



Third Quarter 2022 Outlook and Review

Real GDP grew at a 2.9% rate in the third quarter of 2022 due largely to a lower trade deficit. Consumer spending cooled in the third quarter but preliminary data suggests that consumers will post stronger end of year spending. Consumer spending is now fueled by increased credit card debt and lower savings rates, even as interest rates climb. This relationship is not sustainable, which is a key reason for predictions of a recession in the first part of 2023. The Fed is aiming for a “soft” economic landing with a return to sustainable inflation without tipping the economy into a recession. A consensus is building that continued increases in the Fed fund rate will be necessary well into 2023, making a soft landing less likely. High interest rates and a declining economy would be very bad news for stocks.

The labor market is too strong for the Fed to stop increasing interest rates. The unemployment rate is 3.7% and a three-month moving average gain in payrolls is 272,000. Average hourly earnings are picking up with a 5.1% year-over-year gain reported in November. These strong labor market indicators occurred even though the Federal Reserve Bank hiked the Fed fund rate from 0.13% in January of 2022 to 3.88% in November. The resilient labor market is likely to prompt the Fed to increase the Fed fund rate by 50 basis points in December and a 25 to 50 basis points in January. Rate increases will be smaller but will continue in 2023. Normally, a strong reaction to higher interest rates occurs with lags from twelve to eighteen months, suggesting that the full effect of rate hikes in 2022 will not occur until 2023. The Fed fund rate is likely to reach 5.5% by the end of 2023 unless a significant slowdown occurs.

Inflation likely peaked at mid-year in 2022 but the Fed’s key measure of inflation remains well above the 2% target. The Personal Consumption Expenditure index (PCE) gained 6% on a year-over-year basis in November and the core PCE increased 5%. A neutral Fed fund rate is likely to be about 4.5%, based on the 2% inflation target and 2.5% potential real GDP growth. While the Fed is taking a contractionary direction, it may require additional increases beyond a 4.5% rate to have a significant impact on consumer and investor decisions. Meanwhile, the Treasury yield curve is inverted, fueled by a demand for longer term securities based on the view that interest rates will decline in the future. Often, an inverted yield curve signals a recession, but in the current context it likely reflects a view that the Fed will be successful in defeating inflation.

The first half of 2023 should be the focal point for an economic slowdown. The economy is struggling with high interest rates, eventual slowing of the labor market, and slumping consumer and business sentiment. Historic levels of consumer credit card debt, lower stock market valuation, slowing housing prices, strong dollar value, and a global economic slowdown all work against U. S. economic growth as we go into 2023. A recession is not inevitable but chances of a shallow recession are at least 50-50. New pandemics, wars, global trade disruptions, or dramatic increases in rates would change this view.



The Fed – Rate Hikes will Continue but Increases May be Smaller

The November Federal Open Market Committee minutes suggest that more pain is to come before inflation pressures are quashed. While the 75 basis point increase in the Fed fund rate in November was a unanimous decision, there was agreement that the rates of increases going forward will be smaller. Since the start of 2021, the Fed fund rate target increased from 0.13% to 3.88% in November. Even with this dramatic rate increase, Chairman Powell expressed concern that the economy is not responding as quickly as expected. Smaller rate increases are likely with a 50 basis point increase expected in December followed by lower increases going forward. It may take several quarters for clear signals that the jobs market and inflation data show significant downward trends before the Fed Fund rate stabilizes. The Fed fund rate will likely reach 5% before this happens. Table 1 shows the pattern for Fed fund rates so far this year.

Table 1. Fed Fund Rates in 2022

	Nov. '22	Sep. '22	June '22	May '22	Mar. '22	Feb. '22	Dec '21
Federal Fund Rate (%)	3.88	3.13	1.63	0.88	0.38	N.A.	0.13

<https://www.finder.com/fed-funds-rate>

While the Fed has been aggressive in raising target rates, the volume of assets held by the Fed has not changed much. Table 2 provides a snapshot of the Fed's balance sheet composition since the first of the year. The holdings of securities have changed little since the start of the year, suggesting that higher interest rates are due to sales of government securities by the Treasury to finance government spending rather than large sales by the Fed. The sheer size of the Fed's balance sheet is large from years of Fed accommodation of fiscal policy deficit spending. High levels of government borrowing would have resulted in very high interest rates if the Fed had not accumulated securities to offset government spending. Federal Reserve asset holdings represent approximately 8.8 trillion dollars, which is about 34% of total U.S. gross domestic product.

Table 2. Assets Held in the Federal Reserve's Balance Sheet

	Sep. '22	June '22	May '22	Mar. 22	Feb. '22	Dec '21
Treasuries (trillions \$)	5.67	5.77	5.72	5.76	5.74	5.65
Mortgage Backed (trillions \$)	2.70	2.71	2.71	2.72	2.72	2.62
Other (trillions \$)	0.43	0.44	0.44	0.46	0.47	0.49
Total (trillions \$)	8.80	8.91	8.91	8.94	8.93	8.76
% of GDP	34.2	35.1	35.3	35.9	36.1	35.7

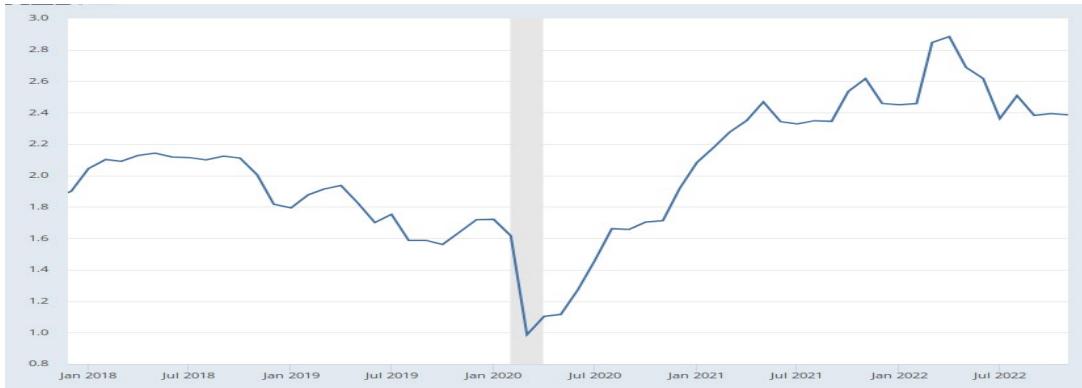
Source: <https://www.federalreserve.gov/releases/h41/current/h41.htm>

The Fed's challenge of fighting inflation conditions will be much easier than Volcker's battle against spiraling inflation in the late 1970s. Unlike the late 1970s, household surveys and expected inflation premiums seen in the bond market all reflect modest inflation expectations. When households expect inflation rates to increase they buy more today to avoid higher future prices, making it hard to dampen spending. Households also demand higher wages in anticipation of higher inflation rates. At the same time, when faced with higher costs due to expected inflation, businesses set higher prices that will hold up in the future. The self-fulfilling prophecy linked to higher inflation expectations fuels a spiral that is difficult to break.



Inflation expectations remain low through the third quarter of 2022, reflecting confidence that the Fed's aggressive moves earlier this year will keep inflation from spiraling. The "breakeven inflation rate" provides a measure of expected inflation based on the current 10-year Treasury Constant Maturity Securities and the 10-year Treasury Inflation-Indexed Constant Maturity Securities. On November 25, the expected average inflation rate over the next ten years is 2.32%. Figure 1 below illustrates the breakeven inflation rates over the last five years. Expected inflation has been falling since mid-year, making the Fed's job easier going forward.

Figure 1-Year Breakeven Inflation Rate (market determined expected inflation rate)



Source: fred.stlouisfed.org

Survey of Professional Forecasters

The November, 2022 survey of 38 professional forecasters provided a weaker outlook than in the August report. Their 1% consensus projection for fourth quarter GDP growth is below the 1.2% forecast provided three months ago. Going forward, forecasters expect only 0.7% GDP growth for 2023 followed by 1.8% growth in 2024. The current 3.7% unemployment rate is expected to climb to an annual-average 4.2% in 2023 with little change over the following two years. Forecasters expect monthly job gains in the fourth quarter to be 217,600 resulting in an average-annual gain of 492,800 for 2022. For 2023 forecasters project monthly job gains to average only 143,600.

Table 3 below summarizes the quarterly forecasts for GDP growth, the unemployment rate, and monthly payroll gains. While there are no consecutive quarters of negative growth (a common definition of a recession), expected growth in the first half of 2023 is barely positive. Forecasters clearly believe that the Fed's increases in interest rates will cool the economy over the next four quarters. Even so, the shrinking payroll forecast for the fourth quarter of 2023 is at odds with the prediction of a more robust 2.1% GDP growth rate.

**Table 3. GDP Growth, Unemployment, and Monthly Payroll Forecasts by Quarter**

	Real GDP Growth (%)		Unemployment Rate (%)		Monthly Payroll Gain (000s)	
	Prior Forecast	Latest Forecast	Prior Forecast	Latest Forecast	Prior Forecast	Latest Forecast
Q4 2022	1.2	1.0	3.7	3.7	167.9	217.6
Q1 2023	1.1	0.2	3.8	3.8	89.0	79.0
Q2 2023	1.5	0.2	3.9	4.0	96.6	35.8
Q3 2023	1.5	0.9	4.0	4.3	80.7	41.8
Q4 2023	N.A.	2.1	N.A.	4.4	N.A.	-14.5

Note: Numbers in red represent more pessimistic forecast revisions.

Source: <https://www.philadelphiahfed.org/surveys-and-data/real-time-data-research/spf-q4-2022>

Professional forecasters provided estimates of the probability of a downturn over the next five quarters. In the most recent survey forecasters raised their probabilities to almost 50% for the middle of 2023. Table 4 shows the forecasted probabilities of a downturn by quarter.

Table 4. Survey of Professional Forecasters Probability of Recession

	Prior Forecast	Recent Forecast
Q4 2022	36.0	36.3
Q1 2023	38.0	47.2
Q2 2023	36.5	49.4
Q3 2023	34.1	46.1
Q4 2023	N.A.	43.5

Note: Numbers in red represent more pessimistic forecast revisions.

Source: <https://www.philadelphiahfed.org/surveys-and-data/real-time-data-research/spf-q4-2022>

Forecasters have been late to the game with respect to their inflation expectations and they continue to play catch up. For the fourth quarter of 2022 forecasters predict that inflation measured by the headline consumer price index (CPI) will average 5.4% at an annual rate compared to the prior 4.3% rate forecast. Forecasters expect the personal consumption expenditures inflation index (PCE) to increase 4.6% compared to a 3.7% in the prior survey.

Projections for headline and core CPI and PCE inflation at nearly all forecast horizons have been revised upward. By the end of 2023 inflation rates will continue to be above the Federal Reserve target. Significant inflation reductions tend to lag the rise in interest rates by as much as a year, suggesting that inflation will remain above the target rate throughout 2023. Table 5 summarizes the headline and core inflation projections from the survey.

Table 5. Headline and Core Inflation Rate Forecasts by Quarter

	Headline CPI (%)		Core CPI (%)		Headline PCE (%)		Core PCE (%)	
	Prior Forecast	Latest Forecast	Prior Forecast	Latest Forecast	Prior Forecast	Latest Forecast	Prior Forecast	Latest Forecast
Q4 2022	4.3	5.4	4.6	5.7	3.7	4.6	3.5	4.5
Q1 2023	3.6	4.5	3.7	4.5	2.9	3.8	3.1	3.8
Q2 2023	3.4	3.5	3.2	3.7	2.8	3.1	2.8	3.2
Q3 2023	3.0	3.1	2.8	3.2	2.5	2.7	2.6	2.8
Q4 2023	N.A.	2.9	N.A.	2.9	N.A.	2.7	N.A.	2.7

Note: Numbers in red represent more pessimistic forecast revisions.

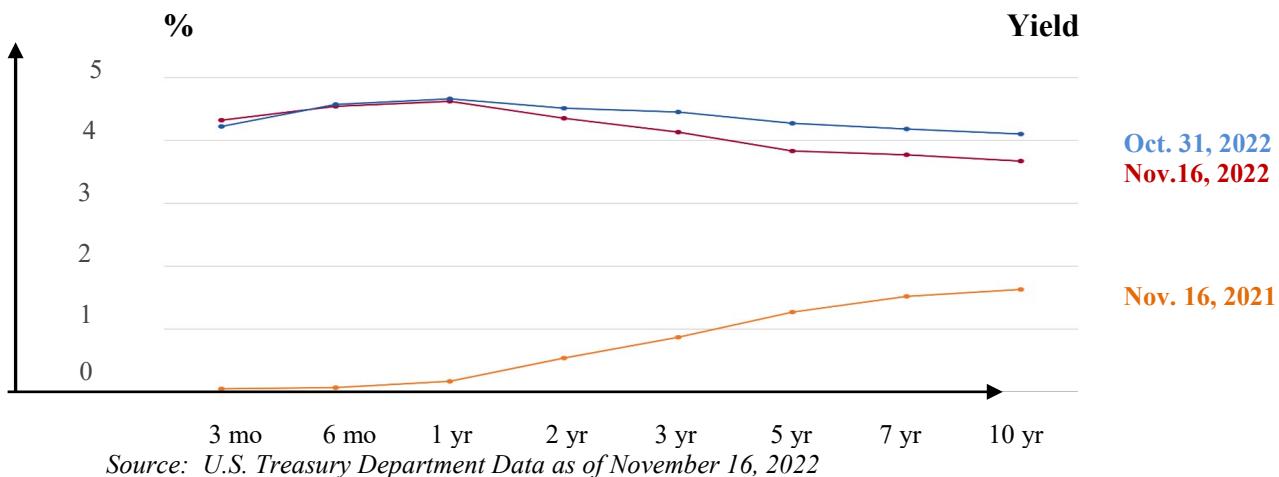
Source: <https://www.philadelphiahfed.org/surveys-and-data/real-time-data-research/spf-q4-2022>



Yield Curves and Lower Expectations for Future Rates

Figure 2 illustrates the yield curve from one-year ago compared to October 31 and November 16 of 2022. The largest increases in yields occurred in the shorter maturities. The result is an inverted yield curve starting at the 1-year maturity and extending to the 10-year maturity. The figure illustrates how the inversion in the yield curve is more pronounced in the early weeks of November. An inversion reflects a market phenomenon where interest rates in the future are expected to be lower than they are today. If so, an investor prefers to hold longer term securities today, driving prices up and yields down on longer term securities, rather than own short term securities and roll them over at a lower future interest rate. The inversion at the 1-year maturity suggests a view that interest rates will peak after next year and then retreat.

Figure 2. U. S. Treasury Yield Curve



Source: U.S. Treasury Department Data as of November 16, 2022

Summary of Recent Economic Data

Gross Domestic Product Growth – Third quarter GDP growth was 2.9% based on the second estimate by the Bureau of Economic Analysis. Without the decline in the U.S. trade deficit growth would have been zero. Consumers spending is slowing and government stimulus spending has now worked its way through the economy. Consumers are now using pent up savings and credit to support spending as inflation takes a toll on disposable income.

- The U.S. economy grew at a 2.9% annual rate in the third quarter, according to the second estimate by the Bureau of Economic Analysis. The surprising third quarter growth rate followed two successive quarters of contraction. Without a large boost from a declining trade deficit, growth would have been flat in the third quarter. A stronger dollar and weakening economies abroad should make trade a drag going forward.
- Consumer spending, business investment, and government spending all supported growth. Inventory investment and housing were key drags on growth. Consumer spending normally leads the way in growth but households are beginning to feel the pinch of lower



real wages and declining savings. Table 6 below summarizes the quarterly growth in GDP and its components over the past seven quarters.

Table 6. Quarterly GDP Annualized Growth Rates

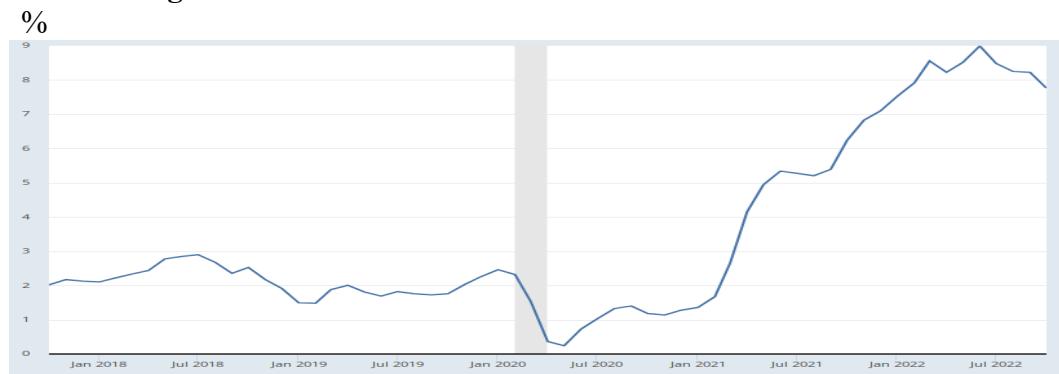
	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3
Real GDP	6.32	7.00	2.65	6.96	-1.63	-0.58	2.93
Nominal GDP	11.71	13.80	9.03	14.27	6.59	8.47	7.33
Consumption	6.98	7.84	1.98	2.14	0.91	1.38	1.18
Fixed Investment	1.70	1.05	-0.18	0.12	0.83	-0.92	-0.74
Inventories	-2.52	-0.75	1.96	5.01	0.15	-1.91	-0.97
Net Exports	-1.02	-0.60	-1.08	-0.16	-3.13	1.16	2.93
Government	1.18	-0.54	-0.02	-0.16	-0.40	-0.29	0.53

Source: Bureau of Economic Analysis

Inflation – Inflation remains well above the targeted rate of 2% but there are signs that inflation is slowing. There is more work for the Fed to do in the coming months, especially if the labor market does not cool off. On a year-over-year basis the Consumer Price Index increased 7.7% in October while the Personal Consumption Expenditure index gained 6%.

- The Consumer Price Index (CPI) increased 7.7% on a year-over-year basis in October. Analysts expected a rate closer to 7.9%, prompting optimism that inflation may have peaked at 9.1% in June. Figure 3 illustrates the movement of the CPI over the past five years. While the CPI is trending lower since mid-2022, the inflation rate remains elevated.

Figure 3. Consumer Price Index for all Urban Consumers



Source: U. S. Bureau of Labor Statistics, fred.stlouisfed.org

- The Personal Consumption Expenditure (PCE) inflation index gained 6% on a year-ago basis in October while the core PCE increased 5%. The goods component increased 8.1% while the services component gained 5.3%. Food prices increased 11.9% and energy prices were up 20.3%.



- The PCE increased 4.3% in the third quarter following a 7.3% rate in the second quarter. Excluding food and energy, prices rose 4.6% in the third quarter compared with a gain of 4.7% in the second quarter. The table below summarizes the year-ago PCE inflation rates.

Table 7. PCE Inflation – Percentage Change from One-Year-Ago

	May 2022	June 2022	July 2022	Aug. 2022	Sept. 2022	Oct. 2022
PCE (%)	6.5	7.0	6.4	6.2	6.2	6.0
Core PCE (%)	4.9	5.0	4.7	4.9	5.1	5.0

Source: <https://www.bea.gov/news/2022/personal-income-and-outlays-september-2022>

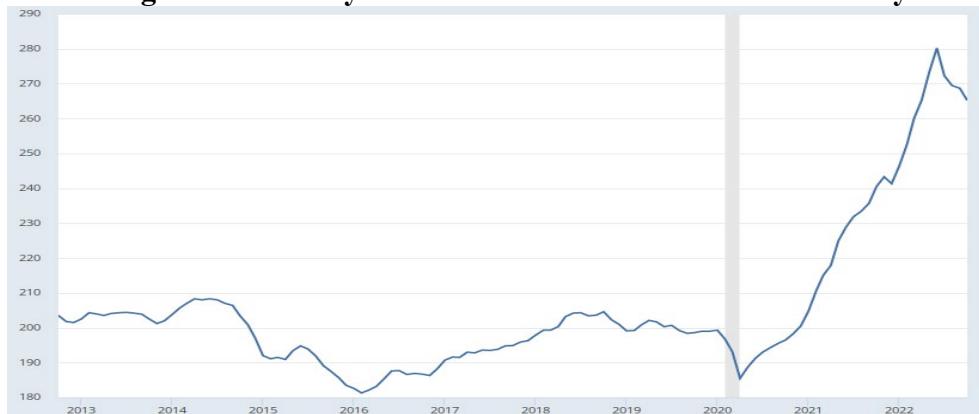
- The Employment Cost Index for wages increased 5.1% on a year-ago basis for the third quarter. With productivity hovering around 1.5%, wage growth would need to about 3.5% to match up with the Fed's 2% inflation target.
- Table 8 provides year-ago percentage changes in the Producer Price Index (PPI) for the last seven months ending in October. The monthly decline in the producer price index signals lower prices in headline inflation rates going forward. Recent softening of the CPI and PCE data along with lower PPI data suggests that inflation may have peaked.

Table 8. Year-Ago Percentage Change in the Final Demand Producer Price Index

Final Demand	April 2022	May 2022	June 2022	July 2022	Aug. 2022	Sept. 2022	Oct. 2022
	11.2	11.0	11.11	9.7	8.7	8.4	8.0

Source: Bureau of Labor Statistics

- Figure 4 illustrates what may be the beginning of a declining trend in the PPI. This does not mean that the Federal Reserve will shy away from additional increases in the Fed Fund targets in December and January. Although, rate increases are likely to be more modest than the 75 basis point increases earlier this year.

Figure 4. Monthly Producer Price Index Ten Year History

Source: Bureau of Labor Statistics, fred.stlouisfed.org, PPI = 100 in 1982



Employment and Labor Market – The labor market has not yet shown a significant slowdown. The unemployment rate is 3.7%. Payrolls increased by 261,000 in October, which remains high but well below the 423,000 monthly gain during the first nine months of 2022. Going forward, the Fed is looking for monthly payroll gains at or below the 200,000 mark with weekly filings for unemployment insurance exceeding 250,000.

- The unemployment rate rose to 3.7% in October from the post-pandemic low of 3.5% in September. The labor force participation rate is 62.1%.
- Payroll gains continue to be relatively strong but signs of a slowdown are developing. The Bureau of Labor Statistics announced that payroll gains were 261,000 in October following a 315,000 gain in September. October's payroll gain is the weakest since December of 2020. In the first nine months of 2022 the average monthly payroll gain was 423,000. Job gains in the 100,000 to 150,000 range match growth in the labor force.
- Continued unemployment claims, also referred to as insured unemployment, represents the number of people who have already filed an initial claim and who have experienced a week of unemployment and then filed a continued claim to benefits for that week. Continued claims data are based on the week of unemployment, not the week when the initial claim was filed. Figure 5 shows the declining pattern of continued unemployment claims back to pre-COVID levels.

Figure 5. Continuing Insured Unemployment Claims



Source: U.S. Employment and Training Administration, fred.stlouisfed.org

- For the week ending on November 19, new filings for unemployment insurance were 240,000 following 223,000 in the prior week. So far, the labor market has had a modest reaction to Fed policies, but the relationship normally has a lag of up to eighteen months.



- U.S. labor productivity increased by a minuscule annualized rate of 0.3% in the third quarter while hourly compensation gained by an annualized 3.8%. As a result, unit labor costs increased 3.5%. Productivity plays a key role in lowering inflation. Producing more with the same amount of labor hours means businesses can pay higher wages and still protect their operating margins. Low productivity in 2022 with rising wages due to a tight labor market is making it harder for the Fed to combat inflation.
- Table 9 below shows the annualized percentage change in output per hour, compensation per hour, and unit labor costs over the past seven quarters.

Table 9. Annualized Percentage Change in Output, Compensation, and Unit Labor Costs

	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3
Output per Hour	3.0	2.7	-2.4	4.4	-5.9	-4.1	0.3
Compensation per Hour	-1.3	7.4	6.7	8.2	2.1	4.5	3.8
Unit Labor Costs	-4.2	4.5	9.3	3.6	8.5	8.9	3.5

Source: Bureau of Labor Statistics, fred.stlouisfed.org

- Inflation-adjusted (constant dollar) private wages and salaries declined 2.7 percent for the 12 months ending September 2022. Inflation-adjusted benefit costs in the private sector declined 3.0 percent over that same period.
- The Bureau of Labor Statistics reported that the number of open positions fell to 10.334 million in October from 10.687 million in September. Open positions have been trending downward from 11.855 million in March.

Personal Income, Saving, and Consumption – Real consumer spending has been stable, rather than falling as interest rates climb and real wages fall. Spending is supported by a falling saving rate and increased use of credit cards. Credit card debt is the highest in twenty years. Current levels of consumer spending are not sustainable and the first two quarters of 2023 should show weaker contributions to growth from consumers.

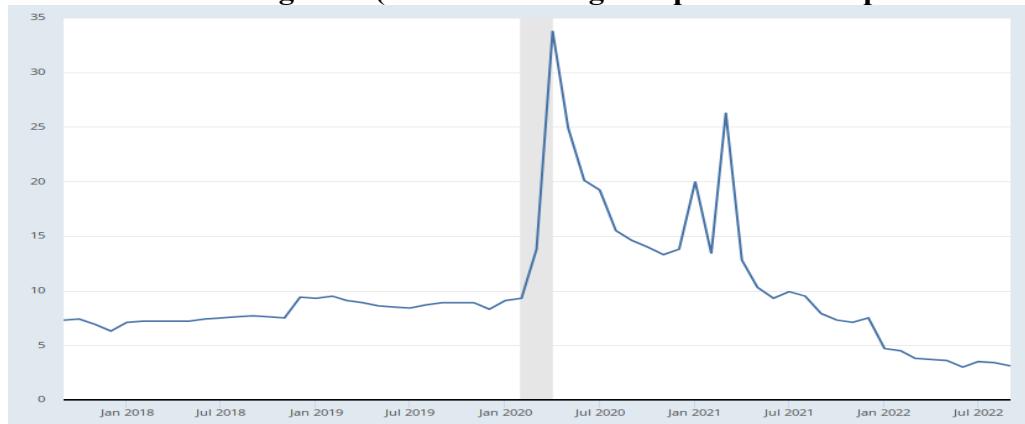
- On a year-ago basis personal income grew 5.2% in September and disposable income grew 3.2%. Even so, when adjusted for inflation, real disposable income fell 2.9% on a year-ago basis. Real disposable income has been falling as inflation outpaces wage gains. The saving rate fell to 3.1% in September as consumers found it harder to cover higher-priced expenses.
- The table below illustrates the year-ago percentage changes in disposable income and the saving rate over the past two quarters.

**Table 10. Year-ago Percent Change in Income and Saving**

	Apr. 2022	May 2022	June 2022	July 2022	Aug 2022	Sep. 2022
Total Personal Income	1.5	4.1	4.6	3.9	4.0	5.2
Disposable Income (Nominal)	-1.4	1.7	2.2	1.5	1.7	3.2
Disposable Income (Real)	-7.3	-4.6	-4.4	-4.6	-4.3	-2.9
Saving Rate	3.7	3.6	3.0	3.4	3.4	3.1

Source: Bureau of Economic Analysis

- Figure 6 illustrates the decline in the savings rate from the peak achieved following the COVID shutdown. The peaks in the saving rate match the timing of government COVID payments. Since then, the saving rate fell below the pre-COVID rate.

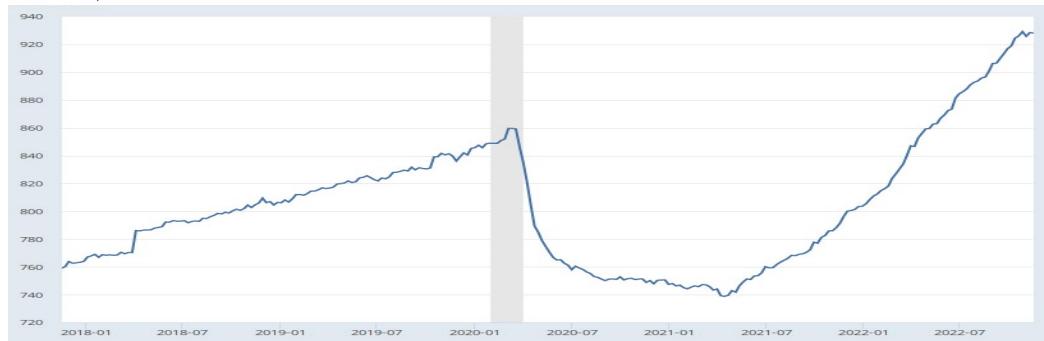
Figure 6. Personal Saving Rate (Personal Saving as a percent of Disposable Income)

Source: Bureau of Economic Analysis, fred.stlouisfed.org

- Consumer credit increased at a seasonally adjusted annual rate of 6.8 % during the third quarter. Revolving credit increased at an annual rate of 12.9 %, while nonrevolving credit increased at an annual rate of 4.9%. U.S. Total Consumer Credit Outstanding is at a current level of 4.701 trillion dollars, up from 4.676 trillion dollars last month and up from 4.355 trillion one year ago. On a year-ago basis, consumer credit increased 7.94%. Figure 7 illustrates the growing use of consumer credit to support consumer spending.

Figure 7. Consumer Credit Card and other Revolving Loans

Billions of \$s



Source: Board of Governors of the Federal Reserve, fred.stlouisfed.org

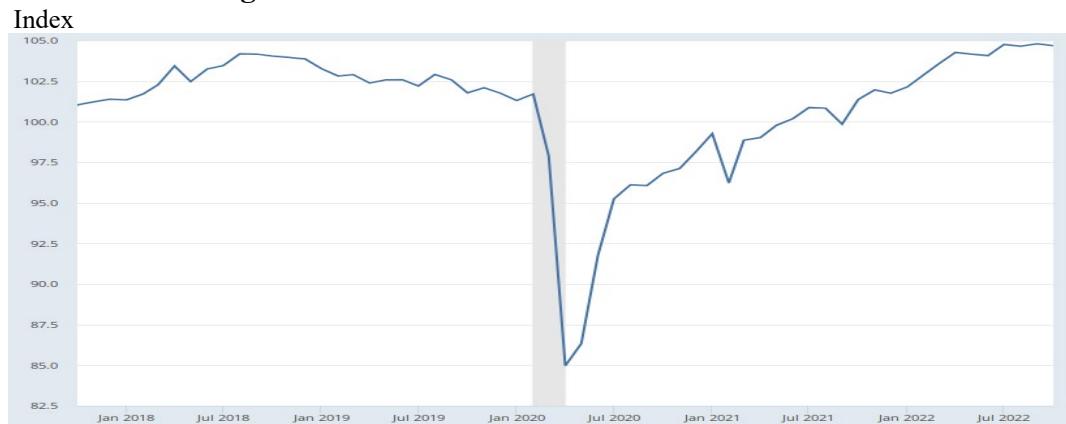


- Retail sales were up year-over-year by 8.3% in October. Going forward sales are expected to weaken as inflation, lower disposable income, higher interest rates, and falling optimism take a toll on consumers.

Production and Manufacturing – The Industrial Production Index rebounded following the opening of the economy as pent up demand and accumulated savings hit the markets. More recently, production is slowing as higher producer prices, rising interest rates, slumping business confidence and continued supply-chain issues persist. The retail inventory to sales ratio is falling as orders are declining in anticipation of slower sales in the next few quarters. Lower inventory will dampen orders and production.

- Industrial production fell 0.1% in October. The figure below illustrates movement of the Industrial Production (IP) over the past five years. The index measures the real output of all establishments located in the United States. The index reached 104.689 in October. Production posted a healthy rebound following the COVID shutdown but has slowed in more recent months. Demand will continue to soften in the face of rising borrowing costs and inflation.

Figure 8. Industrial Production Index for the U. S.

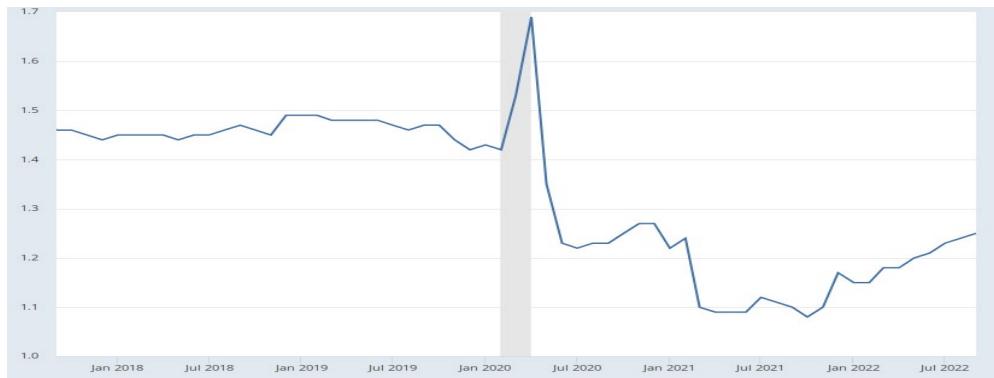


Source: Board of Governors of the Federal Reserve, fred.stlouisfed.org
Index = 100 in 2017

- Core capital-goods orders, without volatile defense and aircraft segments, gained 0.7% in October after falling 0.8% in September. The three-month moving average of core capital goods orders has decelerated in recent months.
- Retail inventories have been rising relative to sales since the start of 2022. The inventory to sales ratio reached 1.25 in September from about 1.1 at the end of 2021. The inventory buildup has been modest so far but the trend is rising. Excess inventory generally helps ease inflation pressures, since businesses use price discounts to stimulate buying. The figure below illustrates the decline in the inventory to sales ratio following the COVID shutdown and emergence of an upward trend in 2022.



Figure 9. Retail Inventory to Sales Ratio

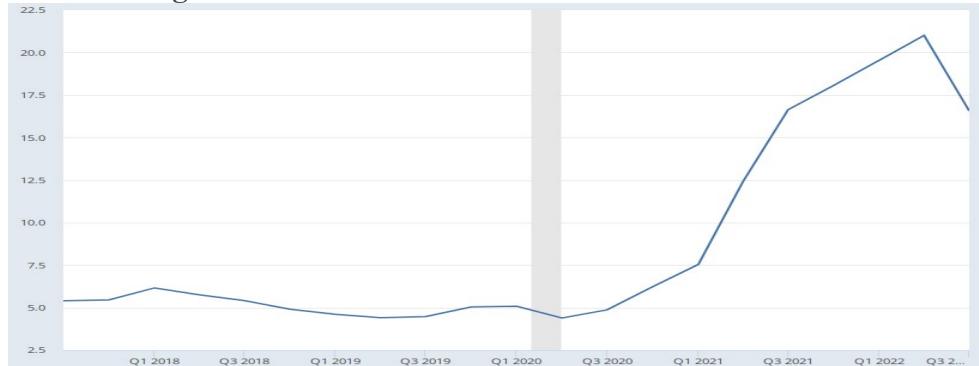


U.S. Census Bureau, fred.stlouisfed.org

Housing - The housing market is cooling as higher mortgage rates discourage would-be buyers. After two years of double-digit price growth, increases are slowing. Mortgage rates increased more than 4 percent over 2022, which is the largest one-year increase since the early 1980s. High prices and high mortgage rates pushed the housing affordability to a three-decade low.

- According to the S&P CoreLogic Case-Shiller 20-City Composite Index, house prices declined by 1.5% in September. Nevertheless, prices increased 10% from a year-ago. The supply of housing remains low, limiting the degree to which prices will fall.
- The National Association of Realtors reported that the median Existing Home Sales Price fell to \$379,100 in October following a median price of \$383,500 last month. One year-ago the median price was \$355,700. The median price is 6.58% higher from a year ago.
- The number of new homes sold in October fell 5.8% from one year ago. Nevertheless, the 630,000 annualized units sold in October represents a 3.5% increase from the start of the year. Sales are aided by expectations that mortgage rates will be higher later in 2022 and by a limited supply. The figure below illustrates the change in housing prices on a year-ago basis over the past five years. While prices remain high the trend is falling.

Figure 10. All Transactions House Price Index

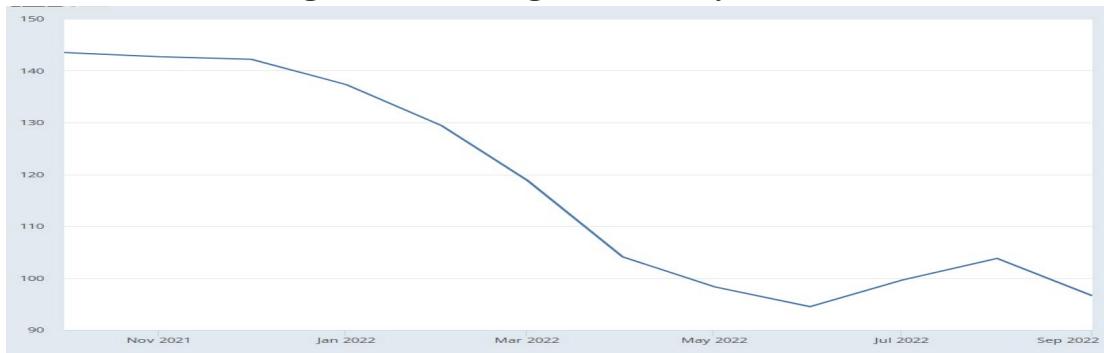


Source: U.S. Federal Housing Finance Agency. fred.stlouisfed.org.



- The Housing Affordability Index measures the degree to which a family can afford to make monthly mortgage payments on a typical home. An index value of 100 coincides with what the median income family could afford on a mortgage for a median-priced home. A 20% down payment is assumed. An index below 100 signifies that the family would not have enough money to qualify for a loan. The figure below illustrates the declining affordability since the index was created.

Figure 11. Housing Affordability Index

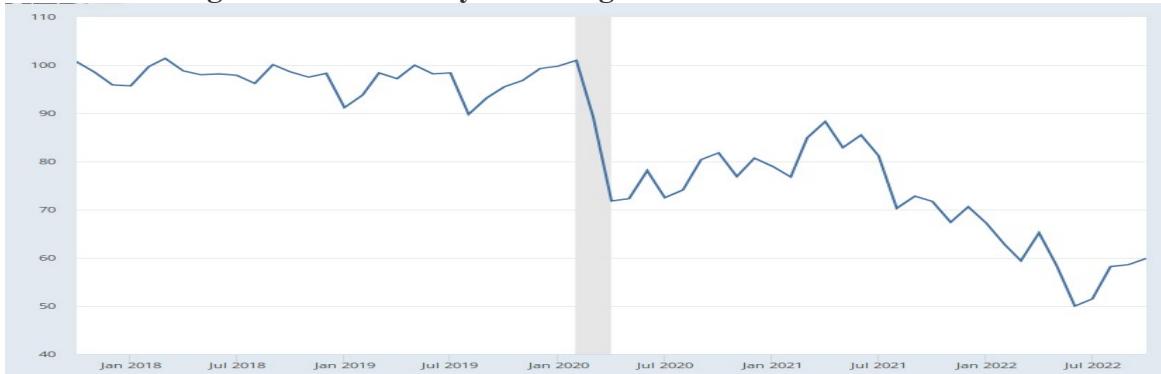


Source: National Association of Realtors, fred.stlouisfed.org

Sentiment – Sentiment measures are declining and approaching recession levels. The University of Michigan Consumer Sentiment Index is already bordering on recession territory. The Consumer Confidence Index is somewhat more optimistic but the Leading Indicator Index has declined for eight straight months, suggesting a downturn.

- The University of Michigan Consumer Sentiment Index is flirting with recession territory. The index is sensitive to gas and equity prices, which explains why the strong labor market has not buffered the decline in the index. The index reached a historic low in June and is below its trough in the COVID shutdown. The figure below illustrates the collapse of the index starting early in 2021.

Figure 12. University of Michigan Consumer Sentiment Index



Source: University of Michigan: Consumer Sentiment, fred.stlouisfed.org



- The Conference Board Consumer Confidence Index inched lower to 100.2 in November. The index is 4.9 points higher than the most recent low in July but is well below the recent peak of 128.9 in June of 2021. Unlike the University of Michigan Sentiment Index, the Conference Board measure is sensitive to the labor market and does not yet fall into recession territory.
- The Conference Board Leading Economic Index fell in October to 114.9. The index is now down 3.2% over the last six months. The eight consecutive months of a decline in the index suggest a high likelihood of a coming recession. The composition of the leading economic indicator index is designed to signal turning points in the economy with about a 7 month lead. However, the index is not foolproof and may send false signals.

U.S. Trade – A reduction in the U.S. trade balance provided the biggest boost to third quarter growth, but softer foreign demand and a strong dollar will likely make trade a drag on GDP again.

- The trade balance supported growth in the first three quarters of 2022 but trade in the fourth quarter is likely to be a drag. The trade deficit began to widen again in September due to softening demand in foreign markets and a stronger dollar due to tight monetary policy in the U.S.
- Going forward, the trade deficit may begin to narrow again in early 2023 due to weaker U.S. demand for foreign goods and prospects for a declining dollar. The trade deficit tends to narrow when economies elsewhere do better than the U. S., which helps support U. S. growth.
- The figure below illustrates the recent pattern of the U. S. trade account.

Figure 13. U.S. Trade Balance of Goods and Services



Source: U. S. Census Bureau, Bureau of Economic Analysis, fred.stlouisfed.org



Global Economic Notes – The zero-COVID policy of China continues to weigh heavily on the Chinese economy and global supply chains. Human rights issues are emerging in both China and Iran but complete government control will likely make such demonstrations short lived.

- The combination of high inflation with slowing economic activity is a global phenomenon, with the possible exceptions of India and Vietnam. Almost every region of the globe now struggles with rising costs and tightening financial policies while trying to cope with lingering COVID infections and disruptions caused by the Russian invasion of Ukraine.
- The International Monetary Fund forecasts global growth to slow from 6% in 2021 to 3.2% in 2022 and 2.7% in 2023. Global inflation forecasts call for an increase of 4.7% in 2021 to 8.8% in 2022. Aggressive monetary policies are expected to bring inflation down to 6.5% in 2023 and 4.1% in 2024. The IMF projects that more than one-third of the global economies will contract in the next two years.
- Prospects for growth in China are especially bleak due to lockdowns from the zero COVID policy and a continued decline in the value of properties. Supply chain problems are likely to become severe due to the lockdown and social unrest may accelerate, causing additional disruptions to economic activity. The size and overall importance of China in the global supply chain make China's problems a key source of instability in global economic growth.

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