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Ly Dai Hung

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ECONOMIC ROBUSTNESS UNDER CURRENT COVID-19 PANDEMIC

Ly Dai Hung¹

¹Vietnam Institute of Economics, Hanoi

¹ORCID ID: <https://orcid.org/0000-0003-2693-7996>

¹Email: hunglydai@gmail.com

Abstract

Objective:

The paper analyzes the reaction of an economy against the current covid-19 pandemic. The analysis covers many economies, both advanced and developing ones, with a focal point on the Vietnam economy.

Methodology:

The research method employs a quantitative analysis based on data analysis of Vietnam economy over 2010-2022, covering the current Covid-19 pandemic. Moreover, the method also uses a qualitative analysis based on reviewing the recent literature on the recovery of economies after the pandemic.

Findings:

The paper shows that the pattern of robustness is different across economies. Some economies experience a sharp reduction in economic growth with a substantial recovery while others have both a less decrease in economic growth but with slow recovery. Moreover, the pandemic also results in a more vulnerable economy against unexpected shocks.

Implications:

The government needs to provide a more stimulating fiscal package to enhance the robustness of an economy against the pandemic. In particular, the package can be oriented directly to low-income households, and small business firms.

Keywords: Economic Robustness; Economic Growth; Pandemic; Quantitative Analysis; Qualitative Analysis; Vietnam economy.

1. Overview.

The Covid-19 pandemic affects the economy through direct and indirect effects, with varying degrees of severity.

1.1. The Direct Effects.

The direct impact of the Covid-19 pandemic on an economy manifests itself through different channels including households, businesses, and the Government. The impacts through these channels directly affect people's living standards both in the short and long term.

The Covid-19 pandemic led to a direct decrease in people's living standards. Specifically, according to the household channel, the pandemic led to a decrease in people's income. According to the Vietnam General Statistics Office (GSO, 2022), Vietnam's per capita income has decreased by 1.1% in 2021 compared to 2020. In addition, the pandemic has also led to a narrowing of the number of jobs, with more than 9.1 million jobs affected in the economy (GSO, 2022).

According to the business channel, the pandemic has led to the loss of many businesses, even bankruptcy, with typical enterprises in the service sector, even large and leading enterprises. When the business is at a loss, the reduction of personnel will inevitably happen. In addition, the income of workers who keep their jobs will also have to decrease. These two factors together create a decrease in the income of workers, and hence, the standard of living of the people.

According to the public finance channel, the pandemic has led to an imbalance of state budget revenue and expenditure in the direction of reduced budget revenue and increased budget spending to respond to the pandemic with different stimulus packages. The budget deficit will lead to an increase in public debt. From there, a dilemma of public debt will be formed: increasing public debt will have more resources to fight the Covid-19 epidemic, but at the same time disrupt the stable structure of state budget safety, potentially hiding the risk of default.

Since the early days of the pandemic, this public debt dilemma has been warned by many economists, especially for developing economies (Norman

Loayza, 2020). Currently, the default situation of some countries such as Sri Lanka in early 2022 can be considered as a current case, with the causes of internal weakness of the economy but also a catalytic role. effects of the recent Covid-19 pandemic.

According to this public finance channel, the increase in public debt will create more pressure on debt repayment for the citizens of the host country. Accordingly, current and future employees will need to work harder to repay the debt created to prevent the Covid-19 pandemic.

1.2. The Indirect Effects.

The indirect impact of the Covid-19 pandemic on an economy manifests itself through various channels including gross domestic product, investment and savings, and forms of socio-cultural connectivity. The impacts through these channels indirectly affect people's living standards, and it will take time to translate into changes in people's living standards.

According to the gross domestic product (GDP) channel, the Covid-19 pandemic has changed the shape of the economic growth rates of economies around the world, even the disrupting in economic development models. Socio-economic. This fracture is shown by the sharp fluctuations in the economic growth rates of countries such as the United States and China, and at the same time, by the disaggregation of the development levels of the economies in the world.

The World Bank report (2021) notes that the Covid-19 pandemic has contributed to widening the development gap between the group of developed countries and the rest of the world. The main reason is that the total output of developed countries will decrease but will recover strongly after the Covid-19 pandemic, while the total output of other countries will fall more sharply, and recover more weakly after the Covid-19 pandemic. Therefore, the gap between these two economic groups will widen during and after the Covid-19 pandemic.

According to the investment and savings channel, the Covid-19 pandemic has both reduced investment and savings, and increased investment and saving. Within

an economy, the group of individuals with high incomes will have increased investment and savings rates during the pandemic, due to the increased accumulation of assets during pandemic, based on the boom of the market of property and financial markets. The remaining group, consisting of middle-income and low-income individuals, will have to use their accumulated savings to cover their living expenses, thereby reducing both savings and investment.

On the level of the world economy, the investment flows tend to increase between developed economies, and decrease capital flows from developed countries to developing economies. Recently, the Vietnam General Statistics Office (2022) noted that the total amount of foreign direct investment capital into Vietnam in the first months of 2022 has continuously decreased. Specifically, the total registered foreign investment capital of the first 6 months of 2022, including newly registered capital, adjusted registered capital, and value of capital contribution and share purchase by foreign investors, is estimated at 14.03 billion USD, down 8.1% over the same period last year. This decrease mainly came from the decline in newly registered capital (reaching 4.94 billion USD, down 48.2% over the same period last year), while the adjusted registered capital reached 6.82 billion USD, up 65.6% over the same period last year, and the registered capital for capital contribution and share purchase by foreign investors reached 2.27 billion USD, up 41.4% over the same period last year.

According to the social-cultural connection channel, the Covid-19 pandemic has led to the formation of new socio-cultural connections, besides the traditional channel. Accordingly, people tend to get closer together in smaller and more closed communities, sharing with each other through online channels, in parallel with face-to-face communication. The formation of these small groups leads to a variety of forms of social association, and from there, creates additional values that contribute to improving people's living standards.

2. Economic and Social Dimensions in Recovery of Vietnam Economy.

The Covid-19 pandemic has a multidimensional impact on an economy. The decline in economic growth rates of countries around the world, even negative in Vietnam in the third quarter of 2021 (GDP decreased by 6.17% over the same period last year), shows that the pandemic caused a structural break in the growth patterns of countries. Since then, the social dimension associated with economic development has also undergone a significant change compared to the pre-pandemic period.

2.1. Economic Dimension.

The Covid-19 pandemic has led to a decline in economic growth globally, including in the Vietnam economy.

The Covid-19 pandemic originated in China at the end of 2019 and gradually spread to other countries from the beginning of 2020. When the pandemic occurred, the average GDP growth rate of the eight economies with the largest trade with China and the rest of the world. Vietnam (including the United States, Japan, China, South Korea, Thailand, Taiwan, Singapore, and Malaysia) for the first time reached negative values and was negative for four consecutive quarters in 2020. According to data from the Department of Statistics According to statistics of these 8 economies, in 2020, on average, these 8 economies have a growth rate of (-2.2%). In Vietnam, the quarterly GDP growth rate also fell sharply, bottoming at 0.29% in the second quarter of 2020. This bottom is even much lower than the 3.10% bottom of the quarter. The first year of 2009 was related to the 2008 world financial crisis. At the end of 2020, Vietnam's growth rate reached 2.91%, the lowest since the economy opened in 1986. 2020.

However, the next developments of the pandemic will create an asymmetric impact between the world and Vietnam in 2021. According to the World Bank's Global Economic Outlook (June 2022), the world economy has recovered from (-3.3%) in 2020 to 5.7% in 2021. In particular, the world's leading economies have recovered rapidly to achieve impressive growth rates in 2021 such as the United States reaching 5.7%, the Eurozone reaching 5.4%, Japan reaching 1.7%, and

China reaching 8.1%. In Vietnam, the economy still maintains the growth rate of 2020, even slightly decreasing to 2.58% in 2021 (GSO , 2022). Thus, while the world economy recovered strongly to surpass pre-pandemic levels, Vietnam's economy is quite stable and has not rebounded strongly to the level achieved before the pandemic occurred. This has potential risks of missing the development pace of Vietnam compared to the world.

Also accompanied by a decrease in the growth rate of economies, the total amount of international trade also decreased due to the disruption of supply chains during the pandemic.

According to World Bank (2022), total international trade grew by 1.4% in 2019, the year before the outbreak of the pandemic, but decreased to (-8.0 %) in 2020, when the pandemic broke out. By 2021, total international trade has recovered strongly, reaching 10.3%, and is forecast to maintain a growth rate of 4.0% in 2022 and 2023.

The high growth in total global trade is partly due to the fact that the base level fell during the Covid-19 pandemic in 2020. In addition, this high growth also represents a possibility of recovery. The reconnection of global supply chains also happened quite quickly when the pandemic was gradually brought under control.

In the global supply chain, the commodity group (commodity) plays an important role in developing economies like Vietnam. This commodity group includes export agricultural and mining products such as rice, wheat, coffee, and coal. Basically, the prices of these commodities fluctuate closely according to the correlation between supply and demand in the world and often tend to fluctuate strongly, thus contributing to a significant change in the trade balance of the economies.

According to World Bank data (2022), the prices of commercial goods have changed significantly from 2019 to 2021. The crude oil price decreased by 33.9% in 2020, and recovered to 66.5% in 2021. Meanwhile, the price index of non-crude goods still maintains an increase of 3.3% in 2020 and 32.7% in 2021.

Changes in the prices of these commodities also lead to different growth patterns in the two groups of economies.

Firstly, the group of developing and emerging countries exporting commercial goods (Commodity-Exporting Emerging and Developing Economies), with Russia typically, has a growth rate of 1.8% in 2019, followed by a strong decline down to (-3.8%) in 2020 and rebound to 4.8% in 2021. Meanwhile, the group of developing and emerging countries import commercial goods (Commodity-Importing Emerging) and Developing Economies), with China typically, has a growth rate of 4.9% in 2019, only slightly decreasing (-0.4%) in 2020, and rebounding strongly to 7.5 % in 2021. Thus, the group of economies importing commercial goods maintained a stable and higher growth rate than the group of economies exporting commercial goods.

2.2. Social Dimension.

The Covid-19 pandemic has created a marked change in the form of society's activities, including labor, employment, and inequality in income distribution.

Until December 2021, the whole world has more than 266.5 million cases of Covid-19; 5.3 million people died from the Covid-19 pandemic (GSO, 2022). This pandemic has forced countries to take urgent measures to socialize on a large scale within and between countries. Since the beginning of 2022, groups of countries have separated on policy to adapt to Covid-19. Currently, most countries, such as Vietnam, have switched from a blockade mode to a safe adaptation to the epidemic, gradually treating Covid-19 as a common disease. Another group of countries, typically China, continues to pursue a Zero-Covid policy to strictly control the epidemic, despite the related economic impact. In the long term, the impact of each policy will be different on economic development, especially on the health of society. In either way, the Covid-19 pandemic has created a decline in the general health background of people, weakening the immune system, and creating conditions for strong outbreaks of epidemics. The scale is much different from

before, like the dengue fever epidemic in Vietnam, and the monkeypox epidemic happening in Africa.

The employment of workers is affected by the Covid-19 pandemic in terms of both size and structure. In particular, the number of people participating in the labor force has declined, mainly due to the rapid decline in demand for jobs stemming from the business decline of businesses during the pandemic. According to GSO (2022), the country's labor force aged 15 and over in the fourth quarter of 2021 was estimated at 50.7 million people, an increase of 1.7 million people compared to the previous quarter and a decrease of 1.4 million people compared to the same period last year. In general, in 2021, the labor force aged 15 and over is 50.5 million people, down 0.8 million people compared to the previous year.

In 2021, which is the second year that Vietnam's economy faces the Covid-19 pandemic, the unemployment rate of working-age workers is 3.22% on average (2.42% in the first quarter; 2.62% in the second quarter; 3.98% in the third quarter; 3.56% in the fourth quarter). In particular, the unemployment rate in urban areas is 4.42%, while the number in rural area is 2.48%. The youth unemployment rate (from 15-24 years old) in 2021 is estimated at 8.48%, of which the urban area is 11.91% and the rural area is 6.76%. The underemployment rate of working-age workers is estimated at 3.10% (2.20% in the first quarter of 2021; 2.60% in the second quarter; 4.46% in the third quarter; and 3.37% in the fourth quarter). In particular, the underemployment rate in urban areas is 3.33%, and the underemployment rate in rural areas is 2.96%.

According to the data updated to the second quarter of 2022 (GSO, 2022), when Vietnam's economy is in a state of safe adaptation to the pandemic, the country's workforce 15 years and older has employment in the second quarter of 2022 is estimated at 50.5 million people, with the national unemployment rate of working age estimated at 2.32%. The national unemployment rate for young people aged 15-24 years old is estimated at 7.63%, and the underemployment rate among the working-age population of the country is estimated at 1.96%.

Inequality in income distribution in Vietnam tends to improve during the Covid-19 pandemic.

In the trend of inequality in income distribution in the period 2016-2020, according to data from the General Statistics Office (2022), income inequality is decreasing as the Gini coefficient reduces from 0.431 in 2016 to 0.373 in 2020. The inequality in income distribution has decreased in both rural and urban areas. Accordingly, when the Covid-19 pandemic occurred, the inequality index of income distribution dropped quite quickly. The difference in the Gini coefficient between 2019 and 2018 is 0.002 points, but the difference between 2020 and 2019 is 0.05 points, which is 25 times. For urban areas, between 2019 and 2018, the Gini coefficient of this area did not change, but between 2020 and 2019, the Gini coefficient decreased by 0.48 points. For rural areas, between 2019 and 2018, the Gini coefficient decreased by 0.007 points, between 2020 and 2019, the Gini coefficient decreased by 0.042 points.

The gap between the highest and the lowest income quintile has narrowed from 10.2 times in 2019 to 8.0 times in 2020. At the same time, the urban rich-poor gap has decreased from 7.2 times in 2019 to 5.3 times in 2020. For rural areas, this gap decreases from 9.6 times in 2019 to 8.0 times in 2020.

3. Time Dimension of Economic Robustness in Vietnam Economy.

The Covid-19 pandemic creates impacts on the socio-economic development process in different directions, along the time dimension, and the level of impact.

Over time, the pandemic creates different short-term and long-term effects.

In general, the form of socio-economic development is stable over time. When the Covid-19 pandemic occurs, this form is changed, even broken, and will tend to return to its original form or transform into another form that replaces the old development form. The ability to return to this form depends on the robustness of an economy. Accordingly, the morphological break is the short-term impact of the Covid-19 pandemic, and the return to the original form or redirecting to a new form is the long-term impact of the Covid-19 pandemic.

3.1. Short-Term.

The most obvious break in the form of socio-economic development is reflected in the unprecedented change in economic growth rate and the way people interact with each other.

In particular, the economic growth rate of Vietnam is going through a period with an unprecedented growth rate since 1986 when the economy began to open up and integrate into the world economy. When considering the annual growth rate, on average in the period 2000-2019, the average growth rate of Vietnam is about 6.2%/year. However, during the period of the Covid-19 pandemic starting from 2020 to the present, the economic growth rate, as measured by the rate of change of gross domestic product (GDP) at real prices, decreased. to less than 3%, reaching 2.91% in 2020 and 2.58% in 2021, respectively. Such a large drop, from an average of 6.2% to less than 3.0%, is a change unusual change due to the Covid-19 pandemic.

When considering the quarterly growth rate, the period 2020 to date has even recorded a negative growth rate. Specifically, in the third quarter of 2021, the GDP growth rate reached (-6.17%) over the same period last year. According to the General Statistics Office (2022), this negative growth number was recorded for the first time since Vietnam collected and announced the growth results.

At the same time, human-to-human interaction also changed significantly when the Covid-19 pandemic occurred, in the direction of enhancing online ways, based on the application of new technology.

As social isolation was conducted to prevent the spread of the Covid-19 pandemic, people have gradually turned to online forms of communication. This trading platform has created an important push to promote the development of virtual spaces, especially recently, the virtual universe (Metaverse) initiated by Facebook Corporation. In this virtual universe, an individual can observe and even interact with different dimensions without changing geographical location.

3.2. Long-Term.

In the long term, the socio-economic development pattern of a country may return to the original trend, before the pandemic, or change to a new pattern. This process depends on the resilience of that economy.

According to research results of the Vietnam General Statistics Office (2022), in the context of complicated epidemic developments, the Vietnam economy is resilient to negative shocks and has moderate resilience.

Specifically, this ability is reflected in the following indicators: (i) control of corruption; (ii) the effect of the Government; (iii) quality of governance; (iv) the share of value added in the agriculture, forestry, and fishery in GDP; (v) the Government's external debt (% of GDP); (vi) consumer price index (CPI); (vii) unemployment rate of the labor force in age (%); (viii) fiscal deficit to GDP (%); and (ix) human development index. According to this result, Vietnam is one of the few countries in the world that has been relatively successful in controlling the Covid-19 epidemic and minimizing the consequences for the economy. And in the period of 2020 until now, when the pandemic occurs, the adaptability and resilience of the Vietnamese economy have been much better than in previous years.

An economy's response to a pandemic may follow a gradual pattern of gradual increases without a breakout, or follow an oscillating trajectory around a strong uptrend (Brunnermeier, 2021). Based on recent developments, in terms of the socio-economic development of Vietnam, this economy may fall into the first state, where the development may be gradual. Recently, the economic growth rate has increased again, reaching 7.72% in the second quarter of 2022, the highest quarterly growth rate in the past 10 years (2011-2021). But in considering the accumulation of the first 6 months of 2022, the GDP growth rate has only reached 6.42% and has not returned to the corresponding level before the pandemic in 2019. Thus, the Vietnam economy is still in the process of recovering back to pre-pandemic levels, and will essentially continue in a gradual pattern of growth, where a breakthrough is unlikely.

4. Conclusion.

The paper analyzes the reaction of an economy against the current covid-19 pandemic. The analysis covers many economies, both advanced and developing ones, with a focal point on the Vietnam economy. The paper employs a quantitative analysis, based on data analysis of the Vietnam economy over 2010-2022, covering the current Covid-19 pandemic, combined with a qualitative analysis based on reviewing the recent literature on the recovery of economies after the pandemic.

The paper shows that the pattern of robustness is different across economies. Some economies experience a sharp reduction in economic growth with a substantial recovery while others have a less decrease in economic growth but with slow recovery. Moreover, the pandemic also results in a more vulnerable economy against unexpected shocks.

The government needs to provide a more stimulating fiscal package to enhance the robustness of an economy against the pandemic. In particular, the package can be oriented directly to low-income households, and small business firms.

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