

Stonebridge Economic Outlook June 16th, 2022

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Overview

The economic outlook has deteriorated considerably due to the unexpected surge in consumer price inflation recently. Over the first five months of 2022, the overall consumer price index (CPI) has skyrocketed at a 10.0 percent annual rate, the fastest pace in over 40 years and twice as fast as the elevated pace I had expected. If history is a guide, such a spike in prices alone increases the odds of the U.S. economy falling into a recession within the next year. Nevertheless, other factors make timing the next recession more difficult.

In that regard, despite substantially higher prices, real consumer spending growth (spending after adjusting for inflation) has held up remarkably well, climbing at a stellar 8.6 percent annual rate through April. Although consumers apparently have managed the inflation spike so far, they are unlikely to withstand high inflation forever. Something has to give. The preferred adjustment would be a sudden slowdown in inflation due to productivity gains. The bad news is that a recession most likely is needed first to get us to that point.

The decline in real gross domestic product (GDP) in the first quarter, despite solid gains in consumer spending and business fixed investment, has added to the concern about the outlook. A sharp deterioration in the trade deficit in the first quarter accounted for most of the weakness, as net exports detracted a whopping 3.2 percentage points from real GDP growth. That said, real GDP in the second quarter is on track to rebound owing to a huge gain in consumer spending and another solid boost in business fixed investment. These gains should more than offset the anticipated drags on growth coming from declines in residential investment, business inventories and net exports.

Just how much second-quarter GDP rebounds will depend primarily on business fixed investment. I expect businesses will attempt to offset labor shortages by investing in equipment and intellectual products to improve labor productivity again in the second quarter, suggesting a somewhat better outcome for overall GDP growth than the consensus. Also, residential investment will be a drag on real GDP in the second quarter but far less than the consensus now expects.

Interestingly, all of the gain in real consumer spending in the first quarter was on services, while the increase in spending on goods simply kept up with the higher prices of goods. Some of that was due to shortages and supply disruptions in the goods sector. Based on April data, real consumer spending is on track to increase at a 4.0 percent annual rate in the second quarter, with both goods and services contributing to the gain. Once the final two months of data are available, consumer spending growth for the second quarter is expected to remain at about 4.0 percent. The key will be overcoming the supply disruptions that have contributed to the demand and supply imbalance in the first place. Ironically, a higher price is a key incentive for businesses to boost production at a lower cost.

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Table 1
U.S. Economic Forecast

2022

	Q1	Q2f	Q3f	Q4f	2021	2022f	2023f
Real Gross Domestic Product	-1.5	3.0	2.5	2.0	5.5	1.5	1.0
Consumer Price Index, All	9.2	8.9	4.2	2.9	6.7	6.3	2.2
Consumer Price Index, Core	6.5	6.1	4.0	3.0	5.0	4.9	2.8
GDP Chain-Type Price Index	8.1	5.4	3.5	3.0	5.9	5.0	2.2
Civilian Unemployment Rate	3.8	3.6	3.5	3.4	4.2	3.4	3.5
Price of WTI crude oil (\$/bbl)	94.4	105.3	108.0	100.3	77.4	100.3	91.5
Trade-Weighted Dollar	115.5	118.1	116.6	115.0	115.0	115.0	110.0
S&P 500 Operating Earnings	49.5	54.0	56.0	57.2	208.2	216.7	209.5
Percent vs. Year Ago	4.4	3.7	7.6	0.8	64.6	4.1	-3.3
91-Day Treasury Bill Rate	0.3	0.9	2.2	3.1	0.1	3.1	2.5
10-Year Treasury Note Yield	2.0	2.8	3.2	3.2	1.5	3.2	2.7
30-Year Mortgage Rate	3.8	5.1	5.2	5.3	3.2	5.3	5.0
Bank Prime Rate	3.3	3.9	5.2	6.1	3.2	6.1	5.5

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Standard and Poor's, Federal Reserve Board, Department of Energy, and Federal Home Loan Mortgage Corporation.

Annual changes in real gross domestic product (GDP) and all measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. The annual estimates of the unemployment rate, the price of crude oil, the trade-weighted dollar and all interest rates are averages for the last quarter of the year indicated. S&P 500 operating earnings per share are for the period indicated.

Quarterly changes in real GDP and all measures of inflation are percent changes from the previous quarter at annual rates. For the unemployment rate, the price of crude oil, the trade-weighted dollar and all interest rates, quarterly estimates are averages for the quarter indicated. S&P earnings are per share for the period indicated. Trade-weighted dollar is the new broad index from the Federal Reserve Board.

f-forecast; bold type reflects a major change from the previous forecast.

The Inflation Gauntlet

All of the 6.5 percent increase in nominal economic activity in the first quarter was due to the 8.1 percent surge in the price index for gross domestic product (GDP). Real GDP actually fell 1.5 percent at an annual rate, as net exports (exports minus imports) detracted a whopping 3.2 percentage points from real GDP. In

addition, the change in business inventories detracted another 1.1 percentage points and government spending detracted about 0.5 of a percentage point. These detractors in the first quarter more than offset the contributions to overall growth from solid gains in both real consumer spending and business fixed investment.



Generally prices rise because demand exceeds supply, while prices fall because supply exceeds demand. Given that consumer prices in the U.S. are increasing at their fastest pace in over 40 years, demand obviously exceeds supply. What happened to get us into this situation and how do we get out?

There are two widely accepted explanations. One view is that all of the surge in consumer price inflation was due to supply disruptions caused by the pandemic and now the Russian invasion of Ukraine. As such, it is a supply shortage that has caused the demand to exceed supply, forcing market clearing prices to adjust higher. This imbalance may require some Fed intervention but only to keep inflation expectations in check until the supply disruptions are resolved. After all, monetary policy cannot fix supply shortages. It can only restrain demand. This particular view is closely associated with the Fed's original view that the uptick in inflation was "transitory" based on the assumption that the pandemic and its economic effects would be temporary. This view was more widely held prior to Russia's invasion of Ukraine.

The other view is that inflation was due to unusually strong demand as a result of the income-preserving nature of the pandemic relief programs while supply was constrained because businesses were being shuttered by the pandemic. More recently, Russia's invasion of Ukraine and the economic sanctions imposed on Russia for doing so have exacerbated food and energy price inflation. Due to the lingering inflation problem that the war has fostered, it is imperative that the Fed do more to contain expectations. To honor its commitment to fight inflation, the Fed is in the process of raising short-term interest rates from a level near zero at the start of the year to an estimated level of 3.4 percent by the end of this year. However, the only way the Fed can fight inflation is by slowing demand. Unfortunately, the Fed's policy initiatives to fight inflation in the past often have slowed demand too much, causing businesses to reduce supply further, employment to fall and the economy to contract.

Of course, that will not stop the Fed from trying to engineer the perfect landing for the economy; that is, slowing demand just enough to ease the upward pressure on prices, while preserving the incentives for businesses to reopen or expand operations to increase supply. Achieving such a balancing act is extremely challenging and highly unlikely. Nevertheless, the low probability of such an outcome will not stop the Fed from trying or market participants from looking for evidence that the Fed has succeeded. Occasionally over the next year or so, I expect market participants to assess the outlook to include a soft, if not perfect, landing for the economy. Given the above consensus increase in the overall CPI in May and the likelihood that the Fed will hike its federal funds rate target at least 50 basis points at its June policy meeting, an optimistic assessment of monetary policy having achieved a soft-landing seems very unlikely at the moment.

Another possible outcome is stagflation, which I define as an extended period where the unemployment rate drifts higher, yet inflation remains stubbornly elevated. Although I would assign a very low probability to this outcome, it is not zero. The only period in my memory that I would call stagflation was the OPEC imposed oil embargoes against the United States in the 1970s. Because of the sluggishness in the labor market during this period, the Fed lacked the political will to raise rates high enough to reduce inflation expectations. It was not until Paul Volker became the Chairman of the Fed in 1979 that monetary policy became restrictive enough to effectively reduce inflation and inflation expectations. Two recessions followed in quick order, a relatively short recession in 1980 and a longer, more severe recession in 1981-82.

Timing the Recession

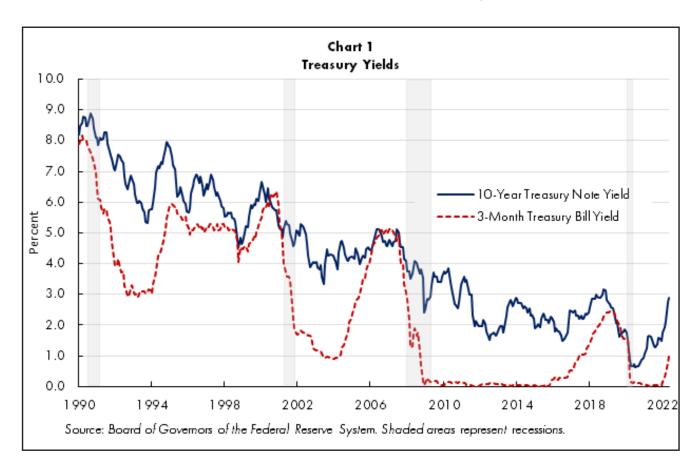
There will be another recession but it is unclear when. The usual telltale signs that a recession is imminent remain conspicuously absent, especially the inverted yield curve. I define an inversion when the yield on the three-month Treasury bill exceeds the yield on the 10-year Treasury note for an extended period of time (at least a month on average). In the past, the recession began anywhere from



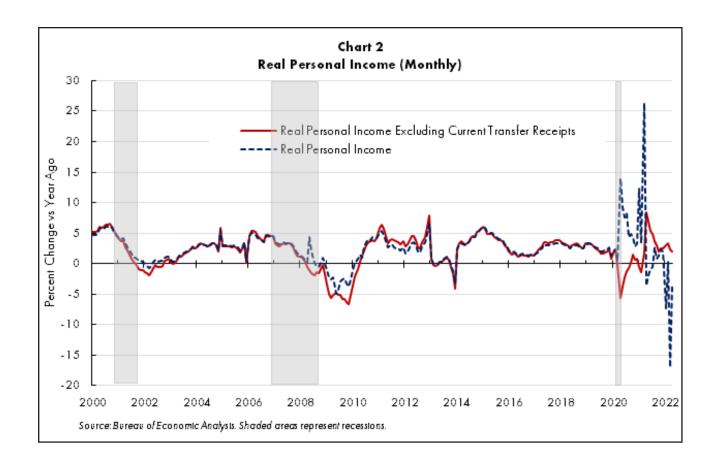
six months to four years after such an inversion. As shown in Chart 1, the Treasury yield curve currently is far from inverted, with the yield on the 10-year note still 160 basis points higher than the yield on the three-month bill. This implies that the start of the recession is still several quarters, maybe years, away.

The unpleasantness of inflation is that consumers need more income just to keep pace with higher prices in order to maintain their living standards. Unfortunately, according to recent data, real personal income growth has not kept pace with real consumer spending, causing many market participants to worry about the sustainability of consumer spending in the second half of the year. I suspect that it is not quite as bad as the headline income data suggests.

An important aspect of real personal income growth over the last two years has been the massive one-off government programs providing pandemic relief. As shown in Chart 2, the percent change in real personal income from a year ago has been far more volatile than the percent change in real personal income excluding transfer receipts from government programs. More importantly, the two measures of real income have diverged far more in recent years than in the past. If government transfer receipts are excluded from real personal income, there is no sharp change from a year ago in March. Assuming that no new relief programs are enacted, the two measures of real personal income in Chart 2 should converge over the remainder of this year. I expect that convergence to occur around 2.0-2.5 percent. This may be the measure of permanent income that drives consumer spending behavior over the remainder of this year.







So, what will drive real personal income growth given that some companies are now talking about cutting rather than adding jobs? Sporadic job cuts would certainly provide some relief to a very tight labor market but they would need to be more widespread to derail the economic expansion. The employment data does not support derailment yet. Nonfarm business establishments added 390 thousand jobs in May and 488 thousand on average over the first five months of the year. This should provide the added income to support spending growth in the second half of 2022, albeit at a slower pace than in the first half. More importantly, if it is supply constraints that have contributed some to higher prices, then more workers may mean more output (postpandemic reopening of the global economy). Of course, the best way to ease inflation is to boost the supply of output with the existing work force.

A recession usually involves a sharp correction in real personal consumption expenditures for one reason or another, given that consumer spending accounts for roughly 70 percent of the U.S. economy's total final product. A loss of purchasing power due to consumer prices rising faster than wages is a frequent catalyst.

Although a recession seems unavoidable, timing it may prove difficult. Key factors are the end of the pandemic or a truce in Ukraine. Both could ease global supply disruptions. After all, inflation is not unique to the U.S. and has led to less accommodative monetary policy stances by central banks around the world.



Monetary Policy Response

The Federal Reserve responded to higher inflation rather than the first-quarter decline in real GDP, as the Fed's policy committee raised its federal funds rate target 50 basis points at its May meeting and another 75 basis points at its June meeting. The Fed apparently has decided to "normalize" monetary policy at a faster pace than projected earlier. Again, this suggests that the Fed is prepared to do too much rather than too little to fight inflation.

Since 2007, the Federal Reserve's policy committee has provided forecasts for economic growth, unemployment and inflation in the Summary of Economic Projections (SEP). In 2012, the SEP was expanded to include the policymakers' assumptions about the future path of the federal funds rate as well. Not surprisingly, financial market participants have responded quickly to the policy information. After all, if the Fed says that the federal funds rate needs to rise to 2.8 percent by the end of next year (see March 16, 2022 projections), market participants would likely push market rates higher in response to this expectation. For example, the yield on the 2-year Treasury note jumped from 1.85 percent on March 15 to 3.2 percent on June 13.

Historically, the impact of monetary policy on the real economy operates with a considerable lag. The estimates of this lag vary from 12 to 24 months. This lag is still in place but the Fed's full disclosure of its expected trajectory of the federal funds rate target may shorten it a bit as longer-term interest rates climb quickly in response to the Fed's projected rise in the federal funds rate.

The only example we have under this regime of broader disclosure from the Fed is the last monetary tightening cycle from 2016 to 2018, when the Fed raised the federal funds rate target from near zero at the end of 2015 to a high of 2.5 percent in December 2018. Interestingly, in early 2016, the Fed's median projection of the federal funds rate was for it to rise to 3.0 percent by the end of 2019. As it turned out, the Fed hiked the

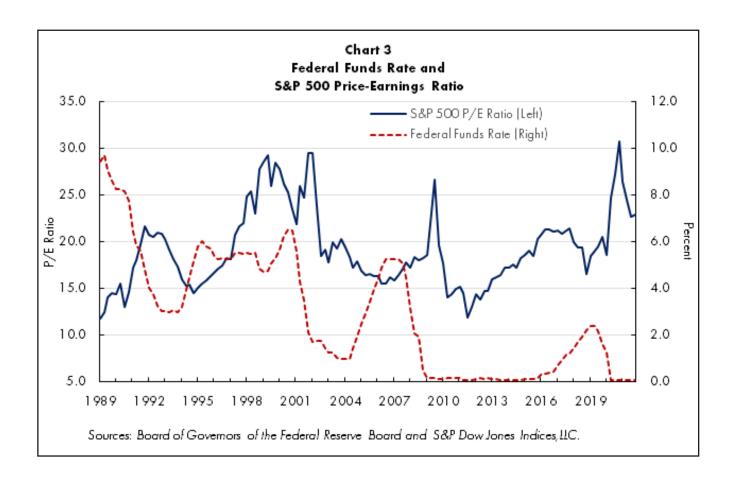
federal funds rate faster but not as much as announced initially. A recession followed but it wasn't until 2020 and the onset of the pandemic. The Fed had actually lowered the funds rate target to 1.75 percent before the pandemic hit, giving the impression that it may have succeeded at achieving a soft landing. Of course, inflation is far more of a problem this time than it was in 2016.

Although the economic outlook is far from rosy, it should be solid enough for corporate profits to hold up reasonably well this year before slowing in 2023. The reason is that companies still seem to have the pricing power to maintain profit margins in a rising cost environment. Pent up demand for services, dissaving by households and supply disruptions seem to explain the recent surge in prices. Although this cannot last forever, it is expected to continue through the end of the year. As a result, profits should hold up reasonably well. In fact, S&P 500 operating profits per share for all of 2022 is projected to be \$216, slightly better than the \$214 estimate in the March forecast. The \$209 operating profits per share estimate for all of 2023 shown in the March forecast has not been revised.

As shown in Chart 3, during the sharply downward trend in the federal funds rate over the last 33 years, the P/E ratio for the S&P 500 was very volatile but with no apparent trend. The range for the P/E ratio over this period was from a low of 11.8 in the first quarter of 1989 to a high of 30.7 in the fourth quarter of 2020. However, there does seem to be a very weak directional relationship. That is, when the federal funds rate goes up, the P/E ratio falls, and vice versa. At the end of this year, if the trailing four quarters of S&P 500 operating earnings per share is \$216, a P/E ratio of 22 would imply a S&P 500 price index of 4752, whereas a P/E ratio of 17 would imply a S&P 500 price index of 3672.

The question is what price-earnings (P/E) ratio is appropriate with the federal funds rate at 3.4 percent by the end of this year and the threat of an economic downturn next year.





Apparently it is lower than the 22.9 P/E ratio for the fourth quarter of 2021. Based on the earnings of the 98 percent of companies that have reported so far, the P/E ratio fell to 19.1 in the first quarter and is expected to fall further to about 18.0 in the second quarter.¹

The Fed will hike its federal funds rate higher. How much is still unclear but my guess is that it will make it to at least 3.0 percent by the end of this year. Whether it will need to do more next year will depend on the lingering inflationary effects from the pandemic and Russia's invasion of Ukraine. The forecast assumes that the federal funds rate target will peak at 3.25 to 3.5 percent early next year. The Fed is expected to reduce its funds rate target to 2.5 percent by the end of 2023 but only if inflation appears restrained and an economic recession imminent.

Although investors would prefer the Fed to fix inflation quickly, it generally takes a while to accomplish. Bond yields will continue to drift higher and credit spreads will widen in anticipation of a more aggressive Fed policy. Longer-term yields will peak once investors are convinced the Fed has done enough to fight inflation. That could happen late this year or early 2023. Typically Treasury bond yields start to fall if investors feel the Fed has gone too far. In this stage, the yield curve inverts and credit spreads widen further. This most likely will not happen until early next year.

¹The P/E ratio is defined as the stock price index at the end of the quarter divided by the total operating earnings over the trailing four quarters. This means that the stock price is known before the earnings for the final quarter is known.

