BRIEF DISCUSSION ON CURRENT ISSUE IN STOCK MARKET

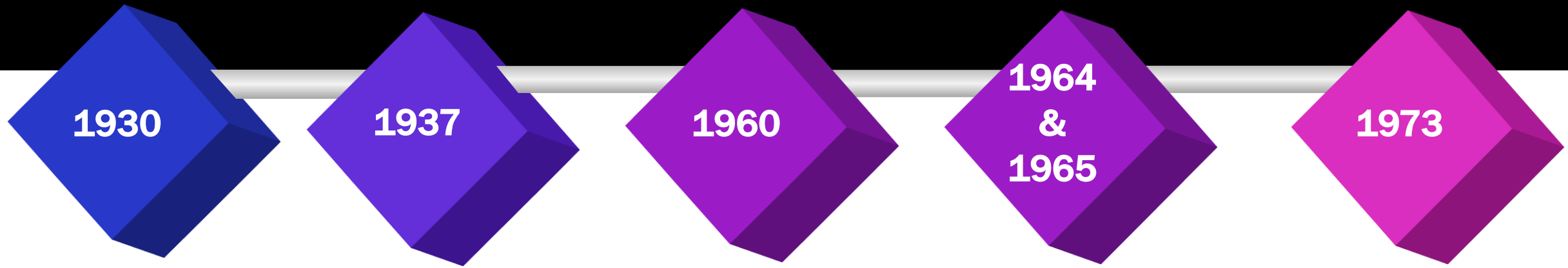
Learning Outcome

01	Define Stock Market
02	Define Current Issue (Covid-19 Pandemic)
03	Identify the significant impact of Covid-19 pandemic towards stock market.
04	Identify long run relationship between stock market and Covid-19 pandemic

STOCK MARKET

- The stock market broadly refers to the collection of exchanges and other venues where the buying, selling, and issuance of shares of publicly held companies take place.
- A stock exchange is an exchange where stockbrokers and traders can buy and sell securities, such as shares of stock, bonds, and other financial instruments.

History of Bursa Malaysia



1930

First formal securities business organisation established in Malaysia - Singapore Stockbrokers' Association.

1937

Re-registered as the Malayan Stockbrokers' Association. But it still did not trade public shares.

1960

Malayan Stock Exchange was formed and public trading started on May 9 1960.

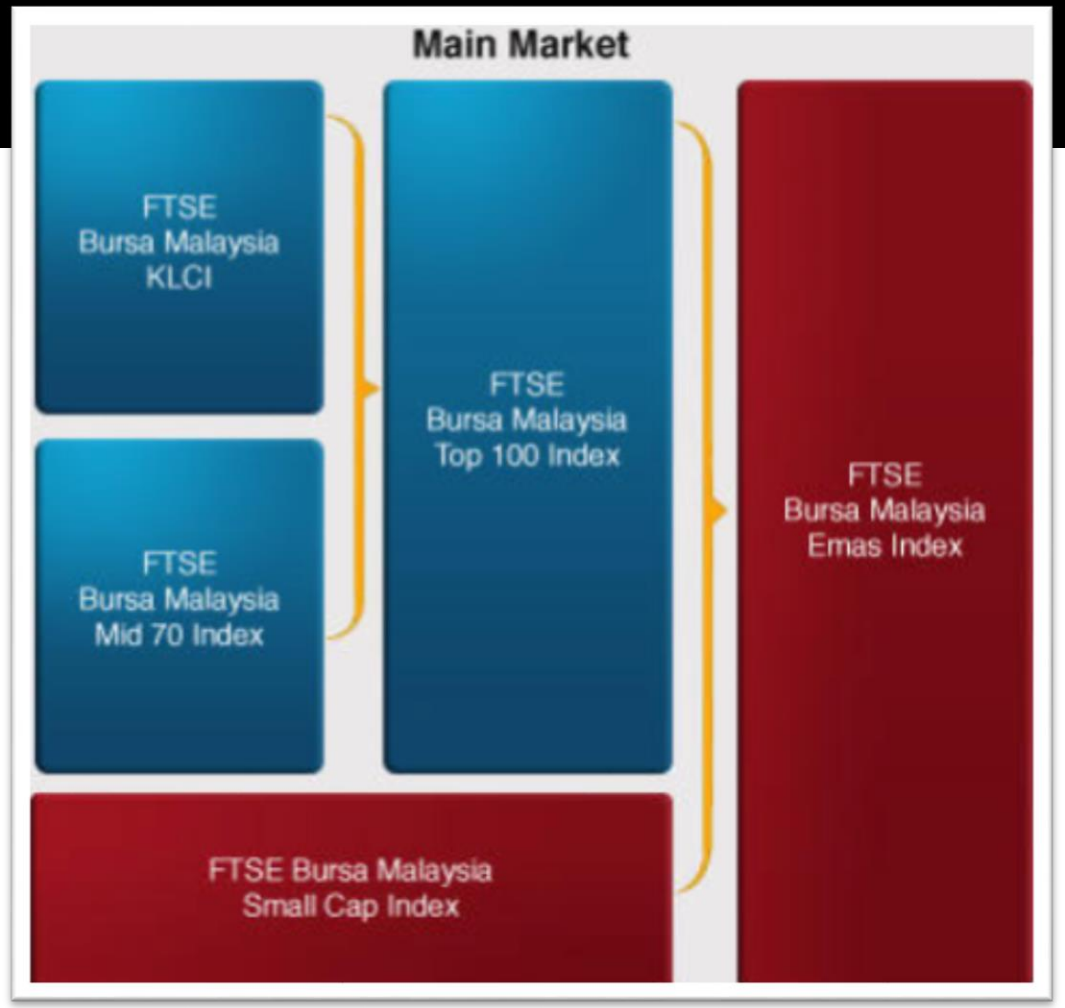
1964 & 1965

Malaysian Stock Exchange was formally formed in 1964. Separation of Singapore from Malaysia in 1965, the Stock Exchange of Malaysia became the Stock Exchange of Malaysia and Singapore

1973

The Stock Exchange of Malaysia and Singapore was divided into the Kuala Lumpur Stock Exchange Berhad and the Stock Exchange of Singapore

Bursa Malaysia Indices



- Bursa Malaysia Emas Index - Consist of Bursa Malaysia Top 100 Index and Bursa Malaysia Small Cap Index.
- Bursa Malaysia Top 100 Index – Included Bursa Malaysia KLCI and Bursa Malaysia Mid 70 Index
- Bursa Malaysia KLCI - Consist of the 30 largest companies on the Bursa Malaysia by market capitalisation
- Bursa Malaysia Mid 70 Index – Consist of the next 70 companies followed by Bursa Malaysia KLCI
- Bursa Malaysia Small Cap Index - Comprises those eligible companies within the top 98% of the Bursa Malaysia Main Market excluding constituents of the FTSE Bursa Malaysia Top 100 Index.

COVID-19 PANDEMIC

- The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
- The first cases in Malaysia were confirmed among travellers from China in Johor via Singapore on 25 January 2020 and continued to be limited to a few imported cases until March 2020.
- End of March total number of cases rises from below 30 to over 2,000 active cases across every state and federal territory in the country. Hence Movement Control Order (MCO), which came into effect on 18 March 2020. The MCO, which was originally to be ended on 31 March 2020, was extended to early May 2020.

MOVEMENT CONTROL ORDER (MCO)

- Movement Control Order commonly referred as MCO, is a series of national quarantine measures implemented by the federal government of Malaysia in response to the COVID-19 pandemic in the country.
- To combat the spread of the virus, MCO actions included limitations on mobility, gatherings, and international travel, as well as the shutdown of businesses, industries, government, and educational institutions.

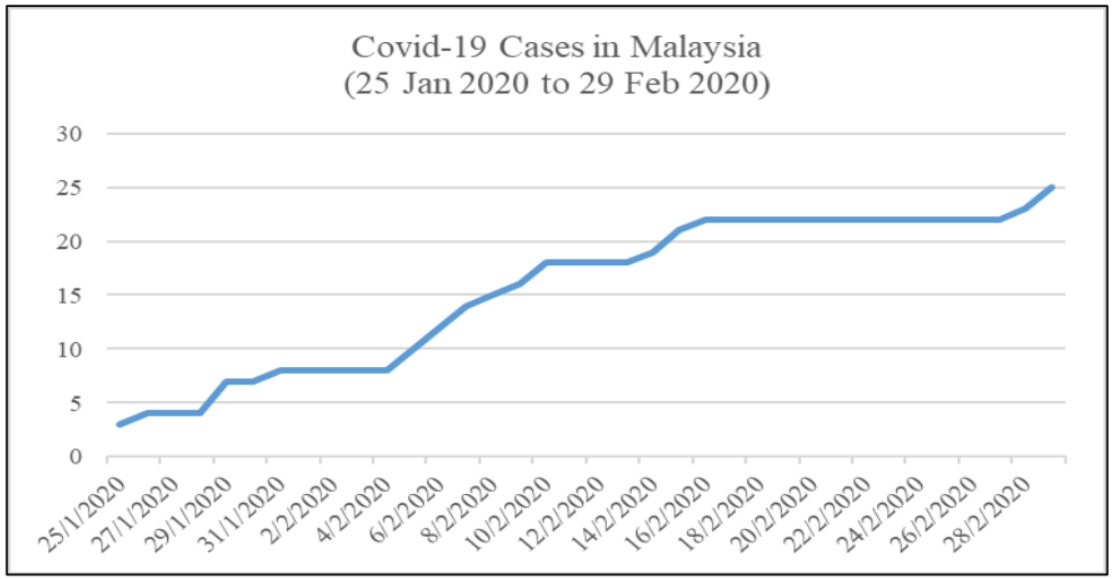
COVID-19 PANDEMIC AFFECT MALAYSIA ECONOMIC

- Small-to-medium enterprises (SMEs) contribute to 35% of Malaysian GDP (Gross Domestic Product) and to 70% of the jobs in the entire market.
- Due to the MCO, SMEs were severely affected, causing many enterprise to face financial struggles. During the two-month lockdown, manufacturers that contributed to Malaysia's export income were forced to shut down, leading the economy to fall by 8.3 percent, compared to a negative 1.7 percent growth in 2019.

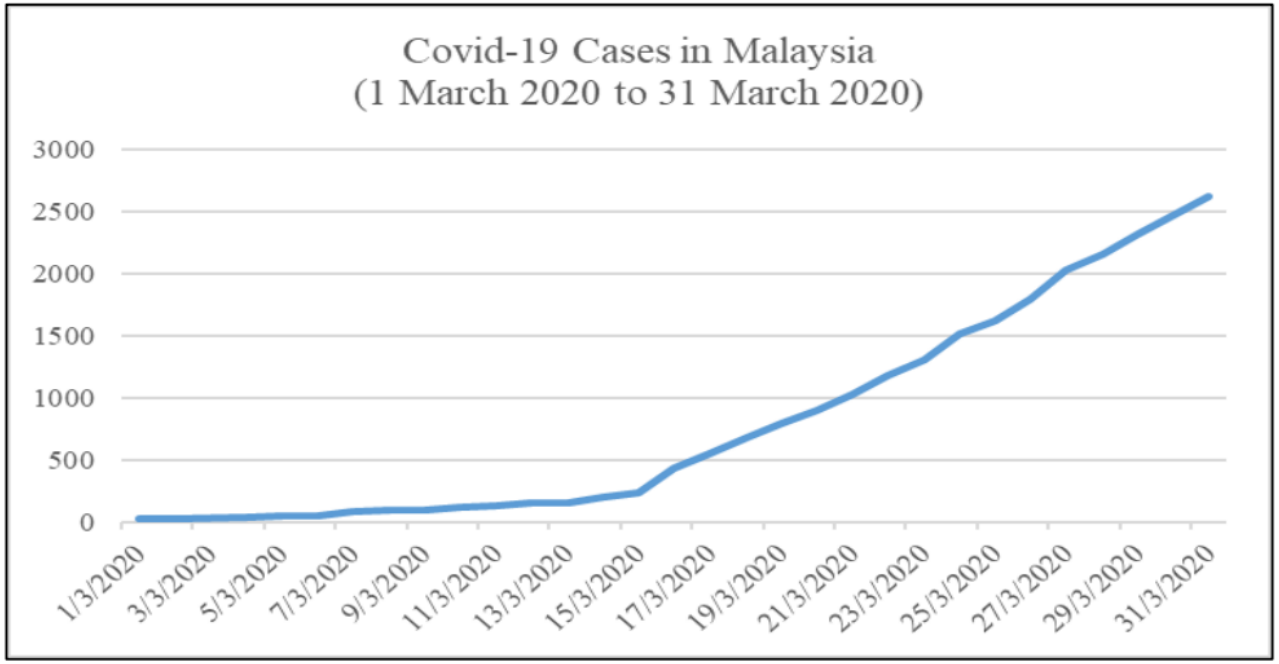
COVID-19 PANDEMIC AFFECT MALAYSIA ECONOMIC

- MCO has also impacted the tourism industry, suffering losses of RM45 million in tourist expenditure. With all economic losses combined across industries during MCO 1.0, Malaysia suffered a total of RM2.4 billion per day.
- COVID-19 affected the Malaysian stock market because many businesses and markets in Malaysia collapsed, resulting in an economic and market recession.

WILL MALAYSIA STOCK MARKET BE AFFECTED BY COVID-19 PANDEMIC ?

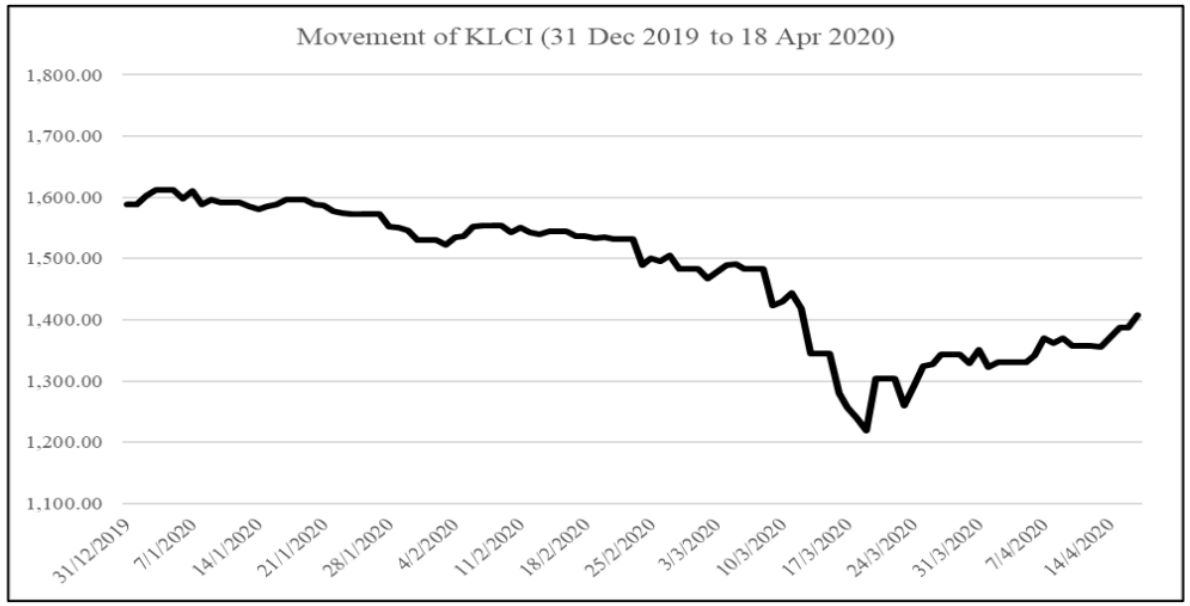


Source: World Health Organization (WHO)



Source: World Health Organization (WHO)

WILL MALAYSIA STOCK MARKET BE AFFECTED BY COVID-19 PANDEMIC ?



Source: Investing.com

Due to the increases of covid cases dramatically from 25 cases on 1 March 2020 to 2,626 cases on 31 March the government of Malaysia announced a movement control order (MCO) effective from 18 March 2020 to 31 March 2020.

The covid-19 cases increases rapidly from 15 March to 31 March. While the KLCI decreases from mid of march to the minimum of 1219.72 in 19 March after the movement control order (MCO) are implemented.

REACTION OF STOCK MARKET AND COVID-19

Variable	KLCI
Constant	2.949[b]
	[0.014]
DCC	-0.003[a]
	[0.084]

A study by Chia et al. (2020) they found that the coefficient of the DCC (confirmed new cases of COVID-19) has the correct negative sign for KLCI. DCC impact is statistically significant for KLCI.

1 unit increases in DCC will decreases 0.003 unit of KLCI.

P-Value less than Significant level of 0.01, 0.05, 0.1 reject null hypothesis.

Null Hypothesis: Insignificant relationship between variables
Alternative Hypothesis: Significant relationship between variables

REACTION OF STOCK MARKET AND COVID-19

By using Regression Analysis. A study by Yong et al. (2020) found that the number of COVID-19 cases in Malaysia had a significant negative relationship with KLCI. This indicated that the COVID-19 outbreak in Malaysia had significant effect on KLCI.

Model	1
Intercept	1362.36
	0.000*
MC_t	-0.250
	0.005*

REACTION OF STOCK MARKET AND COVID-19

According to the study by Awadh et al. (2021) The daily trading size of the Malaysian stock market reacted negatively and significant with the daily growth in the domestic and global extent of the COVID-19 pandemic.

Panel A: ARDL (1, 5, 1, 1, 4) Long–Run Coefficients Estimates					
Cons	Ln(DOC)	Ln(GOC)	(SMV)	$(BA_{i,t\_} - BA_{i,t-j})$	
8.67 (3.15)	–0.15 (–1.46)*	–0.34 (–2.05)**	–0.57 (–2.44)**	0.81 (5.96)**	

* and ** indicate significance at 10% and 5% levels, respectively.

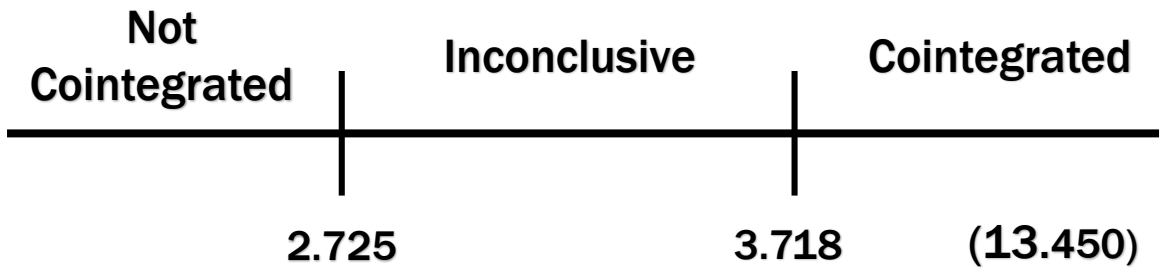
LONG RUN RELATIONSHIP BETWEEN STOCK MARKET AND COVID-19

Table 2: Bounds Cointegration Test Result

Model	**Calculated *F*-statistic**	
Ln (SMS) = F(Ln(DOC), Ln(GOC), (SMV), ($BA_{i,t} - BA_{i,t-j}$)	13.450**	
	K = 4, *N* = 76	
Critical value for bounds test: case II: restricted intercept and no trend	*I*(0)	*I*(1)
1%	3.687	4.842
5%	2.725	3.718
10%	2.313	3.228

Notes: **Denotes to the 5% significance level, while *k* is the number of determinants. Critical bounds of *F*-statistic are shown in Narayan (2005).

A study of The Impact of COVID-19 on the Malaysian Stock Market by Awadh et al. (2021) found that the variables co-integrate over time. This final inference on the existing co-integration is confirmed by testing for the residuals obtained from the long-run co-integrating relationship for the preferred model of ARDL in its level.



REACTION OF STOCK MARKET AND COVID-19 IN UNITED STATES

Table 3. ARDL Bound Co-integration Test Results and the Critical Values

Model (Co-integration Null Hypothesis)	Lag Structure#	F-stat	Outcome at 99%
F (*ln*DJ/*ln*case, *ln*deaths, *ln*vacci, *ln*SI)	(3, 0, 2, 0, 1)	7.213*	Co-integration

Source: The authors' calculations from EViews
Note: # Selected based on AIC; * indicates statistical significance at 1%.

A study by Rohit et al. (2022), by using the ARDL model they found that the estimated F-statistic exceed 99% upper bound, which rejects the null of no cointegration.

Therefore, there exists a cointegration relationship amongst the variables. Which mean there is exist long-run relationship between stock market and Covid 19 in United States.

REACTION OF STOCK MARKET AND COVID-19 IN UNITED STATES

Total confirmed cases reported in the USA shows a significant and negative relationship with the Dow Jones movement.

For every 1% increase in the confirmed cases, there will be a 1.614% decrease in the Dow Jones movement.

Table 4. Long-Run Coefficient Estimates

	Dow Jones Industrial Average	
Independent Variables	Coefficient [Std. Error]	T-Stat [Prob.]
Total confirmed cases	–1.614 [0.681]	–2.371** [0.028]
Total confirmed deaths	–0.205 [0.401]	–0.511 [0.615]
Total vaccination	0.224 [0.085]	2.644** [0.016]
Stringency index	–0.321 [0.118]	–2.717** [0.013]
C	38.025 [9.267]	4.103* [0.001]

Source: The authors' calculations from EViews
Note: *, ** indicates 1% and 5% level of significance respectively.

REACTION OF STOCK MARKET AND COVID-19 IN INDONESIA

Table 3. Bound test of Cointegration Results

Model Spesification	F-Statistic	K	Critical Value Bounds			
			Lower Bound I(0)		Upper Bound I(1)	
ARDL(4,0)	43.30681*	1	1%	4.94	1%	5.58
			5%	3.62	5%	4.16
			10%	3.02	10%	3.51

Note: *indicate the significance at the level 5%

Source: Author calculations

A study by Violita and Lahuddin (2021). They found that the results of the Bound test indicates if there is a relationship of cointegration between the series. Which shows the possible long-run relationship between stock market and covid 19 cases in Indonesia.

REACTION OF STOCK MARKET AND COVID-19 IN INDONESIA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Long-run estimation				
Constant	0.004	0.007	0.614	0.539
Δ(COVID)	0.048	0.083	0.577	0.564

Source: Author calculations

- There is a positive insignificant relationship between daily covid 19 cases and Indonesia stock market.
- Since the p-value is greater than the significant value of 0.01, 0.05, and 0.1 thus the null hypothesis of insignificant between variables are accepted.
- Which mean variable ΔCOVID is not influenced ΔSTOCK.

CONCLUSION

Country	MALAYSIA			United State	Indonesia
	Chia et al. (2020)	Yong et al. (2020)	Awadh et al. (2021)	Rohit et al. (2022)	Violita and Lahuddin (2021)
Relationship between stock market and COVID 19	Negative Significant	Negative Significant	Negative Significant	Negative Significant	Positive Insignificant
Long-run relationship between stock market and COVID 19	-	-	Exist	Exist	Exist

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THANK YOU