

## **THE EFFECTS OF COVID-19 ON THE GLOBAL ECONOMY**

آثار كوفيد-19 على الإقتصاد العالمي

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**Abstract:** Due to Covid 19 pandemic, policymakers need to consider long-term measures, and sustained fiscal and monetary policies to ensure economic recovery. Thus, several central banks introduced sizably expanded asset purchase programs besides conventional interest rate cuts. This paper analyses the new economic situation in reaction to the pandemic consequences, the study concludes that policymakers have acted quickly to put in place economic measures to support economies. Consequently, all over the world, monetary and fiscal measures have been engaged. Meanwhile, we observe that monetary policy alone is less effective. It requires besides a complementary fiscal policy to curb the recession.

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## **1. Introduction :**

We live in a society with a globally integrated economy, which had lost almost all memory of the risk of Infectious diseases. Three months after the start of the health crisis, almost half of the world's population is called for containment. The number of people required to stay home is today twice as large as the total world population during the Spanish flu in 1918.

By the end of October 2021, the Covid-19 epidemic had left more than 5 million dead and almost 240 million people had been diagnosed over the globe since the start of the epidemic, according to Johns Hopkins University, and the figures might be higher than that.

The COVID-19 pandemic is therefore having a serious effect on economic sector. We are now experiencing the deepest recession the world has ever seen. The International Monetary Fund (IMF) predicts the world economy will grow 5.9 percent in 2021 and 4.9 percent in 2022 (0.1 percentage point lower compared to July 2021 (WEO) Update) due to the increasing dynamics of the pandemic (IMF, 2021).

In reaction to the pandemic consequences, policymakers have acted quickly to put in place economic measures to support economies. Consequently, all over the world, monetary and fiscal measures have been engaged.

However, the pandemic continues to hit the world economy. The world is facing today a health and economic crisis.

On another front, national authorities should offer effective, and constructive policy measures. The banking sector should play a pivotal role in containing the unprecedented economic turndown due to unprecedented virus.

In the United States, the Federal Reserve - implicitly and explicitly supported by the Treasury - is currently working to secure almost all private, state and municipal credit in the economy. Emerging countries

can strengthen their resilience to global financial shocks by applying macroprudential regulation.

In an effort to stem the pandemic, governments have resolved to confine their populations, to shut down non-essential businesses, to cut air traffic down, paralyzing whole swathes of the economy. As a result, international trade has collapsed. In this study we will attempt to address the following question: **How can fiscal and monetary measures best deal with adverse shocks?**

In order to understand the most important elements of the study, we diagnose the economic fallout of the new pandemic in the world and provide the effect in the future.

The remaining of this paper is organized as follows:

1. Pandemic effects on global economy
2. The measures taken by countries
3. Two effective policies: monetary and fiscal
4. Required global measures
5. Challenges
6. The future global economy after COVID-19 .

## **2. Pandemic effects on global economy**

There is evidence that pandemic outbreak sparks stock market collapse and the rise in its volatility over the first months of the crisis (Baker, et al, 2020).

As a result of the pandemic, countries where tourism and travel represent a large proportion of GDP are expected to see a significant decrease in activity compared to pre-COVID-19 forecasts (IMF, 2021).

So far, the bond market and oil-exporting countries have been hit hard by the collapse in oil prices. But other countries have also been affected and 30 to 40 credit rating downgrades have already been recorded. From the financial crisis of 2008 to around 2013, we had seen many country rating upgrades. However, this trend came to an abrupt end at the start of the oil crisis of 2014. The trend is sharply deteriorating after the current pandemic crisis.

On the other hand, the economic fallout of the current pandemic has been hurting relatively every production and leaving millions of people jobless. People Infections reduced labor supply and unemployment reduces reimbursement loans and raises the payment default cases. The need of liquidity push more demand on borrowing and loans are less available.

Due to layoffs, revenues decreased with the continuous spread of contagion among population which make people feel afraid, they spend less, leading to demand depression and triggering job losses. In the short term, losses are inevitable. In the United States, the unemployment rate remained well above the pre-crisis level of around 3.5 percent due to the persistent labor shortages (Department of labor, 2021). In France, INSEE estimate of the economic situation revealed that a month of confinement should cost 3 points of GDP. (INSEE, 2020).

For commodity prices, during the first quarter, base metal prices decreased approximately by 15 %, they started falling from August 2019 and reaching 5.5 %. A positive trend ended in January. The second declined was brutal in March 2020 where an additional fall of 9.1 % was reached (IMF, 2020). It returned to increase by 30% between August 2020 and February 2021 (IMF 2021). Likewise, natural gas prices felt by 40 %, as well as crude oil prices declined by about 60 % (a decline of \$40 a barrel) (IMF, 2020), and rose 42 percent in 2021 higher than the 2020 average, This is mostly due to a temporary balance between supply and demand which is expected this year (IMF 2021).

The shutdown of Chinese factories in February (China accounts for about half major metals global consumption) and, later, in Europe and in the United States, has weighed heavily on the demand for industrial metals. The IMF annual base metals price index is expected to rise by 32.1 percent in 2021 and fall by 4.5 percent in. Uncertainty about the speed of the global economic recovery is due to the pandemic are the main reason. (IMF, 2021).

The intensity of the economic impact has conducted to the deteriorate of tax revenues and the rise of unemployment benefit payments. The risk sentiment has triggered interest rate cuts, liquidity backing actions, and, huge asset purchase programs by the central banks in development countries: for instance, in US, England, Canada, Europe, Japan, etc. The simultaneity of supply and demand shocks makes the present situation so exceptional and dangerous (Dominique, 2020).

We can hardly avoid the consequences of the supply shock. With part of the labor force confined for an indefinite period, it is inevitable that production will fall. Some companies will downsize, others will close. These jobs are lost, probably for quite a long time. This is what happens in the event of a natural disaster, but it usually affects only part of the economy. Some of these companies may be saved by the state and can be saved, but not all.

The shock to demand obviously has several cumulative causes. The income of a part of the population which is fading, the consumption deemed non-essential which is postponed, that which is made impossible by confinement, and, since "my expenses are your income" the demand weakens further. This is the well-known cycle of recession.

## **2. The measures taken by countries**

Monetary policymakers in advanced economies have turned to unconventional monetary policy tools to achieve further easing, using forward guidance, large-scale asset purchase programs, and negative interest rates on bank reserves.

By forward guidance, it is meant that sometimes central bank in order to change the behavior and expectations of their households and businesses, they make announcements. If they do that, they are starting to change the behavior of people in the future. In the same manner when teacher announces the exam date, he does so in order to change student behavior and the expectations of their students, hoping they start studying and do better in the exam.

With large-scale asset purchases, central banks are able to offer monetary stimulus by baking up long-term security prices and reducing

long-term yields (Kandrac, 2013). Central banks buy mortgage-backed securities and treasury bonds to reinstall trust and regulation in markets.

Negative interest rate can be lowered to stimulate growth. The drop in rates is primarily structural due to the accumulation of savings. It then accelerated due to new injections of liquidity from central banks. Investors may be paid for borrowing their funds and penalized for saving them. In the pandemic era, authorities must take rigorous steps to control the money supply.

These steps of central banks in reaction to slowdown which comprise monetary tools and liquidity facilities would gain confidence of which economies are really in need.

In parallel to monetary policy, budgetary measures have been also followed to benefit economy. Their implementation has been fast and considerable in many advanced economies. Likewise, many developing economies have also provided important fiscal support.

The majority of affected states have review their public spending in the framework of crisis containment. They increased expenses on medical resources, employment guarantees, business subsidies, etc.

Moreover, certain unpleasant taxes have been suspended, deferred or deleted in order to rise the payment position. The payment of utility bills as well as the loan servicing also have been deferred. In addition, guarantees liquidity and provisions were provided to sustain the private sector.

**Table 1.** Discretionary 2020 fiscal measures adopted in response to coronavirus by 18 November 2020, % of 2019 GDP

<b>Countries</b>	<b>Immediate fiscal impulse</b>	<b>Deferral</b>	<b>Other liquidity/guarantee</b>
<a href="#">Belgium</a>	1.4%	4.8%	21.9%
<a href="#">Denmark</a>	5.5%	7.2%	4.1%
<a href="#">France</a>	5.1%	8.7%	14.2%

<a href="#">Germany</a>	8.3%	7.3%	24.3%
<a href="#">Greece</a>	3.1%	1.2%	2.1%
<a href="#">Hungary</a>	0.4%	8.3%	0.0%
<a href="#">Italy</a>	3.4%	13.2%	32.1%
<a href="#">Netherlands</a>	3.7%	7.9%	3.4%
<a href="#">Portugal</a>	2.5%	11.1%	5.5%
<a href="#">Spain</a>	4.3%	0.4%	12.2%
<a href="#">United Kingdom</a>	8.3%	2.0%	15.4%
<a href="#">United States</a>	9.1%	2.6%	2.6%

**Source:** Bruegel Think tank,

<https://www.bruegel.org/publications/datasets/covid-national-dataset>

For instance, China and Italy temporarily exempted rental payments, mortgage, social security, and tax for the most affected regions and activities. Japan promised financial help to affected businesses and households, and deferral of tax and premiums about social security, for one year. Spain and Germany have provided interest-free tax deferrals, postponed payment of certain debt contracts, and introduced cash transfers for businesses. In Canada, cash transfers have been raised, wage subsidies put in place, student loan and taxes deferred.

The budgetary policy may further hit the economy and lead to more downturn, or might stimulate the economy easily, as authorities expected behind these measures, once the disease is disappeared. In fact, some developing countries have limited resources to face the disease. It must require external finance.

### **3. Two effective policies: monetary and fiscal**

#### **3.1. The key role of central banks in the 2020 crisis containment**

The Federal Reserve has introduced several actions to curb the economic, financial and social damages from COVID 19, including up to \$2.3 trillion in the form of debts towards financial markets, firms, households, and states (FED, 2020).

Containment will cost states dear, very expensive even. To compensate for the deterioration in their public accounts, the governments are taking on more debt by issuing bonds whose yields are negative. Governments are now paid to issue securities. Paid by central banks engaged in unlimited sovereign bond purchase programs (Gopinath, 2020).

Several central banks have considerably expanded asset purchase programs. We cite's €750 billion Pandemic Emergency Purchase Program. The [Pandemic Emergency Purchase Program \(PEPP\)](#) which had a total sum of €750 billion was launched by the European Central Bank in order to purchase securities. Likely, the Federal Reserve's purchases of US treasury securities and agency mortgage-backed securities reached nearly 180 billion, and corporate bonds up to \$300 billion (FED,2020). It will start shutting down its pandemic-era bond-buying program later this year, leaving the US central bank with a balance sheet of more than \$8.5 trillion before buying ends in mid-2022 (Howard,2021). The Bank of Canada has purchased banker's acceptances, government and provincial securities, and the Bank of Japan bought government and corporate bonds and exchange-traded funds (GFSR, 2020).

There are central banks that indirectly buy a large part of public debt. We may ask where does central bank bring money? The answer is with money it creates from scratch, this is called "money printing". But here the central bank doesn't even have to print these banknotes, it's just a set of accounting entries.

Several central banks (including the European Central Bank, US Federal Reserve, Bank of England, Bank of Canada, and Central Bank of the Republic of Turkey) have already moved to launch targeted lending facilities; for example, to financial intermediaries that fund corporate commercial paper.

As of 2020 March 3, the Fed lowered its rates by 50 basis points, followed by the Bank of England on March 11 and 19. On March 15, Fed rates dropped to zero.

**Figure 01:** The Federal funds rate



**Source:** FED (2020), Federal Funds Effective Rate, <https://fred.stlouisfed.org/series/FEDFUNDS>

The Federal Open Market Committee (FOMC) has indicated that it expects to keep the policy rate at this level in order to reduce economic damages.

At the same time, unconventional interventions are deployed using the instruments developed since 2008. On March 18, the ECB announced a program to acquire securities for a total envelope of 750 billion euros (Dominique, 2020).

### **3.2. The key role of Fiscal policy**

Several economies have already introduced sizable and targeted procedures of fiscal policy. For instance, Spain has also deferred deadlines for unemployment benefits as well as suspended social contributions in favor of affected firms, Germany has eased and enlarged subsidies for firms in the context of short-time work programs to ensure employment and incomes for employees. Likewise, Italy has deferred tax payments for business in suffered regions.

In other area of the world, for example, Russia has brought tax deferment (including income tax) for businesses heavily impacted by the current pandemic. Korea has announced wage subsidies for all small activities and raise allowances for unemployed persons. Indonesia has provided tax cuts to the most- exposed tourism sector and to domestic firms. Japan and Denmark have raised subsidies in favor of firms preserving employment, the latter, payed 75% of wages for employees encountering layoff.

More recently, in response to the pandemic, central banks in advanced economies, in particular, have cut interest rates even further. Policymakers have also sustained banks to be able to renegotiate credits. Meanwhile, authorities should be encouraged to pursue calling financial institutions to renegotiate debt deadlines for uneasy debtors without any initial conditions. In China, debtors were asked to postpone interests and principals without being penalized (GFSR, 2020).

#### **4. Required global measures**

Although, the different magnitude of the economic stimuli decided between countries and the preponderant part taken by the loan guarantees are certainly useful, these measures turn out to support only in an indirectly very small part the demand of the poorest people.

The states borrow from financial markets, that is to say, banks, insurance companies or pension funds. For States, they can go into debt at 10 years for 0.4%. Suffice to say that it's time to get into debt because the rent of money is almost free.

First and foremost, the priority is to reach as early as possible the eradication of the pandemic. In the middle of the crisis, it is so important to keep providing the essential tools for health care which is observed as an important drive for economic and human health. This central measure is a pivotal interaction between the long term economic recovery and the current chock therapy.

On the other hand, any government needs to limit the impact of the decline in economic activity. Even so, some developing states may

soon be heavily impacted by high crisis costs due to the large supporting fiscal measures.

The fiscal policy should act to curb the economic impact on the most-affected households and businesses, and to protect economic interaction between stakeholders, for instance, to avoid business closures.

## **5. Challenges**

This economic setback is likely to plunge millions of people from the "emerging middle class" back into extreme poverty. However, more poverty is also more deaths. African countries are younger, but also more fragile, with the highest rates of malnutrition, or HIV infection, or tuberculosis in the world could make the coronavirus even more lethal.

It seems that the economic effects of Covid-19 will be continue for many more years, and they are likely to gradually decrease with the progressive reopening of activities.

The States accordingly encounter a recession that get the form of a V, a U, a W or an L. If the pandemic is controlled, we would observe a V-shaped recession as the constraints will begin to be annulled and economy conditions could come back to normal situations, or a large U in which governments will heal most of the shock but at a slower rate. Governments can ease restrictions now and stimulate economic activity. But if the waves of Covid-19 continue to occur, the restrictions could be further tightened, which would do another blow to the economy. In this scenario, the economy could experience a double shock, or W-shaped recession. In an L-shaped scenario, the economy would recover after a sharp decline, but activity would return to a lower level. (IMF, 2020).

The global forecast expect that all the globe undergoes disruptions to economic activity. However, policymaker should ensure the minimum economic activity and maintain economically vital societies.

Meanwhile, the economic fallout of the COVID 19's Infectious is related to specific blows in specified sectors, therefore government

should set up targeted monetary and fiscal policies. The affected people will need sustained support.

In fact, designing and adopting new fiscal tools—like rules based fiscal stimulus measures—and improving existing automatic stabilizers may take time and will require political agreement. There are today 6,200 banks in Europe compared to 5100 in the United States. The countries all over the world need to consolidate their actions to enhance the profitability of the banks, which is affected by negative interest rates as well as its overcapacity functioning.

At the national level, certain professions can function - at least in part - at home, for others it is much more difficult, if not impossible.

## **6. The future global economy after COVID 19**

### **6.1 Monetary policy**

The response to the pandemic chock has been started and central banks are playing their part of flooding market with liquidity. Central banks must offer much liquidity to financial and non-financial institutions and, that need also to favor small and medium-sized enterprises, which are less prepared to encounter unexpectedly unpleasant moments. They could offer temporary and targeted credit guarantees or direct loans for the near-term liquidity needs of these firms—although, to avoid fiscal risks.

Unconventional monetary tools seem to be effective and give positive effect, therefore, to achieve further easing, countries should keep using negative interest rates, large-scale asset purchase programs and forward guidance.

However, it is convenient to curb much reliance on monetary instruments while fiscal policy can represent a suitable complementary for economy regulation.

Furthermore, the literature indicates that monetary policy can be less effective while public debt to GDP is high. In this regard, it is found that expansionary monetary policy sustains in a downturn, but does less

when the economy is in a high public debt-to-GDP regime (De Luigi, 2018).

Indeed, monetary action has its limits and, as is the case with any natural disaster, budgetary support must be mobilized. They are partly so and support mechanisms such as the extension of partial unemployment in France are a step in the right direction. Any government should not base its strategy only on financing the supply side of economy. This had been arguably the greatest weakness of Trump's original support plan which was in particular to support firms and but householders. Since then, the check for \$ 1,500 for all American households has improved the situation.

We will see how important it is impossible to avoid firm losses due to lack of production, in the short term, but also how the damage, on the other hand, can be limited by an appropriate policy on demand.

## **6.2. Fiscal policy**

As usual, we noticed a delay in putting in place fiscal measures to curb the pandemic, later, we have observed the introduction of automatic stabilizers and the adoption of rules-based fiscal stimulus measures in the aim of stimulating economic sector. (Romer, 2019) finds that fiscal policymakers in advanced economies are more reluctant to stimulate after an adverse shock when initial public debt-to-GDP ratios are higher.

Arguably, monetary policy can support fiscal stimulus in a recession by remaining accommodative and keeping interest rates low. Fiscal policymakers' actions in responding to an adverse shock will be partly a function of their ability to raise spending or lower taxes relative to a preexisting baseline without endangering their fiscal space (IMF, 2018).

## **6.3. Coordination and solidarity**

The lack of coordination in response COVID 19, while what made the success of the 2009 revival was that it had been largely coordinated between the main players (developed economies). As early as January 2008, the IMF announced in Davos the need for a global fiscal

stimulus. It will take shape at the 2009 G20 in London and has saved millions of the predictable unemployed (Dominique, 2020).

In the future, the loss of tax revenues, rising health expenses and the cost of sustaining economy will require large increases in government debt. Meanwhile, a sudden slowdown in growth could produce long-term financial losses.

Given the fact that interest rates actually are still very low in developed countries and unlikely to return to their pre-global financial crisis levels for a prolonged period, policymakers will need to rely more than before on these new monetary policy tools to counter future downturns, since we live in a complete uncertainty regarding the global economic forecast. Indeed, the future will depend on factors difficult to predict, the spread of the virus and the global market conditions.

Actions to reduce the spread of the pandemic would be kept, in the short-term, weighing on economic activity. The tight financial conditions all over the world are likely to be retained during the next years and gradually ease. Global growth is expected to grow 5.9 percent in 2021 and 4.9 percent in 2022. (IMF, 2021).

Certainly, with the invention of the vaccines, the economic recovery is quicker than expected. And, temporary and targeted policies, such as tax relief and wage subsidies, have an important role to play in achieving this goal.

## **7. Conclusion**

As in the precedent economic crises, political decision-makers try to stimulate economic activity as quickly as possible by stimulating demand, but this time, the crisis, is to a large extent, the consequence of the necessary containment measures.

The world has changed dramatically in last months. Policymakers will need to consider long-term measures, and sustained fiscal and monetary policies to ensure economic recovery. In some countries around the world, containment measures are eased as countries try to revive their

economies. But, we should be pleased by the rapid action of central banks for national economies.

Relying on monetary policy alone for limiting COVID 19 's infectious damages carries risks with concerns about likely future counterproductive impacts on financial market and economic equilibrium.

In this terrible moment, the world should work hard, and hand in hand to eradicate the spread of the epidemic.

We should finish with a positive note as positive signals coming from China, where the slowdown - as well as the recovery - started a quarter earlier than in the rest of the world.

## **8. References :**

1. Baker, Scott, Nicholas Bloom, Steven J. Davis, Kyle Kost, Marco Sammon and Tasaneeya Viratyosin, (2020). "The Unprecedented Stock Market Reaction to COVID-19" Covid Economics: Vetted and Real-Time Papers, 1, 3 April.
2. De Luigi, Clara, and Huber, Florian, (2018). "Debt Regimes and the Effectiveness of Monetary Policy." *Journal of Economic Dynamics and Control* 93 (C): 218–38.
3. Department of labor (2021), *United States Unemployment Rate, April*, <https://tradingeconomics.com/united-states/unemployment-rate>.
4. Ferguson, et al, (2020), "Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand", *School of Public Health Imperial College London COVID-19. Report 9*.
5. FED (2020), *FEDERAL RESERVE statistical release* <https://www.federalreserve.gov/releases/h41/current/h41.pdf>.
6. FED (2020), *Federal Funds Effective Rate*, <https://fred.stlouisfed.org/series/FEDFUNDS>
7. GFSR (2020), *Markets in the Time of COVID-19, Global Financial Stability Report, April, 2020, IMF*.
8. Gita Gopinath (2020), « The Great Lockdown », *World Economic Outlook, IMF, April 2020*.

10. Howard Schneider (2021), *Analysis: Fed's bond-buying program may be on the way out, but it's not going far*, <https://www.reuters.com/business/finance/feds-bond-buying-program-may-be-way-out-its-not-going-far-2021-09-24/> 2021/10.30.
11. INSEE (2020), *Economic outlook: CONJONCTURE IN FRANCE*; 9 April, <https://www.insee.fr/en/statistiques/4479775?sommaire=4473307>
12. IMF (2018), “The Global Recovery 10 Years after the 2008 Financial Meltdown”, *WEO*, October.
13. IMF (2020), Chapter 1: *The Great lockdown*, “World economic outlook”, April 2020.
14. IMF (2021), *World Economic Outlook: Recovery during a Pandemic*, Washington, DC, October 2021.
15. Kandrac, J., & Schlusche, B. (2013). *Flow effects of large-scale asset purchases*. *Economics Letters*, 121(2), 330–335.
16. Leamer E. (2008), *WHAT'S A RECESSION, ANYWAY?* NBER WORKING PAPER, No. 14221. USA.
17. Romer, Christina D., and David H. Romer (2019) “Fiscal Space and the Aftermath of Financial Crises: How It Matters and Why.” NBER Working Paper 25768, National Bureau of Economic Research, Cambridge, MA.
18. STRAUSS-KAHN Dominique (2020), *L'être, l'avoir et le pouvoir dans la crise*, *Politique Internationale*, 5 Avril, 2020.