of Items | Mean  | Category       |
|----------------------|-----------------|-------|----------------|
| Mental accounting    | 9               | 1,718 | Strongly agree |
| Loss aversion        | 9               | 1,794 | Strongly agree |
| Investment decisions | 10              | 4,297 | Strongly agree |

Source: Research data processed, 2026.

The average mental accounting of 1.718 and loss aversion of 1.794 were in the category of strongly agreeing according to the coding of the instrument. This shows that respondents are strong in separating funds according to sources and objectives and are sensitive to possible losses. In mental accounting, the item with the strongest approval was the management of funds from various sources differently (mean 1.54), while the evaluation of financial condition in aggregate obtained a mean of 2.03. In loss aversion, the preference for safe investments even though the return is relatively small obtains a mean of 1.63, while the reluctance to realize losses obtains a mean of 1.95.

Investment decisions obtained an average of 4,297 or the category of strongly agreed. Consideration of market conditions in determining the investment time is the highest item (mean 4.44), while the willingness to accept fluctuations according to the level of risk becomes the lowest item (mean 4.22), although it remains in the category of very agreed. Thus, respondents reported a relatively planned decision-making process, but at the same time showed a high bias

### 3.1.3. Instrument Quality and Model Assumptions

Table 4. Instrument Validity and Reliability

| Variabel             | Item | Range r Calculate | Cronbach's Alpha | Conclusion         |
|----------------------|------|-------------------|------------------|--------------------|
| Mental accounting    | 9    | 0,467-0,750       | 0,773            | Valid and reliable |
| Loss aversion        | 9    | 0,448-0,696       | 0,748            | Valid and reliable |
| Investment decisions | 10   | 0,300-0,710       | 0,704            | Valid and reliable |

Source: SPSS 25, 2026 processing results.

All items have  $r$  calculated above the  $r$  table 0.1541 so that they are declared valid. Cronbach's Alpha mental accounting value is 0.773, loss aversion is 0.748, and investment decision is 0.704. All three values meet the reliability limit of 0.70. A summary of instrument quality testing is presented in Table 4.

Table 5. Summary of the Classical Assumption Test

| Testing                  | Results                         | Conclusion                    |
|--------------------------|---------------------------------|-------------------------------|
| Normality                | Exact Sig. = 0,380 > 0,05       | Normally distributed residual |
| Multikolinearitas MA     | Tolerance = 0.602; VIF = 1.660  | No multicollinearity          |
| Multikolinearitas LA     | Tolerance = 0.600; VIF = 1.666  | No multicollinearity          |
| Multikolinearitas Gender | Tolerance = 0.994; LIVE = 1.006 | No multicollinearity          |
| Heteroskedastisitas      | p MA = 0.080; p LA = 0.423      | No heteroscedasticity         |

Source: SPSS 25, 2026 processing results.

The normality test yielded an Exact Sig. (2-tailed) of 0.380, greater than 0.05, so that the residual was declared to be normally distributed. The tolerance value of all predictors was above 0.10 and VIF was below 10, indicating that there was no multicollinearity. The Glejser test yielded a significance value of 0.080 for mental accounting and 0.423 for loss aversion, so that the model showed no symptoms of heteroscedasticity. The results show the model meets the requirements for regression testing.

### 3.1.4. Hypothesis Testing

Table 6. Regression Results and Hypothesis Testing

| Hipotesis | Hubungan                                   | B      | t      | p     | Verdict      |
|-----------|--------------------------------------------|--------|--------|-------|--------------|
| H1        | Mental accounting for investment decisions | -0,561 | -7,716 | 0,001 | Accepted     |
| H2        | Loss aversion to investment decisions      | -0,100 | -1,382 | 0,170 | Not accepted |
| H3        | Mental accounting $\times$ Gender          | 0.207  | 1,423  | 0,158 | Not accepted |
| H4        | Loss aversion $\times$ Gender              | -0.043 | -0,292 | 0,771 | Not accepted |

Source: SPSS 25, 2026 processing results. Adjusted R Square = 0.521.

The regression equation showed a constant of 53.274, a mental accounting coefficient of -0.561, and a loss aversion coefficient of -0.100. Mental accounting has a value of  $t$  -7.716 with  $p < 0.001$ , so the first hypothesis is accepted. Loss aversion has  $t$  -1.382 with  $p$  0.170, so the second hypothesis is not accepted. In the moderation test, the interaction of mental accounting and gender resulted in  $t$  1.423 with  $p$  0.158, while the interaction of loss aversion and gender resulted in  $t$  -0.292 with  $p$  0.771. Both interactions were not significant so the third and fourth hypotheses were not accepted.

Table 7. R Square Adjusted Testing Result

| R Square Adjusted | 0.521 |
|-------------------|-------|
|-------------------|-------|

Source: SPSS 25, 2026 processing results.

The Adjusted R Square value of 0.521 indicates that 52.1% variation in investment decisions can be explained by mental accounting, loss aversion, gender, and interaction variables in the model. The remaining 47.9% was influenced by other factors outside of the study, such as financial literacy, investment experience, risk tolerance, market conditions, social influences, and other behavioral biases.



### 3.2. Discussion

#### 3.2.1. The Influence of Mental Accounting on Investment Decisions

The results of the study show that mental accounting has a negative and significant effect on the investment decisions of Generation Z in Greater Bandung. These findings mean that increasingly rigid grouping and evaluation of funds is related to a decline in the quality of investment decisions. Mental accounting can basically help with self-control. Separating investment funds from consumption, setting goals, and restricting the use of money can maintain discipline. However, those benefits turn biased when each account is treated as a completely separate part and decisions are no longer tied to the financial position as well as the overall portfolio.

The first mechanism arises when investors treat funds differently simply because of their source. Money from salaries, bonuses, or investment profits can be given different risk tolerances, even if they have the same economic value. The second mechanism is a separate evaluation of each instrument. Investors can focus too much on the yield of one asset and ignore the benefits of diversification. The third mechanism is the application of account rules that are too rigid so that investors are slow to adjust their allocation when market conditions, objectives, or risk profiles change. These three mechanisms reflect narrow framing as described in the mental accounting literature (Muehlbacher & Kirchler, 2019; Silva et al., 2023).

Theoretically, these findings reinforce the behavioral finance perspective that explains that investment decisions are not always shaped through completely rational considerations. The negative and significant influence of mental accounting suggests that the grouping of funds can degrade the quality of decisions when investors are too rigid in distinguishing money based on certain sources, goals, or categories. This condition encourages the evaluation of each account and instrument separately, so that attention to risk and return balance and overall portfolio performance is reduced. Mental accounting can still function as a means of financial discipline and control, but its benefits are limited if the grouping of funds develops into a narrow framing that hinders the adjustment of decisions to changes in market conditions, financial objectives, and risk profiles. Thus, the impact of mental accounting is determined by the way investors apply it, namely flexibly as a control tool or rigidly as the basis for separate investment evaluations. On a broader level, these results complement Komara et al. (2023), who show that the strength of behavioral bias's influence on young investors can differ between partial and simultaneous testing.

These results are consistent with Satria et al. (2025) who found the negative influence of mental accounting on the investment decisions of novice retail investors. However, these results differ from Adiputra et al. (2024) and Pandji et al. (2024) who found a positive or significant effect. The difference can come from the way investment decisions are constructively measured. Mental accounting can result in discipline when mental accounts remain connected to portfolio objectives, but it can degrade the quality of decisions when grouping is done narrowly and subjectively. The contribution of these findings is to confirm that the problem is not just the existence of mental accounts, but the degree of flexibility and ability to integrate such accounts in the evaluation of total wealth.

In the study respondents, the tendency of mental accounting can be seen from the strong agreement on the separation of funds based on objectives and sources. Such practices can be a tool for financial control, but regression results show the need to distinguish adaptive disciplines from rigid segregation. Adaptive discipline allows investors to change their allocation when goals, risks, or market conditions change. In contrast, rigid segregation maintains account limits even though those decisions no longer support the overall goal. An investor, for example, may hold a fund in a low-risk instrument simply because it is labeled as such, or reject reallocating even if the composition of the portfolio has been unbalanced.

The theoretical implication is that mental accounting does not always have a single consequence. The literature that found positive influences was likely to capture the functions of budgeting and self-control, while the negative influences in this study were closer to narrow framing and non-fungibility of money. The difference in empirical results can therefore be explained through the intensity, form, and context of the application of mental accounting. This research supports the view that mental accounts need to be analyzed not only on the basis of their existence, but also on the ability of investors to relate each account to the portfolio's wealth, liabilities, and goals in the aggregate.

#### 3.2.2. The Effect of Loss Aversion on Investment Decisions

Loss aversion has a negative direction, but it does not have a significant effect on investment decisions. Descriptively, respondents showed high sensitivity to losses and preferred safe instruments. However, these concerns have not yet become the main explanation for the variation in investment decisions. Respondents still report risk-return considerations, financial objectives, instrument characteristics, and market conditions. Thus, fear of loss can be present as an attitude, but it does not always translate into consistent decision changes.

These findings are in line with Komara et al. (2023) and Tang and Asandimitra (2023), who found that loss aversion had no significant effect on young investor decisions. However, these results are different from Febianti and Simatupang (2025), which found that loss aversion has a positive and significant effect on Generation Z's investment decisions in Cimahi City. These differences can be influenced by the heterogeneity of the instruments, experience, regional characteristics, and the way respondents interpret risk. Losses on stocks, mutual funds, crypto assets, gold, or other instruments have different levels of fluctuation and horizons.

Responses to losses are therefore more likely to be influenced by individual experience, knowledge, financial ability, and goals rather than forming a single common pattern. The results of this study do not reject the prospect theory, but show that the measured intensity of loss aversion is not enough to explain the decision when other factors are also considered.

The insignificance of loss aversion can also be understood from the difference between the reported attitude and actual decision behavior. Respondents may express fear of loss or choose a security, but still make an investment after considering market information and financial objectives. In addition, the experience of dealing with fluctuations can make investors tolerate temporary losses without changing strategies. Under such conditions, loss aversion is present at the level of perception, but its effect on the investment decision score becomes weak.

These results show that a high average level of a bias does not automatically make it a significant predictor. Statistical influence depends on whether the variable explains meaningful differences in decisions across respondents. If most respondents report similarly high loss aversion, variation in the construct may be too limited to distinguish investment-decision patterns. Financial literacy and investment experience may also shape how loss-related information is translated into action. Recent Indonesian evidence indicates that financial literacy can operate selectively across behavioral biases; Wilson et al. (2026), for example, found moderation for some bias-decision relationships but not for those involving loss aversion or mental accounting. In the present sample, heterogeneous investment experience may likewise mean that temporary losses are interpreted differently by more experienced and less experienced investors. Because financial literacy and investment experience were not tested as moderators in this study, these explanations should be treated as plausible mechanisms rather than confirmed effects. Future models can test them directly alongside asset type, investment horizon, and risk tolerance.

### 3.2.3. The Role of Gender Moderation

Gender does not moderate the influence of mental accounting on investment decisions. The effect of fund grouping tends to take place in a relatively similar pattern in men and women. Investors from both groups can set account goals, separate funding sources, and evaluate investment results separately. In the Generation Z sample, age similarity, technology use, and access to information are thought to narrow behavioral differences. How to apply mental accounting is likely to be influenced more by experience, income, financial goals, and the ability to manage a portfolio than gender.

These results support Mubarakah and Rita (2020) and Wijayanti and Santoso (2022), which show that gender does not always change the influence of mental accounting on financial behavior. These findings differ from Satria et al. (2025), who found gender moderation in novice retail investors. Differences in population, composition of respondents, instrument type, region, and level of experience may explain these variations. Thus, educational strategies to reduce disproportionate mental accounting should not be rigidly differentiated based on gender.

Gender also does not moderate the effect of loss aversion on investment decisions. Although women and men may have different loss sensitivities at the individual level, these differences do not form a significant relationship change in the model. Equal access to investment applications, market information, communities, and educational materials allows both groups to obtain relatively similar references. These findings are in line with results showing that loss aversion itself does not have a significant effect, so the interaction with gender is also not strong enough.

The practical implication is that securities companies and digital investment platforms need to prioritize segmentation based on experience, goals, risk profiles, and decision-making patterns, not just by gender. Features that help users see portfolio performance in aggregate, link each account to long-term goals, and display risk-return consequences can help reduce narrow framing. Education also needs to distinguish between the discipline of allocating funds that are useful and the grouping of funds that are too rigid.

### 3.2.4. Implications and Limitations of Research

Theoretically, the results of the study show a difference in the role of cognitive bias and emotional bias. Mental accounting as a cognitive bias has been shown to be related to decisions, while loss aversion as an emotional bias is not. These findings suggest that the way investor's structure and evaluate financial information can be more decisive than the intensity of fear of loss. The absence of gender moderation also suggests that demographic characteristics are not always the main condition in behavioral finance models, especially when respondents have similar generations and access to technology.

Practically, education for Gen Z investors needs to teach two stages of fund management. The first stage is the separation of funds based on the purpose so that basic needs, emergency funds, and investments are not mixed. The second stage is the reconciliation of all accounts in the evaluation of wealth and portfolio. Investors need to assess whether each account still fits the objectives, horizon, and total risk level. Investment platforms can support this process through aggregate portfolio dashboards, asset concentration indicators, simulated allocation changes, goal reminders, and easy-to-understand risk explanations.

For securities companies and financial literacy providers, the moderation results suggest that programs should not only be segmented by gender. Segmentation based on experience, instrument type, objective,

revenue, and response patterns to information is likely to be more relevant. Educational materials can use examples of decisions that show the difference between maintaining budget discipline and getting stuck in an account label. For loss aversion, education needs to help investors distinguish between temporary losses, fundamental changes, and risk limits that have been set before the transaction.

This study has four limitations. First, all variables were measured through self-reported perceptions, which may introduce self-report or common-method bias and may not fully reflect actual transaction behavior. Second, the cross-sectional design captures relationships at one point in time and therefore cannot observe how behavioral biases and investment decisions change over time. Third, respondents were limited to Greater Bandung and were dominated by the 21-25-year-old age group and students, so generalization to other regions or investor groups should be made cautiously. Fourth, respondents invested in different asset classes, whose risk, volatility, and investment-horizon characteristics may produce different behavioral responses. Longitudinal designs, behavioral experiments, and transaction-level data can address these limitations and provide stronger evidence on the stability of the observed relationships.

Further research can strengthen the model through several developments. First, mental accounting can be separated into self-control and narrow framing functions so that its positive and negative impacts can be tested simultaneously. Second, loss aversion can be measured using a simple choice or experiment scenario, rather than just a statement of perception, so that the response to gains and losses can be observed more directly. Third, gender roles can be compared with other moderators such as investment experience, financial literacy, income, and instrument type. Fourth, multigroup analysis can be used to compare investors in stocks, mutual funds, gold, and crypto assets. Such development is important because behavioral bias does not work in separate spaces; Investment decisions are formed through the interaction between individual characteristics, information, platform design, market conditions, and financial objectives. With this approach, behavioral finance research on Generation Z can produce more specific recommendations that can be applied by investment service providers and regulators. Follow-up findings also need to be tested on different market conditions to determine the stability of the relationship between variables.

## 4. CONCLUSION

This research proves that mental accounting has a negative and significant effect on Generation Z's investment decisions in the Greater Bandung area. Pooling funds can support financial discipline, but when applied too rigidly and each investment is evaluated separately, investors risk ignoring the overall condition of the portfolio. Loss aversion does not have a significant effect on investment decisions, so sensitivity to loss has not been the main factor explaining variation in respondents' decisions. Gender also does not moderate the influence of mental accounting or loss aversion. The model explains 52.1% of the variation in investment decisions. Theoretically, the findings reinforce behavioral finance by showing that cognitive and emotional biases do not necessarily have equal explanatory strength and that gender does not automatically condition these relationships among Generation Z investors. Practically, securities companies and digital investment platforms can provide portfolio-wide dashboards, account-concentration alerts, goal-based allocation tools, and clear risk-return prompts before transactions. Financial education providers and regulators can incorporate behavioral-finance modules that distinguish adaptive budgeting from rigid mental accounting and emphasize portfolio-wide risk evaluation rather than relying primarily on gender-based segmentation. This study is limited by self-reported data, its cross-sectional design, its Greater Bandung scope, and heterogeneous investment instruments. Future research can use longitudinal or transaction-level data, expand the regional and asset-class coverage, and directly test financial literacy, investment experience, risk tolerance, overconfidence, and herding as additional explanatory or moderating factors.

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