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## **Dangers of High Inflation or Hyperinflation After Large Fiscal Stimulus: Covid-19**

### **Introduction**

The direct and indirect role of changes in fiscal policy in inflation in the short and long run have been explored in the last few decades. Even though most cases of hyperinflation can be found in modern history, it is important to mention that this phenomenon is not necessarily new. One of the first studied cases of hyperinflation happened in the Roman empire during Diocletian rule (284 – 305 CE). It has served as one of many examples where links with monetary and fiscal policy have been explored (Wassink, 1991). Nonetheless, high inflation and hyperinflation are considered to be disruptive economic forces that countries must strive to avoid. Characteristic events such as the high inflationary period in the U.S. during 60s and 70s and the high inflation periods suffered by many developing countries in other parts of the world make it imperative to establish the effects fiscal policy might have on this economic metric.

Unprecedented fiscal policy measures, for example, the expansionary fiscal stimulus in the U.S. and the Eurozone during the Covid-19 pandemic, have raised concerns about whether they will create inflationary pressures that might be detrimental for the economies. The annual rate of inflation as of October 2021 reached 6.2% in the U.S. Meanwhile, in Western Europe, this value ranged from 3% to 7.4%, also representing unusually high inflation rates (DeSilver, 2021). In the U.S., the general public and the mainstream media platforms are worried about the apparent upward trend in the price level. The fear of high inflation or even hyperinflation is prevalent, and the uncertainty, characteristic of the current state of affairs, adds to the perceived panic.

This paper aims to analyze the policy actions taken by the United States during the Covid-19 pandemic and what they mean when talking about current inflation trends. The possibility of high inflationary periods or hyperinflation periods will also be explored using economic theory, data from other countries, and previously recorded cases of these inflationary events.

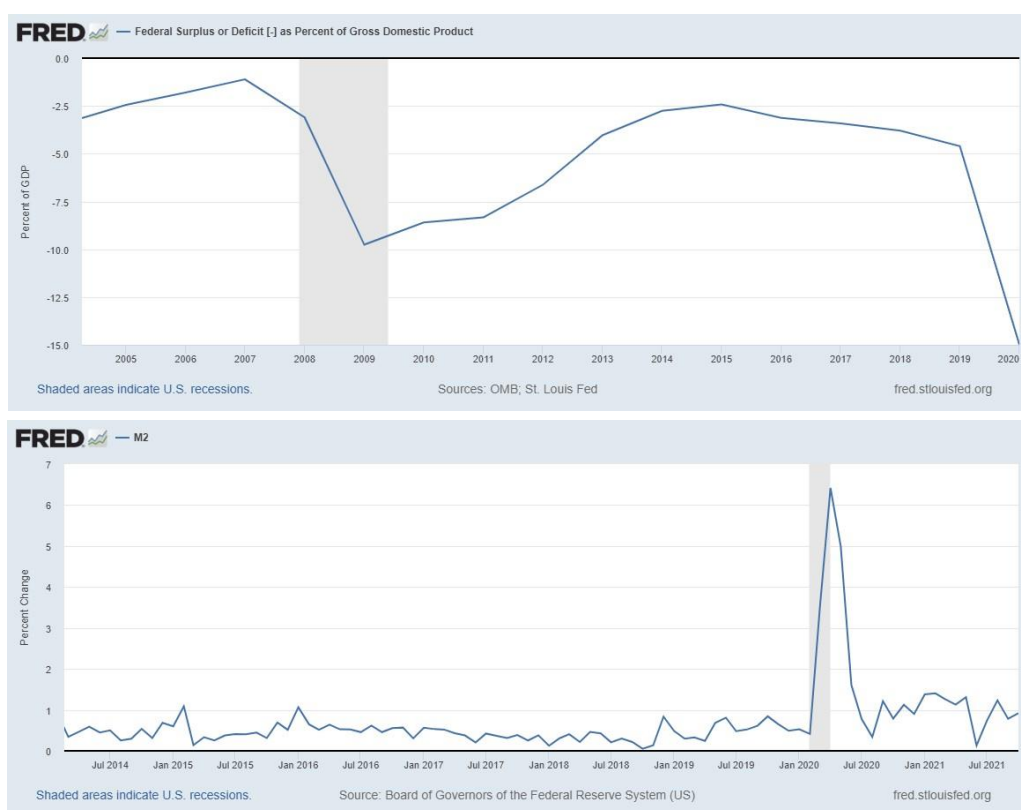
### **Current Events and Background Information**

During the Covid-19 pandemic in 2020, countries in different regions implemented different monetary and fiscal policy changes to counteract the adverse effects from lockdowns, rise in unemployment, travel restrictions, and supply chain disruptions. The United States' monetary and fiscal policy mix during the pandemic can be described as expansionary. Since January 2020, the Federal Reserve has bought more than \$2.6 trillion in government securities (De Grauwe, 2021). In addition, Congress passed various bills that would allow the implementation of different relief and stimulus packages for both businesses and regular citizens. Despite the expansionary approach in policy, the GDP suffered a decline of 5.8%, and the budget deficit increased by 10.7% of GDP (Blundell, Griffith, Levell, et al., 2021). At the same time, state and local government suffered a sharp decline of tax revenue during the second quarter of 2020 (FRED, 2021). This chain of actions is the point of contention for people who doubt the country's ability to properly absorb the policies' benefits, causing a rise in the price level.

More recently, during 2021, the notable spike in inflation has shifted the experts' and public's attention to the idea of a possible high inflationary period or hyperinflation. According to different news outlets, most Americans say that they are worried about high inflation and concerned for the state of the economy overall (Rabouin, 2021). In October 2021, the annual rate of inflation hit 6.2%, the highest in almost three decades. Despite not being an isolated event, as

many other nations are also experiencing higher than usual levels of inflation, the question about the role fiscal policy during 2020 had on this phenomenon still remains.

Moreover, the U.S. also experienced a money supply increase of 35.7% when compared to early 2020. M2 money supply went from \$15.47 trillion in February 2020 to \$20.40 trillion in May 2021 (FRED, 2021). This rapid change in M2 money supply adds to the narrative that the current pattern of inflation might continue, with the public concerns of it getting out of control.



Luckily, a diverse collection of economic literature and real-life cases allows us to investigate the possibility of inflation getting out of control and under which conditions we would expect to see price levels reach hyperinflation territory. This also allows us to connect actions taken with fiscal policy and how they relate to changes in money supply, inflation, and budget deficits.

## Economic Analysis

### Monetarism and Inflation Predictions

To try to answer whether the U.S. is expected to continue in a path of high inflation or even at risk of hyperinflation due to the increase in money supply, we can start by applying some of the key tenets of monetarism. The monetarist school of thought states that money supply determines the GDP in the short-run and the price level in the long run and controls these economic indicators by targeting different money supply growth rates (Friedman, 1968). Typically, if a sustained and excessive increase in money supply is seen, an increase in inflation is expected in the long run. This idea is able to explain the most prominent cases of high inflation that we have witnessed in mainly emerging economies.

The sudden and unprecedented increase in M2 money supply in the U.S., along with the release of excess savings accumulated in 2020, make it difficult to believe this increase in money growth rate will not have a detrimental effect on the price level. Economic literature, especially in the monetarist school of thought, highlights monetary policy's importance when combating big spikes in the price level. The following sections will look at how fiscal policy can indirectly affect the growth in money supply and how these changes are expected to be reflected in inflation trends.

### High Inflation. Transition Economies vs. Developed Countries

According to the Cagan definition of hyperinflation, an economy would have to experience monthly inflation of at least 50% to classify as such. However, the negative effects of high levels of inflation have been well documented, even when not classified as hyperinflation. During the twentieth century, many transition economies, from the former Soviet states to various nations in

sub-Saharan Africa and South America, have suffered devastating consequences due to disruptive high inflation levels (Fischer, Ratna, Vegh, 2002). This tendency of emerging economies to be more susceptible to episodes of high inflation and overall instability has been extensively studied. In many cases, factors such as political turbulence, poor implementation and funding of fiscal policies, and an underdeveloped financial system are the main culprits.

The difference in inflation trends between the developing world and rich countries such as the United States is crucial to understanding the different economic dynamics and what to expect from various events. For example, studies have explored the relationship between countries that tend to have higher median inflation and what factors may play a role. It has been found that countries with higher inflation rates tend to be less politically stable and have larger fiscal deficits (Bleaney, Francisco, 2016). Although somewhat general, these descriptive elements serve as a starting point to analyze why some nations experience disruptive changes in the price level more often than others.

One way to start dissecting emerging economies is to take into account the political environment at the time of economic instability. Latin America is a prime example of this. Poor macroeconomic performance, including high inflation, has been known to take place after a series of significant fiscal policy decisions that either have the objective to redistribute wealth in some form, implement new social programs or increase government spending in some specific sector. Argentina, Bolivia, Peru, and more recently Venezuela are clear examples that countries going through political turmoil, in these cases, re-democratization phases, end up being more susceptible to high inflation and overall poor economic performance (Bittencourt, 2012). The rather indirect connection between these events and a rise in the price level has to do with the funding and implementation of fiscal policy and a lack of strong monetary policy actions.

## **Fiscal Deficits and Their Link to Hyperinflation**

The reason significant fiscal stimulus caused big spikes in the inflation rates in the examples above can be found in the accommodative monetary policy that followed. Increasing government spending due to implementation of social programs, stimulus packages or another activity meant dealing with an increasing budget deficit for transition economies (Nguyen, 2019). To make matters worse, these nations were known to have notoriously underdeveloped financial markets and a central bank that was not always independent. Without an efficient way to finance the increases in spending through borrowing, these nations could only sustain those levels of spending by printing more money. In this way, fiscal policy was indirectly affecting inflation due to money creation.

The way a nation finances its budget deficits is key in predicting the effects of big changes in fiscal policy and how they would affect macroeconomic variables such as inflation. To exemplify this, we can look at the hyperinflation episodes in Europe during the twentieth century. Hungary, Poland, Austria, and Germany struggled with hyperinflation and only found the stability desired after a series of fiscal reforms. However, one critical detail to highlight is how the level of expenditures was not nearly as important as the composition of expenditures in order to end with the high inflationary periods (Franco, 1990). In all of these four cases, the level of government spending did not change significantly through the fiscal reforms, but the composition of how it was financed did. For example, in Germany's case, the share of expenditures coming from an increase in revenue taxes allowed them to maintain the overall level of government spending. These examples not only highlight the importance of deficit financing, but they also make it evident why having constraints in government borrowing in a

lower-income or emerging country might make it more likely for the nation to experience high inflation.

### **Monetary Policy and Prevention of High Inflation Episodes**

As it has been emphasized in this paper, the primary role of monetary policy is crucial when understanding how fiscal policy changes can end up creating high inflation episodes.

Nonetheless, another essential factor to consider is how monetary policy is conducted. From the examples presented earlier in the paper, one of the notorious elements of central banks in developing countries is the lack of independence from other parts of the government, which most times leads to inadequate implementation of monetary policy.

This lack of independence along with inappropriate monetary policy decisions, can prevent any nation from successfully controlling high inflation. In a 1968 paper, Milton Friedman highlighted the importance of having a central bank that was capable of making timely monetary policy decisions while knowing the magnitude these policies were supposed to have (Friedman, 1968). Having a “dovish” central bank that focuses more on economic growth or other economic metrics over inflation can allow inflationary pressures to subsist and eventually worsen. Ideally, the central bank’s policies are both timely and precise in magnitude, as this approach, sometimes described as a more hawkish approach, has been shown to more successfully contain high inflation episodes.

### **Covid-19 Fiscal Response in the United States and Inflation**

Once we have analyzed the effects that different fiscal policy measures have on the economy, it is time to analyze the Covid-19 response in the United States. The important initial detail about the policy measures is that they were created to be temporary. In other words, unlike the policies

we tend to see implemented in countries that have experienced high inflation or hyperinflation, the policies introduced in the U.S. during 2020 were mainly meant to last for a limited time. This is an important piece of data, as we have seen studies that describe persistent fiscal deficits accumulated over time do seem to have a strong positive relationship with inflation (Adao, Silva, 2021). However, fiscal deficits from Covid-19 stimulus packages are not expected to affect budget deficits for a prolonged time, as the policies' nature was only to address temporary disruptions. The Congressional Budget Office has recently forecasted future budget deficits in a July 2021 report. In that report, the CBO predicts that in 2022, the budget deficit will be 4.7% of GDP, representing a decrease from the 14.9% and 13.4% budget deficits for 2020 and 2021, respectively (CBO, 2021). This decreased size of budget deficits is expected to persist during the remaining of the decade.

However, the rise in inflation rates in the U.S. and in many other countries cannot be ignored. As of October 2021, the annual rate of inflation reached 6.2% in the United States. Similar trends are experienced in the Eurozone, where expansionary fiscal policy also took place, but the scale was not as big. Nonetheless, a single culprit has yet to be established. A major event that could be affecting this spike in the price level could be the supply shocks from the pandemic. The supply-side disruptions that have prevailed might be causing part of the increase in the inflation rate, as shortages might make the prices of certain products go up as quantities decrease. In addition, the dependency of U.S. manufacturers on raw materials from other countries only worsens the situation (Mutikani, 2021). Similar patterns regarding import and export disruptions and significant changes in the inflation rate have been studied primarily in Sub-Saharan African countries, where increases in import prices affected a substantial portion of the population due to their dependency on foreign producers (Bleaney, Francisco, 2016).



Despite the notorious change in money supply, initially intended to stimulate the economy and help the country recover more quickly, the current levels of money growth have returned to pre-covid levels. No more fiscal stimulus packages similar to those implemented during 2020 have been proposed by members of Congress, suggesting that the high increase in government spending is not expected to continue in the following years. Still, it is also essential to consider the way the United States finances budget deficits in coming years, as they are a more reliable indicator to predict changes in the price level.

The country's current state does not resemble that of emerging countries that are seen to more frequently suffer from high inflation rates. These political and economic distinctions suggest that current rates of inflation in the U.S.: (1) Might be caused mainly by the pandemic supply chain disruptions, or (2) Might be caused by a combination of excessive, yet temporary, increase in the money supply growth rate along with other supply shocks, which we would expect to slowly go down in the next few years.

### **Conclusion**

Based on the findings of different papers on the link between fiscal stimulus and inflation, macroeconomic theory from the monetarism school of thought, and the fact that many other countries are also experiencing high levels of inflation regardless of the nature of fiscal policy to fight the pandemic, we can predict that the current inflation rate trend in the U.S. is not fully caused by the money supply growth. The recent events regarding the issues caused by the supply chain disruptions, along with a convoluted transition back to the pre-covid economy dynamic, suggest that the high inflation rate is partially caused by a temporary supply shock whose effects are still present but will slowly fade away.

Additionally, the stabilization of the money supply growth rate and the government expenditure levels hint at the possibility of the 2020 spikes in the metrics not having a detrimental effect on the economy in the long run. There is no apparent risk of prolonged high-inflation rates nor hyperinflation in the United States caused by the Covid-19 fiscal policy response.

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