Inflation Dynamics in the United States:

The Impact of Geopolitical Events, Pandemic Stimulus, and Monetary Policy

Anuj Awasthi

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MARV Capital Inc.

1 West End Avenue, 11th Floor

New York, NY 10023

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Introduction

Purpose of the Study

The purpose of the study is to analyze and understand how Geopolitical Events, Pandemic Stimulus, and Monetary Policy contributed to the dynamics of inflation in the United States. This research explores the impacts of geopolitical events on the domestic economy and their contribution on the inflation rate in the United States of America. It highlights the effects of pandemic stimulus measures, such as fiscal stimulus packages, on inflationary pressures. Furthermore, the study investigates how decisions made by the Federal Reserve and other relevant institutions regarding interest rates, money supply, and other monetary tools influenced inflation trends. This aspect examines various monetary policy approaches in managing inflation and promoting economic stability.

What is Inflation and why is it Important?

Inflation, as defined in economics, is a general increase of prices and goods in an economy. Inflation impacts many aspects of the economy such as purchasing power, consumer spending, cost of living, savings and investments, business investments and profitability, wages and employment, and economic growth. It signifies a rise in the general price level of goods and services, leading to a reduction in the value of money. This decline in purchasing power can affect both the economy and living standards. Central banks, like the Federal Reserve in the United States, use inflation data to shape and implement monetary policies, with the aim of stabilizing the economy. This, in turn, benefits both individuals and businesses. Understanding inflation is crucial for individuals aiming to protect their financial well-being and for policymakers looking to ensure economic stability.

Background

The United States' Inflation Periods: A Brief Historical Overview

The United States has had several periods of high inflation, which have left a lasting mark on the country's economy. The Oil Crisis of the 1970s, the stagflation of the late 1970s and early 1980s, the recession of the early 1990s, and the global financial crisis of 2008 were all major events that shaped the US economy

The Oil Crisis: 1973-1975

The Organization of the Petroleum Exporting Countries (OPEC) placed an oil embargo on the United States and other nations who supported Israel during the Yom Kippur War, which was the main cause of the oil crisis that lasted from 1973 to 1975[1]. As a result, the amount of oil available globally was significantly reduced, which caused oil prices to rise sharply. Inflation got worse as cost of oil rose, which had a domino effect on other industries and raised prices for goods and services overall. As a result, inflation peaked in 1974 at an astounding 12.2%[2]. Chairman Arthur Burns led the Federal Reserve, which hiked the federal funds rate many times between 1970 and 1974 in response to economic difficulties and to combat growing inflation[3]. The federal funds rate, for example, increased from about 6% in 1970 to about 12% in 1974[4]. This series of rate increases was part of the Fed's effort to rein in inflation and stabilize prices.

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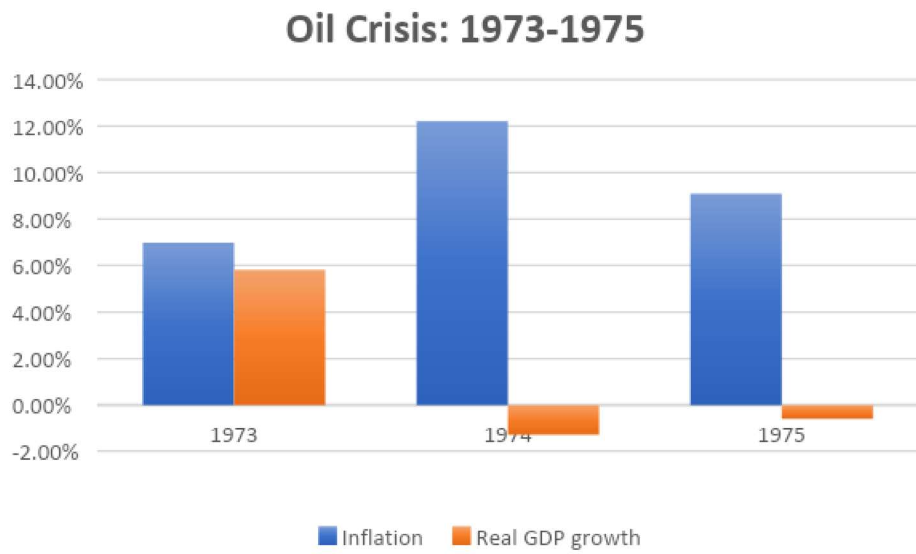
[1] "Oil Embargo, 1973–1974," U.S. Department of State, accessed July 26, 2023, https://history.state.gov/milestones/1969-1976/oil-embargo.
[2] "Federal Funds Effective Rate," FRED, accessed July 27, 2023, https://fred.stlouisfed.org/series/fedfunds.
[3] "Federal Funds Effective Rate," FRED, accessed July 27, 2023, https://fred.stlouisfed.org/series/fedfunds.
[4] "Federal Funds Effective Rate," FRED, accessed July 27, 2023, https://fred.stlouisfed.org/series/fedfunds.

Figure 1. The Oil Crisis: Inflation and Real GDP



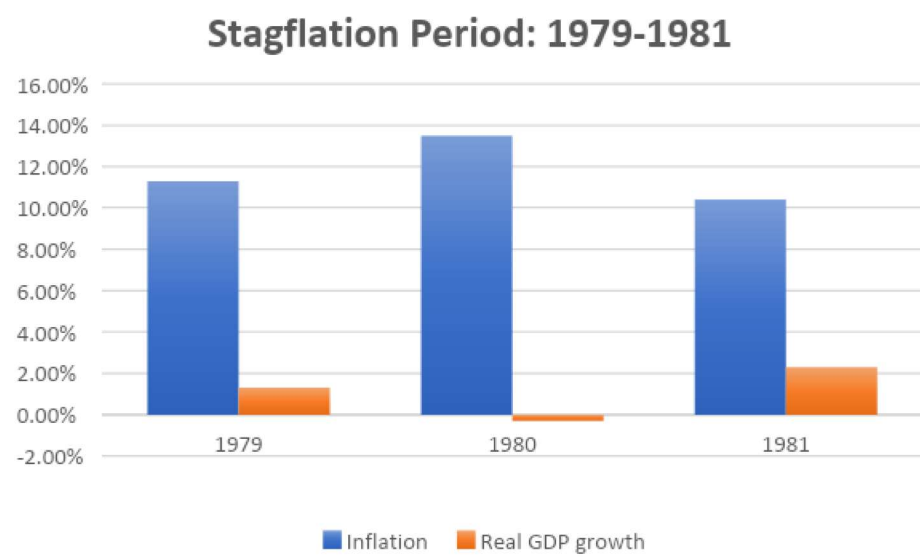
The Stagflation Period

The stagflation period of 1979-1981 was characterized by a combination of stagnant economic growth and high inflation. Inflation peaked at 13.5% in 1980[5]. The main factors that caused inflation to go up were the second oil crisis in 1979 and the wars between Iran and Iraq. These events caused oil prices to skyrocket. Additionally, expansionary fiscal and monetary policies, aimed at stimulating the economy, contributed to an increase in the money supply, thereby fueling inflation. The federal funds rate rose from around 11% in 1979 to over 19% by mid-1981[6]. The Federal Reserve, under the chairmanship of Paul Volcker, tightened the monetary policy to fight inflation, despite the potential negative consequences for the economy and employment[7]. While the measures successfully brought down inflation over the long term,

[5] “Federal Funds Rate - 62 Year Historical Chart,” MacroTrends, accessed July 27, 2023, https://www.macrotrends.net/2015/fed-funds-rate-historical-chart.
[6] “Federal Funds Rate - 62 Year Historical Chart,” MacroTrends, accessed July 27, 2023, https://www.macrotrends.net/2015/fed-funds-rate-historical-chart.
[7] Tim Sablik, “Recession of 1981–82,” Federal Reserve History, accessed July 27, 2023, https://www.federalreservehistory.org/essays/recession-of-1981-82.

they also contributed to a severe recession in the early 1980s[8]. The Fed's tough response to inflation in the late 1970s and early 1980s showed how hard it is to control inflation without hurting the economy.

Figure 2. Stagflation Period: Inflation and Real GDP



Early 1990s Recession: 1990-1991

The early 1990s recession was caused by a combination of factors, including the Gulf War, which led to a spike in oil prices, contributing to inflationary pressures. Inflation peaked at 5.4% in 1990[9]. Additionally, the savings and loan crisis and the housing crash made the economy even worse, leading to less consumer spending and more unemployment, which impacted the overall economic stability and contributed to inflationary pressures. To curb inflation, the Federal Reserve, under the chairmanship of Alan Greenspan, raised the federal funds rates from around 6% in 1989 to nearly 10% by late 1990.

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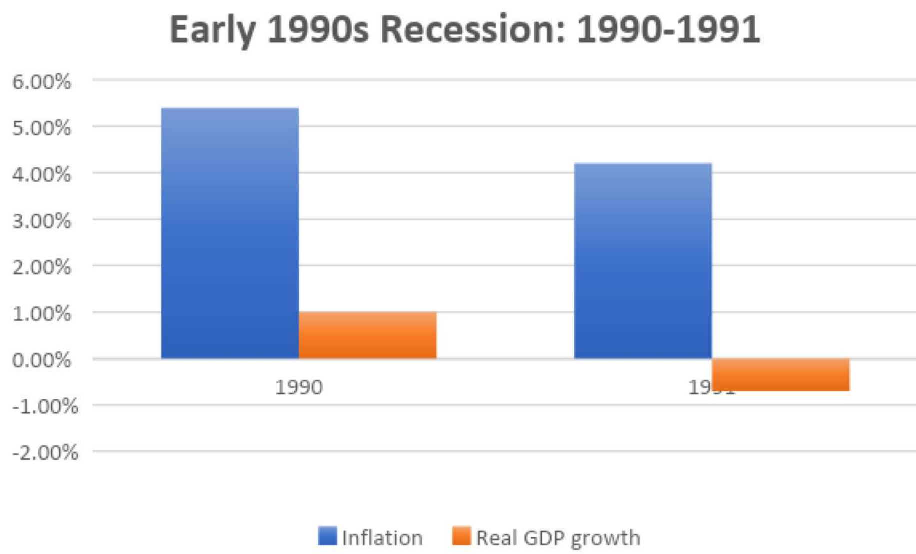
[8] "Federal Funds Rate - 62 Year Historical Chart," MacroTrends, accessed July 27, 2023, https://www.macrotrends.net/2015/fed-funds-rate-historical-chart.
[9] "Federal Funds Effective Rate," FRED, accessed July 27, 2023, https://fred.stlouisfed.org/series/fedfunds.

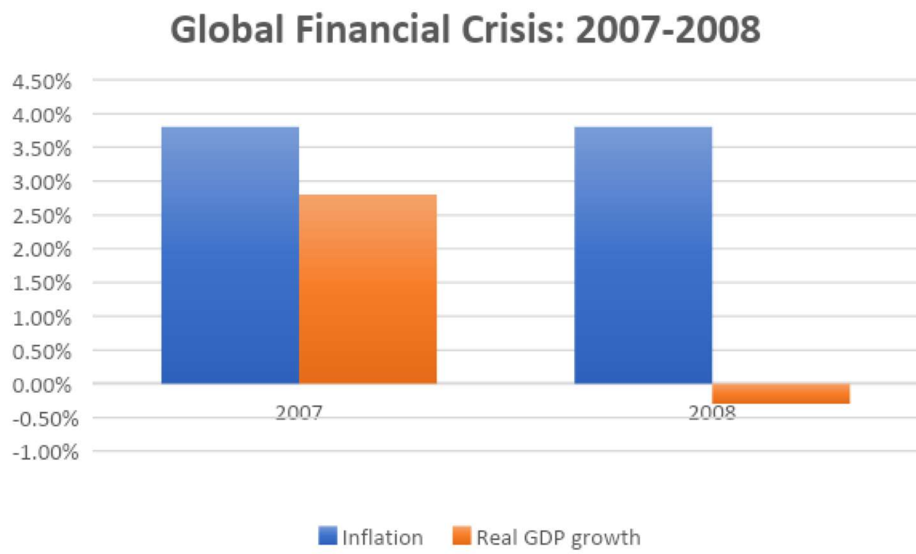
Figure 3. Early 1990s Recession: Inflation and Real GDP



Global Financial Crisis: Inflation and Real GDP

The housing market and subprime mortgage crisis caused the Global Financial Crisis, which led to a period of negative economic growth. Despite the fact that inflation was relatively low during this crisis, its effects were severe, resulting in a serious recession and a large loss of jobs. Under Chairman Alan Greenspan, the Federal Reserve raised the federal funds rate several times in the years preceding the global financial crisis of 2007–2008. The Fed raised interest rates to keep prices stable and prevent the economy from growing too fast. But in order to confront the serious economic issues and prevent a complete economic collapse, the Fed took strong steps following the crisis. By the end of 2008, the federal funds rate, which was approximately 5.25% in the middle of 2007, had been progressively lowered to a range of 0% to 0.25%. Between 2004 and 2006, the Federal Reserve raised the federal funds rate from 1% to 5.25% in a series of 17 consecutive rate hikes.

Figure 4. Global Financial Crisis: 2007-2008



Recent major Geopolitical Events that have affected the United States Economy and Inflation Dynamics

Covid-19: Navigating its Impact with Relief Measures

The COVID-19 pandemic has had a big impact on many parts of the US economy. One of the biggest changes was to jobs, with many people losing their jobs and businesses facing unexpected problems. Based on the research presented in the article "COVID & Unemployment: Behind the Numbers," it is clear that the increase in unemployment brought on by the epidemic was a serious issue. Fortunately, the timely implementation of the American Rescue Plan by the government provided much-needed relief.

The American Rescue Plan Act of 2021, a $1.9 trillion economic stimulus bill, aimed to accelerate the United States' recovery from the COVID-19 pandemic and recession[10]. It expanded upon the measures initiated by the CARES Act and the Consolidated Appropriations

[10] Erik Haagensen, "American Rescue Plan," Investopedia, accessed July 28, 2023, https://www.investopedia.com/american-rescue-plan-definition-5095694.

Act of 2021[11]. Direct payments, unemployment benefits, small business aid, and financing for state and local governments were all included in the plan. The relief plan, put forth by President Joe Biden, was a major step toward resolving the issues raised by the pandemic and its economic effects. A Paycheck Protection Program (PPP) was first introduced in 2020 as part of the CARES Act[12]. It provided businesses, independent/self employed people, and specific nonprofit organizations with access to low-interest private loans for the purpose of covering payroll and other vital obligations. If employment and salaries stayed steady, the loans—which typically totaled 2.5 times the applicant's average monthly payroll costs—could be repaid in part or in full. The Paycheck Protection Program (PPP) was enhanced by the Consolidated Appropriations Act, 2021, which was passed on December 21, 2020. It did this by reviving loan applications, providing an extra $284.5 billion in financing, and allowing some businesses to apply for a PPP loan twice[13]. This extension act was essential in helping companies and nonprofit organizations overcome the continued difficulties brought on by the pandemic. This helped to prevent a wave of bankruptcies and layoffs, and it also helped to keep people and communities healthy and safe.

Assessing Fiscal Policy Impact: Unraveling Inflation Dynamics and Economic Stimulus

Within the field of economics, actions taken by the government, particularly those related to taxation and spending, are referred to as fiscal policy. One example of this is expansionary fiscal policy which is a strategy employed by governments to stimulate the

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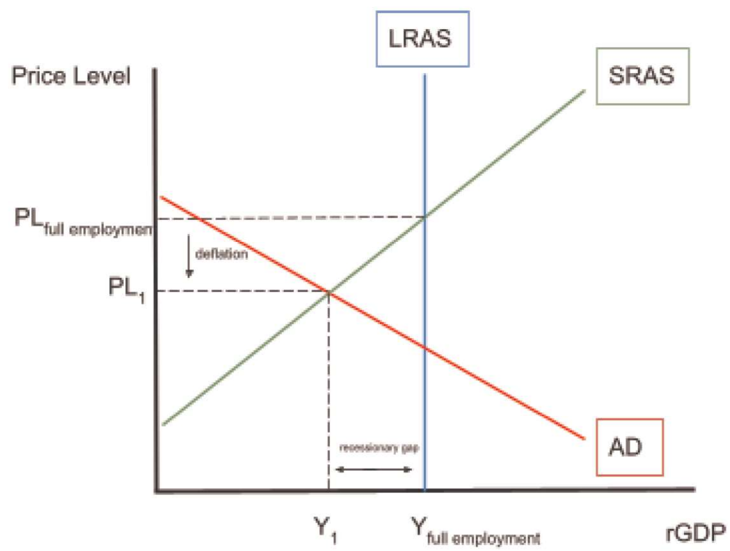
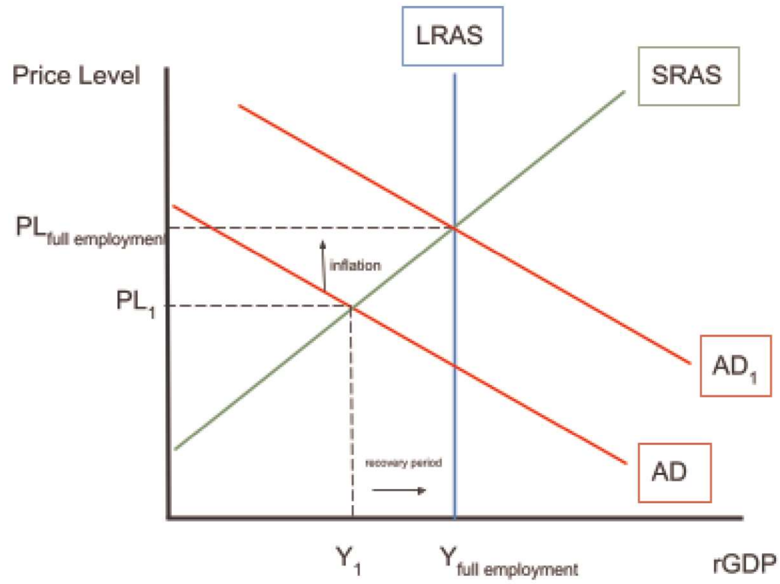
[11] Erik Haagensen, "American Rescue Plan," Investopedia, accessed July 28, 2023, https://www.investopedia.com/american-rescue-plan-definition-5095694.
[12] "Covid-19 Economic Relief," U.S. Department of the Treasury, April 12, 2023, https://home.treasury.gov/policy-issues/coronavirus.
[13] "Covid-19 Economic Relief," U.S. Department of the Treasury, April 12, 2023, https://home.treasury.gov/policy-issues/coronavirus.

economy, especially in times of recession or downturn. The American Rescue Plan, in essence, was a stimulus plan consisting of cash assistance, tax breaks, and higher government expenditures aimed at boosting consumer spending and reviving the economy. Fundamentally, the law of supply and demand is applied. Demand for goods and services rises when the government adds money to the economy. Ideally, companies would increase production to satisfy this demand, resulting in the creation of jobs and a general improvement in the economy.

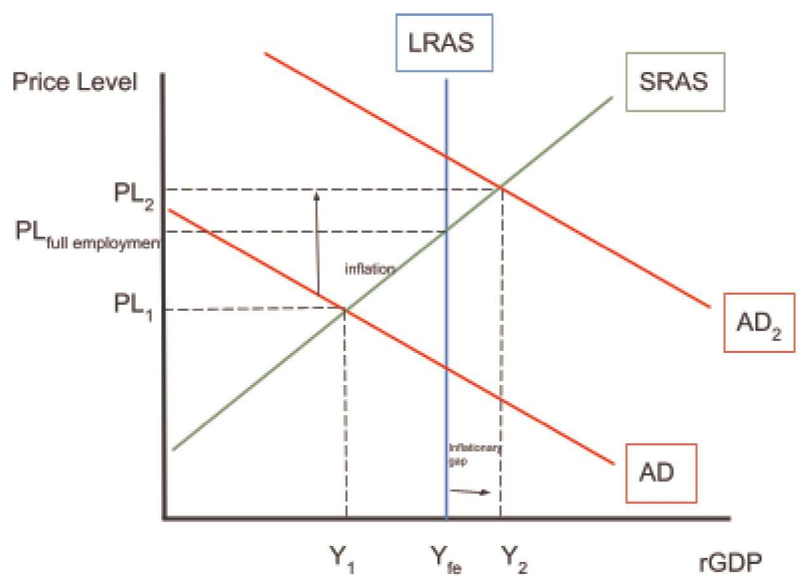
Graph 1. Initial State of U.S. Economy During Pandemic



Graph 2. Correction Measures



Graph 3. Inflation Due to Over Compensation



Utilizing a macroeconomic perspective on government actions, Graph 1 illustrates the decline in consumer spending and investments in the United States as a result of high levels of uncertainty brought on by job losses, health concerns, income uncertainties, and shortages in the manufacturing of goods. The curves shown on the graphs known as the long-run aggregate supply (LRAS) depicts the link between real GDP and price level that would be provided if all prices, including nominal wages, were fully flexible. While prices can fluctuate along the LRAS, output cannot because it represents the output of full employment. The curve known as short-run aggregate supply (SRAS) illustrates the positive correlation between the level of aggregate prices and the total amount of production delivered in an economy. Aggregate demand is the total demand for goods and services. Real GDP is a measure of the total output of firms.

The aggregate demand (AD) in Graph 1 indicates a recession in the economy at PL_1 (price level) and Y_1 (decreased employment). During a recession, firms cut hours or lay off workers, which causes incomes to stagnate or decline. Since the wealthy are typically less affected by a recession than the middle class or lower classes, income inequality may also get worse. Trying to avoid this, the government acted accordingly and set forth the series of stimulus checks as a measure to increase aggregate demand. The extra money proved to reduce spending concerns by consumers and firms and increased aggregate demand. The U.S. government's goal was to bring the economy back to Y_{fe} (full employment level) and the PL_{fe} (price level at full employment) shown on Graph 2 to continue to maximize real GDP. Even though the American Rescue Plan increased employment and attempted to boost the economy, the aggregate demand in the economy overshot the desired level and created an inflationary gap as shown in Graph 3. AD_2 is pushed further right on the SRAS curve.

The American rescue plan soon became a focal point of debate regarding its impact on inflation. Initially, there were minimal concerns regarding potential inflation spikes, with the

Labor Department noting an annual inflation rate of just 1.7 percent[14]. However, soon after, there was a noticeable uptick in prices for various items, bringing annual inflation to a staggering 8.9 percent at its peak, almost five times the rate at the time the plan was enacted[15] (Lynch, "Biden's rescue plan made inflation worse but the economy better").

Some of this inflation was inevitable, given the global economic turmoil from the pandemic. The supply chain disruptions, which led to inflationary pressures, originated in early 2020 with the onset of the pandemic. Mandatory closures of non-essential businesses and government support measures affected household spending patterns, with a shift towards purchasing goods rather than services. This shift in demand outpaced available supplies, leading to scarcity and production limitations. As a result, supply chain issues intensified, contributing to a supply-demand imbalance and a subsequent increase in prices for essential commodities such as energy and food.[16]

Geopolitical Events as Drivers of Inflation after COVID

Impact of Pandemic: Demand Side Impact

World economic growth was rebounding from pandemic-curbing measures. Global economic recovery precipitated rising demand for energy. Prices of crude oil and natural gas began to climb in late 2020, picking up steam in the second quarter of 2021. Natural gas prices rose sharply in mid-2021, as did the price of fertilizers, since natural gas is a key input in fertilizer production. Some key goods and sectors that were notably affected include:

[14] "CPI Home," U.S. Bureau of Labor Statistics, accessed July 28, 2023, https://www.bls.gov/cpi/.
[15] David Lynch, "Biden's Rescue Plan Made Inflation Worse but the Economy Better," The Washington Post, October 11, 2022, https://www.washingtonpost.com/us-policy/2022/10/09/inflation-economy-biden-covid/.
[16] "How Do Supply Chain Issues Contribute to Inflation?: U.S. Bank," How Do Supply Chain Issues Contribute to Inflation? | U.S. Bank, January 25, 2023, https://www.usbank.com/investing/financial-perspectives/market-news/supply-chain-issues-contribution-to-inflation.html.

- **Increased demand for energy**: As the global economy rebounded, businesses and consumers began to use more energy. This increased demand for energy drove up prices, including prices for natural gas.
- **Natural gas as a key input in fertilizer production:** Natural gas is used to produce ammonia, which is a key ingredient in nitrogen fertilizers. Nitrogen fertilizers are the most widely used fertilizers in the world, so rising natural gas prices led to rising fertilizer prices.
- **Global fertilizer trade:** Fertilizer is a global commodity, so rising fertilizer prices in one part of the world can have a ripple effect on prices in other parts of the world. This means that the demand side impact of the global economic recovery was felt in all parts of the world.
- **Building materials:** The demand for building materials surged as individuals and businesses invested in home improvement projects, renovations, and new construction. This heightened demand led to increased prices for lumber, steel, and other construction materials.
- **Electronic devices:** The shift to remote work and increased reliance on digital technology during the pandemic drove up demand for electronic devices, including laptops, tablets, and other IT equipment. This increased demand led to higher prices for consumer electronics.
- **Automobiles:** Increased demand for personal vehicles as people avoided public transportation, contributed to higher prices and reduced vehicle inventories.

- **Housing market:** The surge in demand for housing, driven by low mortgage rates and changing housing preferences, led to increased home prices in many regions.
- **Food and groceries:** Disruptions in the food supply chain, labor shortages, and increased consumer demand for groceries during the pandemic contributed to higher food prices.

Impact of Pandemic: Supply Side Impact

On the other hand, supply chain disruptions resulting from the ongoing COVID-19 pandemic and other factors including, reduced supplies from droughts, limited stocks of commodities in major exporting nations, elevated energy costs impacting fertilizer and transportation, the enforcement of export bans including fertilizer export bans, and restrictions by various countries further constraining supplies, further contributing to global market disruptions. [17]

- **Supply chain disruptions:** Global supply chains experienced significant disruptions, causing delays in the delivery of goods and raw materials. These disruptions were caused by factory closures, transportation constraints, and restrictions on international trade, leading to reduced product availability and longer lead times for certain goods.
- **Trade restrictions and tariffs:** The pandemic led to the implementation of trade restrictions, tariffs, and export/import limitations by some countries, resulting in trade disruptions and challenges for businesses relying on global supply chains. These measures impacted the availability of certain goods and contributed to pricing fluctuations in international markets.

[17] "How Do Supply Chain Issues Contribute to Inflation?: U.S. Bank," How Do Supply Chain Issues Contribute to Inflation? | U.S. Bank, January 25, 2023, https://www.usbank.com/investing/financial-perspectives/market-news/supply-chain-issues-contribution-to-inflation.html.

- **Labor shortages:** Many industries faced labor shortages as a result of pandemic-related lockdowns, health concerns, and restrictions on movement. These shortages affected production capacities and led to challenges in meeting consumer demand, particularly in sectors such as manufacturing, agriculture, and hospitality.
- **Raw material shortages:** Several industries, including the automotive and electronics sectors, encountered shortages of critical raw materials, such as semiconductor chips and rare earth metals. These shortages constrained production capabilities and led to reduced output and higher prices for goods reliant on these materials.
- **Increased production costs:** Businesses encountered higher production costs due to a combination of factors, including supply chain disruptions, increased raw material prices, and expenses associated with implementing health and safety protocols. These elevated production costs were often passed on to consumers through higher prices for goods and services.
- **Shifts in consumer demand:** Changes in consumer behavior and preferences during the pandemic led to shifts in demand for various goods and services. Industries experienced fluctuations in demand for specific products, leading to challenges in aligning production with changing consumer preferences and contributing to supply-demand imbalances.

These supply-side challenges had a notable impact on the availability, pricing, and overall dynamics of goods and services in the post-COVID-19 period.

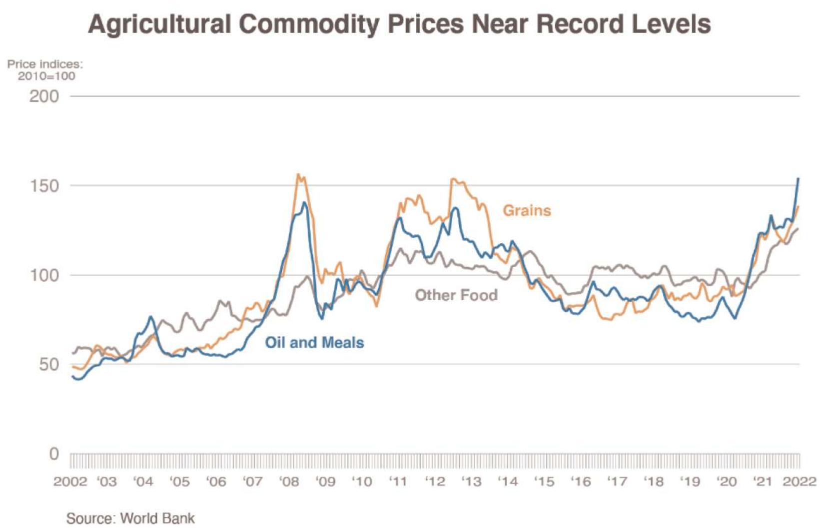
Russia-Ukraine War

The Russia-Ukraine war disrupted global energy and food markets further and came at a time when global food and energy prices were already elevated, pushing prices even higher.[18] Global prices of commodities surged to nearly record levels by April 2022. In the first half of 2022, global food, fuel, and fertilizer prices experienced significant increases, primarily due to the repercussions of the war in Ukraine. The imposition of sanctions on Russia further led to supply chain disruptions, increased commodity prices, and slower economic growth. The sanctions contributed to inflation, as they made it more difficult and expensive for businesses to import goods from Russia.

Wheat and corn prices were particularly affected, as Russia and Ukraine are two of the world's largest exporters of these grains. Sunflower oil prices were also hit hard, as Ukraine is the world's largest exporter of sunflower oil. Energy prices, such as Brent crude oil and natural gas, also increased significantly due to the war. Russia is a major exporter of both of these commodities. The price increases of these commodities have had a significant impact on consumers and businesses around the world. Consumers are paying more for food and energy, while businesses are facing higher costs of production.

Figure 5. Agricultural Commodity Prices

[18] Channing Arndt et al., "The Ukraine War and Rising Commodity Prices: Implications for Developing Countries," Global food security, March 2023, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10015268/.



Monetary Policy and its Influence on Controlling Inflation

The COVID-19 crisis in the US prompted a significant economic downturn, leading to a "dash for cash" and disrupting financial markets. In response, the Federal Reserve implemented various measures, including substantial asset purchases and lending to support households, businesses, and local governments. Jerome Powell, the Fed Chair, emphasized the Fed's commitment to employing these measures aggressively until a solid path to recovery was established.[19]

Easing Monetary Policy

With quantitative easing, the central bank of a country purchases long-term government bonds from its biggest banks in an effort to boost financial system liquidity. This monetary policy also encourages banks to lend and invest more freely, which in turn encourages economic growth. The Fed decreased the federal funds rate and provided forward guidance on interest rates, signaling a commitment to keeping rates low until economic goals were met. Quantitative

[19] Nellie Liang et al., "What Did the Fed Do in Response to the COVID-19 Crisis?," Brookings, March 9, 2022, https://www.brookings.edu/articles/fed-response-to-covid19/.

easing involved the purchase of significant debt securities, adjusted periodically based on the economic recovery.

Supporting Financial Markets

The Fed introduced several pandemic-era facilities, including the Primary Dealer Credit Facility, the Money Market Mutual Fund Liquidity Facility, and Repo Operations, to ensure the smooth functioning of money markets and provide stability during the crisis[20].

Encouraging Banks to Lend

The Fed lowered the discount window rate, urging banks to use their regulatory capital and liquidity buffers for increased lending. Additionally, the Main Street Lending Program supported small and mid-sized businesses, while the Paycheck Protection Program Liquidity Facility facilitated loans under the PPP[21].

Supporting Corporations and Businesses

The Fed established the Primary Market Corporate Credit Facility and the Secondary Market Corporate Credit Facility to directly lend to corporations. The Commercial Paper Funding Facility aimed to bolster the commercial paper market, and the Term Asset-Backed Securities Loan Facility supported consumers through various asset-backed securities[22].

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[20] Nellie Liang et al., "What Did the Fed Do in Response to the COVID-19 Crisis?," Brookings, March 9, 2022, https://www.brookings.edu/articles/fed-response-to-covid19/.
[21] Nellie Liang et al., "What Did the Fed Do in Response to the COVID-19 Crisis?," Brookings, March 9, 2022, https://www.brookings.edu/articles/fed-response-to-covid19/.
[22] Nellie Liang et al., "What Did the Fed Do in Response to the COVID-19 Crisis?," Brookings, March 9, 2022, https://www.brookings.edu/articles/fed-response-to-covid19/.

Supporting State and Municipal Borrowing

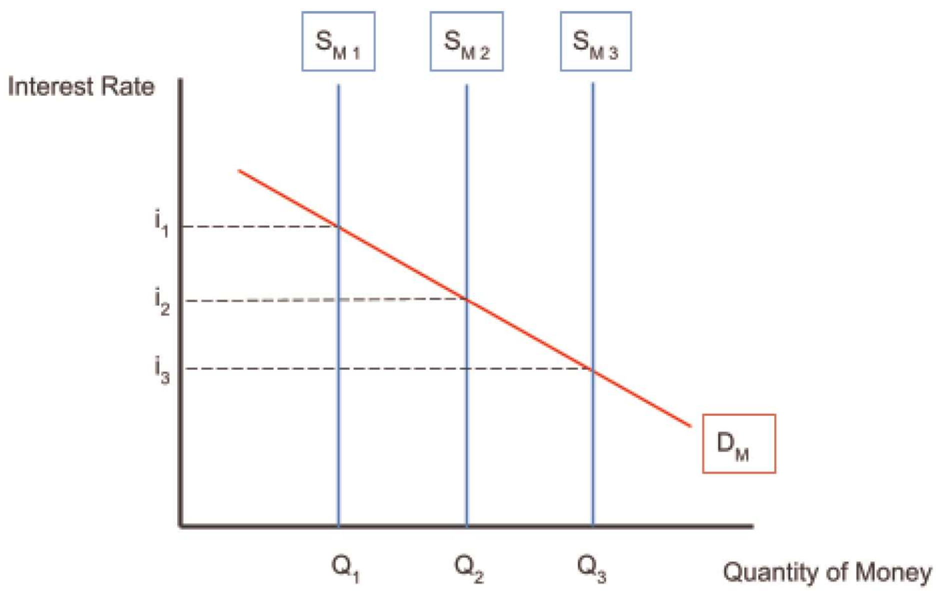
The Fed provided direct lending to state and municipal governments through the Municipal Liquidity Facility, aiding those struggling to borrow during the crisis. Additionally, the Fed backed municipal bond liquidity through the Municipal Liquidity Facility and the Commercial Paper Funding Facility, expanding eligible collateral to include municipal debt.

The Fed's crucial interventions during the pandemic were essential in maintaining the flow of credit to households and businesses, preventing further economic deterioration amid widespread job losses and restricted economic activity. By targeting various markets, including the Treasury, corporate, and municipal debt markets, the Fed ensured the continued functioning of vital financial systems, facilitating business survival and eventual recovery post-pandemic. Additionally, providing unlimited liquidity to financial institutions helped sustain credit availability, enabling them to meet the demands of businesses and individuals facing financial constraints.

Post Covid-19: Course Reversal by the Fed

The onset of inflation in 2021 posed a tougher landscape for monetary policy, prompting endeavors to curb inflation while upholding robust employment levels. Using a macroeconomic perspective, the government employed contractionary monetary policy as a means to control inflation in the economy. It is the central bank's — the Fed's — role to carry out contractionary monetary policy which is a type of monetary policy that aims to reduce the rate of money supply injected into the economy and fight inflation. The purpose of this policy is to promote low and stable inflation, low unemployment, and promote a stable economics environment for long-term growth. Monetary policy impacts the aggregate demand indirectly through interest rates. Interest rates are determined through the "money market" and can be thought of in a way similar to that of supply and demand. The money supply is decided by the Fed and is fixed. Graph 4 shows the how when money supply ($S_{M\,1}$) decreases along the demand for money curve (D_M), interest rates increase, and vice versa.

Graph 4. The Affect Money Supply has on Interest Rates

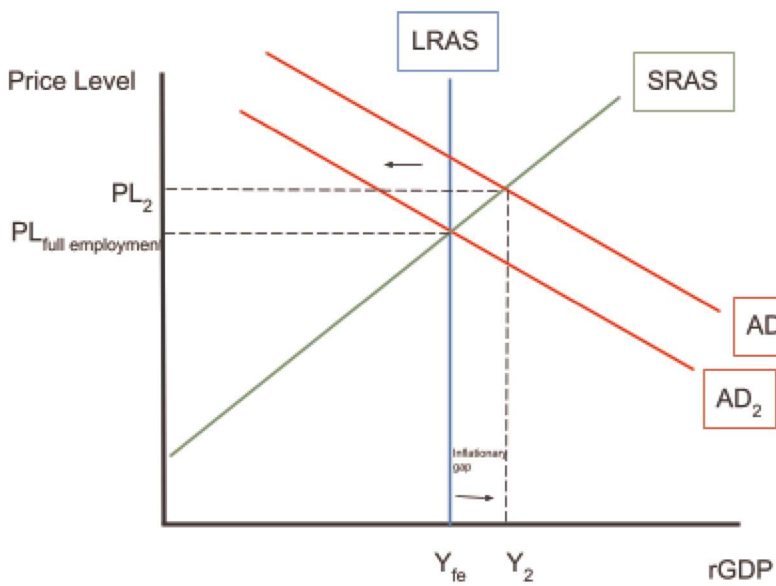


Since the U.S. economy is experiencing inflation due to an excess of aggregate demand explained earlier, the central bank will reduce the money supply which leads to higher interest rates. The Fed on March 16, 2022, after the Covid-19 pandemic subsided, shifted from its expansive monetary approach, initiating an increase in its short-term interest rate goal and a reduction in its long-term asset holdings (quantitative tightening)[23]. Interest rates were increased by 4.5%[24]. The US Federal Reserve has raised interest rates eleven times since March

[23] Jeff Cox, "One Year after the First Rate Hike, the Fed Stands at Policy Crossroads," CNBC, March 16, 2023, https://www.cnbc.com/2023/03/16/one-year-after-the-first-rate-hike-the-fed-stands-at-policy-crossroads.html.
[24] Jeff Cox, "One Year after the First Rate Hike, the Fed Stands at Policy Crossroads," CNBC, March 16, 2023, https://www.cnbc.com/2023/03/16/one-year-after-the-first-rate-hike-the-fed-stands-at-policy-crossroads.html.

2022[25]. This is the most significant tightening of monetary policy in decades. The end goal of this was to lower investment and consumer spending to decrease aggregate demand. Graph 5 illustrates the effects of contractionary monetary policy as its goal is to decrease aggregate demand and reduce inflation so the economy can return back to full output.

Graph 5. Impact of Contractionary Monetary Policy on Inflation



The Fed started reducing its balance sheet through quantitative tightening (QT). QT is the process of selling assets that the Fed has accumulated over the years, such as government bonds and mortgage-backed securities. This reduces the amount of money in the economy, which can help to cool demand and reduce inflation. The Fed emphasized its commitment to taking appropriate measures to prevent elevated inflation expectations from becoming firmly established.[26]

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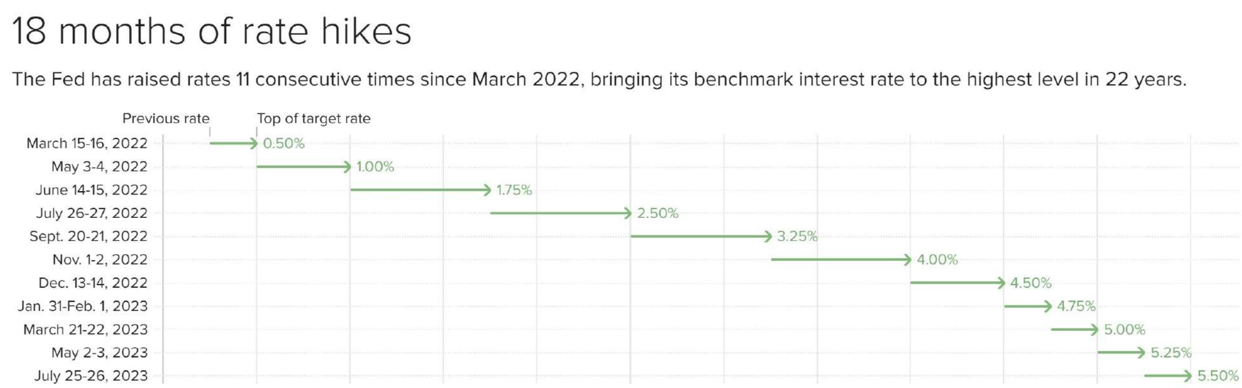
[25] "Federal Reserve Focuses Monetary Policy on Fighting Inflation: U.S. Bank," Federal Reserve Focuses Monetary Policy on Fighting Inflation | U.S. Bank, May 4, 2023, https://www.usbank.com/investing/financial-perspectives/market-news/federal-reserve-tapering-asset-purchases.html.

[26] "Tracking the Recovery from the Pandemic Recession," Center on Budget and Policy Priorities, accessed July 29, 2023, https://www.cbpp.org/research/economy/tracking-the-recovery-from-the-pandemic-recession.

Rate Hikes

The Fed has been aggressive in raising interest rates[27] and reducing its balance sheet because inflation is at a 40-year high in the US.[28] The Fed's target inflation rate is 2%, but inflation went to 9.1% in June 2022, the highest rate since November 1981. The Fed is determined to bring inflation back down to its target level, even if it means slowing economic growth.

Figure 6. Fed Rate Hikes



Source: Federal Reserve; Chart: Aimee Picchi

Quantitative Tightening

The Quantitative Tightening (QT) program launched by the US Federal Reserve (Fed) in March 2022 marked a significant step in monetary policy[29]. Starting at a pace of allowing up to $30 billion in Treasury securities and $17.5 billion in mortgage-backed securities (MBS) to mature monthly without reinvestment, the Fed doubled the pace to $60 billion in Treasury

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[27] Aimee Picchi, "Federal Reserve Pauses Interest Rate Hikes - for Now," CBS News, accessed July 29, 2023, https://www.cbsnews.com/news/federal-reserve-interest-rate-pause/.
[28] https://www.globaldata.com/data-insights/macroeconomic/us-inflation-hits-40-year-high/
[29] Akhilesh Ganti, "Quantitative Tightening (QT)," Investopedia, accessed July 29, 2023, https://www.investopedia.com/quantitative-tightening-6361478.

securities and $35 billion in MBS per month by June 2022[30]. The program's primary aim was to curb inflation and reduce the Fed's ballooning balance sheet, which swelled during the COVID-19 pandemic due to extensive asset purchases. Through the selling of these assets, the Fed intended to diminish the money supply, potentially leading to increased borrowing costs. There are two primary aspects to the expected impact of the QT program. First, by reducing the demand for Treasury securities and MBS and raising their yields, it is expected to increase interest rates[31]. As a result, borrowing might become more costly, which might put a stop to economic growth. Second, if there is less money in circulation, consumers may find it more difficult to spend, which might hinder economic growth overall and present challenges for businesses looking to make investments.

The Fed reiterated that it will keep the QT program in place until inflation reached its intended 2% level. It is still willing to change the program's pace, though, if needed. This program is significant since it is unique in the United States, and as such, its potential economic impact is undetermined. The Fed is working to implement QT in a way that reduces the possibility of upsetting financial markets and hurting the economy. Depending on the rate of drop in reserve balances and market conditions, the length QT program, or the reduction of the balance sheet, may last for an additional three years.[32]

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[30] "Plans for Reducing the Size of the Federal Reserve's Balance Sheet," Board of Governors of the Federal Reserve System, accessed July 29, 2023, https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm.
[31] "Plans for Reducing the Size of the Federal Reserve's Balance Sheet," Board of Governors of the Federal Reserve System, accessed July 29, 2023, https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm.
[32] Onsel Gulbiten, "Fed's Quantitative Tightening (QT) Will Face Constraints," Putnam Investments, accessed July 29, 2023, https://www.putnam.com/advisor/content/perspectives/10090-feds-quantitative-tightening-qt-will-face-constraints-2.

Reloading for the Next Crisis

Engaging in QT frees up capacity for a future quantitative easing (QE). If the Fed's balance sheet were to continue to grow, it could, in theory, run out of Treasuries or other acceptable assets to purchase to conduct QE in the future.

"The Fed would rather not have this ratchet effect where the balance sheet just keeps getting bigger, because at some point, you have a problem," says William B. English.[33] "I think they want to be clear that this is a counter-cyclical policy that they'll engage in to provide support when it's necessary, and they'll unwind when it's appropriate to do so."[34]

Looking Ahead

The Federal Reserve plans to maintain its benchmark rate for now, with the anticipation of potential rate hikes by the end of the year. They aim to keep rates high well into 2024, envisioning just two rate cuts that year, compared to the four they had previously anticipated. Despite stronger economic growth, inflation remains a concern, with the Fed's forecast suggesting that inflation might not reach 2% until 2026. While the Fed paused tightening this month, it remains vigilant in monitoring economic data, including factors such as the United Auto Workers' strike and the resumption of student loan payments. Some economists suggest another rate hike could occur at the Fed's November 1 meeting, unless there is a significant weakening in inflation data before then.

[33] English, William B., and Donald Kohn. "What if the Federal Reserve Books Losses Because of Its Quantitative Easing?" Brookings Institution "Up Front" blog, June 1, 2022.
[34] English, William B., and Donald Kohn. "What if the Federal Reserve Books Losses Because of Its Quantitative Easing?" Brookings Institution "Up Front" blog, June 1, 2022.

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