OPEN ACCESS
Finance & Accounting Research Journal
P-ISSN: 2708-633X, E-ISSN: 2708-6348
Volume 3, Issue 4, P.No. 67-74, December, 2021
DOI: 10.51594/farj.v3i4.276
Fair East Publishers
Journal Homepage: www.fepbl.com/index.php/farj

BEHAVIOUR OF STOCK MARKET DURING THE COVID-19 PANDEMIC: THE MALAYSIAN EXPERIENCE

Noor Sahlawaty bt Ghazali[1] & Maran Marimuthu[2]

[1,2] Universiti Teknologi PETRONAS
Sri Iskandar, Perak DR, Malaysia

*Corresponding Author: Noor Sahlawaty bt Ghazali
Corresponding Author Email: noor_17009098@utp.edu.my

Article Received: 03-11-21 **Accepted:** 27-11-21 **Published:** 02-12-21

Licensing Details: Author retains the right of this article. The article is distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 License (http://www.creativecommons.org/licences/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the Journal open access page.

ABSTRACT

The COVID-19 outbreak was triggered in Wuhan, China in December 2019. The World Health Organization (WHO) has declared a public health emergency in January 2020. The literature shows that the COVID-19 pandemic slowed the Malaysian economy. According to the World Bank, Malaysia GDP is USD336.7 bill in 2020, USD 364.7 bill in 2019, a USD28bill reduction or 7.67%. The Malaysian government is trying to address this scenario, it is important to establish and apply expansionary fiscal measures.

The dread of the virus's danger has caused people to cease living, working, socializing, doing business, and the other normal activities. Economic consequences are very unclear, making it difficult to take adequate steps to reverse the downward economic trend. The present research analyses the potential economic impact of the COVID-19 pandemic on the Malaysian economy using a systematic review approach. Also, econometric study to determine the degree of integration between the FBMKLI and the COVID-19 daily infected cases.

The findings show the relationship between COVID-19 infected cases and the performance of the FBMKLI.

Keywords: COVID-19, FBMKLI, Correlation, Malaysia, Systematic Review, Granger causality.

INTRODUCTION

The first case of COVID-19 was discovered in Wuhan, China, in 31st, December 2019. On January 25, 2020, Malaysia's first case of COVID-19 was confirmed. WHO declared a global emergency in January 31, 2020 because of the COVID-19's fast spread.

The COVID-19 diseases effect health and financial wellbeing due to MCO stopping economic activity of an entire country in this study Malaysia. The adverse consequences of coronavirus COVID-19 have caused major economic disruption such as disruption in supply chain, decreasing supply and demand for goods and services due to manufacturing closure added by banned of interstate traveling, closure of borders resulting in crippling of tourism economy and transportation business. The COVID-19, according to the BNM (Bank Negara Malaysia), has damaged Malaysia's financial growth. As investors worry about the economic impact of the COVID-19 pandemic, the performance of the FTSE Malaysia Composite Index has declined, and the negative impact is evident. According to experts, the Malaysian equities market likely to be bearish in September, owing to the growing COVID-19 infections, which would continue to impact local market confidence.

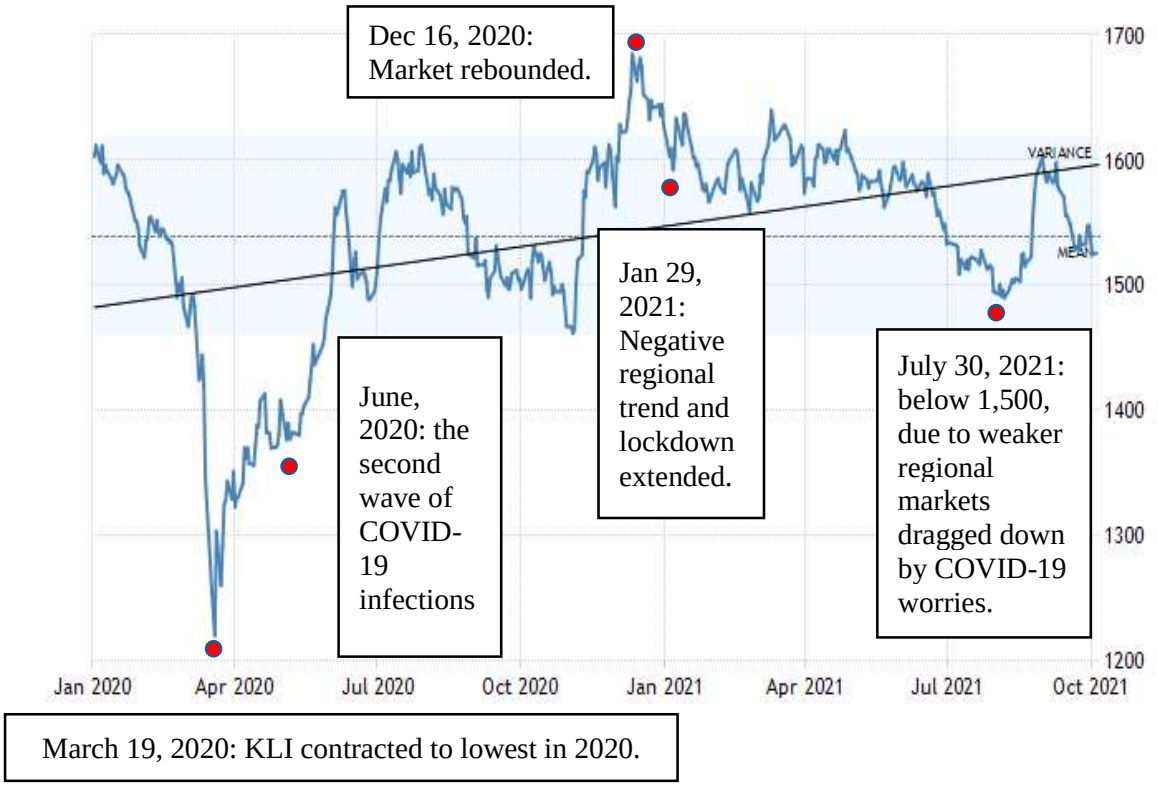

Figure 1: Malaysian Stock Market the FBMKLI
Source: https://tradingeconomics.com/malaysia/stock-market

The chronology of the FBMKLI performance is shown in figure 1. From January 2, 2020 to early October 2021: The FBMKLI opened up 13.74 points or 0.86%. On Feb 24, 2020: after a major selling move, at 1,490.06, the FBMKLI was down 41.14 points, or 2.69 percent due to few factors that influence investors' concern such as the Global COVID-19 epidemic, decreased crude oil prices, and political unrest in Malaysia. On March 19, 2020, fear of the pandemic caused Malaysia's capital market value to drop to RM1.25 trillion.

A second wave of infections caused investors' concern on June 15, 2020, resulting in the biggest drop for Bursa Malaysia in three months followed by broader market decline, the FBMKLI

closed below 1,500 points, down 22.6 points or 1.49% to 1,496.72 on September 9, 2020. The confluence of factors includes a drop in crude oil prices and the expectation of BNM's OPR (overnight policy rate) decision. On Oct 1, 2020: the Malaysian manufacturing sector showed signs of losing momentum and Bursa Malaysia's main index start on a weaker note in line with the subdued regional markets.

By December 16, 2020: The total market value of Malaysian stocks rebounded to RM600 billion, or 48.7%, to RM1.85 trillion, however, the FBMKLI dropped 14.22 points closing at 1,566.40. Against a backdrop of regional market losses, the FBMKLI closed at 1,566.40, down 14.22 points or 0.9% on January 29th, 2021. In addition to the current lockdown, the deteriorating trend of the region contributed to the decline of the index.

On July 30, 2021, the FBMKLI fell below 1,500 points, in line with weakening regional markets pulled down by concerns over COVID-19. On August 27, 2021: The FTSE Bursa Malaysia Composite Index rose 0.28% , the highest in the past three months, as positive market sentiment has continued after the political turmoil has been temporarily resolved in recent weeks.

LITERATURE REVIEW

When the COVID-19 pandemic pushed the economy further into another recession, the world economy was already facing the challenge of the Sino-US trade war. As the spread of the virus is out of control and no cure has been found, the worsening health crisis has caused many deaths.

In March 2020, Malaysia announced a movement control order in an effort to stop the spread of the disease, and has successfully controlled the COVID-19 infection cases to a minimum. However, after the elections in Sabah, the virus spread faster than ever. Since then, the spread of COVID-19 has led to higher death rates, with infections climbing to a million. Malaysia successfully controlled the COVID-19 infection using several MCOs, but the number of cases has surged again since September.[1]

The negative impact of the pandemic can also be seen from the links between the stock markets.(Liu et al., 2020) claim that following the COVID-19 viral epidemic, financial prices in most impacted nations plummeted. The result also reveals the negative abnormal return is greater in Asian countries. (Şenol & Zeren, 2020) have reconfirmed the damage caused by COVID-19. They believe that the influence of COVID-19 pandemic is more serious than the previous pandemics in regards to influence on the stock market and economy. The severity of the COVID-19 impact is further explain by (Phan & Narayan, 2020) who show that most stock market reacted negatively to COVID-19 impact and concluded that COVID-19 as the most destructing incident for stock markets. Then, (Chakrabarti et al., 2021) further explained the negative impact of COVID-19 on increasing the diversification risk of international investment portfolios. Also, (David et al., 2021) suggest the shocks caused by diseases significantly affected stock markets heavier and longer than previous pandemic.

(He et al., 2020) shows that COVID-19 post negative effect in the short-run on stock market and this impact has a two-way spillover effect between two market. Yet, the impact on countries' stock markets and impact to global market the same degree.

[1] Malaysia 2021 Article IV Consultation — Press Release; Staff Report; and Statement by The Executive Director for Malaysia

COVID-19 has had a huge effect on global trade and stock markets resulting in the Malaysian economy into a technical recession. Malaysia has temporarily halted the infection of COVID-19 by enacting the 1st MCO (Movement Control Order), nevertheless, Malaysian was hurt by unprecedented economic losses in the second quarter of 2020.

(Bank Negara Malaysia, 2020) reported that in 2020, the global economy is predicted to grow at a negative rate. The containing the COVID-19 has slowed the global economic growth. The IMF report stated that the 2020 economic recession is expected to be at as bad as during the 2009 global financial crisis, and it is expected to recover in 2021. Meanwhile, (Bank Negara Malaysia, 2021) reported that in 2021, the Malaysian economy is expected to rise to between 6.0 and 7.5 percent. Economic activity slowdown and MCO due to the pandemic will affect economic growth.

Many studies suggest that a temporary policy should be prioritized to manage the health and financial crisis. To deal with the pandemic's impact on the Malaysian economy, the Malaysian government issued five policy packages from February to September 2020, totaling RM 305 billion 21¼ percent of GDP. Malaysian authorities are aware of the importance of ensuring the country's health resources and facilities are available so that healthcare specialists able to prioritize treatment of severe cases. In addition, health facilities are being taken precautions to ensure that they are not overburdened by cases and are not a source of virus transmission to other medical staff and patients, and are sourcing COVID-19 vaccines from different providers. Similarly, stock markets react swiftly to the COVID-19 pandemic, and their reaction changes over time depending on the stage of the epidemic. (Ashraf, 2020) reveals that the market has seen significant unfavorable reactions in the early phases of verified cases, as well as 40 to 60 days following the initial confirmed cases.

Methodology and Data

This study uses the time series analysis. Econometric analysis is used to establish the link between COVID-19 and the FBMKLI. The FTSE Bursa Malaysia Composite Index, and daily COVID-19 cases are used in this study, which spans the months of February to December 2020.

Table 1

Unit root ADF and PP test for the FBMKLI and COVID-19 Daily Case from January 2020 to December 2020

	Level		1st Difference		Level		1st Difference	
	Individual effects				Individual effects, individual linear trends			
Method	ADF test t-statistic	Prob.**	ADF test t-statistic	Prob.**	Statistic	Prob.**	Statistic	Prob.**
ADF - Fisher Chi-square	5.58147	0.2327	270.475	0.000	5.2436	0.2632	260.499	0.0000
ADF - Choi Z-stat	2.40786	0.9920	-16.0092	0.000	1.49752	0.9329	-15.3933	0.0000
PP - Fisher Chi-square	7.11258	0.1301	167.422	0.0000	35.7154	0.0000		
PP - Choi Z-stat	-1.32162	0.0931	-11.0616	0.0000	-4.44781	0.0000		

According to the ADF test the variables are stationary at 1st difference. However, PP test, the variables are stationary at 1st difference in individual effects but stationary at level in Individual effects, individual linear trends.

Table 2
Unit Root KPSS Test for the FBMKLI and COVID-19 Daily Case from January 2020 to December 2020

	Level		1st Difference		Level		1st Difference	
Variables	KPSS test t-statistic	Prob.**	KPSS test t-statistic	Prob.**	Statistic	Prob.**	Statistic	Prob.**
FBMKLI (Intercept)	338.8158	0.0000	0.01013	0.9919	175.6577	0.0000	-0.6063	0.5447
(Intercept and Trend)					7.299776	0.0000	0.70543	0.481
COVID-19 (Intercept)	11.47666	0.000	0.549333	0.5832	-10.0872	0.0000	-0.40083	0.6888
(Intercept and Trend)					18.47123	0.0000	0.677521	0.4986

The KPSS test shows the variables are stationary at level. The null hypothesis all variables is stationary at level is accepted.

Table 3
Descriptive Statistic for the FBMKLI and COVID-19 Daily Cases from January 2020 to December 2020

	FMBKLI	Daily Cases
Mean	1596.340	369.2418
Median	1620.000	68.50000
Maximum	1780.000	2525.000
Minimum	1360.000	-846.0000
Std. Dev.	90.03188	562.8027
Skewness	-0.763645	1.584333
Kurtosis	3.222941	4.804863
Jarque-Bera	30.37456	169.5491
Probability	0.000000	0.000000
Sum	488480.0	112988.0
Sum Sq. Dev.	2472251.	96607810
Observations	306	306

The kurtosis value is more than 3, this result implies the data is not normally distributed. The Jarque-Bera statistics indicate that both variables are 0 which implies the data is not normal. The choice is to reject the null hypothesis and conclude that data do not follow a normal distribution if the p-value is less than or equal to the significance level. Statistics, according to Jarque-Bera, contradict the null hypothesis of normal distribution.

Table 4

Linear Regression between the FBMKLI and COVID-19 Daily Cases from January 2020 to December 2020

Dependent Variable: FMBKLI

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1570.043	5.52372	284.2366	0.000
DAILY_CASES	0.071217	0.008216	8.668593	0.000
R-squared	0.198195	Mean dependent var		1596.34
Adjusted R-squared	0.195557	S.D. dependent var		90.03188
S.E. of regression	80.75025	Akaike info criterion		11.62711
Sum squared resid	1982263	Schwarz criterion		11.65145
Log likelihood	-1776.948	Hannan-Quinn criter.		11.63685
F-statistic	75.1445	Durbin-Watson stat		0.171698
Prob(F-statistic)	0.0000			

Table 5

VAR Lag Order Selection Criteria for the FBMKLI and COVID-19 Daily Cases.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-3776.672	NA	1.81E+09	26.99051	27.01647	27.00093
1	-3265.988	1010.424	48428130	23.37134	23.44923	23.40259
2	-3230.367	69.96988	38637462	23.14548	23.27529	23.19755
3	-3217.278	25.52425	36209139	23.08056	23.26229*	23.15345
4	-3207.712	18.51594	34798766	23.0408	23.27447	23.13453
5	-3198.347	17.99452	33491640	23.00248	23.28807	23.11703*
6	-3195.84	4.780859	33852544	23.01315	23.35066	23.14852
7	-3189.789	11.4537	33362610	22.9985	23.38794	23.1547
8	-3185.773	7.544658	33361884	22.99838	23.43975	23.17541
9	-3183.884	3.522241	33872687	23.01346	23.50675	23.21132
10	-3181.765	3.920379	34335866	23.02689	23.57211	23.24558
11	-3173.419	15.32028	33292345*	22.99585*	23.59299	23.23537
12	-3170.95	4.497406	33665502	23.00678	23.65585	23.26713
13	-3170.799	0.27261	34612545	23.03428	23.73527	23.31545
14	-3169.812	1.769894	35375694	23.0558	23.80872	23.3578
15	-3164.408	9.610776*	35034414	23.04577	23.85062	23.3686
16	-3160.379	7.107889	35040468	23.04557	23.90234	23.38922
17	-3157.349	5.302586	35299174	23.0525	23.96119	23.41698
18	-3154.207	5.454821	35533061	23.05862	24.01924	23.44393
19	-3150.56	6.277666	35641932	23.06114	24.07369	23.46728
20	-3148.71	3.158694	36214998	23.0765	24.14097	23.50346
21	-3146.091	4.433673	36598054	23.08636	24.20276	23.53415
22	-3140.564	9.276201	36227440	23.07546	24.24378	23.54408
23	-3135.703	8.090398	36033830	23.06931	24.28956	23.55875
24	-3130.75	8.173051	35820261	23.0625	24.33467	23.57277

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Table 6
Pairwise Granger Causality Tests between the FBMKLI and COVID-19 Daily Cases

Null Hypothesis:	Obs	F-Statistic	Prob.
D(DAILY_CASES) does not Granger Cause D(FBMKLI)	292	0.56795	0.8541
D(FMBKLI) does not Granger Cause D(DAILY_CASES)		0.54670	0.8702

The result fails to identify any causality relationship between the FBMKLI and COVID-19 cases. The probability value is more than 0.05 significant level for both series therefore, the null hypothesis of no granger cause is accepted. The daily cases of COVID-19 does not lead the FBMKLI and vice versa.

Table 7
Correlation Test

Correlation Matrix		
Variables	FMBKLI	DAILY_CASES
FMBKLI	1.000	

DAILY_CASES	0.445191	1.000
	0.0000	-----

The correlation test show COVID-19 case and the FBMKLI have a positive but weak correlation with each other at 44% therefore, COVID-19 case does influence the FBMKLI at a small degree.

Discussion

Overall findings from literature have stated COVID-19 has negative effect on stock market. The Malaysian government put up solutions to contain the negative impact with appropriate policies. Closing manufacturing companies and businesses, travel bans, and border closures can help control the spread of the virus, but it has seriously impacted business and the economy. The effect on the Malaysian economy conditions is reflected in the FBMKLI performance. To overcome the coronavirus and its economic impact, governments must act promptly and firmly. and pay attention to the impact of the catastrophic epidemic. During a virus outbreak, the government must ensure that effective and well-resourced public health measures are taken to prevent infection and spread, as well as to implement targeted policies to support the healthcare system and staff, as well as to protect the incomes of disadvantaged social groups and businesses.

The immediate impact of forced shutdowns and travel restrictions is significant. As virus outbreaks fade, supportive macroeconomic policies can help restore confidence and aid demand recovery. In order to revitalize the economy, measures to restore investor confidence, financial assistance to low-income groups, effective and efficient health regulations, MCO at all levels and enterprises, and reasonable standard operating procedures are all important and urgently needed.

CONCLUSION

At a glance, it is apparent that nations who obtained vaccination protection promptly were able to safeguard their economy. See also: (Hasell, 2020). COVID-19 is a terrifying new threat. As a result, it piqued the interest of investors. Despite the volatility and the panic, realistic economic forecasts underpin fluctuations in individual company stock prices.

Consequently, society can understand the nature of the problems we face in these difficult times. To avoid additional negative repercussions and the propagation of the COVID-19 shock, a wide variety of activities, including fiscal policy interventions, are needed, according to the stock price response. According to experts, the economic environment will change from normal.

Such shifts have the potential to cause major social and political upheavals. Hopefully, we will avoid the inherent hazards while taking use of the opportunities. (Bank Negara Malaysia, 2021) found that an appropriate combination of monetary, financial and fiscal policies is necessary to ensure overall effectiveness and long-term economic recovery. To assist and guarantee a durable economic recovery, the intensity and extent of the COVID-19 shock demands the deployment of supplementary monetary, fiscal, and financial sector policies, including the adoption of more targeted and sector-specific measures for the impacted parts of the economy.

References

Ashraf, B. N. (2020). Stock markets' reaction to COVID-19: Cases or fatalities? *Research in International Business and Finance*, *54*(May), 101249. https://doi.org/10.1016/j.ribaf.2020.101249

Bank Negara Malaysia. (2020). GROWTH WEAKENED BY THE COVID-19 PANDEMIC. *Outlook and Policy in 2020*, *March 2020*, 104. www.bnm.gov.my/files/publication/ar/en/2012/cp04.pdf

Bank Negara Malaysia. (2021). *Outlook and Policy in 2020 Markedly weaker global growth prospects*. *March 2020*, 104. www.bnm.gov.my/files/publication/ar/en/2012/cp04.pdf

Chakrabarti, P., Jawed, M. S., & Sarkhel, M. (2021). COVID-19 pandemic and global financial market interlinkages: a dynamic temporal network analysis. *Applied Economics*, *53*(25), 2930–2945. https://doi.org/10.1080/00036846.2020.1870654

David, S. A., Inácio, C. M. C., & Tenreiro Machado, J. A. (2021). The recovery of global stock markets indices after impacts due to pandemics. *Research in International Business and Finance*, *55*(September 2020). https://doi.org/10.1016/j.ribaf.2020.101335

Hasell, J. (2020). *Which countries have protected both health and the economy in the pandemic? - Our World in Data*. September 01. https://ourworldindata.org/covid-health-economy

He, Q., Liu, J., Wang, S., & Yu, J. (2020). The impact of COVID-19 on stock markets. *Economic and Political Studies*, *8*(3), 275–288. https://doi.org/10.1080/20954816.2020.1757570

Liu, H., Manzoor, A., Wang, C., Zhang, L., & Manzoor, Z. (2020). The COVID-19 outbreak and affected countries stock markets response. *International Journal of Environmental Research and Public Health*, *17*(8), 1–19. https://doi.org/10.3390/ijerph17082800

Phan, D. H. B., & Narayan, P. K. (2020). Country Responses and the Reaction of the Stock Market to COVID-19—a Preliminary Exposition. *Emerging Markets Finance and Trade*, *56*(10), 2138–2150. https://doi.org/10.1080/1540496X.2020.1784719

Şenol, Z., & Zeren, F. (2020). Coronavirus (Covid-19) and Stock Markets: the Effects of the Pandemic on the Global Economy. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi (ASEAD)*, *7*(4), 1–16. www.asead.com