

# CHAPTER 1

## INTRODUCTION

### 1.1 Overview of Research Object

According to Wijoyo et al. (2020), Generation Z, or well known as Gen Z is a group of people who was born in period of 1995-2010. This generation is mostly working as students, starting from junior high school students until university students. In minority, some of them have been developing their career, whether as employees or entrepreneurs. However, according to BPS (2021), Gen Z is classified born in period of 1997-2012.

**Table 1.1**  
**Types of Generation**

Name of Generation	Period of Born
Generation Traditionalist	<1946
Generation Baby Boomer	1946-1964
Generation X	1965-1979
Generation Y	1980-1994
Generation Z	1995-2010
Generation Alpha	>2010

*Source: Wijoyo et al. (2020)*

Furthermore, as seen on Table 1.2, BPS classifies types of generation differently with Wijoyo that can be seen on Table 1.1. Despite of different classification of both, the period of born of each classification is not classified significantly.

**Table 1.2**  
**Types of Generation**

Name of Generation	Period of Born
Pre-Boomer (Generation Traditionalist)	<1945
Baby Boomer	1946-1964
Generation X	1965-1980
Generation Y	1981-1996
Generation Z	1997-2012
Post Generation Z (Generation Alpha)	>2012

*Source: BPS (2021)*

Data from BPS (2021) as seen on Figure 1.1 indicates that 27.94% of 270,2 million Indonesian population which is 74.93 million people are Gen Zs leading share of population in Indonesia who is followed by Generation Y or Generation Millennial by 25.87% or equal to 69.38 million people.

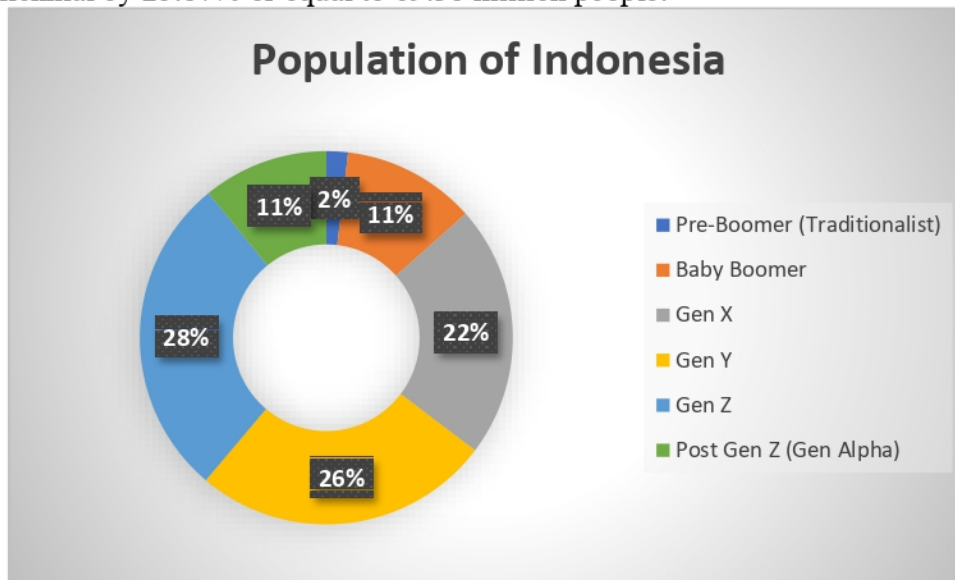


Figure 1.1

Total Population of Indonesia in 2020

Source: BPS (2021)

Gen Y, who was born in period of 1980-1994, is always compatible with Gen Z since they are capable to operate cutting-edge technology. However, Gen Z tends to be more multi-tasking since this generation can work online, browse online, scroll social media, and listen to music at the same time. Moreover, Gen Z is slightly more energetic because some of Gen Y's is entering or more than 40 years old.

As mentioned before, Gen Z is good at technology, since the generation is the first digital generation in which information is accessible easily by sophisticated internet (Wijoyo et al., 2020). Anything can be handled by them because of the technology. Social media is main thing for Gen Zs since that is such a place of their life to be socializing. So crucial, they often put their virtual life on social media first as platform to increase their personal image until they forget their real life. They will do anything to get viral on social media as long as it is to engage their account. The higher the engagement is, the more money come. As seen on Figure 1.2, Mr. Beast was a YouTube channel with the most earning in 2021 by \$54 million,

following by Jake Paul on the second place by earning \$45 million, and Markiplier by making \$38 million from YouTube. Those facts reflect how easy people make money in social media.

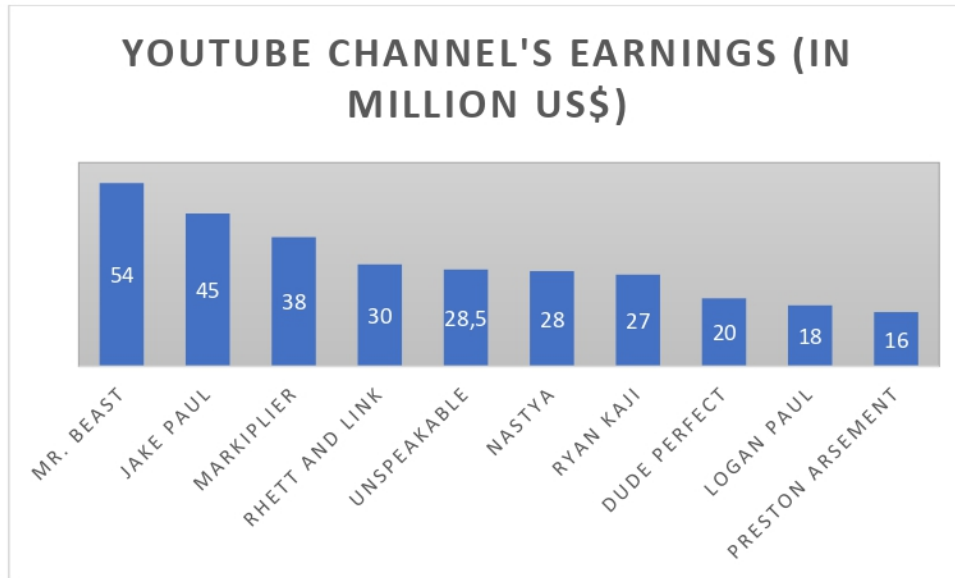


Figure 1.2

Top 10 Highest Earnings of YouTube Channels in 2021

Source: statista (2022)

This thing leads Gen Zs to become instant-minded. They perceive that content creators or influencers on social media easily get money in which they don't need to do 9-5 work on office. Therefore, they tend to be lazy in which they don't know actually how hard becomes content creators, starting from pre-production until publishing content on social media. They want less effort to make more money without appreciating the process. Investment or trading is an option to make money without going to office. Stock and forex are some of investment instruments which are legal in Indonesia. But, Gen Zs see some influencers such as Indra Kenz and Doni Salmanan making a lot of money from trading in binary option in which both of them could make million rupiahs just in minutes. They saw those influencers as ideal Gen Z since both of them respectively have total asset more than Rp50 million (KOMPAS.com, 2022). In early of 2022, those influencers were arrested under case of trading fraud since binary option trading is illegal according to law in Indonesia.

Besides being good at multitasking, technology, social, and instant-minded, according to Wijoyo et al. (2020), there are other characteristics identifying Gen Z, as following:

- **Expressive.** Gen Zs are tolerant with different culture and paying attention on environment issue,
- **Adaptive and fast switcher,** and
- **Less verbal communication, selfish, and individualist.**

According to Ministry of Internal Affairs of Republic of Indonesia (in DataIndonesia.id, 2022), there are 66.86 million of Gen Zs in Indonesia. As seen on Table 1.3, province with the highest population is West Java by 11,886,058 million people, following by East Java (9,252,385 million people) and Central Java (8,511,476 million people). The ministry then describes that North Kalimantan becomes the least population of Gen Zs in Indonesia by only 189.403 people.

**Table 1.3**  
**Top 10 Generation Z Population in Indonesia in 2021**

Province	Population (in million people)
West Java	11,886
East Java	9,252
Central Java	8,512
North Sumatera	4,317
Banten	2,800
DKI Jakarta	2,663
South Sulawesi	2,513
Lampung	2,250
South Sumatera	2,175
Riau	1,783

*Source: DataIndonesia.id (2022)*

On this research, the author would like to pick up investors Generation Zs of West Java as research objective since the province includes in Top 10 Generation Z in Indonesia. Moreover, West Java is one of the centrals of economic and trade in Indonesia in which technology sophistication is one of greatest there. Therefore, it can be assumed that West Java has the highest investor of Generation Zs in Indonesia.

## 1.2 Research Background

Investment is one of the most trending topics in the years. Investment is basically spending money in commodity in which the money will hopefully grow in the future (Royda & Riana, 2022). Investment can be source of passive income. People can sit down at home and analyze which commodity or asset that apparently will be profitable in which, later on, they decide to invest the asset. If the analysis is correct, the profit will come to you. Even, many people consider investment is the main source of making money. They don't need to work for 40 hours per week in which the profit of investment can definitely fulfill their needs and desires as well as saving for retirement savings. It is proven by many people showing off their assets they have on social media and they declare that it thanks to profit of investment. So, many people start investing in stock, forex, cryptocurrency, etc.



Figure 1.3

### The Growth of Investors Population in Indonesia

*Source: Indonesia Central Securities Depository (KSEI) (2022)*

Based on Figure 1.3, it can be seen that the population of investors in Indonesia is growing for last years. Before *Covid-19* pandemic, the growth of the population was not that significant. But, after the pandemic, there was huge growth. The pandemic is the trigger of people to have reserve fund since lay-off happens (Kompas, 2022). It also turns people to be not more consumptive (CNBC Indonesia, 2022).

According to Claudia Kolonas as Co-Founder of Pluang, she mentioned that the growth of investor population in Indonesia is due to accessible internet and digitalization to learn deeper about investment (Agung, 2022) as well influence of social media. Therefore, people can choose one or some of many investment instruments that they prefer (CNBC Indonesia, 2022). In addition, she stated that there is improvement in financial literacy of Indonesians over the last years.



Figure 1.4

Stock Investor Demography of Indonesia on the 1<sup>st</sup> Semester 2022

*Source: Indonesia Central Securities Depository (KSEI) (2022)*

Furthermore, according to Figure 1.4, the youngest group of investors who was under 31 years old incredibly dominated share of investor population in Indonesia by 59.72%, in which the group mostly consisted of Gen Z (17-27 years old). People aged 31-40 years old that all consisted of Gen Y were followed on the second place by 21.92%. The group consisting of people aged 41-50 years old who were dominated by Gen X contributed 10.53% to investor demography in Indonesia. Then, people aged 51-60 years old who were also dominated by Gen X gave 5,08% to number of investors in Indonesia. Lastly, the group consisting people

aged more than 60 years old less contributed to share population of investors in Indonesia by 2.75%.

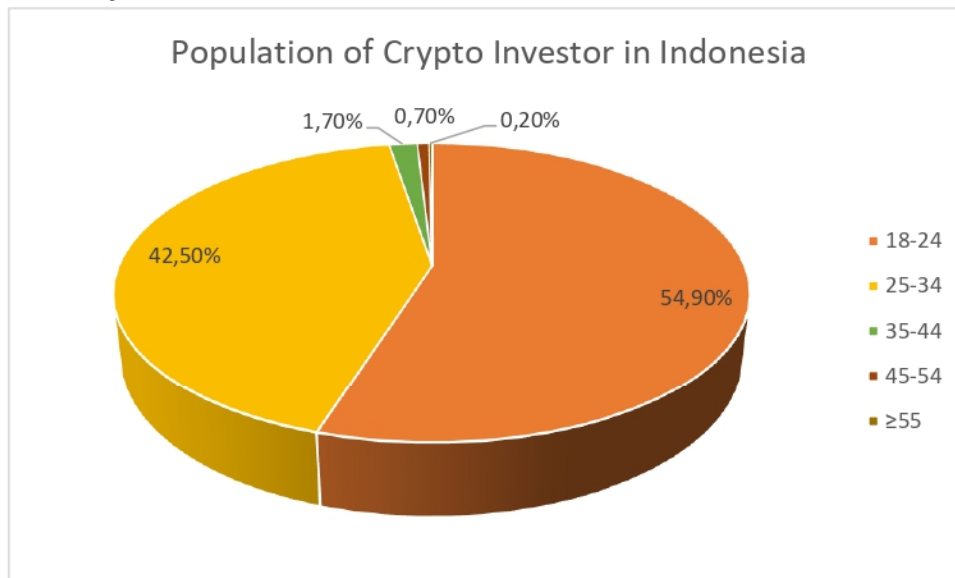


Figure 1.5

#### Population of Indonesian Crypto Investors in 2021

*Source: start.io (in statista, 2022)*

Based on Figure 1.5, people aged 18-24 years old who is classified as Generation Z dominate the population of crypto investor in Indonesia by 54.9%. Besides, the population of crypto investor of Gen Zs is going to be higher since 42.50% of the population are people aged 15-34 that Gen Zs are currently aged 12-28. In addition, people aged 35-44 years old, 45-54, and  $\geq 55$  years old are groups who less dominate the population by respectively below 2%.

Based on facts above, the investment issues in Gen Z become phenomenal. According to Pandu Sjahrir as Commissioner of BEI said that there are four reasons why Gen Z dominates investment transaction in Indonesia (CNN Indonesia, 2021), as following:

- Gen Z's mindset has changed into investment, not consumptive.
- There are many fintech and marketplace coming up to sell investment product. Their existence help Gen Z to invest directly without broker.
- The rapid development of technology and digitalization in which those are expertized by Gen Z.



- There are start-up companies in Indonesia invested by global investor that later on will be listing on BEI in which there are more options of stock commodities to be chosen. These start-up companies that are already listing on stock exchange is used by BEI to become marketing strategy.

Besides, according to Bhisma Yudhistira as an economist (dream.co.id, 2021), he described that investment is delivered into daily conversation. When Gen Zs hang out, they don't do gossip. They will ask their profit of investment. This leads Gen Zs to be obligated to follow recent topic in which this phenomenon is called as Fear of Missing Out or well-known as FOMO (Kompas, 2022). Gen Z feels afraid of missing an update in which they can't share that on social media which is important for them. If they don't follow the hype, they will be assumed as last-year people. Therefore, that makes Gen Zs make a lot of investment without considering many things, such as risk, economic situation, analysis, etc.

Furthermore, it makes many sides to bring Gen Zs invest into illegal investment. Although the financial literacy in Indonesia is getting better, but Gen Z apparently needs to improve it. Head of Representative Office of BEI of South Sumatera, Hary Mulyono, stated that the domination of getting investment fraud by Generation Y moved to Generation Z (tempo.co, 2022). A member of Board of Commissioners of OJK, Friderica Widayarsi Dewi added that those illegal investment brokers are after university students (Kompas.com, 2022). Since Gen Zs are instant-minded, they offer investment choice that can results big profit in short time. Gen Zs become completely interested and willing to invest a lot of money in as well as existing their impatience. But, they don't have money since they haven't worked yet. Then, they apply online loan that is harmful since online loans give high interest and unlimited fine. The consequences are they ask Gen Zs to have full access to their smartphone data in which it can leads to cybercrime. The Head of SWI, Tongam L. Tobing, mentions that the loss of people investing on illegal or bogus investment surprisingly reached Rp109 T in 2022 (CNN Indonesia, 2022). He further reports that total loss of them for the last five years has been Rp123.5 T. It indicates that the operation of bogus investment is getting higher. To



deduct the level of illegal investment, OJK had frozen 18 various illegal investment brokers per October 5, 2022, consisting of:

- ✓ Five brokers doing money game
- ✓ Four brokers doing non-permission investment offering
- ✓ Three brokers doing crypto trading activity without legal permission
- ✓ Two brokers having non-permission robot trading
- ✓ One broker having security crowd funding without legal permission
- ✓ Three brokers having other illegal issue

Hence, BEI is encouraging 3P Program standing for *Paham* (understand), *Punya* (own), and *Pantau* (monitor) to investors of Gen Z (tempo.co, 2022). *Paham* means that details regarding capital market, including regulation, procedure, etc. BEI research that they don't use their spare money to invest in which they owe to many sides, including online loan, so that they do panic when the price of commodities they invest in goes down. *Punya* means that own investment instruments that they know the mechanism. It is recommended to invest in more than one investment instruments. At some moments, they have often done mismanagement of investment planning as well as reluctance of self-upgrading and investment diversification. The last but not least, the investment need to be monitored (*Pantau*), whether the movement of price stock in stock exchange and the company performance.

As mentioned before, Gen Z is the most population in Indonesia by 74.93 million people. It is also followed that Gen Z is the most population of stock investor and has good contribution in cryptocurrency investment transaction in Indonesia. BEI and the Financial Services Authority (OJK) encourage Gen Z to invest. According to Royda and Riana (2022), investment is beneficial to reduce inflation pressure in which investor can reduce inflation pressure. It is proven by establishment of many investment galleries in high schools and universities by BEI to educate Gen Z to start investing, especially learning analysis methods to predict rationally which commodity that will be profitable in the future, whether fundamental analysis, by seeing financial statement, and technical analysis by

seeing price movement (chart) that is supported by indicators, such as MACD, Moving Average, CCI, etc.

However, there is a lot of investors using cognitive or emotion analysis to make investment decision. Since *Covid-19* pandemic, the growth of investment is incredibly pumping up. People see content creators or influencers who keeps living because of trading or investment. They follow those influencers and other people in huge amount start following as well in which they feel afraid of not following the trend. This condition is called as FOMO. FOMO in trading is feeling afraid of getting rich in short time (tanamduit, 2022). They don't want to miss chance of it. It is found that people investing in due to FOMO don't have strong investment strategy and analysis before making decision in which they invest after listening recommendation from friend, news, or the influencers. FOMO does lead to herding behavior which is making decision taken by majority (Ritika and Kishor, 2022). It is proven by Gupta and Shrivastava (2022) that FOMO supported by herding behavior has significant impact related to retail investor's decision. Herding behavior gives quite impact to retail investor's decision by 0.015 of Effect Size. In addition, herding behavior alongside with media and advocate recommendation also influences investment decision.

On the other hand, investors feel confident with their investment decision, even it is towards to overconfidence bias. Overconfidence bias is one of the most biases investors have (halofina, 2021). They feel they can handle the volatile capital market. Their decision does impact to commodity price. So overconfidence bias, they invest their money all in (okefinance, 2021). Even, they lend money to add their investment capital. Conversely, it is found that many of their investments do flop.

Furthermore, influenced by FOMO, many investors don't have investment plan, especially when holding commodities (ajaib, 2021). They don't know how long their investment decision. There is a lot of incidents happening when they cut loss since the commodity price they hold for just a week does decrease. In the next two weeks, their commodity price is beyond of their investment capital. They feel regret about it. Then, they don't know the limit of taking profit and cutting loss. It

is phenomenal that many investors hold undervalued commodity in which later on the price keeps going down. They also feel regret when they take profit, the price of the commodity on next week jumps up hugely. These phenomena lead to psychological bias called regret-aversion bias, which is feeling painful when they don't make good decision (Ritika and Kishor, 2022). It is found that regret-aversion bias is the second bias among five biases that influences investment decision making by 23.16% (Antony and Joseph, 2017).

After analyzing commodities, next step is making decision which commodities that would like to invest in. Rational analysis that investors have made before is the main key to be considered in investment decision making. However, according to Ritika and Kishor (2022), investors stray from being rational. They judge it based on personal beliefs, presences, or past events. When they are stuck with it, they will make decision irrationally, inconsistently, and incompetently (Ritika & Kishor, 2022). This refers to behavioral finance, focusing on psychological biases that can influence investment decision making (Ritika & Kishor, 2022).

According to Ritika and Kishor (2022), psychological biases such as herding behavior, overconfidence bias, and regret-aversion bias, impact investment decision making. They determine that investors don't make rational investment decision completely. They prefer to make decision based on prior beliefs, past experience, trend of the market, and recommendation from other. They admit that they are swayed by their emotion during making investment decision. Besides, according to Jain et al. (2022), behavioral finance, including herding behavior, overconfidence bias, and regret-aversion bias, includes in Top 5 psychological biases that affect investment decision at most. The research results that behavioral finance is a multidimensional phenomenon that can significantly affect investor's decision. In addition, in another research, it indicates that those biases also influence investment decision (Zahera & Bansal, 2018).

Gen Z is the youngest generation who is able to start investing at the moment. They have great contribution in investment in Indonesia in which it is good to push economical condition of the country. However, they are reluctance

since they haven't been fully mature yet in which they don't have stable emotion and psychology. This can lead to have wrong investment legally. It is proven by the total loss of people from illegal investment significantly increasing for the last five years that makes OJK blocks many illegal brokers. This also can lead to bad investment decision or irrational investment decision. Based on phenomena above, the author is keen to make further research regarding behavioral finance titled "**The Influence of Herding Behavior, Overconfidence Bias, and Regret-Aversion Bias on Investment Decision (Case Study on Generation Z in West Java)**".

### **1.3 Formulation of Problem**

To recall it, here these are some points of this research, herding behavior is making investment decision from other decision taken by majority of people, overconfidence bias is feeling confident too much regarding investment decision that investors make, and regret-aversion bias is feeling painful when investors don't make good investment decision

Based on research background and problem identification, the questions for it are:

1. Does herding behavior give significant influence on investment decision making of Generation Z in West Java?
2. Does overconfidence bias give significant influence on investment decision making of Generation Z in West Java?
3. Does regret-aversion bias give significant influence on investment decision making of Generation Z in West Java?
4. Do herding behavior, overconfidence bias, and regret-aversion bias simultaneously give significant influence on investment decision making of Generation Z in West Java?

### **1.4 Research Purpose**

Based on formulation of problem, the purposes of this research are:

1. To get to know how influential herding behavior is on investment decision making.

2. To get to know how influential overconfidence bias is on investment decision making.
3. To get to know how influential regret-aversion bias is on investment decision making.
4. To get to know how influential herding behavior, overconfidence bias, and regret-aversion bias are simultaneously on investment decision making.

### 1.5 Research Benefit

The research hopefully can give benefits, such as:

- **Theoretical aspect.** By this research, it can be reference of new knowledge for readers as well as reference for next researcher who will make theme-related research.
- **Practical aspect.** By this research, the regulators of investment in Indonesia such as the Indonesia Stock Exchange (BEI), the Financial Services Authority (OJK), and the Commodity Futures Trading Regulatory Agency (BAPPEBTI) can educate Generation Z further regarding investment. Not only analysis methods, but also psychological control in taking investment decision.
- **Generation Z.** By this research, Gen Z can refer this to become literacy that behavioral finance which is specifically herding behavior, overconfidence bias, and regret-aversion bias can influence investment decision. Furthermore, it is hoped that Gen Z can make wise investment decision with rational considerations.

### 1.6 Systematics of Research Writing

On this thesis, there is research writing systematics containing mainly five chapters, as following:

1. **Chapter 1 (Introduction):** This chapter has six subchapters, starting from overview of research object, research background, formulation of problem, research purpose, research benefit, and systematic of research writing.

2. **Chapter 2 (Literature Review):** This chapter determines theory of every single variable and previous research, theoretical framework, and research hypothesis (for quantitative research).
3. **Chapter 3 (Research Methodology):** This chapter consists of research characteristics, variable operationalization, population and sample, data collection, validity test and reliability test, and data analysis method.
4. **Chapter 4 (Result and Discussion):** This chapter discusses respondent characteristics, result, and discussion.
5. **Chapter 5 (Conclusion):** This chapter consists of conclusion and recommendation.