



The Impact of the Investor Sentiment Index (SMI) on the Malaysian Stock Market during the COVID 19 Pandemic

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ABSTRACT

COVID-19 is a highly contagious viral infection that has changed the world, with many human lives being lost. This study aimed to analyse investors' sentiment and stock market behaviour in Malaysia during the COVID-19 pandemic. Stock market performance was measured through the FTSE BURSA 100 Index (T100) from January 29, 2020, until March 31, 2021, by employing principal component analysis (PCA) to construct the investors' Sentiment Index (SMI). The results indicated that the sudden outbreak of COVID-19 and its rapid spread significantly impacted investors' psychology, which disrupted investors' investment decisions. Furthermore, rapid increases in confirmed COVID-19 cases and deaths increased the uncertainty and unpredictability of the country's economic situation. As a result, the Malaysian financial market showed a steep downward trend during the COVID-19 pandemic.

JEL Classification: G1, G4

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INTRODUCTION

COVID-19 is a novel coronavirus disease that emerged in 2019. The initial outbreak of the disease was in China, and it quickly expanded to many other countries, including Malaysia. The first case of COVID-19 in Malaysia was recorded on January 25, 2020. Within a few months, by May 16, 2021 (MHO), the number of recorded cases had reached 466,330 infected and 1,866 deaths. The recorded cases worldwide reached 163.5 million infected and 3.54 million deaths on the same day. Restrictions were introduced in many countries to reduce/stop the rate of coronavirus spreading. These restrictions included; suspending formal education and switching to remote classes, postponing or cancelling events, such as; concerts, sports competitions, and art activities, reducing the number of passengers on public transportation, and closure of public areas, such as; shopping malls, restaurants, and entertainment venues, enforcing the use of masks and gloves in closed quarter areas and public places, and curfews. These restrictions and prohibitions affected the populations' social life and started to profoundly affect the economies of various developed and developing countries (Çütü and Kilic, 2020; Utit et al., 2021). According to Chundakkadan and Nedumparambil (2021), the outbreak of COVID-19 drastically shook global financial markets due to the lockdown of economic activities and partly due to negative investor sentiment.

In Malaysia, one of the government's preventative measures to address the COVID-19 pandemic and reduce its spread was implementing movement control orders, which will be indicated as MCO hereafter. The first MCO was announced on March 18, 2020, and continued until May 3, 2020, when a conditional MCO (CMCO) followed until the end of the year. However, on January 13, 2021, the Malaysian government announced a second MCO due to the sudden increase in COVID-19 active cases and death toll (National Security Council). During each MCO period, all business sectors and corporate activities were instructed to cease operations. This situation significantly impacted the real economy and the stock market (Anh and Gan, 2020; Chia et al., 2020; Rassanjani et al., 2021). Not only in Malaysia but stock markets worldwide also exhibited varying degrees of volatility following the outbreak of the COVID-19 pandemic (Uddin et al., 2021).

As shown in Figure 1, the KLCI Index dropped to its lowest level in a decade, plummeting 20.52 per cent since the 18th of March 2020 (Chia et al., 2020). Consistent with the study by Mazur et al. (2021), the decline of the stock market index was caused by the COVID-19 pandemic. This situation was mainly caused by investors' overreaction to news, resulting in panic selling during a volatile market, contributing to stock market volatility (Silalahi et al., 2021). The plummeting of the Malaysian stock market during the pandemic could have been due to two reasons, according to Ozili (2021). The first reason, the closure of businesses and corporate activity, led to a downward effect on financial market activities. The second reason was the sudden high level of uncertainty among investors, leading to increased stock market volatility. The source of such uncertainty was caused by the inability of investors to predict the subsequent effects of the COVID-19 pandemic on the market and future government actions to fight the spread of the pandemic. Ashraf (2020) found that stock markets responded negatively to the growth in COVID-19 confirmed cases. That is, stock market returns declined as the number of confirmed COVID-19 cases increased.



Figure 1 FTSE Bursa Malaysia KLCI Index

This study investigated the direct effect of investors' sentiment on the Malaysian stock market. Investors' sentiment in this study refers to a person's proclivity to make financial decisions based on emotions and/or opinions (Baker and Wurgler, 2007). In other words, investors' sentiment measures investors' reactions to the continuous flow of information from markets, which may cause investors to over- or underreact. The role of investors' sentiment is essential as it correlates with market returns and volatility (Bouteska, 2019; Cagli et al., 2020). Brown and Cliff (2005) and Chung et al. (2012) claimed that investors' sentiment was subject to change based on market conditions and the flow of information.

Moreover, García (2013) argued that markets' responsiveness to sentiment has been particularly significant during recessions. This notion was consistent with Smale's (2017) study, which found evidence that investors' moods drop during economic downturns, particularly when a financial crisis occurs. During the COVID-19 pandemic, a sudden dip in investors' moods occurred (Anh and Gan, 2020; Chia et al., 2020; Mazur et al., 2021).

Aggarwal et al. (2021) documented that the rise in investors' panic levels during the COVID-19 pandemic significantly affected stock market returns. Thus, investors panicked from the sudden disruption of market flows and information caused by the spread of fear due to the sudden spread of the COVID-19 pandemic. This situation led to a spike in investors' uncertainty, causing volatility to rise and, thus, affecting the market return. Furthermore, Lee et al. (2020) pointed out that the main gap in existing studies was the lack of a comprehensive view of the influence of the COVID-19 pandemic on a specific market. Therefore, the present study was motivated to investigate the effect of investors' sentiment on the Malaysian stock market during the spread of the COVID-19 pandemic.

Investigating such a relationship has contributed to the literature in three ways. First, this study has added to the existing research concerning Malaysia by providing empirical evidence regarding how Malaysian investors reacted during a crisis period, which in this case, was the COVID-19 pandemic. News about disease outbreaks, especially infectious diseases, such as; SARS, H1N1, and polio, typically leads to sudden increases in market activity due to fear spreading among investors concerning how such conditions affect their investment (Curatola et al., 2016). In addition, following the mood sensitivity hypothesis (Hirshleifer et al. 2020), a bad news might aggravate pessimism and negative attitudes, influencing market players' decisions. In this study's scenario, the COVID-19 pandemic put many individuals in dangerous situations and impacted many elements of their lives. The World Health Organization (2020) acknowledged that COVID-19-related news caused worry and anxiety.

Second, investor sentiment is essential in asset pricing (Yang and Li, 2013). Various studies have examined investors' sentiment during the COVID-19 period, such as; Chundakkadan and Nedumpambil (2021), Çütçü and Kilic (2020), and Erdem (2020), who investigated the effect of COVID-19 on the stock markets of several countries. However, they found inconsistent results because each country's response to the pandemic was different. According to Hoong et al. (2022), the COVID-19 pandemic affected ASEAN stock markets differently, as each government approached the pandemic differently. Thus, investors' sentiment reactions varied across countries due to unprecedented policy responses, such as; lockdowns, social distancing, and stimulus packages, worldwide (Sharma and Sha, 2020). According to Altig et al. (2020), the uncertainty surrounding these policy responses was huge. This outcome was because policymakers and other economic agents were uncertain whether these responses would be temporary or permanent, to what extent the interventions would influence investment and consumption activities, and how long economies would take to recover after the pandemic.

Moreover, the COVID-19 pandemic had a significantly greater negative impact on the stock markets in emerging countries than in developed countries. The negative impact on emerging markets was more pronounced for firms with small market capitalisations and growth stocks (Harjoto, 2021), which was the case for the Malaysian stock market. Thus, the present study was motivated to investigate investors' sentiment effects on the performance of an emerging market, such as Malaysia, to contribute to the growing body of literature on investors' sentiment during the COVID-19 period.

Third, unlike prior literature regarding Malaysia (for example, Lee et al., 2020), the current study utilised principal component analysis (PCA) to investigate the relationship between investors' sentiment and the stock market's performance. This approach allowed the study to propose a new market Sentiment Index (SMI). The proposed index combined multiple factors, such as; the stock exchange turnover ratio, money flow index, relative strength index (RSI), changes in COVID-19 daily confirmed cases, and changes in daily

COVID-19 confirmed death cases, to form a linear index. Thus, the present study differentiated itself from most other literature concerning Malaysia by using the SMI as an indicator of investors' sentiment during the COVID-19 pandemic. Furthermore, the results of the present study have contributed to the behavioural psychology theory and the dynamic process of stock price volatility, broadening the knowledge of readers and academics.

The present study's results have demonstrated that the SMI had a significant positive relationship with the performance of the FTSE BURSA 100 Index (T100). This finding was consistent with earlier studies, indicating the importance of investors' sentiment on asset pricing (Bouteska, 2019; Cagli et al., 2020). Furthermore, the PCA result revealed that both COVID-19 confirmed and death cases negatively impacted investors' sentiment. Thus, concluding that health hazards, such as the COVID-19 pandemic, have a significant role in influencing investors' sentiment in investment decisions. Ali et al. (2020) reported that panic in global financial markets increased as COVID-19 evolved from an epidemic to a pandemic. This situation, in turn, influenced the performance of stock markets.

The remainder of this paper is structured as follows. Section 2 presents an overview of pertinent literature. Section 3 describes the data and methodology employed in this study, and Section 4 presents and discusses the results. Section 5 concludes the paper.

REVIEW OF LITERATURE

Although the COVID-19 pandemic has severely impacted the world's economy, the real impact of the outbreak remains unknown. Recently, Chundakkadan and Nedumparambil (2021) explored whether recent COVID-19 announcements affected investors' sentiment, affecting stock market behaviour. Their findings showed that COVID-19 had created negative sentiment among market participants and, in turn, depressed the stock market. Furthermore, Çütücü and Kilic (2020) investigated the impact of the COVID-19 pandemic on ten stock market indices (USA, Spain, Russia, Britain, Brazil, Italy, France, Germany, Turkey, and Iran). The analyses revealed that such a significant worldwide health problem had affected the population's social lives and decreased the economies of the targeted markets and their financial markets.

In another study, Papadamou et al. (2020) examined the impact of the COVID-19 pandemic on thirteen world stock markets. They documented that the pandemic's effect was stronger on European stock markets than on the rest of the world. In addition, Ashraf (2020) used the number of daily COVID-19 cases and deaths from January 22, 2020, to April 17, 2020, to measure the response of 64 stock markets to the pandemic. Ashraf (2020) found a significant negative relationship between the number of COVID-19 cases and stock market returns. Furthermore, Ashraf (2020) revealed that stock markets reacted more intensely to increased infection case numbers than the death toll.

Moreover, Baker et al. (2020) argued that the impact of COVID-19 on the U.S. stock market was even greater than any previous disease outbreaks, such as global influenza in 1918, SARS in 2003, and Ebola in 2015, due to governmental restrictions on commercial activities. Finally, Pertiwi et al. (2021) investigated the effect of investor sentiment on Indonesia's stock returns during the COVID-19 pandemic. They proxied stock returns using monthly Jakarta composite return index data, and monthly consumer confidence index data were used as a proxy for investor sentiment from March 2020 until April 2021. They concluded that investor sentiment significantly impacted stock returns during the COVID-19 pandemic.

In Malaysia, Keh and Tan (2021) reported that government actions during the pandemic, such as; mandatory home confinement, closure of workplaces, and debt or contract relief for households, significantly affected economic activity and stock market performance in the country. This situation was apparent in the significant plummeting of the Malaysian stock market, as the Kuala Lumpur Composite Index (KLCI) dropped dramatically from 1,602.50 on January 2, 2020, to its lowest point, 1,219.72 on March 19, 2020. Lee et al. (2020) also established that the frequency of COVID-19 cases negatively affected stock price movements in Malaysia. In another study, Chia et al. (2020) examined the relationship between Malaysian stock market returns and variables related to COVID-19, using data from the FTSE Bursa Malaysia KLCI Index and eight selected main indices from January 2, 2020, to April 30, 2020. The results showed that daily new confirmed COVID-19 case and death numbers had a negative but insignificant impact on the returns of the selected indices.

The COVID-19 pandemic has caused significant and far-reaching social, economic, and political impacts on most countries worldwide. The pandemic has affected the global economy in two ways. One, the spread of the virus encouraged social distancing, leading to the shutdown of; financial markets, corporate offices, businesses, and events. Two, the rate at which the virus was spreading and the heightened uncertainty about how bad the situation could get led to a retraction in consumption and investment among consumers and investors (Ozili and Arun, 2020). The present study was motivated by evidence that people's emotions and anxieties affect investment decisions in stock markets (Kamstra et al., 2005; Kaplanski and Levy, 2010). Examining investors' sentiment is crucial, as sudden and severe increases in volatility may increase the risk of a future financial crisis (Danielsson et al., 2015).

RESEARCH METHODOLOGY AND MODELS

Data Description

The first Malaysian case of COVID-19 was reported on January 25, 2020 (MHO). Thus, the present research included daily observations from the FTSE BURSA 100 Index (T100) from January 29, 2020, until March 31, 2021. The present study selected the T100 because it is a comprehensive index comprising the top-performing 100 firms in the Malaysian market. Furthermore, the T100 index combines the FTSE Bursa Malaysia KLCI Index and the FTSE Bursa Malaysia Mid 70 Index. Finally, the study did not choose the FTSE Bursa Malaysia EMAS Index because it includes the FTSE Bursa Malaysia Small Cap Index, which is volatile. Thus, the T100 index was the perfect indicator to investigate the effect of investor sentiment on stock returns in the Malaysian market. The daily price of the T100 index was collected from DataStream, while the COVID-19 daily death and confirmed case numbers were obtained from the World Health Organization (WHO).

Methodology

This research developed a sentiment index using PCA for investors' sentiment in the Malaysian stock market and checked the influence of investors' sentiment on stock market returns during the COVID-19 pandemic. The index was developed using the methods described by Chen et al. (2010) and Chen et al. (2014) for developing an index. Notably, Rehman (2013) used the same methods to examine the relationship between stock market returns and a sentiment index. Finally, the variables selected for constructing the sentiment index were based on Naseem et al. (2021), who investigated the effect of the COVID-19 pandemic on investors' sentiment in China, Japan, and the U.S. through the construction of an SMI using PCA.

Model for the investor sentiment index

The model used in this research for the sentiment index is represented by Equation (1):

$$SMI_{m,t} = \alpha_0 + \alpha_1 STURN + \alpha_2 MFI + \alpha_3 RSI + \alpha_4 \Delta CC + \alpha_5 \Delta CD + \varepsilon_t \quad (1)$$

where $SMI_{m,t}$ is the sentiment index estimated by Equation 1, representing the linear combination of the standardised variables. STURN represents the stock exchange turnover ratio, calculated by Equation 2. MFI denotes the Money Flow Index, calculated by Equations 3 to 5. RSI stands for the Relative Strength Index, calculated by Equation 6. Finally, ΔCC and ΔCD stand for the change in COVID-19 daily confirmed case and death numbers, respectively.

Stock Exchange Turnover Ratio (STURN)

STURN measures the trading activity of the stock market. According to Ying (1966), stock market turnover is a good indicator of market sentiment. Ying (1966) discovered that large (small) turnover was followed by a rise (fall) in the market price. Moreover, according to Karpoff (1987), stock market turnover follows the swings in a bullish market, while the turnover is high and low in a bearish market. Thus, this study concluded that turnover was an informative tool for measuring investors' sentiment in the stock market. Therefore, this study considered STURN an essential component of SMI. The following equation was used to calculate the stock exchange turnover ratio (STUN):

$$STUN = 100 \frac{VM_{Daily}}{VN_{Monthly}} \quad (2)$$

where $STUN$ is measured by calculating the moving basis of both VM_{Daily} the daily volume and $VN_{Monthly}$ the monthly volume. This calculation is useful in understanding the daily sentiment of investors during a specific month of the year.

Money Flow Index (MFI)

The MFI is a tool used to measure buying and selling pressure by analysing price and volume. The purpose of the MFI is to measure the effect of investors' sentiment on stock prices by determining market trends, such as; overbought and oversold conditions, divergences, and failure swings. When the MFI rises, it indicates an increase in buying pressure, while when it falls, it suggests an increase in selling pressure. It was first necessary to measure the daily prices and the daily money flow, as shown in Equations 3 and 4, to calculate the MFI. Thus, the money flow was positive or negative when the daily price was higher or lower than the previous day (Chen et al., 2010; Naseem et al., 2021).

$$Daily\ Prices = \frac{Low + High + Close}{3} \quad (3)$$

$$Money\ Flow = Daily\ Prices \times Turnover \quad (4)$$

The next step was calculating the MFI by finding the positive and negative money flow over N days. Based on earlier literature, the best N-measure measurement was 14 days (Chen et al., 2010; Naseem et al., 2021). The daily MFI was calculated, as shown in Equation 5.

$$MFI = 100 \times \frac{Positive\ Money\ Flow}{Positive\ Money\ Flow + Negative\ Money\ Flow} \quad (5)$$

Relative Strength Index (RSI)

The RSI is a momentum indicator that determines if a market is oversold or overbought by measuring the speed and change of price movements (Naseem et al., 2021; Ryu et al., 2017; Zia Ur Rehman et al., 2017). The general rule states that an RSI of 70 implies that a market is overbought. On the other hand, an RSI of 30 indicates that a market is oversold. The most common method of calculating the RSI is using a standardised moving period of 14-days (Chong and Ng, 2008; Ryu et al., 2017), as shown by Equation 6.

$$RSI(14)_t = 100 \times \frac{\sum_{i=1}^{14} (P_{t-1} - P_{t-i-1})_+}{\sum_{i=1}^{14} |P_{t-1} - P_{t-i-1}|} \quad (6)$$

where $(P_{t-1} - P_{t-i-1})_+ = P_{t-1} - P_{t-i-1}$ if $P_{t-1} - P_{t-i-1} > 0$, and $= 0$ otherwise.

Change in Daily numbers of COVID-19 cases and death rates

This study aimed to capture investors' mood swings and their effects on market prices to align with the spread of the COVID-19 pandemic. The same method was used by both Naseem et al. (2021) and Chia et al. (2020), who investigated the influence of investors' moods on market indices. Equations 7 and 8 present the daily COVID-19 cases and death numbers, respectively. The changes in daily numbers of COVID-19 cases and death cases were estimated as follows:

$$\Delta CC = CC_t - CC_{t-1} \quad (7)$$

$$\Delta CD = CD_t - CD_{t-1} \quad (8)$$

Investor Sentiment Effect on Stock Market Index

Firstly, the market returns of the FTSE BURSA 100 Index were calculated as follows:

$$Y_t = 100 \times LOG \left(\frac{P_t}{P_{t-1}} \right) \quad (9)$$

where P_t is the index closing price at time t and P_{t-1} is the closing price of the previous period. The index was regressed on the volatility series of the Malaysian stock exchange using Zia Ur Rehman et al.'s (2017) approach.

$$Y_t = \alpha + \beta SMI_t \tag{10}$$

where Y_t is the market returns of the FTSE BURSA 100 Index and SMI_t refers to the sentiment index.

This study adopted Chen et al.'s (2010) method to examine the effect of investors' sentiment on stock market performance during the COVID-19 pandemic. Chen et al. (2010) proposed using the principal component analysis (PCA) method on a new market sentiment index, forming a linear index from various factors, including; the money flow index, market turnover, relative strength index, and other factors.

EMPIRICAL RESULTS

Figure 2 shows the number of COVID-19 cases in Malaysia. The pandemic spread to Malaysia starting on January 25, 2020, with the first confirmed case. The virus afterwards spread very quickly due to the exponential growth pattern of its infection. On March 15, a sudden surge of 428 new cases stemmed from a mass religious gathering in Kuala Lumpur, Malaysia, held between February 27 and March 1, attended by 14,500 participants.

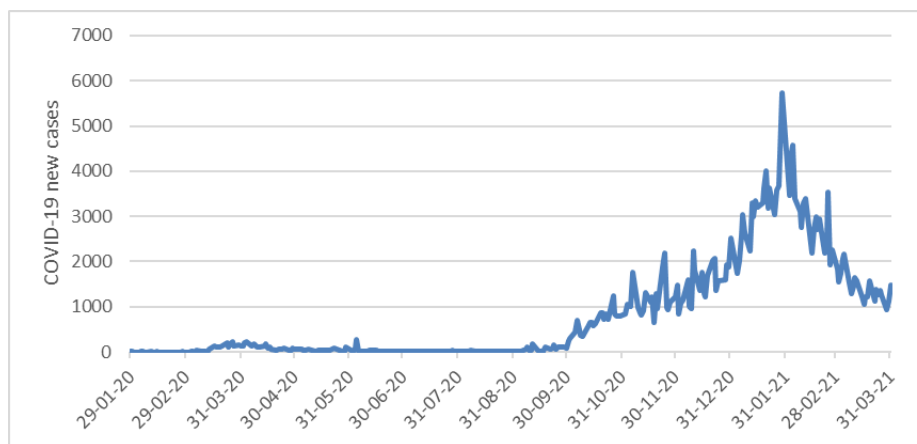


Figure 2 Number of COVID-19 Cases in Malaysia (January 29, 2020 – March 31, 2021)

The effect of the spread of COVID-19 on the Malaysian stock market is depicted in Figure 3. A downward trend in the T100 index can be inferred, mainly after January 30, 2020, when the WHO declared a global emergency in the fight against COVID-19's worldwide spread. Moreover, on March 27, 2020, the Malaysian stock market fell by 2052 points, to its lowest number in a decade since the Asian financial crisis of 1997 (Chia et al., 2020). The WHO classifying COVID-19 as a pandemic caused a sudden downward spiral in Malaysian stock market prices, followed by the implementation of the MCO by the Malaysian government on March 18, 2020. The Malaysian government implemented the MCO to fight against the country's sudden increase in COVID-19 cases. Under the MCO, all government, business, and private premises and places of worship were closed, except for essential services. On January 20, 2021, another sudden surge in COVID-19 cases was due to two major clusters: the Benteng Lahad Datu cluster in Sabah and Kedah's Tembok cluster. As a result, the number of confirmed COVID-19 cases increased to 169,379, including 630 deaths and 127,662 who had recovered. At that time, the daily number of confirmed COVID-19 cases ranged between 2,000 and 4,000. As a result, on January 6, 2021, the Ministry of Health (MOH) implemented a targeted movement control order (MCO).

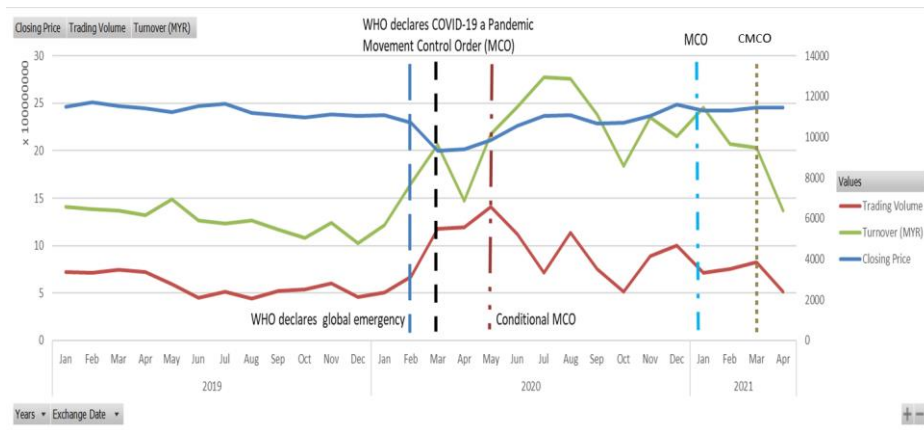


Figure 3 The effect of COVID-19 on Malaysian stocks markets

In this study, the PCA technique was chosen because it includes features such as alleviating problems with variable selection in regression models related to multicollinearity caused by the correlations between the explanatory variables. Moreover, the PCA technique allows information to be presented as new variables. Since the total number of principal components is equal to or less than the original number of variables, the PCA technique new variables can be expressed as the linear combination of each variable. On the other hand, the resulting Eigenvalues represent the amount of variation that each principal component retains. This situation results in larger eigenvalues for the first principal component than subsequent ones due to the division of variation between principal components. Table 1 represents the SMI based on the principal component analysis of the selected variables.

Table 1 Principal component analysis (PCA) of the variables

The Eigenvalues	Component	Eigenvalue	Difference	Proportion	Cumulative
Eigenvalues: (Sum = 5, Average = 1)	Comp1	1.94528	0.898685	0.3891	0.3891
	Comp2	1.0466	0.033156	0.2093	0.5984
	Comp3	1.01344	0.088539	0.2027	0.8011
	Comp4	0.924904	0.855135	0.185	0.986
	Comp5	0.069769	.	0.014	1
Total					

Table 1 shows that PC-1 accounted for 38.91 % of the variation in the data (1.94528 out of 5, using the Eigenvalues) compared to only 1.4 % for PC-5. Based on the existing literature, an Eigenvalue, which shows an amount greater than one, should be selected (Zia Ur Rehman et al., 2017); thus, PC-1 with an Eigenvalue of 1.94528 was used as it met the criteria of maximal variation. Moreover, PC-1 explained 38.91 % of the variations of the components, representing the highest value compared to other principal components. The computed SMI on the first principle component was extracted by Equation 11.

$$SMI_t = 0.0276MFI + 0.0025STURN + 0.0392RSI - 0.00007\Delta CC - 0.01999\Delta CD \tag{11}$$

The relationship between the T100 index stock returns and the constructed SMI is explicitly shown in Figure 4. It shows that the returns of the T100 index were moving alongside the changes in the SMI. This situation indicated that investor sentiment played a major role in influencing the market flow. Equation 11 shows that the cumulative COVID-19 new cases and death numbers negatively affected investors' sentiment, which influenced the market's direction from bullish to bearish and vice-versa. Furthermore, Figure 4 shows that the T100 index returns and SMI became bearish before the MCO announcements (represented by the dashed line, where the dashed-dotted line represents the CMCO (conditional MCO)), especially during the announcement of the first MCO on March 2020.

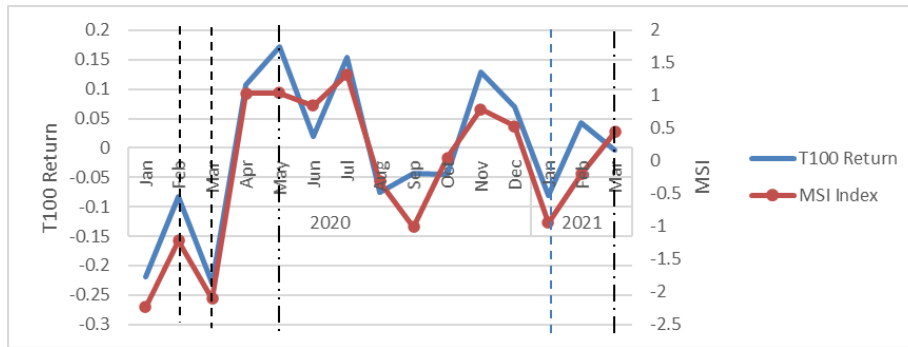


Figure 4 Relationship between T100 returns and Sentiment Index SMI

The regression results are presented in Table 2, showing that SMI had a significant positive relationship with stock returns at the 1 % level. This result shows the vital role of investors' sentiment in explaining variations in the stock market during the pandemic. Moreover, the results in Equation 11 indicate that COVID-19 negatively impacted investors' sentiment, which led to negative pressure on stock market returns. This situation was due to the distribution caused by the spread of the pandemic on people's daily routines and investor sentiment toward investment decisions.

Furthermore, from Figure 3, it could be inferred that the T100 and SMI indices had been falling in reaction to the pandemic's outbreak before the MCO's implementation (Chia et al., 2020). However, a positive impact could be seen after the implementation of the MCOs, most likely due to the positive market sentiment generated by the government's efforts to control the COVID-19 outbreak. During the lockdowns, the Malaysian government launched several stimulus packages to help those in need and stimulate economic activity, including the First Economic Stimulus Package 2020, which was announced on February 28, 2020, and was worth ten billion ringgit (Crowe, 2020a). The Second Economic Stimulus Package 2020 was announced on March 28, 2020, and was worth 250 billion ringgit (Crowe, 2020b). Moreover, an additional Prihatin SME Economic Stimulus Package 2020 was announced on April 7, 2020, and was worth 20 billion ringgit (Tan et al., 2020).

Table 2 The relationship between the SMI and returns of the T100

	α	$\beta(SMI_t)$
Y (returns of markets)	.0056194 (0.19)	.0670854 (3.12)

Note: t-statistics are shown in parentheses.

CONCLUSION

The COVID-19 pandemic caused financial market volatility in developing and developed countries. This study investigated the impact of investors' sentiment on the performance of the Malaysian stock market during the COVID-19 outbreak. This result was achieved by employing the PCA technique to build the SMI, representing investors' sentiment during the pandemic. The results indicated that the sudden outbreak of COVID-19 had a significant impact on the physiology and psychology of Malaysian investors, disrupting investors' investment decision-making. Furthermore, Malaysia's rapid increase in COVID-19 confirmed cases and deaths contributed to economic uncertainty and unpredictability. This situation resulted in a severe and unexpected downward trend in the Malaysian stock market.

Furthermore, the results of the study indicated that health hazards had a significant impact on investor psychology. This outcome can be demonstrated through the significant positive relationship between the SMI and the selected Malaysian Index T100. This significant relation signified how proximity of health problems in the population can impact the economy.

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