Central Banks to the Rescue

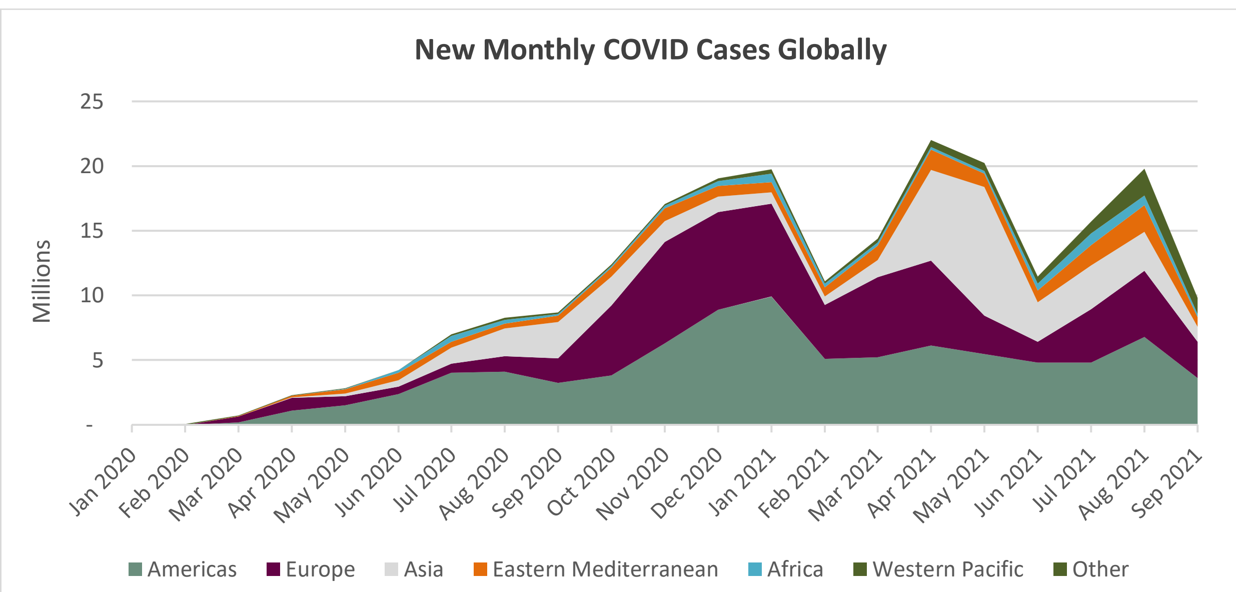
Global Monetary Policy Response During the Age of COVID-19

The novel coronavirus pandemic that spread across the globe beginning in late 2019 and early 2020 presented nations with a crisis that threatened both the health of populations, as well as the vitality of national economies. As the pandemic spread, negative economic impacts resulting from pandemic mitigation measures were felt at a speed and scope not seen before.

Prior economic recessions were often associated with asset bubbles, speculation, easy credit, or weak regulation. The blow to the global economy from COVID-19 was a new kind of shock; one tied to social distancing and quarantines that shuttered businesses, sealed borders, disrupted supply chains, eliminated jobs, increased financial market volatility, and left policy makers scrambling for solutions. Recovery efforts differed across borders, but the crisis engendered immediate and decisive action from central banks across regions, some of which were still recovering from the effects of the global financial crisis of 2008-09. Central banks implemented traditional recession-fighting weapons, but the speed, size, and magnitude of their efforts to address the COVID-induced recession were unprecedented as they were varied. Central banks continued to support their economies while stabilizing capital markets through monetary policy, maintaining open market operations, repurchase agreement facilities, lowering bank reserve requirements, reintroducing asset purchases, and creating capital market back-stops, all of which provided much needed confidence and liquidity to a global financial system threatened by COVID-19.

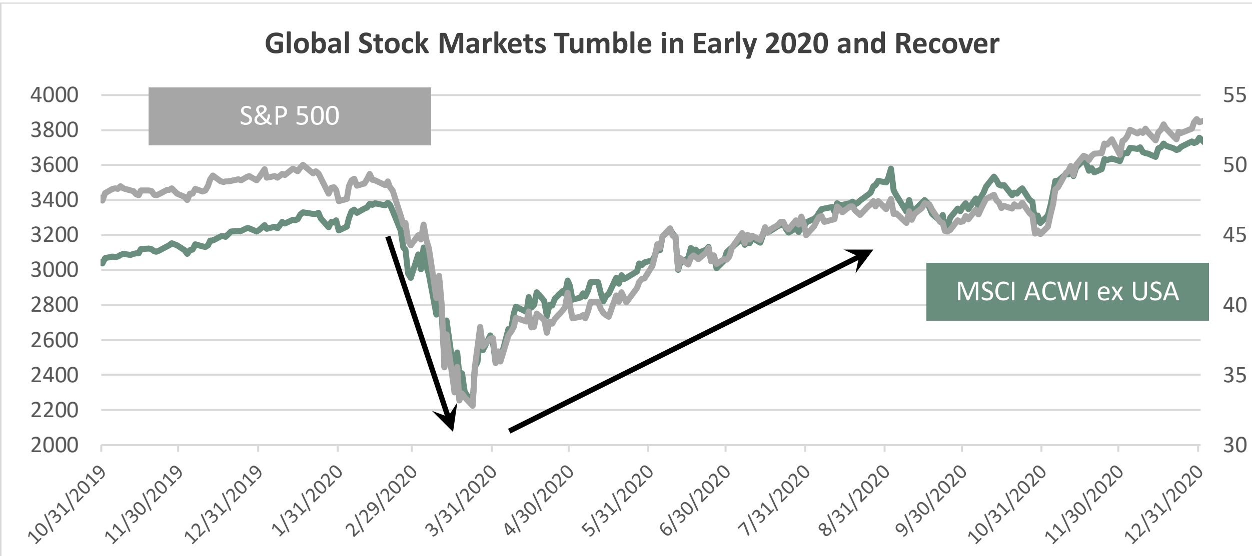
How Did We Get Here?

The early days of COVID-19 were characterized by uneven impacts in different regions as the virus gradually spread from its suspected source in the Hubei province in China. Central banks were defensive



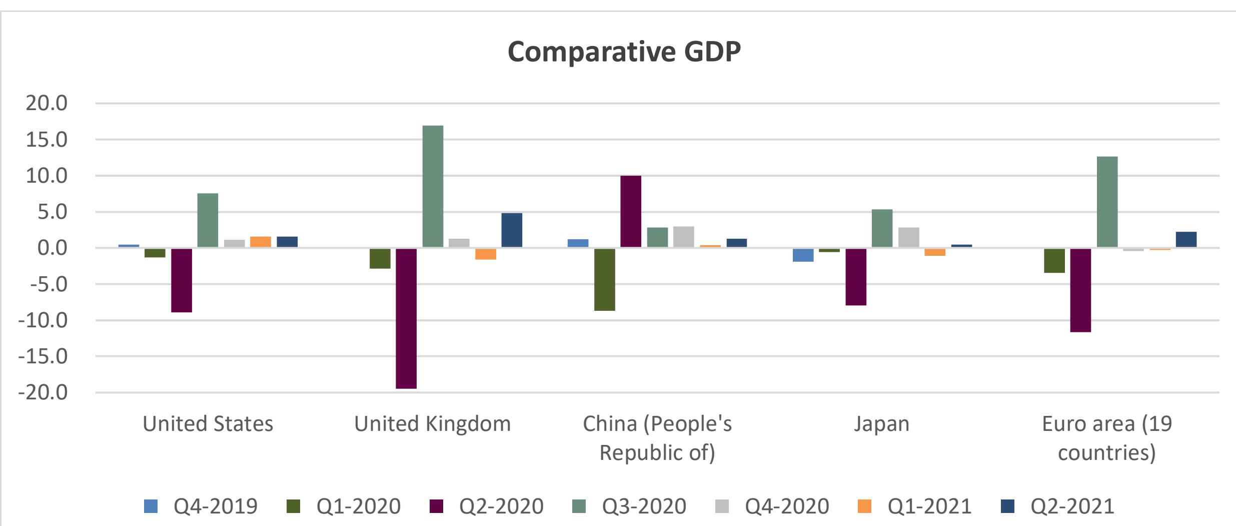
Source: World Health Organization; https://worldhealthorg.shinyapps.io/covid/

before COVID-19 began spreading. By the end of 2019, the Federal Reserve had lowered their key lending rate three times. Despite this, financial optimism continued to persist as gains were buoyed by expectations that any possible recession would be mild. Yet in short time, Chinese authorities commenced a drastic lockdown of the Hubei province, causing great economic turmoil in China. Further advances of the virus in Europe and mounting cases in the United States quickly caused a flight to quality among investors, plummeting stock valuations by as much as one-third from February to March. Following China’s example, most advanced economies implemented lock-down measures which deeply impacted global economic growth.



Source: Bloomberg

The deepest impact was felt in April when lockdown measures prevented domestic and international travel, free flow of trade goods, and in-person attendance for all but the most crucial jobs, bringing economies to a standstill.



Source: OECD. Growth rate based on seasonally adjusted volume data, percentage change from the previous quarter

Economic growth retreated during the first and second quarters of 2020, manifesting the severity of the lockdown's effects on economic activity. The U.S. labor force lost approximately 21 million jobs and the European area economy contracted 11.7% from the prior quarter, as Europe and the Americas were experiencing over 87% of recorded cases.

What Sort of Measures Did Central Banks Put In Place to Combat COVID-19?

Central banks quickly mobilized to address deep recessionary forces through aggressive monetary stimulus for the most part coordinated with unprecedented fiscal stimulus enacted by the ruling legislative and parliamentarian branches of government. Primarily, central banks across the globe implemented measures under the following categories:

- **Key Policy Rate Cuts.** Cuts in a central bank's key lending rate signal a willingness of a central bank to combat deflationary pressures by lowering interest rates. Rate cuts are designed to encourage borrowing, thereby increasing the velocity of money supply, and in turn, bolstering aggregate demand. Rate setting is one of the primary tools of a central bank to combat inflation and recession. In most advanced economies, the rate cuts during COVID-19 followed an approach similar to that of the global financial crisis. The Federal Reserve (Fed), the People's Bank of China (PBOC), and the Bank of England (BoE) all cut rates aggressively though in a smaller amount vis-à-vis the global financial crisis given their already low starting point. These central banks also provided forward guidance to signal to investors their intentions about future rate levels.
- **Asset Purchases.** The United States and Europe successfully employed asset purchase programs targeting longer duration fixed income securities. Asset purchases create additional demand for securities, placing upward pressure on their fair value, which in turn lowers their yield for market participants. Sometimes referred to as quantitative easing, asset purchase programs are an effective tool in a central bank's arsenal. Initially, the Fed, the PBOC, and the BoE purchased bonds from their nations' treasuries (the Fed also purchased federal agency mortgages), though they expanded purchases to include private assets. The European Central Bank (ECB) launched the Pandemic Emergency Purchase Programme (PEPP) as a temporary purchase program able to buy private and public sector securities. PEPP is able to buy up to €1.8 billion.[1] The Bank of Japan (BoJ) increased existing programs of private asset purchases and included the purchase of equity securities through the purchases of exchange traded funds (ETFs).
- **Liquidity Provisions/Credit Support.** Many central banks provided liquidity to the capital markets by directly purchasing corporate securities, providing direct lending facilities to industrial firms, guaranteeing liquidity for capital market sectors by backstopping securities floated by offer, and expanding credit to businesses. The Fed's Main Street Lending Program is an example where a central bank purchased shares of bank loans to business. The BoE also introduced their version, known as the Term Funding Scheme (TFS). Central bank activity in

[1] https://www.ecb.europa.eu/mopo/implement/pepp/html/index.en.html

this category bolstered investor confidence and promoted liquidity for businesses.

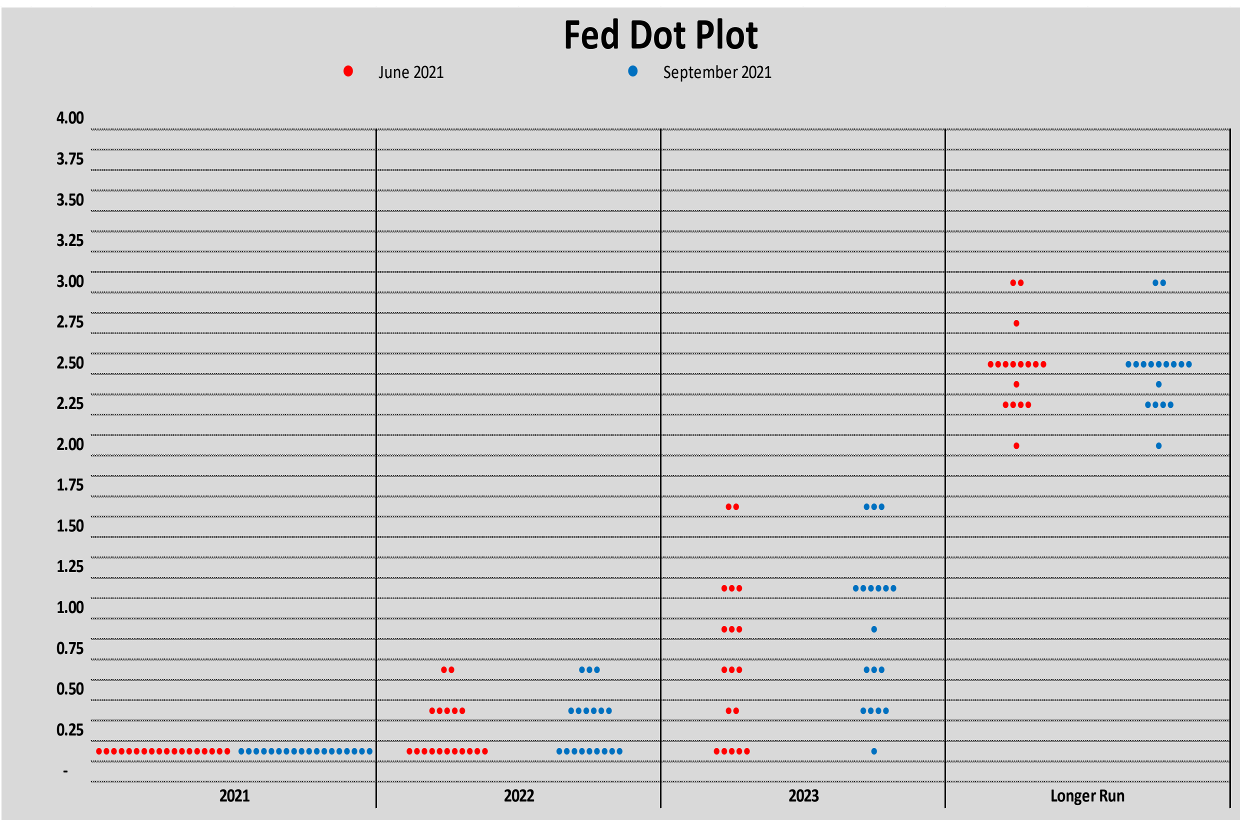
- **Regulatory Action.** Most regulatory action involved lowering of capital buffers and liquidity requirements to encourage bank lending to extend credit and increase liquidity while avoiding exacerbating already adverse conditions on banks needing to meet stringent regulatory requirements.

Stimulus in the U.S.A.

The United States confirmed the first case of COVID-19 in January of 2020, and cases increased significantly throughout the year. The economy contracted 31.4% in the second quarter of 2020 but rebounded strongly in the quarters that followed. The Fed intervened by quickly lowering rates in March by 150 basis points to a Federal Funds Target Rate of 0% – 0.25%. The Fed also lowered borrowing costs for credit at the discount window and embarked on a purchasing program that included U.S. Treasuries and federal agency mortgage-backed securities. In conjunction with strong fiscal stimulus being made available by Congress, the Fed also launched a host of programs to support the capital markets. Of note are the Commercial Paper Lending Facility to help issuers avoid liquidity problems, when they issued commercial paper, Primary Dealer Credit Facility to provide financing to primary dealers, and many more detailed below.

Fed Action	Details
Rate Cuts	• Cut fed funds target rate by 1.50% to 0.00-0.25% • Discount window rate lowered to 0.25% • Fractional reserve requirement 0% • Interest on Excess Reserves cut to 0.10%
TSY/Agency MBS Purchases	• $500 billion+ TSY and $200 billion+ AGY MBS
Repo Operations	• $1.5 trillion+ short-term repo facilities to provide liquidity
Commercial Paper Funding Facility (CPFF)	• Purchases of Tier 1 CP
Primary Dealer Credit Facility (PDCF)	• Loans to Primary Dealers up to 3 months
Money Market Mutual Fund Liquidity Facility (MMLF)	• Liquidity to MMFs in form of loans to banks to purchase assets from MMFs
FX Swap Lines	• Temporary lending to boost circulation of dollars worldwide
Primary Market Corporate Credit Facility (PMCCF)	• Purchases of investment grade corporate debt directly from issuers
Secondary Market Corporate Credit Facility (SMCCF)	• Purchases of investment grade debt in the secondary market
Term ABS Loan Facility (TALF)	• Loans to investors to buy highest-rated ABS to support consumer and business credit
Municipal Liquidity Facility	• Up to $500 billion in lending to states and municipalities via debt security purchases from states, large counties, and cities
Main Street Lending Program	• Up to $600 billion in loan purchases from small-and-mid-sized businesses
Paycheck Protection Program Liquidity Facility	• Liquidity to participating financial institutions through term financing backed by PPP loans to small businesses

Currently, the Fed continues to maintain the easy monetary policy and continues to purchase U.S. Treasury securities and federal agency mortgage-backed securities, though discussions about tapering asset purchases have begun and continue to be debated. GDP has rebounded for the United States, and inflationary pressures which are believed to be transitory have surfaced, though the Fed continues to focus on improving the labor market, with unemployment at 4.8% for the month of September 2021. Investors continue to focus on when the Fed will start to raise interest rates and how fast they will rise. The Fed has typically attempted to move its benchmark rate to an equilibrium point, where the economy is functioning at full employment and capacity utilization while maintaining stable prices. The Fed's long-term rate projection is currently estimated at 2.5%, but there is much debate as to whether this will be the appropriate terminal rate over the long run, considering advances in inflation and employment. Moreover, while it is near-certain that extreme accommodative measures such as purchases of ETFs and capital market backstops are ending or have already ended, there is strong evidence that the Fed will likely maintain its benchmark rate lower for a longer period. Any future anticipated Fed moves must also be weighed considering the changing make-up of the Federal Open Market Committee. Recent announcements of the upcoming retirements of Robert Kaplan and Eric Rosengren have fueled speculation that the new FOMC may tilt more towards a dovish bias. In any case, a lower Fed Funds Target Rate for a longer period may cause the U.S. Treasury Yield Curve to steepen in intermediate term, especially as inflationary pressures associated with a broader economic reopening continue to mount.



EU Still Hanging On

The blow to the global economy from COVID-19 was a new kind of shock; one tied to social distancing and quarantines that shuttered businesses, sealed borders, disrupted supply chains, eliminated jobs, increased financial market volatility, and left policy makers scrambling for solutions. Recovery efforts differed across borders, but the crisis engendered immediate and decisive action from central banks across regions.

Europe has been one of the regions more heavily impacted by the negative effects of COVID-19, and before the pandemic, the ECB's policy was accommodative (2019 saw the deposit facility rate lowered to -0.5% and the Asset Purchase Programme, APP, had resumed asset purchases).

The ECB committed to providing support to the region through a policy of asset purchases of an additional €120 billion through the end of 2020 under APP and through the creation of the Pandemic Emergency Purchase Programme (PEPP). They are also keeping borrowing rates affordable by maintaining the deposit facility rate at -0.5% and Main Refinancing Operations (MRO) at 0.0% and expanding lending programs known as the Targeted Longer-Term Refinancing Operations (now on its third round). Lastly, the Governing Council of the ECB has provided forward guidance that it expects to keep policy rates at their current or lower levels until the inflation outlook converges to their inflation target within a projection horizon on a consistent basis. Indeed, this past September, in a move they characterized as "recalibrating," policy makers maintained their monetary policy unchanged, but opted to slow down the pace of net asset purchases under PEPP. They have reiterated that rates will remain at their present or lower levels until inflation is seen reaching 2% ahead of its projection horizon and durably for the rest of its projection horizon. Euro zone inflation did notch to a decade high of 3% in August and GDP across the 19-member common currency bloc climbed 2% in the second quarter, exceeding expectations.

Bank of China Moving Chinese Economy Along

China was the first nation to impose strict containment measures that saw the effective shutdown of an entire province. Their economy initially contracted 6.8% in the first quarter of 2020. The PBOC injected liquidity into its banking system through open market operations, expanded re-lending and re-discounting facilities by RMB 1.8 trillion to support various manufacturers, as well as reduced interest rates for these by 50 and 25 basis points respectively. They also coupled this with a reduction in the Medium-Term Lending Facility (or MLF, the main rate at which the central bank lends to big commercial banks) by 30 basis points. Equally important for China is the state of their exchange rate, which has been allowed to adjust flexibly. Of note, the PBOC has removed the use of the counter-cyclical factor in their currency's central parity model. This has allowed China to guide and stabilize market expectations in a more market-based direction.

Initially, China's economy was quick to achieve growth once COVID-19 was under better control. Their GDP grew by 3.2% year-over-year in the second quarter of 2020 after falling 6.8% in the first quarter. Despite this, China's growth is under a renewed threat from a rise of the COVID-19 Delta variant, as well as concerns about the real estate sector controls, as evidenced by slowing retail sales (2.5% year-over-year, versus the expected 7% Bloomberg survey of economists) through August 2021. In September 2021, China reiterated that their monetary policy is currently within normal range, and will not embark on largescale stimulus, consistent with other large economies like the United States. Most economic indicators point to continued slow growth, though any outcomes must be weighed against possible disruptions due to increased COVID infections, and possible economic turmoil related to credit overextensions in the real estate sector.

Bank of Japan's Measures to Address COVID-19

Japan's GDP fell by 4.8% in 2020 due to a sharp drop in domestic consumption. Exports have also fallen sharply as global trade continues to suffer from the negative effects of COVID. The BoJ's approach to maintaining stability in their financial markets focused on government bond purchases, the creation of special funds to support corporate financing, and increased purchases of ETFs and Japan Real Estate Investment trusts (J-REITs). The government bond purchases are being expanded to maintain stability in the bond market and stabilizing rates. The BoJ has stated that they have no set limit for government bond purchases. As to the corporate financing program, the BoJ has focused on purchasing commercial paper and corporate bonds as well as providing Special Funds-Supplying Operations as a measure to incent banks and other financial institutions to expand lending activities. The BoJ's ETF and J-REIT purchases are being implemented to reduce overall risk in the asset markets. To date, the BoJ has discussed up to 12 trillion yen for ETFs and 180 billion for J-REITs). The BoJ's three-pronged approach to easing has increased lending without the volatility experienced during the global financial crisis. The BoJ stated at its September 22, 2021, meeting, that the Bank should continue to support financing and maintain financial market stability through its three measures, and market support should continue its current monetary policies, as there has been no significant change in financial conditions.

Banking by Committee: The Bank of England

The early phase of COVID-19 caused economic activity in the United Kingdom to fall dramatically as liquidity dried up and the capital markets became more volatile. Decisions regarding policy at the BoE center around the Monetary Policy Committee (MPC), Financial Policy Committee (FCP), and Prudential Regulation Committee (PRC). Through this framework, the BoE was able to reduce its Bank Rate by 65 basis points to 0.1%. it also expanded the banks holding of UK government bonds and non-financial corporate bonds by £450 billion, introduced the aforementioned Term Funding Scheme as a companion policy to low rates. The UK Treasury (HM Treasury) and the BoE have also agreed to provide short-term additional liquidity should the government need it, as well as a joint Treasury and BoE COVID Corporate Financing Facility and additional government loan guarantee plans for a total of £352 billion, roughly equivalent to over 19% of GDP. Currently, the BoE is setting a policy to meet a 2% inflation target, and in August, voted unanimously to maintain Bank Rate at 0.1% and continue the current pace of asset purchases.

What Is The Path Forward?

As we progress into the fall of 2021, inflationary pressures (except for China) continue to grow in the face of reopening economies and the proliferation of vaccines. Central banks continue to maintain an easing monetary policy stance, while at the same time, moving away from extraordinary stimulus measures. Regardless of the measures taken by the different central banks, global economies must remain resilient in the face of increased financial volatility, ambivalence toward COVID-19 vaccination, and increased price pressures due to pent-up demand, disrupted supply chains, and continued sector expansion as COVID-19 health policies evolve.

Carlos Oblites
Senior Portfolio Strategist

Questions?

Please contact Chandler at info@chandlerasset.com, or toll free at 800-317-4747 with any questions or to learn about investment management solutions for public entity investment programs.