# A Conceptual Model: Generation Z Cryptocurrency Investors' Behaviors in the Era of the Covid-19 Pandemic

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# ABSTRACT

This article aims to explain the effect of overconfidence, emotion, and experience on risk perception, using SEM-PLS Method. The expected findings are a negative relationship between overconfidence on risk perception, a positive relationship between emotion on risk perception, also a positive relationship between experience on risk perception. This study explains whether the unusual behaviors of generation Z cryptocurrency investors, during the Covid-19 pandemic, have a correlation with their risk perception. Researchers hope that this research can provide investors and practitioners with an understanding to better understand individual investor interests and consumer behavior toward generation Z cryptocurrency investors in the midst of the Covid-19 pandemic.

Keywords: Cryptocurrency, Emotion, Experience, Overconfidence.

#### I. INTRODUCTION

During the Covid-19 pandemic, the Indonesian people grew interested in the importance of investing in the capital market and cryptocurrencies. This trend occurs because people are starting to become aware of the importance of having savings and emergency funds, especially during a pandemic that cannot be predicted when it will end, as reflected in PT Indo Premier Sekuritas data compiled by Kompas.com in December 2020, which recorded a two-fold increase in millennial investors. fold compared to before. This trend was also triggered by the decline in deposit rates which caused people to start looking at other investment options.

In 2019, the trading volume of world cryptocurrency assets reached US\$ 20 billion and in 2021 it has reached almost US\$ 200 billion per day as disclosed by the Head of the Commodity Futures Trading Regulatory Agency (Bappebti) to Kontan.co.id. And according to data on Tokocrypto, in 2021 the number of cryptocurrency asset investors has exceeded stock investors at two million people.

Bappebti added that high fluctuations in investment in crypto assets need to be watched out for because the risk of decreasing assets is up to 50-80%. Investors also need to choose a trusted crypto exchange provider to minimize security risks that can occur.

According to data from the Indonesia Stock Exchange (IDX) the number of Single Investor Identification (SID) in

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February 2021 reached 2,001,288 accounts and from the Financial Services Authority (OJK) data submitted to Kontan.co.id the number of investors in the capital market including mutual funds, bonds and others reached 4.51 million investors, previously in December 2020 there were still 3.88 investors. There was an increase of 16.24% and the increase continued, data from the Indonesian Central Securities Depository (KSEI) added to Bisnis.com that at the end of April 2021 the number of capital market SIDs reached 5,088,093 investors.

Demographically, KSEI noted that investors in the capital market were dominated by men at 61.37% with total assets of Rp. 567.16 trillion, while female investors were 38.63% with total assets of Rp. 206.15 trillion. In terms of age, investors aged less than 30 years dominate by 56.90% with a minimum total asset of IDR 33.23 trillion, while elderly investors (60 years) are the least number of investors with 3.74% but their assets exceed half of market assets capital of IDR 40,612 trillion. The 31-40 year old group is the second group of investors with 21.89% with assets of IDR 70.08 trillion. The third position is in the age group of 41-50 years with a percentage of 11.39% and assets of IDR 129.44 trillion while in the age group of 51-60 years there are 6.09% with assets of IDR 182 trillion.

Based on these data, it can be concluded that investors in the age range of 18-25 years have increased the most in the last 5 years. This is reinforced by the increase in cryptocurrency investors who jumped very high during the Covid-19 pandemic, especially among young investors. This phenomenon occurred coupled with the small number of job vacancies available during the pandemic, resulting in an increasingly high unemployment rate in Indonesia. There are also many cases of termination of employment in the country, with the reason being to save company organizational costs. Thus, it becomes a challenge for young people, especially those who have just graduated, to compete with more people in getting jobs.

The age group of 18-25 years belongs to generation Z. Robinson (2016) groups individuals born after 1890 into 10 generational groups, one of which is generation Z. In this generation group, the year range is determined births, namely between 1995 and 2012. There is also the term strawberry generation used by Kasali (2018) to describe generation Z who tend to be selfish, slow, don't want to be criticized, and have difficulty accepting adult advice. Part of the individual behavior of generation Z is selfish and lacks respect for the opinions of others, this generation has difficulty accepting opinions and input from other people. Generation Z is also said by Kasali (2018) to have the trait of thinking he is the most righteous and has the right to do what he wants.

Based on the data, generation Z is increasingly interested in entering the investment world, especially in the cryptocurrency market during this pandemic. An appropriate investment decision can be made if investors are rational and able to predict and project the future well. However, according to Ackert and Deaves (2009), in reality investors are not fully rational. Traditional financial science often ignores the influence of psychological factors on investors when making investment decisions. Many of the behaviors of investors cannot be explained in the context of traditional financial theory (Nofsinger, 2018). These deviant and irrational behaviors were developed in a new science, namely Behavioral Finance.

Good investment is needed by an investor when making an investment decision that is uncertain. This is very important and plays an important role related to investor behavior. Meanwhile, cryptocurrency investment is a form of investment with a very high level of risk. Valuation analysis and price trends are also not based on strong fundamentals. In the cryptocurrency market, there is no limit to the lowest price and the highest price for a coin, unlike in the stock market. This allows crypto coin prices to fluctuate greatly from time to time, and is quite difficult to predict, and carries a very high risk. Of course, in this uncertain crypto market situation, a high-risk perception is required in investing. It also requires a calm, stable, and ready emotional condition.

The nature of overconfidence or excessive selfconfidence is also a psychological factor that influences the behavior of investors in investing. In the research of Duxbury (2015) research, overconfidence can influence investors in taking risks and can cause investors to take greater risks in making investment decisions. According to Nofsinger (2018), psychologists have determined that investors who are overconfident think they have more knowledge and abilities than other people and tend to ignore investment risks.

Emotions often considered important in decision making and risk perception (Sjoberg, 2007). According to Nofsinger (2005), the feelings or emotions of an individual have an important effect on the process of making investment decisions and when the investor is facing uncertainty. It is also said that investors with positive emotional states are better able to assess situations and risks and make good decisions than investors who are experiencing negative emotions.

Experience of investors in the capital market is also included in the factors that influence investor behavior in terms of knowledge or knowledge. According to research by Chou *et al.* (2010), there are differences between investors who are more experienced in investing with those who are less experienced, where this affects the investment risk assessment of each individual.

The overconfidence of Generation Z can be related to one of the psychological factors that shape investor behavior, namely overconfidence. Generation Z, who were born in 1995 to 2012, can be categorized as still in their teens and early adulthood, namely in the age range of 8 to 25 years (Robinson, 2016). In this age range, a person is not yet fully mature and unable to control his emotions, so emotions in this generation are not stable enough. Emotional instability in generation Z can affect the risk perception and investment decisions of an investor.

The investment experience of generation Z is certainly not as much as that of previous generations, such as generation X or Y, due to their relatively young age. Even though the growth in the number of investors in this age range has the highest percentage, experience or experience that is still small can influence the size of the perception of investment risk in decision making. In addition, in this age range, most individuals do not have long-term investment plans because most are still at the educational level or are still new workers.

Seeing the phenomena in the Indonesian cryptocurrency market and the interrelated psychological factors above, the author will conduct research on Overconfidence, Emotion, and Experience on Risk Perception in Generation Z Cryptocurrency investors in the Covid-19 Pandemic Era.

# II. LITERATURE REVIEW

### A. Overconfidence

Overconfidence is an attitude that evaluates one's own abilities more than actual abilities. According to Ackert and Deaver (2009), actually, there is no overconfidence, but there is an error in self-perception which results in an error in self-confidence.

# B. Emotions

According to Goleman (1997), emotion is a unique feeling and thought, as well as a biological and psychological state and a series of tendencies to act.

# C. Experience

Experience is a personal event that occurs because of a certain stimulus (Duxburry, 2015). Experience also is a learning that can influence changes in one's behavior.

Greenstein and Schiffman *et al.* (2015) stated that consumers will only make decisions when the level of consumer confidence is higher than the perceived risk. The high risk perceived by consumers can cause a crisis of consumer confidence thereby reducing their purchasing decisions online.

#### E. Generation Z

According to Chou (2012), generation Z or digital generation is a young generation that grows and develops with a great dependence on digital technology. Santosa (2015) mentions several indicators of children belonging to Generation Z, including having an ambitious character, tending to like practical things, liking freedom and high self-confidence (overconfident), thinking critically and detailing, concerned with self-existence (recognition), and proficient with technology.

#### **III. FRAMEWORK AND HYPOTHESIS**

In the research of Chu *et al.* (2012), showed a relationship between overconfidence and disposition effects. This relationship is explained by the feelings of pride and shame that accompany the return on investment. The research shows that overconfident investors have greater feelings of pride (shame) when they are successful (unsuccessful). The research results of Chu *et al.* (2012) proved that overconfidence is negatively related to perceived risk, because individuals with high self-esteem tend to make high judgments and predictions about themselves and take risks by making commitments that exceed their abilities.

H1: Overconfidence has a negative effect on risk perception in generation Z cryptocurrency investors in the Covid-19 pandemic era.

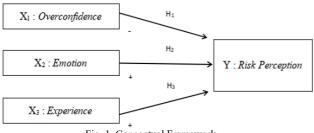


Fig. 1. Conceptual Framework.

According to Moued and Hunjra (2020), emotions in the form of anger, fear, and positive mood can have a positive influence on risk perception. However, the emotional form of stress actually has a negative influence. Additionally, Duxbury (2015), found that the degree of fear experienced in the face of a risky choice (as captured by facial expressions) correlates with the degree of risk-averse behavior in subsequent choices.

# H2: Emotion has a positive effect on risk perception in generation Z cryptocurrency investors in the Covid-19 pandemic era.

An investor who has more experience will have a lower risk perception than a novice investor or one who doesn't have much investment experience. According to Andrei (2019), level of experience, education, information media sources influence investors in seeing the risks to be taken. Based on research belonging to Rana (2019), experience, investment knowledge, and education which are included in investor behavior, have a positive influence on risk perception. Where experience, investment knowledge, and education are considered guidelines for investors in investing in stocks and making decisions.

# H3: Experience has a positive effect on risk perception among generation Z cryptocurrency investors during the Covid-19 pandemic

# IV. METHODS

According to Sekaran (2016), population refers to all groups of people, events, or interesting things that researchers want to investigate. The population of this study is the Z generation itself. The sample is part of the population consisting of several selected members (Sekaran, 2016). The sample for this research is generation Z cryptocurrency investors. Sampling in this study uses stratified sampling, with criteria aged between 18-25 years who enter the Z generation and have coin products in the cryptocurrency market.

The type of data in this study is primary data. The primary data in this study were the results of a questionnaire that had been filled in by Generation Z cryptocurrency investors. The procedure for compiling this research questionnaire was that first the questionnaire materials were taken from the main journals and the research reference journals, which were then translated first, then evaluated and rearranged based on the condition of the object. to be researched. The survey in this study was conducted using the media google form and distributed via social media Line, Instagram, Facebook and Whatsapp.

The scale used in this study is the Likert scale. According to Sekaran (2016), the Likert scale is designed to check how strongly the subject agrees or disagrees with the statements on a five-point scale presented to respondents. The 5-point Likert scale consists of: Strongly Disagree (STS), Disagree (TS), Neutral (N), Agree (S), and Strongly Agree (SS).

This study will use the Structural Equation Modeling (SEM) - Partial Least Squares (PLS) analysis model with the SmartPLS. The PLS method uses the outer model and inner model stages in its processing. Outer model design is needed to measure indicators and paths that connect them with latent variables. The criteria or indicators in the outer model are convergent validity, discriminant validity, and composite reliability.

Structural model (inner model) is made based on the research hypothesis that links between research latent variables. The criteria or indicators in the inner model are the coefficient of determination ( $\mathbb{R}^2$ ) and the path coefficient. Hypothesis testing is done by comparing the significance probability value with the alpha (a) value in the predetermined path coefficient results. The alpha value (a) used in this study is 5% with a t-statistic value of 1.96. If the significance probability value is  $\leq$  5% or the t-statistic value is > 1.96, then Ha is supported.

# V. CONCLUSIONS

Theoretical and practical implications are based on this study as a consideration for future research. If you look at the conceptual model in this study, it provides an alternative model that is slightly different from previous studies where there are no other variables such as emotion and experience that affect risk perception, especially in generation Z cryptocurrency investors.

In addition, in the future, it is hoped that the conceptual model in this study can contribute as a reference and consideration to help financial practitioners and investors better understand factors beyond predictions, such as the Covid-19 pandemic, and better understand the behavior of generation Z cryptocurrency investors in relation to company finances.

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