



September 28, 2022

Key Takeaways

GDP growth: Our U.S. GDP growth forecast is 1.6% for 2022 and 0.2% for 2023, as the economy falls into a shallow recession in the first half of the year (compared with 1.8% and 1.6%, respectively, in our August economic update).

Labor force: The jobs market is still tight as workers quickly find jobs. The labor force participation rate for prime age female workers (25 to 54 years old) climbed in August to its highest rate since before the pandemic, as COVID-19 vaccines to young children and reopening of schools helped parents return to the workforce, to improve business needs.

Unemployment: We now expect the unemployment rate to reach 4.8% by the end of 2023 and peak at 5.7% by early 2025. It will hold above 5% through 2026.

Inflation: Inflation likely peaked in third-quarter 2022 but will remain high on continued supply-chain disruptions. Core prices, excluding food and fuel, is expected to remain above the Fed's 2.0% target until first-quarter 2024.

The Fed: The Fed is now likely to push rates from zero at the beginning of this year to 400-425 basis points (bps) by early 2023. The Fed will keep monetary policy tight until inflation begins to moderate in second-half 2023. We expect the Fed to cut rates in late 2023 as its soft landing turns into a hard one with prices softening on weak demand. Risk is for more rate hikes this year and the next.

Downside: While our baseline now includes a recession, we can't rule out chances of an even harder landing. As we write this, the Fed has indicated that it will tighten the screws more if needed. A more aggressive Fed would likely mean an even harder landing than in our baseline.

Upside: One upside could be that, as the economy tumbles, demand softens, lowering prices, allowing the Fed to change course to avoid an economic crash. The economic ship re-rights itself and manages to steer toward safer waters.

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Just Like Ol' Times

To meet the National Bureau of Economic Research's (NBER) definition of a recession, a contraction must meet three criteria: depth, duration, and dispersion. As in 1947, the NBER will not likely call the contraction in the first half of the year a recession because the third D of its three criteria--dispersion--was not met.

But we suspect history will repeat itself. Just as the U.S. fell into recession the next year, in 1948, we believe that odds the U.S. economy will avoid recession over the next 12 months have dimmed. We expect the U.S. will fall into recession in 2023.

Recent indicators now show cracks in the foundation as the U.S. economy heads into 2023, as rising prices and interest rates eat away at household purchasing power. Indeed, our dashboard of leading indicators from our Business Cycle Barometer report had only one of the nine indicators we tracked in July in positive territory--six were negative and two neutral (see "Economic Research: U.S. Business Cycle Barometer: As Weakness Continues, Further Spread Would Mean Recession," Sept. 1, 2022).

Although our 10-year/three-month term spread indicator remained neutral in August, both the 10-year/one-year and 10-year/two-year have been inverted, on average, for two straight months, which has been a robust signal of a recession in times past.

Higher prices and interest rates have dented household affordability. Although higher prices at the checkout erode household purchasing power, economic momentum will still likely protect the U.S. economy this year.

But what's around the bend in 2023 is the bigger worry. The impact of extremely high prices and aggressive rate hikes on affordability will weigh on household demand. With the Russia-Ukraine conflict and China slowdown exacerbating supply chains and pricing pressures, to force the Fed's hand, it's hard to see the economy walking out of 2023 unscathed.

Leading Indicators Growth Signal Heatmap As Of August 2022

Latest data

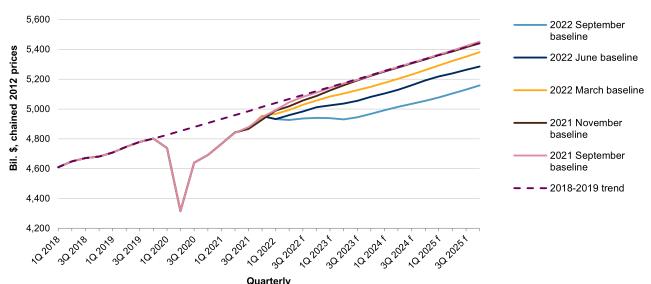
Leading indicators	May-20	Feb-21	May-21	Nov-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
Term spread	Neutral	Positive	Positive	Neutral	Positive	Positive	Positive	Positive	Positive	Positive	Neutral	Neutral
Credit spread	Negative	Positive	Positive	Positive	Positive	Positive	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
S&P 500	Positive	Positive	Positive	Positive	Negative	Negative	Neutral	Negative	Negative	Negative	Negative	Negative
Key element: Expectations of the financial market on future economic conditions												
Consumer sentiment	Negative	Neutral	Neutral	Neutral	Neutral	Neutral	Negative	Negative	Negative	Negative	Negative	Neutral
Key element: Consumers' willin	gness to pu	rchase, esp	pecially du	rables								
Jobless claims-adjusted by labor force	Negative	Negative	Negative	Positive								
Freight transportation index-annual growth rate	Negative	Neutral	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	N.A	N.A
Key element: Rapid response to changing business conditions												
Building permits (single- family)-annual growth rate	Negative	Positive	Positive	Neutral	Neutral	Positive	Neutral	Neutral	Negative	Negative	Negative	N.A
ISM (MFG) new orders index	Negative	Positive	Positive	Positive	Neutral	Positive	Neutral	Neutral	Positive	Negative	Negative	N.A
Key element: Leading real production activities down the pipeline												
Fed's loan survey	Negative	Neutral	Neutral	Positive	Positive	Positive	Positive	Neutral	Neutral	Neutral	Negative	Negative
Chicago Fed NFCI Index	Negative	Positive	Positive	Positive	Positive	Neutral	Neutral	Neutral	Negative	Negative	Negative	Negative
Key element: Availability of credit and level of financial stress of the real sector												

Data through Aug. 30. N.A.--Not available. Source: S&P Global Ratings Economics. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

We now expect GDP growth will decelerate to just 0.2% in 2023, given continued higher prices and borrowing costs as cumulative rate hikes take hold. The unemployment rate will climb to 4.8% by the end of 2023, peaking to 5.7% by early 2025. While we see the unemployment rate decelerating from its peak, the unemployment rate won't reach its current rate through 2026.

Although shallow, the technical recession (a broad-based, sharp reduction in economic activity as defined by the NBER) that we now expect for the U.S. economy reflects continued supply disruptions and a larger spike in prices that has led to the Fed front-running interest rate action into early 2023. Damaged household purchasing power leads to households shutting their pocketbooks, leaving businesses that built up inventory to meet surging demand left with full shelves. The Fed will ultimately get its wish of lower inflation, and businesses will be forced to sell at a discount, bringing down prices (and hurting profit margins).

U.S. Real GDP



Quarterly f--Forecast. Sources: U.S. Bureau of Economic Analysis, S&P Global Market Intelligence, and S&P Global Ratings Economics forecasts.

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Table 1 S&P Global Ratings U.S. Economic Forecast Overview

September 2022

	2020	2021	2022f	2023f	2024f	2025f
Key indicator						
Real GDP (year % change)	(3.4)	5.7	1.6	0.2	1.6	1.9
Real consumer spending (year % change)	(3.8)	7.9	2.4	0.7	1.9	2.1
Real nonresidential private fixed investment	(5.3)	7.4	4.1	(0.6)	(1.3)	(0.5)
Net exports of goods and services	(941.8)	(1,283.1)	(1,429.0)	(1,321.8)	(1,326.4)	(1,334.8)
CPI (year % change)	1.2	4.7	8.3	3.7	1.6	1.4
Unemployment rate (%)	8.1	5.4	3.7	4.3	5.3	5.7
Light vehicle sales (annual total in mil.)	14.5	15.0	14.2	15.2	16.3	17.1
10-year Treasury (%)	0.9	1.4	2.8	3.3	3.2	3.2

Note: All percentages are annual averages, unless otherwise noted. Core CPI is consumer price index excluding energy and food components. f--forecast. Sources: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, The Federal Reserve, Oxford Economics, and S&P Global Ratings Economics forecasts.

We expect the Fed to frontload more rate increases this year and reduce the size of its balance sheet. We expect the federal funds rate to reach 4.00%-4.25% by first-guarter 2023 and remain there until the first rate cut in late 2023. The Fed cuts rates on signs of stabilizing prices, though deteriorating economic conditions may have also encouraged a softening stance in rate hikes. The Fed only gradually lowers rates as they wait for inflation, particularly core inflation, excluding food and fuel, to near the 2.0% target, which will occur in first-quarter 2024. The Fed only slowly lowers rates thereafter, ensuring that the inflation beast is tamed.

Table 2 History Of U.S. Recessions

Peak	Trough	Length (months)	Previous expansion (%)	GDP decline (%)	Stock market decline* (%)	Unemployment rate increase (percentage points)	Federal funds rate decline¶ (percentage points)		
Apr-60	Feb-61	10	24	(1.3)		1.5	(1.30)		
Dec-69	Nov-70	11	106	(0.7)	(32.1)	2.4	(3.37)		
Nov-73	Mar-75	16	36	(3.1)	(41.2)	3.8	(4.49)		
Jan-80	Jul-80	6	58	(3.1)	(13.4)	1.5	(4.79)		
Jul-81	Nov-82	16	12	(2.5)	(15.5)	3.6	(9.84)		
Jul-90	Mar-91	8	92	(1.4)	(15.6)	1.3	(2.03)		
Mar-01	Nov-01	8	120	(0.4)	(20.3)	1.3	(3.89)		
Dec-07	Jun-09	18	73	(3.8)	(41.1)	4.5	(4.03)		
Feb-20	Apr-20	2	128	(10.1)	(27.0)	11.2	(1.53)		
Baseline	1								
Dec-22	Jun-23	6	33	(0.4)	(3.6)	2.0	0.5		

^{*}S&P 500 reflects percentage change from the peak before the recession till the trough during the recession. ¶Discount rate in 1960 and 1970 recessions. Fed is expect to raise rates by 50 basis points in first-quarter 2023. Sources: NBER, BEA, S&P, BLS, Federal Reserve, and S&P Global Ratings Economics estimates for 2023 recession.

Returning Workers--The Silver Lining

U.S. wage growth continues to pose somewhat of a conundrum for both workers and employers. Even as more people entered the workforce in August, labor is in short supply. Hourly wages were up a hefty 5.2% on a year-over-year basis in July. That is double what the growth was pre-pandemic, with a historic average of 2.5% year-over-year.

But even this solid pace of wage growth is still not enough to cover ever-higher prices at the grocery store or gas station. Indeed, while nominal wages are strong, in real terms, August wage gains on a year-over-year basis once again remained negative for the 17th straight month, thanks to inflation. In fact, when adjusted for inflation, we expect wage gains will remain negative through the year. The knock-on effects could create a vicious cycle as dollars earned buy fewer items.

CPI And Average Earnings



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If economic activity remains healthy and the supply of labor scarce, employers will continue to raise wages to get more people off the sidelines. While this extra cash may help soften affordability constraints, demand generated from higher wages could worsen the wage spiral that already seems underway. Inflation raises workers' wage demands, which forces businesses to raise their sales prices to stay afloat.

The vicious cycle will continue until the Federal Reserve implements more aggressive interest rate hikes--and the economy will pay the price. The Fed raises rates aggressively to combat inflation at the expense of economic growth. This economic reset increases recession risk over the near term. The labor market remains strong, but if these conditions persist, the question may be for how long. We anticipate the Fed will raise interest rates again later this year and in 2023, with the fed funds rate moving from near zero in early 2022 to over 4% by early 2023. We hope the Fed's shock therapy will normalize inflation by second-quarter 2024.

The saving grace in the August jobs report was that more people joined the labor force. An increasingly larger pool of labor will help businesses hire at a less extreme wage range. The main factor contributing to the ongoing labor shortage can be identified in a word: women. Simply put, women have not returned to the workforce. If we compare the current labor force to the pre-pandemic trend, of the approximately 4 million people missing, a staggering 3 million are women. During the initial phase of the of the pandemic, labor force participation dropped sharply by close to 3% for both men and women. However, two years down the road, most men have returned to the workforce. In April, just 0.8 million men were still missing from the workforce compared with over 3 million women.

As of August, that currently translates to a labor force participation rate of 55.1% for women over

the age of 16, which still trails the pre-crisis (February 2020) labor force participation rate of 55.9%, according to the Bureau of Labor of Statistics. For prime age women (25-54), the labor force participation rate in August was 77.2%--the first time it topped pre-crisis levels (76.9%), which may be a sign of good things to come.

Softer wage gains may not sound appealing at first blush. But as the labor supply-demand dynamic rebalances, which we suspect will be the case sometime next year, in real terms, those wage gains will once again be in positive territory.

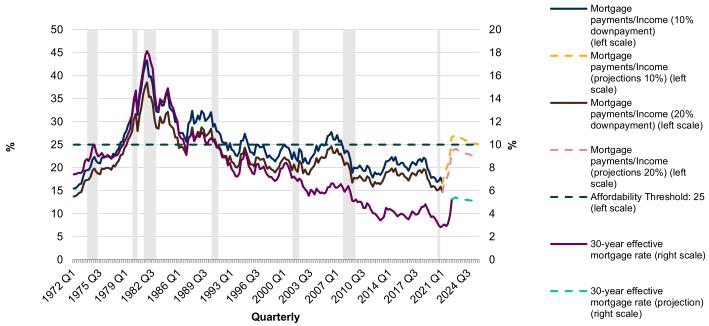
Give Me Shelter

As home prices climbed higher through first-quarter 2022 and the Fed started to aggressively raise rates, affordability worsened. Our affordability measure of mortgage payments as a share of income, assuming a 10% down payment, likely topped 25% in second-quarter 2022 for the typical first-time buyer and is set to worsen to 28% by fourth-quarter 2022--its highest since first-quarter 2007 during the financial crisis--on soaring home prices and mortgage rates. While year-over-year home price gains reached levels not seen since 1987, mortgage payments as a share of household income, on average, were still below the 25% threshold of affordability through first-quarter 2022--but barely. When we assume a 20% down payment, we found that the share fell to an average of 18.0% from 2010 to 2019 from 23.8% in 2006.

This doesn't consider the impact higher interest rates will have on monthly mortgage payments in the future. Fortunately, for those households who already bought a home, more mortgages are fixed rate rather than adjustable rate, with less exposure to climbing rates in the future. But prospective homeowners will be vulnerable to higher monthly payments.

Chart 3

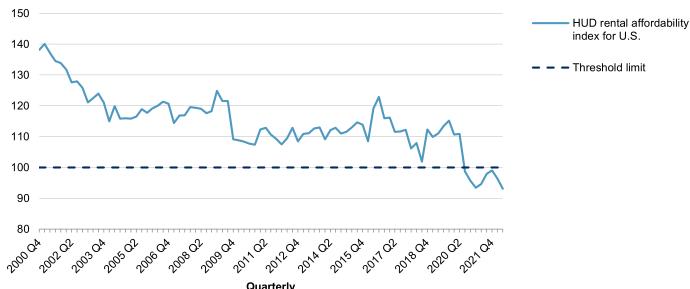
Mortgage Payments As A Percentage Of First-Time Homebuyer's Income



Note: Dotted line indicates projections/estimates from 2021 to 2025. Gray bars indicate recession. Actual income data though 2020. Sources: U.S. Census Bureau, U.S. Department of Housing and Urban Development,

Freddie Mac, U.S. Bureau of Economic Analysis, Federal Reserve Bank of St. Louis, and S&P Global Ratings Economics. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Rental Affordability Index



Quarterly
Data as of second-quarter 2022. Sources: HUDuser.gov and S&P Global Ratings Economics.
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One big factor behind the affordability crunch is a more hawkish Fed, which has already pushed mortgage rates up to 5.18% in the second quarter of 2022, a 13-year high. And we forecast a climb to 5.36% by the end of 2022. Using S&P Global Ratings' U.S. economic forecasts, mortgage payments, after a 10% down payment, are expected to rise above the 25% threshold for a typical first-time homebuyer's income starting in second-quarter 2022--reaching the peak of 27.1% in fourth-quarter 2022, its highest level seen since second-quarter 2006. It will remain above the 25% threshold through fourth-quarter 2025.

For those able to purchase a home with a 20% down payment, fortunately, mortgage payments as a percent of household income are expected to stay under the 25% affordability threshold through the end of 2025, but it will also worsen to the least affordable level since second-quarter 2006.

As a kicker, we found that mortgage payments as a share of income for a middle-income homebuyers likely topped the affordability threshold of 25% in first-quarter 2022 and will worsen to 31.4% by fourth-quarter 2022. We expect this measure to remain well above the affordability threshold through 2025, leaving 60% of U.S. households out of the market.

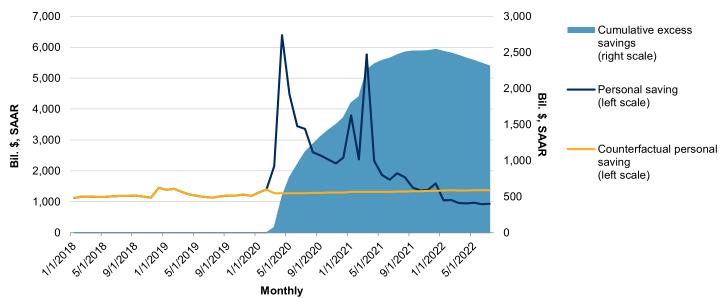
It isn't just potential home owners that are squeezed. According to the U.S. Department of Housing and Urban Development (HUD), the ability to rent an apartment is also out of reach.

HUD's Rental Affordability Index (RAI) fell to 93.1% in the second quarter, a new all-time low, after falling 3.4 percentage points to 96.5% the previous quarter. According to HUD criteria, a housing affordability /rental affordability (HAI/RAI) value of less than 100.0 indicates that a homeowner/renter household with median income has less income than typically required to qualify for a median-priced home/rental property.

Moreover, the cushion for household balance sheets--that were built on fatter paychecks, hefty stimulus packages in 2020 and 2021 that targeted lower-income households, and high stock prices--is being used to cover higher costs. Indeed, higher borrowing costs and the stock market correction will take a chunk out of household balance sheets. The cushion is still relatively large, compared to 2019 household savings. But if prices remain high, they will eventually erode these buffers, particularly for those with lower incomes and smaller cushions (chart 5).

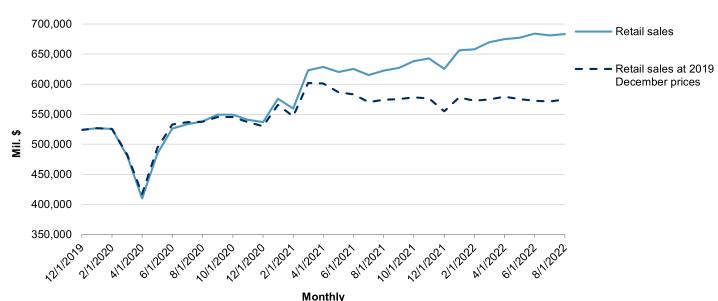
Chart 5

Household Savings



Sources: U.S. Bureau of Economic Analysis and S&P Global Ratings Economics. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Retail Sales



Source: Source: U.S. Census Bureau, S&P Global Ratings, and S&P Global Ratings Economics. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

While households continue to shop, recent retail sales data through August suggest that households may be starting to slow spending in response to higher prices (see chart 6). Though declining gasoline prices eased affordability constraints, overall retail sales in August were modest. And while auto sales were healthy in August, based on unit car sales, it will likely trend lower in September, leaving unit car sales at just 14.1 million in the third quarter and 14.2 million, on average, for the year—down from 15 million the year before. Adjusting retail sales for inflation, the frightening split that appeared over the last year has only gotten wider. Purchasing power has been squeezed, particularly among low—income households. While savings stored during the pandemic have enabled households to absorb higher prices, eventually these buffers will whittle down.

The Federal Reserve: Full Speed Ahead

The healthy jobs market and rapidly rising inflation give the Fed more reason to be aggressive, with another 75-bps hike in September. This is the third 75-bps hike in a row, with 75-bps hikes possibly becoming the new normal. While we have the Fed continuing to raise rates up to the 4.0% to 4.25% range by early next year, the Federal Open Market Committee dot plots after its September meeting indicate that the risk for even higher rate hikes is very palpable, with the median fed funds rate at 4.6% for year-end 2023, with many participants on board.

More-aggressive Fed policy to combat unbridled inflation is one more nail in the coffin of this decelerating economy. We now expect the unemployment rate to reach 4.8% by the end of 2023 and reach 5.6% by the end of 2024.

The consolation prize is that the Fed raising interest rates and reducing its balance sheet should be enough to eventually begin to tame inflation and help restore real wage strength and purchasing power. Unfortunately, we believe the Fed will push the U.S. into recession as well.

Table 3

S&P Global Ratings' Economic Outlook (Baseline)

September 2022

	2022				2023									
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	2020	2021	2022	2023	2024	2025
% change														
Real GDP	(1.6)	(0.5)	0.8	0.3	(0.1)	(0.6)	1.2	1.8	(3.4)	5.7	1.6	0.2	1.6	1.9
GDP components (in	real terms)													
Consumer spending	1.8	1.5	1.2	1.8	(0.5)	(0.6)	1.6	2.0	(3.8)	7.9	2.4	0.7	1.9	2.1
Real nonresidential private fixed investment	10.0	(0.0)	2.2	1.0	(1.4)	(2.8)	(1.4)	(0.7)	(5.3)	7.4	4.1	(0.6)	(1.3)	(0.5)
Net exports of goods and services	(1,543.9)	(1,472.6)	(1,339.1)	(1,360.4)	(1,339.6)	(1,313.0)	(1,313.8)	(1,320.9)	(941.8)	(1,283.1)	(1,429.0)	(1,321.8)	(1,326.4)	(1,334.8)
СРІ	8.0	8.6	8.6	7.9	6.2	4.0	2.8	1.8	1.2	4.7	8.3	3.7	1.6	1.4
Levels														
Unemployment rate (%)	3.8	3.6	3.6	3.7	3.8	4.2	4.5	4.8	8.1	5.4	3.7	4.3	5.3	5.7
10-Yr. T-note yield (%)	1.9	2.9	3.1	3.2	3.3	3.3	3.3	3.3	0.9	1.4	2.8	3.3	3.2	3.2
3-month T-bill rate (%)	0.3	1.1	2.8	3.6	3.9	3.8	3.7	3.6	0.4	0.0	1.9	3.8	3.2	2.5
Housing starts (mil.)	1.7	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.6	1.6	1.5	1.5	1.5
Unit sales of light vehicles (mil.)	14.1	13.4	14.1	15.1	15.1	15.1	15.1	15.4	14.5	15.0	14.2	15.2	16.3	17.1

Notes: (1) Quarterly percent change represents annualized growth rate. Annual percent change represents average annual growth rate from a year ago. (2) Quarterly levels represent average during the quarter. Annual levels represent average levels during the year. (3) Quartery levels of housing starts and unit sales of light vehicles are in annualized millions. (4) Quartery levels of CPI represent year-over-year growth rate during the quarter. Sources: S&P Global Market Intelligence and S&P Global Ratings Economics forecasts.

Soumyadip Pal, of CRISIL Global Analytical Center, an S&P Global Ratings affiliate, Mumbai, also contributed to this report.

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