

**Investment Decision-Making Among Generation Z: A Study in Selangor, Malaysia**

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**Abstract** — The primary objective of this research is to study the possible relationships that may exist between disposition effect, overconfidence, herding behavior, and anchoring with investment decision-making among Generation Z in Selangor, Malaysia. The study was conducted based on the hypotheses, the research questions, and the research objectives. A total of 141 participants, aged 18 to 28 years, were involved in the study. The results of the research revealed that the disposition effect and anchoring had significant relationships with investment decision-making among Generation Z in Selangor, Malaysia, whereas herding behaviour and overconfidence had no significant impact. The study provides valuable insights into the investment behaviour of Generation Z, thereby enhancing our understanding of investment decisions-making and the decision-making processes of this generation. The implication of the study was also provided.

**Keywords (in English)** — Investment Decision-Making, Disposition Effect, Overconfidence, Herding Behaviour, Anchoring

## **1. Introduction**

### **1.1 Investment Decision-Making**

Investment decision-making is a rational process that involves weighing several investment options and selecting the one that maximizes profits while minimizing risks. According to Musfidah et al. (2022), investment decision-making is a deliberate and rational process in which an individual or investor considers multiple investment options, compares their prospective earnings, and selects the one that provides the highest return with the least amount of risk. According to Gunawan (2024), understanding investment decision-making helps to comprehend the complex methods underlying investment decisions, which are imperative for investors, financial institutions, and policymakers alike. Investors require an array of information to have a better image of the organization's decision-making process, which involves a wide range of factors, including economic, political, and social factors (Bhimani & Langfield-Smith, 2007; Sachdeva & Lehal, 2024). Investors may be subject to behavioural biases, such as emotional and cognitive biases, which impact the rationality of investment decisions. Bihari et al. (2022) argued that financial decisions are not always logical or rational. Instead, they can be impacted by behavioural biases such as fear or greed, as well as cognitive biases like overconfidence or anchoring. These biases cause investors to make decisions that are not based on facts or objective research, hence, compromising the quality of their investing selections.

Investment decision-making is a complex process and is a major driver of financial markets. Individual and institutional investors have a significant influence on setting financial market trends (Shah & Butt, 2024). In the past, investment decision-making was done based on traditional financial analysis. This methodology focused on analysing financial statements, such as balance sheets and income statements, to evaluate a company's financial health (Olayinka, 2022). Furthermore, classical economic theory assumes that individuals behave rationally, seeking to maximise their wealth by adhering to fundamental financial principles and considering all available information when making investment decisions (Che Hassan et al., 2023). Investors would consider current economic statistics to determine the overall economic condition. Industry trends were thoroughly examined to find promising sectors and prospective investment opportunities. Today's investment decisions are influenced by a far broader range of factors than in the past. Investments have become more accessible to a wider audience, thanks to technological advancements, such as internet platforms and smartphone applications (Solanki et al., 2019). Additionally, data analytics and artificial intelligence are being used to analyse large datasets and uncover possible investment opportunities. The growing availability of information through the internet and social media creates both benefits and challenges for investors, who must distinguish between credible sources and falsehoods. Environmental, social, and governance (ESG) aspects have also gained traction, with investors prioritising the ethical and long-term impact of their

investments. Furthermore, the interconnection of the global economy necessitates an examination of international economic and political developments. Finally, behavioural finance has largely contributed to our understanding of how psychological biases influence investing decisions (Wellfren & Lajuni, 2022). In Malaysia,

## **1.2 Generation Z**

Today, investment decisions are critical among Generation Z. Slepian et al. (2024) stated that Generation Z is individuals born between 1997 and 2012. This generation lives in a digital-dominant world, where nearly 95% of them own or have access to digital devices, such as smartphones, computers, tablets, smart TVs, and gaming consoles. Research by Rosdiana (2020) suggests that a strong sense of self-assurance drives the financial decisions of Generation Z. This confidence can lead to efficient and careful investment decisions if they have sufficient investment knowledge and abilities (Pašiušienė et al., 2024). Behavioural biases have a significant impact on the financial decisions of Generation Z. According to research conducted in Greater Bandung, Indonesia, variables such as the fear of missing out, affected by social media exposure, can lead to poor investment decisions, typically resulting in losses rather than profits (Fadhiil & Fariska, 2024). Additionally, according to Polkuamdee (2025), Generation Z is often drawn to high-risk financial options due to social media trends. According to Ramendran and Ho (2024), Generation Z has a more financially aware mind-set as they have access to investment knowledge through platforms such as TikTok and Instagram. Generation Z in Malaysia is actively adopting fintech platforms and digital investment tools (Langston, 2025). Malaysian Generation Z has a high adoption rate of e-wallets and fintech applications. It affects their access to and engagement with investing products (Farid, 2024). The measures of Bank Negara Malaysia to promote digital financial services have created an environment that encourages Generation Z to pursue investment opportunities. The state of Selangor is a major economic engine in Malaysia, accounting for a large portion of the country's GDP. Generation Z's participation in the investment environment in Selangor, Malaysia, has a direct impact on the state's economic dynamism. Their investment decisions influence capital flows, market trends, and the overall health of the local economy (DOSM, 2022).

From an investment decision-making perspective, previous research has explored factors such as the endowment effect, barnum effect, representation effect, representativeness, self-attribution bias, and regret aversion (Bautz, 2022). However, there has been lack of research studying the effect of variables such as disposition effect, overconfidence, herding behaviour and anchoring on investment decision-making in Selangor, Malaysia especially among Generation Z. Hence, this study focuses on determining the possible relationships that may exist between disposition effect, overconfidence, herding behaviour and anchoring with investment decision-making of Generation Z in Selangor, Malaysia.

Generation Z is the first generation to perceive the internet as a magnificent innovation that will transform everything. This generation was born as the internet and social media became a commonplace (Rosdiana, 2020). They rely heavily on social media and online platforms for information and communication (Chiu & Ho, 2023). This dependence makes individuals more susceptible to herding behaviour because they are constantly exposed to the investment choices and experiences of others. In Malaysia, Generation Z faces the disposition effect in investment decision-making. Generation Z grew up with cell phones, social media, and access to a variety of financial instruments and platforms; hence, the high level of digital literacy may influence how they interact with other investors. The ease of access to real-time market data, social investment platforms, and stock-related discussions on social media may stimulate impulsive decision-making in selling and buying assets, thus magnifying the disposition effect. Generation Z is frequently exposed to both "hype" stocks and rapid feedback from these networks, which may lead individuals to follow trends or stay in fear of losing in investment, "missing out" (Herawati et al., 2022; Tan, 2021).

Another trait that Generation Z may exhibit during the investment decision-making process is overconfidence, which can lead to them losing it all. Generation Z may be taking advantage of possibilities to participate in the financial market and achieve short-term gains (Kiderlin, 2021). Tay (2024) stated that in Malaysia, there has been an increase in scams on Generation Z investors as they may be new to the investment world and may be more vulnerable to fraud due to their lack of competence and overconfidence. Excessive confidence can lead to risky financial decisions and unexpected losses. Excessive optimism due to overconfidence results in market mispricing, which occurs when asset values deviate from their true value (Haykir & Yagli, 2022). Social media, online trends, and peer recommendations may influence Generation Z to exhibit herding behaviour, particularly in financial markets. This can lead to both positive and negative outcomes, such as increased investment in certain areas or susceptibility to scams (Alili, 2022). Lastly, anchoring is another habit that Generation Z may encounter during the investment decision-making process. According to Herawati et al. (2022), Generation Z is particularly vulnerable to the fear of missing out (FOMO), particularly when they observe others gaining from investments. This emotional reaction can induce people to fixate on an initial price point or trend, resulting in anchoring behaviour. For example, if investors observe a stock increase, they may base their decision-making on that price, neglecting aspects such as the company's fundamentals or broader market trends.

Hence, the research question of this study is examine whether there are possible relationships that may exist between disposition effect, overconfidence, herding behaviour, and anchoring in the investment decision-making of Generation Z in Selangor, Malaysia. The objective of this research is to examine the relationships between disposition effect, overconfidence, herding behaviour, and anchoring

with investment decision-making among Generation Z in Selangor, Malaysia. The state of Selangor, Malaysia, was selected because it has the highest GDP of all the Malaysian states. Selangor has the highest number of Generation Z investors in Malaysia, and it is a leading economic hub and a major target for investments, which likely includes Generation Z investors. This study will contribute to existing knowledge, especially on financial literacy programmes that will allow better investment decision-making among Generation Z (Ng & Lim, 2022)

## **2.0 Literature Review**

### **2.1 Prospect Theory**

Prospect theory, proposed by Kahneman and Tversky (1979), explains how individuals perceive and evaluate risk when making decisions, particularly in situations involving potential gains and losses. The theory highlights that individuals tend to be more sensitive to losses than to equivalent gains. This phenomenon, known as loss aversion, helps explain why investors may irrationally retain losing assets in an attempt to avoid realising losses.

### **2.2 Heuristic Theory**

The concept of heuristics in decision-making was advanced by Simon (1977), who introduced the idea of bounded rationality and the notion of “satisficing.” Later, Tversky and Kahneman (1974) further investigated how cognitive biases arise from reliance on heuristics. Heuristic theory refers to individuals’ use of mental shortcuts to make quick and convenient decisions without engaging in extensive or analytical cognitive processing. Although such rules of thumb can be useful in many situations, they may also lead to cognitive biases that distort judgment and result in suboptimal decision-making.

### **2.3 Disposition Effect**

The disposition effect refers to the tendency of individual investors to sell winning assets too early while holding losing assets for too long, irrespective of market momentum. This behavioural bias is widely recognised as one of the most robust patterns observed in investor trading behaviour (Ahn, 2022). Bhutto et al. (2025), in a study of 256 Pakistani investors, reported a significant positive relationship between the disposition effect and investment decision-making. They noted that holding on to losing assets and prematurely selling winning ones can lead to inefficient portfolio performance and missed opportunities for higher returns.

Similarly, Shandu and Alagidede (2024) found that South African investors are susceptible to the disposition effect, which in turn reduces investor welfare. Ahn (2022), who examined 76,712 retail investors in Korea, showed that the disposition effect significantly affects investment decisions, with gender, investor preferences, and sophistication playing key roles in explaining its severity. Moreover,

Zhang et al. (2022) found that Chinese investors tend to display a stronger disposition effect when participating in the stock market during periods of low market returns, low investor sentiment, high market volatility, and elevated economic policy uncertainty. Hence, based on the above literature, the following hypothesis is proposed:

H1: There is a significant relationship between disposition effect and investment decision-making among Generation Z in Selangor, Malaysia

## **2.4 Overconfidence**

Overconfidence is a cognitive bias that arises when individuals become excessively confident in their knowledge or abilities. This bias occurs when individuals hold unfounded beliefs about the accuracy of their judgments, intuitive reasoning, or cognitive capabilities. Four indicators are commonly used to define overconfidence bias:

1. belief in one's ability to evaluate companies more accurately than other investors,
2. a high volume of stock trading,
3. belief in the potential for substantial gains from one's portfolio, and
4. perceived understanding of the investments made (Ariwangsa, 2024).

According to Yulianis and Sulistyowati's (2021) study on overconfidence in investment decisions among the Sidoarjo community in Indonesia, overconfidence had a significant effect on investment decision-making. Similarly, Wang and Nuangjamnong (2022) found that excessive confidence was significantly and positively related to investment decisions. They argued that investors who believe they are highly competent are more likely to trade shares in capital markets because they perceive themselves as experts capable of earning higher returns.

Lamichhane and Simkhada (2024) also noted that overconfidence is a behavioural bias that can influence investment decisions. They stated that overconfidence reflects individuals' belief in their ability to interpret and correct information, which can subsequently distort financial choices. Overconfident investors frequently underestimate risk, resulting in suboptimal asset allocation. Such investors tend to invest more heavily in high-risk assets, whereas less confident investors prefer low-risk assets. Hence, based on the above literature, the following hypothesis is proposed:

H2: There is a significant relationship between overconfidence and investment decision-making among Generation Z in Selangor, Malaysia

## **2.5 Herding Behaviour**

According to Sathya and Gayathiri (2024), herding behaviour is common in uncertain circumstances, leading investors to mimic the activities of others. Herding behaviour in financial markets causes the

formation of market bubbles, magnifies price swings, and contributes to market inefficiencies. Herding behaviour dynamics demonstrate the intricate relationship between individual acts and aggregate market results (Sathya & Gayathiri, 2024). According to Almansour et al.'s (2023) study on 134 investors in Saudi Arabia, the authors found that herding behaviour had a significant positive impact on investment decision-making. The authors stated that understanding the impact of prevalence and herding behavior in investment decisions can help identify market inefficiencies and vulnerabilities. Quaicoe and Eleke-Aboagye (2021) found that the most dominant factor affecting investment decision-making was herding behaviour. According to a study by Sentosa and Gosal (2023), herding behaviour positively impacts investment decision-making among Generation Z management students in Universitas Ciputra Surabaya, Indonesia. The authors further stated that this aids them in stock selection and analysis and expedites decision-making in stock market transactions. Tili et al. (2022) found that herding behavior affects investors' decision-making in emerging markets such as China, Japan, and Hong Kong. Finally, Ahmed and Wu's (2022) study of 309 investors trading on the Pakistan stock exchanges found that herding behaviour positively affects investment decision-making. Hence, based on the literature review above, the following hypothesis is proposed:

H3: There is a significant relationship between herding behaviour and investment decision-making among Generation Z in Selangor, Malaysia

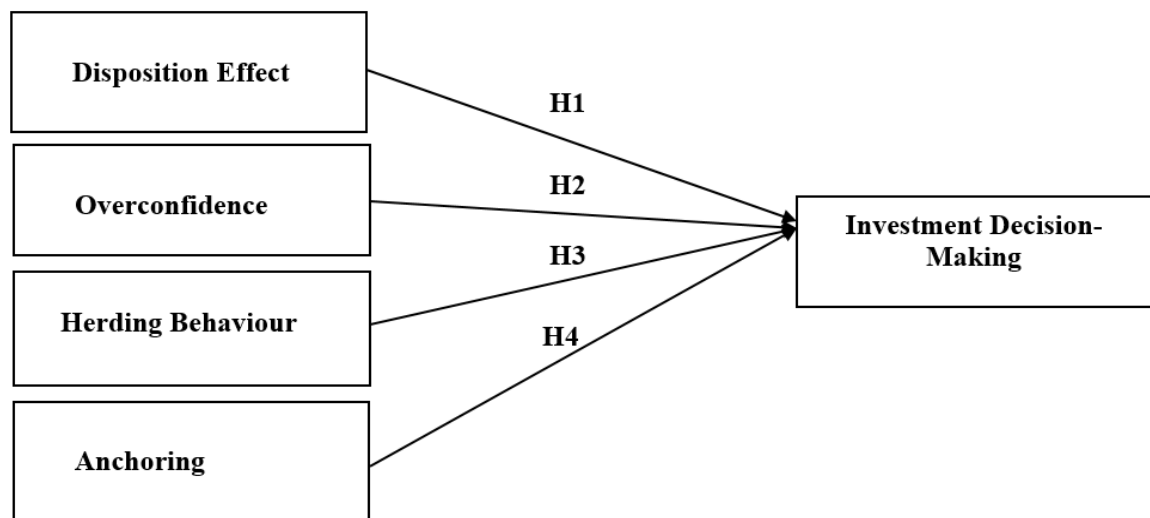
## **2.6 Anchoring**

Anchoring is another cognitive bias that influences investment decisions. This bias happens when people make decisions based too heavily on the first piece of information they encounter (Wang, 2023). Investors tethered to a stock price or market level may fail to modify their behaviours in response to new information, resulting in mispriced investments (Sathya & Gayathiri, 2024). According to Loris and Jayanto (2021), anchoring has a significant positive relationship with Islamic investors in Phintraco Sekuritas Semarang City, Indonesia. The authors stated that this is because investors tend to rely more on other people's decisions in making their investment decisions. Moreover, the anchoring effect may affect investors from different levels of experience and geographical regions, according to Guo et al. (2022), who found that the anchoring effect affects students' investment decisions, as they are more likely to be swayed by stock prices or maximum value. Owusu and Laryea (2023) found that investors in Ghana are prone to anchoring bias, and females were more likely to be anchored than male investors. Finally, Jan et al. (2022) found that anchoring bias has a significant and positive influence on Chinese investment decisions after the COVID-19 pandemic, while Tlili et al. (2022) found that anchoring was one of the variables affecting investment decisions in emerging markets such as China, Japan, and Hong Kong, particularly during down-market periods. Hence, based on the literature review above, the following hypothesis is proposed:



H4: There is a significant relationship between anchoring and investment decision-making among Generation Z in Selangor, Malaysia

Figure 1 shows the conceptual framework based on the literature review.



**Figure 1:** The Conceptual Framework

### 3.0 Research Design

This study adopted a positivist approach, as its research philosophy was grounded in established theories. The research strategy involved collecting data based on empirical scientific evidence. The functionalist paradigm guided the inquiry. A deductive research approach was employed, and the overall research design was explanatory in nature. The research strategy utilised a survey method, following a mono-method approach in which questionnaires served as the primary data collection instrument.

A cross-sectional design was used due to time constraints and because it is commonly applied in survey-based research to collect data at a single point in time. The unit of analysis comprised investors between the ages of 18 and 28 residing in the state of Selangor, Malaysia. This age group was selected to ensure that participants were capable of making independent investment decisions and were at a critical stage of actively developing their financial knowledge.



### **3.1 Research Population**

The target population of this study consists of Generation Z investors residing in the state of Selangor, Malaysia. Selangor was selected because it is the most populous state in the country and has the highest GDP. It also has one of the largest concentrations of Generation Z individuals in Malaysia, as well as the highest number of higher education institutions, investment centres, and small and medium enterprises (SMEs) (DOSM, 2022).

### **3.2 Research Method**

Data were collected using an online survey questionnaire created with Google Forms and distributed to Generation Z investors between the ages of 18 and 28. A non-probability convenience sampling method was employed, and respondents were approached during an investment talk held in Kuala Lumpur. Convenience sampling was deemed suitable because the respondents were readily available and easily accessible to the researchers. Potential participants were informed about the purpose of the study and were asked for their consent to participate. Those who agreed were provided with the questionnaire link.

A total of 141 respondents completed the questionnaire. The first section of the survey captured demographic information, including gender, age, race, highest education level, employment status, investment experience, and type of investment. The subsequent sections measured the study variables. The disposition effect was assessed using a four-item scale adapted from Tarigan et al. (2021). Four-item scales adapted from Cao et al. (2021) were used to measure overconfidence, herding behaviour, and anchoring. Investment decision-making was measured using a four-item scale adapted from Hunjra et al. (2016).

All constructs in the study were measured using a five-point Likert scale ranging from (1) “Strongly Disagree,” (2) “Disagree,” (3) “Slightly Agree,” (4) “Agree,” to (5) “Strongly Agree.”

### **3.3 Data analysis**

Data analysis was done using Statistical Package for Social Sciences (SPSS) for the data cleaning, normality of data, producing the descriptive analysis of the demographic profile, and the mean and standard deviation of the variables. Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to analyse the measurement model and structural model. PLS-SEM was suitable for the study as the sample size was 141, which is less than 200. Furthermore, PLS-SEM is more suitable for models with formative constructs.

## 4. Results

### 4.1 Normality and Outliers

The Kolmogorov-Smirnov statistics test with Lilliefors significance level to test normality has been produced for this study. Kolmogorov-Smirnov statistics test was conducted as the sample size was more than 50, and is preferred for larger sample sizes. As seen in Table 1, the Kolmogorov-Smirnov test yielded a significant value of less than 0.001, which was significantly lower than the threshold of 0.05. This shows that the data does not have a normal distribution. Thus, different statistical procedures, such as the Z-test, must be utilized to investigate normality. The z-score was calculated to measure how far from the mean each of the data values is, using a standardized scale. An absolute z-value of  $\pm 3.29$  is required for medium-sized samples ( $50 \leq n < 300$ ) to determine that the sample distribution is normal. As seen in Table 2, the Z-score value is -6.647, which is outside of the acceptable range of -3.29 and +3.29; hence, the data is not normally distributed. PLS-SEM will therefore be suitable software to conduct the data analysis, as the data is considered not normally distributed.

**Table 1:** Test of Normality

| <b>Kolmogorov-Smirnov<sup>a</sup></b> |            |     |       |
|---------------------------------------|------------|-----|-------|
|                                       | Statistics | df  | Sig.  |
| Investment-decision Making            | .218       | 141 | <.001 |

**Source:** Authors' own work

a. Lilliefors Significance Correction

**Table 2:** Descriptive

| <b>Descriptive</b>         |                            |            |            |
|----------------------------|----------------------------|------------|------------|
|                            |                            | Statistics | Std, Error |
| Investment Decision-Making | Mean                       | 4.0603     | .05965     |
|                            | 95%Confidence interval for |            |            |
|                            | Lower Bound                | 3.9424     |            |
|                            | Upper Bound                | 4.1782     |            |
|                            | 5% Trimmed Mean            | 4.1241     |            |
|                            | Median                     | 4.0000     |            |
|                            | Variance                   | .502       |            |
|                            | Std. Deviation             | .70831     |            |
|                            | Minimum                    | 1.25       |            |
|                            | Maximum                    | 5.00       |            |
|                            | Range                      | 3.75       |            |
|                            | Interquartile Range        | .63        |            |
|                            | Skewness                   | -1.356     | .204       |

Kurtosis

3.056

.406

**Source:** Authors' own work

#### 4.2 Demographic Details

The demographic profile of the respondents is presented in Table 3. Male respondents accounted for 53% of the sample, while females made up 47%. In terms of age distribution, 41.8% of respondents were between 21 and 23 years old, 31.2% were aged 27 to 28, and 21.3% were between 24 and 26 years old.

With regard to ethnicity, 59.6% of respondents were Chinese, 16.3% were Malays, and 12.8% were Indians. For the highest level of education attained, 70.9% had tertiary education, whereas 19.8% had completed secondary education.

In terms of employment status, 70.2% of respondents were employed, while 21.3% were unemployed. Regarding investment experience, 88.7% identified as beginners and 11.3% as experienced investors.

Finally, 40.4% of respondents reported investing in cryptocurrency, 23.4% invested in stocks, and 29.1% invested in exchange-traded funds (ETFs).

**Table 3:** Demographic Details

| Demographic Features     |                        | Frequency | Percentage |
|--------------------------|------------------------|-----------|------------|
| Gender                   | Female                 | 66        | 47.0       |
|                          | Male                   | 75        | 53.0       |
| Age Group                | 18-20 years old        | 8         | 5.7        |
|                          | 21-23 years old        | 59        | 41.8       |
|                          | 24-26 years old        | 30        | 21.3       |
|                          | 27-28 years old        | 44        | 31.2       |
| Race                     | Malay                  | 23        | 16.3       |
|                          | Chinese                | 84        | 59.6       |
|                          | Indian                 | 18        | 12.8       |
|                          | Others                 | 16        | 11.3       |
| Highest Education Level  | Secondary school       | 28        | 19.8       |
|                          | Tertiary education     | 100       | 70.9       |
|                          | Postgraduate education | 13        | 9.2        |
| Employment Status        | Employed               | 99        | 70.2       |
|                          | Unemployed             | 30        | 21.3       |
|                          | Self-Employed          | 12        | 8.5        |
| Experience in Investment | Beginner               | 125       | 88.7       |
|                          | Experienced            | 16        | 11.3       |
| Types of Investment      | Stock                  | 33        | 23.4       |
|                          | Cryptocurrency         | 57        | 40.4       |
|                          | Unit Trust             | 4         | 2.8        |
|                          | Real Estate            | 6         | 4.3        |
|                          | ETF                    | 41        | 29.1       |

**Source:** Authors' own work

### 4.3 Descriptive Details

The list of means and standard deviations for each item scale of the variables in the study is presented in Table 4.

**Table 4:** Descriptive Details

| <b>Construct<br/>Item</b> |     |  | <b>Mean</b> | <b>SD</b> |
|---------------------------|-----|--|-------------|-----------|
| Disposition Effect        | DE1 | I will invest in a company that has positive information.  | 4.12        | .806      |
|                           | DE2 | I will invest in a company that has a good reputation.   | 4.14        | .850      |
|                           | DE3 | I will invest in a company whose product information is already well-known.                                      | 4.18        | .883      |
|                           | DE4 | I will invest in a company that matches investor preferences.  | 4.19        | .819      |
| Overconfidence            | O1  | I trust my investment opinion more than others.  | 4.04        | .852      |
|                           | O2  | I am confident in my ability to make investment decisions better than others.                                    | 4.04        | .882      |
|                           | O3  | My investment strategy is better than that of my peers.  | 4.08        | .854      |
|                           | O4  | My investment strategy achieves better returns than that of my peers.  | 4.06        | .855      |
| Herding Behaviour         | HB1 | I will invest in options influenced by other investors' decisions on selection.                                  | 3.91        | 1.112     |
|                           | HB2 | I will invest based on the volume choices made by other investors.   | 3.90        | .995      |
|                           | HB3 | I will invest by quickly reacting to changes in other investors' decisions and following their market reactions. | 3.82        | 1.039     |
|                           | HB4 | I will invest based on other investors' decisions to buy and sell assets.  | 3.84        | 1.033     |
| Anchoring                 | A1  | I will invest in assets that have dropped significantly from their previous closing or all-time high.            | 4.01        | .902      |
|                           | A2  | I will invest using the purchase price as a reference point in trading.  | 4.04        | .890      |

|                               |      |   |      |      |
|-------------------------------|------|---|------|------|
| Investment<br>Decision-Making | A3   | I will invest based on my previous experiences in the market.             | 4.11 | .892 |
|                               | A4   | I will invest by forecasting future price changes based on recent prices. | 4.07 | .859 |
|                               | IDM1 | I would choose less risky alternatives to ensure financial security.      | 4.08 | .757 |
|                               | IDM2 | I would choose riskier alternatives to maximize potential gains.          | 4.06 | .777 |
|                               | IDM3 | I will invest without worrying about market fluctuations.                 | 4.07 | .825 |
|                               | IDM4 | I will invest at least half of my funds into various financial assets.    | 4.03 | .870 |

**Source:** Authors' own work

#### 4.4 Analysis of the Measurement Model

Table 5 presents the reliability and validity results for the measurement model used in this study. All constructs demonstrated strong reliability and validity. Composite Reliability (CR) and Cronbach's alpha, two indicators of internal consistency, exceeded the recommended threshold of 0.70. According to Hair (2022), values above 0.70 indicate satisfactory reliability, and all constructs in this study surpassed this benchmark.

Convergent and discriminant validity were also assessed. Convergent validity was established because the Average Variance Extracted (AVE) values for all constructs were above 0.50, and the item loadings ranged from 0.865 to 0.959, exceeding the minimum recommended loading of 0.708 suggested by Hair (2022) for indicator reliability. These results indicate that the measurement model demonstrates strong internal consistency and adequate convergent validity.

**Table 5:** Validity and Reliability of Construct

| Construct                  | Item | Outer loading | Cronbach alpha | Composite reliability(rho-a) | Composite reliability(rho-c) | Average variance extracted (AVE) |
|----------------------------|------|---------------|----------------|------------------------------|------------------------------|----------------------------------|
| Disposition Effect         | DE1  | 0.937         | 0.954          | 0.972                        | 0.966                        | 0.878                            |
|                            | DE2  | 0.921         |                |                              |                              |                                  |
|                            | DE3  | 0.944         |                |                              |                              |                                  |
|                            | DE4  | 0.945         |                |                              |                              |                                  |
| Overconfidence             | O1   | 0.915         | 0.956          | 1.019                        | 0.967                        | 0.881                            |
|                            | O2   | 0.959         |                |                              |                              |                                  |
|                            | O3   | 0.932         |                |                              |                              |                                  |
|                            | O4   | 0.947         |                |                              |                              |                                  |
| Herding Behaviour          | HB1  | 0.944         | 0.952          | 0.981                        | 0.965                        | 0.873                            |
|                            | HB2  | 0.931         |                |                              |                              |                                  |
|                            | HB3  | 0.943         |                |                              |                              |                                  |
|                            | HB4  | 0.919         |                |                              |                              |                                  |
| Anchoring                  | A1   | 0.921         | 0.954          | 0.965                        | 0.966                        | 0.878                            |
|                            | A2   | 0.940         |                |                              |                              |                                  |
|                            | A3   | 0.945         |                |                              |                              |                                  |
|                            | A4   | 0.941         |                |                              |                              |                                  |
| Investment Decision-Making | IDM1 | 0.865         | 0.901          | 0.905                        | 0.931                        | 0.770                            |
|                            | IDM2 | 0.878         |                |                              |                              |                                  |
|                            | IDM3 | 0.893         |                |                              |                              |                                  |
|                            | IDM4 | 0.873         |                |                              |                              |                                  |

**Source:** Authors' own work

Next, in PLS-SEM, to demonstrate discriminant validity, the "Heterotrait-Monotrait ratio (HTMT)" between two constructs should be less than 0.85 or 0.9. This indicates that the correlation between the constructs should be notably lower than the correlation within each construct. Table 6 shows that the discriminant validity is below 0.85, indicating appropriate discriminant validity.

**Table 6:** Discriminant Validity-Heterotrait -monotrait (HTMT) -Matrix

|                                  | Anchoring | Disposition<br>Effect | Herding<br>Behaviour | Investment<br>Decision-<br>Making | Overconfidence |
|----------------------------------|-----------|-----------------------|----------------------|-----------------------------------|----------------|
| Anchoring                        |           |                       |                      |                                   |                |
| Disposition Effect               | 0.159     |                       |                      |                                   |                |
| Herding Behaviour                | 0.395     | 0.305                 |                      |                                   |                |
| Investment<br>Decision-Making    | 0.103     | 0.334                 | 0.162                |                                   |                |
| Overconfidence                   | 0.344     | 0.102                 | 0.192                | 0.127                             |                |
| <b>Source:</b> Authors' own work |           |                       |                      |                                   |                |

#### 4.5 Structural Model Analysis

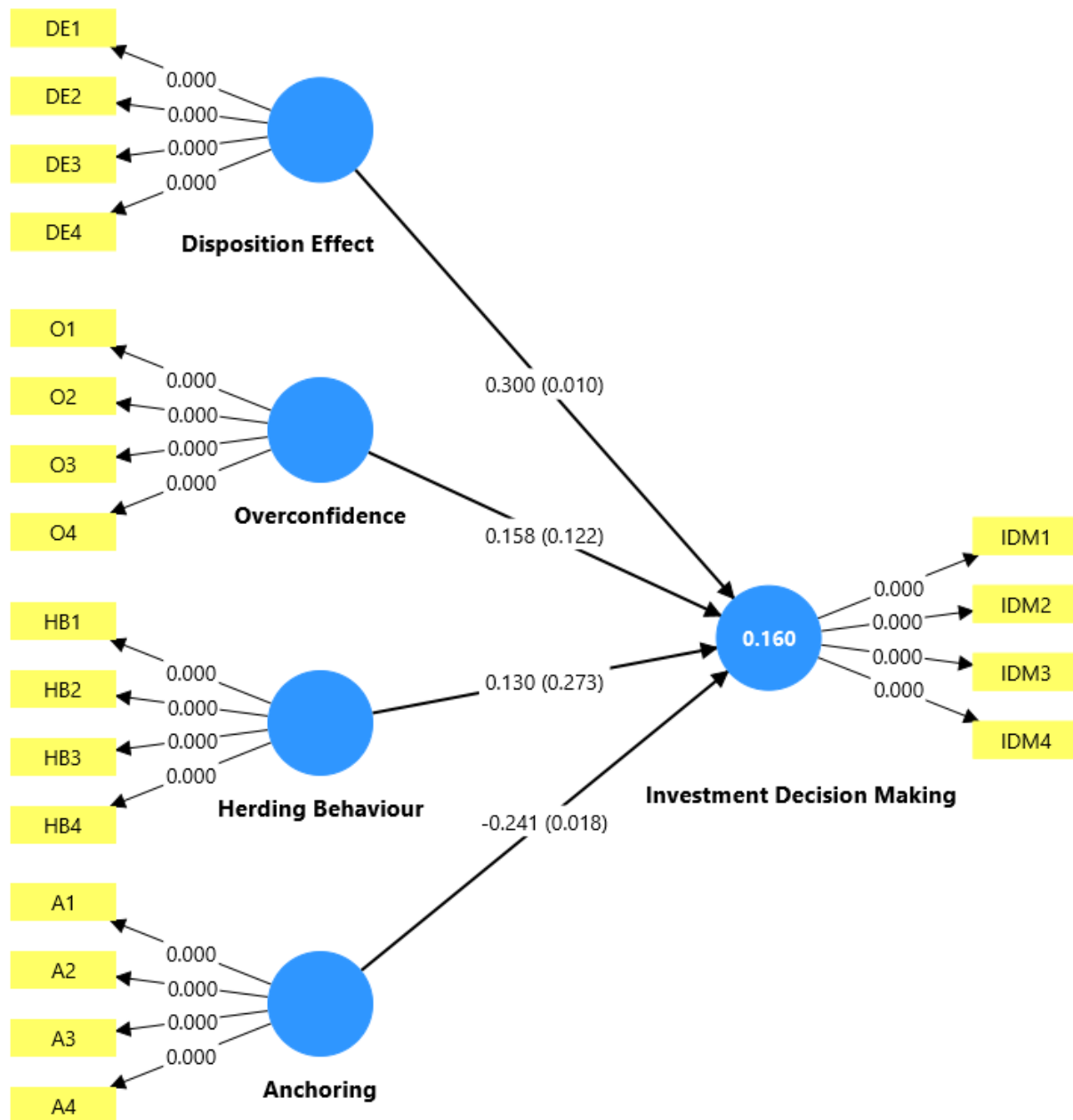
A structural model analysis was conducted to examine the significance of the hypothesised relationships and the  $R^2$  value of the research model. The structural model was evaluated using the  $R^2$  value,  $t$ -statistics for the dependent construct, and the significance of the structural path coefficients. Figure 2 illustrates the structural model, which depicts the effects of the disposition effect, overconfidence, herding behaviour, and anchoring on investment decision-making among Generation Z in Selangor, Malaysia.

As shown in Figure 2, the independent variables collectively explain 16% of the variance in investment decision-making. An  $R^2$  value of 0.16 indicates a weak level of explanatory power, meaning that 84% of the variance is attributed to factors not included in this study. The model's reliability is further supported by the adjusted  $R^2$  value of 0.143, which accounts for the number of predictors used.

The  $Q^2$  value was 0.069, which is greater than zero. In PLS-SEM, a  $Q^2$  value above zero demonstrates that the structural model has predictive relevance. Although a  $Q^2$  of 0.069 reflects weak predictive capability, it remains acceptable, as it indicates that the model can reproduce the observed data to some extent.

The next stage of the analysis involved examining the relationships between the disposition effect, overconfidence, herding behaviour, and anchoring with investment decision-making among Generation Z in Selangor. In PLS-SEM, these relationships are assessed through path coefficients. To evaluate the significance of these paths, the bootstrapping technique was applied, which resamples the data to reduce the impact of non-normality and enhance the robustness of the estimates. Following bootstrapping, the significance levels and path coefficients for each relationship were obtained.





Source: Authors' work

**Figure 2:** Structural Model with path coefficients and p-value.

Table 4 presents the hypotheses (H1 to H4) along with their corresponding *t*-statistics. For a one-tailed test, a relationship is considered significant if the *t*-value exceeds 1.645 ( $p < .05$ ) or 2.33 ( $p < .01$ ). For a two-tailed test, significance is achieved when the *t*-value is greater than 1.96 ( $p < .05$ ) or 2.58 ( $p < .01$ ). Based on these criteria, the results in Table 4 show that H1 and H4 are supported, whereas H2 and H3 are not.

H1 states that the disposition effect has a significant relationship with investment decision-making among Generation Z in Selangor, Malaysia. This hypothesis is supported ( $\beta = 0.300$ ,  $t = 2.566$ ,  $p < .010$ ). Notably, the disposition effect yielded the highest  $\beta$ -value (0.300), indicating that it is the strongest predictor of investment decision-making in this study.

H4 proposes that anchoring has a significant relationship with investment decision-making among Generation Z in Selangor, Malaysia. This hypothesis is also supported ( $\beta = -0.241$ ,  $t = 2.367$ ,  $p < .018$ ).

**Table 7: Hypotheses**

|   | Original<br>sample<br>(O) | Sample mean<br>(M) | Standard<br>deviation<br>(STDEV) | T statistics<br>(O/STDEV) | P values | Decision         |
|---|---------------------------|--------------------|----------------------------------|---------------------------|----------|------------------|
| <b>Disposition Effect -<br/>&gt; Investment<br/>Decision Making</b> | 0.300                     | 0.295              | 0.117                            | 2.566                     | 0.010    | Supported        |
| <b>Overconfidence -&gt;<br/>Investment<br/>Decision Making</b>      | 0.158                     | 0.168              | 0.102                            | 1.547                     | 0.122    | Not<br>Supported |
| <b>Herding Behaviour<br/>-&gt; Investment<br/>Decision Making</b>   | 0.130                     | 0.114              | 0.118                            | 1.096                     | 0.273    | Not<br>Supported |
| <b>Anchoring -&gt;<br/>Investment<br/>Decision Making</b>           | -0.241                    | -0.234             | 0.102                            | 2.367                     | 0.018    | Supported        |

**Source:** Authors' own work

## 5.0 Discussion and Implications

As shown in Table 7, the findings indicate that the disposition effect has a significant relationship with investment decision-making among Generation Z investors in Selangor, Malaysia, consistent with previous studies (Ahn, 2022; Bhutto et al., 2025; Shandu & Alagidede, 2024; Zhang et al., 2022). Generation Z investors appear more inclined to sell assets that have gained value and to retain those that have decreased in value. This suggests that, similar to earlier generations of investors, emotional factors, such as fear of loss or excitement over gains, may influence their decision-making.

Similarly, anchoring also shows a significant association with investment decision-making among Generation Z investors in Selangor, aligning with past research (Jan et al., 2022; Guo et al., 2022; Loris & Jayanto, 2021; Owsu & Laryea, 2023; Tili et al., 2022). A possible explanation is that Generation Z investors may place undue emphasis on initial pieces of information. This reliance on early reference points indicates that they may not always behave fully rationally; rather than evaluating information objectively, they may anchor their decisions to specific starting values or prior expectations.

In contrast, overconfidence was found to have an insignificant relationship with investment decision-making among Generation Z investors. This may be because Generation Z is generally less willing to take risks, particularly with high-risk investment products. Herding behaviour also demonstrated an insignificant relationship with investment decision-making. This suggests that Generation Z investors in Selangor may be less inclined to follow the majority and may not be easily influenced by social pressure or prevailing market sentiment during the period of this study.

The findings of this study have theoretical implications that will enhance the current studies on investment decision-making, especially among Generation Z. The Prospect Theory by Kahneman and Tversky (1979) has addressed the importance of the disposition effect, where Generation Z evaluates gains and losses to a reference point, which is the price. Through Prospect Theory, the disposition effect has become one of the real-world behaviours that is still relevant. Furthermore, the Heuristic Theory by Tversky and Kahneman (1974) has revealed the importance of the anchoring effect, as Generation Z may rely heavily on the first piece of investment information. Through the findings of this study, these variables are still associated with investment decision-making among Generation Z and will enhance current studies on investment decision-making among Generation Z. Therefore, this study has provided empirical evidence to support the Prospect Theory and Heuristic Theory.

In terms of practical implications, this study has provided valuable insights for future investigations into the impact of disposition effect and anchoring on the investment decision-making among Generation Z. This would then lead to necessary actions that can be taken by the various government agencies, financial institutions, professional bodies and institutions of higher learning who will be interested in the finding of this study and would want to understand how Generation Z is different from other generations. The disposition effect leads to irrational decision-making and hurts long-term portfolio performance, while anchoring may cause investors to conclude irrelevant or outdated reference points. Bhutto et al (2025) stated that investor behaviour may cause market bubbles; hence, policymakers and financial institutions must understand how investors' behaviour affects investment decision-making. As such, financial literacy programmes must be tailored for Generation Z and implemented in schools and higher education institutions to promote evidence-based investing (Böni & Kröncke, 2025). The Ministry of Higher Education must have tailored a financial literacy curriculum to promote rational investment behaviour among Generation Z. Furthermore, Fintech and robo-advisors

can integrate behavioural understanding of their investors and provide nudges such as a signal before an investor sells an asset, which then cultivates positive behaviours (Leow, 2023; Lisauskiene et al., 2024). An application with bias-aware features can also help investors from Generation Z to rethink any emotionally driven trades (William, 2025).

## **6.0 Conclusion**

In conclusion, this study found that the disposition effect and anchoring significantly influence investment decision-making among Generation Z investors in Selangor, Malaysia, whereas herding behaviour and overconfidence did not exhibit significant effects. These findings enhance the understanding of the psychological factors shaping the financial choices of Generation Z investors. The insights obtained from this study can inform the development of more targeted financial education initiatives and investment tools that align with the behavioural tendencies of Generation Z.

## **7.0 Limitations and Future Research**

This study has several limitations. First, the model yielded a low  $R^2$  value, indicating that additional behavioural factors should be explored in future research to more fully explain investment decision-making among Generation Z. Second, the sample size of 141 respondents was relatively small and does not adequately represent the broader population. Future studies should therefore employ a larger and more diverse sample to enhance generalisability.

Third, the study was geographically limited to Selangor. Expanding the research to include other states such as Kuala Lumpur or Penang, both of which have greater access to financial institutions and more technologically active populations, may yield deeper insights. Conducting a longitudinal study would also provide a clearer understanding of how investment behaviours change over time.

Lastly, incorporating factors such as investor sentiment and macroeconomic conditions would offer a more holistic explanation of the variables influencing investment decisions among Generation Z (Ph & Uchil, 2020).

## References:

- Ahmad, M., & Wu, Q. (2022). Does herding behavior matter in investment management and perceived market efficiency? Evidence from an emerging market. *Management Decision*, 60(8), 2148-2173.
- Ahn, Y. (2022). The anatomy of the disposition effect: which factors are most important?. *Finance research letters*, 44, 102040.
- Alili, S. (2022, October 28). Generation Z is going to social networks for financial advice. <https://www.thestar.com.my/tech/tech-news/2022/10/28/generation-z-is-going-to-social-networks-for-financial-advice>
- Almansour, B. Y., Elkgrhli, S., & Almansour, A. Y. (2023). Behavioral finance factors and investment decisions: A mediating role of risk perception. *Cogent Economics & Finance*, 11(2), 2239032.
- Ariwangsa, I. O. (2024). The impact of financial literacy on investment decisions: the moderating role of financial technology. *UPI YPTK Journal of Business and Economics*, 9(3), 16-22.
- Bautz, R. P. B. (2022). *The Impact of Financial Education on Non-Financial Biases: Opportunities and Limitations to Foster Critical Thinking* (Master's thesis, Universidade Catolica Portuguesa (Portugal)).
- Bhimani, A. and Langfield-Smith, K. (2007), "Structure, formality and the importance of financial and non-financial information in strategy development and implementation", *Management Accounting Research*, Vol. 18 No. 1, pp. 3-31.
- Bhutto, S. A., Nazeer, N., Saad, M., & Talreja, K. (2025). Herding behavior, disposition effect, and investment decisions: A multi-mediation analysis of risk perception and dividend policy. *Acta Psychologica*, 255, 104964.
- Bihari, A., Dash, M., Kar, S. K., Muduli, K., Kumar, A., & Luthra, S. (2022). Exploring behavioural bias affecting investment decision-making: a network cluster based conceptual analysis for future research. *International Journal of Industrial Engineering and Operations Management*, 4(1/2), 19-43.
- Böni, P., & Kröncke, T. (2025). Principles of Evidence-Based Investing. In *The Evidence-Based Investor: Overcoming Investment Myths for Better Performance* (pp. 61-65). Cham: Springer Nature Switzerland
- Cao, M. M., Nguyen, N. T., & Tran, T. T. (2021). Behavioral factors on individual investors' decision making and investment performance: A survey from the Vietnam Stock Market. *The Journal of Asian Finance, Economics and Business*, 8(3), 845-853.
- Che Hassan, N., Abdul-Rahman, A., Mohd Amin, S. I., & Ab Hamid, S. N. (2023). Investment intention and decision making: A systematic literature review and future research agenda. *Sustainability*, 15(5), 3949.

- Chiu, C. L., & Ho, H. C. (2023). Impact of celebrity, Micro-Celebrity, and virtual influencers on Chinese gen Z's purchase intention through social media. *Sage Open*, 13(1), 21582440231164034.
- DOSM. (2022). Department of Statistics Malaysia. Dosm.gov.my website: [https://www.dosm.gov.my/portal-main/release-content/gross-domestic-product-gdp-by-state-#:~:text=Selangor%20and%20W.P.,cent%20\(2021%3A%201.8%25\)](https://www.dosm.gov.my/portal-main/release-content/gross-domestic-product-gdp-by-state-#:~:text=Selangor%20and%20W.P.,cent%20(2021%3A%201.8%25))
- Fadhiil, I & Fariska, P. (2024). Generation Z Investment Decision: An Analysis Using Behavioral Factors. *Dinasti International Journal of Economics, Finance & Accounting*, 5(2), 886–899. <https://doi.org/10.38035/dijefa.v5i2.2803>
- Farid, A. (2024, August 13). E-Wallet App Usage & Demographics Malaysia (2024 Statistics). Upstackstudio.com website: <https://upstackstudio.com/blog/e-wallet-malaysia/>
- Gunawan, T. I. (2024). Understanding Investment Decision-making: A Qualitative Inquiry into High-Frequency Trading, Investment Strategies, and Portfolio Performance in the Financial Market. *Golden Ratio of Finance Management*, 4(2), 131-141.
- Guo, J., Wang, Y., & Xue, R. (2022, December). Anchoring Effect Affects Decision Making on the Stock Market. In *2022 2nd International Conference on Economic Development and Business Culture (ICEDBC 2022)* (pp. 1250-1256). Atlantis Press.
- Hair, J.F., Babin, B. and Krey, N. (2017a) 'An Assessment of structural equation modeling applications in the journal of advertising', *Journal of Advertising*, Vol. 46, No. 1, pp.163–177.
- Haykir, O., & Yagli, I. (2022). Speculative bubbles and herding in cryptocurrencies. *Financial innovation*, 8(1), 78.
- Herawati, I., Rizal, I., & Amita, N. (2022). The impact of social media on fear of missing out among the Z generation: a systematic literature review. *Journal of Islamic and Contemporary Psychology*, 2(2), 92-98.
- Hunjra, A. I., Qureshi, S., & Riaz, L. (2016). Psychological factors and investment decision making: A confirmatory factor analysis. *Journal of Contemporary Management Sciences*, 2(1).
- Jan, N., Jain, V., Li, Z., Sattar, J., & Tongkachok, K. (2022). Post-COVID-19 investor psychology and individual investment decision: A moderating role of information availability. *Frontiers in Psychology*, 13, 846088.
- Kahneman, D., & Tversky, A. (1979), "Prospect theory: an analysis of decision under risk", *Econometrica*, Vol. 47 No. 2, pp.263-291.
- Kiderlin, S. (2021, June 27). Gen Z investors are taking more risks to get rich quick, survey finds. <https://markets.businessinsider.com/news/stocks/gen-z-investing-risk-appetite-barcalys-survey-social-meida-fintok-2021-6-1030556783>

- Lamichhane, P., & Simkhada, A. (2024). Risk Tolerance, Overconfidence and Investment Decisions in Nepal. *Journal of General Education and Humanities*, 3(2), 227-240.
- Langston, J (2025, March 4). The future of investing: How GenZ is shaping the financial landscape. RFI Global website: <https://rfi.global/the-future-of-investing-how-genz-is-shaping-the-financial-landscape/#:~:text=Although%20GenZ%20represents%20a%20significant,platforms%20over%20traditional%20investment%20firms%2C>
- Leow, H. T. (2023, March16).Nudging users to adopt a behavioural change on Robo-Advisors.<https://medium.com/the-uxplorer/nudging-users-to-adopt-a-behavioural-change-on-robo-advisors-8de2da7b3261>
- Lisauskiene, N., Daraskuviene, V., & Butkus, M. (2024). Passive vs active robo-advisors and disposition effect. Moderating role of gender and financial literacy. *Baltic Journal of Economics*, 24(2), 239-260.
- Loris, R. P., & Jayanto, P. Y. (2021). The effect of representativeness, availability, anchoring, risk perception, and herding on investment decisions syariah investors. *Jurnal Akuntansi ISSN*, 2303, 0356
- Musfidah, H., Aji, T. S., & Hartono, U. (2022). Defining Investment Decision Making in the Stock Market: A Literature Review. *Journal of World economy: Transformations & transitions*, 2(5), 3.
- Ng, P. K., & Lim, A. Y. (2022). Youth Financial Literacy in Malaysia: An Exploration of Factors Influencing Investment Decisions. *Journal of Youth Studies*, 18(4), 403-418.
- Olayinka, A. A. (2022). Financial statement analysis as a tool for investment decisions and assessment of companies' performance. *International Journal of Financial, Accounting, and Management*, 4(1), 49-66.
- Owusu, S. P., & Laryea, E. (2023). The impact of anchoring bias on investment decision-making: evidence from Ghana. *Review of Behavioral Finance*, 15(5), 729-749.
- Pašiušienė, I., Podvieszko, A., Malakaitė, D., Žarskienė, L., Liučvaitienė, A., & Martišienė, R. (2023). Exploring Generation Z's Investment patterns and attitudes towards greenness. *Sustainability*, 16(1), 352
- Ph, H., & Uchil, R. (2020). Influence of investor sentiment and its antecedent on investment decision-making using partial least square technique. *Management Research Review*, 43(11), 1441-1459.
- Polkuamdee, N. (2025, March 10). Financial influencers sway Gen Z. <https://www.bangkokpost.com/business/general/2977301/financial-influencers-sway-gen-z>



- Quaicoe, A., & Eleke-Aboagye, P. Q. (2021). Behavioral factors affecting investment decision-making in bank stocks on the Ghana stock exchange. *Qualitative Research in Financial Markets*, 13(4), 425-439..
- Ramendran, G., & Ho, J.W. (2024, December 7). Gen Z work hard to strike a balance. <https://www.thestar.com.my/news/nation/2024/12/07/gen-z-work-hard-to-strike-a-balance>
- Rosdiana, R. (2020). Investment behavior in generation Z and millennial generation. *Dinasti International Journal of Economics, Finance & Accounting*, 1(5), 766-780.
- Sachdeva, M., & Lehal, R. (2024). Contextual factors influencing investment decision making: a multi group analysis. *PSU Research Review*, 8(3), 592-608.
- Sathya, N., & Gayathiri, R. (2024). Behavioral biases in investment decisions: An extensive literature review and pathways for future research. *Journal of Information and Organizational Sciences*, 48(1), 117-131.
- Sentosa, K. Y. K., & Gosal, G. G. (2023). Exploring the Influence of Parental Financial Behavior, Financial Literacy, and Herding Behavior on Investment Behavior Among Generation Z Investors.
- Shandu, P., & Alagidede, I. P. (2024). The disposition effect and its manifestations in South African investor teams. *Review of Behavioral Finance*, 16(1), 167-185.
- Shah, B., & Butt, K. A. (2024). Heuristic biases and investment decision-making of stock market investors: A review paper. *Vision*, 09722629231220985.
- Slepian, R. C., Vincent, A. C., Patterson, H., & Furman, H. (2024). "Social media, wearables, telemedicine and digital health,"—A Gen Y and Z perspective..
- Solanki, S., Wadhwa, S., & Gupta, S. (2019). Digital technology: An influential factor in investment decision making. *International Journal of Engineering and Advanced Technology*, 8(6S4), 27-31.
- Simon, H. A. (1977). The logic of heuristic decision making. In *Models of discovery: And other topics in the methods of science* (pp. 154-175). Dordrecht: Springer Netherlands.
- Tan, G. K. S. (2021). Democratizing finance with Robinhood: Financial infrastructure, interface design and platform capitalism. *Environment and Planning A: Economy and Space*, 53(8), 1862-1878.
- Tarigan, Z. J. H. (2021). *The effect of essential information and disposition effect on shifting decision investment* (Doctoral dissertation, Petra Christian University).
- Tay, C. (2024, March 25 )SC: Complaints about scams, unlicensed activities continued to rise in 2023. The Edge Malaysia. <https://theedgemalaysia.com/node/705745>
- Tlili, F., Chaffai, M., & Medhioub, I. (2023). Investor behavior and psychological effects: herding and anchoring biases in the MENA region. *China Finance Review International*, 13(4), 667-681.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *science*, 185(4157), 1124-1131.

- Wang, B. (2023). The impact of anchoring bias on financial decision-making: exploring cognitive biases in decision-making processes. *Studies in Psychological Science*, 1(2), 41-50.
- Wang, P., & Nuangjamnong, C. (2022). Determinant Factors of Overconfidence, Herding Behavior, and Investor Elements on Investment Decision Making in China. *Universal Journal of Financial Economics*, 1(1), 23-42.
- Wellfren, A. C., & Lajuni, N. (2022). Mapping Investment Decision Studies: A Bibliometric Review. *International Journal of Academic Research in Business and Social Sciences*. 12(7), 1673 – 1697.
- William, A. C. (2025). Development of an AI-Powered Engine for Behavioral Bias Detection in Investment Advisory. *International Journal of Information Technology Research and Development (IJITRD)*, 6(3), 13-18.
- Yulianis, N., & Sulistyowati, E. (2021). The effect of financial literacy, overconfidence, and risk tolerance on investment decision. *Journal of Economics, Business, and Government Challenges*, 4(01), 61-71.
- Zhang, X., Wang, Z., Hao, J., & Liu, J. (2022). Stock market entry timing and retail investors' disposition effect. *International Review of Financial Analysis*, 82, 102205.