

## Research on the Indonesian Economic Impact of the COVID-19 Pandemic

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### ABSTRACT

This is a descriptive study that aims to estimate the impact of the COVID-19 pandemic crisis on the economy of Indonesia and, the business sector, and to explore the crisis mitigation measures (CMMs) by businesses, especially micro, small and medium enterprises (MSMEs). It adopted an exploratory methodology by comprehensively reviewing the available literature, e.g. policy documents, research papers, and reports on the subject being studied. Based on official data from the government, reveals that the Indonesian economy is growing negatively, the number of unemployed and poverty is increasing, and a number of sectors, especially tourism, and transportation, are experiencing the worst, especially in 2021 when the pandemic crisis reaches its climax. However, it was also found that a number of sectors experienced rapid growth at that time, such as health, telemedicine and pharmacy, disinfectant and mask manufacturing industry, e-commerce business, logistics, and food delivery. It was also found that many businesses survived because they carried out CCMs.

**Keywords:** small businesses, MSMEs, unemployment, poverty, macroeconomic, COVID-19, CMMs

### INTRODUCTION

Covid-19 is spreading rapidly throughout the world. The outbreak of COVID-19 has disrupted the world economy. Due to the high transmission rate, high mortality rate, and incubation period, the main preventive measure was to control social distancing and isolation, and this is what governments in countries infected by this pandemic have done which has left many people helpless. As a result, economic activity has stopped which has changed the macro environment of the world economy from the aspects of aggregate demand and total supply, labor income, and financial market trading. Quarantine, lockdown, and social distancing that were implemented to contain the virus have reduced labor supply disrupted supply chains, and reduced productivity. Layoffs, falling incomes, fears of contagion, and increased uncertainty caused people to spend less, triggering further business closures and job losses. All this led to the closure of large parts of the economy.

Decrease or cessation of domestic production and other domestic disruptions due to the implementation of quarantine, lockdown, and social distancing extended to trading partners through global trade and value chains. Compared to the great depression during the global financial crisis in 2008, the impact of COVID-19 on the global economy is more severe. According to the annual Trade Outlook on April 8, 2020, issued by the WTO, world goods trade will plunge between 13% and 32% in 2020 due to the COVID-19 pandemic. It was said that global GDP would fall by up to 3% while developing countries would be hit hardest, which at that time was estimated to be an average of 4%, but some were more than that. 6.5% (Maliszewska et al., 2020).

While, based on the IMF estimate, quoted from Mou (2020), the world will lose 9 trillion US dollars, or the equivalent of 6 times the GDP of Japan and Germany namely South Korea. The impact of the new coronavirus on GDP in various countries is as follows (Table 1).

**Table 1.** GDP Growth Rates 2019-2021 (%)

|                            | 2019 | 2020 | 2021 |
|----------------------------|------|------|------|
| World                      | 2.9  | -3.0 | 5.8  |
| People's Republic of China | 6.1  | 1.2  | 9.2  |
| Japan                      | 0.7  | -5.2 | 3.0  |
| Republic of Korea          | 2    | -1.2 | 3.4  |
| United States              | 2.3  | -5.9 | 4.7  |
| ASEAN-5                    | 4.0  | -0.6 | 7.8  |
| European Union             | 1.7  | -7.1 | 4.8  |
| Africa                     | 3.2  | -1.7 | 4.6  |

Source: [https://www.imf.org/external/datamapper/NGDP\\_RPCH@WEO/OEMDC/ADVEC/WEOWORLD](https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD)

The outbreak of coronavirus disease (COVID-19) has had a devastating impact on the Indonesian economy, as on the world economy, due to declined consumption and production as a direct consequence of policies on social/physical distance, work, and schools from home, and the necessity for companies in non-strategic sectors to stop their activities. Suryahadi et al. (2020) estimated that COVID-19 would reduce Indonesia's economic growth to between 1% and 4%. Whereas the Financial System Stability Committee (KSSK) predicted that the spread of COVID-19 would hit the Indonesian economy in 2020, reaching around 2.3% to -0.4%.

With the above background, this paper, which is a descriptive study, aims to examine the impact of COVID-19 on the Indonesian economy by analyzing secondary data available from various official sources including the Central Statistics Agency. This research emphasizes the business sector, especially micro, small, and medium enterprises (MSMEs). This paper also discusses sectors or types of businesses that benefited from the outbreak of COVID-19 or that grew rapidly during the pandemic.

## LITERATURE REVIEW

### *Macroeconomic Impacts*

Naseer et al. (2023) provide a visual overview of COVID-19's global economic impact. The Coronavirus outbreak has caused a global economic collapse. Most countries have implemented full or partial lockdown measures to slow the spread of disease. The lockdown implemented in many affected countries has slowed global economic activity substantially, many companies have reduced operations or closed down, and people have lost their jobs at an increasing rate. Service providers were also affected. In addition to manufacturers, agriculture, the food industry, a decline in education, the sports industry, and the entertainment sector were also affected, and the world trade situation deteriorated substantially.

Cho and Kim (2021) examine the macroeconomic impact of the COVID-19 pandemic through the Computable General Equilibrium (CGE) model. Due to a second wave and a subsequent delay in economic recovery, the pandemic could lead to a permanent shock in capital accumulation and productivity. This implies that the shock may not merely affect the short-term growth rate but also negatively impact the future economic growth path from its

pre-pandemic trend. Through simulations, in the mild scenario, countries lose 0.10% to 0.31% of their future economic growth rates; in the severe scenario, they lose 0.21% to 0.69%.

According to the Organisation for Economic Co-operation and Development (OECD, 2020), G20 countries' growth rate in the first quarter of 2020 was -3.4%, the lowest figure since records began in 1998. In the second quarter of 2020, the fall deepened to -6.9%, showing that the economic damage was more severe than the -1.5% hit during the 2008 global financial crisis. The United States received a shock of -1.3% in the first quarter of 2020, falling to -9.1% in the second quarter; the United Kingdom witnessed respective declines of -2.2% and -20.4%; and France -5.9% and -13.8. In Asia, India received a shock of 0.7% in the first quarter of 2020 and -25.2% in the second; Korea, -1.3% and -3.2%; Japan, 0.6% and -7.9%; and China, -10.0% and 11.5%. Based on the epidemic and associated restriction measures, the International Monetary Fund (IMF 2020) predicted an annual global growth rate of -4.4% for 2020.

McKibbin and Fernando (2020) expanded the G-Cubed model, i.e. a global model introduced by Lee and McKibbin in their 2004 study that estimated the impact of SARS on the global economy, to COVID-19, analysing the impact on China and the whole world. By applying the index of medical services to evaluate the impact, their result shows that the impact on global economies was from -0.1% to -9.9%. Keogh-Brown, et al (2020) evaluated the impact of the pandemic through direct disease effects and those of government restriction policies also by using the CGE model. They evaluated the impact on the United Kingdom as £40 billion in 2020, with preventative suppression actions including lockdowns imposing unprecedented economic losses.

In its April World Economic Outlook, IMF (2020) reversed its early global economic growth forecast from 3.3% to -3%, an unusual downgrade of 6.3% within three months. This makes the pandemic a global economic shock like no other since the Great Depression and it has already surpassed the global financial crisis of 2009. The United Nations' Department of Economic and Social Affairs concluded that COVID-19 pandemic may also increase exclusion, inequality, discrimination and global unemployment in the medium and long term if not properly addressed using the most effective policy instruments (UN DESA, 2020). From articles such as Baker et al. (2020), Basilaia and Kvavadze, (2020), Devakumar et al. (2020), Kraemer et al. (2020), Mahler et al. (2020), Guerrieri et al. (2020), Fernandes (2020), Pinner et al. (2020), Sarkis et al. (2020), and Ibn-Mohammeda et al. (2021), it reveals that the negative effects have ranged from a severe contraction of GDP in many countries to multi-dimensional environmental and social issues across the strata of society. In many respects, socio-economic activities came to a halt as millions were quarantined; borders were shut; schools were closed; car/airline, manufacturing, and travel industries crippled; trade fairs/sporting/entertainment events were canceled, and unemployment claims reached millions while the international tourist locations were deserted; and, nationalism and protectionism re-surfaced. With massive job loss and excessive income inequality, global poverty has increased. Governments, firms, and individuals in many affected countries scrambled for adjustments. The pandemic has exposed the weakness of over-centralization of the complex global supply and production chain networks and the fragility of global economies, whilst highlighting weak links across industries. This has had a direct impact on employment and heightened the risk of food insecurity for millions due to lockdown and border restrictions.

Baker et al. (2020) state that both the impacts on confidence about future economic prospects, and on uncertainty are arguably larger than the shock of the collapse of the subprime market

associated with the Great Financial Crisis of 2008–09, and probably more similar in magnitude to the rise in uncertainty during the Great Depression of 1929–1933.

COVID-19 also negatively affected the global economy by reshaping supply chains and sectoral activities (Fang and Yeung, 2020; Fang et al., 2020; Guerrieri et al., 2020). As shown by such as Fernandes (2020) and McKenzie (2020), based on an analysis by the U.S. Institute for Supply Management, 75% of companies have reported disruptions in their supply chain, unleashing a crisis that emanated from lack of understanding and flexibility of the several layers of their global supply chains and lack of diversification in their sourcing strategies. These disruptions will impact both exporting countries (i.e. lack of output for their local firms) and importing countries (i.e. unavailability of raw materials).

Fang et al. (2020) found from their investigation in the People's Republic of China (PRC) that foreign COVID-19 shocks transmitted via global supply chains also reduced job creation in the PRC. This impact came mainly from the decline of export demand due to the policy responses by foreign governments to COVID-19. In the same 13 weeks, foreign COVID-19 shocks reduced job creation in the PRC by another 11.7%, weakening the labor market's recovery. Fang et al.'s (2020) findings also provide empirical evidence that input-output linkages and global value chains are important propagation channels for shocks such as COVID-19. The COVID-19 pandemic is a global shock and, like the pandemic itself, which may have multiple waves, the COVID-19 shock may hit local economies multiple times via global supply chains (Fang, 2021).

From a comprehensive literature review regarding the impact of COVID-19, Ibn-Mohammeda et al. (2021) show that the negative impact of the pandemic on the macroeconomy in countries infected with the virus is also caused by the significant decline in two sectors due to COVID-19, namely aviation and tourism. As a result of the pandemic, the volume of flights both domestically, such as in Indonesia, and between countries, has decreased sharply or stopped completely. Likewise, the number of tourist visits both domestic and foreign has decreased drastically; many infected countries even closed their borders during the crisis.

### ***Business Impacts***

Not entirely because of COVID-19 alone, but because of government policies or regulations to implement lockdowns, schools and work from home, and the need for non-strategic sectors such as entertainment venues, sports activities, and travel to stop activities completely. which caused the destruction of the business sector. As a result, many companies suffer losses and even go bankrupt, including many small businesses.

It is often stated in the literature that one comparative advantage of small businesses, in particular micro and small enterprises (MSEs) relative to larger enterprises is their flexibility and capacity to move from one product to another when market demand changes, and they can expand easily when the economy grows, and to contract easily in case of economic crisis (Tambunan, 2019). Berry et al. (2001) argued that small businesses are very important in industries or economies that face rapid market or economic condition changes, such as a sharp macro-economic downturn because they work as a shock absorber in the business cycle. In Sandee et al. (2000), it is stated that small businesses can be expected to perform better under volatile macro-economic conditions than big companies that produce more standardized products, where the reorganization of the assembly line takes time.

However, some authors argued that small businesses, as with their larger counterparts, can also be severely affected by an economic crisis. It depends, among other factors, on the type of crisis and thus its main transmission channels through which the crisis affects small businesses. Experiences in many countries in Southeast Asia showed that credit, import and domestic demand were the most important transmission channels through which the 1997/98 Asian financial crisis affected local small businesses. For instance, in Thailand, some findings from, among others, Chantrasawang (1999), Berry et al. (2001), Bakiewicz (2004), and Régnier (2005) showed that many Thai small businesses were forced to discontinue their production activities mainly because credit from banks was not available, interest rate was extremely high, and domestic demand for their products dropped significantly. The same was true in Malaysia where many small businesses were affected because of (i) domestic demand declined, (ii) no credit was available while they relied heavily on loans from banks and other formal financial institutions, (iii) they were highly dependent on imported raw materials and other inputs that became very expensive, and (iv) many small businesses were key suppliers to multinational corporations that were also affected by the crisis that led to low orders or order cancellations (Mustafa and Mansor, 1999; Abdullah, 2002). In the Philippines, many local small businesses in certain industries such as the auto parts and electronic goods industries had to stop production as domestic demand for new cars and electronic goods declined significantly during the crisis (Tecson, 1999; Berry and Rodriguez, 2001).

With respect to COVID-19, OECD in its updated report on small businesses policy response to the crisis (2020a,b) explains that the COVID-19 crisis affected small businesses through both the supply and demand sides. On the supply side, small businesses faced a shortage of labor, as workers were unwell or needed to look after children while schools were closed and movements of people were restricted. Measures to contain the disease by lockdowns and quarantines have led to further and more severe drops in capacity utilization. As supply chains were also interrupted by the crisis, many small businesses experienced shortages of parts, intermediate goods, or processed raw materials. On the demand side, small businesses also suffered from a cash shortage due to a dramatic decline in demand and revenue. All these effects were compounded because workers were laid off and firms were not able to pay salaries. More generally, small businesses were likely to be more vulnerable to 'social distancing' than their larger counterparts. The impact of the virus could have potential spillovers into financial markets which would make small businesses suffer even more. These various impacts affected both small and large businesses. However, according to the report, the effect on small businesses was especially severe, particularly because of higher levels of vulnerability and lower resilience related to their size.

Shafi et al. (2020) collected data from 184 Pakistani small businesses by administering an online questionnaire, and the data was analyzed through descriptive statistics. It reveals that most of the participating enterprises have been severely affected by the significant drop in demand and they were facing several issues such as financial problems, supply chain disruption, decrease in demand, and reduction in sales and profit, among others. Further, more than two-thirds of participating enterprises reported that they could not survive if the lockdown lasted more than two months.

Results of an ILO SCORE Programme survey indicate that small businesses were struggling to survive the effects of COVID-19 (ILO, 2020a,b,c,d). Of the 1,000 small businesses surveyed from eight countries across four continents, 70% have had to shut down operations. Half (50%) have temporarily closed their business by following direct instructions from the authorities, while the other 50% have closed temporarily due to a reduction in orders, cases of

staff COVID-19 infection, or more sadly, permanently. More than 75% of small businesses were experiencing or expecting a reduction in revenues through 2020. In some cases, the reductions in revenues were very high. One-third (33%) of businesses anticipated losing more than half of their revenues. 75% of companies were suffering from reduced demand and one-third (33%) were experiencing a more than 50% drop in customer orders. Nearly 9 out of 10 businesses were experiencing a shortage in cash flow.

Based on their survey of MSMEs in some cities in China, Dai et al. (2020) reported that Chinese MSMEs experienced a “V”-shaped recovery. When strict lockdowns were imposed in most Chinese cities in February in order to stop the spread of the virus, MSMEs were hit hard. It was found that around 14% of surveyed firms reported that they would be unable to last beyond a month on a cash flow basis, and 50% of them could not last beyond three months. Moreover, 80% of the surveyed firms were not operating at the time of the survey. The firms also reported that the barriers to business operations varied according to their positions in the supply chain, where upstream firms were mainly affected by labor shortages, but downstream firms reported more serious challenges related to supply chains and consumer demand. It was also found that the effects of the pandemic varied across sectors. Export-oriented firms expressed more negative outlooks than domestic-oriented firms because they tended to employ more migrant workers and their suppliers were more highly concentrated; moreover, the export-oriented firms also held more pessimistic views on business prospects than domestic-oriented ones. However, when the economic conditions had greatly improved, it was found that most businesses had reopened again, though smaller firms reopened at a lower rate across all sectors. In general, their survey findings showed that the vast majority of MSMEs were able to reopen and rehire workers once mobility restrictions were lifted. Besides that, the authors found that the COVID-19 restrictions took a heavy toll on MSMEs. Around 18% of the surveyed MSMEs closed permanently. The authors also found that the major challenges faced by the surveyed MSMEs shifted from the supply-side disruptions at the beginning of the pandemic to the demand side later on.

### ***Crisis Mitigating Measures (CMMs)***

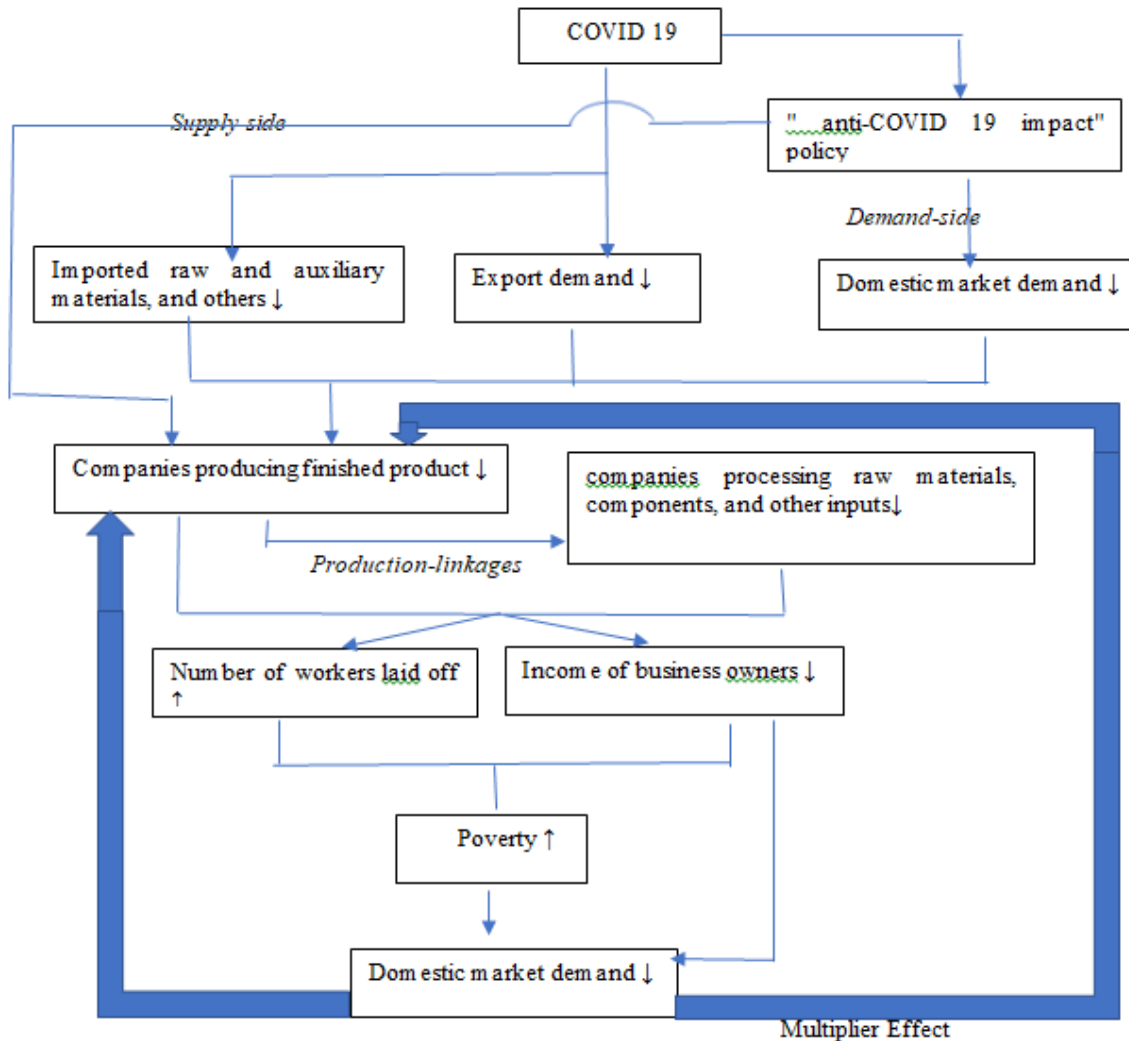
The ILO survey shows that small businesses were responding to the economic fallout from COVID-19 in several ways (ILO, 2020b,c,d). Half of the businesses surveyed have reduced their production of goods and services to match demand reductions and constraints on their production. Over one-third (38%) of the sampled businesses negotiated wage modifications with their workers or revised payment terms with their banks and suppliers. Less frequently, some businesses in the sample tried to diversify their sales channels or products to try to reduce the effects of the crisis on their business.

Shafi et al. (2020) from their research in Pakistan also provides evidence on CMMs adopted by affected small businesses. The enterprises surveyed have chosen a variety of strategies to curb the crisis. Particularly, 31% of the sampled enterprises have shut down the business completely, while 19% have partially closed their businesses, whereas 18% planned to apply for a loan. Moreover, 12% of investigated businesses continued to operate their business. Only 4% expressed that they were planning to change the business line to address the COVID-19 challenge. Additionally, 2% struggled to work remotely. Working remotely as much as possible was one of the best ways to stay safe and minimize the exposure to get infected. Nevertheless, not all businesses in the sample, especially micro and small enterprises in the rural or backward regions have the required resources to adopt such a strategy.

## Theoretical Framework

A lot of news in mass media during the whole year of 2020 reveals that the COVID-19 pandemic has severely affected many companies including small businesses in Indonesia. The economic crisis caused by the pandemic has had a negative effect on these companies through four main channels (Figure 1). The first channel was the result of the "anti-COVID 19 impact" policy which consisted of three main elements: (i) social/physical distancing' (ii) learning and working from home; and (iii) the temporary suspension of business activities in non-strategic sectors. The second element obviously has caused the number of buyers in the local market to decrease dramatically (↓). Thus, this policy element has affected business activities on the demand side ('demand effect'). The third element of the policy has affected business activities on the supply side ('supply effect'). These demand-side and supply-side effects did not happen only in companies supplying finished products but also in those supplying processed raw materials, components, spare parts, auxiliary goods, semi-finished goods, and other inputs.

The second channel was the decrease in world demand, especially from China, for Indonesian products which caused Indonesia's exports to decrease (ADB, 2020). The third channel was the decline in imports of processed raw materials and auxiliary materials, especially from China, which forced many companies, including MSMEs, in Indonesia which were highly dependent on imports from China to reduce/stop their production (Kompas, 2020a, b). The fourth channel was the increase in the number of poor people as many employees were laid off, or their wages were cut, which further led local market demand to decline and hit many domestic companies.



**Figure 1.** The Main Economic Transmission Channels of the Impact of the COVID-19 Pandemic on Domestic Businesses

## Evidence from Indonesia

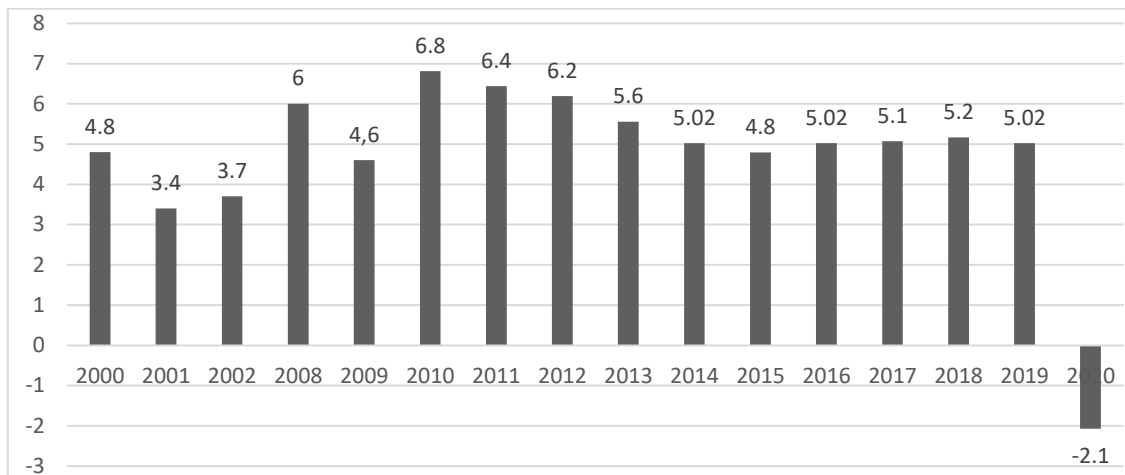
### *Macroeconomic and Sectoral Impacts*

The current COVID-19 crisis is generally considered a domestic supply and demand crisis due to declined consumption and production as a direct consequence of policies on social/physical distance, work and schools from home, and closure requirements for all companies in non-strategic sectors. Suryahadi et al. (2020) estimated that COVID-19 would reduce Indonesia's economic growth to between 1% and 4%. Even, it was estimated that the Indonesian economy would experience a recession of minus 5.4% (OECD Eurostat).

Since the end of the Asian financial crisis of 1997-98, which caused Indonesia's economy to grow negatively. As it is known many factor affects the country's economic stability such as exchange rates, inflation and other factors. In developing countries, factors such as low real exchange rate, high inflation, economic crises due to budget deficits and recession negatively affect economic growth (Emek, M., L., 2021. Indonesia's economic growth rate has continued to be positive until early 2020 when the COVID-19 pandemic broke out (Figure 2). Data from the National Statistics Bureau (BPS) shows that as a direct consequence of the pandemic, the



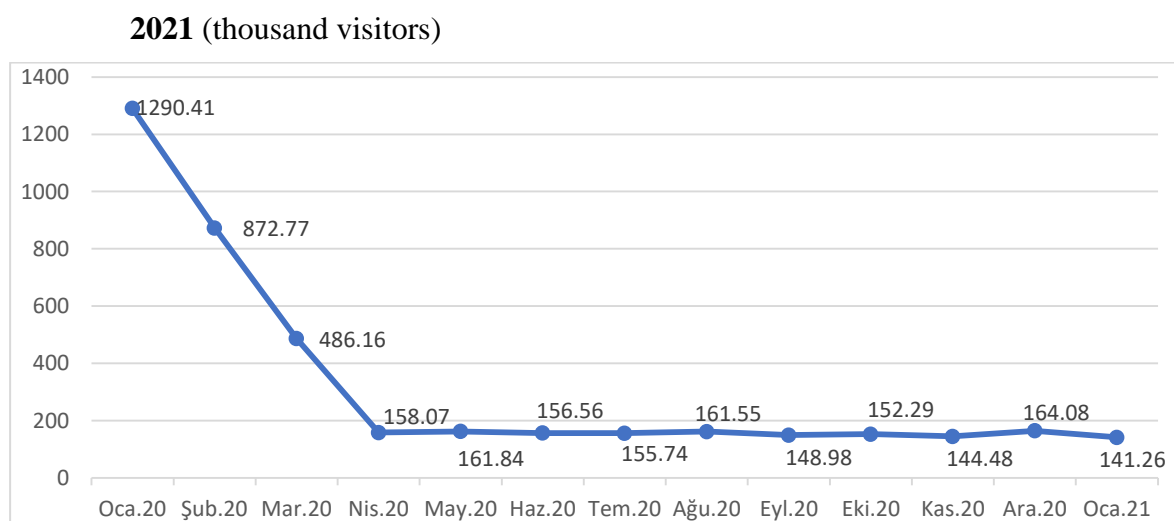
country's economy by the end of 2020 experienced a growth contraction of 2.07%. Business fields that experienced the deepest growth contraction included transportation and warehousing with 15.04%; provision of accommodation and food and drink amounted to 10.22%; company services by 5.44%; other services by 4.10%; and large trade and retail; and car and motorcycle repair by 3.72%.



**Figure 2.** Annual Growth of Indonesian Real GDP, 2000-2021 (%)

Source: BPS (<https://www.bps.go.id/>)

The sector hardest hit by the pandemic was the tourism sector. Judging based on those who entered through all international airports in the country, the number of foreign tourists visited Indonesia in January 2021 dropped significantly by 99.79% compared to the number of those visited in January 2020. All international airports in Indonesia experienced a decline, even at most airports the decline reached 100%. Meanwhile, the main international airport in Indonesia, Soekarno-Hatta, experienced a decrease at 99.34%. Figure 3 shows number of foreign tourists visited Indonesia per month for the period January 2020-January 2021.



**Figure 3.** Number of Visiting Foreign tourists in Indonesia during the Period January 2020 - January

Source: BPS (<https://www.bps.go.id/>)

As illustrated in Figure 4, the negative impact of COVID-19 on the tourism sector in turn has a negative impact on small businesses, both directly and indirectly through several transmission channels. The direct impact was through the reduction of small business activities in the tourism sector, such as restaurants, cafes, travel agencies, local transportation, rentals, cheap accommodation/hotels, and various kinds of entertainment. Meanwhile, the indirect impact was a decrease in orders received by small-sized suppliers (e.g. catering, provision of food and beverages, cleaning services, repair services, rental of musical instruments, rental of sport equipment, laundry) from companies that are directly related to tourism as mentioned previously. In addition, the decrease in the number of tourists in Indonesia during 2020 both from abroad and domestically (due to the "anti-COVID-19 impact" regulations) has an impact on the volume of transportation activities both at home and on national airlines serving international routes such as Garuda and Lion Air. In turn, this decline also resulted in a reduction in orders for suppliers in the country, many of which were from the small businesses category.

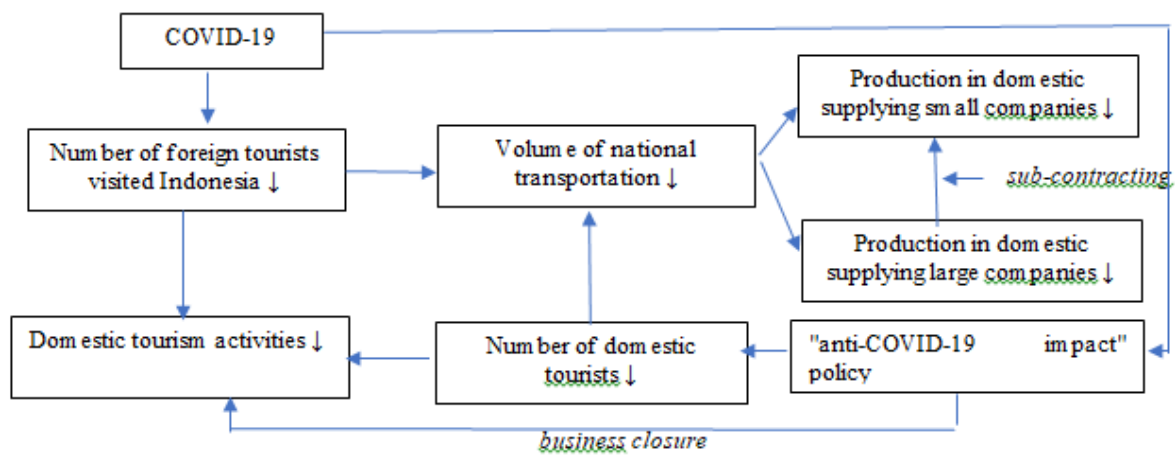


Figure 4. The Impact of COVID-19 on Tourism and Transportation Sectors

### Unemployment and Poverty

The large number of companies that closed or reduced their activities during the COVID-19 pandemic automatically resulted in an increase in unemployment. According to official data from the government, the open unemployment rate in August 2020 was 7.07% of the total labor force, an increase of 1.84 percentage points compared with August 2019. The population who worked as many as 128.45 million people, decreased as many as 0.31 million people from August 2019. The sector that experienced the largest decrease in employment during that period was in the manufacturing industry at 1.30%.

The COVID-19 pandemic has caused some residents to lose or stop working and become unemployed or not in the labor force (BAK). The COVID-19 pandemic has also caused some of those residents to become temporarily unemployed or experience reduced working hours. The working-age population affected by COVID-19 is grouped based on the National Survey of Labor Force (SAKERNAS) results in four components, namely: (1) unemployment due to COVID-19; (2) not in the labor force (BAK) due to COVID-19; (3) temporarily not working due to COVID-19; and (4) working residents who experience reduced working hours due to COVID-19. Conditions (1) and (2) are the impact of the COVID-19 pandemic on those who

have stopped working, while conditions (3) and (4) are the impact of the COVID-19 pandemic felt by those who are still working.

In Table 2 it can be seen that the working-age population affected by COVID-19 in August 2021 was 21.32 million people, a decrease of 7.80 million people, or 26.77% compared to August 2020. When compared to February 2021, the working-age population affected by COVID-19 has increased by 2.22 million people (11.67%). In August 2021, the composition of the working-age population affected by COVID-19 consisted of: 1.82 million people unemployed due to COVID-19; 700 thousand people are not in the labor force (BAK) due to COVID-19; 1.39 million people temporarily out of work due to COVID-19; and 17.41 million working residents who have had their working hours reduced due to COVID-19.

**Table 2.** Impact of COVID-19 on the Working Age Population, August 2020 - August 2021

| Component <sup>1</sup>                            | Augt.2020 <sup>2</sup> | Feb.2021 <sup>2</sup> | Augt.2021 <sup>2</sup> | Change:<br>Augt.2020-Augt2021 |        | Change:<br>Feb.2021-Augt2021 |       |
|---|------------------------|-----------------------|------------------------|-------------------------------|--------|------------------------------|-------|
|   |                        |                       |                        | Mill. peope                   | %      | Mill. people                 | %     |
| U <sup>3</sup>                                    | 2.56                   | 1.62                  | 1.82                   | -0.74                         | -28.96 | 0.20                         | 12.19 |
| BAK <sup>4</sup>                                  | 0.76                   | 0.65                  | 0.70                   | -0.06                         | -6.98  | 0.05                         | 8.35  |
| STB <sup>5</sup>                                  | 1.77                   | 1.11                  | 1.39                   | -0.38                         | -21.54 | 0.28                         | 25.68 |
| PJK <sup>6</sup>                                  | 24.03                  | 15.72                 | 17.41                  | -6.62                         | -27.55 | 1.69                         | 10.77 |
| Total PUK <sup>7</sup><br>affected by<br>COVID-19 | 29.12                  | 19.10                 | 21.32                  | -7.80                         | -26.77 | 2.22                         | 11.67 |
| PUK   | 203.97                 | 205.36                | 206.71                 | 2.74                          | 1.34   | 1.35                         | 0.66  |
| % of PUK  | 14.28                  | 9.30                  | 10.32                  | -3.96 <sup>8</sup>            |        | 1.02 <sup>8</sup>            |       |

Notes: 1) due to COVID-19; 2) million people; 3) U=unemployment; U due to COVID-19 are unemployed who have stopped working due to COVID-19 since February 2020; 4) BAK = not in the labor force; BAK due to COVID-19 are working-age residents who are included in the non-labor force category and have stopped working due to COVID-19 since February 2020; 5) STB = temporarily not working; STB due to COVID-19, residents are working but because of COVID-19 they are temporarily not working; 6) PJK = the working population who is experiencing reduction working hours due to COVID-19; 7) PUK = the working-age population; 8) percentage point.

**Source:** BPS (2021b).

Next, in Table 3 it can be seen that the working-age population affected by COVID-19 in August 2022 was 4.15 million people, a decrease of 17.17 million people or 80.53% compared to August 2021. Apabila dilihat dari komponen dampak COVID-19 terhadap penduduk usia kerja, sebanyak 0,24 juta orang merupakan pengangguran karena COVID-19; 0,32 juta orang bukan angkatan kerja (BAK) karena COVID-19; 0,11 juta orang sementara tidak bekerja karena COVID-19; dan 3,48 juta penduduk bekerja mengalami pengurangan jam kerja karena COVID-19. The largest percentage decrease among the four components was for those who were temporarily unemployed due to COVID-19, namely 91.76%.

**Table 3.** Impact of COVID-19 on the Working Age Population, August 2021 - August 2022\*

| Component | Augt.2021 | Augt.2022 | Change:<br>Augt2021-Augt2021 |        |
|-----------|-----------|-----------|------------------------------|--------|
|           |           |           | Mill. people                 | %      |
| U         | 1.82      | 0.24      | -1.58                        | -86.88 |

| Component                      | Augt.2021 | Augt.2022 | Change:<br>Augt2021-Augt2021 |        |
|--------------------------------|-----------|-----------|------------------------------|--------|
|                                |           |           | Mill. people                 | %      |
| BAK                            | 0.70      | 0.32      | -0.38                        | -54.48 |
| STB                            | 1.39      | 0.11      | -1.28                        | -91.76 |
| PJK                            | 17.41     | 3.48      | -13.93                       | -80.03 |
| Total PUK affected by COVID-19 | 21.32     | 4.15      | -17.17                       | -80/53 |
| PUK                            | 206.71    | 209.42    | 2.71                         | 1.31   |
| % of PUK                       | 10.32     | 1.98      | -8.34                        |        |

Note: \* see Table 2 for more information.

Source: BPS (2021b).

As a result of increasing unemployment and reduced working hours accompanied by salary cuts during COVID-19, the number of people living below the poverty line increased in 2020 from 24.78 million people in 2019 to 27.55 million people, or an increase of around 9.22% of the population in 2019 became 10.19% in 2020. However, in 2021 the poverty rate decreased again as can be seen in Figure 5.

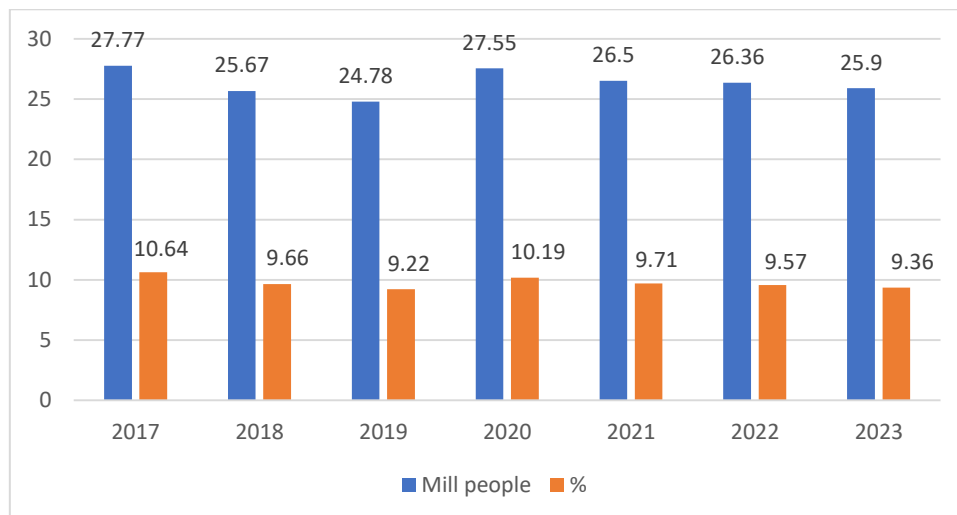


Figure 5. Poverty, 2017-2023

Source: BPS (BPS (<http://www.bps.go.id>))

### *Small Business Impact and CCMs*

Since March 2020 stories about the impact of COVID 19 on small business in many parts of the country from various sources began to emerge. Small businesses in the tourism sector were the hardest hit, followed by those in business lines which were heavily affected by the 'anti-COVID-19 impact' policies such as small shops, restaurants, cafes, and transportation. Table 4 summarizes them for the period March and April 2020.

**Table 4.** Some Evidence on the Impact of Covid-19 on Small Businesses

| Source   | Impact   |
|--|--|
| Rahman (2020), Santoso (2020), Tambunan (2020) | 163,713 small businesses have been seriously affected. As many as 56% due to a decrease in sales, 22% difficulty in capital, 15% difficulty in the distribution of products and 4% difficulty finding raw materials  |
| Hermansah (2020)                               | Based on a survey of small businesses in some sectors, 96% claimed to have been negatively impacted. As many as 75% experienced a significant decrease in sales; 51% believe that it is very likely that their business will only last one month to the next three months  |
| Anwar (2020)                                   | Of the 14,238 small businesses in Serang City, 10,238 were affected. Only 4,000 businesses have survived this epidemic   |
| Kompas (2020c)                                 | The decrease in demand for small businesses' products is expected to decrease by around 60% to 80%. This decrease was caused by a decrease in the number of buyers visiting shops  |
| Sundari (2020)                                 | Many small businesses in the Cimahi City have experienced a decline in sales of up to 80%. Even a large number of small businesses are forced to lay off their employees. Especially those that their businesses rely heavily on daily production activities are severely affected. Also export-oriented small businesses are also affected  |
| Nurzaman (2020)                                | A case study: Ms. Tarli Sutarli is the manager of the Bueuk stamp coffee plant located in Golempang Hamlet, Ciliang Village, Parigi District, Pangandaran Regency. According to her, at normal times her turnover can reach 7 to 12 million IDR per month. Recently, hit by the corona pandemic crisis, she has almost closed her business because her turnover has dropped dramatically from day to day   |
| Burhan (2020).                                 | Small businesses revenues in the culinary, fashion retail and beauty services sectors fell during the corona pandemic. The culinary sector experienced a decline in daily income of up to 37%, the fashion retail by 35%, and beauty services by 43% percent. Also food orders at restaurants decreased very significantly by up to 60%. The negative impact of the pandemic was felt most significantly by small businesses that still ran their businesses offline |
| Kompas (2020d, e)                              | By April 2020, there were 212,394 laid off workers and 1,205,191 workers who were sent home but still paid (not full) from 74430 companies. From the informal sector, the number of workers affected and losing their jobs reached 282,000 people from 34453 enterprises, mostly from the micro and small enterprise category  |

Based on the results of a survey of MSEs in the manufacturing industry (called micro and small industries or MSIs) conducted by BPS (2021), the production growth of MSIs during 2020 experienced a deep contraction when compared to the growth rates in 2018 and 2019 (Figure 6). The beverage industry (KBLI11) was the industry group with a percentage of MSIs that were closed or temporarily not in production, i.e. around 11.95 percent, during the fourth quarter of 2020. At the end of 2020 (fourth quarter), 7.06 percent of MSIs were closed or temporarily not producing (11.25%). Banten was the province with the minimum percentage of MSI closed/temporarily not in producing (11.22%) during the fourth quarter of 2020.



**Figure 6.** Growth Rates of Production in MSIs, 2020

Source: BPS (2021)

Almost a quarter of the total number of MSI could not continue in production during the 2020 pandemic. In percentage terms, the number of MSIs that were still in production, both those that remained with the same industrial activities (*permanent* KBLI) or those that changed the type of industrial activity (KBLI 2-digits changed) the lowest occurred in Quarter II-2020, which was 76.70 percent (Table 5). Most of the MSI production was still in the same type of business activity. Changes in the number of MSIs fluctuate between quarters. This shows that MSIs' efforts were very dependent on the state of the pandemic.

**Table 5.** Percentage of MSIs by Business Status, 2020

|         | Production, Fixed KBLI | Production, Different KBLI 2-Digit | Temporarily Not in Production | Closed | Others |
|---------|------------------------|------------------------------------|-------------------------------|--------|--------|
| Q1-2020 | 76,6                   | 0,53                               | 13                            | 4,28   | 5,6    |
| Q2-2020 | 76,7                   | 0,29                               | 15,35                         | 5,43   | 2,23   |
| Q3-2020 | 80,11                  | 0,22                               | 11,55                         | 6,03   | 2,1    |
| Q4-2020 | 79,39                  | 0,18                               | 11,25                         | 7,06   | 2,12   |

Source: BPS (2021)

Apart from the impact of COVID-19 on the macroeconomy, sector performance, employment opportunities, poverty, and business activities of companies, there are also a lot of stories on how companies, especially small businesses handled the crisis. Such as Afifiyah (2020), Ciremaitoday (2020), KB (2020), Kompas (2020d), and Setyowati (2020) show CMMs adopted by affected micro and small enterprises (MSEs), e.g. change business line to those which are not too affected by the crisis or have a chance of survival or even growth, turn to the business of making masks and other personal protective equipment that were most sought during the Covid pandemic, change the way of marketing from offline to online or e-commerce by using existing trading platforms, and switch from waiting for buyers to come to the home delivery via a telephone call, short message service (sms) or WhatsApp (WA).

Another evidence is from Tambunan (2020) who conducted a survey on 137 MSMEs during May-September 2020 in various cities and sectors in Indonesia. They were from the food and

beverage businesses including restaurants, food processing, and catering. Some other respondents were small shops or mini markets, clothing industries, café, and coffee shops, photocopy services, haircut and washing services, transportation services, craft industries, music studios, creative content production workshops, groceries, printing, and laundry. Before COVID-19, most of them marketed their products in a conventional way (offline).

It was revealed from the survey that several respondents chose more than one form of CMMs. Most of them experienced a decrease in turnover or an increase in production costs large enough to force them to take some adjustment steps. Table 6 shows the number of respondents according to the chosen form of CMMs. As can be seen, the most popular forms of CMM were reducing production volume and changing conventional or offline marketing systems to online marketing systems or e-commerce. With respect to the latter, this was indeed highly recommended by the Indonesian government that all MSMEs should switch to an online marketing system so that their sales can remain smooth or at least not fall too much in this COVID-19 period.

**Table 6.** CMMs taken by the respondents to cope with the impact of the 2020 crisis (% of total sampled enterprises;  $N = 137$ )

| Adopted Type of CMM                    | Distribution % |
|--|----------------|
| No special designed strategy           | 0,81           |
| Other measures                         | 2,85           |
| Offer directly to individual consumers | 7,72           |
| Go online                              | 26,83          |
| Change the raw materials               | 8,13           |
| Debt restructuring                     | 1,63           |
| Change the type of business            | 2,44           |
| Reduce production                      | 29,27          |
| Cut wages                              | 8,94           |
| Lay off workers                        | 11,38          |

Source: Tambunan (2020)

### Positively Affected Sectors

However, evidence in many affected countries shows that some other sectors during the pandemic period were still experiencing positive growth rates, including health services and social activities; information and communication; procurement water, waste management, waste, and recycling; real estate; agriculture, forestry, and fisheries.

In Indonesia, the sectors that became 'the winners' during the crisis were health, telemedicine and pharmacy, disinfectant and mask manufacturing industry, e-commerce business, logistics, food delivery, and home fitness. In fact, since the pandemic, consumer patterns in the country have begun to change. Usually, people shop traditionally, but now they are starting to shift to shopping digitally or online. Many large e-commerce companies in the country are taking advantage of this. Tokopedia, Lazada, Bukalapak, Shopee, and Blibli, to mention some, admitted that the number of users shopping on their platforms had increased to double than usual. In line with the growth in the number of buyers shopping on e-commerce, this has had

a big impact on logistics companies. Many logistics companies in Indonesia such as JNE, J&T, SiCepat Express, Pos Indonesia, and others have experienced very significant increases.

Food delivery also has increased significantly since the outbreak the pandemic, especially in cities. The food and beverage sector has thus been required to have food delivery services. For this reason, food and drink delivery services such as Gojek and Grab are currently widely used by the public. As a result of this change in consumer behavior, eateries or restaurants that do not provide delivery services will become less successful and could even be threatened with bankruptcy.

The outbreak of COVID-19 has made many people more concerned about their health. However, in line with this, quite a few people were afraid to go to the hospital. As a result, many people switched to using telemedicine applications such as Halodoc and Alodokter to carry out health consultations. The consultations carried out were not only easy but also offered relatively cheaper costs compared to hospitals.

The implementation of lockdown or work and study from home has limited people's exercise activities. Since then, many people have chosen to exercise at home. Therefore, during the pandemic period, some companies that sold sports equipment made big profits.

## CONCLUSION

### The Theoretical and Practical Contributions

Like most other countries in the world, Indonesia has been hit by the Corona pandemic. This study aimed to examine empirically the impacts of this pandemic crisis on the Indonesian economy and small businesses. It explains theoretically the main transmission channels through which the crises affected MSMREs and explores the main CMMs adopted by the affected small businesses (MSMEs).

This study has two important contributions, i.e. theoretical and practical contributions. With respect to the theoretical contribution, different types of crises have different transmission channels through which the crisis will affect the economy or businesses and pose different business risks and therefore require different CMMs. So, an economic crisis may not affect all companies in all sectors, it depends on the type of the crisis and therefore its transmission channels. For instance, the COVID-19 pandemic crisis could be considered as a combination of market demand and market supply (production) crises, as a result of the 'anti-COVID-19 impact policy'. From the market demand side, only companies that make finished products (goods and services) and are completely dependent on offline marketing were hit hard as people are staying at home. Whereas from the market supply side, generally, only companies with large numbers of workers such as textile, apparel, electronics companies, and businesses which became a gathering place for many people such as cafes and restaurants, entertainment venues, cinemas, hotels, and malls that had to close during the pandemic period. Meanwhile, micro-businesses that only use less than 5 workers such as small car repair shops, small car washes, small shops, or business units without workers such as craftsmen, small traders, and food stalls remain open.

While, on the other side, companies that produce highly demanded products such as health equipment, telemedicine, pharmacy, disinfectant, mask, equipment for home fitness, and food delivery, and also companies in the e-commerce business, logistics, remain in business or even grow.



As its practical contribution, if the government wants to assist crisis-affected businesses, especially MSMEs, this study has two policy implications. First, to make its stimulus packages program effective, MSMEs that will be most affected should be identified first. For that, it needs to know in advance the type of crisis, its main transmission channel, and its related type of business risks. Second, the form of stimulus must be in line with the CMM adopted by the targeted MSMEs. In other words, the stimulus program must be complementary to the adopted CMM. So, different CMMs in response to different business risks need different policy approaches and different stimulus packages.

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