



Economic Review - Fourth Quarter 2022

The state of the general economy can help or hinder a business' prospects by influencing the demand for its goods and services. The economy also affects the availability and price of inputs such as capital and labor. The prevailing economic conditions therefore directly affect the value of a business at a specific point in time. The 128-month economic expansion from June 2009 to February 2020 was the longest since the 1850s. The COVID-19 global pandemic suddenly and severely affected economies and markets around the world, causing the U.S. economy to lose nearly 22 million jobs and go into a recession from February 2020 to April 2020, which was the shortest recession in U.S. history. After returning to growth in April 2020, the U.S. economy rapidly recovered, adding back nearly 19 million jobs in the following 20 months. Despite a decline in gross domestic product in the first and second quarters to start the year, the economy has managed to add over 4.8 million jobs in 2022, and gross domestic product returned to growth in the third quarter of 2022.

Summary

The state of the general economy can help or hinder a business' prospects by influencing the demand for its goods and services. The economy also affects the availability and price of inputs such as capital and labor. The prevailing economic conditions therefore directly affect the value of a business at a specific point in time. The 128-month economic expansion from June 2009 to February 2020 was the longest since the 1850s.¹ The COVID-19 global pandemic suddenly and severely affected economies and markets around the world, causing the U.S. economy to lose nearly 22 million jobs and go into a recession from February 2020 to April 2020, which was the shortest recession in U.S. history.² After returning to growth in April 2020, the U.S. economy rapidly recovered, adding back nearly 19 million jobs in the following 20 months. Despite a decline in gross domestic product in the first and second quarters to start the year, the economy has managed to add over 4.8 million jobs in 2022, and gross domestic product returned to growth in the third quarter of 2022.

The Federal Open Market Committee (the "Committee") of the Federal Reserve held two meetings during the fourth quarter of 2022; one in November and one in December to discuss the additional measures being taken to support the economy, which include:

- Increasing the target range for the federal funds rate by 75 basis points in November and 50 basis points in December; representing a total change in the target range from 3.0 percent-to-3.25 percent to 4.25 percent-to-4.50 percent.
- Signaling that additional rate increases are will likely be necessary to continue to reduce inflation toward its 2.0 percent target, although the Committee has indicated it will consider the aggregate impacts of their tightening of monetary policy over the

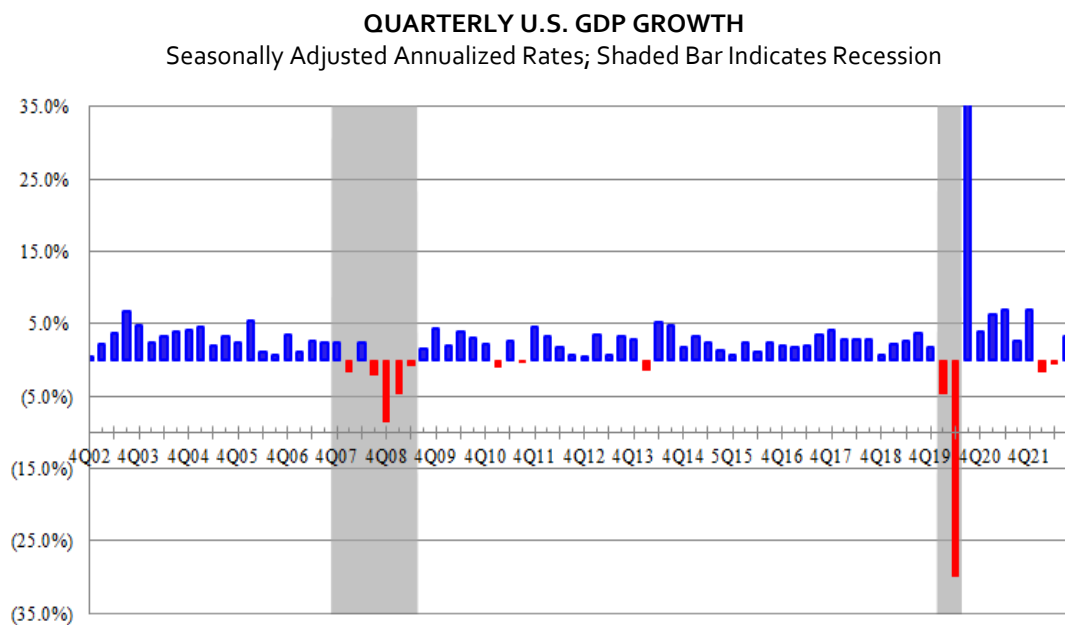


last year, as the Committee expects the effect of previous rate increases to be working with a lag throughout the economy.

- Continuing its reduction of the assets held on the Federal Reserve’s balance sheet by \$95 billion per month.³

Gross Domestic Product

The U.S. Bureau of Economic Analysis estimates that real gross domestic product (GDP)—the output of goods and services produced by labor and capital located in the United States—increased at an annual rate of 3.2 percent in the third quarter of 2022; which is a change of course following declines of 1.6 percent and 0.6 percent in the first and second quarters of 2022, respectively. In 2021, GDP increased by 5.7 percent for the year, compared to a 3.5 percent decline in 2020. Quarterly GDP data for the preceding 20 years is shown in the following figure.

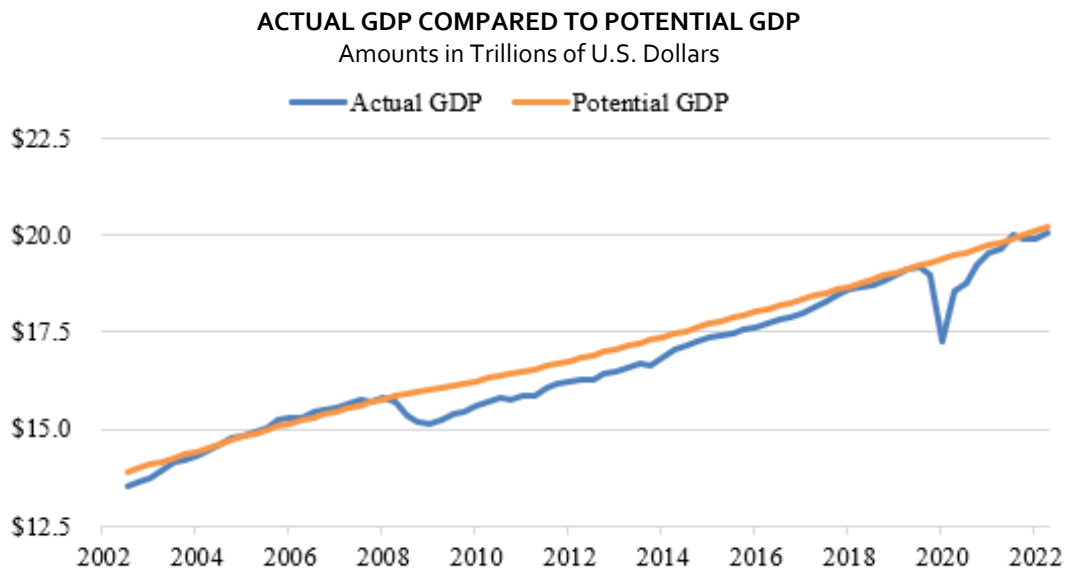


Sources: U.S. Bureau of Economic Analysis and National Bureau of Economic Research. GDP percent change is based on chained 2012 dollars.

The brief 2020 recession caused by the coronavirus pandemic resulted in real GDP in the U.S. to fall to \$17.3 trillion in the first quarter of 2020, which was \$2.1 trillion below the \$19.4 trillion potential real GDP estimated by the Congressional Budget Office. After actual GDP briefly exceeded potential GDP in the fourth quarter of 2021, the declines in output in the first two quarters of 2022 brought upon shortfall of \$0.21 trillion between actual and potential GDP. The growth in actual GDP in the third



quarter of 2022 has tightened this deficit to \$0.14 trillion. Actual GDP and potential GDP for the past 20 years are shown in the following figure.



Sources: U.S. Bureau of Economic Analysis and Congressional Budget Office. GDP is based on chained 2012 dollars.

The Federal Reserve projects GDP to finish with modest growth of 0.5 percent for 2022. Thereafter, it projects GDP growth rates of 0.5 percent and 1.6 percent in 2023 and 2024, respectively, before settling at 1.8 percent annual growth for the long-run.

Employment

From March 2010 (the end of the 2008–2009 recession) to February 2020, 23.2 million net non-farm jobs were created.⁴ After the brief recession caused by the coronavirus pandemic eliminated ten years of job growth in just a few months, the economy returned to its pre-pandemic levels of employment in the third quarter of 2022. In the fourth quarter of 2022 alone, an additional 874,000 jobs were added. The unemployment rate was 3.5 percent in December, near the 53-year low of 3.4 percent in 1969. A more expansive measure of labor underutilization, including discouraged workers who have left the workforce and part-time workers who would prefer full-time work, fell to 6.5 percent by the end of the fourth quarter (an all-time low since data was first collected in 1994).⁵

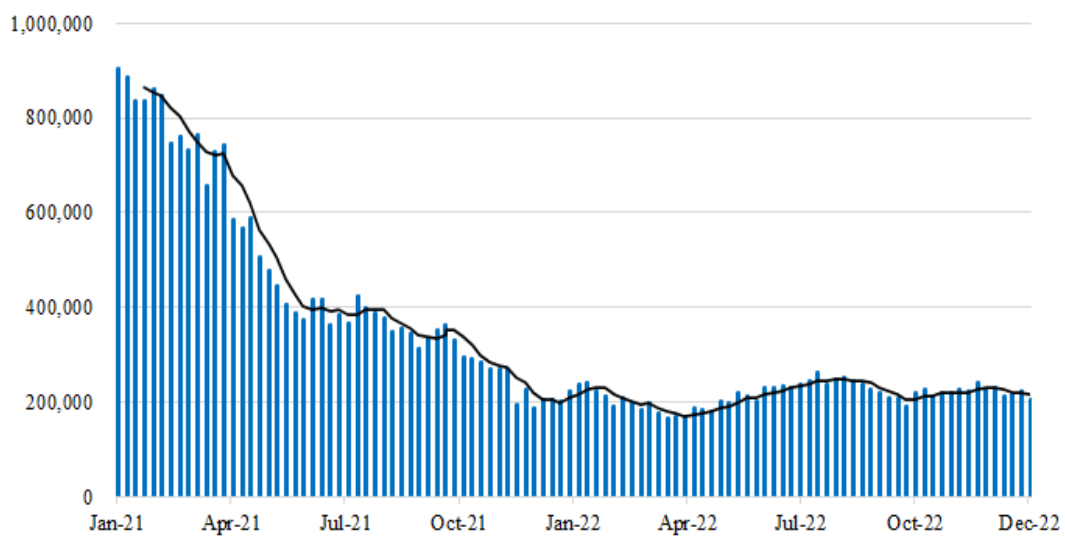
Beginning in March 2020, national, state, and local governments began instituting lockdowns that forced the closures of many businesses and restricted the free movement of citizens, and a wave of layoffs and furloughs began. Initial unemployment claims, which had averaged 218,000 per week in 2020 prior to the COVID-19 pandemic, spiked to a high of 6,648,000 for the week ending March 28, 2020. As the economy and labor market recovered, initial unemployment claims have remained



historically low, declining slightly to an average of 221,000 throughout the fourth quarter of 2022 compared to an average of 232,000 throughout the third quarter.

After initial claims fluctuated between approximately 210,000 and 230,000 for most of the fourth quarter, they fell to quarter-low of 206,000 for the week ending December 31, 2022. Initial claims are still near the lower end of its historical range and continue to signal an extremely tight labor market despite recession and inflation concerns. Weekly initial unemployment claims and the four-week moving average for the past two years are shown in the following figure.

WEEKLY INITIAL UNEMPLOYMENT CLAIMS



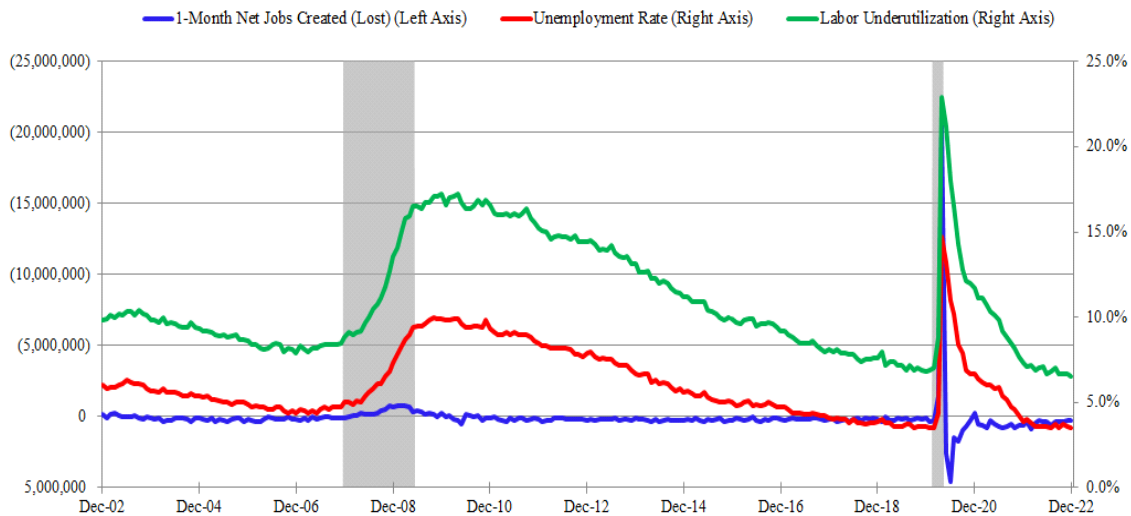
Source: Federal Reserve Bank of St. Louis.

Unemployment and underemployment restrain economic growth as consumers are unable or hesitant to spend. The past 20 years of job creation, employment, and underemployment data are presented in the following figure.



MEASURES OF STRESS IN THE LABOR MARKET

Shaded Bar Indicates Recession



Sources: Department of Labor, Bureau of Labor Statistics, and National Bureau of Economic Research. Data represents non-farm payrolls.

While the labor market has continued to improve in recent quarters and is recovering well from the pandemic, there is still a large mismatch between the number of people actively looking for work and the number of unfilled job openings. As of December 2022, while there were approximately 5.7 million unemployed people seeking work, businesses reported that there were still 11 million job openings available.^{6 7} In addition, over 4 million workers reportedly quit their jobs in the month of December, a level which has remained near all-time highs in previous months.⁸ The higher the rate at which workers quit is generally viewed as a positive sign for the labor market, as workers will usually only quit their job if they believe they can find or have found a better job. The Committee believes that the large number of job openings relative to the number of people seeking work and workers' willingness to quit their current job indicate that labor conditions are remaining strong.

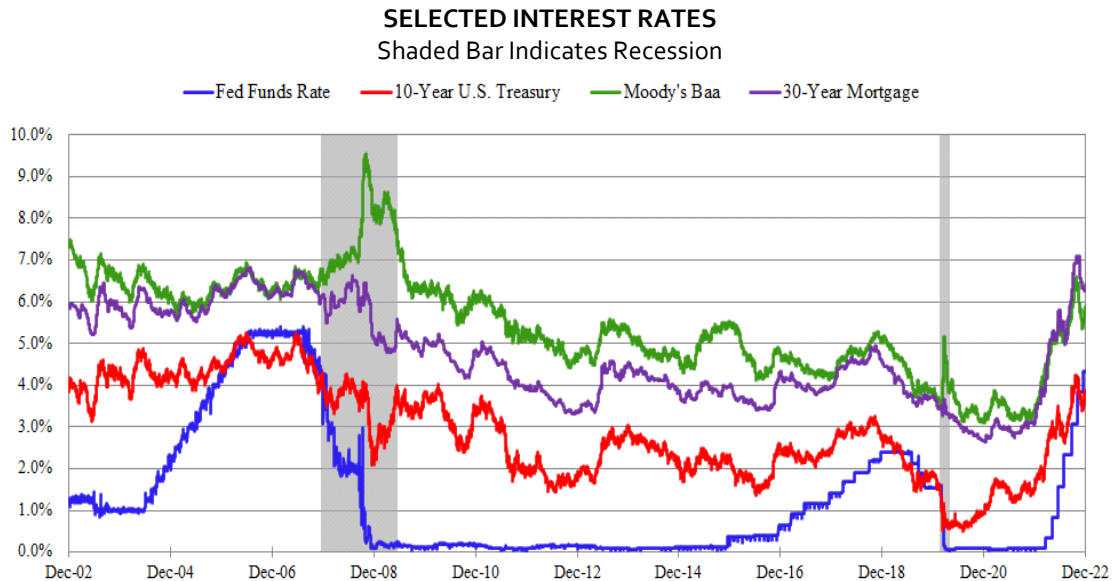
Interest Rates

Interest rates declined or remained flat during the fourth quarter of 2022, although they remained elevated compared to recent years. Optimism is emerging that the Committee may be nearing completion of its rate increase cycle. In other words, investors believe the federal funds rate may be reaching its "terminal" level, which is the point at which inflation can continue to moderate towards the 2.0 percent target without further hindering growth.

The yield on the 10-year U.S. Treasury remained effectively flat during the fourth quarter (increased by 5 basis points) to 3.88 percent, which is its highest level since April 2010. During the fourth quarter, the Moody's Baa rate decreased by 20 basis points to 5.87 percent, while the 30-year fixed home



mortgage rate declined by 28 basis points to 6.42 percent, fueled by hopes that the Committee's tightening of monetary policy is nearing completion. Interest rates are likely to continue to closely follow the actions and outlook provided by the Committee. The past 20 years of historical interest rate data are shown in the following figure.



Source: Federal Reserve Statistical Release H.15 (519) Selected Interest Rates.

Stock Market Activity

The NASDAQ Composite was the lone major U.S. index to post a negative return in the fourth quarter of 2022. While all the other major indices had gains during the fourth quarter, the year finished with a widespread decline in equity prices. Volatility moderated compared to recent quarters, but still reflected concerns over persistently high inflation and how aggressive the Committee will be in its rate increases to reduce inflation. The uncertainty of a recession continues to weigh on investors as it is unknown how high the Committee will eventually raise rates to rein in inflation.

The Dow Jones Industrial Average was the best performing major U.S. index during the fourth quarter of 2022, as investors preferred industrial companies who are not as vulnerable to interest rates as technology-based companies are. Accordingly, the NASDAQ Composite continued to be the worst performing index for the fourth quarter and all of 2022, as the unclear path of rising interest rates weighs on the value of future cash flows. In addition, the strengthening of the U.S. dollar throughout the year has relatively weakened the revenue these global technology companies bring in from foreign customers, which is a considerable portion of their revenue.



The major indices were buoyed by optimism driven by recent data that inflation is indeed receding without further declines in gross domestic product, and while the labor market remains remarkably strong. While most investors were all but certain a recession was incoming, it's becoming more realistic that the Committee may be able bring down inflation without inducing a widespread decline in economic activity and a steep rise in unemployment to do so. As a result, most of the major indices (other than the NASDAQ) scraped back some of their losses for the year with a strong fourth quarter. Total returns for U.S. stock indices are shown in the following figure.

TOTAL RETURNS OF MAJOR U.S. STOCK INDICES

Index	Fourth Quarter 2022	Year to Date
S&P 500	7.6%	(18.1%)
Dow Jones Industrial Average	16.0%	(6.9%)
NASDAQ Composite (1)	(1.0%)	(33.1%)
S&P MidCap 400	10.8%	(13.1%)
Russell 2000	6.2%	(20.4%)

Note:

(1) Return represents principal only.

Inflation⁹

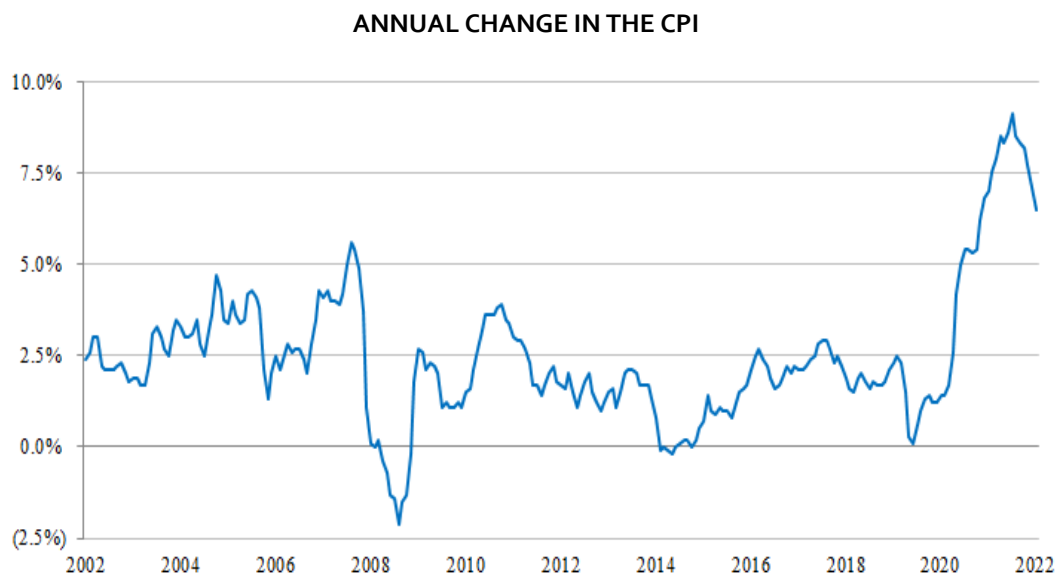
Inflation continued to be the most prevalent topic surrounding the U.S. economy throughout the fourth quarter of 2022. Although improving, the subdued global recovery from the coronavirus pandemic continues to hinder international supply chains from achieving their pre-pandemic capacity, and the Russian invasion of Ukraine has adversely affected global food and energy prices. Chairman Powell has reiterated that the Committee will utilize the appropriate tools to fulfill its dual mandate as directed by Congress, which includes stable prices (defined as 2.0 percent annual inflation). The consumer price index ("CPI") decreased by 0.1 percent in the month of December alone, its first monthly decline since November 2018. The CPI increased 6.5 percent for the 12 months ending December 2022, further extending the downward trend that began in July 2022. The price of fuel oil continued its decline in the fourth quarter, but remains over 41 percent higher in December 2022 than one year prior.

Core CPI, which excludes oil and food due to their volatility, increased by 5.7 percent over the 12-month period ending December 2022, which is a decline from the 6.7 percent increase for the 12-month period ending September 2022, signaling that inflation for main goods and services remains high but is improving. Core CPI rose by 0.3 percent in December 2022 alone, a notable decline from 0.6 percent in September 2022. It is no longer a question whether inflation will go down, but how long it will take to reach the Committee's 2.0 percent long-term target. The Committee is expected to begin to ease its rate increases (both in frequency and magnitude) as the effects of previous hikes



gradually work their way through the economy, and data continues to suggest inflation is trending downward.

The last time inflation was comparable to our current environment was the early 1980s, which exhibited some of the issues being experienced today; global and political instability, as well as energy and oil shocks. However, the current inflationary environment is particularly surprising given how muted inflation had been for the past two decades. Since 2002, inflation had only reached 5.0 percent for a brief period in 2008, and had since failed to exceed 4.0 percent until April 2021. The annual change in the CPI for the last 20 years is shown in the following figure.



Source: Bureau of Labor Statistics.

As a result of the reduction in the pace of inflation in recent months, inflation expectations are beginning to reflect that optimism among consumers. The Federal Reserve monitors inflation expectations because if consumers and businesses anticipate an increase in wages and prices, they can adjust their behavior accordingly, making the expected inflation a reality. Every month, the Federal Reserve Bank of New York publishes expectations of future inflation. Prior to 2020, one-year forward-looking inflation expectations generally remained between 2.5 percent and 3.0 percent since 2015. One-year forward-looking inflation expectations have continued to decrease from a high of 6.8 percent in June 2022 to 5.0 percent in December 2022; a positive sign that the Committee's actions and incoming data are indicative of progress towards price stability. In addition, three-year forward looking inflation expectations remain elevated above the Committee's longer run 2.0 percent target, but have declined over the past year from nearly 4.0 percent to 3.0 percent as of December 2022.¹⁰



The Committee has continued to adjust its stance as the outlook of inflation changes over time based on new economic data. However, the Committee has recently confirmed its intent to adjust its policies accordingly for the purpose of achieving stable prices. At its December meeting, the members of the Committee provided their outlook of the target range for the federal funds rate in the coming years. The members are in agreement that the target range for the federal funds rate will be between 4.75 percent and 5.75 percent by the end of 2023. In 2024, there is some variance of projections for the target range, with more than half of the members indicating an appropriate range somewhere between 3.75 percent and 4.25 percent; however, a decent collection of members believe an appropriate target range could be as high as 5.0 percent. In the longer run, all of the Committee members indicate a target range somewhere between 2.0 percent and 3.0 percent is likely.¹¹

The Federal Reserve publishes estimates of personal consumption expenditures (“PCE”) inflation and Core PCE inflation. It projects inflation to continue to subside in 2023, with PCE inflation of 3.1 percent and Core PCE inflation of 3.5 percent. In the years to follow, the Federal Reserve expects inflation to retreat to more moderate levels. It projects PCE and Core PCE inflation of 2.5 percent in 2024, followed by PCE and Core PCE inflation of 2.1 percent in 2025, supporting its belief that the Committee’s policies will not allow the inflationary environment to exist long-term.¹²



Disclaimer: this article has content that is general and informational in nature. This document is not intended to be accounting, tax, legal, or investment advice. Data from third parties is believed to be reliable, but no assurance is made as to the accuracy or completeness.

Endnotes:

1. National Bureau of Economic Research.
<<https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions>>.
2. Ibid.
3. Board of Governors of the Federal Reserve System, "Plans for Reducing the Size of the Federal Reserve's Balance Sheet", May 4, 2022.
<<https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm>>.
4. Bureau of Labor Statistics. "Employment, Hours, and Earnings from the Current Employment Statistics survey (National)." <http://data.bls.gov/timeseries/CES000000001?output_view=net_1mth>.
5. "U-6 total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force." Reported on a seasonally adjusted basis.
6. Bureau of Labor Statistics, "The Employment Situation - December 2022," January 6, 2023,
<<https://www.bls.gov/bls/news-release/empisit.htm#2022>>.
7. Bureau of Labor Statistics, "Job Openings and Labor Turnover - December 2022," February 1, 2023,
<<https://www.bls.gov/news.release/jolts.nro.htm>>.
8. Ibid.
9. Bureau of Labor Statistics, "Consumer Price Index - March 2022," April 12, 2022,
<<https://www.bls.gov/cpi/>>.
10. Federal Reserve Bank of New York, "Survey of Consumer Expectations,"
<[https://www.newyorkfed.org/microeconomics/sce#/>](https://www.newyorkfed.org/microeconomics/sce#/)>.
11. Board of Governors of the Federal Reserve System, "Summary of Economic Projections," December 14, 2022, <<https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20221214.htm>>.
12. Ibid.