

# The Effect of Covid-19 on Increasing E-Commerce Sales in Various Fields

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**Abstract:** The Covid-19 pandemic forced the government to implement activity restriction obligations starting in March 2020. Even though Covid-19 paralysed physical activity, on the other hand, this has also made online sales increase sharply. According to the report "Big Data Review of the Impact of Covid-19 2020" compiled by the Central Statistics Agency (BPS), online sales during this pandemic actually jumped sharply when compared to sales in January 2020. In March 2020, online sales jumped 320 % of total online sales at the beginning of the year. The spikes are getting sharper, April 2020 online sales recorded an increase of 480% from January 2020.

**Keywords:** Covid-19, Online Sales, Literature Review

## Introduction

In March 2020 the highest sales were in the Food and Beverage sector, which increased 570% from sales in January 2020. The lowest sales were sports products which only increased 170% from January sales. While in April 2020, the highest sales were still held by Food and Beverages, which jumped 1070% from sales in January 2020. The lowest sales were sports products, with a percentage of 210% from January 2020. Apart from Food and Beverages and Sports equipment, Some of the increased sales also occurred in medical devices, communication equipment, cosmetics, household equipment, educational equipment, and clothing (Higuera-Castillo et al., 2023; Paredes-Corvalan et al., 2023).



**Figure 1** Number and Value of E-Commerce Transactions in 2018

The impact of Covid-19 not only disrupted Indonesia's export and import sectors, but also hit the trade sector, namely from tax revenues which also experienced a decline (Sun et al., 2021). This has a very serious impact because in tax revenue the trade sector really has a big contribution in boosting state revenue to be precise, it is in the second largest order (Cai et al., 2023; Ye et al., 2023). The Central Statistics Agency (BPS) released data related to oil and gas and non-oil and gas exports which stated that there had been a decline in oil and gas and non-oil exports due to the impact of this pandemic, this happened because China is the world's largest importer of crude oil (D. Chen et al., 2023). Not only that, the Covid-19 pandemic has also caused a decline in production produced by China, even though the focus of world goods and the central production of world goods is concentrated in China. If there is a negative correction on production in China, the world will experience supply chain disruptions which in the end can reduce the world production process, whose raw materials are imported from China. Indonesia itself really needs raw materials from China to carry out the production process, especially raw materials for electronic parts, furniture, plastics, textiles and computers (Rinaldi & Bottani, 2023).

## Research Method

Research related to increasing online sales during the Covid-19 pandemic, this year 2020 and research sites in Indonesia, the target is that there are opportunities and how to take advantage of them (Permana et al., 2021b). The research subject on online sales, the method used is to review some of the literature. Systematic literature review or often abbreviated as SLR or in Indonesian it is called a systematic literature review is a literature review method that identifies, assesses, and interprets all findings on a research topic, to answer predetermined research questions (Azzery, 2022; Hidayat et al., 2023). In addition, another research method was used, namely the method used in this study was a descriptive quantitative method, namely using an approach called secondary data analysis (Permana et al., 2021a). Secondary data

analysis or what is often abbreviated as DAS is a research methodology that uses secondary data as the main data source. The intended use of secondary data is to use an appropriate statistical test technique to obtain the required information from data released by a certain competent agency or institution to then be processed in a systematic and objective manner. The quantitative method according to is explained as a research method that adheres to positivism, the sampling method is usually carried out by calculating certain appropriate sample techniques, the techniques used to research on certain populations or samples, the process of collecting data with research instruments and data analysis statistical in nature to test the hypotheses that have been set, especially for comparative and associative hypotheses. Quantitative data analysis results are usually presented with pictograms and piecharts, bar or line graphs and frequency distribution tables. The discussion on research analysis will be explained in depth and the interpretation of the data presented in a straightforward and detailed manner in order to produce a conclusion that contains a brief answer to the problem formulation based on the data that has been collected. While in this research descriptive research aims to record, describe, interpret and analyze the current situation. Or it can be said that this research has the goal of obtaining information about the current condition and then analyzing the relationship between the existing variables (Wang et al., 2023). This study does not use hypotheses, but only describes the information as it is in accordance with the research variables. Secondary data that has been obtained from competent institutions or agencies is then presented on research instruments that have been tested, then processed using certain statistical test techniques. The secondary data used is data related to the global and Indonesian economy which has been processed by a non-bank financial institution, namely PT. Syailendra Capital which is the gateway for repatriation funds. Furthermore, this data will be identified and carried out further analysis. Bogdan explained that data analysis is a step of systematically compiling and searching for data obtained from field notes and other materials, so that it will be easy to understand, and the findings obtained can be informed to the people in need (Y. Chen et al., 2023).

## Result and Discussion

Increasing E-commerce transactions are classified into several types of business sectors. Significant increases occurred in the financial and insurance sectors during the Covid-19 pandemic. This shows that financial transactions during the Covid-19 pandemic were fully directed to use online transactions.

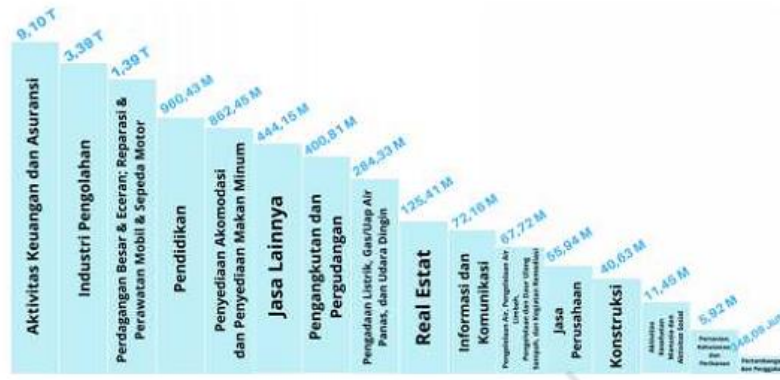


Figure 2. Value of E-Commerce Transactions by Business Field

The impact of the Covid-19 pandemic caused low investor sentiment towards the market which ultimately led the market to tend to be negative. However, after reaching the phase 1 agreement in January 2020, the trade war between the United States and China began to decrease. Monthly Bulletin February 2020 edition published by PT. Syailendra Capital reports that today Indonesia is still in a stable economic situation. Strategic measures related to fiscal and monetary are also estimated to still have room to provide economic stimulus if needed. However, as the Covid-19 pandemic case developed, the market did indeed fluctuate more in a negative direction.

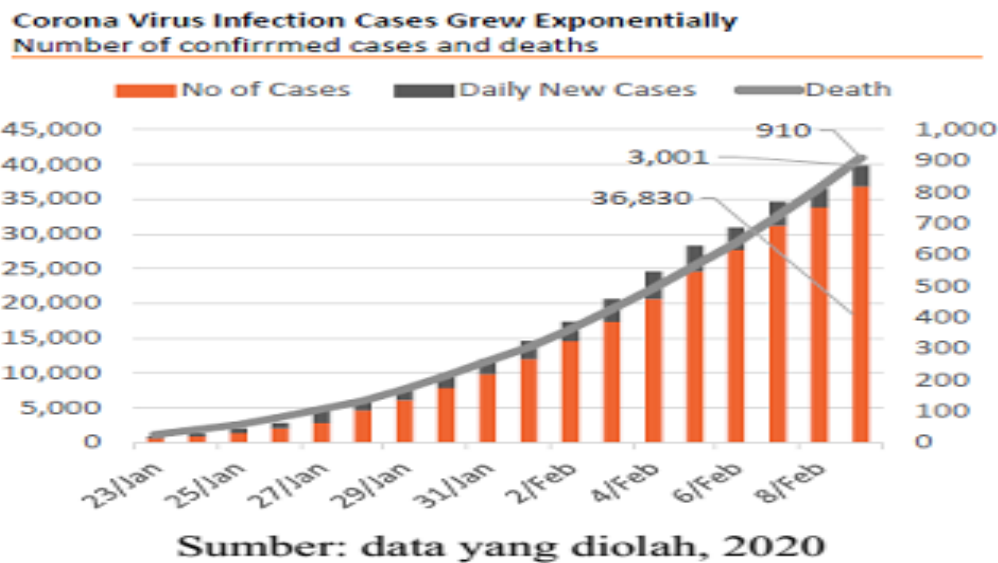
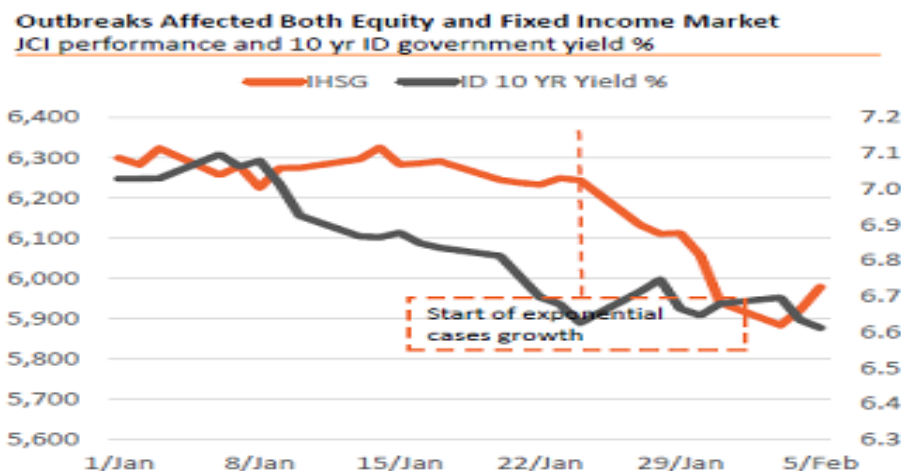


Figure 3. Corona Virus Infection Cases Grew Exponentially [4]

The Covid-19 pandemic, which increased significantly starting at the end of January 2020, has infected 28,000 thousand people. as of 24 February 2020, it was recorded that 79,930 people had contracted Covid-19 and as many as 2,469 people had been recorded as having died in this pandemic. The Covid-19 pandemic has also had a significant effect on bonds and the stock

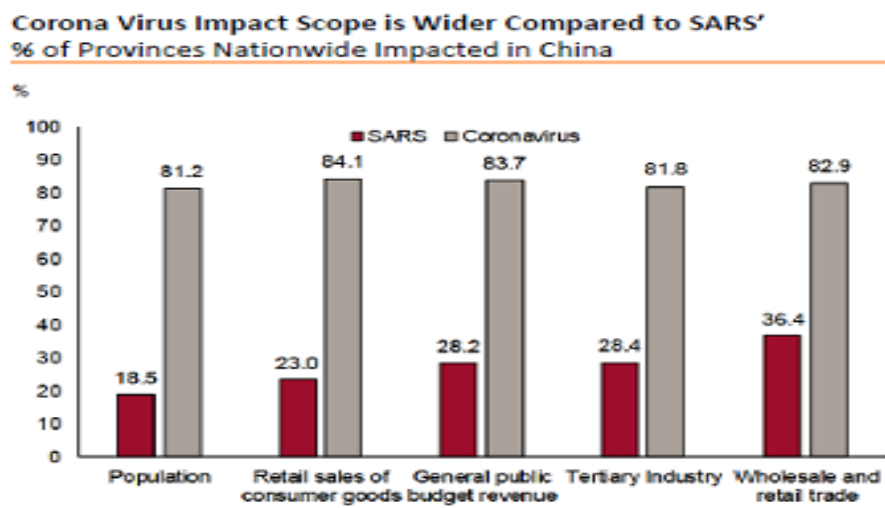
market. The impact of the Covid-19 pandemic on bonds and the stock market can be seen in the performance of the Jakarta Composite Index and government bonds in the last 10 years.



Sumber: data yang diolah, 2020

Figure 4 Outbreaks Affected Both Equity and Fixed Income Market

In Figure 4 it can be seen that the market is fluctuating in a negative direction towards the rate of spread of Covid-19. The Covid-19 pandemic has also had a very large impact when compared to the cases caused by the SARS virus.



Sumber: data yang diolah, 2020

Figure 5 Corona Virus Impact Scope is Wider Compared to SARS

The Covid-19 pandemic, which increased significantly starting at the end of January 2020, has infected 28,000 people. As of 24 February 2020, it was recorded that 79,930 people had been infected with Covid-19 and as many as 2,469 people had been recorded as having died in this pandemic. The Covid-19 pandemic has also had a significant effect on bonds and the stock market. The impact of the Covid-19 pandemic on bonds and the stock market can be seen in

the performance of the Jakarta Composite Index and government bonds in the last 10 years. The decline in retail sales growth was previously predicted by Syailendra Capital which stated that the Covid-19 pandemic would have a significant impact on China's economic growth ranging from 0.5 to 1 percent in the first quarter of 2020. Not only that, slow export activity Indonesia to China will also have a significant impact on the national economy. The slowdown in the global economy has had a major impact on Indonesia's economic growth. This can be seen in the sensitivity analysis of the Indonesian economy. Based on the sensitivity analysis it was found that when there is a 1% slowdown in the Chinese economy, it will affect and have an impact on the rate of economic growth in Indonesia, which is -0.09%. This is also in line with the advanced sensitivity analysis where every 1% of the European Union's economic slowdown will have an impact on the rate of economic growth in Indonesia by -0.07%, India (-0.02%), Japan (-0.05%) and America. United States (-0.06%). The same picture also applies to most commodities, namely every 10% decrease in the price of crude palm oil (CPO) will have an impact on the Indonesian economy of 0.08%, oil is positive 0.02%, and coal is -0.07%.

**Slowdown in Global Growth Impact ID's GDP Growth**  
Sensitivity analysis of impact to ID's GDP

		Impact to ID's Growth
Every 1% growth decrease	China	-0.09%
	EU	-0.07%
	US	-0.06%
	Japan	-0.05%
	India	-0.02%
Every 10% price decrease	CPO	-0.08%
	Coal	-0.07%
	Oil	0.02%

Sumber: data yang diolah, 2020

Figure 6 Slowdown in Global Growth Impact ID's GDP Growth

## Conclusions

The impact of the Covid-19 pandemic caused low investor sentiment towards the market which ultimately led the market to tend to be negative. Strategic steps related to fiscal and monetary are urgently needed to provide economic stimulus. As the cases of the Covid-19 pandemic developed, the market fluctuated more in a negative direction. In addition, the slowdown in Indonesia's export activities to China also had a significant impact on the Indonesian economy. The current slowdown in the global economy has had a major impact on Indonesia's



economic growth. This can be seen in the sensitivity analysis of the Indonesian economy. Based on the sensitivity analysis it was found that when there is a 1% slowdown in the Chinese economy, it will affect and have an impact on the rate of economic growth in Indonesia, which is -0.09%. This is also in line with the advanced sensitivity analysis where every 1% of the European Union's economic slowdown will have an impact on the rate of economic growth in Indonesia, namely -0.07%, India (-0.02%), Japan (-0.05%) and United States (-0.06%). The same picture also occurs in most commodities, namely every 10% decrease in the price of crude palm oil (CPO) will have an impact on the Indonesian economy of 0.08%, positive oil is 0.02%, and coal is -0.07%. However, online sales have increased sharply because as a solution to fulfilling online-based shopping needs and goods sent to destination addresses reduce direct interaction in the market as a prevention of Covid-19.

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