

FACTORS INFLUENCING INVESTMENT  
DECISION-MAKING IN STOCK MARKET AMONG  
MILLENNIALS IN MALAYSIA

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**FACTORS INFLUENCING INVESTMENT DECISION-  
MAKING IN STOCK MARKET AMONG  
MILLENNIALS IN MALAYSIA**

**BY**

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requirement for the degree of

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DEDICATION

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LIST OF ABBREVIATIONS

KLSE	Kuala Lumpur Stock Exchange
CDS	Central Deposit System
SID	Stock Investment Decisions
HE	Herding
OV	Overconfidence
AI	Accounting Information
FI	Firm Image
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factor
Sig.	Significance
N	Sample Population
Gen Z	Generation Z
Std. Error	Standard Error
B	Beta
ANOVA	Analysis of Variance
P	p-value
H1	Hypothesis 1
H2	Hypothesis 2
H3	Hypothesis 3
H4	Hypothesis 4

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## Preface

Stock market investing may be a difficult task, particularly for people who are unfamiliar with the world of finances. Making investing selections may be challenging since there are numerous considerations to take into account. Even seasoned investors occasionally find it challenging to understand the nuances of the market, especially during periods of turbulence or uncertainty.

Nevertheless, for individuals who are willing to invest the time and effort needed to extensively learn about and comprehend the stock market, investing in stocks can be a pleasant and profitable effort. Investors may make better judgments and develop a portfolio of companies that can defy market volatility by carefully evaluating every component that may impact the price of the company.

This research seeks to give a broad overview of some of the significant variables that may affect stock investment decisions. Readers will obtain an expanded understanding of the elements that investors take into account when determining which stocks to purchase or sell by evaluating a variety of aspects, from investor behaviors to company-specific information. This research paper begins by examining behavioral elements including overconfidence and herding. In addition, this research paper also will talk about how accounting knowledge and company reputation might influence young Malaysian stock investors' decisions.

Ultimately, this research is aimed at serving as an in-depth handbook for investors who want to choose stocks wisely. Investors may make better judgments and increase their chances of being successful in the market by being aware of the different factors that might affect their decision.

## Abstract

This study investigates the variables influencing Malaysian millennials' stock market investment choices. The research investigation examines the relationship between the dependent variable of stock investment choice and the four independent factors of herding, overconfidence, accounting information, and firm image.

In order to better understand how herding, overconfidence, accounting information, and firm image impact stock investing decisions among millennials in Malaysia, the prospect theory is used as the theoretical foundation.

The research design employs a quantitative descriptive approach, targeting Malaysian millennial investors who have a CDS account and are currently investing in the Kuala Lumpur Stock Exchange (KLSE). A statistical analysis was performed on the 594 valid responses that have been collected from the survey questionnaire. The results show a significant positive relationship between herding, accounting information, as well as firm image, and stock investing decisions. However, the relationship between overconfidence and stock investment decision is positive but insignificant.

The hypothesis of overconfidence is rejected, while those related to herding, accounting information, and firm image are supported by the findings. The study's conclusions imply that for investors to make wise investment decisions in the stock market, they must be aware of the impact that herding, accounting information, and corporate image have on such decisions. The study's theoretical as well as practical implications, limitations, and suggestions for further research are covered in the conclusion.

## **CHAPTER 1: RESEARCH OVERVIEW**

### **1.0 Introduction**

In Chapter 1, the study's context as well as its problems, objectives, research questions, as well as significance will be outlined.

### **1.1 Research Background**

The decline in the rate of births, the rise in millennial debt, and the ageing population will have an enormous effect on the prospective future of the banking and financial services sector. According to the Department of Statistics Malaysia (2022), the proportion of the population aged over the age of 65 raised from 7% in 2021 to 7.3% in 2022. Malaysia has entered an ageing society, as defined by the United Nations, and the investment industry must strive to cater to various age groups.

Investments are made to guarantee every person's current and future retiring financial well-being. According to Khan, Afrin, and Rahman (2015), making investments is the distribution of monetary resources to possibilities with a likelihood that there will be greater returns in the future (Tyson, 2020). The investment means assets that are not set aside for future use. By making investments, it can boost its wealth and generate returns that exceed inflation.

Mahardhika and Zakiyah (2020) stated that the investment choices of investors are very distinct, such as investing in capital markets and money markets. Investing in stock is a trendy investment event nowadays and it is one of the most popular investment options for investors. Long-term stock investment contributes to capital appreciation. It has great potential for attractive returns, but it also comes with risks (Icici Direct, 2021). The main objective of investing in the stock exchange is to

maximize the expected return while minimizing uncertainty (Gitman, 2005). Investing in stock is considered to be a chance for investors to create extra revenue in the stock market, but the returns of investment are not guaranteed (Abidin & Jaffar, 2012).

Malaysia's stock exchange is referred to as the Kuala Lumpur Stock Exchange (KLSE). According to Mahardhika and Zakiyah (2020), a study found that it is about 57% of Malaysia's population invested in the capital market. It is abundantly clear from these previous studies as the stock market is an attractive market for Malaysians to invest and grow their wealth for future planning.

There is also 23% of active trading accounts belonging to millennials on KLSE. In September 2019, they accounted for 47% of all new accounts opened, and it continues to expand (Bursa Malaysia, 2019). To state the obvious, millennials see the value in their investment. Aside from this, the active participation of millennial shareholders is an increasing phenomenon in Malaysia, for example, with 50% of the new retail investors by the year 2020 being millennials (Subramaniam, 2022). There has also been an unexpected rise in retail investors among millennials and Gen Z. They now account for 36% of total Central Deposit System (CDS) accounts in 2020, compared to about 17% in 2019 ("Malaysian Millennial Traders," 2022). Say, millennials see the value in their investment.

According to an observation carried out by Jacob (2022), 86% of the generation of millennials elect to invest in unit trusts instead of stocks. Less preferred capital market products consisted of stocks (65%), bonds/sukuk (19%), as well as private retirement savings plans (14%). Figure 1.1 displays the top seven capital market products for people aged between the ages of 18 and 40 in Malaysia, based on an analysis of 1003 individuals.

Figure 1.1: Top 7 Capital Market Products



Source: Jacob, K. (2022). Trends: Unit trust remains No 1 capital market product among youth. The Edge Markets.

Moreover, the quantity of investors in stocks has increased significantly during the COVID-19 pandemic. Wan, Fitriani, and Yesika Emelia (2022) found that a lot of investors have turned to the capital market during the pandemic. In the year 2020, the Bursa Malaysia index has fallen to its lowest possible level in 10 years, down 20.54%. However, Chia, Liew, and Rowland (2020) stated only a handful of companies, including medical care and gloves investments, gained an advantage from the pandemic. Mazur, Dang, and Vega (2021) found that this is because these stocks are considered to be excellent performers during the COVID-19 pandemic. That led a lot of people to invest in these stocks. The trade volume of stocks on KLSE surged to a high of ten billion shares as speculators chased gloves and medical-related stocks during the pandemic (Say, 2020).

Additionally, women have significantly changed the investment in the environment in the last few decades. Even though the traditional conception of the typical shareholder in investments is believed to be males, female wealth, as well as investment footprint, are getting bigger. The proportion of women who make investments is currently on the rise. Tzanetos (2023) mentioned that a 2021 Fidelity study found that 67% of women now invest outside of retirement accounts. In 2018, that figure was just 44%. This can be seen as an increase of 23% between 2018 and 2021. Although women got a late start in this pandemic, they have incredible

potential to change the future investment landscape. According to Kuek (2022), more of the number of female investors held Central Deposit System (CDS) accounts. The number of new accounts opened during the year was 85,094, up 110.63% from 40,398 a year earlier. Subsequently the beginning of the COVID-19 pandemic, a growing number of female investors began to make investments, as evidenced by the increase in the number of female investors.

## **1.2 Research Problem**

### **1.2.1 Irrational Investment Decision**

Investing in the stock market is one of the best pathways to creating and building wealth over time. However, losses in the short term are common (Mascia, 2022). Moreover, Shiller (2003) mentioned investors do not think and act rationally. Intuition is seen as irrationality (Barkovi, 2019). Campbell and Sharpe (2007) mentioned investor behaviour deviates from rational behaviour under the influence of various subjective factors.

Adielyani and Mawardi, (2020) claimed millennials sometimes make irrational stock investment decisions. Hossain and Siddiqua (2022) mentioned several emotional issues that prompt investors to make investment decisions, which is proof of irrational market behavior and inefficient markets. Irrational behavior may become the dominant choice of the majority of the entire society (Barkovi, 2019). People who invest with intuition make irrational investment decisions, which is likely to cause their investment failure.

### **1.2.2 Emotions and Subjective Thinking**

Investors' decision is driven by greed and fear. They conjecture in stocks between idealistic highs and lows (Shiller, 2003). Investors are also misled by emotions, and subjective thinking, and constantly form several

expectations which are irrational about the company's future performance and the economy as a whole (Mouna & Anis, 2015). Javed and Marghoob (2017) also stated investor behaviour is characterized by overexcitement and overreaction when the stock market rises and falls, and various factors affect their decision-making. Investors need to make rational decisions based on the information available from emotion-free judgments.

When the market goes up, investors become optimistic that it will continue to go up. On the contrary, investors become extremely pessimistic during economic downturns. Overacting or underreacting to market events can lead to market panic and crashes. Therefore, emotions and subjective thinking can lead to a mistake made by investors while they are investing in the stock market.

Additionally, people also often think they are overconfidence. They also overestimated the accuracy of their knowledge and the superiority of their knowledge (Lin, 2017). The tendency to be overconfident increases forecast errors, which can lead to unfavourable trading (Bloomfield, Libby, & Nelson, 1999). This is because overconfident investors believe that they have the ability and expertise in the field of stock market investment (Trinugroho & Sembel, 2011).

### **1.2.3 Blindly Conformity**

With the wrong mindset, investors will not succeed in stock investment. Mascia (2022) claimed that people will make wrong decisions in the stock market because they followed misguided advice from others. Investors fail because they believe too much in what they hear or read (Kay, 2013). The crowd is not always the best idea when it comes to investing (Partridge, 2022).

The bad advice caused investors to lose money and their portfolio fails. A friend or family member may give them advice because it is what they have heard from someone else, or because they have a feel for a particular stock without investigating the company (Mascia, 2022). For instance, accessing the company's annual report for its future program to raise its capital to understand the company's prospects in the future.

#### **1.2.4 Limited Research Studied targeted Malaysian Stock Exchange and Malaysian Millennials**

Additionally, the majority of the previous study on stock investment decisions was carried out in other nations and wasn't focused on an intended age category.

The aforementioned studies, for instance, were carried out mainly in Pakistan, Ghana, Indonesia, as well as Bangladesh. Quicoe and Eleke-Aboagye (2021) carried out research to determine the behavioral variables that influence the choice of investments on the Ghana stock exchange. Sitinjak and Ghozali (2012) analyzed the behaviors of Indonesian shareholders in their stock investment choices. Furthermore, additional research is carried out in Bangladesh. Khan et al. (2015) examined the variables that impacted Bangladeshi investment in stocks decision.

The research studies were carried out in various nations. Also, it reveals that the majority of research investigations failed to identify a particular group of people to be examined. Therefore, research on the stock investment decisions of the KLSE and the millennial generation has been determined inadequate.

### **1.3 Research Objectives**



### **1.3.1 General Objective**

The general objective of this study is to identify the factors that influence Malaysian millennial investors' investment decisions in the stock market.

### **1.3.2 Specific Objectives**

1. To examine the relationship between herding and stock investment decisions among millennials in Malaysia.
2. To investigate the relationship between overconfidence and stock investment decisions among millennials in Malaysia.
3. To examine the relationship between accounting information and stock investment decisions among millennials in Malaysia.
4. To investigate the relationship between firm image and stock investment decisions among millennials in Malaysia.

## **1.4 Research Questions**

1. What is the influence of herding on stock investment decisions among millennials in Malaysia?
2. What is the influence of overconfidence on stock investment decisions among millennials in Malaysia?
3. What is the influence of accounting information on stock investment decisions among millennials in Malaysia?

4. What is the influence of firm image on stock investment decisions among millennials in Malaysia?

## **1.5 Research Significance**

This research is important for publicly listed companies to better understand millennial investors when they are planning to invest in a particular stock (Mutswenje, 2009). Safdar, Mateen, Khan, Mustafa, and Shafique (2020) mentioned that it also identifies the biggest factors influencing investors' decisions, which will influence the company's future strategy.

In addition, it will be beneficial given that it functions as an overview for the researchers to develop an in-depth knowledge of the relevant studies on the topic (Ikeobi & Jat, 2016). Due to the paucity of literature on the subject, the aim of this research is to investigate the variables that influence the stock investment decisions of Malaysian millennial investors.

In addition, this study can help financial advisers to design investment portfolios based on investors' investment decisions (Nareswari et al., 2021). Especially by considering factors such as herding, overconfidence, accounting information, and firm image that affect investors' decision-making on stock investment.

Moreover, this study will be useful for investment advisors to help investors devise appropriate asset allocation strategies for those with different needs (Nareswari et al., 2021). Therefore, this study will provide a deeper study of investors' decision-making on stock investment through the analysis of variables.

In a nutshell, this research will aid listed-company, researchers, financial advisors, and investment advisors in better comprehending the significance of herding, overconfidence, and accounting information, as well as firm image in the investment decisions of Malaysian millennial investors.

## **1.6 Conclusion**

This chapter covered the background of the research. The problems were also exposed. Mention has been given regarding the four research questions, the general and specific objectives, and the significance of the study.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

The second chapter outlines the results from different researchers. The research's underlying theory is prospect theory – loss aversion. In addition, this paper will include dependent variables such as investment decisions, and independent variables including herding, overconfidence, accounting information, and firm image based on previous research. Along with that, the conceptual framework for the research and the development of hypotheses will also be stated and discussed.

### **2.1 Underlying Theory**

#### **2.1.1 Prospect Theory – Loss aversion**

Prospect theory is a descriptive theory of decision-making under uncertainty (Kahneman & Tversky, 1979). In prospect theory, utility is defined as changes in terms of gains or losses (Weber & Johnson, 2009). Shang, Duan, and Lu (2021) stated that this theory is concerned with the changes in wealth, gains and losses are measured. It embodies loss aversion and has a wide range of applications. In the past few years, loss aversion has been repeatedly applied to behavioral finance (Schmidt & Zank, 2005).

In investment, loss aversion is explained by people who are eager to realize gains for fear of losses (Shang et al., 2021). It has been empirically recognized as the degree to which people are sensitive to a loss twice as large as the gain given the same nominal amount (Kahneman & Tversky, 1979). The research from Schmidt and Zank (2005) shows people are more sensitive to losses than gains in loss aversion under prospect theory. Hassan, Khalid, and Habib (2014) stated investors tend to avoid risks and try to

invest where they are guaranteed a positive return. They are afraid of losses and are more willing to take risks to avoid losses rather than make gains (Silwal & Bajracharya, 2021). The sadness of loss is stronger than the joy of gain (Shang et al., 2021). Therefore, even a small loss can be a particularly painful experience for people.

Mbaluka, Muthama, and Kalunda (2012) stated that when choosing two options with losses, they will become risk-seeking. Investors may be concerned more about the return on their investment. Loss-averse investors will either not participate in the stock market or will allocate a small amount of their wealth to stocks (Gomes, 2005). Therefore, loss-averse individuals choose to avoid any equity exposure. According to Sashikala & Chitramani (2018), a past study noted that loss aversion refers to the tendency of people to evaluate possible outcomes based on the gains or losses of an investment. Jain, Walia, and Gupta (2019) found that loss aversion under prospect theory will significantly affect the investment decisions of investors.

## **2.2 Review of Variables**

### **2.2.1 Stock Investment Decisions**

The dependent variable of the research is millennials' stock investment decisions. Metawa, Hassan, Metawa, and Safa (2019) stated that a stock investment decision describes purchasing and selling options that are made by investors according to fundamental evaluation, technical analysis, and other sources of data.

The investment decision is particularly important for any enterprise that must have investment-related knowledge (Safdar et al., 2020). Cao, Nguyen, and Tran (2021) stated that investment decision-making can be measured by macroeconomic information, companies' profit and performance, and the history of stock price trends. Typically, the decision is used for analysing

company knowledge as well as information to minimize uncertainties and the resulting impacts (Safdar et al., 2020). This information helps investors to make investment decisions.

In this research, four distinct variables were chosen to examine the variables that are influencing the Malaysian millennial generation's stock investment decisions. The dependent variable is a stock investment decision, and the analysed independent variables are herding, overconfidence, accounting information, as well as firm image.

### **2.2.2 Herding**

Individual investors exhibiting the behavior of herding are the ones who adhere to market trends. It also outlines the way an investor follows the decisions of other investors as well (Nareswari et al., 2021). Therefore, they do not utilize information or data as they make stock decisions regarding investments, instead choosing to merely imitate the behavior of other people (Bakar & Yi, 2016). The herding investors might act based on the activity in the trading of those deemed informed. This could lead every market participant to be making mistakes due to herding (Abul, 2019). Areiqat, Abu-Rumman, Al-Alani, and Alhorani (2019) mentioned that the supporting proof of collective influence correlates with financial decisions made based on limited rationality. Herding can be measured by other investors' decisions regarding stock types of selection, volume, buying, or selling (Cao et al., 2021). Investors herd because the majority's decision is assumed to be correct (Bakar & Yi, 2016).

Tabassum, Soomro, Ahmed, Alwi, and Siddiqui (2021) found that the influence of herding behaviour on the choice of investment behaviour is negligible. Adielyani and Mawardi (2020) demonstrated that herding behaviour has a positive and significant effect on investment decisions. In addition, Qasim, Hussain, Mehboob, and Arshad (2019) suggested that

investors' investment decisions are significantly impacted by herding behaviour.

### **2.2.3 Overconfidence**

Overconfidence refers to behavioral bias in which investors think they have more intelligence than other investors (Shiller, 2016). It can lead investors to make bad trading decisions, which repeatedly manifest as excessive trading, portfolio losses, and risk-taking (Nofsinger, 2017). As a result, overconfident investors believe more strongly in their valuation of the stock and care less about the beliefs of others.

Tabassum et al. (2021) stated that overconfidence has no positive and insignificant influence on investors' decisions on investment in Pakistan. On the other hand, Herlina, Hadiano, Winarto, and Suwarno (2020) proved that overconfidence influences investment decisions. Moreover, Adielyani and Mawardi (2020) also found that overconfidence influences investment decisions and results in a positive and significant impact on it.

### **2.2.4 Accounting information**

Amahalu, Abiahu, Chinyere, and Nweze (2018) defined accounting information as information that describes utility accounts. High-quality accounting information allows external stakeholders to fully understand the fundamentals of the company (Khoufi, 2020). It is considered a critical factor used because the decision can be based on the company's stock.

Silalahi, Hafizh, Nasution, and Sugianto (2021) mentioned a company's share price reflects its future profits. This information is essential for making reasonable investment decisions. Financial statements can only be used to evaluate a company's share price in the stock market if it provides

informative data to investors. Waweru, Munyoki, and Uliana (2008) point out that investors' behavior is affected by changes in stock prices. Consequently, a decision-maker is always gathering information to reduce uncertainty.

Somathilake (2020) found that accounting information has a positive relationship with investment decisions but it has an insignificant impact on it in the Colombo. Furthermore, Zaidi and Tahir (2019) also found that accounting information has a positive relationship with investment decisions. Moreover, Ahmad (2017) also claimed that accounting information is considered the greatest factor influencing behavior of investors.

### **2.2.5 Firm image**

The firm image describes as the impression of a company's reputation in the industry. It includes corporate reputation, corporate status, perception of corporate products and services, and perception of corporate ethics which can be measured in the firm image (Mutswenje, 2009). Safdar et al. (2020) found that firm image is a factor that has a positive and significant impact on investment decisions. In addition, Pandey, Risal, and Chauhan (2020) also discovered that firm image has a significant influence on the psychology of investors when making investment decisions. Moreover, Salman, Mughal, Mehmood, and Makarevic (2020) concluded that the firm image has a positive and significant relationship with investment decision-making.

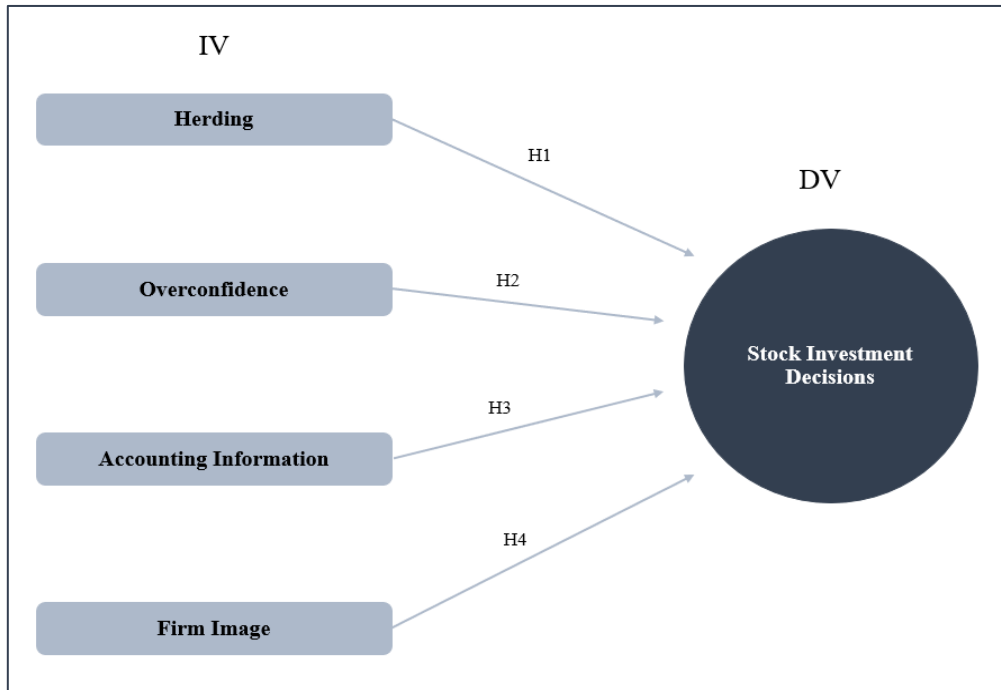
## **2.3 Conceptual Framework**

In this study, the stock investment decision was used as dependent variables, and herding, overconfidence, accounting information, and firm image were used as



independent variables. Figure 2.1 represents the conceptual framework of this research.

Figure 2.1: Conceptual Framework



Source: Developed for the research

## 2.4 Hypotheses Development

### 2.4.1 Relationship Between Herding and Stock Investment Decision

Herding means that investor behavior tends to follow the behavior of other investors (Nareswari et al., 2021). Preliminary research has shown herding is related to stock investment decision in a variety of stock exchange markets in the world. Cao et al. (2021) found that herding has a positive influence on investment decisions and also a positive relationship between herding and investment decision. Furthermore, Qasim et al. (2019) proved that investment decisions were significantly influenced by herding. Additionally, Areiqat et al. (2019) discovered that herding has a significant influence on

stock investment decisions in Amman Stock Exchange. Hence, this research proposes a hypothesis to examine the relationship between herding and stock investment decisions among Malaysian millennials. Based on the previous studies, the hypothesis can be drawn:

**H1:** There is a significant relationship between herding and stock investment decision among millennials in Malaysia.

#### **2.4.2 Relationship Between Overconfidence and Stock Investment Decision**

Overconfidence is a behavioral bias in which investors believe they are smarter as compared with other investors (Shiller, 2016). In research from Tabassum et al. (2021), the result found that overconfidence has an insignificant influence on investment decisions in Pakistan. In the research from Adielyani and Mawardi (2020), the result revealed that overconfidence has a positive and significant impact on investment decisions. Furthermore, Areiqat et al. (2019) found that overconfidence has a significant impact on investment decisions in Amman Stock Exchange. In addition, Metawa et al. (2019) proved that overconfidence has a significant impact on investment decisions. Based on previous research findings and results consistent with this study, the hypothesis in this research is proposed:

**H2:** There is a significant relationship between overconfidence and stock investment decision among millennials in Malaysia.

#### **2.4.3 Relationship Between Accounting information and Stock Investment Decision**

Accounting information is information that processes financial transactions and provides external reports to external parties (Amahalu et al., 2018).

Somathilake (2020) found that accounting information has a positive relationship with investment decisions. Besides, Zaidi and Tahir (2019) found that accounting information has a relationship with investment decisions. Moreover, Ahmad (2017) found that accounting information is the greatest significant reason influencing individual investors' behavior. Therefore, the study generates a hypothesis to test the relationship between accounting information with stock investment decisions among millennials in Malaysia. Based on previous research findings and results consistent with this study, the hypothesis in this research is proposed:

**H3:** There is a significant relationship between accounting information and stock investment decision among millennials in Malaysia.

#### **2.4.4 Relationship Between Firm image and Stock Investment Decision**

Firm image refers to the reputation impression of a company in the industry (Mutswenje, 2009). Safdar et al. (2020) found that firm image has a positive influence and significant relationship with investment decisions. Besides, Pandey et al. (2020) also found that the firm image has a significant influence on psychology aspect when investors make stock investment decisions. Furthermore, Salman et al. (2020) found that the firm image has a positive and significant relationship with individual investor investment decision-making. Therefore, this study generates a hypothesis to examine the relationship between firm image and stock investment decisions among millennials in Malaysia. Based on previous research findings and results, the hypothesis in this research is proposed:

**H4:** There is a significant relationship between firm image and stock investment decisions among millennials in Malaysia.

## **2.5 Conclusion**

In this chapter, the theory underlying the literature, the dependent and independent variables, and the conceptual framework are discussed. It proposed hypotheses that herding, overconfidence, accounting information, and firm image are significantly related to stock investment decisions.

## **CHAPTER 3: METHODOLOGY**

### **3.0 Introduction**

The third chapter describes the study's methodology, such as the design of the study, sampling design, techniques of data collection of data, the instrument for research, construct measurements, processing of data, and proposed data analysis tools, including descriptive analysis, as well as inferential analysis.

### **3.1 Research Design**

#### **3.1.1 Quantitative Research**

Quantitative research is one of the major divisions of research design. According to Goertzen (2017), quantitative research methods involve the collection and analysis of data that is structured and can be represented numerically. By using quantitative research, it can understand the relationship or association between variables through testing hypotheses.

According to Watson (2015), quantitative research aims for data collection via measurements and analysis of trends and relationships in these data. Hoxha and Hasani (2022) mentioned quantitative research uses many variables of interest in the social sciences. For instance, gender, socioeconomic status, or other personal characteristics, cannot be manipulated because of attributive variables.

This research aims to explore the relationship between dependent and independent variables that influence millennial investors' stock investment decisions. Therefore, the quantitative method is implemented in this study.

By using the quantitative research method, the researcher can analyze the collected data and interpret it as a description or explanation. Besides, the data can be collected through a survey to interpret each outcome and conclude the entire study.

### **3.1.2 Descriptive Research**

Descriptive research can be interpreted as a statement of events. It is used to describe various aspects of the phenomenon. It is an effective method to get information that can be used to develop hypotheses and suggest associations (Business Research Methodology, n.d.). Hence, the descriptive research design was implemented in this research, as both the dependent and independent variables can be measured by using the 5-point Likert scale in the questionnaire. In addition, this study also aims to explore and conclude the relationship between a dependent variable and independent variables through data collection. As previously stated, this study is considered to be a descriptive research design by developing hypotheses which suitable for testing relationships between variables.

## **3.2 Sampling Design**

### **3.2.1 Target Population**

The target population in this research is millennial investors in Malaysia. Millennials are considered to be born between 1996 and 1981 (Subramaniam, 2022). This research focuses on Malaysian millennial investors who must have Central Depository System (CDS) account to invest in the stock market. To trade on KLSE, an investor must open a CDS account with an Authorised Depository Agents. Besides, it also indicates that the target population will be selected from across Malaysia which consists of 13 states and three federal territories. According to the Ministry

of Foreign Affairs (n.d.), the states in Malaysia involves Perlis, Kedah, Penang, Perak, Selangor, Negeri Sembilan, Malacca, Johor, Kelantan, Terengganu, Pahang, Sabah, and Sarawak. The three federal territories are Kuala Lumpur, Putrajaya, and Labuan. Therefore, millennials who currently invest with CDS accounts in the KLSE are targeted regardless of the region in the country.

### **3.2.2 Sampling Frame**

To describe a sampling frame is a complete list of individuals from which samples will be drawn (Taherdoost, 2016). It is more specific than the target population. The sampling frame of this research is the list of CDS account holders who are considered a millennial and currently investing in KLSE. The sampling frame is highly confidential for security reasons. So it is not available for the researcher to access the complete list of CDS account holders.

### **3.2.3 Sampling Technique**

Sampling refers to the selection of a subdivision of individuals from a population to predict the entire population (Singh & Masuku, 2014). Sampling techniques can be divided into two major types which included probability sampling and non-probability sampling. As no database can be accessed, the non-probability sampling technique will be applied in this research. Snowball sampling was chosen because it is useful in the process of establishing a sample and gathering enough data for research (Sharma, 2017). This sampling technique is often used in hidden populations which are difficult for the researcher to access. The reason for using snowball sampling is that the units to include in the sample are difficult to identify. There is no obvious list of the population that this research is targeting. Thus, snowball sampling is the feasible choice of sampling technique. For

applying it, the self-administered questionnaires will be distributed through the researcher's broker and filled out by his other clients as well as his colleagues who are also brokers of the stock market. The broker's clients then distributed questionnaires to people they knew who were investing in stocks.

### **3.2.4 Sample Size**

The sample size is an important highlight of any study that aims to infer a population from a sample (Taherdoost, 2016). The sample for this study is Malaysians born between 1996 and 1981 and also currently investing in KLSE. The sample size of respondents was estimated by Raosoft, a sample size calculator website with a margin of error (5%), confidence level (95%), population size (20,000), and response distribution (50%) are given. By using it, the sample size of this research is estimated as a minimum of 377 respondents to be measured in this research. Hence, a self-administered questionnaire is conducted and distributed to 377 respondents who are millennial investors and currently investing with CDS accounts in KLSE as a sample size to measure this research.

## **3.3 Data Collection Method**

### **3.3.1 Primary Data**

In this research, the data collection method used is primary data collection. Kumar (2014) stated several methods can be used to collect primary data. It involves observations, interviews, and questionnaires. Thus, a self-administered questionnaire is adopted in this research to obtain the primary data online. The survey results of 378 respondents were required for data collection in this study. The questions being asked in the survey reflected



the respondents' perceptions of the constructs in the stock investment decision context.

## **3.4 Research Instrument**

### **3.4.1 Questionnaire Design**

The self-administered questionnaire involves three sections: Section A, section B, and section C. Section A is the demographics profile of millennial investors, section B is the general information, and section C is the dependent variable and independent variables.

Section A of the questionnaire collected the demographic data of the respondents. As an example, gender, nationality, age, level of education, employment status, as well as income per month. Following that, four questions were created for section B in order to guarantee that all respondents were CDS account holders and investors in the stock market. This is followed by a breakdown of monthly stock investment expenditures in the form of percentages. All questions in section C deploy a Likert scale with 5 points (Strongly Disagree – 1, Disagree – 2, Neutral – 3, Agree – 4, and Strongly Agree – 5). The dependent variable (decisions regarding stock investment) comprises 6 statements. On the other hand, independent variables like herding had 9 statements, overconfidence had 8 statements, accounting information had 7 statements, and firm image had a total of five statements for respondents to express their degree of agreement with each of the statements.

### **3.4.2 Conceptual Definition**

The conceptual definition of herding and overconfidence are modified and the article by Adielyani and Mawardi (2020) is adopted to create the

definitions of both constructs. The conceptual definition of accounting information is modified and the article by Perera and Thrikawala (2021) is adopted. Meanwhile, the firm image is also being modified and it is adopted from Mutswenje (2009) for developing a conceptual definition of the construct. The conceptual definitions for the constructs are displayed in Table 3.1.

Table 3.1: Conceptual Definition

<b>Construct</b>	<b>Conceptual Definition</b>
Herding	The behavioural tendency of investor to follow others in decision-making actions.
Overconfidence	The degree of overconfidence that investors overestimate their excessive predictions, knowledge, skills, and abilities.
Accounting Information	The degree to which investors are concerned about the process of measuring and analysing the annual report of a company.
Firm Image	The degree to which investors are concerned about the status of a company.

Source: Developed for the research

### 3.4.3 Operational Definition

The construct for stock investment decisions is adopted from Cao et al. (2021), Nareswari et al. (2021), as well as Yang et al, (2021), with a total of 6 items. Meanwhile, the herding is derived from Cao et al. (2021), and Nareswari et al. (2021). The overconfidence involves 8 items adopted from Cao et al. (2021), Metawa et al. (2019), and Yang et al, (2021). Besides, accounting information is adopted from Mutswenje (2009), Yang et al. (2021), and Zaidi and Tahir (2019) with a total of 7 items. Lastly, 5 construct items of the firm image are taken from the research done by Mutswenje

(2009) as well as Zaidi and Tahir (2019) with a total of 5 items. Table 3.2 contains the finalized statements for this research.

Table 3.2: Operational Definition

Variables	Item	Statement (Modified)	Number of Items	Source(s)
Stock Investment Decisions	SID 1	I will invest in stocks if I did not lose a lot of money along the way.	6	(Cao et al., 2021), (Nareswar i et al., 2021), & (Yang et al., 2021)
	SID 2	I will invest in stock market to get the profit as soon as possible.		
	SID 3	I will invest if listed companies report positive returns annually.		
	SID 4	I will consider stock index when making investment decisions in stock market.		
	SID 5	My investment decisions will be affected by trading volume.		
	SID 6	I consider the opinions of brokers or financial consultant when making investment decisions in stock market.		
Herding	HE1	I will change my decision very quickly because other investors have changed their decisions on stock investment.	9	(Cao et al., 2021), & (Nareswar i et al., 2021)
	HE2	The opinions of my broker and financial adviser influence my decision on how many shares to buy.		
	HE3	I do not have the confidence to make decisions that are different than what most investors would make.		

	HE4	Other investors' opinion will affect my decisions on selecting to buy a particular of stock.		
	HE5	Other investors' opinion will affect my decisions on deciding the volume to buy a particular of stack.		
	HE6	Other investors' opinion will affect my decisions on buying and selling a particular of stock.		
	HE7	I will follow my friends to invest in the same stock because I think their information is very reliable.		
	HE8	I will follow my family to invest in the same stock because I think their information is very reliable.		
	HE9	I will follow my colleagues to invest in the same stock because I think their information is very reliable.		
Overconfidenc e	OV1	I believe my skills and knowledge will help me make more money in the stock market.	8	(Cao et al., 2021), (Metawa et al., 2019), & (Yang et al., 2021)
	OV2	I have the confidence to value the shares in my portfolio.		
	OV3	I believe that I am better at predicting future prices of shares		
	OV4	I have the skills and expertise needed to invest in stock market.		
	OV5	I am confident in my analytical abilities and		

		market forecasting experience.		
	OV6	I am confident about my data source for investing in stock market.		
	OV7	I am confident about my ability to analyze new information in stock market.		
	OV8	I am confident that I can do stock trading by myself in stock market.		
Accounting Information	AI1	I have knowledge about accounting information and fully understand the meaning of ratio in the financial statement.	7	(Khawaja & Alharbi, 2021), (Yang et al., 2021), & (Zaidi and Tahir, 2019)
	AI2	I will prefer to buy a stock with affordable share price when making stock investment decision.		
	AI3	I will prefer to purchase stock with marketability when making stock investment decision.		
	AI4	I will check the financial statement of listed company before making stock investment decision		
	AI5	I will check the price of share before making stock investment decision.		
	AI6	I will check dividend paid when investing in stock market before making stock investment decision		
	AI7	I will check condition of financial statement of listed companies in stock market when making stock investment decision.		

Firm Image	FI1	I will take consideration of firm's reputation when making stock investment decision.	5	(Mutswenje, 2009) & (Zaidi and Tahir, 2019)
	FI2	I will search for information about whether the company is involved in solving community problems before making stock investment decision.		
	FI3	I will take consideration of the feeling for a listed company's products and services before making stock investment decision.		
	FI4	I will take consideration of perceived ethics of firm when making stock investment decision.		
	FI5	I will take consideration of the political party affiliation when making stock investment decision.		

Source: Developed for the research

### 3.5 Construct Measurement

In order to more effectively comprehend the scales of measurements utilized for every item in the questionnaire adhering to modification, Table 3.3 is presented.

Table 3.3: Measurement Scale

Section	Item	Measurement Scale
Section A – Demographic Profile	Gender	Nominal
	Nationality	Nominal
	Age	Ordinal

	Level of Education	Ordinal
	Employment Status	Nominal
	Individual Monthly Income	Ordinal
Section B – General Information	Direct CDS Account holder	Nominal
	Nominee CDS Account Holder	Nominal
	Invest Status	Nominal
	Monthly Stock Investment Expenses	Ordinal
Section C – Dependent Variable and Independent Variables	Stock Investment Decision	Interval
	Herding	Interval
	Overconfidence	Interval
	Accounting Information	Interval
	Firm Image	Interval

Source: Developed for the research

### 3.5.1 Nominal Scale

In this research, both sections A and B of the questionnaire used scales with nominal values. By way of example, gender, nationality, and employment status in section A, and three questions for screening direct the CDS and nominee CDS account holders as well as current investment status by responding to "yes" or "no" in section B. Figure 3.1 illustrates a scale with a nominal value example.

Figure 3.1: Example of Nominal Scale

<p>1. Gender</p> <p><input type="radio"/> Male</p> <p><input type="radio"/> Female</p>
--

Source: Developed for the research

### 3.5.2 Ordinal Scale

In this study, an ordinal scale was used to administer a questionnaire survey. Section A includes demographic information such as age, level of education, and monthly income, while Section B includes monthly stock investment expenditures. Figure 3.2 depicts an ordinal scale example.

Figure 3.2: Example of Ordinal Scale

6. Individual Monthly Income

- Below RM1500
- RM1501 – RM3000
- RM3001 – RM5000
- RM5001 – RM7000
- Above RM 7001

Source: Developed for the research

### 3.5.3 Interval Scale

This study used an interval scale in the questionnaire. For example, the 5-point Likert scale in Section C. Figure 3.3 shows the example of an interval scale.



Figure 3.3: Example of Interval Scale

Stock Investment Decisions						
No.	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I will invest in stocks if I did not lose a lot of money along the way.	1	2	3	4	5
2.	I will invest in stock market to get the profit as soon as possible.	1	2	3	4	5
3.	I will invest if listed companies report positive returns annually.	1	2	3	4	5
4.	I will consider stock index when making investment decisions in stock market.	1	2	3	4	5
5.	My investment decision will be affected by trading volume.	1	2	3	4	5
6.	I consider the opinions of brokers or financial consultant when making investment decisions in stock market.	1	2	3	4	5

Source: Developed for the research

## 3.6 Data Processing

### 3.6.1 Questionnaire Checking

All questionnaires submitted by research participants were checked immediately to ensure the completeness of responses and identify missing values during the data collection. Google Forms helps to ensure all the questions were marked as required to be answered, and respondents will not miss out on any questions before submitting the questionnaire. In this research, the data-checking process was feasible, especially in assessing the completeness of the questionnaire answered by targeted respondents.

### 3.6.2 Data Editing

The self-administration survey was developed and sent out via a Google Form. Due to the distinctive features of forms created by Google,

respondents were obligated to answer each question before proceeding to the next part of the questionnaire. In this research, no questionnaires went missing and no data editing was carried out.

### 3.6.3 Data Coding

After the data collection was completed, the raw data from Google Forms were converted to excel sheets for data coding. By showing the indicators for each category, Table 3.4 shows the details for each coding.

Table 3.4: Items Coding

<b>Question</b>	<b>Options</b>	<b>Coding</b>
Gender	Male	1
	Female	2
Nationality	Malaysian	1
	Non-Malaysian	2
Age	Below 27 years old	1
	27– 30 years old	2
	31– 34 years old	3
	35– 38 years old	4
	39– 42 years old	5
	Above 42 years old	6
Levels of Education	No formal education	1
	High school graduated	2
	Some college, no degree	3
	Bachelor’s degree	4
	Postgraduate degree	5
	Doctoral degree/ PhD	6
Employment Status	Student	1
	Employed	2
	Self-employed	3

	Part-timer	4
	Unemployed	5
Individual Monthly Income	Below RM1500	1
	RM1501 – RM3000	2
	RM3001 – RM5000	3
	RM5001 – RM7000	4
	Above RM7001	5
Direct CDS Account Holder	Yes	1
	No	2
Nominee CDS Account Holder	Yes	1
	No	2
Invest Status	Yes	1
	No	2
Monthly Stock Investment Expenses	Below 10% per month	1
	10% – 20%	2
	21% – 40%	3
	41% – 60%	4
	More than 60% per month	5
All Questions in Section C	Strongly Disagree	1
	Disagree	2
	Neutral	3
	Agree	4
	Strongly Agree	5

Source: Developed for this research

### 3.6.4 Data Transcribing

In this research, the data were transferred to IBM SPSS Version 29 for transcribing the coded data. This system will run the data automatically and helps to prevent the error of transcription, as well as accuracy is promised.

### **3.6.5 Data Cleaning**

Last but not least, the data cleaning helps to ensure no data is missing before the researcher analyses the data in the following chapter. During this stage, SPSS software can help the researchers efficiently identify errors and prevent data inconsistencies and out-of-range of data. This process is important because the data set with errors will cause an unreliable conclusion in the research.

## **3.7 Proposed Data Analysis Tool**

### **3.7.1 IBM Statistical Package for the Social Science (SPSS) Version 29**

In this study, the IBM Statistical Package for Social Sciences (SPSS) Version 29 was used for data analysis. Data were collected and then analysed by the software.

### **3.7.2 Descriptive Analysis**

In order to describe and summarise the demographic profile and general information of the respondents, statistical methods called descriptive statistics were utilized. It involves age, gender, level of education, employment status, income, as well as general investment expense information. Utilising charts and tables, the spreadsheet program Excel makes use of displaying demographics and general information. Furthermore, IBM SPSS Version 29 was employed for determining the mean as well as the standard deviation.

### 3.7.3 Scale Measurement

#### 3.7.3.1 Reliability test

Carmines and Zeller (1979) indicate reliability as the extent to which the measurement of a phenomenon may yield results that are consistent and stable. Cronbach's alpha is the norm for reliability measurements. The interpretation of Cronbach's alpha coefficient by George and Mallery (2002) is displayed in Table 3.5.

Table 3.5: Interpretation of Cronbach's Alpha Coefficient

<b>Cronbach's Alpha</b>	<b>Reliability</b>
$\alpha \geq 0.9$	Excellent
$0.80 \leq \alpha < 0.90$	Very Good
$0.70 \leq \alpha < 0.80$	Good
$0.60 \leq \alpha < 0.70$	Moderate
$0.50 \leq \alpha < 0.60$	Poor
$\alpha < 0.50$	Unacceptable

Source: George and Mallery (2002)

#### 3.7.3.2 Pre-testing

Bowden, Fox-Rushby, Nyandieka, and Wanjau (2002) mentioned that pre-testing is a major opportunity for researchers to measure the meaning properties of survey questions. Therefore, pre-testing was conducted. A total of 6 responses were gathered through the "Google form", and their evaluation was obtained by creating a "Google form" for feedback collection.

### 3.7.3.3 Pilot Test

The objective of the pilot examination was to assess the internal consistency following the pre-test phase. Browne (1995) recommended that piloting requires a minimum of 30 participants. Thus, a total of 43 responses were collected however only 37 were able to be utilized to carry out the test of reliability for this research.

Cronbach's alpha for all of the variables (SID, HE, OV, AI, and FI) in this study exceeds the minimal suggested value of 0.6. It demonstrates that all scales fall within the ideal and reliable range. Table 3.6 depicts Cronbach's alpha for each construct examined in this research.

Table 3.6: Cronbach's Alpha of Each Construct

Variables	Cronbach's Alpha
Stock Investment Decision (SID)	0.615
Herding (HE)	0.885
Overconfidence (OV)	0.917
Accounting Information (AI)	0.836
Firm Image (FI)	0.810

Source: Developed for the research.

### 3.7.4 Inferential Analysis

#### 3.7.4.1 Pearson Correlation Coefficient Analysis

According to Schober, Boer, and Schwarts (2018), the coefficient value serves as a measure of the correlation among the variables. The correlation coefficient strengths range from -1 to 1, demonstrating a negative or positive association between the two

variables. The interpretation of the coefficients of Pearson's correlation is presented in Table 3.7.

Table 3.7: Interpretation for Pearson Correlation Coefficient

<b>Coefficient Range</b>	<b>Strength</b>
0.00 – 0.09	Negligible correlation
0.10 – 0.39	Weak correlation
0.40 – 0.69	Moderate correlation
0.70 – 0.89	Strong correlation
0.90 – 1.00	Very strong correlation

Source: Schober et al. (2018)

#### **3.7.4.2 Multiple Linear Regression Analysis**

Aiken, West, and Pitts (2003) mentioned that multiple regression analysis aims for investigating the relationship between a dependent variable and independent variables. It is applied to estimating the relationship between the variables (Uyanık & Güler, 2013). This paper uses it to study the changes in stock investment decisions with the influence of herding, overconfidence, accounting information, and firm image.

#### **3.7.4.3 Multicollinearity**

Multicollinearity is one of the assumptions of the regression analysis. When 2 or more independent variables in a regression model are associated, even small multicollinearity can cause great problems (Daoud, 2017). It increases the variance of the regression coefficients making the variables unstable, which brings problems to interpret the coefficients (Keith, 2014). Variance inflation factor (VIF) is a commonly used index to determine multicollinearity. It is

a tool to measure and quantify the extent to which variance is inflated. When the tolerance value is  $\leq 0.10$  or the VIF value is  $\leq 10$ , it indicates that there is no severe multicollinearity in the model (Marcoulides & Raykov, 2019). This research examines the multicollinearity problem through the multicollinearity test.

### **3.8 Conclusion**

In summary, this research is a quantitative descriptive research. The sampling design, techniques of data collection of data, the instrument for research, construct measurements, processing of data, and proposed data analysis tools, descriptive and inferential analysis, as well as the scale measurements were explained in this chapter.



## **CHAPTER 4: DATA ANALYSIS**

### **4.0 Introduction**

Chapter 4 mainly depicts and explains the findings of various analyses, for instance, descriptive analysis, measurement of scale, as well as inferential analysis.

### **4.1 Data Processing**

#### **4.1.1 Data Cleaning**

A total amount of 653 responses were collected during the data collection process. Among the 653 responses, 59 unqualified responses were deleted due to non-Malaysian and not investing in the stock market currently. Hence, a total of 594 respondents will be analysed in the following section.

#### **4.1.2 Treatments of Missing Value**

The self-administered survey – Google Form has been designed for allowing the participants to follow the order of questions and proceed to the next section based on the answer. Hence, there is no missing value because participants must answer every question before they submit the form.

## 4.2 Descriptive Analysis

### 4.2.1 Demographic Profile

#### 4.2.1.1 Gender

Table 4.1 demonstrates the frequency and percentages of the gender of respondents. This suggests that 320 of the 594 respondents were men and 274 were women. In percentage terms, it was 53.9% for men and 46.1% for women. Therefore, it implies the majority of stock investors are men.

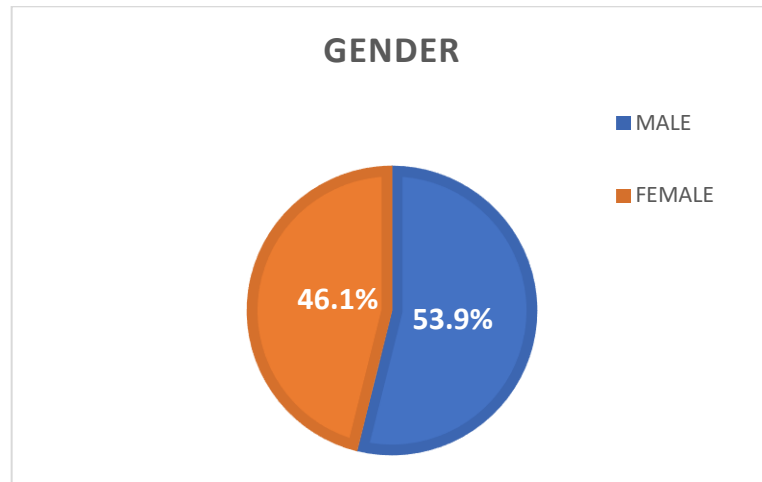
Table 4.1: Gender

Gender	Frequency	Percentage (%)
Male	320	53.9
Female	274	46.1
<b>Total</b>	<b>594</b>	<b>100.00</b>

Source: Developed for the research

Figure 4.1 represents a graphical illustration of the overall distribution of respondents by gender. Male and female proportions are depicted in blue and orange, accordingly. The statistic indicates that 53.9% of the participants were male and 46.1% were female. It also indicates that there are greater numbers of male investors on the KLSE than female investors.

Figure 4.1: Gender



Source: Developed for the research

#### 4.2.1.2 Age

Table 4.2 displays the frequency and percentage distribution of participant ages. As shown in the table, the majority of respondents were between the ages of 35 and 38. The number of individuals aged 35 to 38 (198) was the highest, followed by 178 individuals aged 31 to 34, 116 individuals aged 39 to 42, and 102 individuals aged 27 to 30.

Similarly, as shown in the table, respondents aged 35 to 38 comprised 33.3% of the total, followed by those aged 31 to 34 (30.0%), 39 to 42 (19.5%), and 27 to 30 (17.2%). The findings indicate that the majority of stock investors are in their early to mid-thirties.

Table 4.2: Age

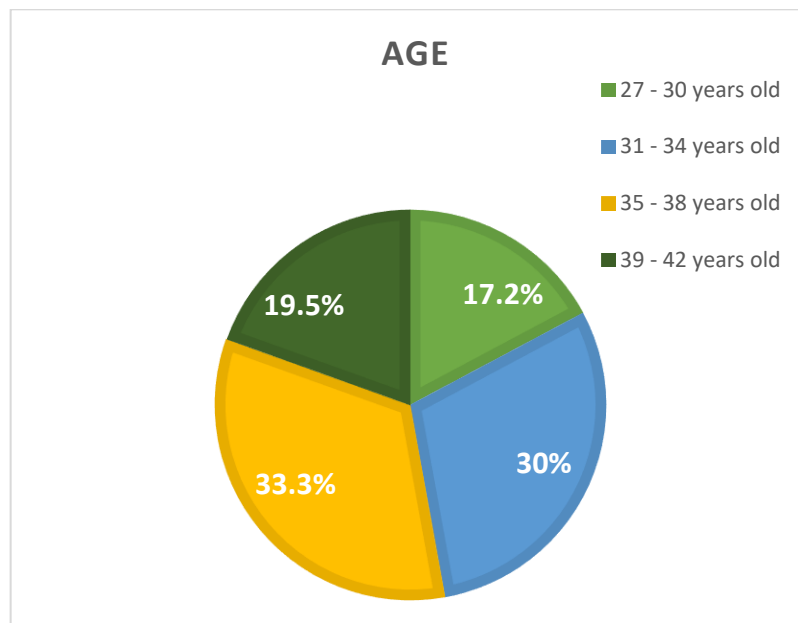
Age	Frequency	Percentage (%)
27 – 30 years old	102	17.2
31 – 34 years old	178	30.0
35 – 38 years old	198	33.3

39 – 42 years old	116	19.5
<b>Total</b>	<b>594</b>	<b>100</b>

Source: Developed for the research

Figure 4.2 is a graphical representation of the age distribution of the respondents. The proportions of those aged 27 to 30, 31 to 34, 35 to 38, and 39 to 42 are depicted in respective shades of light green, blue, yellow, and dark green. As shown in the graph, respondents aged 35 to 38 accounted for 33.3%, respondents aged 31 to 34 for 30%, respondents aged 39 to 42 for 19.5%, and respondents aged 27 to 30 for 17.2%. The findings indicate that the majority of stock investors are in their early to mid-thirties. This indicates a large number of KLSE investors over the age of 35.

Figure 4.2: Age



Source: Developed for the research

#### 4.2.1.3 Education Level

The frequency and percentage of education levels are displayed in Table 4.3. The table indicates that the majority of respondents hold

a bachelor's degree or higher. The bachelor's degree has the highest frequency (259 respondents), which is followed by the postgraduate degree (134 respondents), some college, no degree (102 respondents), high school graduates (45 respondents), Doctoral degree/PhD (38 respondents), and no formal education (16 respondents).

In addition, the table reveals that bachelor's degree holders made up 43.6% of the total number of respondents, which was followed by those with postgraduate degrees (22.6%), some college, no degree (17.2%), high school graduates (7.6%), Doctoral degree/PhD (6.4%), and those with no formal education (2.7%). The results demonstrated that the majority of stock investors are knowledgeable.

Table 4.3: Education Level

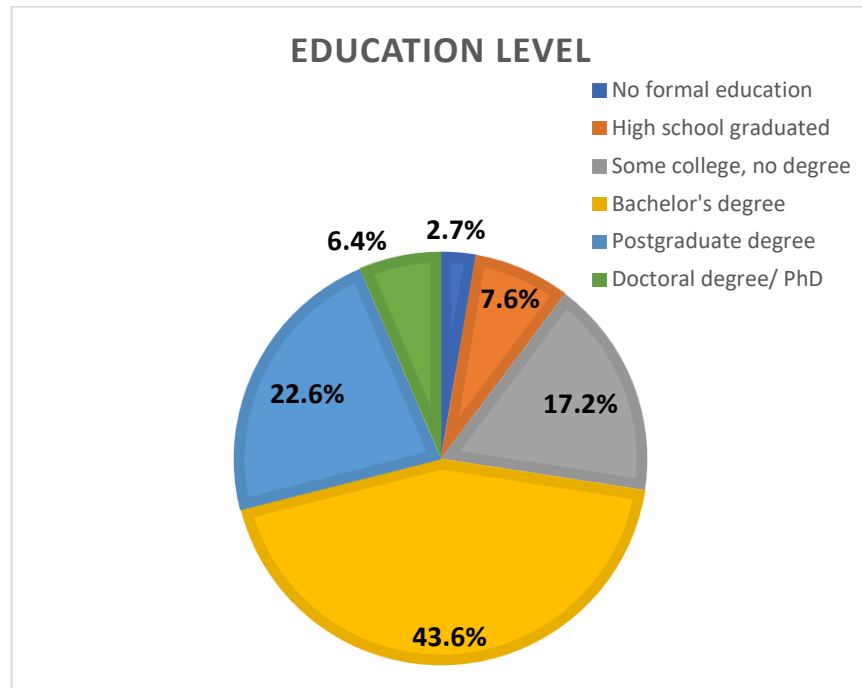
Education Level	Frequency	Percentage (%)
No formal education	16	2.7
High school graduated	45	7.6
Some college, no degree	102	17.2
Bachelor's degree	259	43.6
Postgraduate degree	134	22.6
Doctoral degree/ PhD	38	6.4
<b>Total</b>	<b>594</b>	<b>100</b>

Source: Developed for the research

Figure 4.3 is a graphic illustration of the percentage distribution of respondents' levels of education. Dark blue, orange, grey, yellow, light blue and green represent the proportions of individuals with no formal education, high school diploma, junior college, no degree, undergraduate, as well as graduate degrees, correspondingly. 43.6% of the participants held a bachelor's degree, 22.6% held a postgraduate degree, 17.2% were from some colleges with no degree, 7.6% were high school graduates, 6.4% held a doctorate, and 2.7%

had no formal education. The majority of respondents who accomplished the online survey held a bachelor's degree, according to the findings. This demonstrates that the majority of investors are educated and intelligent. It also demonstrates that they possess the fundamental investment knowledge necessary for investing.

Figure 4.3: Education Level



Source: Developed for the research

#### 4.2.1.4 Employment Status

Table 4.4 illustrates the frequency as well as the percentage of the respondents' employment status in this research. The data in the table shows that the majority of respondents have employment. The highest frequency noticed was employed respondents (358), followed by self-employed respondents (178), part-time workers (49), unemployed respondents (6), and students (3).

Furthermore, the table demonstrates that 60.3% of respondents were employed, followed by 30.0% who were self-employed, 8.2% who

worked part-time, 1% who were unemployed, and 0.5% who were students. The result shows that the majority of the participants have stable financial resources for sustaining their investment in stock expenditures and have employment.

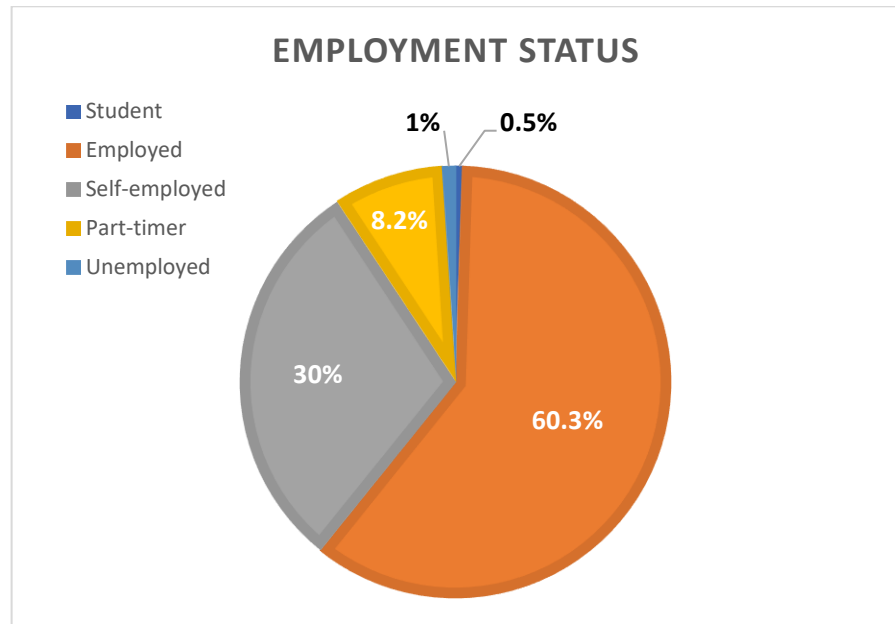
Table 4.4: Employment Status

Employment Status	Frequency	Percentage (%)
Student	3	0.5
Employed	358	60.3
Self-employed	178	30.0
Part-timer	49	8.2
Unemployed	6	1.0
<b>Total</b>	<b>594</b>	<b>100</b>

Source: Developed for the research

Figure 4.4 presents the state of employment distribution. The percentages of students, employed, self-employed, part-time workers, as well as the unemployed, are represented by the colours dark blue, orange, grey, yellow, and light blue, in that order. 60.3% of the participants have employment, 30% have their businesses, 8.2% are part-time workers, 1% are without employment, and 0.5% are students, as shown in the graph. In accordance with the results, the majority of them have careers. This also suggests that the majority of KLSE shareholders have possession of stable monetary assets.

Figure 4.4: Employment Status



Source: Developed for the research

#### 4.2.1.5 Income

Table 4.5 highlights the frequency and percentage of respondents' income. The data in the table demonstrates that the majority of respondents have a monthly income of between RM3001 and RM5000. RM3001 to RM5000 has the highest response frequency (262 respondents), subsequently followed by RM5001 to RM7000 (159 respondents), RM1501 to RM3000 (69 respondents), and those under RM1500 (13 respondents).

In addition, the table discloses that respondents with monthly incomes between RM3001 and RM5000 comprised 44.1% of all respondents, followed by those with monthly incomes between RM5001 and RM7000 (26.8%), above RM7001 (15.3%), RM1501 to RM3000 (11.6%), and under RM1500 (2.2%). In accordance with the study's findings, most of the respondents obtained between RM3,000 and RM5,001.



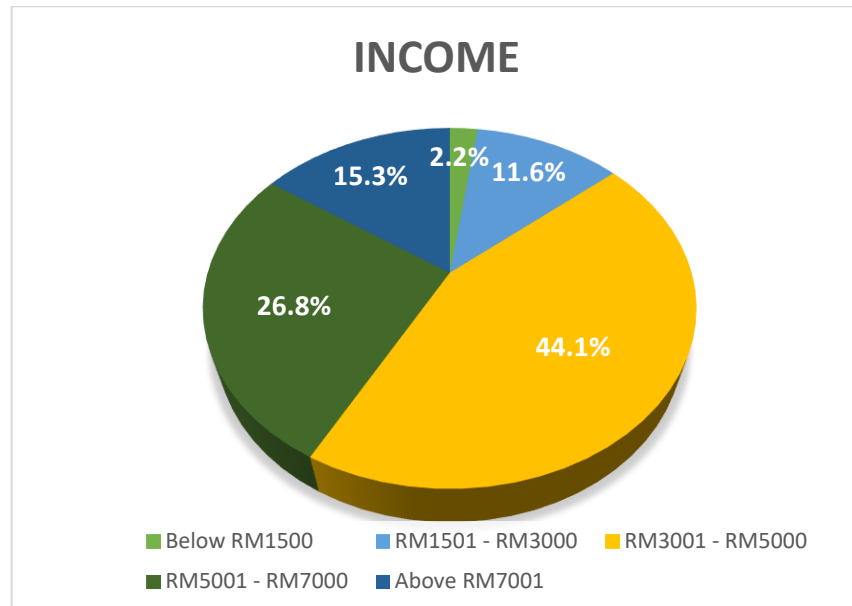
Table 4.5: Income

<b>Income</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Below RM1500	13	2.2
RM 1501 – RM 3000	69	11.6
RM 3001 – RM 5000	262	44.1
RM 5001 – RM 7000	159	26.8
Above RM 7001	91	15.3
<b>Total</b>	<b>594</b>	<b>100</b>

Source: Developed for the research

Figure 4.5 represents a visual representation of the income levels of the participants in this research. Below RM1500, between RM1501 and RM3000, between RM3001 and RM5000, between RM5001 and RM7000, and above RM7001 are denoted by the colours light green, light blue, yellow, dark green, and dark blue, correspondingly. 44.1% of respondents earned between RM3001 and RM5000 per month, 26.8% earned between RM5001 and RM7000 per every month, 15.3% earned more than RM7001 per every month, 11.6% earned between RM1501 and RM3000 each month, and 2.2% earned less than RM 1500 per a month. The vast majority of respondents earned between RM3001 and RM5000 per month, in accordance with the study's findings. This also indicates that the majority of investors in the stock market have equitable access to basic financial assets and surplus capital.

Figure 4.5: Income



Source: Developed for the research

#### 4.2.1.6 Investment Expenses

The frequency and percentage of respondents' monthly investment expenses are displayed in Table 4.6. The table reveals that the majority of respondents pay monthly investment expenses between 21% and 40%. The highest observed frequency ranges from 21% and 40% (236 respondents), then followed by 10% to 20% (180 respondents), 41% to 60% (96 respondents), less than 10% per month (64 respondents), and greater than 61% per month (18 respondents).

In addition, the table reveals that 39.7% of respondents spend between 21% and 40% of their monthly income, followed by 30.3% who spend between 10% and 20%, 16.2% who spend between 41% and 60%, 10.8% who spend less than 10% per month, and 3.0% who spend more than 61% per month. The results indicate that the majority of respondents are stock market enthusiasts, as they invest at least 21% of their monthly income in the stock market.

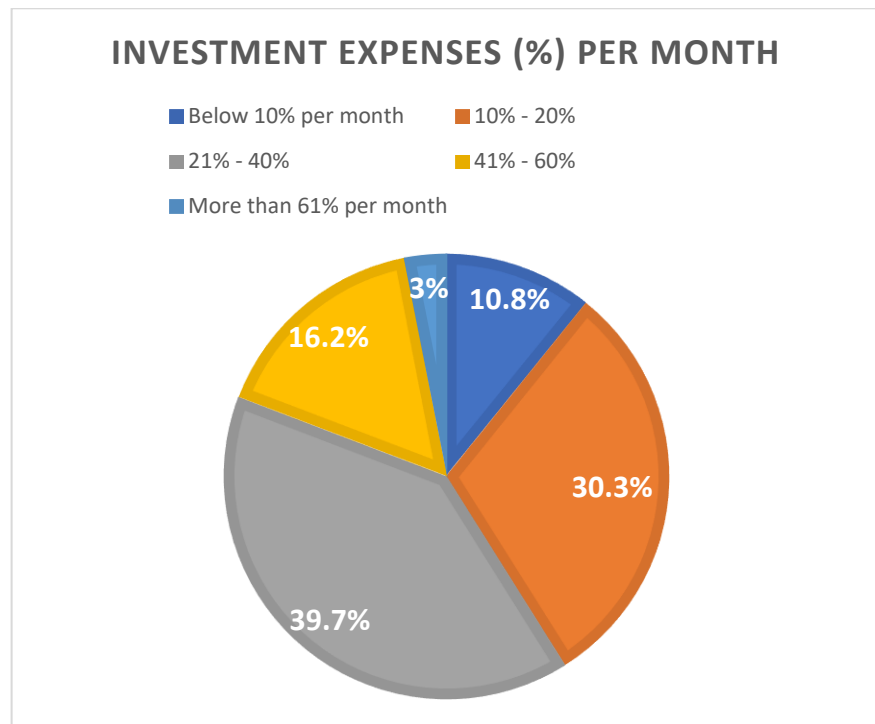
Table 4.6: Investment Expenses

<b>Income</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Below 10% per month	64	10.8
10% - 20%	180	30.3
21% - 40%	236	39.7
41% - 60%	96	16.2
More than 61% per month	18	3.0
<b>Total</b>	<b>594</b>	<b>100</b>

Source: Developed for the research

Figure 4.6 depicts the investment expenses of the income distribution of the respondents. Below 10% per month, 10% to 20%, 21% to 40%, 41% to 60%, and more than 61% per month are displayed in dark blue, orange, grey, yellow, and light blue, accordingly. 39.7% of respondents make investments between 21% to 40% of their total monthly earnings, 30.3% invest 10% to 20% of their monthly income, 16.2% invest 41% to 60% of their monthly income, 10.8% invest less than 10% of their monthly income, and 3.0% invest more than 60% of their monthly income. The results indicate that the majority of respondents are stock market enthusiasts, as they invest at least 21% of their monthly income in the market.

Figure 4.6: Investment Expenses



Source: Developed for the research

### 4.3 Descriptive Statistics for Variables

The mean as well as the standard deviation of both dependent and independent variables have been shown in Table 4.7. Each of the variables has mean values between 3 and 4, with the stock investment decision averaging 3.5230, subsequently followed by firm image (3.5138), accounting information (3.4452), overconfidence (3.3733), as well as herding (3.2264). It suggests that the vast majority of the respondents perceive each variable to be somewhere between "neutral" and "agree". Additionally, herding has the greatest standard deviation, meaning that the data points are spread over an expanded spectrum of values. Each variable's mean and standard deviation are presented in the table below.

Table 4.7: Mean and Standard Deviation of Variables

Variable	Mean	Standard Deviation
Stock Investment Decision (SID)	3.5230	0.6999

Herding (HE)	3.2641	0.8315
Overconfidence (OV)	3.3733	0.7716
Accounting Information (AI)	3.4452	0.7378
Firm Image (FI)	3.5138	0.7182

Source: Developed for the research

### 4.3.1 Mean and Standard Deviation of Stock Investment Decisions

Table 4.8 shows that SID3 has the greatest mean of 3.68. On the other hand, SID6 has resulted in the highest standard deviation with a value of 1.273. Table 4.8 demonstrates the mean and standard deviation for each of the scale items for stock investment decisions.

Table 4.8: Mean and Standard Deviation of Stock Investment Decision

Items	Statement	Mean	Standard Deviation
SID1	I will invest in stocks if I did not lose a lot of money along the way.	3.62	1.216
SID2	I will invest in stock market to get the profit as soon as possible.	3.49	1.149
SID3	I will invest if listed companies report positive returns annually.	3.68	1.122
SID4	I will consider stock index when making investment decisions in stock market.	3.55	1.192
SID5	My investment decisions will be affected by trading volume.	3.40	1.195
SID6	I consider the opinions of brokers or financial consultant when making investment decisions in stock market.	3.39	1.273

Source: Developed for the research

### 4.3.2 Mean and Standard Deviation of Herding

By referring to Table 4.9, HE7 has the highest mean of 3.80 and the highest standard deviation of 1.340. Table 4.9 lists the mean and standard deviation of the herding of each scale item.

Table 4.9: Mean and Standard Deviation of Herding

Items	Statement	Mean	Standard Deviation
HE1	I will change my decision very quickly because other investors have changed their decisions on stock investment.	3.67	1.256
HE2	The opinions of my broker and financial adviser influence my decision on how many shares to buy.	3.17	1.133
HE3	I do not have the confidence to make decisions that are different than what most investors would make.	3.44	1.213
HE4	Other investors' opinion will affect my decisions on selecting to buy a particular of stock.	3.27	1.319
HE5	Other investors' opinion will affect my decisions on deciding the volume to buy a particular of stack.	3.19	1.139
HE6	Other investors' opinion will affect my decisions on buying and selling a particular of stock.	3.22	1.226
HE7	I will follow my friends to invest in the same stock because I think their information is very reliable.	3.80	1.340

HE8	I will follow my family to invest in the same stock because I think their information is very reliable.	3.05	1.165
HE9	I will follow my colleagues to invest in the same stock because I think their information is very reliable.	3.20	1.266

Source: Developed for the research

### 4.3.3 Mean and Standard Deviation of Overconfidence

According to Table 4.10, OV1 has the greatest mean value, with a mean of 3.56. OV5, with a standard deviation value of 1.345, has the greatest standard deviation of all of the items. Table 4.10 illustrates the mean as well as the standard deviation for each scale item's level of overconfidence.

Table 4.10: Mean and Standard Deviation of Overconfidence

<b>Items</b>	<b>Statement</b>	<b>Mean</b>	<b>Standard Deviation</b>
OV1	I believe my skills and knowledge will help me make more money in the stock market.	3.56	1.269
OV2	I have the confidence to value the shares in my portfolio.	3.30	1.051
OV3	I believe that I am better at predicting future prices of shares	3.49	1.134
OV4	I have the skills and expertise needed to invest in stock market.	3.26	1.231
OV5	I am confident in my analytical abilities and market forecasting experience.	3.16	1.345
OV6	I am confident about my data source for investing in stock market.	3.36	1.124

OV7	I am confident about my ability to analyze new information in stock market.	3.38	1.134
OV8	I am confident that I can do stock trading by myself in stock market.	3.46	1.244

Source: Developed for the research

#### 4.3.4 Mean and Standard Deviation of Accounting Information

Table 4.11 indicates that AI1 has the highest mean value, with a value of 3.71. Moreover, AI4 has the highest standard deviation among these items, with a value of 1.269. Table 4.11 shows the mean as well as the standard deviation of the accounting information for every questionnaire scale item.

Table 4.11: Mean and Standard Deviation of Accounting Information

Items	Statement	Mean	Standard Deviation
AI1	I have knowledge about accounting information and fully understand the meaning of ratio in the financial statement.	3.71	1.154
AI2	I will prefer to buy a stock with affordable share price when making stock investment decision.	3.31	1.222
AI3	I will prefer to purchase stock with marketability when making stock investment decision.	3.69	1.107
AI4	I will check the financial statement of listed company before making stock investment decision	3.29	1.269



AI5	I will check the price of share before making stock investment decision.	3.20	1.126
AI6	I will check dividend paid when investing in stock market before making stock investment decision	3.40	1.088
AI7	I will check condition of financial statement of listed companies in stock market when making stock investment decision.	3.52	1.098

Source: Developed for the research

#### 4.3.5 Mean and Standard Deviation of Firm Image

Table 4.12 implies that FI1 has the highest mean value of 3.63. Conversely, the standard deviation of FI3 is the greatest at 1.240. Table 4.12 displays the mean as well as the standard deviation of the firm image for each questionnaire scale item.

Table 4.12: Mean and Standard Deviation of Firm Image

Items	Statement	Mean	Standard Deviation
FI1	I will take consideration of firm's reputation when making stock investment decision.	3.63	1.230
FI2	I will search for information about whether the company is involved in solving community problems before making stock investment decision.	3.48	1.090
FI3	I will take consideration of the feeling for a listed company's products and	3.38	1.240

	services before making stock investment decision.		
FI4	I will take consideration of perceived ethics of firm when making stock investment decision.	3.50	1.096
FI5	I will take consideration of the political party affiliation when making stock investment decision.	3.58	1.099

Source: Developed for the research

#### 4.4 Reliability Analysis

Cronbach's alpha ranged between 0.80 and 0.89 for both herding and overconfidence, which implies a great deal of reliability. The accounting information has a Cronbach's alpha value between 0.70 and 0.79, which suggests high reliability. The range of 0.60 to 0.69 for Cronbach's alpha of stock investment decisions as well as firm image suggested moderate reliability. Thereby, all variables are within the acceptable range of reliability. Table 4.13 depicts the findings of this research's dependent and independent variable reliability tests.

Table 4.13: Result of Reliability Test

Variable	Items	Cronbach's Alpha	Internal Consistency
Stock Investment Decision	6	0.620	Moderate Reliability
Herding	9	0.851	Very Good Reliability
Overconfidence	8	0.800	Very Good Reliability
Accounting Information	7	0.759	Good Reliability
Firm Image	5	0.606	Moderate Reliability

Source: Developed for the research

## 4.5 Inferential Analysis

### 4.5.1 Pearson Correlation Coefficient Analysis

The Pearson correlation coefficient among all independent variables was positive. It demonstrates that each of the independent variables is associated positively with the dependent variable.

There is a moderately positive correlation between herding, accounting information, firm image, and stock investment decisions in the range of 0.40 to 0.69. There is also a weak positive correlation between overconfidence and stock investment decisions. Evidently, each of the correlations is statistically noteworthy at the 0.01 level. The results of Pearson's correlation coefficient analysis are displayed in Table 4.14.

Table 4.14: Result of Pearson Correlation Coefficient Analysis

		<b>Stock Investment Decision (SID)</b>
<b>Herding (HE)</b>	Pearson Correlation	.615**
	Sig. (2-tailed)	<.001
	N	594
<b>Overconfidence (OV)</b>	Pearson Correlation	.368**
	Sig. (2-tailed)	<.001
	N	594
<b>Accounting Information (AI)</b>	Pearson Correlation	.502**
	Sig. (2-tailed)	<.001
	N	594
<b>Firm Image (FI)</b>	Pearson Correlation	.480**
	Sig. (2-tailed)	<.001
	N	594

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for the research

#### 4.5.2 Multiple Linear Regression Analysis

The adjusted R-square represents the proportion of the dependent variable that is influenced by the regression of the independent variable. The better the regression model, the greater the adjusted R-square value. According to Ozili (2023), an R-square between 0.1 and 0.5 is appropriate in social science research. Therefore, the adjusted R square in this study of 0.430 is acceptable. It indicates that herding, overconfidence, accounting information, and firm image influence 43% of stock investment decisions. Other variables influence the remaining 57%. Table 4.15 displays a summary of the model.

Table 4.15: Model Summary

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.659 <sup>a</sup>	.434	.430	.52820

Source: Developed for the research

Table 4.16 presents the results of variance analysis, which indicate that the p-value is 0.001 (less than 0.05). It indicates that this study's model is statistically significant and well-fitting. Therefore, the independent variables can predict the dependent variables in this study. The ANOVA results are shown in the table below.

Table 4.16: ANOVA Table

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	126.137	4	31.534	113.029	<.001 <sup>b</sup>
<b>Residual</b>	164.327	589	.279		
<b>Total</b>	290.463	593			

- a. Dependent Variable: SID
- b. Predictors (Constant), FI, HE, OV, AI

Source: Developed for the research

In Table 4.17, the significance values (p-values) of the dependent and independent variables are indicated. The hypothesis is supported and considered significant when the p-value is less than 0.05. Furthermore, the unstandardized beta defines the slope of the line between the dependent variable and the predictor variable. Simultaneously, the positive or negative impact of the independent variable on the dependent variable is indicated. When the negative sign is present, the independent variable has a negative effect on the dependent variable, and vice versa.

In accordance with Table 4.17, the p-values for herding ( $p = 0.001 < 0.05$ ), accounting information ( $p = 0.001 < 0.05$ ), and firm image ( $p = 0.029 < 0.05$ ) are less than 0.05. Thus, the hypotheses are confirmed. The p-value of overconfidence, meanwhile, is greater than 0.05 ( $p = 0.7062 > 0.05$ ). The hypothesis of overconfidence is therefore refuted. The following table displays the coefficient table.

In addition, table 4.17 demonstrates that herding has a positive and statistically significant effect on stock investment decisions, as the unstandardized beta coefficient of stock investment decision and herding is 0.386, indicating that when herding increases by 1 unit, stock investment decisions increase by 0.386 units. Additionally, herding has the greatest impact on stock investment decisions because its unstandardized beta value is the highest, at 0.386.

Moreover, accounting information has a positive and significant influence on stock investment decisions. The unstandardized coefficient beta of stock investment decisions and accounting information is 0.189, indicating that when accounting information increases by 1 unit, the stock investment decision also increases by 0.189 units. It has the second largest impact on stock investment decisions due to its unstandardized beta value of 0.189.

Additionally, the firm's image has a positive and significant effect on stock investment decisions. The unstandardized coefficient beta of the stock investment decision and the firm image has a value of 0.095, indicating that when the firm image increases by 1 unit, the stock investment decision also increases by 0.095 units. The value of the unstandardized beta of the firm's image is only 0.095, so it has the third-least influence on stock investment decisions.

Next, overconfidence has a positive but insignificant impact on stock investment decisions. The unstandardized beta coefficient of stock investment decision and overconfidence is 0.014, indicating that when overconfidence increases by 1 unit, stock investment decision increases by 0.014 unit. However, overconfidence has the least impact on stock investment decisions due to its unstandardized beta value of 0.014.

Table 4.17: Coefficient Table

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	$\beta$	Std. Error	Beta		
<b>(Constant)</b>	1.231	.122		10.106	<.001
<b>HE</b>	.386	.032	.458	12.224	<.001
<b>OV</b>	.014	.037	.016	.378	.706
<b>AI</b>	.189	.045	.199	4.238	<.001
<b>FI</b>	.095	.043	.097	2.189	.029

a. Dependent Variable: SID

Source: Developed for the research

### 4.5.3 Multicollinearity

Each construct's VIF values were evaluated. In this study, the construct tolerance value ranged from 0.435-0.683 and the VIF value ranged from 1.463-2.301. Consequently, it indicated that there is no multicollinearity issue. Table 4.18 displays the results of the construct's collinearity statistics.

Table 4.18: Result of Collinearity Statistics of Construct

<b>Construct</b>	<b>Tolerance</b>	<b>Variance Inflation Factor</b>
HE	0.683	1.463
OV	0.563	1.775
AI	0.435	2.301
FI	0.485	2.061

Source: Developed for the research

## 4.6 Conclusion

The respondents' demographic profiles and general information were described and illustrated. The mean and standard deviation of the variables indicate that respondents, on average, hold "neutral" and "agree" attitudes towards all independent variables. In addition, the inferential analysis demonstrates that all independent variables are related to the dependent variable. All hypotheses have also been evaluated. It also demonstrates that herding, accounting information, and firm image have positive and statistically significant effects on dependent variables, with the exception of overconfidence, which has a positive but not statistically significant effect on stock investment decisions. In this section, the slopes of all independent and dependent variables are also indicated.

## **CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS**

### **5.0 Introduction**

The fifth chapter discusses the results of the analysis, including an examination of the relationships between all independent and dependent variables, findings' implications, limitations, and recommendations for future research.

### **5.1 Discussion of Major Findings**

The key findings of this study are displayed in the table below.

Table 5.1: Summary of Result for Hypotheses Testing

<b>Hypothesis Statement</b>		<b>Result</b>	<b>Supported/ Rejected</b>
H1	There is a significant relationship between herding and stock investment decision among millennials in Malaysia.	p: 0.001 $\beta$ : 0.386 <b>Significant</b>	<b>Supported</b>
H2	There is a significant relationship between overconfidence and stock investment decision among millennials in Malaysia.	p: 0.706 $\beta$ : 0.014 <b>Insignificant</b>	<b>Rejected</b>
H3	There is a significant relationship between accounting information and stock investment decisions among millennials in Malaysia.	p: 0.001 $\beta$ : 0.186 <b>Significant</b>	<b>Supported</b>



H4	There is a significant relationship between firm image and stock investment decisions among millennials in Malaysia.	p: 0.029 β: 0.095 <b>Significant</b>	<b>Supported</b>
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Source: Developed for the research

### 5.1.1 Relationship between Herding and Stock Investment Decision

The inferential analysis reveals a significant and positive relationship between herding and the stock investment decisions of millennial investors on the KLSE, as indicated by a p-value of 0.001 and a beta value of 0.386. This finding supports H1 and suggests that millennial investors are likely to rely on the opinions and decisions of others when making stock investment decisions, resulting in a propensity to mimic the actions of other investors. The high unstandardized beta value of 0.386 indicates that, among the independent variables examined in the research, herding has the greatest effect on stock investment decisions. This result is consistent with prior research, such as the study by Adielyani and Mawardi (2020) and the study by Cao et al. (2021), which discovered a positive and significant relationship between herding and investment decision. When making stock investment decisions, millennial investors on the KLSE tend to exhibit herding behaviour.

### 5.1.2 Relationship between Overconfidence and Stock Investment Decision

Overconfidence assumed a significant correlation with stock investment decisions among millennial investors, in accordance with Hypothesis 2. The result of the inferential analysis, however, indicates otherwise. While there is a positive relationship between overconfidence and stock investment

decisions, the p-value of 0.706 indicates that the relationship is not statistically significant. Thus, the analysis refutes H2, indicating that overconfidence has no significant effect on the stock market investment decisions of millennial investors. This result is consistent with previous research, such as the study by Tabassum et al. (2021), which concluded that overconfidence has no significant effect on investors' decisions. It suggests that millennial investors may not react in excess or overestimate their abilities and knowledge when making stock market investment decisions, resulting in an absence of significant influence for overconfidence in their stock investment decisions. As a result, the overconfidence hypothesis is rejected, and it has little impact among the independent variables on stock investment decisions, as indicated by its unstandardized beta value of 0.014.

### **5.1.3 Relationship between Accounting Information and Stock Investment Decision**

H3 describes the significant relationship between accounting information and stock investment decisions among Malaysian millennials. Accounting information has a positive and significant impact on stock investment decisions, as indicated by the result. In addition, accounting information has a significant relationship with stock investment decisions given that its p-value is 0.001, meaning it is less than 0.05. The hypothesis has thus been validated. This result is consistent with previous research, such as the investigation conducted by Somathilake (2020) and Ahmad (2017), which reported that accounting information has a positive and statistically significant relationship with stock investment decisions. The previous investigation also discovered that accounting information has the greatest impact on investors' stock investment decisions. In this study, accounting information is not the most important factor that investors evaluate, but it is the second most important factor among the independent variables. Accounting information provides investors of the millennial generation with a concise and precise image of a company's financial performance and

position, suggesting that they are more likely to use it when selecting a stock for their portfolio investment planning. For example, including a company's revenue, expenses, assets, and liabilities. Therefore, it can be surmised that millennial investors on the KLSE are inclined to utilise information to guide stock investment decisions.

#### **5.1.4 Relationship between Firm Image and Stock Investment Decision**

H4 describes the significant relationship that exists between firm image and stock investment decisions among Malaysian millennials. The firm image's p-value of 0.029, which is below 0.05, reveals that firm image has resulted in a positive and significant relationship with stock investment decisions. Thus, as well, this hypothesis has been proven. This finding aligns with previous studies, involving the research carried out by Safdar et al. (2020) as well as Salman et al. (2020), which found a positive and statistically significant connection between firm image and stock investment decisions. It implies that millennial shareholders are more likely to consider the reputation of a business when making investments in stocks, as it may increase investor confidence, which leads to higher stock prices that are beneficial to investors as well. In addition, the findings indicate that the firm's image has a positive and statistically significant influence on stock investment decisions since the unstandardized beta for the firm's image is 0.095. The firm image worth is the third most significant factor impacting the stock market decisions of millennial investors. When making stock investment decisions, millennial shareholders in the KLSE take into account the firm's image.

## **5.2 Implications of the Study**

### **5.2.1 Theoretical Implications**

It is unprecedented that in this study, loss aversion under the prospect theory is used to examine the behaviour and actions of investors when they make decisions in the stock market. In general, previous research has employed this theory to examine only those behavioural factors; however, this research adds cognitive factors, such as accounting information as well as firm image. Both of them are not behavioural variables, yet it has been demonstrated that their effects are positive and practicable. Consequently, this paper is conducted unconventionally, as it does not follow the previous paper in its use of prospect theory to examine only behavioural factors, but instead includes cognitive factors such as accounting information and firm image. Moreover, the prospect theory has been effectively applied in this study, as the analysis revealed that the model explains 43% of the variance in the stock investment decision.

In addition, as stated previously, there is insufficient literature investigating this topic, particularly from a Malaysian perspective. This paper seeks to fill this gap in the field by analysing the decision-making processes of Malaysian millennial investors. It is important to note that the available research studies the whole generation of a nation, which is distinct from the Malaysian stock market investors who are millennials. Therefore, this paper focused solely on millennials in order to provide a deeper understanding by identifying the generation. It is also anticipated that additional research will be conducted on the same or comparable topic of stock investment decisions, thus this research may function as a foundation for future studies.

### **5.2.2 Practical Implications**

The research conducted has implications for policymakers. As there is a significant relationship between herding and stock investment decisions among millennial shareholders in the Malaysian stock market, herding behaviour could motivate investors to take greater risks, which may result in excessive volatility in the market. The appropriate financial education environment facilitates more effective utilization of investment-related data. Improving the efficacy of financial guidance and managing risks is one of the primary priorities for policymakers. Financial awareness can be strengthened by incorporating the psychology of investors into its development.

Since accounting information as well as firm image have a significant relationship with stock decision-making among millennial shareholders in the Malaysian stock exchange, investors will always make better stock investment decisions if they have easy access to high-quality information. Investors must comprehend the market and associated risks before investing. A company may be obligated to provide both quantitative and qualitative data regarding the risks it encounters. In addition, publicly traded companies are required to preserve and enhance their corporate reputation because millennial investors place a premium on this factor.

## **5.3 Limitations of the Study**

### **5.3.1 Restricted Target Population**

The research examines the stock investment decisions of Malaysian millennial investors but only focuses on a particular group of people, and this may impact the applicability of its findings to other populations. As a result, the results of this paper may not be suitable for use as a reference in other papers, due to the fact that different generations possess distinct

perspectives, resulting in different outcomes. This paper could serve as a source of information for researchers who choose millennials as their study population in future studies.

### **5.3.2 Geographical Bias**

Data collection as well as access to a sample of Malaysian millennial investors are the constraints on this study. The data refused to directly capture the respondents' towns and cities. Regardless of the collection of questionnaire data and the exclusion of not qualified data, it is possible that the conclusions presented in this research are not representative of the entire picture of Malaysian millennial investors. It was because of a number of mistakes made in the questionnaire submissions by those who provided inaccurate responses that differed from their initial personal data. As the prevalence of fraud increases, individuals may provide false information about themselves as a precaution.

### **5.3.3 Time Constraints**

Additionally, time is limited for completing every page of the research paper. The investigation has been given a complete duration of a few months. This period of time needs to be utilized in its entirety for questionnaire development, data collection, test pilots, as well as data analysis. Limits on time can negatively impact the quality of the study's results and conclusions. The restriction on time may oblige the researcher to complete the investigation in a shorter time frame, which can result in inaccuracies, omissions, and inadequate research.

### **5.3.4 Not Capturing All Relevant Factors**

Furthermore, there comprise four different independent variables and no moderating factors in this research. As behavioural and cognitive factors are involved, merely the independent variables such as herding and overconfidence, while accounting information and firm image are investigated in the research. Since herding and overconfidence are behavioural factors while accounting information and firm image are cognitive factors, extra behavioural and cognitive factors could be added to the examination in order to draw a deeper conclusion. More importantly, the overconfidence hypothesis is rejected in this study, which differs from the findings of previous research; thus, this variable merits more investigation, as the findings discovered are distinct.

## **5.4 Recommendations for Future Research**

### **5.4.1 Use Different Methodologies**

Different methodologies are recommended for future studies in the recommendations. In contrast to questionnaires, carrying out interviews or focus group discussions may provide extra insights. Future investigators can additionally pick qualitative research methods for pertinent subjects, as interviews may provide precise and specific findings. Alternatively, mixed methodologies might be suggested for future studies. Combining both quantitative and qualitative techniques, a combination of both to investigate the study topics while offering an improved comprehension of the relevant study topics.

### **5.4.2 Investigate Additional Variables**

Future studies could benefit from including behavioural variables, such as investor sentiment, representative bias, and regret aversion, in addition to other cognitive variables, like personal financial needs, market trends, and economic variables. Incorporating such variables into the study's design might offer a more thorough comprehension of the phenomenon that is under investigation and increase the potential for generalization of the results. Similarly, this facilitates the development of theoretical frameworks and models that could more effectively clarify the relationship between stock investment decisions as well as behavioural and cognitive factors.

### **5.4.3 Conduct Replication Studies**

Replication investigations serve as crucial for validating scientific findings. It affords researchers the opportunity to acquire knowledge from research and enhance their comprehension of the underlying processes. Replication investigations serve a distinctive part in research, aiding in the evaluation of previous investigations and guaranteeing the validity and generalizability of research findings. When the results of a single investigation correspond with the results from a number of others, confidence in the reliability and validity of its findings is bolstered and claims of fresh information are supported. Thus, conducting studies of replication can contribute to the advancement of scientific understanding with more precise and exhaustive models and theories.



## **5.5 Conclusion**

This chapter addressed the implications of theory and practice, beginning with findings from an analysis supported by previous research. Eventually, both the limitations of this present study and suggestions for future investigations are presented.

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Appendix 3.1: Questionnaires



UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

BACHELOR OF INTERNATIONAL BUSINESS (Honours)

**Final Year Project Title: Factors Influencing Investment Decision-Making in Stock Market Among Millennials in Malaysia.**

**Section A: Demographic profile**

Please kindly select the answer to the following questions.

Choose one answer from the following options.

1. Gender
  - Male
  - Female
  
2. Nationality
  - Malaysian
  - Non-Malaysian
  
3. Age
  - Below 27 years old
  - 27– 30 years old
  - 31– 34 years old
  - 35– 38 years old
  - 39– 42 years old
  - Above 42 years old

4. Levels of education

- No formal education
- High School graduated
- Some college, no degree
- Bachelor's degree
- Postgraduate degree
- Doctoral degree/ PhD

5. Employment Status

- Student
- Employed
- Self-employed
- Part-timer
- Unemployed

6. Individual Monthly Income

- Below RM1500
- RM1501 – RM3000
- RM3001 – RM5000
- RM5001 – RM7000
- Above RM 7001

**Section B: General Information**

Please kindly select the answer to the following questions.

Choose one answer from the following options.

7. Do you have a Direct CDS account?

- Yes
- No

8. Are you using Nominee CDS account to do investment?

- Yes
- No

9. Are you currently investing in stock market?

- Yes
- No

10. Monthly stock investment expenses (as a percentage of your monthly income)

- Below 10% per month
- 10% - 20%
- 21% - 40%
- 41% - 60%
- More than 60% per month

**Section C: Factors influencing investment decision-making in stock market among millennials in Malaysia**

This section is to obtain opinion of respondents about factors affecting investment decision in stock market among millennials in Malaysia. **This section is using the Likert Scale (Strongly Agree – 5, Agree – 4, Neutral – 3, Disagree – 2, and Strongly Disagree – 1).** Please indicate your **level of agreement** in the column based on your opinion of each statement.

Stock Investment Decisions						
No.	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I will invest in stocks if I did not lose a lot of money along the way.	1	2	3	4	5
2.	I will invest in stock market to get the profit as soon as possible.	1	2	3	4	5
3.	I will invest if listed companies report positive returns annually.	1	2	3	4	5
4.	I will consider stock index when making investment decisions in stock market.	1	2	3	4	5
5.	My investment decision will be affected by trading volume.	1	2	3	4	5
6.	I consider the opinions of brokers or financial consultant when making investment decisions in stock market.	1	2	3	4	5

<b>Herding</b>						
<b>No.</b>	<b>Statements</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1.	I will change my decision very quickly because other investors have changed their decisions on stock investment.	1	2	3	4	5
2.	The opinions of my broker and financial adviser influence my decision on how many shares to buy.	1	2	3	4	5
3.	I do not have the confidence to make decisions that are different than what most investors would make.	1	2	3	4	5
4.	Other investors' opinion will affect my decision on selecting to buy a particular of stock.	1	2	3	4	5
5.	Other investors' opinion will affect my decision on deciding the volume to buy a particular of stock.	1	2	3	4	5
6.	Other investors' opinion will affect my decision on buying and selling a particular of stock.	1	2	3	4	5
7.	I will follow my friends to invest in the same stock because I think their information is very reliable.	1	2	3	4	5
8.	I will follow my family to invest in the same stock because I think their information is very reliable.	1	2	3	4	5
9.	I will follow my colleagues to invest in the same stock because I think their information is very reliable..	1	2	3	4	5

Overconfidence						
No.	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I believe my skills and knowledge will help me make more money in the stock market.	1	2	3	4	5
2.	I have the confidence to value the shares in my portfolio.	1	2	3	4	5
3.	I believe that I am better at predicting future prices of shares.	1	2	3	4	5
4.	I have the skills and expertise needed to invest in stock market.	1	2	3	4	5
5.	I am confident in my analytical abilities and market forecasting experience.	1	2	3	4	5
6.	I am confident about my data source for investing in stock market.	1	2	3	4	5
7.	I am confident about my ability to analyze new information in stock market.	1	2	3	4	5
8.	I am confident that I can do stock trading by myself in stock market.	1	2	3	4	5

Accounting information						
No.	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I have knowledge about accounting information and fully understand the meaning of ratio in the financial statement.	1	2	3	4	5
2.	I will prefer to buy a stock with affordable share price when making stock investment decision.	1	2	3	4	5
3.	I will prefer to purchase stock with marketability when making stock investment decision.	1	2	3	4	5
4.	I will check the financial statement of listed company before making stock investment decision.	1	2	3	4	5
5.	I will check price of share before making stock investment decision.	1	2	3	4	5
6.	I will check the dividend paid before making stock investment decision.	1	2	3	4	5
7.	I will check condition of financial statement of listed companies in	1	2	3	4	5

	stock market when making stock investment decision.					
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<b>Firm image</b>						
<b>No.</b>	<b>Statements</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1.	I will take consideration of firm's reputation when making stock investment decision.	1	2	3	4	5
2.	I will search for information about whether the company is involved in solving community problems before making stock investment decision.	1	2	3	4	5
3.	I will take consideration of the feeling for a listed company's products and services before making stock investment decision.	1	2	3	4	5
4.	I will take consideration of perceived ethics of firm when making stock investment decision.	1	2	3	4	5
5.	I will take consideration of the political party affiliation when making stock investment decision.	1	2	3	4	5

**Thank you for your participation.**



Appendix 4.1: SPSS Output

Appendix 4.2: Frequencies Statistics

**GENDER**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	320	53.9	53.9	53.9
	Female	274	46.1	46.1	100.0
	Total	594	100.0	100.0	

**AGE**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	27– 30 years old	102	17.2	17.2	17.2
	31– 34 years old	178	30.0	30.0	47.1
	35– 38 years old	198	33.3	33.3	80.5
	39– 42 years old	116	19.5	19.5	100.0
	Total	594	100.0	100.0	

**EDUCATION**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	16	2.7	2.7	2.7
	High school graduated	45	7.6	7.6	10.3
	Some college, no degree	102	17.2	17.2	27.4
	Bachelor's degree	259	43.6	43.6	71.0
	Postgraduate degree	134	22.6	22.6	93.6
	Doctoral degree/ PhD	38	6.4	6.4	100.0
	Total	594	100.0	100.0	

**EMPLOYMENT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	3	.5	.5	.5
	Employed	358	60.3	60.3	60.8
	Self-employed	178	30.0	30.0	90.7
	Part-timer	49	8.2	8.2	99.0
	Unemployed	6	1.0	1.0	100.0
	Total	594	100.0	100.0	

**INCOME**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below RM1500	13	2.2	2.2	2.2
	RM1501 – RM3000	69	11.6	11.6	13.8
	RM3001 – RM5000	262	44.1	44.1	57.9
	RM5001 – RM7000	159	26.8	26.8	84.7
	Above RM7001	91	15.3	15.3	100.0
	Total	594	100.0	100.0	

**DirectCDS**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	398	67.0	67.0	67.0
	No	196	33.0	33.0	100.0
	Total	594	100.0	100.0	

**NomineeCDS**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	196	33.0	33.0	33.0
	No	398	67.0	67.0	100.0
	Total	594	100.0	100.0	

**InvestmentExpenses**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 10% per month	64	10.8	10.8	10.8
	10% – 20%	180	30.3	30.3	41.1
	21% – 40%	236	39.7	39.7	80.8
	41% – 60%	96	16.2	16.2	97.0
	More than 60% per month	18	3.0	3.0	100.0
	Total	594	100.0	100.0	

Appendix 4.3: Descriptive Statistics

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
SID	594	1.00	5.00	3.5230	.69987
HE	594	1.00	5.00	3.2641	.83152
OV	594	1.00	5.00	3.3733	.77161
AI	594	1.14	5.00	3.4452	.73775
FI	594	1.00	5.00	3.5138	.71824
Valid N (listwise)	594				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
SID1	594	1	5	3.62	1.216
SID2	594	1	5	3.49	1.149
SID3	594	1	5	3.68	1.122
SID4	594	1	5	3.55	1.192
SID5	594	1	5	3.40	1.195
SID6	594	1	5	3.39	1.273
Valid N (listwise)	594				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
HE1	594	1	5	3.67	1.256
HE2	594	1	5	3.17	1.133
HE3	594	1	5	3.44	1.213
HE4	594	1	5	3.27	1.319
HE5	594	1	5	3.19	1.139
HE6	594	1	5	3.22	1.226
HE7	594	1	5	3.18	1.340
HE8	594	1	5	3.05	1.165
HE9	594	1	5	3.20	1.266
Valid N (listwise)	594				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
OV1	594	1	5	3.56	1.269
OV2	594	1	5	3.30	1.051
OV3	594	1	5	3.49	1.134
OV4	594	1	5	3.26	1.231
OV5	594	1	5	3.16	1.345
OV6	594	1	5	3.36	1.124
OV7	594	1	5	3.38	1.134
OV8	594	1	5	3.46	1.244
Valid N (listwise)	594				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
AI1	594	1	5	3.71	1.154
AI2	594	1	5	3.31	1.222
AI3	594	1	5	3.69	1.107
AI4	594	1	5	3.29	1.269
AI5	594	1	5	3.20	1.126
AI6	594	1	5	3.40	1.088
AI7	594	1	5	3.52	1.098
Valid N (listwise)	594				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
FI1	594	1	5	3.63	1.230
FI2	594	1	5	3.48	1.090
FI3	594	1	5	3.38	1.240
FI4	594	1	5	3.50	1.096
FI5	594	1	5	3.58	1.099
Valid N (listwise)	594				

Appendix 4.4: Correlations

		<b>Correlations</b>				
		SID	HE	OV	AI	FI
SID	Pearson Correlation	1	.615**	.368**	.502**	.480**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	594	594	594	594	594
HE	Pearson Correlation	.615**	1	.375**	.498**	.526**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001
	N	594	594	594	594	594
OV	Pearson Correlation	.368**	.375**	1	.637**	.553**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001
	N	594	594	594	594	594
AI	Pearson Correlation	.502**	.498**	.637**	1	.665**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	594	594	594	594	594
FI	Pearson Correlation	.480**	.526**	.553**	.665**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	594	594	594	594	594

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Appendix 4.5: Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	FI, HE, OV, AI <sup>b</sup>	.	Enter

a. Dependent Variable: SID

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659 <sup>a</sup>	.434	.430	.52820

a. Predictors: (Constant), FI, HE, OV, AI

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	126.137	4	31.534	113.029	<.001 <sup>b</sup>
	Residual	164.327	589	.279		
	Total	290.463	593			

a. Dependent Variable: SID

b. Predictors: (Constant), FI, HE, OV, AI

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.231	.122		10.106	<.001	.992	1.471
	HE	.386	.032	.458	12.224	<.001	.324	.448
	OV	.014	.037	.016	.378	.706	-.059	.088
	AI	.189	.045	.199	4.238	<.001	.101	.277
	FI	.095	.043	.097	2.189	.029	.010	.180

a. Dependent Variable: SID

Appendix 4.6: Collinearity

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1.231	.122		10.106	<.001	.992	1.471		
	HE	.386	.032	.458	12.224	<.001	.324	.448	.683	1.463
	OV	.014	.037	.016	.378	.706	-.059	.088	.563	1.775
	AI	.189	.045	.199	4.238	<.001	.101	.277	.435	2.301
	FI	.095	.043	.097	2.189	.029	.010	.180	.485	2.061

a. Dependent Variable: SID