Tackling the Economic Challenges of COVID-19: A Look at the Federal Reserve System: History and Present Day

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Research Note

Abstract

In this paper, we take a look at some of the measures taken by the central bank of the United States viz. the Federal Reserve System, to help businesses, both small and large, to weather the unprecedented economic challenges faced by managers and owners of businesses to survive through the crisis of shutdowns, lost sales, unemployment, and illness. One such step taken by the Federal Reserve was to lower the discount rate, the rate at which Federal Reserve gives loans (Discounts and Advances) to U.S. financial institutions. It may be taken as a standard response to economic slowdowns by central banks around the globe, but Federal Reserve's action has more significant effects than any other central bank.

While there is no "one size fits all" economic measure that works in all countries in the wake of the pandemic, we believe that knowing and discussing what one central bank did – can lead to bankers, academics, politicians, business managers and owners from different countries share their experiences and tailor proposals and plans to fit the needs of an individual country. In this spirit, this proposed paper is an endeavor to examine the role of monetary policy in averting the forces of the pandemic. The paper is divided into three sections. Section 1 talks about the structure of the Federal Reserve System, surveys some historical behavior and examines the decision-making process in the system. Section 2 discusses the economic impacts of coronavirus on all economic aspects but focuses more on the monetary structure of the US economy. Section 3 makes the argument that expansionary monetary policy was a tremendous necessity of the time, but overdoing its activity in the same direction may bring back the threat of inflation. Summary and conclusion follow Section 3.

Keywords: COVID-19, Federal Reserve System, the United States, Pandemic Responses, Economic Challenges of COVID-19, future of monetary policy

1. Introduction

This paper is written specifically to examine the measures taken by the United States Federal Reserve System (FRS hereafter), with the support of the American Legislative and Executive branches of government, to tackle and mitigate the economic havoc wreaked on businesses and households by the COVID-19 pandemic. However, before jumping into the details of their actions, we believe it would benefit readers of the general public for the authors to give a brief outline of the Federal Reserve System, its structure, and normal mode of operations. This would clarify how, in some respects, the central bank of the United States is a somewhat unique structure as compared to others around the world.

2. Historical Background to the FRS

The central bank of a country is put in charge of handling monetary policy, in conjunction with the government's fiscal policies, to make the lives of its citizens better by typically controlling inflation and unemployment. As mentioned above, the United States central bank has a unique composition and a very different working structure than many others around the world.

The Federal Reserve System (FRS) was created on December 23, 1913, with the passage of The Federal Reserve Act of 1913, which was signed by President Woodrow Wilson. Originally, to maintain local control and a decentralized structure, the Federal Reserve Act created a Board of Governors that would be located in Washington, D.C., and 12 Reserve Banks which would have control over their own districts. The districts would be empowered to act independently, with loose oversight by the Board. One unique feature was that each of these Federal Reserve Banks set their own discount rate, the rate at which they would lend money to financial institutions within their regions. It was felt that was preferable to a single nationwide rate being determined by a Board sitting in the capital, which may not be aware of the needs for liquidity and support at the local level. However, over time as technology advanced and the flow of transactions increased, the FRS felt it would be more beneficial to move to a standardized, single discount rate that would be applicable to all financial institutions across all 12 districts. So, Congress passed the Banking Act of 1935 – which created the Federal Open Market Committee (FOMC) as the Fed's monetary policy-making body, which would meet eight times a year (every six weeks) and determine the national discount rate that would prevail across all districts.

The Federal Reserve officially identifies Districts by number and Reserve Bank city as under:

1. Boston	2. New York	3. Philadelphia	4 Cleveland	5. Richmond	6. Atlanta
7. Chicago	8. St. Louis	9. Minneapolis	11. Dallas	12. San Francisco	

The banking system in any economy is the conduit through which money flows through the system. In the United States, there exists a network of traditional commercial banks, credit unions, a few savings and loans, and investment bankers – jointly referred to as Financial Institutions (FI). The FRS was created to regulate and ensure the viability of the U. S. banking system and in the early days, that is all FRS did as a priority.

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3. History of the Creation of the FRS

The following information is derived from the Owen-Glass Federal Reserve Act of 1913, and it clearly states the reasons and events that led to the origin of the Federal Reserve System.

Public sentiment had been supportive of national monetary reform since the Panic of 1907. The National Monetary Commission, created under the Aldrich-Vreeland Act, issued a report in 1912, which called for the creation of what many regarded as a third-string of Banks of the United States. All major European powers had developed centralized controls over their banking systems, but the U.S. remained alone in failing to do so. Full centralization of banking had not proved popular earlier in the country's history, but the recurring bank panics and instability of the currency clearly pointed to the need for major reform.

Following President Wilson's victory in 1912, Arsène P. Pujo of Louisiana, chairman of the House Banking Committee, led the so-called Pujo Commission in a wide-ranging examination of the nation's financial ills. Among other actions, Pujo brought in J. P. Morgan to testify and eventually came to the conclusion that a 'money trust' existed in the country and the central banking solution offered by the Monetary Commission would not work.

In 1913, the Democrats controlled both houses of Congress and crafted a regional, rather than fully centralized, approach to banking reform. Carter Glass of Virginia headed matters in the House and Robert L. Owen of Oklahoma did so in the Senate. The final legislation created 12 Federal Reserve Banks that would act as central banks for all national banks and other member state institutions. The Banks would not be federal bodies, but private ones owned by the member banks. A Federal Reserve Board was formed to oversee the system and establish policy. Members of the Board would be appointed by the President, providing a considerable measure of federal direction over the system. A new form of currency was created—the Federal Reserve Note—as a means to solve the problem of inelasticity. The notes were to be backed by commercial credit and reserves of gold of at least 40 percent of the amount of the notes issued. Government funds were to be deposited in the Banks, which ended the old sub-treasury system. The greatest power bestowed on the new Federal Reserve System was the establishment of the *discount rate*—the rate of interest charged by the Banks when lending to member institutions. The ability to raise the discount rate was to have the tendency to slow down the economy while dropping rates would tend to stimulate economic activity.

The Federal Reserve Act was an important reform measure, but it failed to produce overnight miracles. Banks, or the "money trust," would remain supremely powerful and draw the attention of later federal regulation.

4. Structure of Federal Reserve System

4.1. Membership to Federal Reserve Board (FRB) and Its Functions

There are basically three layers of authority in the Federal Reserve System. At the top of the system is the Federal Reserve Board (FRB), sometimes called the Board of Governors (BOG). There are seven members of the BOG, all appointed by the U.S. President for a non-renewable fourteen-year term. In fact, their contracts are staggered such that one governor finishes his or her contract every two years. Therefore, during a four-year term, a U.S. President can appoint

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only two governors to the BOG. Hence, it is believed that the majority of the BOG is outside the control of a particular White House administration. This is one reason behind the argument that the Federal Reserve System is independent of a president's administration.
In reality, however, this independence is not as clear-cut as it may sound. This is partly because BOG members can always resign. Job offers from the private sector are more lucrative than staying for fourteen years on the BOG's government salary. When a governor resigns, the president has another opportunity to appoint someone for the remainder of that term. In practice, therefore, the last president to appoint only two governors was John F. Kennedy. Additional considerations arise when a president is re-elected, as was the case with Presidents Reagan, Clinton, and George W. Bush. Therefore, the independence of the Federal Reserve System is questionable.
The Chairman of the Federal Reserve System is also appointed by the U.S. president for a regular (but renewable) term of four years. Since 2006, up to 2016, Ben Bernanke was the chairman of the Federal Reserve Board, succeeding Alan Greenspan. Mr. Greenspan was the longest-serving chairman, from 1987 to 2006. While his career was marred by the events of September 11, 2001, he also served during the unprecedented growth of the U.S. economy in the 1990s. Mr. Greenspan's actions have been severely criticized by some (a Google search on the words "Greenspan follies" will give a better understanding). Many critics blame Mr. Greenspan for the financial crisis of 2007. Another influential chairman of the Federal Reserve Board was Paul Volcker, who served from 1979 to 1987. Recall that 1979 was a very inflationary year, with a roughly fourteen percent inflation rate; Volcker is given much credit for taking this rate down to roughly seven percent by 1987.
Mr. William Machesney Martin, Jr., is another chairman of the Federal Reserve Board who single-handedly helped design the monetary policy of the U.S. from 1951 to 1970. He was a very efficient economist who made many useful and correct decisions. He was appointed as the chairman at the early age of forty, and his performance was such that he was re-appointed four successive times by five different U.S. presidents.
The main decisions made by Federal Reserve Board members are:

1. Determining the level of Legal Requirement Ration (LRR);
2. Suggesting changes in bank regulations to Congress; and
3. Most importantly, serving on the second most important committee in the Federal Reserve System, namely, the Federal Open Market Committee (FOMC).

The following information is taken from Federal Reserve Board - Structure of the Federal Reserve System outlines the membership, structure, and functions of the FOMC, which makes up the second layer of authority in the Federal Reserve System.

4.1.1. Membership

The FOMC is composed of the seven members of the Board of Governors and five Reserve Bank presidents. The president of the Federal Reserve Bank of New York serves on a continuous basis; the presidents of the other Reserve Banks serve one-year terms on a rotating basis beginning January 1 of each year. Rotation is such that each year one member is elected to the

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Committee by the boards of directors of Reserve Banks in each of the following groups: (1) Boston, Philadelphia, and Richmond; (2) Cleveland and Chicago; (3) Atlanta, St. Louis, and Dallas; and (4) Minneapolis, Kansas City, and San Francisco.

4.1.2. Organization

By statute, the FOMC determines its own organization. Each year at its first meeting, the Committee elects its chairman and vice-chairman and selects staff officers to serve the Committee for the coming year. Traditionally, the chairman of the Board of Governors is elected chairman and the president of the Federal Reserve Bank of New York is elected vice-chairman. Staff officers are selected from among the officers and employees of the Board of Governors and the Federal Reserve Banks.

4.1.3. Meetings

By law, the FOMC must meet at least four times each year in Washington, D.C. Since 1981, eight regularly scheduled meetings have been held each year at intervals of five to eight weeks. If circumstances require consultation or consideration of action between these regular meetings, members may be called on to participate in a special meeting or a telephone conference or to vote on a proposed action by telegram or telephone. At each regularly scheduled meeting, the Committee votes on policy to be carried out during the interval between meetings

Attendance at meetings is restricted because of the confidential nature of the information discussed and is limited to Committee members, nonmember Reserve Bank presidents, staff officers, the Manager of the System Open Market Account, and a small number of Board and Reserve Bank staff.

4.1.4. The Decision-Making Process

Before each regularly scheduled meeting of the FOMC, System staff prepare written reports on past and prospective economic and financial developments that are sent to Committee members and to nonmember Reserve Bank presidents. Reports prepared by the manager of the System Open Market Account on operations in the domestic open market and in foreign currencies since the last regular meeting are also distributed. At the meeting itself, staff officers present oral reports on the current and prospective business situation, conditions in financial markets, and international financial developments. In its discussions, the Committee considers factors such as trends in prices and wages, employment and production, consumer income and spending, residential and commercial construction, business investment and inventories, foreign exchange markets, interest rates, money and credit aggregates, and fiscal policy. The manager of the System Open Market Account also reports on account transactions since the previous meeting.

After these reports, the Committee members and other Reserve Bank presidents turn to policy. Typically, each participant expresses his or her own views on the state of the economy and prospects for the future and the appropriate direction for monetary policy. Then each makes a more explicit recommendation on policy for the coming inter-meeting period (and for the

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longer run, if under consideration). Finally, the Committee must reach a consensus regarding the appropriate course for policy, which is incorporated in a directive to the Federal Reserve Bank of New York—the Bank that executes transactions for the System Open Market Account. The directive is cast in terms designed to guide the manager in the conduct of day-to-day open market operations. The directive sets forth the Committee's objectives for the long-run growth of certain key monetary and credit aggregates. It also sets forth operating guidelines for the degree of ease or restraint to be sought in reserve conditions and expectations with regard to short-term rates of growth in the monetary aggregates. In general, the future growth of the money supply is dependent upon the decisions made by FOMC in its meetings.

"Federal funds rate" is another important term, referring to the interest rate charged by one financial institution for its loans to another financial institution. The U.S. banking system allows FIs to correspond with each other regarding each other's accounts, to help each other with various services such as foreign exchange transactions, and borrowing to balance their books every night. FIs that are short of funds can many times borrow from other FIs on an overnight basis; these loans are known as "federal funds."

The third interest rate of importance is the "prime rate." This rate is determined by each FI and is applied to loans made to a large customer such as a big corporation. All of these interest rates generally move in the same direction. Hence, when the FOMC increases the discount rate, all interest rates go up, and vice versa.

The Federal Reserve Banks are the third layer of authority in the Federal Reserve System. The United States is divided into twelve "districts" and each Federal Reserve Bank controls one district. The main Federal Reserve System office is located in Washington, D.C., and each bank has corresponding regional offices in all major cities of the U.S.

5. The Pandemic Crisis Hits, Falling off the Cliff: March 2019

Following a strong 2019 for the US economy, the first two and a half months of the New Year made it seem like the Year 2020 would continue that trend of impressive economic progress. Months of January and February showed no signs of faltering with March looking like it would hold steady, until midway through the month when COVID-19 began to arrive in the USA. As the pandemic was finding its origin in late February in the Wuhan province of China, for initial days the world did not find it too severe nor was it foreseen to be very dangerous. Therefore all countries were enjoying a moderately impressive economic growth and the US was not alone in this trend, many countries were experiencing similar booms. The arrival of the coronavirus pandemic would change almost everything. As COVID-19 spread across the world, economies began to feel the pressure as countries began to try and battle the virus. As the future events made it clear, many countries were not able to completely withstand the pressure put on them by COVID-19 and began to collapse. So when we look at the many of the factors that tell us what a good economy is, such as GDP and its determinants, as well as the stock market, and interest rates, we see just how far and wide COVID-19 affected the economies. Besides all these changes, we shall also investigate the policy behavior in these crucial months.

Section 2

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6. The case of the US GDP

The GDP in U. S. was increasing at a rate of around 3 percent each quarter for 2019, and with a strong start to 2020, it looked like it would be similar going into the first quarter. However, with the onset of coronavirus and it is being able to rapidly spread throughout the world, this impressive march would not be sustainable. In the first quarter, the drop in GDP was nowhere near as severe as it could have been due to the strong start of the US economy. In spite of this, it was still an unprecedented drop that would manage to become even worse after the second quarter. Following Figure 1 makes the point very clear.

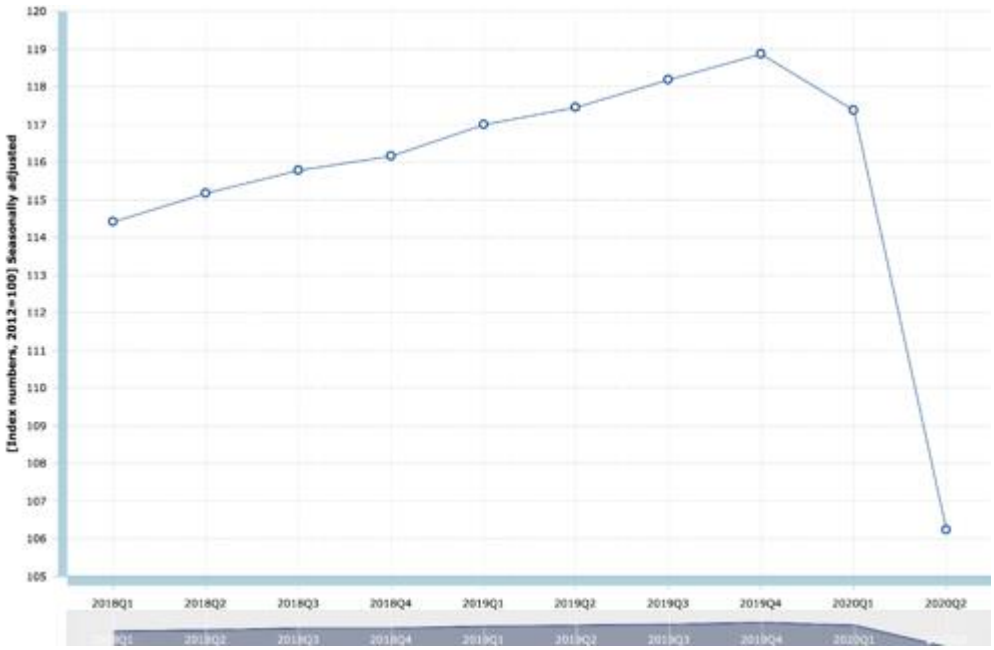

Fig. 1: Real Gross Domestic Product, Q1:2018 - Q2:2020

Source: US Bureau of Economic Analysis

The graph shows us the constant growth of the US economy had been continuing for the past several years, starting with the first quarter of 2018. However, the growth at the start of 2020 is shown by the less severe drop in Q1 of 2020, when compared to the drop in Q2. Despite the strong start the US GD still dropped by 5% in Q1 and jumped to an even larger drop of over 30% in Q2. The first effects of COVID-19 on the US economy were taking place around March leading to the drop in the first quarter. Then many states went to a severe lockdown period. Workers could not get to their jobs, highways were less traveled, most of the small businesses were closed, many activities including travel were canceled, production processes slowed down, unemployment increased, economic transactions slowed down and more importantly no one could correctly guess how the events were going to fold in future. This uncertainty of the future was the main source for further sluggish activities, which allowed the vicious cycle to continue.

The second quarter of 2020 did not have the strong start to protect the US economy from massive drop practically unbelievable and mostly never seen by anyone individual alive. This whole scenario was much worse than the Great Depression that we have seen in Chapter 3.

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With countries beginning to shut down the factors of production stayed unemployed, and the economic output suffered even more.

7. U. S. Unemployment

Unemployment as a number, while not able to give a complete overview of an economy, gives a view of how strong the economy is during a given period. Looking at the numbers before and after the arrival of COVID-19 shows drastic drops and evaluating these numbers can lead to more stark discoveries about just how severe COVID-19 has been on the US economy.

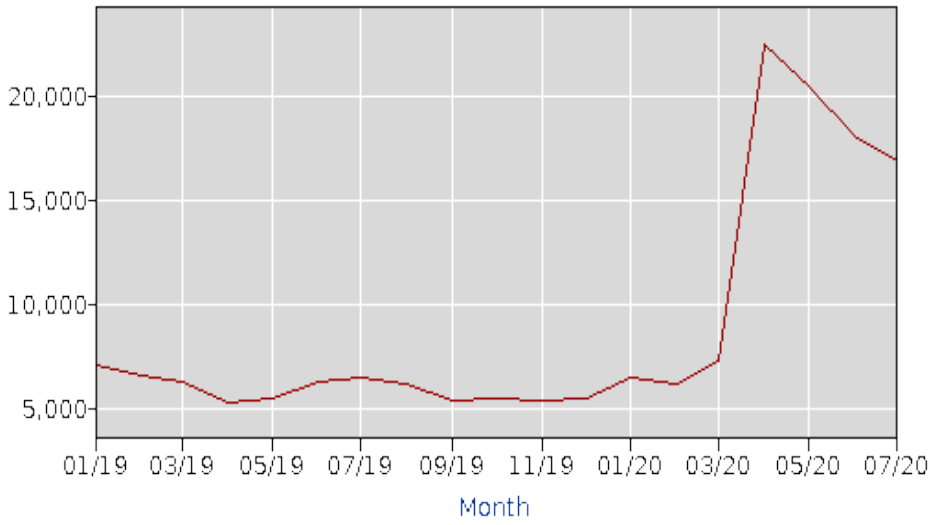

Fig. 2: Unemployed (in '000s) aged 16 and over 9

Source: Bureau of Labor Statistics, Summer 2021

After a solid 2019 unemployment rates remained low for the first two months of 2020 with a slight increase in March coinciding with the coronavirus hitting the US. Come April unemployment rates had reached higher than they were during the great recession in only a month. It reached levels in three months that took years for the US to hit during the great depression. When compared to two of the biggest economic downturns of the past two centuries, COVID-19's hit on employment would lead to massive shifts in the economy even more severe than those two. With more unemployed there was a decrease in income for the average American leading to a decrease in consumption, this being one of the largest determinants in the drop of the US's GDP. This gives us another reason as to why US GDP was hit so hard following the pandemic.

The graph below shows how retail and foodservice sales took a massive drop in March of 2020. They had remained constant throughout 2019 before the drop. While not all of US consumption, these two services make up a large portion of it. It comes as no surprise that GDP dropped at such an extreme rate at a similar time.

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Fig. 3: Advance Real Retail & Food Services Sales (RRSFS)

Source: Federal Reserve Bank of St. Louis, Advance Real Retail and Food Services Sales [RRSFS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/RRSFS, October 30, 2020.

8. International Trade

The US is the largest importer in the world and one of the largest exporters, which means they play a large role in all international trade. Pre-COVID-19 the US import and export numbers remained largely the same. With a slight decrease in both imports and exports occurring as 2019 neared its end.

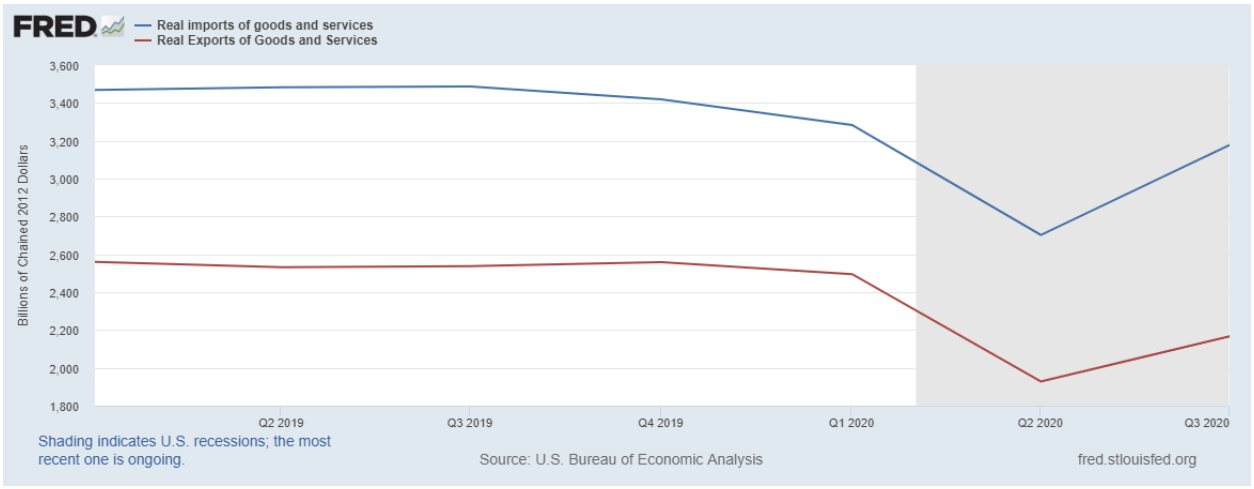

Fig. 4: US Imports and Exports January 2019- April 2020

Source: U.S. Bureau of Economic Analysis, Real imports of goods and services [IMPGSC1], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/IMPGSC1, October 29, 2020.

Both imports and exports dropped at a shocking rate following the arrival of COVID-19 for the US. With more countries closing and consumption decreasing trade would not be able to continue as it had before the virus. In the third quarter of 2020, both imports and exports started to increase closer to the levels they were before March.

The Geneva-based body, World Trade Organization (WTO) forecast in April that global trade in goods would fall by between 13 and 32 percent in 2020, numbers that the WTO chief described as "ugly," before rebounding by 21 to 24 percent in 2021. Later, the WTO said rapid responses

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by governments meant its pessimistic scenario for 2020 was unlikely. "Initial estimates for the second quarter, when the virus and associated lockdown measures affected a large share of the global population, indicate a year-on-year drop of around 18.5 percent," the WTO said in a statement.

"The fall in the trade we are now seeing is historically large – in fact, it would be the steepest on record. But there is an important silver lining here: it could have been much worse," said WTO director-general Roberto Azevedo.

9. The Stock Market

The stock market was experiencing a steady rise like other parts of the economy during 2019 and early 2020. COVD-19 would not let that trend continue come March.

Fig. 5: DJIA January 1, 2019- Oct 5, 2020

Source: S&P Dow Jones Indices LLC, Dow Jones Industrial Average [DJIA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DJIA, October 6, 2020.

With drastic drops in the Dow Jones Industrial Average (DJIA), people began to sell off stocks, and it looked like the market would struggle to recover.

A common factor amongst many economic downturns is drops in the stock market. From the Great Depression to the Great Recession, this trend continued with the economic downturn following the arrival of COVID-19. It looked like it would take quite some time for the market to recover from a hit like this. Then when the DOW Jones was at the lowest it had been in almost two years, it started to bounce back. While it only took weeks for the market to drop it would take months for it to even begin to recover. With the market beginning to come close to what it was pre-COVID-19, it does not mean the market is recovering. As of the end of October with the government unable to come up with a new stimulus plan and the election looming, the market is beginning to drop again.

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10. Housing

In the Great Recession of late 2008, the housing market was the primary cause. Lenders were issuing and trading sub-prime mortgages over and over. No one believed that housing prices would fall in a substantial way. Then the housing market collapsed and the world's economy felt the consequences.

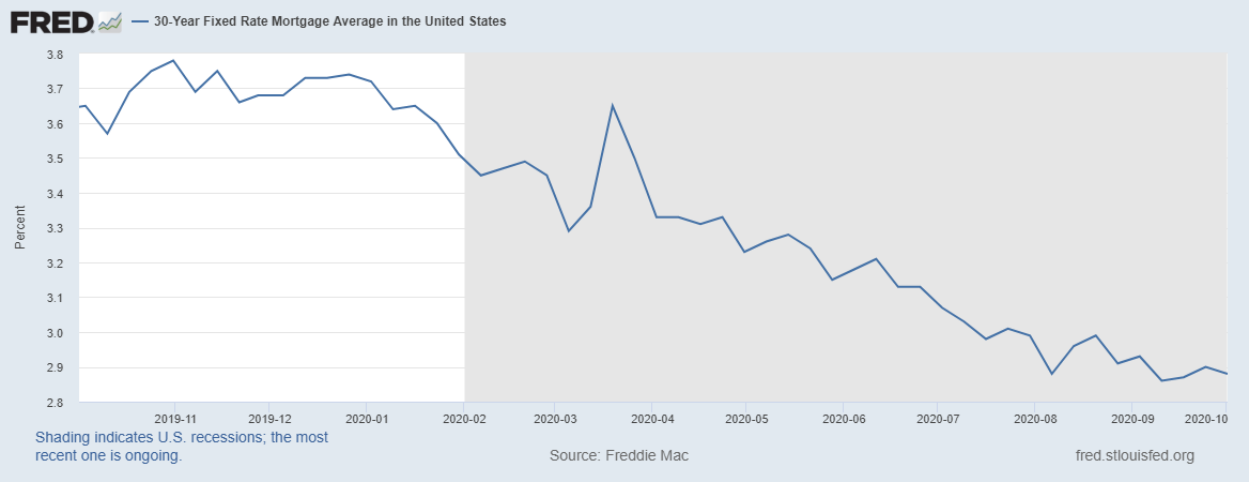

Fig. 6: 30 Year Mortgage Rates January 2019-October 2020

Source: Freddie Mac, 30-Year Fixed Rate Mortgage Average in the United States [MORTGAGE30US], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MORTGAGE30US, October 5, 2020.

The above graph shows that the immediate aftermath of corona in the US lead to a massive jump in rates followed by a drastic decrease.

11. Federal Funds Rate

The federal funds rate is a valuable tool to examine what is currently happening in the US economy, particularly interest rates. If the rate is dropping at an excessive amount quickly it means that the US economy is grinding to a halt with less money being spent.

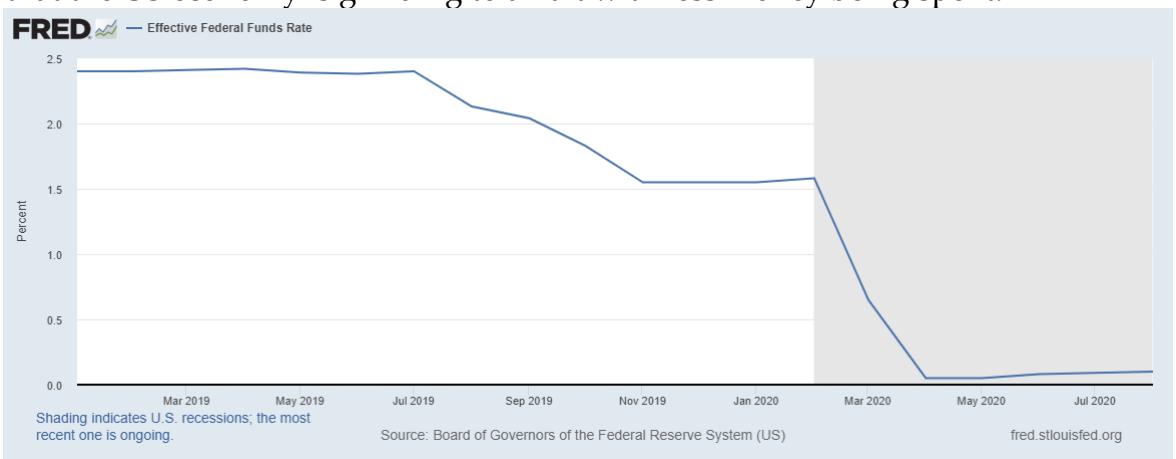

Fig. 7: Federal Funds Rate January 2019- July 2020

Source: Board of Governors of the Federal Reserve System (US), Effective Federal Funds Rate [FEDFUNDS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FEDFUNDS, September 30, 2020.

The above graph shows just how extreme the drop was in March and the months following. The rate went from 1.5 to almost zero showing the shockingly small amount of currency moving through the market. This leads to growing inflation rates that can negatively affect the economy.

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Section 3

12. Policy Responses: Fiscal Policy Change

With the economy suffering at unprecedented rates the government had to step in to try and stimulate the economy. Two large expansionary fiscal policies were put forward by the federal government to help this growth in 2019. One being the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, this bill was enacted to give households and small businesses throughout the country extra money to stimulate the market. This act was to the tune of $2 trillion was not only to help stimulate the market but also an attempt to help those households struggling to provide for themselves. With other acts also being enacted to help with recovery and struggling households and small businesses the government ended up spending $4 trillion dollars over and above the regular $3.5 it would have spent in 2019. While these bills are important to help the people hit hardest by COVID-19, it is important to remember that the US still carries massive debt and it is increasing with each stimulus act.

13. Short Timeline of the FRS Reaction to the Pandemic

13.1. February 28, 2020

At 2:30 pm EST – a statement from Federal Reserve Chair Jerome H. Powell was released:
"The fundamentals of the U. S. economy remain strong. However, the coronavirus poses an evolving risk to economic activity. The Federal Reserve is closely monitoring developments and their implications for the economic outlook. We will use our tools and act as appropriate to support the economy.

13.2. March 3, 2020

The FOMC held an unscheduled meeting and lowered the target federal funds rate by 50 basis points, to 1 and 1.25 percent. The BOG announced a decrease in the primary credit rate of 50 basis points to 1.75 percent. As Figure 7 indicates the decreased interest rate prevailed for the rest of 2020. In later months of 2020, the recovery signs were seen but very vaguely. Most of the country was still under the COVID mania, and some business was getting done by remote operations such as working from home. Here is the summary of economic conditions in the second half of 2020:
The COVID-19 pandemic continues to weigh heavily on economic activity and labor markets in the United States and around the world, even as the ongoing vaccination campaigns offer hope for a return to more normal conditions later this year. While unprecedented fiscal and monetary stimulus and relaxation of rigorous social-distancing restrictions supported a rapid rebound in the U.S. labor market last summer, the pace of gains has slowed and employment remains well below pre-pandemic levels. In addition, weak aggregate demand and low oil prices have held down consumer price inflation. In this challenging environment, the Federal Open Market Committee (FOMC) has held its policy rate near zero and has continued to purchase Treasury securities and agency mortgage-backed securities to support the economic recovery. These measures, along with the Committee's strong guidance on interest rates and the balance sheet,

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will ensure that monetary policy will continue to deliver powerful support to the economy until the recovery is complete.

14. Economic and Financial Developments

14.1. **Economic activity and the labor market**

The initial wave of COVID-19 infections led to a historic contraction in economic activity as a result of both mandatory restrictions and voluntary changes in behavior by households and businesses. The level of gross domestic product (GDP) fell a cumulative 10 percent over the first half of 2020, and the measured unemployment rate spiked to a post–World War II high of 14.8 percent in April. As mandatory restrictions were subsequently relaxed and households and firms adapted to pandemic conditions, many sectors of the economy recovered rapidly and unemployment fell back. Momentum slowed substantially in the late fall and early winter, however, as spending on many services contracted again amid a worsening of the pandemic. All told, GDP is currently estimated to have declined 2.5 percent over the four quarters of last year and payroll employment in January was almost 10 million jobs below pre-pandemic levels, while the unemployment rate remained elevated at 6.3 percent and the labor force participation rate was severely depressed. Job losses have been most severe and unemployment remains particularly elevated among Hispanics, African Americans, and other minority groups as well as those who hold lower-wage jobs.

In February 2021 monetary report, Federal Reserve mentioned the following goals:

"In light of the effects of the continuing public health crisis on the economy and the associated risks to the outlook, the FOMC has maintained the target range for the federal funds rate at 0 to 1/4 percent since last March. In pursuing the strategy outlined in its revised statement, the Committee noted that it expects it will be appropriate to maintain this target range until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time."

14.2.**Balance sheet policy**

With the federal funds rate near zero, the Federal Reserve has also continued to undertake asset purchases to increase its holdings of Treasury securities by $80 billion per month and its holdings of agency mortgage-backed securities by $40 billion per month. These purchases help foster smooth market functioning and accommodative financial conditions, thereby supporting the flow of credit to households and businesses. The Committee expects these purchases to continue at least at this pace until substantial further progress has been made toward its maximum-employment and price-stability goals.

In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee is prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals" (Feb 2021)

The last observation we can make for the conclusion of this paper is seen in Figure 8 as follows

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Fig.8: M1 for the United States

Source: OECD, Available at: https://fred.stlouisfed.org/series/MANMM101USA189S

While Federal Reserve Board Chairman, Jerome Powell promised to do "Everything possible" to take the economy back to the recovery path, the tremendous jump in the M1 money supply cannot be ignored. The level of M1 was roughly 4 trillion in 2019 and early 2020, but in late 2020 it rose to 19 trillion a whopping 400% increase in money supply in one year, enough to make any strong monetarist faint!! However, this increase is partly due to newly passed Regulation D which made financial institutions transfer many saving account balances to the checking account. Second, the demand for money in pandemic years increased to a very high level as people needed to keep more in checking deposits. In the later months of 2021, we are seeing the inflationary effects of such an increase in M1.

15. Summary and Conclusions:

We observed the structure and evolution of the Federal Reserve System and focused on monetary policymaking in the pandemic. It is important to know how the decisions were made in Federal Reserve behavior. It was pointed out that the striking changes in money supply were somewhat necessary to tackle the problem of pandemics and to support the extraordinary expansionary fiscal policy. We also noticed the tremendous increase in the M1 money supply in recent years.

Conflict of Interest: The authors declare no conflict of interest.

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