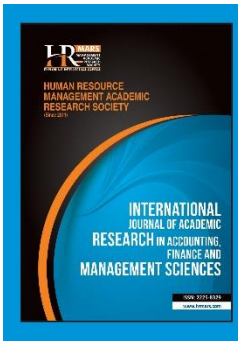

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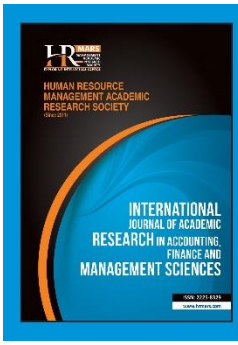
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Determinants of Investment Decision-Making During The Covid-19 Pandemic

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Abstract

The rapid and overwhelming impact of the coronavirus pandemic and containment measures have triggered a severe world economic crisis. Malaysia is not completely devoid of this pandemic, especially as one of the countries that relies greatly on international trade, tourism, exports of raw materials, and external funding. A severe collapse like this has made practically the entire population reluctant to invest, not to mention that many investments have been subdued. The Prospect Theory, Behavioral Finance, and Rational Expectation theories are referred to as underlying theories of this study. In light of such occurrence, this study aimed to investigate the factors (anxiety of market volatility, risk perception, vaccination status, and herding behaviour) that influence the decision making of investors regarding their investments during the COVID-19 pandemic. Structured questionnaires were distributed among investors in Klang Valley through social media and investors WhatsApp group. This study managed to collect 117 responses after three weeks of questionnaire distribution and Partial Least Square Structural Equation Modeling (PLS SEM) version 4 was utilised to analyse the data. The result of the research show that anxiety and herding have significant influence on investors' decision making to invest during COVID-19. On the other hand, both risk perception and vaccination status are insignificant influence on the decision-making of investment amidst the pandemic. This research study is limited to individual investors as it does not include institutional and professional investors. A number of recommendations are made based on the study to help the general public understand the advantages and disadvantages of investing during a recession, such as providing more information on investment during pandemic by expertise to the individual investors, and the partnership of company stakeholders with health government in giving assurance that the vaccination helps the economy and investment portfolio of their companies.

Keywords: Investment, Pandemic, Prospect Theory, Market Volatility, Risk

Introduction

While the world is yet ignorant of the severity and scale of the catastrophe, the rapid emergence of a new coronavirus pandemic known as COVID-19 has posed a historic and

serious threat to human health and socioeconomic stability worldwide (CRS, 2020). The majority of countries' stock markets and exchange rates had adverse effects from the COVID-19 spread, the implementation of movement restriction measures, and the general economic unpredictability (Contessi, 2020). The stock markets in Thailand, Indonesia, Vietnam, and Philippine reportedly lost close to a quarter of their value, according to the (ASEAN Policy Brief, 2020). From end of January to the end of March, the Vietnam stock index fell by 29.3 %, while the Malaysia index fell by 11.8 % during the same period.

The main stock exchange in Malaysia is a home to 789 businesses in total, according to the (Bursa Malaysia website, 2020). These companies represent all of the sectors that contribute to the country's gross domestic product (GDP). The most frequently traded financial instruments on the Malaysian stock exchange are bonds, derivatives, and securities (Bursa Malaysia, 2020). According to the Bursa Malaysia and Yahoo Finance websites, the outcome of the Malaysian stock market during the propagation of COVID-19 has reportedly entered a chaotic stage and is on a downward trend. The recent gradual decline observed on the Malaysian stock market may be the result of significant financial losses for listed firms that traded in the market's shares. Gamal et al (2021) state that the Malaysian economy's continuous strict control of isolation, which preceded the lockdown policy, produced uncertainty across all sectors and caused the capitalists in the country's banking institutions and industrial sectors to suffer. The current economic effects of COVID-19 on the size of the Malaysian stock market, however, cannot be reversed any time soon. This is because COVID-19 is still operational. Similar to how other markets behave, the behaviour of the Malaysian stock market is influenced by the shifts in market volatility, the difference between ask and bid prices, and the expected pattern of pandemic outbreaks (Al-Awadhi et al., 2020). While trying to understand how the Malaysian stock market operates, volatility and spread are not the only things that may be considered. In fact, stock markets' reaction to sudden changes in the external or internal environment affects the investing climate in a way that is comparable to how investors react to natural disasters in the affected countries (Wang & Kutan, 2013).

Bank Negara Malaysia (BNM) has participated in government stimulus measures designed to restore liquidity and credit flows in order to stimulate the economy. Since 2020, the Overnight Policy Rate (OPR) has been decreased by 25 basis points to 1.75 percent by the BNM's Monetary Policy Committee (MPC) (BNM, 2020-2021). The performance of stock market indices may be impacted by the reduced adjustment to the OPR. Regarding personal investing, there is a social issue (Haws, 2021). Due to the economic effects of Covid-19, most Malaysians are unable to save as much as they used to, and more than one in five Malaysians are considering taking advantage of the loan moratorium, it took a global epidemic for us to address our bad financial habits (RinggitPlus et al., 2021). Yarovaya et al (2020) claim that investors herd together when they experience a generalised financial panic and have comparable anxieties. Extremely high herding levels were seen at the beginning of 2019, and they gradually decreased from April through May before rising once more in July. Herding was not seen from November 6 to December 8, 2019, after which it reappeared and continued to be seen until the end of the analysis period. After the middle of February 2020, there was an average decline in herding levels (Yarovaya et al., 2020). Additionally, several approaches to COVID-19 have been taken by governments all across the world. Some are requiring greater preventive measures, such as social seclusion and immunizations, according to (Freedman, 2022). As for Hainlin (2022), he claims that because it seems that the genetic heterogeneity of variants raises real concerns about when the economy will return to normal, investors may be anxious to see it reach a "steady state".

The purpose of this study was

i. to investigate how anxiety in share market volatility, risk perception, vaccination status, and herding behaviour affect Malaysian investors' choice of investments during the COVID-19 pandemic.

The rest of this paper is organised as follows: literature review and proposed hypotheses, research methodology, results and findings, and lastly, discussion and conclusion of the study.

Literature Review

Investment Decision Making

The idea of decision-making was first introduced more than 50 years ago, and the administration department almost certainly cannot avoid the process. For decision-making matters, according to Dean (1996), the strategic context positively correlates to decision efficacy. A country's financial position is represented by the number of investors. As a result, if the prediction for the currency is steady, the country's economic situation is likely to be good, and vice versa. Local product development and most businesses' profits increase in tandem with an expanding economy. Stock markets will, however, deteriorate as a gauge of the health of the economy if the economy enters a specific condition circumstance, such as COVID19. Investment choices in the stock market are regularly scrutinised due to the stock market's significant influence on economic conditions. Due to their illogical behaviour, investors may occasionally make decisions without considering their personal knowledge, which could have an impact on some investment returns. The behaviour of investors in response to market conditions is not significantly influenced by investment decisions, claimed (Arup et al., 2017). After looking into the matter, this conclusion was made. The results of the study done by Ngoc (2014) run directly counter to his assertion that "the market condition plays a key influence in the investment decision." The main objective of the investors is to make a profit off of the funds they have invested. They do not give fear avoidance techniques much thought since they believe that taking a risk would result in greater financial gain. Annual income and reserve funds have an impact on the financial specialists' dynamics (Banerjee & Masulis, 2012). However, in contrast to other high-risk situations, the COVID-19 circumstance is distinct.

The Prospect theory, which was created by Kahneman and Tversky in 1979, focuses on the idea that investors build and select their portfolios based on risk. If they favour products with a defined risk profile and a predetermined predicted return, the study advises investors to reduce the risk (Zhang et al., 2021). Prospect theory, which explains the inverse relationship between risk and return, is focused on the behaviour and traits of risk-averse investors. The second hypothesis, behavioural finance, claims that psychological elements, such as mood, emotion, and cognitive biases have an impact on how investors make financial decisions (Putri et al., 2020). For instance, emotions have a significant impact on investors' financial behaviour (Lucey & Dowling, 2005). According to a study on financial behaviour, markets and investors are not entirely rational, and speculation and cognitive biases can manipulate investors (Danepo, 2018). This study examined how the COVID-19 pandemic has affected some of the more prevalent cognitive biases, including herd mentality and risk perception, as well as the implications for financial decision-making. Finally, a branch of macroeconomics known as rational expectations holds that people make decisions by considering the importance of long-term trends and the best information that is now available (Delcey & Sergi, 2019).

Rational expectations state that although people occasionally make bad choices, they typically do so. According to this hypothesis, people who have realistic expectations always learn from their mistakes. It also examined whether such expectations outweigh a news frenzy that would have caused investors to become anxious. Investors, especially individual investors, may rely on news even though it may be biased and uncomplete to make decisions (Talwar et al., 2021). However, investors encounter the negative bias when they use the news as their main source of information when making investment decisions (Engelhardt et al., 2020). Psychological studies have shown that people are more interested in negative information (Ostic et al., 2021). According to Shang et al (2021), repeated media coverage in the context of the economy causes the public to form illogical expectations rather than positive ones. This study demonstrates a link between market volatility and vaccination status as the foundation for investors' investing decisions by referring to this idea.

Anxiety in Share Market Volatility and Investment Decision Making

Investors, financial analysts, and policymakers forecast and analyse financial time models to ensure rational investment decision-making (Abdalla & Suliman, 2012). Since it refers to a financial market's variability and serves as an indicator of financial risk, market volatility is a crucial concept in time series evaluation and modelling (Abdalla & Winker, 2012). As a result, volatility has a big impact on risk management, derivatives pricing, and portfolio selection (Yong et al., 2021). According to Yong (2021), the Malaysian market volatility decreased prior to the pandemic but remained stable afterward and had recovered.

A study on the effects of COVID-19 on stock prices and how COVID-induced anxiety influenced European stock markets in terms of market returns was conducted by Sun et al. in 2022. It has been demonstrated that people behave more aggressively and are more likely to look for explanations when they are terrified. According to the report, people's financial portfolios are becoming more diversified due to their fear of communicable diseases. Taylor et al (2020), who detailed how COVID-19 causes people's stress levels to rise, provided support for this research. The study produced a COVID-19 Stress Syndrome (CSS), which was used to find those who are most likely to engage in safety-related behaviours. Wagner (2020) contends that notwithstanding opportunities, investors should steer clear of situations that are inherently dangerous. Later, Kiruba et al (2021) studied the actions of investors, including a sizable number of Indian stock market participants during COVID-19. The results show that investors' worries about market volatility and their fear of COVID-19 have a big impact on their choices. Thus, the hypothesis was:

H1: There is a significant influence between anxiety in share market volatility and investment decision making.

Risk Perception and Investment Decision Making

The views and behaviours of people about investment are significantly impacted by the economic effects of COVID-19. Investment choices have been impacted as a result of people adjusting to the new environment. The concept of risk perception explains how various ideas and realities are seen as risks (Nadya et al., 2019). Particularly when it comes to making financial decisions in an uncertain environment, risk perception has a significant role in shaping household behaviour. According to Nadya et al (2019), a person's risk perception is how they evaluate dangers that do not match up with their expectations or presumptions and what actually happens. Since perception is the first stage of the risk response, it has a

substantial impact on the risks inherent in any investing tool related to how people behave, while making decisions. When someone is aware that there is a risk to an asset, they will automatically assess or think about the magnitude of the risk. This hypothesis that risk perception has a negative impact on investment decision-making is supported by the findings of the study by Nadya et al. (2019). This research also suggests that people tend to avoid investing in risky assets like stocks and bonds and opt to put their money instead into low-risk ones like savings accounts and certificates of deposit (CDs). A person would rather spend money in higher risk assets, such as real estate and gold investments, if they think an asset that is actually high risk has a lower risk.

Iqbal et al (2022) claim that as COVID-19 cases increase in the area, people begin to perceive the pandemic as a more tangible event. As a result, they process and analyse investment plans more carefully, which causes them to associate risks with minimal means, implying a higher risk tolerance and involving more risk in their investment decision. The COVID-19 pandemic, on the other hand, may be perceived as a terrifying event that occurs far away if there are fewer cases in the area. This interpretation could lead to the classification of risks as high-level means, implying that less thought goes into investment decisions and that there are fewer changes in risk tolerance.

An investor makes stock market investments in the aim of making money. These incentives include dividends and capital gains. An investor must be able to choose which instrument to buy in order to achieve his goals. Being able to live independently and worry-free is a wish that many individuals have. There are many methods to do this, one of which is through investment. Many people choose not to invest, though. Poor instrument selection, a lack of knowledge of the investment product, engaging in group activities with friends, and inaccurate risk assessment can all contribute to this (Natsir et al., 2021). Each investor views risk differently; some are accepting, neutral, or ambivalent. The results of the study by Natsir et al. (2021) demonstrate that perceived risk has an impact on investing decisions. Thus, the hypothesis was:

H2: There is a significant influence between risk perception and investment decision making.

Vaccination Status and Investment Decision Making

It is not surprising that the majority of attention has switched to the use of vaccination to combat the virus given that COVID-19 has dominated the news. Economic challenges brought on by COVID-19 include a brief but severe downturn. Even while the economy has now reclaimed much of its lost ground, it is still thought to be far from normal. Investor sentiment seemed to improve in the latter months of 2020 as a result of the incredibly swift development and approval of vaccine, which is considered as a positive sign for the long-term health of the economy (US Bank, 2021).

The infrastructure for running the program, upkeep of the cold chain, and personnel for administration and healthcare are all included in the direct costs of a vaccination program. Governments are occasionally able to purchase vaccines with the aid of charities and non-governmental groups in an effort to improve public health. Effective immunisation programs will reduce morbidity and death rates, which will slash infection rates, treatment costs, and healthcare costs. A healthy population contributes to and improves an economy, and economic growth makes investments in health improvement possible (Rodrigues & Plotkin, 2020). This is a two-way interaction between health and the economy. Investors' decisions

about the stock market are, therefore, influenced by their concern over the COVID-19 immunisation news. Thus, the hypothesis was:

H3: There is a significant influence between vaccination status and investment decision making.

Herding Behaviour and Investment Decision Making

The herding theory, which describes imitating other stock market participants' actions, is the outcome of the growth of behavioural finance theories. Investors' investment decisions have been investigated in order to understand herding behaviour. The financial markets are significantly impacted by investors' propensity to mimic or duplicate the actions of other investors (Hayes, 2022). Herding behaviour theory states that investors who tend to go along with the crowd would overlook their own private information, causing prices to deviate from their intrinsic value. This could cause market volatility (Balcilar et al., 2013).

The state of the financial markets changes over time. A market that is considered to be bullish gives a high rate of return. Conversely, poor rates of return are connected to bearish markets. This suggests that investor behaviour may vary depending on the state of the market, and further research is necessary. Additionally, investor herding behaviour changes in an up-and-down market, and the relationship between herding behaviour and market (portfolio) return is no longer linear (Chang et al., 2000). This study is concerned with investors' non-linear herding tendency.

One of the behavioural trends in the financial markets that can be seen across almost all asset classes is herding behaviour. As a result, it has been the subject of extensive research. The influence of herding behaviour on the financial crisis of the 1990s was very noticeable. In their research, Devenow and Welch (1996) establish the evolution of herding behaviour. They found that imitating other investors makes investors feel safer. Investors, however, are focused on their personal and sensitive information on their investment plan decisions while the market is up or down, and they rely on market information provided by others. As a result, herding will happen more frequently when the market is unstable. Therefore, investor herding behaviour would cause market instability by changing securities prices far from their underlying values.

It is important to note a few recent noteworthy developments in the research of herding behaviour. Omay and Iren (2019) look at how international investors behaved in Malaysia throughout the current financial crisis. The authors examined herding behaviour using the smooth-transition autoregressive and generalised impulse response functions and concluded that herding behaviour exists among foreign investors in Malaysia during a time of crisis. Furthermore, they contend that foreign investors react to crises quicker than local investors. Regime-dependent and dynamic models of researching herding behaviour are becoming more and more common in recent empirical studies on the subject. Ah Mand et al (2021) investigated Malaysian investors' regime-dependent herding behaviour. They discovered that Malaysian herding behaviour is a highly regime-dependent, nonlinear phenomenon using a two-state Markov Switching model. Additionally, Kumar et al (2020) explored investor herding behaviour by differentiating it in connection to various market conditions and identify the existence of herding tendency among investors in the Asia-Pacific region.

Herding is a decision-making process based on firsthand observation of other members of the public and results from human relationships (Adiputra et al., 2020). Adiputra et al (2020) assert that the herding effect may lead stock prices to diverge from their intrinsic

value, which may alter the perspective of asset pricing theory as well as the components of the return and risk model. As a result, it might have an impact on how investors choose to invest. The existence of herding poses an additional danger to investors. Therefore, the hypothesis was:

H4: There is a significant influence between herding behaviour and investment decision making.

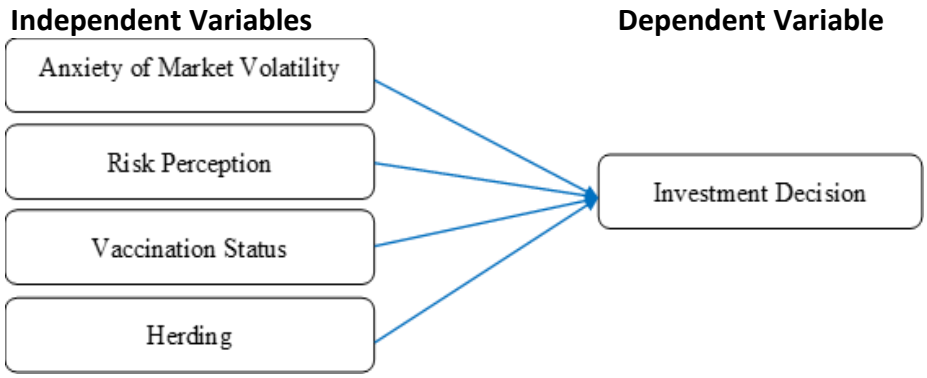

Figure 1: Theoretical Framework

Research Methodology

This study used a cross-sectional sample survey to acquire the data since the investors in Klang Valley, Malaysia who participated in the study must be at least 21 years old. Cooper (2019) states that the way the research topic is defined serves as a basic guideline for establishing the unit analysis. The unit of analysis is at the person level because the current research question explicitly refers to the investigation of the investor's choice to invest in stocks. Purposive sampling, another technique used for data collecting, selects respondents for the survey in advance using predetermined criteria. Scholars advise using this strategy, particularly when the probability sampling method is unreliable. If the respondents are picked based on particular criteria before the survey, this strategy can produce a sample size that is representative of the population (Sarstedt et al., 2018). Additionally, this strategy has been acknowledged as one that successfully targets those with in-depth understanding of the research objective (Cochran, 2007). The data collection period for this study was from May to June 2022.

As suggested by Hair et al (2014), the G*power tool, which can be accessible online, was used in the current investigation to calculate the sample size. Therefore, using the G*Power analysis with a 0.15 effect size, 0.05 alpha value (95% confidence), and 0.20 beta value (80% to avoid mistake), the minimum sample size needed for this study, as determined by the G*Power, was at least 85 respondents, as shown in Figure 2. Out of the 200 qualified respondents for this survey, only 117 investors answered the questionnaire. This sample size reflects a 58.5 % response rate, which Sekaran and Bougie (2010) deem acceptable. The current researchers have benefited from the quick development of technology by utilising an innovative data collection method, an online survey, that hastens the collection of the data. Data collecting methods, such as electronic and online surveys allow participants to read and reply to questionnaires they receive via email without the assistance of a trained interviewer (Cooper, 2019).

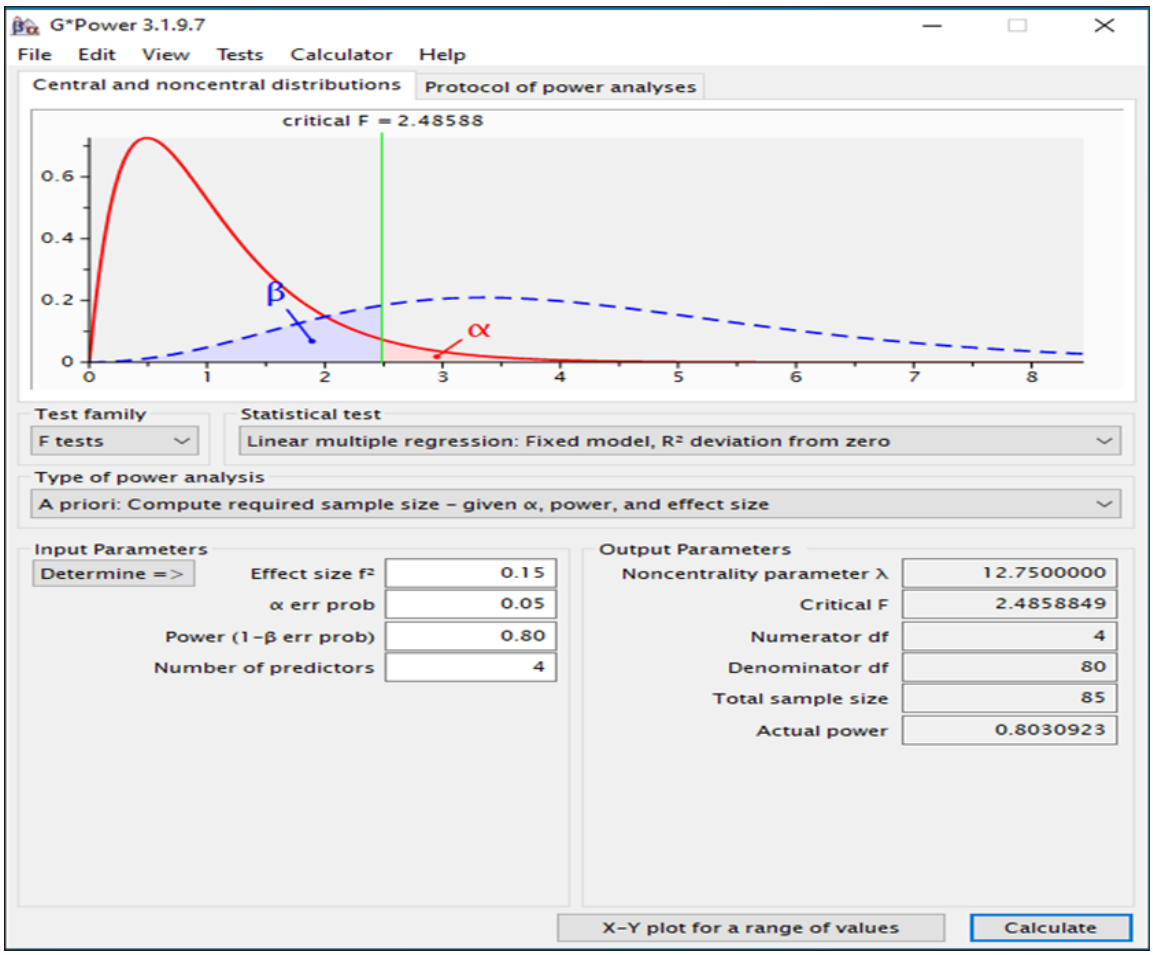

Figure 2: G-Power Analysis

The questionnaire was adapted from previous studies and a total of 29 questions are included in the set of questionnaires. The number of questions for each variable constituting the structure of the questionnaire is presented in Table 1.

Table 1
Number of Items in the Questionnaire

PART	Variables	Dimensions	No of items
Section A	Demographic Profile	Gender, Age, Education Level, Monthly Income Level	4
Section B	Dependent Variable	Investment Decision Making	5
Section C	Independent Variables	Anxiety	5
		Risk Perception	5
		Vaccination	5
		Herding Behaviour	5

Based on the rules and process recommended by Hair et al. (2014), the Smart-PLS version 4 was used in the current study to analyse the data. Two interconnected models—the measurement model and the structural model—were used to assess the outcomes of the PLS-Path model. The outcomes of the PLS-Path model were assessed using the measurement

model. The measurement model examined and evaluated the validity and reliability of the measurement items before moving on to reliability. The structural model was assessed next to determine the connection between the latent variables proposed in the conceptual model under consideration.

A component of the model looks at the connection between latent variables and their measure is the measurement model. The evaluation of the internal consistency of the item measurement serves as the starting point for the measurement model assessment. This part, therefore, describes the outcome of the measurement model for the current investigation using the PLS-SEM analysis. The evaluation of the measurement model was carried out using the procedures suggested by Hair et al. (2014) and Ramayah et al. (2018).

Result and Finding

In spite of the fact that 200 questionnaires were distributed, only 117 responders (that is 78.8 percent) handed them back in a usable condition. The ages of the people who responded to the survey ranged from 21 to 60 years old, as shown in Table 2. The survey was completed by over 52.1 % male respondents, but only 47.9 % responded from the female gender. There was a total of 55.6 % of the respondents who had earned bachelor's degrees, 24.8 % had earned master's degrees, 13.7 % had earned undergraduate certificates, and 6.0 % had earned secondary school certificates. The investors' income ranged from RM 5,001 to RM 10,000, with 29.9 % of investors having earnings in this range, 25.6 % earn between RM1,000 and RM 3,000, while 24.8 % earn between RM 3,001 and RM 5,000. Another 7.7 % of the respondents earn less than RM 1,000, compared to 12 % who earn more than RM 10,000.

Table 2
Respondents' Profile

		Frequency	Percentage (%)
Gender	Male	61	52.1
	Female	56	47.9
Age	21-30	44	37.6
	31-40	42	35.9
	41-50	22	18.8
	Above 50	9	7.7
Education	Secondary	7	6.0
	Diploma	16	13.7
	Bachelor Degree	65	55.6
	Master's Degree	29	24.8
Monthly Income	Less R M1,000	9	7.7
	RM 1,001 - RM 3,000	30	25.6
	RM 3,001 - RM 5,000	29	24.8
	RM 5,001 - RM 10,000	35	29.9
	Above RM 10,000	14	12.0

Partial Least Square – Structural Equation Modeling (Measurement Model)

This study employed the composite reliability (CR) in assessing the internal consistency reliability. This is because the CR has the capability to measure the reliability of indicators

differently, which follows the PLS-SEM algorithm that focuses on individual indicator reliability (Hair et al., 2014).

The items in the construct are considered to have adequate internal consistency reliability if the CR value for each construct is at least 0.70 (Hair et al., 2014; Henseler et al., 2009; Ramayah et al., 2018). Based on Table 3, the values of composite reliability for all the constructs are between 0.745 and 0.934, exceeding the satisfactory threshold value of 0.7, which fulfils the internal consistency reliability.

The purpose of the indicator reliability assessment is to measure the consistency of each latent construct in measuring what it intends to measure (Urbach & Ahlemann, 2010). Furthermore, Hair et al. (2017) argue that a loading value of 0.708 or greater indicates that the latent variable is able to explain 50 percent of the indicator variance. However, the elimination of loading values below 0.708 can only be done if the omission can increase the composite reliability of the AVE. Thus, the decision to eliminate any indicator is carefully concluded based on the condition that the deletion of each lower loading will increase the AVE and CR (Henseler et al., 2009).

Convergent validity indicates the degree of individual indicators that reflect the constructs in comparison to indicators measuring other constructs (Urbach & Ahlemann, 2010). According to Hair et al (2014), convergent validity can be measured via the AVE value. AVE is the grand value of squared loading of all the indicators associated with the construct (Ramayah et al., 2018). In short, it represents the percentage of latent construct that explains the variance of its indicators (Hair et al., 2014). The convergent validity is considered adequate if each construct obtains an AVE value of at least 0.50 or higher (AVE ≥ 0.50) (Fornell & Larcker, 1981; Hair et al., 2014). Based on Table 3, the AVE values for all the constructs have achieved the threshold value of 0.50, i.e., ranging between 0.500 and 0.739. The results demonstrate the standard as suggested by Fornell and Larcker (1981) and the achievement of the AVE value of convergent validity as proposed by (Hair et al., 2014).

Table 3
Discriminant Validity

ITEMS	**Loading**	**CR**	**AVE**
Anxiety (ANX)		0.827	0.615
ANX1	0.714		
ANX2	0.868		
ANX5	0.763		
Risk Perception (RISK)		0.897	0.687
RISK2	0.872		
RISK3	0.917		
RISK4	0.720		
RISK5	0.793		
Herding (HERD)		0.934	0.739
HERD1	0.844		
HERD2	0.844		
HERD3	0.901		
HERD4	0.865		
HERD5	0.843		
Vaccination (VAX)		0.887	0.664

VAX1	0.813		
VAX2	0.866		
VAX3	0.866		
VAX5	0.703		
Investment Decision (DC)		0.745	0.500
DC3	0.748		
DC4	0.658		
DC5	0.701		

Note: ANX3, ANX4, RISK1, VAX4, DC1 and DC2 were deleted due to low loading.

The analysis of discriminant validity is important to ensure that the constructs under investigation are not only purely distinct from one another (Ramayah et al., 2018), but also that the indicators have strongly measured the construct that they are supposed to measure (Vinzi et al., 2010). The current study followed the proposal of Henseler et al (2009) by employing the method of HTMT for determining the discriminant validity. The value of HTMT obtained should not exceed 0.85 when assessing multicollinearity in data (Kline, 1994). This result suggests that each of the constructs under investigation does not only have a good degree in representing the constructs but is also appropriate for structural analysis (Hair et al., 2017).

Table 4
Heterotrait Monotrait (HTMT)

	ANXIETY	DECISION	HERDING	RISK	VACCINE
ANXIETY					
DECISION	0.480				
HERDING	0.237	0.491			
RISK	0.135	0.288	0.173		
VACCINE	0.367	0.494	0.587	0.370	

The reliability and validity tests, which include the indicator reliability, internal consistency, convergent validity, and discriminant validity were conducted as the reflective measurement model assessments for this study. Overall, the results acquired in all the tests are satisfactory. In particular, the indicator loadings for the indicator reliability test and internal consistency obtained a value of more than 0.708 with the AVE for convergent validity tests achieving more than 0.50. In the discriminant validity test, the values acquired in HTMT ratio are satisfactory (at below 0.85) to establish the discriminant validity in the reflective measurement model.

Partial Least Square – Structural Equation Modeling (Structural Model)

Based on Figure 3, the R^2 value for investment decision making as an endogenous construct is 0.195, which is considered moderate according to (Hair et al., 2014). This value indicates 19.5 percent of the variance in investment decision making can be explained by anxiety, risk perception, vaccination, and herding.

Figure 3: Research Model

Table 5 summarizes the hypothesis testing results and illustrates the routes for each hypothesis in terms of their coefficients, observed t-statistics, and significance levels. According to previous research (Hair et al., 2014; Henseler et al., 2009), the appropriate t-values for a one-tailed test is 1.645 (5 percent significance level at $p < 0.05$). The findings of the study indicate that two of the four hypotheses evaluated strongly connected with the endogenous variable. In terms of investment decision making (DC) as an endogenous variable, anxiety (ANX) ($\beta = 0.203$, $t = 1.706$, $p < 0.05$) and herding behaviour (HERD) ($\beta = 0.260$, $t = 2.197$, $p < 0.05$) exhibit positive and statistically significant correlations. Consequently, H1 (Anxiety has a significant positive influence on investment decision making) and H4 (Herding behaviour has a significant positive influence on investment decision making) are supported. The findings of anxiety in market volatility (Sun et al., 2022; Kiruba et al., 2021; Wagner, 2020) and herding behaviour (Ah Mand et al., 2021; Adiputra, 2020; Kumar et al., 2020) corroborate those of prior investigations. It was found that the investors are worried that the value of funds invested will reduce during the pandemic. The investors also have to secure their savings for virus treatment instead of investing in market shares. Based on the research, it was found that fear of contagious diseases is causing people to diversify their investment portfolios. This research was supported by Taylor et al. (2020), who explain the elevation of people's stress level due to COVID-19. The research reveals a COVID-19 Stress Syndrome (CSS), which was used as a tool to identify those individuals most inclined to adopt safety-related behaviours. Another factor that influences an investment decision is when investors prefer to get opinions and follow the investment strategies from other investors during the pandemic situation. Herding behaviour has been studied to explain the investment decisions of investors. Therefore, the willingness of investors to imitate or replicate the behaviour of other investors has major implications for the financial markets (Hayes, 2022). However, risk

perception (RISK) (β = 0.016, t = 0.115, non-significant) and vaccination status (VAX) (β = 0.126, t = 0.970, non-significant) have no discernible effect on the investment decision making. As a result, H2 (RISK has a significant positive influence on DC) and H3 (VAX has a significant positive influence on DC) are not supported.

Table 5
Path Coefficient and Hypothesis Testing

Hypothesis	Beta	T-Stat	P Values	CI LL	CI UL	VIF	Decision
H1: ANX --> DC	0.203	1.706	0.044	0.008	0.409	1.121	Supported
H2: RISK --> DC	0.016	0.115	0.454	-0.217	0.230	1.139	Not Supported
H3: VAX --> DC	0.126	0.970	0.166	-0.046	0.381	1.587	Not Supported
H4: HERD --> DC	0.260	2.197	0.014	0.037	0.439	1.387	Supported

Furthermore, the collinearity issues can be addressed by evaluating the VIF values. According to Diamontopolous (2006), a VIF value of 3.3 or higher indicates the possibilities of the construct to expose any collinearity problems. Based on Table 5, the value of VIF for each exogenous construct is between 1.121 to 1.587, thus, indicating that the exogenous constructs in the present study are free from collinearity issues.

Discussion and Conclusion

The stock market investor behaviour in the Klang Valley is typical of a sizable sample of investors. The reliability test shows that the variables used for the study were suitable. The findings of Sadiq et al (2021), who conclude that COVID-19 worry is the ultimate driver of the public's attention towards stock market volatility, are in direct conflict with the average level of anxiety associated to market volatility. The findings of the study suggest that anxiety has little impact on financial choices. Iqbal et al (2022) discovered that risk perception had an intentionally low impact on investment choices. Every risk-taking investor during COVID-19 thought about their financial and personal situations before choosing an investment. The conclusion of this study supports the outcomes. The vaccination updates, on the other hand, have no bearing on how investors make decisions, which leads to unfavourable results. This study supports the claim made by Herlina et al (2022), according to which ASEAN's return stock is negatively impacted by vaccine development. Chelangat Naomi et al (2018) argue that herding behaviour is not a significant factor in influencing investment decision-making, which is at odds with the findings of this study. Herding and risk perception have a significant impact on investing decision-making, according to the general study that examined the impact of psychological behaviour. Updates on vaccines and worries about market volatility have not significantly affected investment choices during COVID-19. The elements of Investors' cascade style sheet were created based on prior research by Kiruba and Vasantha (2021). The following four criteria were considered when assessing investors' choices during the Omicron variant COVID-19 outbreak: Worry over market volatility, aversion to risk, investing based on vaccination updates, and imitating other investors' stock purchases.

The aim of this study was to identify factors influencing investors' investment choices during the COVID-19 growth period. It is anticipated that further data will be needed to investigate the psychological behaviour of international investors once this pandemic has passed. The outcomes of the multiple regression analysis show how herding and risk

perception have an impact on COVID-19 investment choices. The findings also indicate that fears about market volatility and vaccine updates have minimal impact on investor behaviour. The findings of this study suggest investing during pandemic scenarios for individual investors. Investors are advised to evaluate the state of the shares market before making any investments. The results of the regression analysis show that COVID-19 updates and news have an impact on investing choices, and as such it is wise to take appropriate action.

Contribution

The study has significant research and practice-related ramifications. Three theories each contribute an element to this investigation. According to the first theory of rational expectation, people make decisions based on the most accurate information that is currently available and the importance of long-term trends. This study establishes a relationship between market volatility and vaccination status as the foundation for investors' investment decisions by referring to the idea of this theory. According to the second theory, behavioural finance, investors' investing decisions are influenced by psychological elements like emotions, mood, and cognitive biases. In accordance with the second idea, investors examine how the COVID-19 epidemic affects some of the more prevalent cognitive biases, including as herding and risk perception, and the resulting implications on investing decision-making. Last but not least, the prospect theory, which describes the inverse relationship between risk and return, is centered on the actions and characteristics of investors who are risk averse.

For such a situation, investors might create investment plans. Since investors make decisions based on their anxiety on market share volatility and herding behaviour, governments should take the necessary precautions to avoid having to go into lockdown in the future. Investors need access to greater knowledge and expertise when making investment decisions. It is inevitable that investors will copy those who may have more investment expertise because people are prone to being anxious during a sudden outbreak. It is best for the government or health sectors to view vaccination as mandatory and offer information on the return on investment from immunisation because vaccination does not significantly affect investment during COVID-19.

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