IMPACT OF INVESTORS' SENTIMENT ON SHARE PRICES: POTENTIAL INVESTING STRATEGIES DURING THE COVID-19

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Abstract

The resurgence of the Covid-19 infections worldwide and the downtrend in stock markets give anxiety to investors on the potential loss of their investment capital and value. At present, investors are motivated to search for the appropriate investment strategies for better protection of their investment value. There will be opportunities amid the risks, especially for investors with a long-term horizon. Still, the opportunities are difficult to exploit without the understanding of how the share prices of companies are influenced during the Covid-19 outbreak. The sentiment of investors, although it can be challenging to estimate, is posited as one of the dominating factors to the movement of share prices. Investors' sentiment, which will be negative with a pessimistic view on the future trends of certain stocks, may cause some stocks to be severely undervalued, offering other investors an opportunity to buy the shares at discounted price. As history from the previous infectious disease outbreaks reveals that their shocks to stock market usually are temporary, a buying strategy to stocks that have been dipped but are fundamentally strong can be suitable to apply for investors with long term objectives. The proposal to any potential investing strategy, however, is not plausible to develop without the understanding of how investors' sentiment during this pandemic affect the share prices of companies. Thus, using panel data regression analysis, this study is proposed to examine the daily impact of investors' sentiment on share prices of the Malaysian listed companies from January 2020, the month when the Covid-19 case reached Malaysia, to May 2022. Relying on the internet search-based data, Google Search Index volume (SIV) to measure the investors' sentiment reaction or sentiment, this study predicts that the sentiment of investors will uniquely impact the movement in the share prices of companies from specific sectors

Research paper

Keywords: Investors Sentiment; Share Prices; Investment Strategies; Covid-19

Scientificia

Introduction

The Covid-19 outbreak is an international pandemic that has impacted the world. As of May 10, 2022, there are approximately 519 million reported cases of Covid-19, with about 6.2 million reported death cases, globally (Worldometer, 2022). One sure thing is that the pandemic has already influenced the way people work, live, and assess their finances, at least in the short term (Scheyvens et al, 2021). However, no one could fully understand for sure what the effects will look like in the aftermath of this pandemic. There could be long-lasting effects on both the health of the public and the stock market. Investors in the stock market are weighing hopes of recovery against fears of "another wave" of these pandemic cases speculating that the wave will result in severe and continuous effects on the stock market and value of their investment for the long term. It is notifiable that the Covid-19 outbreak has dampened the performance of some business entities, particularly those from travel, leisure, and hospitality, tourism, airlines, retail, and property investment segments. However, the Covid-19 pandemic has also witnessed an emergence of speed to the technology segment, accelerating the adoption of disruptive technologies from retail to healthcare sectors. Companies from this segment have significantly outperformed companies from other segments in the stock markets, and investors' sentiment and demand for stocks from this sector seem positive. The big technology stocks are contributing significantly to the rise in the stock markets as the lockdown boosted demand for the firms' groceries, online marketplace, and cloud computing services (The Star, 2020). The positive demand from consumers and sentiment from the investment community suggests the technology segment as a potential sector where long term investors can produce significant profits. However, at present, it is

not fully understood what sort of long-term effects that this pandemic may offer to business entities, stock market, and investment community as a whole.

To have some insights on the potential impact of the Covid-19 on global stock markets, it will be significant to review back historically to the infectious disease outbreaks and their impact on the stock market, previously. Stock markets tumbled during the peaks of the SARS outbreak in 2003 but recovered once the outbreak contained. Looking from the view of stock market indexes, S&P 500 closed out at 26 percent at the end of 2003 after recovered from 10 percent drops in March 2003. Hang Seng index fell about 10 percent before its recovery when the index recorded a rise to 35 percent at the end of 2003 (The principle, 2020). Historically, the SARS outbreak sent stock markets lower, but the impact is relatively temporary. There was a short run market shock that decreased the value of stocks, but in the long run, stocks returned to their previous levels and even reached new highs (Yan et al., 2020). A comparable infectious disease outbreak, the Spanish u in 1981, can see a similar impact. It reports that the pandemic killed more than 50 million people globally, with the intensity and speed of the infections to one-third of the world's population were almost unimaginable (World Health Organization, 2020). This statistic made the Spanish u one of the deadliest epidemics in history. One would think that this pandemic would cause intense worries among investors and severe negative impacts on the stock market in the long term, but that was not the actual scenario. The Dow Jones Industrial Average fell over 2,000 points in four days out of fear that the pandemic will continue to spread and impact the global economy as a whole. The concern is that cities

will become quarantined, supply chains will break, and growth in the economy will slow down. However, the impact of the Spanish flu on the stock market was minimal when the stock market recovered quickly from its downtrend. The Dow Jones Industrial average in 1918 and 1919 shows that the stock market was lightly affected by any of the three waves of the Spanish u (Taylor, 2020).

The case on the influence of the infectious disease outbreaks on the Malaysian stock market is of no difference. Malaysian stock market has significantly overreacted to the SARS outbreak in the short term (Ali et al., 2010). The finding of this study suggests that the investors overreact to abnormal negative news. During this period, a series of unfavourable news about a stock have dampened investors' positivity causing them to undervalue the securities highly. Once investors realized of the undervaluation, and take corrective action, stock prices reverse in the subsequent period, particularly in the long term. As such, the opportunity for long term investors to reap out profits has started to regain. The opposite impact on the performance of stocks also applies to a series of positive news. If a similar effect of the Covid-19 on the Malaysian stock market expected, one must expect that there will be a shock in the stock market only in the short term. The stock market will recover immediately and resume resiliently in the long run. The preliminary support seems to show when FBM KLCI, a capitalization-weighted Malaysian stock market index composed of the 30 largest companies on the Bursa Malaysia by market capitalization, is closed at 1,538.53 points on June 3, 2020, escalated by 1.52 percent by the sixth day of consecutive gains. The index is at the level that it once was on February 20, before when the Covid-19 blew up in Malaysia, and about a month before Malaysia's government

announced the movement control order (MCO) on March 18, 2020. The up-trend in the FBM KLCI denotes that, despite headwinds, the Malaysian stock market has started to rebound in due course (Figure 1).

Figure 1. Daily Trend of FTSE Bursa Malaysia KLCI, Source: Trad-ingView.com (July 2020)

Apart from denoting the potentially early recovery of the Malaysian stock market, the uptrend in the FBM KLCI also indicates that there is a great possibility for investors to activate a specific investing strategy and action. They should buy stocks from strong companies, which their share prices have been severely dampened by the Covid-19, at a discounted price. Theoretically, this study proposes that to exploit the presence of and to maximize profits from this pandemic, investors should start buying for stocks that have dipped and hold the shares for the long term. In specific, travel, leisure and hospitality, tourism, airlines, retail and property industries, which seem to have hit the hardest by this Covid-19 outbreak, must be the investors' preference as the sectors should give the most guaranteed profits over the long term. However, relying solely on the theoretical argument and history of how have previous infectious disease outbreaks impacted global and Malaysian stock

markets will only offer an incomplete inference to the potential investing strategies of the investors.

There should be empirical and statistical evidence on the impact of the Covid-19 to share prices or performance of the Malaysian companies, particularly during the hikes of Covid-19 in Malaysia. This study is of the view that a better understanding of how the Covid-19 influence the performance of share prices of Malaysian companies, through the sentiment of investors, must be developed in advance to any concrete proposals to the appropriate investing strategies. This view drives this study to this question: Does investors' sentiment play a role in impacting the companies' share prices during the Covid-19 outbreak? Supporting to Yan et al., (2020), this study is of the opinion that the share prices or performance of companies are not always influenced solely by an infectious disease outbreak but also by speculations and the sentiment of investors. Investor's sentiment, defined as a belief about future cash flows and investment risks that is not justified by the facts at hand, is accepted as a key driver to stock prices (Baker and Wurgler, 2007). Investors' sentiment will be relatively negative with a pessimistic view on the future trends of specific stocks. The pessimism of the investors might cause some shares to be undervalued severely than how they should, particularly during the peaks of the Covid-19 outbreak (Pereira et al., 2021; Hameed et al., 2021; Kawamorita et al., 2022). In another instance, however, investors will buy into stocks they feel will weather the storm or even benefit from the Covid-19 outbreak, and thus producing a stable positive movement or over-valuation in share prices of the stocks (Dheer & Salamzadeh, 2022). The possibility of the impact on the companies' share prices from these two different types of sentiments of investors leads this study to the next question: Does

share prices of the companies from different sectors influence uniquely from the investors' sentiment or attention during this Covid-19 outbreak? Developing its motivation from the two questions mentioned above, this study proposes the examination on the impact of investors' sentiment on the share prices of Malaysian listed companies during the Covid-19 pandemic, with and without the segregation of the examination according to sectors. In other words, this study proposes to examine the influence of the investors' sentiment on the change in the share prices of Malaysian companies during the Covid19 outbreak and to examine the influence of the investors' sentiment on the change in the share prices of Malaysian companies, segregating to different sectors, during the Covid-19 outbreak.

Overall, this study responds to the call for more researches on the impact of Covid-19 outbreak from the stock market's perspective (Rahman et al., 2021). In specific, this study attempts to contribute its insights from the potential effect of the investor's sentiment on share prices of the Malaysian listed companies, at least from two aspects.

Firstly, the study attempts to provide empirical evidence on how the Covid-19 outbreak has an impact on the share prices of the Malaysia listed companies through the sentiment of investors. A few surveys have shown that the majority of investors have taken their money out of the stock market during the Covid-19 outbreak. Regardless of either it is a breakdown of trust in the stock market particularly for certain shares or actual monetary losses, the Covid-19 outbreak's impact on many investors is notifiable. From the investors' perspective, it is only natural for them to react expectedly to market dips by letting go of their shares' ownership. However, the history, particularly on the impact of the previous infectious disease outbreaks to the stock market

and share prices have shown that investors are rewarded for shouldering the market risk. That is, the investors will be able to reap out significant profits over the long term for holding tight on their shareholdings during the pandemic. As such, this study can potentially propose for investors to activate their buying strategy for strong fundamental stocks if it can empirically prove that the investors' sentiment, during this pandemic outbreak, really has impacted the share prices of the listed companies adversely as the negative impact is probably not due to the stocks fundamental but the unnecessary sentiment or reaction from the investors. Secondly, this study adds volume to studies relating to Covid-19 by widening the examination on the impact of investors sentiment on share prices of the Malaysian listed companies across sectors, identified from the most frequent searches in Google Trends. The possibility that the effect of the investors' sentiment on share prices of the Malaysian companies to be different for specific sectors should also be examined and understood. In this regard, this study will be able to propose industries that have received an optimist view from investors as an appropriate investing platform for the other investors, mainly retail and uninformed investors, during the hikes of a pandemic. This potential investing strategy can be proposed to short term investors who aim for a quick capital gain through an instance positive movement in share prices of the companies from specific sectors.

Literature Review

Investors' Sentiment and Performance of Companies

The performance or value of companies refers to their stock's ability to increase or decrease the wealth of shareholders. Performance is measured by the fluctuation in prices and usually is the description of favorable conditions of the owners and shareholders. According to Iswajuni, Manasikana & Soetedjo (2018), a positive response from an investor can increase the company's value with increasing demand for stocks. Investors' sentiment reflects the overall attitude or tone of investors toward a company. Baker and Wurgler (2006) define investors' sentiment as misguided confidence about a company's risks or future cash flows, which is unjustified in terms of the information available. Moreover, moods, emotions, attitudes, and investor opinions, which described investors' sentiment, is a broad view representing any misperception that can cause mispricing (Zhou and Yang, 2019). Numerous studies have acknowledged that profitable trading strategies that take advantage of the stock price movements were caused by investors' sentiment (Jiang and Jin, 2020). This fact is confirmed by Baker and Wurgle (2006), which found that as investors' sentiment increased, the returns of small-cap stocks and growth stocks would decrease. Audrino, Sigrist, and Ballinari (2019) concurred and stated that sentiment variables could improve volatility forecasts significantly, although the magnitudes of the improvements are relatively small from an economic point of view. However, Antweiler and Frank (2004) found a negative correlation between the message board sentiment variable and the returns of the next day stock market and the capacity to predict vola-

tility and volume of trading. A study by Xu and Zhou (2018) finds that sentiment changes have a positive impact on future stock returns in the Chinese A-share market (Yao and Li, 2020).

In recent years, the impact of public news sentiment on the share price has received increasing attention (Cepoi, 2020). A growing body of literature has focused on understanding whether the economic or political news would influence the price movements in financial markets (Broadstock and Zhang, 2019; Shi and Ho, 2020). In last two years, the world was shocked when the World Health Organization (WHO) declared a global emergency due to the rapidly spreading of the Covid-19 outbreak on January 30, 2020 (Dana et al., 2022 a, b; Salamzadeh & Dana, 2021, 2022). Unfortunately, the source of the Covid-19 pandemic is unknown, and there are still on-going studies on the medical treatment (Liu, Manzoor, Wang, Zhang, and Manzoor, 2020). The Covid-19 outbreak has emerged as a nuisance for the financial markets with unexpected levels of uncertainty and high volatility (Ali, Alam, and Rizvi, 2020). Thus, the news and reports related to this infectious disease can cause alarm and influences investors' sentiments (Haroon and Rizvi, 2020). According to Cepoi (2020), stock markets around the world have suffered enormous losses in the first three months of 2020 due to the Covid-19 pandemic and the considerable amount of related news. Although the current literature relating the Covid-19 outbreak to financial markets is limited as the scale of this pandemic has not been witnessed in over a century, the existing studies have provided some exciting results (Cepoi, 2020). Besides, Akhtaruzzaman, Boubaker, and Sensoy (2020) show that listed companies across China and G7 countries have experienced significant increases in the conditional correlations for the market returns. This finding is in line with what Okorie and Lin

(2020) discovered that considerable fractal contagion on the market return and market volatility. As such, the stock markets have become highly volatile and unpredictable because of the high uncertainty of the pandemic and its associated economic losses (Zhang, Hu and Ji, 2020). He added that financial markets have already responded with dramatic movements even though the exact global economic impacts are not yet clear. Thus, it can be concluded that positive response and a high confidence level of investors will increase the demand for shares that will be followed by an increase in companies' value or performance.

Google Trends and The Application of Search Volume Index (SVI)

In past decades, the internet has been acknowledged as an essential platform for information sharing and searches. In 2004, the internet marked a notable contribution with its ability to provide information on the individuals' interest through the Search Volume Index (SVI) that has been made publicly accessible via Google Trends. Google Trends among others are able; to capture the relative popularity (i.e., the number of searches made) of a term or a keyword over time, to provide a chance to compare the popularity of several keywords and to rank the most searchable keywords in various categories and geographical regions (Limand Stridsberg, 2015). This feature recognizes Google Trends as one of the entrancing data sources offered by Google.

Thus far, researchers, with studies from a different range of disciplines, have attempted to use the data source and they report favorable outcomes on the application of Google Trends in a various set of research objectives. Dimp and Jank (2011) examined the relationship between search queries and stock market volatility and reported that Google Trends improved in-

sample and out-of-sample volatility forecasts. Earlier, Ettredge et al. (2005) applied Google Trends to predict economic statistics. Guzman (2011) employs SVI to explain the movement of inflation. Joseph et al. (2011) examined the relationship between Google Trends and abnormal returns for the S&P 500 stocks. Meanwhile, Bordino et al. (2012) investigated the influence of Google Trends on stock volumes in the NASDAQ market. Further, Drake et al. (2012) studied factors that influence investor demand during earnings announcements. Beer et al. (2012) examined the relationship between short-term overreaction of retail investors' interest and mutual fund flows. Da et al. (2011) are acknowledged as the pioneering study that applies Google Trends or SVI while examining IPO performance. The study uses a sample of rms of the Russell 3000 index from 2004 to 2008. It utilizes Google's SVI as a proxy for retail investor attention in its attempt to link investors' sentiment to IPO prices and returns (Rahman et al., 2022). The study, relying on the attention theory proposed in Barber and Odean (2008), finds that an increase in individual investors' attention causes a positive price movement. However, the favorable price movement occurs only in the short term as price reversals are found in the long run.

Research Methodology

This study proposes to examine the impact of investors' sentiment on share prices of the Malaysian listed companies for the period from January 2020 to May 2022, based on daily basis observations. This period allows the empirical analysis of the impact of investors' sentiment on the movement of share prices during the period of the hikes Covid-19 cases in Malaysia. 24 January 2020 is used as the starting point of this study as the date marked the

first confirmed Covid-19 case in Malaysia when it is detected on travellers from China arriving via Singapore (World Health Organization, 2020). The main variable of this study includes the variables of primary interest, the performance of the listed companies as the dependent variable. Meanwhile, the independent variable is the investor's sentiment or attention, supported by other independent variables, namely; daily trading volume and unsystematic risk. The sample of this study focuses on the Malaysian listed companies from sectors that have received most frequent searches based on the search volume index during the Covid-19 outbreak, in which information on the frequencies can be acquired online from Google Trends. Meanwhile, the data on daily share prices and trading volume can be sourced from the Thomson Reuters Eikon database.

Operationalized Definition and Measurement of the Daily Performance of Companies

In this study, the performance of companies refers to their stock's ability to increase or decrease the wealth of shareholders. The movement in price typically measures performance. When the stock price increases, the stock shows excellent performance and vice versa. The performance of Malaysian listed companies examined in this study is captured using the most common approach, the daily stock return or changes in share prices. This approach, despite few limitations, embodies changes in expectations of a company's future performance more so than its actual underlying and present performance and health. The following equation denotes the estimation of the daily performance of the sampled companies.

$$DailyPerformance\ (DP) = \frac{(CloPrice\ 1 - CloPrice\ 0)}{CloPrice\ 0}\ x\ 100$$

where,

$$DailyPerformance = return\ of\ t\ day\ for\ the\ ith\ company$$

$$CloPrice\ 1 = the\ closing\ price\ of\ t\ day\ for\ the\ ith\ company$$

$$CloPrice\ 0 = the\ closing\ price\ of\ t - 1\ day\ for\ the\ ith\ company$$

Operationalized Definition and Measurement of Investors Sentiment

Investors' sentiment is defined in several ways. Zhang (2008) defines investors' sentiment as market participants' belief about an investment's future cash ows. Baker and Wurgler (2007) extend the definition to the market's belief about investment risks due to the unpredictability of the outcome. Liu, Yang, Zhang, and Hu (2017), which denote investors' sentiment also as market sentiment, state investors' sentiment as the feeling or tone of a market which can result in the price movement of a share in the stock market. Liu et al. (2017) generally categorized investors' sentiment into two classes; positive (optimism) and negative (pessimism).

Various attempts have been made to measure investors' sentiment and evaluate the validity of the measurements in explaining the movement of stocks' returns. Past studies (e.g., Brown and Cli, 2004a, 2004b; Shiller, 2000) have applied at least two main approaches to estimating investors' sentiment: market-based (i.e., indirect) and survey-based (i.e., direct). The recent development on the measurement of the investors' sentiment has acknowledged the use of publicly-based information from social media content and Internet

search data. Internet search-based measures' increasing popularity has been stimulated by the data offered by Google Trends since 2004, which provides the online search volume index (SVI) of any search term or keyword inputted to Google. When one input search terms or a keyword into Google Trend, the application will produce the search volume history for the terms, on a time series basis. Da et al. (2015) highlight several advantages related to the use of search-based sentiment measures as opposed to former alternatives. Firstly, Google Trends can produce daily, weekly, and monthly SVI data for a specific time window, allowing the tracking for SVI in the different time-frequencies. Secondly, SVI is more transparent than other social media-based measures as it directly denotes behavior or beliefs instead of asking about it, particularly when one uses a qualitative approach (e.g., personal surveys and interviews) to capture the sentiment or belief of individual investors (Oliveira-Brochado, 2019).

Following the measurement proposed in Da et al. (2011), this study uses SVI data to measure investors' sentiment. This study, unlike Da et al. (2011) that uses weekly SVI data, opts to capture daily SVI data as it intends to examine the impact of investors' sentiment on the daily changes in share prices of the sampled companies. The classification of the types of sentiment from investors (positive or negative) using Google Trends can be tricky. The trickiness exists because the SVI, as argued by some researchers, can only reveal the frequency or volume of the searched terms without the information on the type of sentiments from the investors (i.e., optimism and pessimism). However, the identi cation and application of a suitable list sentiment-revealing search terms will make the construction of a Google-based sentiment index more feasible (Oliveira-Brochado, 2019). For example, Beer et al. (2013)

and Da et al. (2015) used "investor pessimism" as search terms for investors' sentiment and also applied several negative economic search terms to denote the pessimism. Meanwhile, Mao et al. (2015) included only two search terms ('bull market' and 'bear market') in its analyses to indicate the optimism and pessimism of investors. In this study, it opts using "buy" and "sell" to capture the positive (optimism) and negative (pessimism) sentiment of the investors, accordingly, as the two terms are commonly used in a financial context to portray the potential investment decision of the investors or attention of searchers.
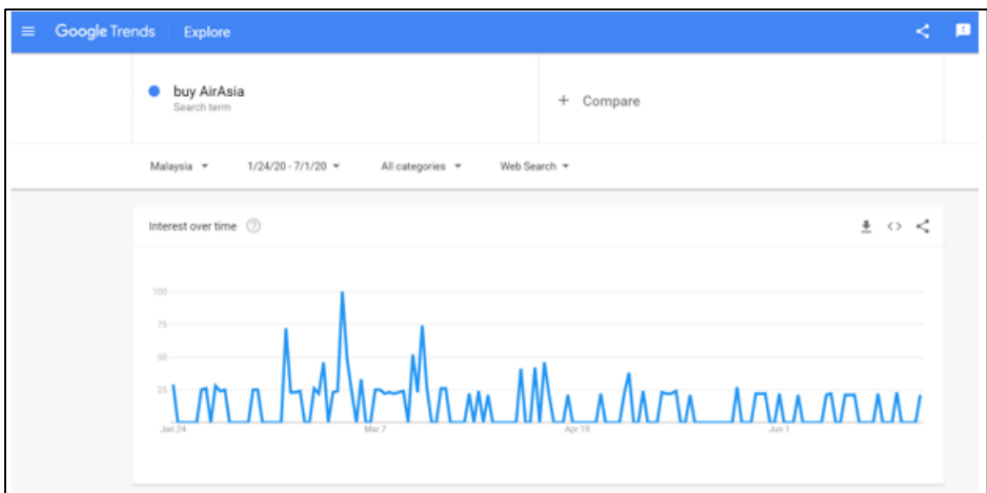

Figure 2. Daily Search Volume Index Source (SVI) for "buy AirAsia":
Source: Google Trends (July 2020)

Upon the retrieval of the daily SVI data for positive (buy) and negative (sell) sentiment of investors for a company from 24 January 2020 to 1 July 2020, this study will subtract the two indexes data and divide it by the total SVIs to produce the Net Positivity Score (NPS) of a company, on a daily

basis. The sentiment of investors of a company on a particular day is positive if the NPS value produces a positive NPS value and vice versa. The estimation of NPS can be formulated as follows:

$$Net\ Positivity\ Score\ (NPS) = \frac{(Positive\ SVI - Negative\ SVI)}{Total\ SVI}\ x\ 100$$

where,

$$Net\ Positivity\ Score\ (NPS)$$
$$= Net\ sentiment\ of\ t\ day\ for\ the\ ith\ company$$

$$Positive\ SVI$$
$$= Total\ SVI\ for\ search\ terms\ "buy"\ of\ t\ day\ for\ the\ ith\ company$$

$$Negative\ SVI$$
$$= Total\ SVI\ for\ search\ terms\ "sell"\ of\ t\ day\ for\ the\ ith\ company$$

Panel Data Analysis and Diagnostic Tests

This study adopts a quantitative research technique and utilizes panel data analysis to accomplish its objectives. Panel data, an analysis that contains the combination of cross-sectional and time series analysis, suits the nature of data of this study. It consists of observations at a regular frequency (daily observation from 24 January 2020 to 1 July 2020) and across numbers of companies (from diferent sectors). Panel data analysis applied in this study began with the diagnostic tests and followed by the static panel estimation, which are Pool Ordinary Least Square (POLS), Random Effect Model (REM), and Fixed Effect Model (FEM). The suitable diagnostic tests are unit root test, multicollinearity check, heteroscedasticity, and serial correlation. If

these tests are ignored, it is worried the panel model estimation is less valid or bias.

The panel unit root test aims to identify whether the data of this study are stationary or nonstationary. The significance of the unit root test is to ensure the regression model is free from nonstationary variables, as claimed by Mahadeva and Robinson (2004). Some commonly used tests for unit root are Levin, Lin and Chu (LLC) test, Harris and Tzavalis test, Breitung test, Im, Pesaran, and Shin (IPS) test, Fisher-type test, and Hadri LM stationary test. Also, another essential diagnostic test that is the Variance Inflation Factor (VIF) test, used to check the multicollinearity problem between independent variables. If the result is near to 1, it implies that the variables are highly correlated and require cautious actions to the variables (e.g., to drop out of the model).

Next, heteroscedasticity is the problem that appears because of the multiple groups of samples crossed with the numbers of periods in panel data. This heteroscedasticity exists when the variance of the error term, given the explanatory variables, is not constant (Wooldridge, 2006). In POLS model, the presence of heteroscedasticity can be measured by using the Breusch-Pagan Lagrange multiplier test. Meanwhile, the Modi ed Wald test utilized to test this problem in the FEM. If the result of the p-value is less than 0.05, then the model suffers from a heteroscedasticity problem. Meanwhile, to deal with serial correlation problems in panel data, the test that is employed is the Woolridge test. If the p-value for the Woolridge test is 0.05, it indicates that the model has a serial correlation problem.

Once the diagnostic tests have completed, the POLS, REM, and FEM is executed. The POLS Model assumes that the error term and individual-

specific effect are not correlated with each other. Hence, to check either the data are poolable or the Random Effect model is appropriate, this study uses the Breusch-Pagan Lagrange multiplier test. The null hypothesis indicates the variance of the unobserved fixed effects is zero. Therefore, pooled OLS might be the appropriate model. Otherwise, the model can proceed to REM or FEM. The REM used to control unobserved heterogeneity when the heterogeneity is constant over time and not correlated with independent variables and then estimates error variance specific to groups (or times). Meanwhile, the FEM explains unobserved heterogeneity or individual-specific effect, which correlated with the explanatory variable. Before deciding either REM or FEM is the best model estimator in this study, the Hausman specification test needs to verify it. This test aims to identify the existence of endogenous regressors or predictor variables in model estimation if the null hypothesis is rejected (p-value < 0.05); results have supported the Fixed Effect Model rather than Random Effect.

Conclusion

No one can predict when and how the next pandemic will occur. The Covid-19 outbreak highlighted the need for an appropriate response mechanism to sustain the stock market, including the share prices of the listed companies (O'Donnell et al., 2021). The sustainability in share prices will not only protect the potential profits desired by investors but also will relatively avoid the unnecessary reaction from investors when it comes to their investment decision during the pandemic. The sudden selling action, for instance, may cause a sharp decline in a stock's price and, thus, will create the unnec-

essary "panic" to other investors leading them to be trapped by the uninformed investment decision. Therefore, the understanding on the influence of the investors' sentiment on the share prices of Malaysian companies' during the Covid-19 outbreak is expected to provide an initial insight essential for both investors and policymakers such as the Securities Commission and Bursa Malaysia in making the decisions or implementing a specific policy during the next pandemic outbreak.

Financial markets are currently displaying a great deal of volatility. A wide range of scenarios remain plausible and need to explore. At the start of the outbreak of Covid-19, many countries did not expect the effects and underestimated the result. While the impact on investors' sentiment is more challenging to observe, it is critical from an economic policy point of view to identify the initial effects and how to deal with shocks, particularly in the stock market and from the reaction of investors. Thus, this study will help to strategize short, medium, and long-term government initiatives, considering the linkages between investors' sentiment, stock market, and Covid-19. Although a complete understanding of the long-term impact of Covid-19 to investors sentiment and share prices require continuous e orts from researchers, the finding of this study nevertheless will promote confidence and offer insight on a more informed decision by the investors for their pro t protection, at least during the peaks of a pandemic.

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