

## MCO in Malaysia: Consumer Confidence and Households' Responses (PKP di Malaysia: Keyakinan Pengguna dan Tindak Balas Isi Rumah)

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### ABSTRACT

*This research attempts to analyze households' responses to Movement Control Orders (MCO) and assess the impact of MCO on consumer confidence based on the potential disproportionate impact on various income groups in Malaysia. Households' responses and consumer confidence are measured through an online survey to collect the targeted groups' financial situation and household information and expectations during MCO. A total of 660 respondents from all over Malaysia were involved in this study. Analysis of the MCO responses showed that households were able to comply with MCO rules with the highest positive response of 99.7%. In comparison, the households' responses to the implementation of MCO showed the highest negative response of 18.4%, with the majority represented by the B40 income category (65.2%). The consumer confidence present index is operating at six times higher than the expectation index, which indicates that the implementation of MCO in the short-run has a moderate impact on households' economic status than in the long-run involving the COVID-19 pandemic effect on the overall economy. According to the people's confidence to the government in the long-run, current political developments are essential to influence the people's confidence in the economy. The consumer confidence index gives an overview of two policies that need to be emphasized by the government. Based on the short-run status of food consumption, this study strongly recommends that the policymakers consider establishing a National Food Stockpile in light of the nation's food security and moving on to food-based agriculture that considers the targeted groups in the long-run.*

*Keywords: consumer confidence; COVID-19; economic impact; Malaysia; MCO response.*

*JEL Code: A1; D1; E7*

### ABSTRAK

*Penyelidikan ini cuba menganalisis tindak balas isi rumah terhadap Perintah Kawalan Pergerakan (PKP) dan menilai impak PKP terhadap keyakinan pengguna berdasarkan kemungkinan kesan yang tidak seimbang terhadap pelbagai kumpulan pendapatan di Malaysia. Tindak balas dan keyakinan pengguna diukur melalui tinjauan dalam talian untuk mengumpulkan keadaan kewangan kumpulan sasaran dan maklumat isi rumah serta dan jangkaan semasa PKP. Seramai 660 responden dari seluruh Malaysia terlibat dalam kajian ini. Analisis tindak balas PKP menunjukkan isi rumah dapat mematuhi peraturan PKP dengan respon positif tertinggi sebanyak 99.7% manakala tindak balas perasaan melaksanakan PKP menunjukkan respon negatif tertinggi sebanyak 18.4% yang majoritinya diwakili oleh kategori pendapatan B40 (65.2%). Indeks keyakinan pengguna sekarang adalah pada enam kali lebih tinggi daripada indeks jangkaan, yang menunjukkan bahawa pelaksanaan PKP dalam jangka pendek memberi kesan sederhana terhadap status ekonomi rumah tangga daripada jangka panjang yang melibatkan kesan pandemik COVID-19 pada keseluruhan ekonomi. Indeks keyakinan pengguna sekarang adalah pada tiga kali lebih tinggi daripada indeks jangkaan, yang menunjukkan bahawa pelaksanaan PKP dalam jangka pendek kurang memberi kesan terhadap status ekonomi rumah tangga daripada jangka panjang yang melibatkan kesan pandemik COVID-19 pada keseluruhan ekonomi. Berdasarkan keyakinan rakyat terhadap kerajaan dalam jangka panjang, perkembangan politik semasa sangat penting untuk mempengaruhi keyakinan rakyat terhadap ekonomi. Manakala, indeks keyakinan pengguna memberikan gambaran umum mengenai dua dasar yang perlu dititikberatkan oleh pemerintah. Berdasarkan status penggunaan makanan jangka pendek, kajian ini mencadangkan*

pembuat dasar mempertimbangkan untuk menubuhkan Stok Makanan Nasional berdasarkan keselamatan makanan negara dan beralih ke pertanian berasaskan makanan yang mempertimbangkan golongan sasaran dalam jangka panjang.

Kata kunci: keyakinan pengguna; COVID-19; impak ekonomi; Malaysia; respon PKP.

Kod JEL: A1; D1; E7

## INTRODUCTION

On January 30, 2020, the World Health Organization (WHO) declared Coronavirus Disease (COVID-19) as a "Public Health Emergency of International Concern" (WHO, 2019). The WHO has considered the COVID-19 outbreak to be ten times deadlier than the swine flu pandemic in 2009 (WHO, 2020a). Unlike the latter, the COVID-19 has claimed more lives and spread more widely across the world in a relatively short period. Due to its severity, WHO announced the outbreak as a pandemic on March 11, 2020 (WHO, 2020b). The pandemic has changed the lives of many people from all over the world. It creates many unprecedented challenges for countries to cope with and form a "new normal" for ordinary citizens.

Figure 1 illustrates the cumulative, active, and daily COVID-19 cases in Malaysia from March 13 to May 3, 2020. The first COVID-19 case was detected on January 25, 2020, and from mid-March, the number of infected patients increased steadily. While daily active COVID-19 cases fluctuated with increasing rate until May 26, 2020, where it fluctuated again at a lower rate until April 28, and then increased. In contrast, the active case curve increased unwaveringly until early April, and then it became flat for a few days before it decreased at a slower rate (Department of Statistics Malaysia, 2020a).

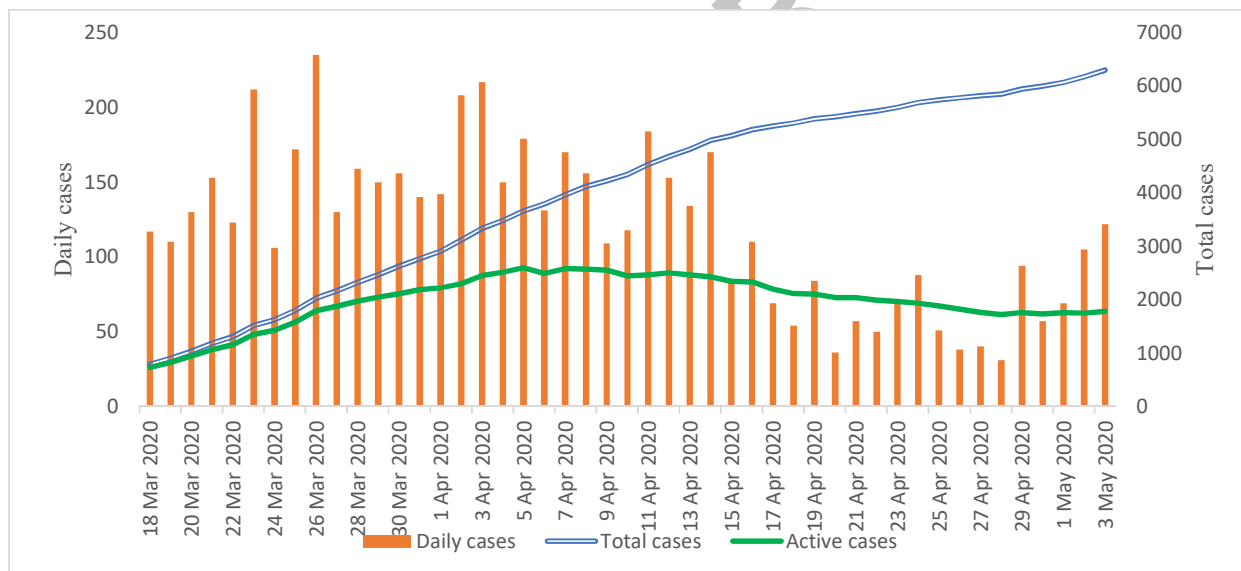


FIGURE 1. The cumulative, active, and daily COVID-19 cases in Malaysia

Source: Department of Statistics Malaysia, 2020a

The government's policies and responses are essential in determining the course of the event for its citizens. Understanding the right and effective governmental policies and responses in managing a pandemic like the COVID-19 is key to reducing virus transmission, further minimizing personal impacts on ordinary people in Malaysia. A Movement Control Order (MCO) is one of the preventive measures implemented in response to the COVID-19 pandemic in Malaysia. Table 1 shows the chronology of MCO Implementation in Malaysia. On March 18, 2020, the Malaysian government imposed MCO to help curb the disease's infection rate. Since then, Malaysia has gone through five MCO phases with strict actions recommended by WHO (Flanders Investment & Trade 2020; Ministry of Health Malaysia 2021).

TABLE 1. Chronology of MCO Phase Implementation in Malaysia (2020/2021)

Phase	Movement Control Order	Announcement	Duration	
I	MCO 1.0	March 18 2020	18 to March 31, 2020	
		March 25, 2020	1 to April 14, 2020	
		April 10, 2020	15 to April 28, 2020	
		April 23, 2020	April 29 to May 3, 2020	
II	CMCO	May 1, 2020	4 to May 12, 2020	
		May 10, 2020	May 12 to June 9, 2020 (Cross-state permission during Eid al-Fitr)	
III	RMCO	June 7, 2020	June 10 to August 31, 2020	
		August 28, 2020	September 1 to December 31, 2020	
IV	RCMO in all states except Sabah, Selangor, Kuala Lumpur and Putrajaya	October 12, 2020	Continue until December 31, 2020	
	CMCO in Sabah	October 12, 2020	13 to October 26, 2020 (Cross-state permission during Sabah Elections)	
		October 24, 2020	October 27 to November 9, 2020	
	CMCO in Selangor, Kuala Lumpur, and Putrajaya	October 12, 2020	14 to October 27, 2020	
		October 26, 2020	October 27 to November 9, 2020	
	CMCO in all states except Perlis, Pahang, Kelantan, and Sarawak	November 7, 2020	November 9 to December 6, 2020	
	CMCO in all states except Perlis, Pahang, Kelantan, Sarawak, Kedah, Melaka, Johor and Terengganu	20 November, 2020	21 November to 31 December 2020	
	CMCO in Sabah	December 5, 2020	7 to December 20, 2020	
			21 to December 31, 2020	
	CMCO in Kuala Lumpur, Selangor, and localities targeted other states	December 18, 2020		
	CMCO in Kuala Lumpur, Selangor dan localities targeted other states	December 28, 2020	1 to January 14, 2021	
	RMCO	January 1, 2021	January 1 to March 31, 2021	
	V	MCO 2.0 in Penang, Selangor, Kuala Lumpur, Putrajaya, Labuan, Melaka, Johor and Sabah		
		CMCO in Pahang, Negeri Sembilan, Kedah, Terengganu and Kelantan	January 11, 2021	13 to January 26, 2021
RCMO in Perlis and Sarawak				
MCO 2.0 in all states except Sarawak		January 13, 2021	January 22 to February 4, 2021	
CMCO in Sarawak		February 2, 2021	February 5 to February 18, 2021	
			February 15 to March 1, 2021	
MCO 2.0 in Penang, Selangor, Kuala Lumpur, and Johor	February 15, 2021	February 19 to March 4, 2021		
CMCO in all states except Penang, Selangor, Kuala Lumpur, and Johor.				

Note: During the MCO, EMCO was also implemented in targeted localities throughout the country, including prisons and high-risk areas.

Source: Ministry of Health Malaysia, 2021

MCO refers to lockdown or comprehensive prohibition of mass movements and gatherings including religious, sports, social and cultural activities. It involves shutting down all government and private premises except those engaged in essential services, comprehensive restrictions on all Malaysians traveling abroad, and restrictions on foreign tourists and visitors into the country. Meanwhile, CMCO stands for Conditional Movement Control Order and refers to the various economic and social activities allowed subject to the conditions and standard operating procedures set. Under the Recovery Movement Control Order (RMCO), more MCO restrictions have been eased, allowing interstate travel and even more businesses to reopen.

The authorities impose the Enhanced Movement Control Order (EMCO) to lock down specific districts identified as high-risk and red zones since several patients were infected from specified cluster(s). Apart from those who provided essential services, movement in and out of a premise or area placed under EMCO is prohibited. Only the head of the family is allowed to venture outside to buy food or household goods within an area. Social activities are not permitted, and all residents of the areas must undergo mandatory quarantine that can be extended up to 28 days where screening and testing are compulsory (Ministry of Health Malaysia, 2021). MCO's also involve other preventive measurement instructions as follows:

- i) Prohibited activities under each phase of MCO, including the implementation of strict Standard Operating Procedures (SOP's), which allows business sectors to resume their operations and educational centers to reopen. The suspense of unauthorized activities, including sports competitions or games that require mass gatherings of supporters in stadiums, and prohibition of any activities that require crowds to gather in a large number.
- ii) Penalties made under Prevention and Control of Infectious Diseases Act 1988 (Act 342), states that each offender will be subject to a fine not exceeding MYR 1,000 or a jail term not exceeding six months for various offenses. For example, breach any of the provisions such as violating the MCO regulations or obstructing a public servant.
- iii) As of August 31, 2020, foreign travel restriction was implemented where the Malaysian government agreed to allow specific foreigner categories to enter the country. However, based on the increasing number of COVID-19 cases, the government has announced an entry ban of citizens/anyone from 23 high-risk countries, including the United States, the United Kingdom, Brazil, France, Spain, Italy, Saudi Arabia, Russia, and Bangladesh, among others.
- iv) Social distancing as part of SOP's. Social distancing refers to the practice of staying home and away from others or staying at least two meters away from other people.
- v) Use of MySejahtera application to monitor the movement and health of the Malaysian population and detect close contact in the event of infection.

While Malaysia made a crucial decision to implement MCO, other countries have taken various measures from stricter lockdown to total free movement without any social distancing. Singapore, for example, practices social distancing without the imposition of any movement restrictions. Meanwhile, in the United States, different states have different policies to deal with the pandemic, hence not having a uniform approach, unlike in Malaysia. In Sweden, people go about their normal daily activities unperturbed by the virus's spread in the community. Japan has also been somewhat reluctant to impose strict measures to restrict people's movement despite the spike in cases. Government policy in dealing with COVID-19 is vital because it has a direct impact on the current economy. For example, the Malaysian economy is highly leveraged, with the household debt-to-GDP ratio was significantly high at 82.8% in June 2019, a figure surpassing that of high-income nations, including the United States at 75% and Japan at 58.2% (MIER 2020).

Bantuan Prihatin Nasional (BPN) is one of the assistances provided in the Economic Stimulus Package given on a one-off basis to the B40 and M40 groups. BPN 1.0 payments were carried out in April 2020, and BPN 2.0 payments were carried out in October 2020. According to the household and the single categories, payment rates are divided based on monthly income, which benefit 10.6 million recipients. Moratorium is a "temporary deferment or suspension of loan/financing payment obligation (principal and interest/profit) for a limited period". The government has announced a six-month moratorium as of April 1, 2020. This finance assistance aims to relieve individuals' and businesses' monthly burdens who face temporary financial constraints arising from the COVID-19 pandemic (Yassin 2020).

From an economic perspective, the COVID-19 pandemic can be viewed as a significant event impacting the government's policies, responses, and the overall economy. From a macroeconomic perspective, the direct medical costs of treating patients and implementing various controls for diseases can have detrimental effects on the economy. Restrictions on the transportation of people and goods, commonly imposed in areas where the risk of infection is high, significantly

disrupt outputs and exports and undercut, even hinder, the seeds of future growth in investment as investors lose their confidence in the market. From the microeconomic perspective, this pandemic affects individual and corporate decisions in terms of consumer confidence. Consumer confidence is an economic indicator that measures the degree of optimism that consumers have or feel about the economy's overall state, as well as their financial situation (OECD 2020). Apart from the impact of a pandemic outbreak on production and investment, a considerable negative influence to be noted is that an extreme event often imposes negative shocks on households' spending at the other end. In particular, consumers often avoid travel and shun public places to reduce the risk of getting infected, and this disruption in consumption influences the economy considerably.

By looking more specifically at MCO as part of the government's response, this research attempts to analyze households' responses to MCO and assess MCO's economic impact on consumer confidence based on the potential disproportionate impact on various income groups in Malaysia.

## LITERATURE REVIEW

Malaysia's political system is classified as quasi-democracy, which is to adhere to the concept of strong government and authority to ensure political stability (Zakaria Ahmad 1989). Another theory of political governance introduced by Anne Munro-Kua (1996) also described Malaysia as authoritarian-populism that combines coercion and giving to the people to maintain government control. Both of these theories are used as a basis to study the response and compliance of Malaysians to the approach of the concept of coercion through the implementation of MCO and the concept of giving through financial initiatives by the government. Through coercion and giving, the people are obedient to the government. Meanwhile, the theory of the impact of MCO implementation on the economy is based on consumer confidence. The Consumer Confidence Survey measures the level of confidence individual households have in the economy's performance during the MCO period. The Consumer Confidence Index is the average number for the survey's question of the Present Situation Index and Expectations Index (OECD 2020).

The government's prompt and forward responses are crucial for tackling a highly transmissible pandemic and severe contagious diseases like the COVID-19. Besides, having hands-on blueprints ready to be used to manage an influenza pandemic like the COVID-19 will likely reduce transmission of the pandemic stress, decrease the number of cases, hospitalizations, and deaths, maintain essential services and reduce the economic and social impact of a pandemic (WHO, 2004). The United States showed an example of government unpreparedness as Bill Gates stated that the United States government wasted precious time before taking actions to decrease the virus's spread rate, including implementing social distancing and ramping up testing abilities (Carter 2020). In April 2020, Gates called for a national shutdown which was in line with the nation's leading infectious disease expert Anthony Fauci's recommendation (Gates 2020). The Malaysian Prime Minister had shown the government's prompt response to the COVID-19 pandemic. On March 16, 2020, he made a televised speech and officially publicized the restricted activities order under the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967 (Nair 2020; Kaur 2020; Tang 2020; Yassin 2020). Strict and centralized enforcement of lockdown, quarantines, and closures are the most effective way to contain the pandemic (Neidhöfer & Neidhöfer 2020; Góis et al. 2020).

MCO implementation is in line with the analysis of Baker, et al. (2020); among the measures taken by governments around the world to deal with the COVID-19 epidemic is to mandate some form of social distancing. The measures' effectiveness varies according to the country that introduced it too early, too late, too loose, or too tight. It is influenced by factors of lack of information related to the duration of the virus's spread, how many are infected and how high the death rate will occur, to what extent social measures taken voluntarily stay away, and country-specific factors. Having a sound health system is a factor used by governments of countries to loosen social incarceration, which seems to be effective based on low mortality rates, such as in South Korea and Japan. However, it is not the case for all countries, where some countries were taking similar steps ended up with as high as the United States death rate due to COVID-19. The very strict implementation of the MCO is in line with the penalties for various offenses as well as arrests and detentions by the Polis Diraja Malaysia (PDRM) involving non-compliance with the MCO (Daim & Rahmat 2020). Besides, enforcement of closures across counties and states, home quarantine, and strict SOP setting are the most effective strategies. The policy goal to truly flatten the curve really speaks a lot about the Malaysian government's leadership, which can be a model to be emulated worldwide on the implementation of MCO phase I from March 18 to March 31, 2020 (Rahim 2020).

Overall, numerous empirical studies on MCO and COVID-19 describe the macroeconomic and microeconomic indicators were based on consumer confidence analysis. The change in consumer confidence can affect real economic activities through the changes in business sentiments. Thus, the current and expected confidence in economic and personal financial situations are of particular relevance for policy purposes. On March 23, 2020, the Malaysian Institute of Economic Research (MIER) reported that the economic impact of COVID-19 and the MCO was expected to decrease Malaysia's real gross domestic product (GDP) growth to -2.9% for 2020, relative to the previous year. MIER projected that the number of job losses could be an estimated 2.4 million, mainly comprising unskilled workers (67%). Household

incomes were projected to decline by 12%, decreasing consumer spending by 11%, despite the decline in the general consumer price level by 4.4%. MIER expected the recovery from this year's projected economic recession due to the COVID-19 outbreak and implementation of the recommended stimulus package to result in a V-shaped recovery for 2021 to see better economic performance (MIER 2020). At the end of 2020, Malaysia recorded a -1.3% economic growth rate influenced by all economic sectors' fall, which was a 5.6% decrease as compared to a positive 4.3% growth rate in 2019 (Department of Statistics Malaysia 2021).

Department of Statistics Malaysia (2020b) reported that MCO impacted the country's household spending patterns, recording a decrease of 55% in average spending on consumption, mainly from essential goods and services such as food utilities, health, and communication. From the income class perspective, it is found that the T20 income class group showed a significant decrease in households' spending, with 59% followed by the M40 (48%) and B40 (41%). If all households accepted the official moratorium of loan announced by the Central Bank of Malaysia, the spending of Top 20 would have dropped significantly compared to before the MCO by 63%. Meanwhile, M40 and B40 fell by 54% and 49%, respectively.

Hassan, et al. (2021) analyzed the socio-economic impact of COVID-19 on the MENA region and the role of Islamic finance opportunities post-COVID-19. Since more than half of the world crude oil is exported from MENA countries, the pandemic has caused dual shocks in both supply and demand, resulted in reduced prices and international demands of crude oil. They suggested increasing the integration between public and private sectors as well as civil societies to decrease the negative economic impacts of the pandemic. They also recommended increasing public funds allocations to the health system, corporations, SME's, and individual financial support to secure jobs and avoid liquidity crunch and improve the trust level and the role of the Islamic finance institutions in the recovery of the economic shocks caused by the pandemic.

Kinatader, et al. (2021) examined the relationship between major assets classes among the Global Financial Crisis (GFC) and COVID-19. Due to its importance for investors to ensure better safeguards of their asset portfolio using safe-havens. They found the co-relationship within the asset classes dominant in COVID-19 compared to the GFC is less significant, which means a considerable fear increased among investors, resulting in the growth of demand in traditional safe assets, including gold bonds and liquidity to the safe-havens.

Giammanco, et al. (2020) investigated the relationship between sales volume turnover and the adoption of governmental response to the COVID-19 pandemic using the consumer confidence index. The results indicated consumer confidence is positively related to the percentage change of the index of deflated turnover of the retail sale of food, beverages, and tobacco and negatively affected by restrictive governmental measures. In other words, they found a negative relationship between change in turnover of retail sales via mail or internet and consumer confidence.

Jung, et al. (2016) explored an epidemic outbreak's economic effect and substantive empirical evidence on how epidemic outbreaks impact consumers' consumption and shopping behaviors. Using scanner panel data on individual consumers' debit and credit card transactions, they found that the outbreak of an epidemic caused a substantial disruption in households' spending with considerable heterogeneity across households' spending categories. In particular, consumers dramatically cut down spendings at traditional shopping channels but exhibited a substantial increase in e-commerce spending. Their findings were particularly relevant because the consumers' response to the epidemic was attributable to a psychological factor and fear of contagion rather than budgetary constraints. Considering the increasing challenges posed by infectious diseases, given advances in transportation efficiency, they provided important implications for policies and interventions meant to sustain the economy when epidemics occur. The improved policy environment for establishing and maintaining the e-commerce channel would reduce consumers' fear of contagion from purchasing goods and services and help manufacturers and retailers retain their sales.

The realization of sustainable economic growth with increasing concern about more complicated pandemic outbreaks is fundamental through establishing, adapting, and improving e-commerce as an alternative shopping channel. Given that not all retailers could go through e-commerce due to challenges related to technology, e-commerce knowledge, cost, and others, especially for SME's (Ahmad, et al. 2015).

## METHODOLOGY

This research attempts to analyze MCO's economic impact on consumer confidence and assesses MCO's potential disproportionate effects on different groups of people in Malaysia. The study period stretches from the implementation of MCO 1.0 on March 18 until May 3, 2020. This study focuses on Malaysia, which will be separated into five regions, namely Northern (Penang, Perlis, Kedah, Perak), Central (Selangor, W.P. Kuala Lumpur), Southern (Malacca, Negeri Sembilan, and Johor), East Coast (Pahang, Terengganu, Kelantan), and Sabah and Sarawak. Participation criteria consisted of Malaysian citizens aged 21 years and above with earning income who have access to a good internet connection and can provide valid informed consent before participation.

This study's total population is the working population of 21 years and above, according to Labor Statistics in Malaysia in 2020, which is 65.1%, and good internet access for 75% of the total working population in Malaysia. In contrast, the estimated proportion, also called the confidence interval, is at 4%. The confidence level is the probability that

the error margin contains the true proportion is at 95%, with an estimated response rate of 70%. The sample size estimation calculation suggests the use of 552 respondents (Krejcie & Morgan 1970). This is the number of individuals out of the population who will participate and achieve the required sample size based on the expected response rate. Hence, this study involves 660 respondents. The sample size is adequate for statistical analysis to be conducted, and more conclusive inferences can be made from the findings. The number is also appropriate, considering the time and resource constraints of this research.

This research adopts a virtual snowball procedure and self-selection sampling method to obtain the study sample, encompassing different groups of people. Snowball sampling can be defined as when qualified participants share or recommend another potential subject to participate in the research (Berg, 2006). Virtual snowball sampling uses the traditional snowball sampling method on social media to reach out to the targeted population (Hill, et al. 2013). According to Sharma (2017), self-selection sampling allows respondents to participate in this research, and researchers will not approach them directly. This technique is also appropriate because it can ensure respondents' greater willingness to provide more insight into the studied phenomenon.

The online questionnaire consists of 30 questions distributed evenly within three sections. Section A presents the respondent's background information, including age, gender, marital status, occupation, educational level, and residence. Section B presents the assessments of the government's responses to MCO based on quasi-democracy and authoritarian-populism theories. Responses were categorized as positive, negative, or neutral. Section C comprises economic impact based on Consumer Confidence Index, C1: Present Situation Index, and C2: Expectation Index. Sub-section C1 is related to respondents' appraisal of current household circumstances such as income, debt, and spending. Meanwhile, sub-section C2 is regarding respondents' expectations regarding the economy as a whole, employment conditions, and the price of goods and services. Responses are categorized as positive, negative, or neutral.

For each question, the number of positive responses is divided by the sum of the positive and negative responses to yield a proportion called the "relative" value. Consumer Confidence Index takes the value from 0 to 1, indicating more positive responses mean a higher index; more neutral or negative responses mean a lower index (OECD, 2020). The high index indicates high confidence by consumers in the current economy. This factor is also influenced by the policies being implemented by the government to improve the economy as a whole.

This study utilizes internet facilities to distribute questionnaires to targeted groups. The internet has allowed investigators to research topics through emails, online surveys, chat rooms, and electronic focus groups (Hill, et al., 2013). These methods often allow researchers to access a population out of reach, build a large group of participants, and collect data that can be transformed into complex statistical analyzes. The survey is accessible online, and respondents can participate by filling in a Google Doc Survey Form. The online questionnaire is distributed on social media such as Facebook, WhatsApp, Telegram, and Instagram.

The Data will be entered and analyzed using SPSS version 22. Descriptive statistics will be utilized to summarise the socio-demographic characteristics of subjects. Numerical data will be presented in the form of mean (SD) or median (IQR) based on normality distribution. Furthermore, categorical data will be presented as frequency (percentage). The analysis of this study uses the respondents' income axis, as presented in Table 2 below. In term of income distribution, the top income earners (T20) have the most significant share of income, followed by the average (M40) and low-income earners (B40) groups equal to 46.8%, 37.2%, and 16%, respectively. Low-income earners earn less than RM 4,850, while the top income earners earn more than RM 10,959 (Department of Statistics Malaysia 2020).

TABLE 2. Income category by households' groups in Malaysia in 2019

Classified	Group	Category	Income Threshold (RM)	Number of Households in 2019 (Million)
B40	Low-income earners	Bottom tier income earners account for 40% of the country's total income	Less than 4,850	2.91
M40	Average- income earners	Medium tier income earners account for 40% of the country's total income	4,850 to 10,959	2.91
T20	Top- income earners	Top tier income earners account for 20% of the country's total income	Higher than	1.46

Source: Department of Statistics Malaysia, 2020c

## RESULTS AND DISCUSSION

The survey questions focus on phase I of the MCO period, which took place between March 18, 2020, and May 3, 2020. A total of 681 surveys were conducted completely; however, only 660 respondents were taken into account after the data cleaning process was done. The analysis of government response to MCO and Consumer Confidence Index is based on the relationship with income groups before the COVID-19 pandemic. The analysis showed that a total of 368 respondents or 55.7%, were from the B40 category, 199 respondents or 30.2% were from the M40 category, and 93 respondents or 14.1%, were from the T20 category.

### BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3 presents the background characteristics of respondents. 21-30 age group accounts for a significant share of the respondents, which is 56%. Participation in this age group was highest on the assumption that this category met the criteria who have access to a good internet connection compared to other age groups. Most of the respondents are female and of Malay ethnicity, accounting for 47% and 75%. 59% of them are single, and a significant 89% have a higher education level. When it comes to occupation status, unemployed respondents account for 30%, followed by the government and private sector workers as much as 26% and 23%, respectively. More than half of the respondents' households consist of 4-6 people and live in the city. Furthermore, 46% of the respondents reside in the Northern area, and 41% live with the total respondents' family-own property.

TABLE 3. Background characteristics of respondents

Category	Total	Percentage	Category	Total	Percentage
<b>A1 Age</b>			<b>A2 Ethnicity</b>		
21-30	370	56%	Malay	488	74%
31-40	138	21%	Chinese	105	16%
41-50	105	16%	Indian	47	7%
51-60	40	6%	Other	20	3%
61 and above	7	1%		660	
	660		<b>A4 Marital Status</b>		
<b>A3 Gender</b>			Single	389	59%
Male	172	26%	Married	264	40%
Female	488	74%	Other	7	1%
	660			660	
<b>A5 Educational level</b>			<b>A6 Total of household</b>		
No education	3	0.5%	3 people and below	185	28%
Primary education	3	0.5%	4 - 6 people	382	58%
Secondary education	66	10%	7 - 9 people	79	12%
Higher education	588	89%	10 people and above	14	2%
	660			660	
<b>A7 Occupation</b>			<b>A8 Location of residence</b>		
Government	171	26%	Northern	303	46%
Private	152	23%	Central	184	28%
Self-employed	60	9%	Southern	53	8%
Unemployed	198	30%	East Coast	99	15%



Category	Total	Percentage	Category	Total	Percentage
Retiree	13	2%	Sabah	7	1%
Others	66	10%	Sarawak	14	2%
	660			660	
<b>A9 Current residential area</b>			<b>A10 Ownership of property</b>		
Village	145	22%	Own property	244	37%
Town	172	26%	Rented property	145	22%
City	336	51%	Family property	271	41%
Suburbs	7	1%		660	
	660				

Source: Calculated by the authors

The type of employment during the MCO implementation showed that 30% of the respondents were unemployed. This percentage shows that many respondents were impressed with MCO's implementation based on a negative response of 65.2% among the B40 group. Most of these respondents are in the age category of 21-30 years old with single status. This study assumes they worked as part-time or contract workers before the COVID-19 pandemic, and the implementation of the MCO resulted in them being laid off significantly in the tourism sector. Meanwhile, the survey results showed that almost 46% of the respondents were in Malaysia's Northern region. This study assumes that it was due to Malaysia's Northern region having a higher number of states (Penang, Perlis, Kedah, and Perak) compared to other regions of the country and located closer to where the researchers are based which is at the Universiti Sains Malaysia, Penang. However, this study did not focus on high infection case areas since the data collection method was online as well as taking into account that all states are in total lockdown and that the consumer confidence index impacts Malaysia as a whole.

#### ANALYSIS OF HOUSEHOLDS' RESPONSES TO MCO

This section analyzes two criteria: the households' compliance to MCO and the government's financial assistance to ease households' financial burden, especially for B40 groups. Responses are categorized as positive, neutral, and negative. Based on the Pivot Table, respondents' responses were evaluated based on income group categories B40, M40, and T20.

TABLE 4. Percentage of responses related to the implementation of government policy towards MCO

Criteria	Income Group	Positive responses		Neutral responses		Negative responses	
		Total	Percentage	Total	Percentage	Total	Percentage
<b>Compliance to MCO</b>							
B1 Households' response in dealing with the COVID-19 outbreak	B40	307	46.5%	52	7.8%	9	1.3%
	M40	187	28.3%	8	1.2%	4	0.6%
	T20	80	12.1%	11	1.6%	2	0.3%
	<b>Total</b>	574	87%	71	10.8%	15	2.2%
B2 Households' response to implementation of MCO	B40	272	41.2%	17	2.5%	79	11.9%
	M40	170	25.7%	6	0.9%	23	3.4%
	T20	71	10.7%	3	0.4%	19	2.8%
	<b>Total</b>	513	77.7%	26	3.9%	121	18.4%
B3 Effectiveness of MCO to overcome	B40	301	45.6%	5	0.7%	62	9.3%
	M40	178	26.9%	2	0.3%	19	2.8%

COVID-19	T20	86	13%	1	0.15%	6	0.9%
<b>Total</b>		565	85.6%	8	1.2%	87	13.2%
B4 Compliance with MCO rules	B40	366	50.9%	0	0%	2	0.3%
	M40	199	30.1%	0	0%	0	0%
	T20	93	14%	0	0%	0	0%
<b>Total</b>		658	99.7%	0	0%	2	0.3%
<b>Effectiveness of financial assistance</b>							
B5 Bantuan Prihatin Nasional (BPN)	B40	278	43.4%	31	4.6%	59	8.9%
	M40	151	22.8%	20	3%	28	4.2%
	T20	65	9.8%	14	2.1%	14	2.1%
<b>Total</b>		494	74.8%	65	9.8%	101	15.4%
B6 Moratorium	B40	313	47.4%	42	6.3%	13	1.9%
	M40	178	26.9%	18	2.7%	3	0.4%
	T20	86	13.4%	4	0.6%	3	0.4%
<b>Total</b>		557	87.4%	60	9%	19	3.6%

*Source:* Calculated by the authors

Based on Table 4, most of the respondents positively responded to MCO compliance based on households' response to both in dealing with the COVID-19 outbreak and implementation of MCO, and MCO's effectiveness to overcome COVID-19 and compliance with MCO rules. More than 99% of the respondents were positively complying with MCO rules. 366 respondents were from B40, followed by 199 and 93 from M40 and T20, respectively. Almost no respondents reacted neutrally or negatively to MCO rules compliance. Malaysians' compliance with the government in implementing the MCO based on the Effectiveness of MCO to overcome COVID-19 received as high as 85.6% in positive responses. A total of 77.7% of respondents supported the MCO implemented to curb COVID-19. Further, 99.7% of respondents complied with MCO rules such as social distancing, wearing a face mask, and staying at home during the MCO. At the beginning of the MCO implementation, the government took the initiative to introduce economic stimulus packages and moratoriums to all Malaysians according to their respective categories as immediate financial assistance.

A significant number of respondents reacted positively toward financial assistance's effectiveness based on BPN and the moratorium by 74.8% and 87.4%, respectively. Less than 10% of respondents were neutral, and 15% and 3.6% negatively responded to BPN and the moratorium. However, the highest negative response was from B40, which accounted for 59% of the total negative responses toward BPN and 68% of the moratorium's total negative responses. On the other hand, M40 positively responded to BPN and the moratorium by 77.8% and 31.9% of the total positive responses, respectively. Furthermore, out of B40 respondents, the majority reacted positively to the effectiveness of financial assistance by 77.9% and 82.8% to BPN and the moratorium, respectively, and only 18% reacted negatively to BPN. Similarly, out of M40 respondents, a large share was positive about the effectiveness of financial assistance by 75% and 89.4% to BPN and the moratorium, respectively. Out of T20 respondents, 69.8% were positive, and respondents with neutral and negative were even by 15.5% responding to BPN, and most of the T20 respondents positively reacted to the moratorium. A total of 60 respondents in the B40 category did not receive a salary (either part-time or contract workers) due to the MCO implementation and considered insufficient assistance. On the other hand, 16% of respondents in the T20 category had stable finances and did not need this financial assistance based on changes in income that did not change or get better after the MCO was implemented.

Analysis of the study showed that 55% of respondents did not accept the moratorium. This indicator is positively related to government sector employment. Based on eligibility requirements, housing loans under government financing are not eligible for the deferral payment waiver. It explains why the percentage of respondents who did not receive the moratorium was high. On the other hand, for the respondents who received the moratorium, 31% went for savings, and 26% were used to purchase essential items. Other uses of the moratorium are spending the money and pay the debt.

## ANALYSIS OF CONSUMER CONFIDENCE

Consumer confidence analysis is based on two indexes: the present situation index and the expectations index. Both indexes explain the level of households' confidence in the current economic situation upon the occurrence of the COVID-19 pandemic. Due to the increasing number of COVID-19 cases in Malaysia, the government has implemented MCO. It causes all job sectors to be disrupted and other sectors to carry out work from home. However, some employment sectors, such as construction, tourism, transportation, and others, had to close operations entirely due to MCO's implementation. The analysis of the effect of current consumer confidence is divided into two parts, namely the analysis of households' response based on four indicators; household income, debt, and spending, and consumer index analysis based on the present confidence index.

TABLE 5. Present Situation Index during MCO in Malaysia (2020)

Criteria	Income Group	Positive Responses		Neutral Responses		Negative Responses		Present Confidence Index
		Total	Percentage	Total	Percentage	Total	Percentage	
<b>Household Income</b>								
C1 Financial status after MCO	B40	49	7.4%	102	15.4%	217	32.8%	0.3
	M40	54	8.1%	65	9.8%	80	12.1%	
	T20	27	4%	41	6.2%	25	3.7%	
	<b>Total</b>	<b>130</b>	<b>19.5%</b>	<b>208</b>	<b>31.4%</b>	<b>322</b>	<b>48.6%</b>	
C2 Change in household income during MCO	B40	13	1.9%	201	30.4%	154	23.3%	0.2
	M40	24	3.6%	134	20.3%	41	6.2%	
	T20	10	1.5%	69	10.4%	120	18.1%	
	<b>Total</b>	<b>47</b>	<b>7%</b>	<b>404</b>	<b>61.1%</b>	<b>315</b>	<b>47.6%</b>	
<b>Household Debt</b>								
C3 Saving conditions during MCO	B40	249	37.7%	0	0%	119	18%	0.74
	M40	160	24.2%	0	0%	39	5.9%	
	T20	81	12.2%	0	0%	12	1.8%	
	<b>Total</b>	<b>490</b>	<b>74.1%</b>	<b>0</b>	<b>0%</b>	<b>170</b>	<b>25.7%</b>	
C4 Selling valuable good for essential items during MCO	B40	332	50%	0	0%	36	5.4%	0.93
	M40	191	28.9%	0	0%	8	1.2%	
	T20	0	0%	0	0%	93	14%	
	<b>Total</b>	<b>523</b>	<b>78.9%</b>	<b>0</b>	<b>0%</b>	<b>137</b>	<b>20.6%</b>	
<b>Household Spending</b>								

C5	Change your daily expenses during the MCO	B40	101	15.3%	128	19.3%	139	21%	0.4
		M40	37	5.6%	62	9.3%	100	15.1%	
		T20	33	5%	22	3.3%	38	5.7%	
		<b>Total</b>	<b>171</b>	<b>25.9%</b>	<b>212</b>	<b>31.9%</b>	<b>277</b>	<b>41.8%</b>	

Source: Calculated by the authors

Based on Table 5, the results showed a significant drop in households' financial status after MCO's implementation, with 48.5% showing households' deteriorating financial status. Meanwhile, 32% of the respondents agreed that their income decreased during the implementation of the MCO. Self-employment is the most affected type of employment with 166 respondents (51.4%), followed by the private sector (22.6%), the government sector (14.5%), and others (11.5%). These results are in line with (MIER, 2020; Department of Statistics Malaysia, 2020c) and indicated that many workers had to be laid off, especially contract workers and those working in the most affected sectors during the pandemic.

In addition, 40% of respondents had a monthly debt payment commitment not included in the moratorium category. They had to pay commitment using their savings (23%) and reduced daily expenses (67%). To make matters worse, although 74.3% of respondents had current savings apart from both Employment Provident Fund (EPF) and insurance, the savings only last up to one to two months, while the COVID-19 pandemic is expected to continue for up to two years. Simultaneously, 25.7% of respondents did not have savings, which fall within the category B40. Only 11% of the total of 660 respondents had savings for up to six months. More than that, 7% of respondents had to sell valuable goods for essential items during MCO.

During the implementation of the MCO, various assistance in the form of food was given to the affected households based on various recipients' categories. Half of the B40 respondents had received food assistance on a one-off basis. This assistance could reduce the daily spending of the affected households. 26% of respondents agreed that MCO's increased their daily expenses. Among the factors influencing the increase in spending are as follows.

- i) Changed in essential purchases (28%)
- ii) Changed in the duration of staying at home (24%)
- iii) Changed in the cost of goods and services (18%)
- iv) Increased in income due to moratorium (10%)
- v) Changed in the number of dependents (10%)
- vi) Changed in non-essential and e-commerce purchases (10%)

TABLE 5. Present Situation Index during MCO in Malaysia (2020) (To be continued)

Criteria	Income Group	Positive Responses		Neutral Responses		Negative Responses		Present Confidence Index	
		Total	Percentage	Total	Percentage	Total	Percentage		
C6	Receive food assistance from any agency during MCO	B40	134	20.3%	0	0%	234	35.4%	0.23
		M40	16	2.4%	0	0%	183	27.7%	
		T20	3	0.4%	0	0%	90	13.6%	
		<b>Total</b>	<b>153</b>	<b>23.1%</b>	<b>0</b>	<b>0%</b>	<b>507</b>	<b>76.7%</b>	
<b>Household Consumption</b>									
C7	Money to buy food during MCO	B40	241	36.5%	86	13.3%	41	6.2%	0.9
		M40	161	24.3%	28	4.2%	10	1.5%	
		T20	82	12.4%	9	1.3%	2	0.3%	
		<b>Total</b>	<b>484</b>	<b>73.2%</b>	<b>123</b>	<b>18.8%</b>	<b>53</b>	<b>8%</b>	

C8	Eat the same thing for several days	B40	220	33.3%	60	9%	88	13.3%	0.8
		M40	153	23.1%	24	3.6%	22	3.3%	
		T20	81	12.2%	6	0.9%	6	0.9%	
		<b>Total</b>	454	68.6%	90	13.5%	116	17.5%	
C9	Skip meals because there is not enough food during MCO	B40	224	33.9%	51	7.7%	93	14%	0.77
		M40	141	21.3%	27	4%	131	19.8%	
		T20	78	11.8%	10	1.5%	5	0.7%	
		<b>Total</b>	443	67%	88	13.2%	229	34.5%	
C10	Eating healthy food during the MCO	B40	267	4.34%	56	8.4%	45	6.8%	0.86
		M40	148	22.4%	23	3.4%	28	4.2%	
		T20	80	12.1%	6	0.9%	7	1%	
		<b>Total</b>	495	38.84%	85	12.7%	80	12%	

Source: Calculated by the authors

Households' food consumption showed people in Malaysia were able to meet food sufficiency throughout the MCO's implementation. Most households were able to buy food (73%) and had food stocks (68.7%). A high percentage also showed that respondents did not skip food (67%) and consumed healthy food (75%) during the MCO period.

The total Present Confidence among households during the MCO's implementation was 61.3%, showing the highest number of positive responses in the food consumption indicator. The highest negative response is the income indicator which is 0.2. Meanwhile, based on the expectation index in Table 6, two indicators, namely the current economic situation and the price of goods and services, show a very low index with a total of 0.08 and 0 respectively and 0.4 for employment condition during COVID-19.

Somewhat surprise, all respondents from all income groups agreed that the prices of goods and services had increased during the pandemic, which affected consumer spending. Based on households' responses to their job worries, 30% of respondents were anxious about being laid off during the pandemic. A total of 75.3% of households agreed that the current economic situation is getting worse based on their assessment through;

- i) Economic indicators and statistics (27%)
- ii) Media reports (25%)
- iii) Deserted shopping streets and entertainment places (18%)
- iv) Decreasing in income or family members' income (16%)
- v) Business performance (13%)
- vi) Others (1%)

TABLE 6. Expectation Index during MCO in Malaysia (2020)

Criteria	Income Group	Positive Responses		Neutral Responses		Negative Responses		Present Confidence Index
		Total	Percentage	Total	Percentage	Total	Percentage	
C11 Economic condition during COVID-19	B40	21	3.1%	62	9.3%	285	43.1%	0.08
	M40	17	2.5%	46	6.9%	136	20.6%	
	T20	6	0.9%	11	1.6%	76	11.5%	
	<b>Total</b>	44	6.6%	119	18%	497	75.3%	
C12 Change in prices of goods and services during COVID-19	B40	0	0%	170	25.7%	198	30%	0
	M40	0	0%	83	12.5%	116	17.5%	

	T20	0	0%	40	6%	53	8%	
<b>Total</b>		0	0%	293	44.8%	367	55.6%	
C13 Employment condition during COVID-19	B40	65	9.8%	164	24.8%	139	21%	0.4
	M40	61	8.2%	96	15.4%	42	6.3%	
	T20	31	4.6%	42	6.3%	20	3%	
<b>Total</b>		157	23.7%	302	45.7%	201	30.4%	0.48

*Source:* Calculated by the authors

The response proportions to each question calculation are included in the percentage's responses. The indexes are then averaged together as follows:

- Consumer Confidence Index: Average of all 13 questions
- Present Situation Index: Average of indexes for questions 1 to 10
- Expectations Index: Average of indexes for questions 11 to 13

TABLE 7. Consumer Confidence Index of MCO in Malaysia (2020)

Consumer Confidence Index	0.5
Present situation Index	0.6
Expectation Index	0.1

*Source:* Calculated by the authors

Table 7 showed that the present situation index is 0.61 higher than the expectation index at 0.16. An indicator of the consumer confidence index at 0.5 is moderate compared to the maximum index at 1. It showed that the implementation of MCO in the short-run has a moderate impact on households' economic status than in the long-run involving the COVID-19 pandemic effect on the overall economy.

## CONCLUSION

Most of respondents positively responded to MCO compliance. More than 99% of the respondents were positively complying with MCO rules. A total of 77.7% of respondents supported the MCO implemented to curb COVID-19. 99.7% of respondents complied with MCO rules such as social distancing, wearing a face mask, and staying at home during the MCO. In addition, a significant number of respondents reacted positively toward financial assistance's effectiveness. However, the highest negative response was from B40, which accounted for 59% of the total negative responses toward BPN and 68% of the moratorium's total negative responses. Analysis of the study showed that 55% of respondents did not accept the moratorium. This indicator is positively related to employments in government sector. Based on eligibility requirements, housing loans under government financing are not eligible for the deferral payment waiver. It explained why the percentage of respondents who did not receive the moratorium was high. Moreover, the results showed a significant drop in households' financial status after MCO's implementation, with 48.5% showing households' deteriorating financial status. Self-employment is the most affected type of employment indicating that many workers had to be laid off, especially contract workers and those working in the most affected sectors during the pandemic.

There are many types of stockpiles, maintained at different levels for different purposes including, public, private, and household stockpiles. Based on the latest practice, BERNAS is a solo importer of rice as the public stockpiled with a rate of 30% being imported. This study suggests that the government can use its discretionary power to ensure a minimum quantity of private and household stockpiles needed to be maintained for a stipulated time, especially during a pandemic. In such instances, the government can use available private stock and stockpile directly owned by the consumers as a basis for anticipatory decision-making to ensure food security in Malaysia during a pandemic.

The consumer confidence present index is operating at six times higher than the expectation index, which indicates that the implementation of MCO in the short-run has moderate impact on households' economic status than in the long-run involving the COVID-19 pandemic effect on the overall economy.

The consumer confidence index gives an overview of two policies that need to be emphasized by the government. Based on the short-run status of food consumption, this study strongly recommends that the policymakers consider establishing a National Food Stockpile in light of the nation's food security and moving on to food-based agriculture that considers the targeted groups in the long-run. Meanwhile, based on the people's confidence in the long-run, promising current political developments are essential to influence the people's confidence in the economy.

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