Goldman Sachs | Economics Research

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US Economics Analyst

10 Questions for 2023 (Mericle / Phillips)

- We wish all of our readers a happy, healthy, and prosperous 2023. In the last *US Economics Analyst* of the year, we discuss what we believe are the most important questions for 2023.
- Our most out-of-consensus forecast for 2023 is our call that the US will avoid a recession and instead continue progressing toward a soft landing. This forecast partly reflects our view that a period of below-potential growth is enough to gradually rebalance the labor market and dampen wage and price pressures. But it also reflects our analysis that indicates that the drag from fiscal and monetary policy tightening will diminish sharply next year, in contrast to the consensus view that the lagged effects of interest rate hikes will cause a recession in 2023.
- We see the first steps in the rebalancing process this year as quite successful. Our jobs-workers gap has shrunk quickly at little cost, with all of the decline in labor demand coming from a drop in job openings. But there is much further to go in 2023. We expect the jobs-workers gap to narrow steadily next year due mainly to a further drop in job openings, but also to a limited increase in the unemployment rate to just over 4%. Both labor market rebalancing and a more moderate inflation environment should lower wage growth toward a more sustainable rate.
- Supply chain recovery and the deflationary impulse in the goods sector that it promised to bring took much longer than we expected but have finally arrived. We expect this ongoing process to push core goods inflation negative next year, driving most of the decline in overall core inflation. This should help to push elevated short-term inflation expectations back toward normal levels.
- We expect the FOMC to deliver 25bp rate hikes in February, March, and May, and then to hold the funds rate at 5-5.25% for the rest of 2023. We are skeptical that the FOMC will cut the funds rate until the economy is threatening to enter recession, and we do not expect this to happen next year.
- The debt limit likely poses the greatest political risk next year, and we expect it to rival the 2011 episode in its disruption to financial markets and the economy. That said, we do not expect Congress to enact major fiscal changes. Republicans might press for spending cuts in a debt limit deal, but we do not expect substantial cuts next year. The White House might press for increased fiscal support, but this also looks unlikely as we believe a soft landing is more likely

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and a divided Congress would have difficulty responding to a recession even if one occurs.

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10 Questions for 2023

For the last *US Economics Analyst* of 2022, we present our top 10 questions for the coming year.

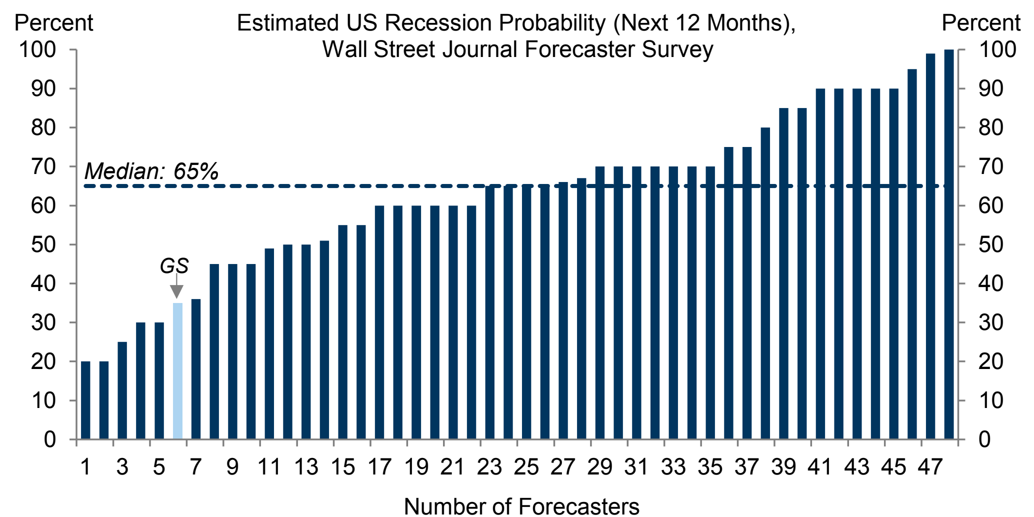
1. Will the US economy enter recession in 2023?

No. The consensus 12-month recession probability stands at 65%, well above our own 35% probability.

Part of our disagreement with consensus arises from our more optimistic view on whether a recession is necessary to tame inflation. We have argued this year that an extended period of below-potential growth can gradually rebalance supply and demand in the labor market and dampen wage and price pressures with a much more limited increase in the unemployment rate than historical relationships would suggest. We see this adjustment process as having gone quite well so far, though there is much further to go in 2023. We agree both that calibrating policy just right to stay on this low-growth path is difficult and that there is still uncertainty about how sticky inflation will prove to be, and for that reason our 12-month recession probability is about double to triple the unconditional historical average.

If views on what it will take to reduce inflation were the sole source of disagreement, then we would expect the consensus Fed forecast to be more hawkish than our own. Instead, both the consensus Fed view and market pricing are a touch more dovish than our forecast of a 5-5.25% terminal rate. This implies that much of the disagreement arises instead from differing views on near-term growth momentum and especially on the lagged impact of the rate hikes already delivered on the economy.

Exhibit 1: Our 12-Month Recession Odds Are at the Low End of Consensus Forecasts



Source: Wall Street Journal, Goldman Sachs Global Investment Research

We expect more resilience in underlying demand next year than consensus because our analysis indicates that policy restraint has played a very large role in slowing demand

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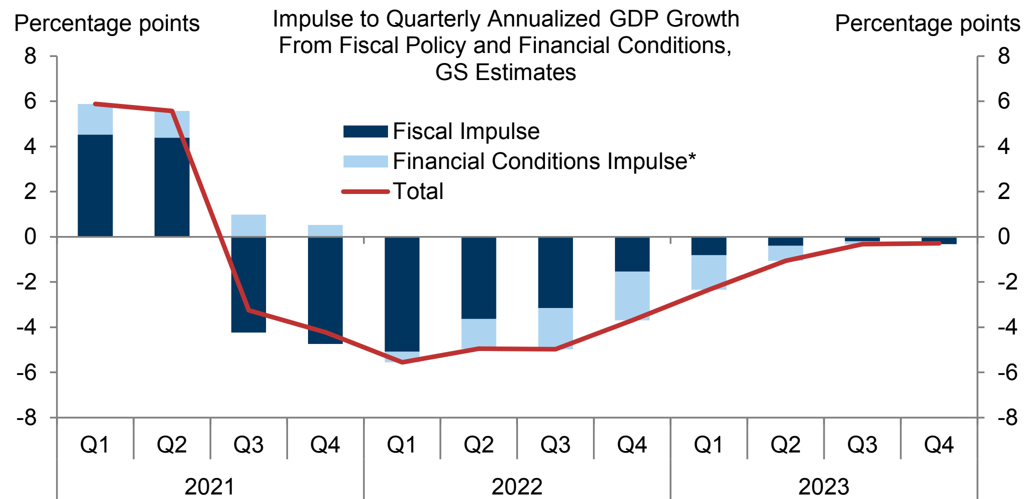
growth this year but will fade quickly next year. Exhibit 2 shows that the combined drag from fiscal policy tightening and from monetary policy tightening via financial conditions has been very substantial but will diminish in 2023.

Exhibit 2: The Drag on GDP Growth from Monetary and Fiscal Policy Tightening Will Fade in 2023



Source: Goldman Sachs Global Investment Research

In contrast, the consensus forecast reflects a view that the "long and variable lags" of monetary policy will push the economy into recession next year. We recently showed that other macro models support the conclusion of our financial conditions index growth impulse model that the peak impact of rate hikes on GDP *growth* is front-loaded, as shown in Exhibit 3. Much of the disagreement between our view and the implicit consensus view likely arises from two sources. First, our approach recognizes that rate hikes affect the economy via broad financial conditions as soon as markets anticipate them, which in 2022 was well before they were delivered. Second, some forecasters seem to confuse lags from monetary policy to GDP *growth* with lags to GDP *levels*—in fact, Milton Friedman's famous assessment that policy acts with long and variable lags clearly referred to the time until the peak impact on the *level* of GDP.

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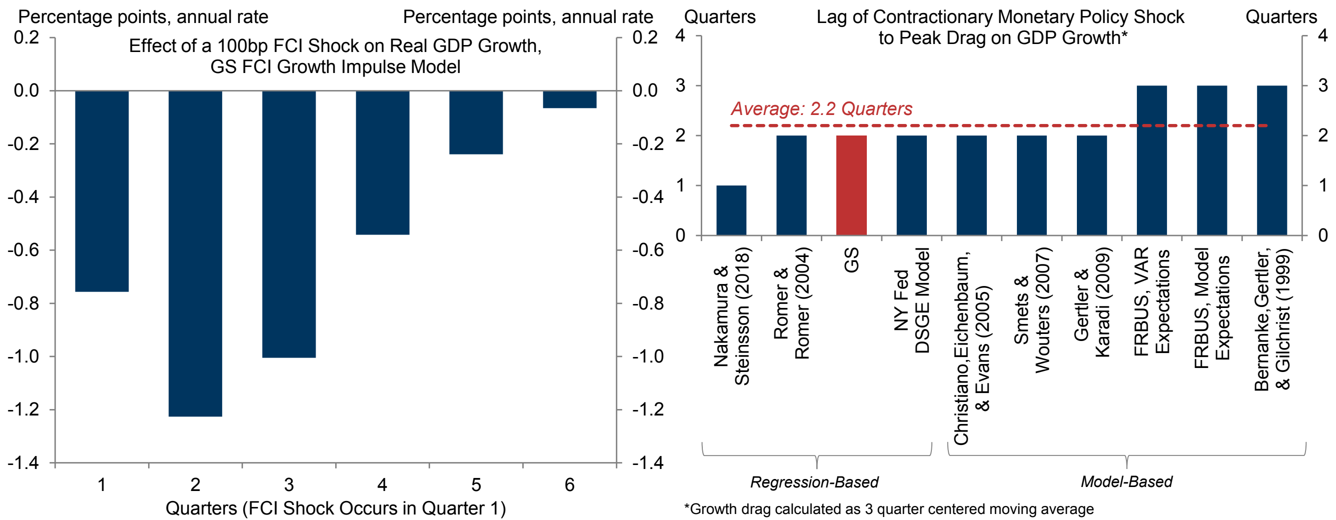
Exhibit 3: Both Our FCI Impulse Model and Other Leading Macro Models Suggest That Monetary Policy Lags Are Shorter Than Many Market Participants Think



Source: Goldman Sachs Global Investment Research

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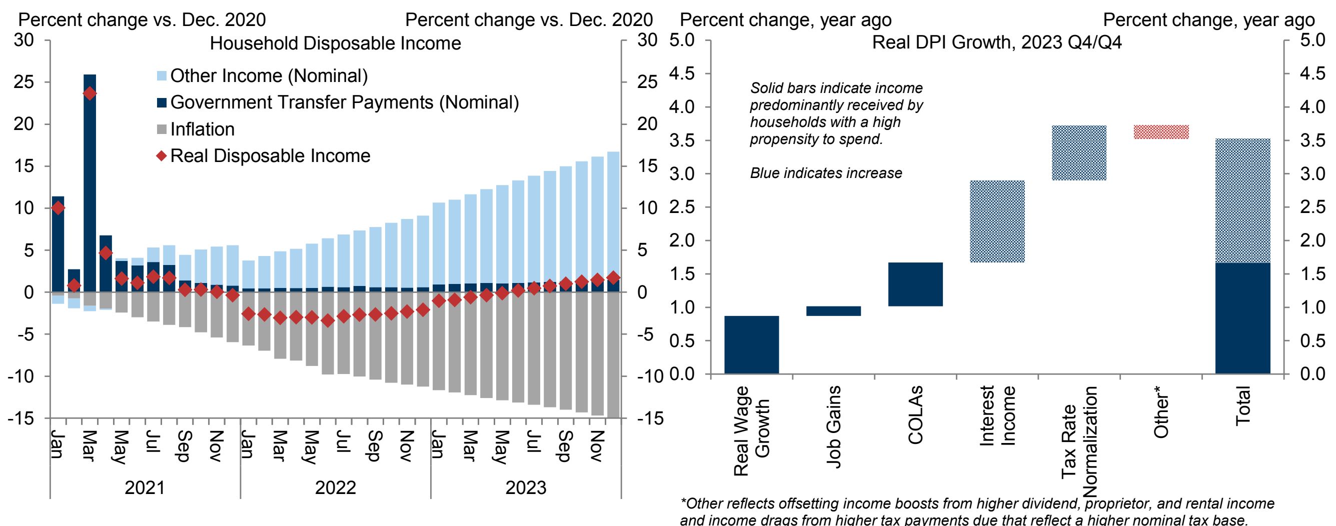
2. Will consumer spending grow at least 1%?

Yes. Real disposable income fell from the spring of 2021 through the summer of 2022 as inflation outran wage growth and special transfer payments included in pandemic relief packages expired. Exhibit 4 shows that we expect real income to rise 3.5% in the year ahead, supported by positive real wage growth, large cost-of-living adjustments on transfer payments including Social Security and food stamps, a jump in interest income, and a decline in the effective tax rate as a spike driven by capital gains and bracket creep reverses. While gains from interest income and tax rate normalization will accrue mostly to high-income households and have less impact on spending, the turnaround in real income is nonetheless a key reason that we have a relatively optimistic 2023 consumer outlook.

Exhibit 4: A Turnaround in Real Income Growth Is the Key Driver of Our Above-Consensus Consumption Forecast

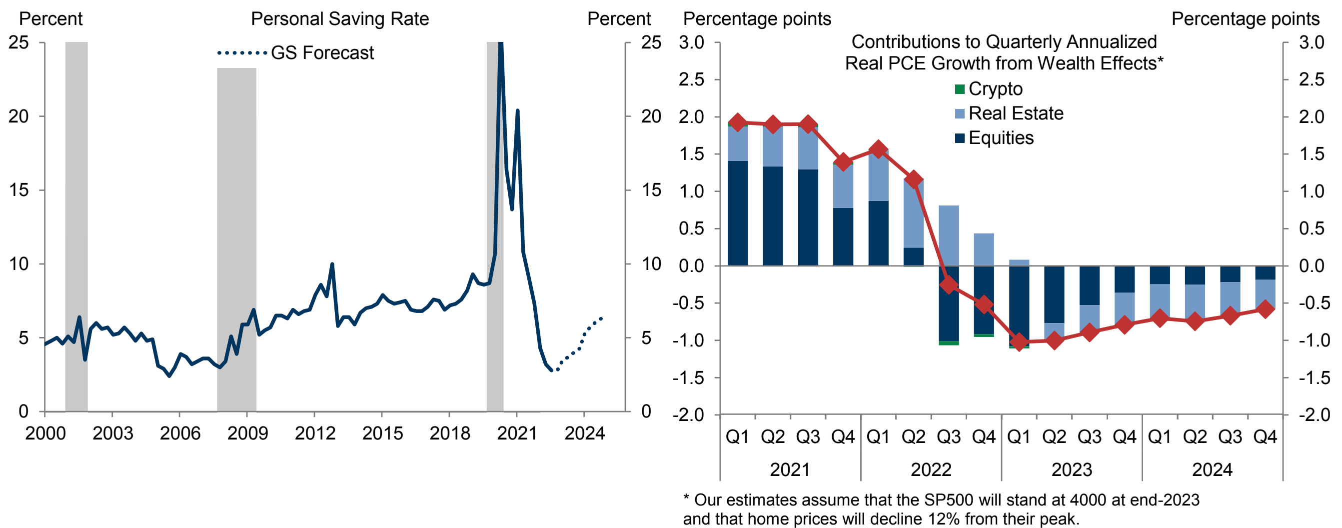


Source: Goldman Sachs Global Investment Research

The impact of firmer real income growth on consumption should be partially offset by a rise in the saving rate next year. We expect the saving rate to increase in part because higher interest rates have reduced household wealth by lowering home and equity prices, and in part because the lower- and middle-income families that tapped excess savings to support their spending this year as transfer payments expired will have less to draw on next year. One important form that drawing on excess savings has taken is the rebound in consumer credit use, and while it remains below its pre-pandemic level as a share of income, its recent rapid growth rate is not sustainable and will have to slow next year.

We expect these forces to net out to consumption growth of roughly 1.5% in 2023.

Exhibit 5: A Rise in the Saving Rate in Part Due to Falling Household Wealth Should Partially Offset the Impact of Stronger Income Growth on Consumption Growth



Source: Goldman Sachs Global Investment Research

3. Will the jobs-workers gap fall below 3 million?

Yes. Based on timely job openings measures from LinkUp and Indeed, we estimate that our jobs-workers gap—total labor demand (employment plus job openings) minus total labor supply (the size of the labor force)—has fallen from a peak of 5.9 million to 4.3 million. All of the decline in labor demand so far has come from a decline in job openings—a drop that is much larger than any in US history seen outside a recession—rather than in employment. While this is encouraging, we estimate that the gap needs to shrink to 2 million to be compatible with a more sustainable rate of wage growth. This means the Fed still has a long way to go and will have to ensure that GDP growth remains below potential and the jobs-workers gap continues to shrink in 2023.

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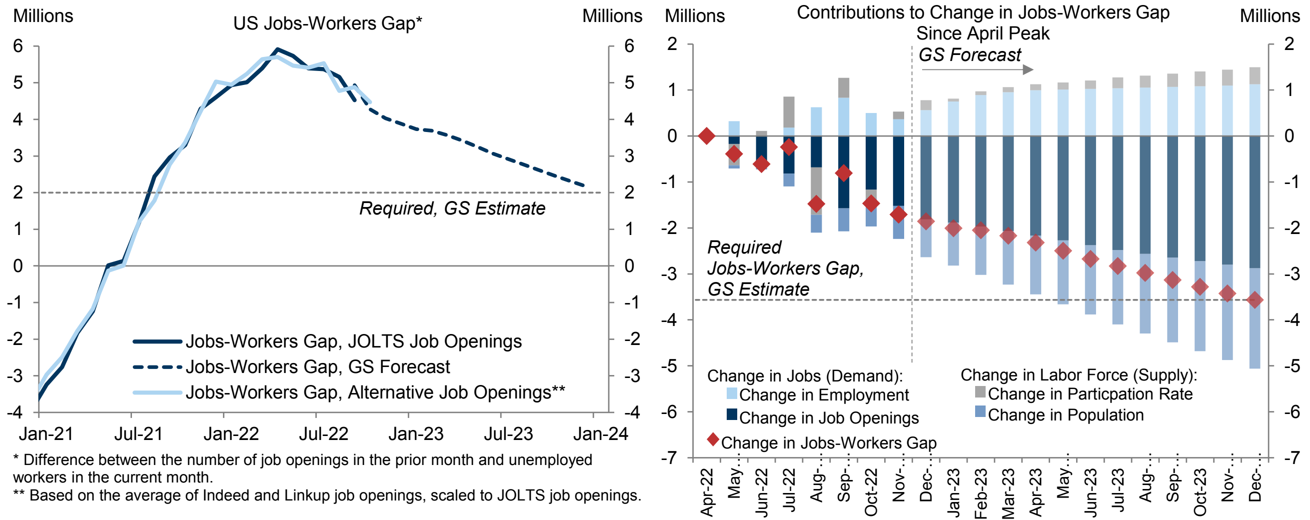
Exhibit 6: We Expect the Jobs-Workers Gap to Continue to Shrink in 2023



Source: Goldman Sachs Global Investment Research

4. Will the job openings rate fall from its peak by more than the unemployment rate rises from its trough?

Yes. A key reason that we have been more optimistic than many other economists about the prospect of avoiding recession is that while we agreed that labor demand was too high and needed to be reduced, we expected a larger-than-usual share of this decline to come from a reduction in the very elevated job openings rate and less of it than usual to come from an increase in the unemployment rate. We suspected that the labor market was on a steep part of the Beveridge curve and were doubtful that the breakdown in labor market matching efficiency that others thought had happened had actually occurred.

The ratio of the increase in the unemployment rate to the decline in the job openings rate has been very favorable so far. We expect that ratio to remain more favorable than usual for now because, as Exhibit 7 shows, high-frequency data indicate that job openings are still falling, but the layoff rate and initial jobless claims remain very low and the re-employment rate of the short-term unemployed remains high.

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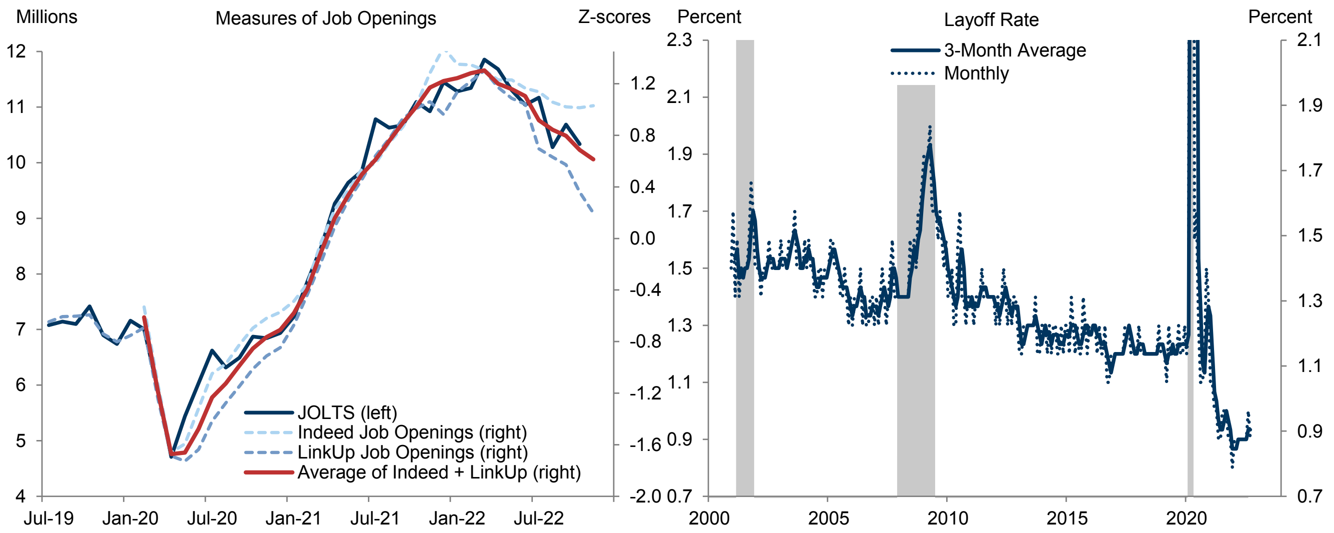
Exhibit 7: Job Openings Are Still Falling and the Layoff Rate Is Still Very Low, Indicating That the Decline in Labor Demand Remains on Track But Is Not Yet Threatening to Generate a Spike in Unemployment



Source: Department of Labor, Indeed, LinkUp, Goldman Sachs Global Investment Research

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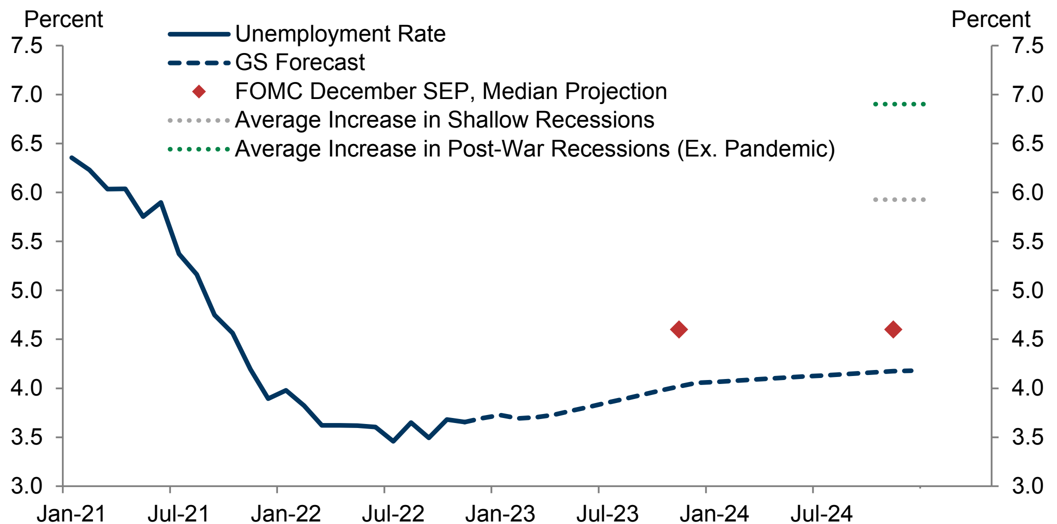
We expect the ratio to rise next year, as it usually does over time, but to still end up much lower than the historical pattern suggests. Blanchard, Domash, and Summers note that the unemployment rate has on average risen 1.5 times as much as the vacancy rate has fallen after two years in prior episodes. This average historical ratio would imply that our forecast that the job openings rate will ultimately fall 1.7pp from its peak to the end of 2023 would translate to a 2.6pp increase in the unemployment rate to over 6%. We instead expect the unemployment rate to rise to 4.1% by the end of 2023 and a bit further in early 2024, resulting in a trough-to-peak increase of 0.7pp. This is less than the FOMC expects and roughly one-third of the increase seen in the average shallow US recession, as shown in Exhibit 8.

Exhibit 8: We Expect the Unemployment Rate to Rise to 4.2% by Early 2024, an Increase About One-Third as Large as Seen in the Average Shallow US Recession



Source: Federal Reserve, Goldman Sachs Global Investment Research

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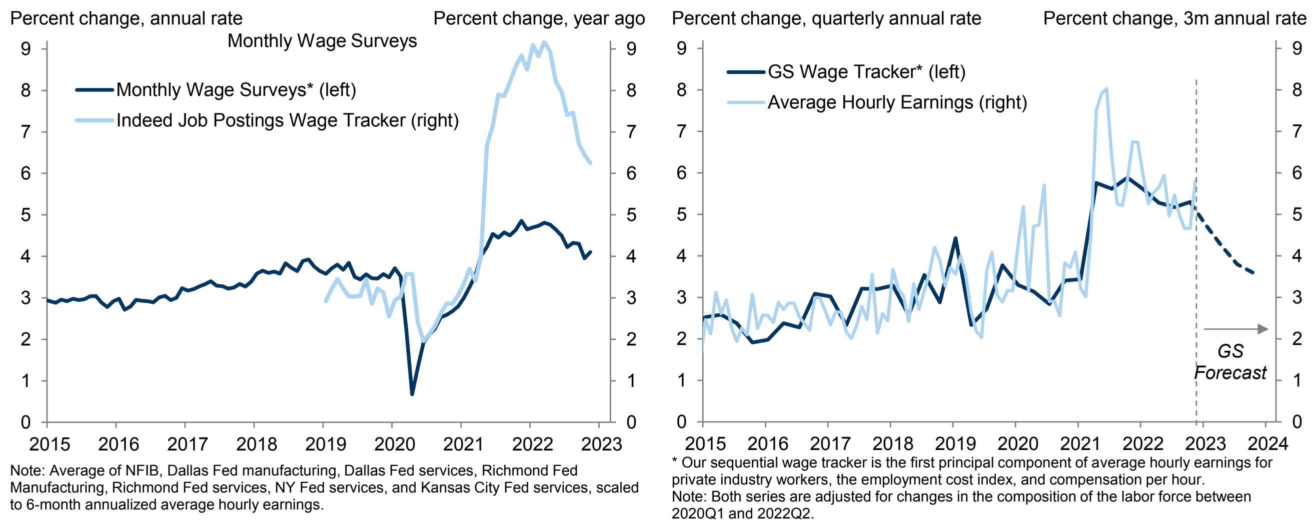
5. Will wage growth slow at least 1pp?

Yes. Our wage tracker rose 5.4% over the last year, more than we expected and well above the 3.5% rate that we estimate would be compatible with the Fed's 2% inflation target. The continued strength in wage growth likely reflects both the tightness of the labor market and demands for larger cost-of-living adjustments in a year when further inflationary shocks pushed headline CPI inflation to an eye-popping peak of 9%. We expect both of these upward pressures on wage growth to diminish in 2023 as the supply-demand imbalance in the labor market continues to moderate and headlines about inflation spiking to new highs give way to headlines about inflation falling and a recession possibly looming.

Leading indicators including questions about wage growth expectations in business surveys and the Indeed wage growth tracker based on offered wages in job ads support our expectation that wage growth will cool down, as Exhibit 12 shows. We do see some risk of an upcoming "January effect" where more wage contracts reset at the start of the year and incorporate larger than usual cost-of-living adjustments. But by the end of 2023, we expect wage growth to slow to about 4%. This would still be a bit too hot, but any sizeable drop would provide Fed officials with a proof of concept for the idea that gradual labor market rebalancing can dampen wage and eventually price pressures without a recession.

Exhibit 9: Forward-Looking Indicators of Wage Growth Point to a Meaningful Deceleration Next Year



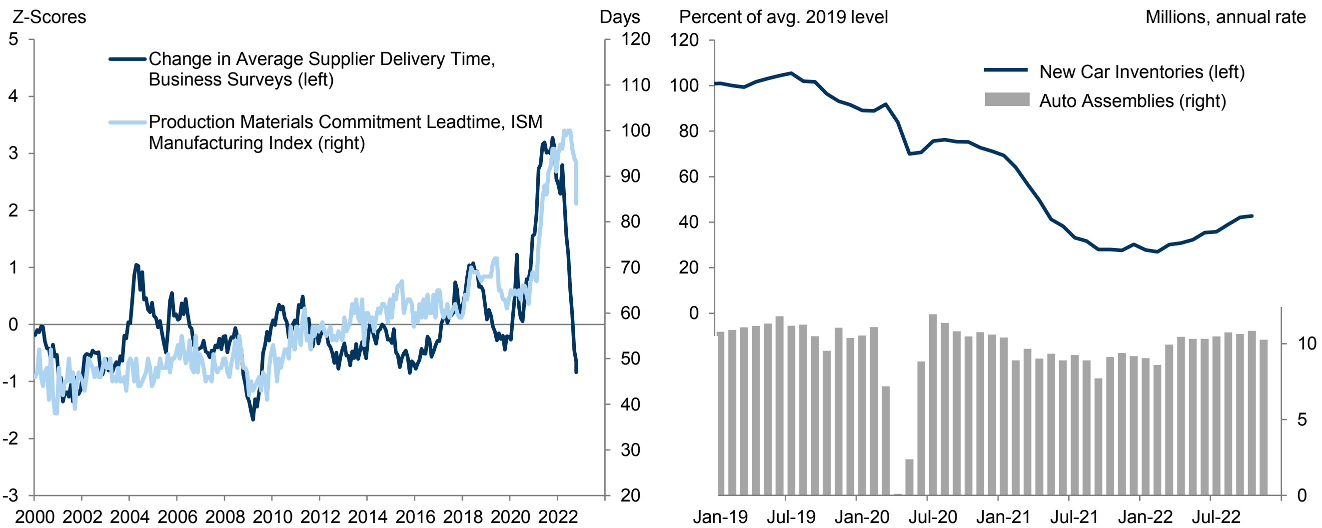
Source: Department of Labor, Indeed, Goldman Sachs Global Investment Research

6. Will core goods inflation turn negative year-over-year?

Yes. One of our largest forecast misses in both 2021 and 2022 arose from mistiming the supply chain recovery, which was delayed by further global shocks and in turn delayed the disinflationary impulse from the goods sector that we had expected to push core inflation meaningfully lower this year. But now supply chain recovery finally appears to be underway, lowering costs and enabling production of scarce items like autos to recover, as Exhibit 9 shows. As inventories are rebuilt, competition should reverse the scarcity effects that raised retail margins and consumer prices earlier in the

pandemic.

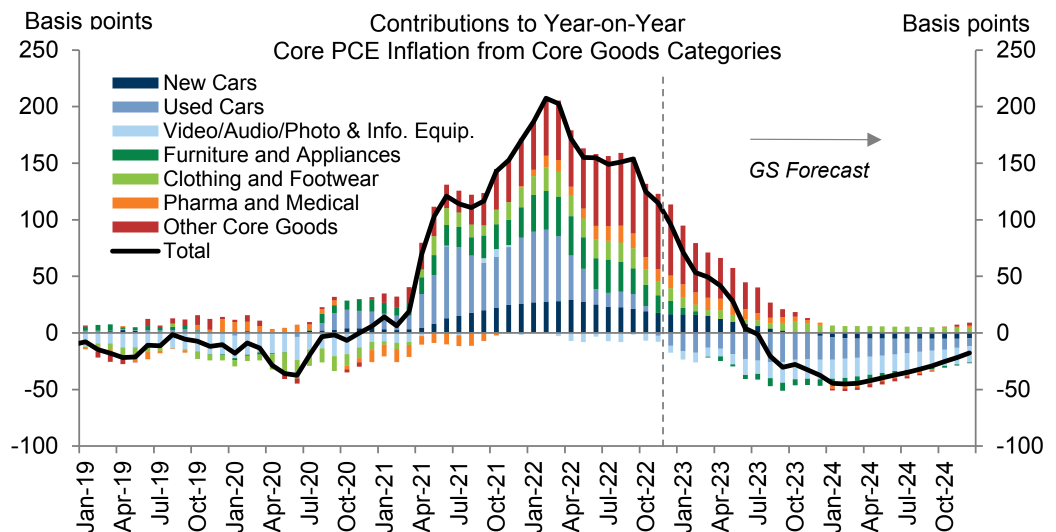
Exhibit 10: Supply Chain Recovery Is Finally Underway and Delivering a Rebound in Production, Rebuild of Inventories, and Return of Competition That Are Reversing Scarcity-Driven Price Spikes in Categories Like Autos



Source: Institute for Supply Management, Federal Reserve, Department of Commerce, Goldman Sachs Global Investment Research

More moderate commodity price inflation, falling transportation costs, and downward pressure on import prices from past dollar appreciation should also help to reduce core PCE goods inflation, which has already fallen from a peak of 7.6% year-on-year to 3.8% in November and should turn negative next year. Core goods inflation ran modestly negative last cycle, and we expect it to run somewhat more negative than usual for a while as elevated prices of items like used cars revert to more normal levels.

Exhibit 11: We Expect Core Goods Inflation to Turn Negative in 2023



Source: Department of Commerce, Goldman Sachs Global Investment Research

We expect a more limited decline on the services side, with core services PCE falling from 5% to a still high 4.5% by December 2023, in part due to lags in the official data for the two largest categories, shelter and health care. However, Chair Powell's recent

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focus on the sharp decline in alternative measures of rent inflation that will lead the official data by longer than usual suggests that Fed officials are comfortable looking ahead to an eventual deceleration and will not overreact to the lagged official data next year.

7. Will one-year Michigan consumer inflation expectations fall below 4%?

Yes. One-year consumer inflation expectations surged in 2021 and early 2022 as gasoline and food prices rose and price spikes on many items in short supply caught consumers' attention. As gasoline prices have moderated, one-year inflation expectations have begun to moderate too, though they remain high, as Exhibit 11 shows. Barring further spikes in commodity prices, we expect one-year inflation expectations to fall further next year for a few reasons. First, short-term expectations tend to converge more toward long-term expectations than vice-versa in the absence of additional inflationary shocks. Second, moderation in categories like gasoline and food that are particularly salient for inflation expectations and a broader goods-driven decline in inflation should help to restore a sense of normalcy. Third, the end of the election season and the deluge of inflation-themed campaign ads might help too.

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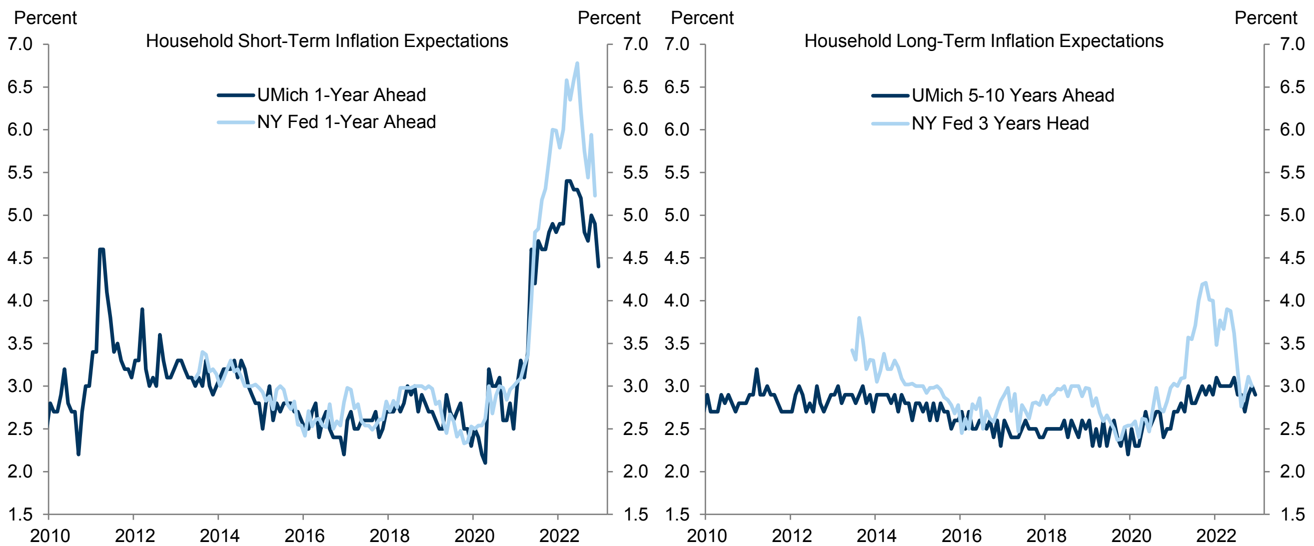
Exhibit 12: Short-Term Inflation Expectations Remain High, but Long-Term Expectations Are Anchored

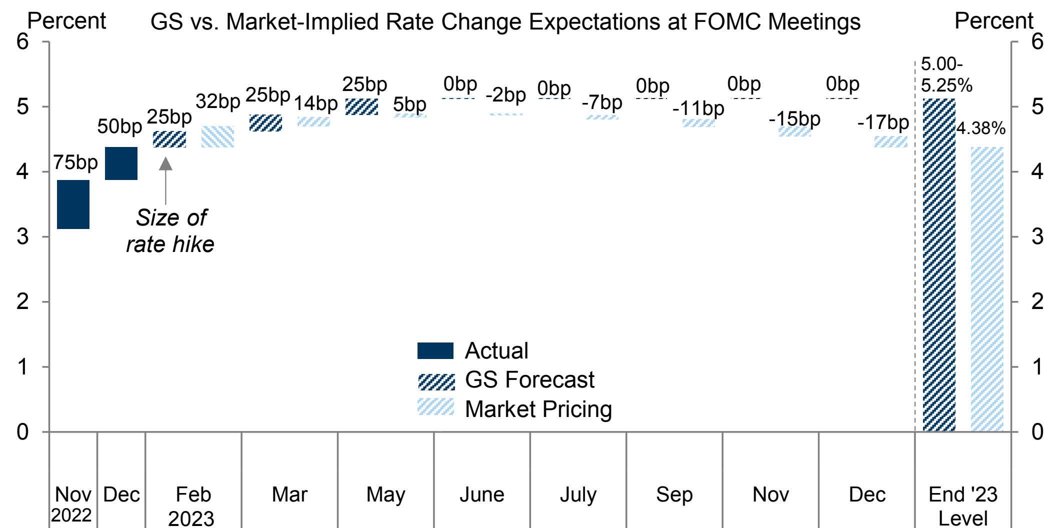


Source: University of Michigan, Federal Reserve Bank of New York, Goldman Sachs Global Investment Research

8. Will the Fed cut the funds rate?

No. We expect the FOMC to deliver three 25bp rate hikes in February, March, and May, and then to hold the funds rate at 5-5.25% for the rest of 2023. In contrast, market pricing implies a peak funds rate of 4.75-5% and declines to about 4.4% by the end of 2023, as shown in Exhibit 13.

Exhibit 13: We Expect the FOMC to Hike Three Times Next Year and Then Hold at 5-5.25%



Source: Goldman Sachs Global Investment Research

There are two possible rationales for cutting the funds rate in the future. The first rationale would be that if inflation declines, Fed officials might decide that policy does not need to be as restrictive anymore. We are doubtful that the goods-driven decline in inflation that we expect in 2023 would be sufficient to give the FOMC confidence that inflation is moving down in a sustained way, which Powell has said is the criterion for cutting. But more than that, we remain skeptical that the FOMC will cut just for the sake of returning to neutral because we suspect that the Fed leadership does not have enough confidence in its neutral rate estimate for it to exert much gravitational pull on the policy rate.

The second and we think more likely rationale for cutting at some point would be that the economy is entering recession or threatens to do so without an easing in monetary policy. We see this as the more natural path—if tighter monetary policy succeeds in convincingly reducing inflation, we expect the FOMC to just leave the policy rate unchanged until something goes wrong. We have cuts in our forecast over 2024-2026, but we do not intend for the timing to be taken literally and instead think of our path of cuts as a placeholder for an uncertain future date when something goes wrong.

We often caution that market pricing is a probability-weighted average of many scenarios and is not directly comparable to our modal forecast of the Fed path, which assumes that the economy will avoid recession next year. We suspect that the downward slope in the yield curve in 2023 mostly reflects some probability of cuts in a possible recession scenario, while the downward slope in 2024 likely reflects both some probability of cuts in a recession and some probability of cuts if inflation moderates without a recession. Our own probability-weighted average forecast of possible Fed paths also implies that the yield curve should slope downward but is somewhat more hawkish than market pricing.

9. Will the debt limit have as negative an impact on financial markets in 2023 as it

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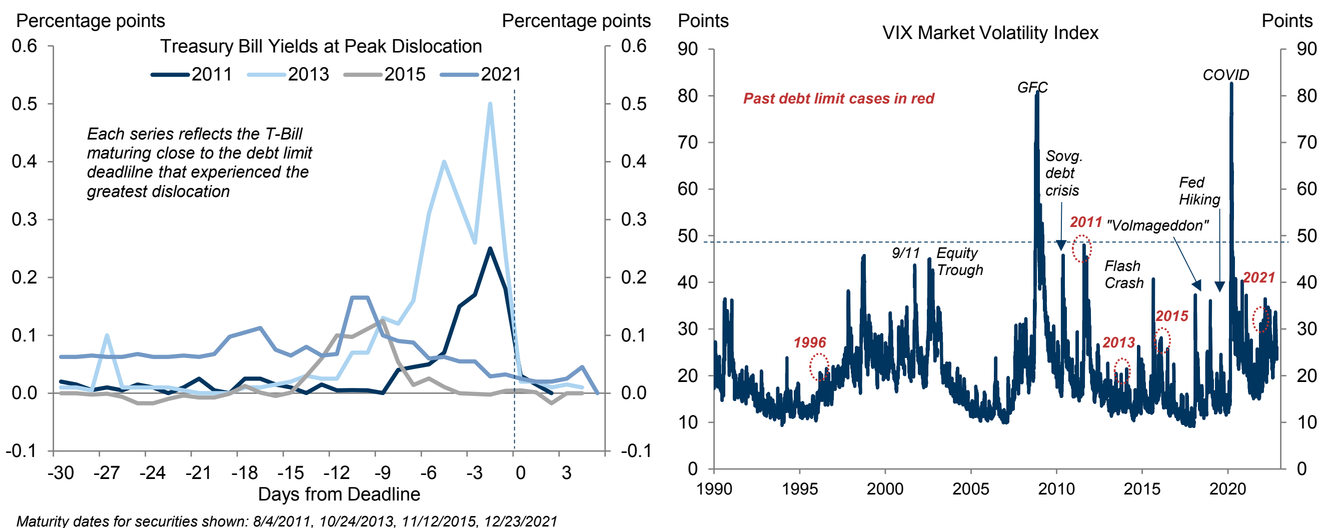
did in 2011?

Yes. The political and fiscal conditions next year will be similar to the last two extremely disruptive debt limit increases, in 1995 and 2011. Like next year, in those periods a Democratic President in his third year faced a Republican House after losing the majority in the midterm election. Those episodes also followed a run-up in public debt as a share of GDP and/or a rise in federal interest expense, similar to the experience over the last few years. However, midterm gains of 54 seats in 1994 and 63 in 2010 gave Republicans a clearer political mandate and the votes to carry it out, at least in the House. By contrast, Republicans netted only 9 seats in the 2022 midterms and enter 2023 with a very thin House majority. Public focus on the public debt is also much lower compared to those prior periods, and Republicans have not emphasized fiscal restraint nearly as much recently as they had in the mid-1990s or early part of the Obama Administration.

Prior disruptive debt limit standoffs led to increased market volatility and a sell-off in Treasury securities maturing around the debt limit deadline, and we would expect this to occur next year. In 2023, we would expect yields on bills maturing around the deadline to rise by at least as much as they did in 2011 and 2013, and for volatility in financial markets to rise similar to those periods (Exhibit 14).

Exhibit 14: Disruption from the 2023 Debt Limit Deadline Is Likely to Rival the 2011 Experience



Source: Bloomberg, Treasury, Goldman Sachs Global Investment Research

There is also a real chance that Congress fails to raise the debt limit in time next year, forcing Treasury to reduce daily payments to the level of receipts (i.e., immediately eliminating the budget deficit), resulting in a spending cut of around 10% of GDP at an annualized rate. While we think it is more likely that Congress manages to avoid this and raise the debt limit before it constrains Treasury's ability to pay its obligations, the risk appears higher than at any point since 2011.

The deadline for Congress to raise the debt limit before Treasury must cut back net borrowing will likely be sometime in August but could be as late as October depending on Treasury cash flows (Exhibit 15). An early signal of the risk the debt limit poses will come at the start of 2023, when the new House of Representatives is seated. If

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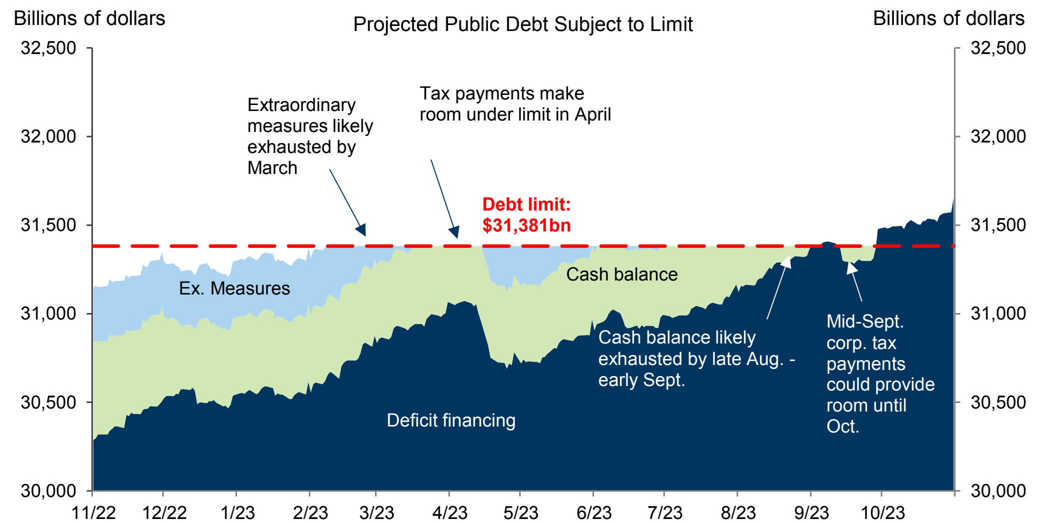
Republicans reinstate the "motion to vacate" that allows any member of the House to call for a vote for a new speaker of the House—several Republican House members have recently called for this in return for their vote for speaker—it could be difficult for the next speaker to put a clean debt limit increase to a vote until forced by financial markets.

Exhibit 15: Congress Has Until August and Possibly as Long as October to Raise the Debt Limit



Source: Department of the Treasury, Goldman Sachs Global Investment Research

10. Will Congress enact substantial fiscal policy changes in 2023?

No. Two factors could in theory lead Congress to pass fiscal policy changes with a meaningful macroeconomic impact. First, a recession could trigger a countercyclical policy response as it did during the last three recessions. However, as discussed above, we don't see a recession as the base case. Assuming the economy avoids recession in 2023, there would be little reason to expect Congress to approve fiscal stimulus next year. Even if the economy enters recession a countercyclical fiscal response is far from guaranteed, as divided control would make it harder for Congress to respond to a downturn, and any recession that might occur would likely be far milder than the downturns that led to substantial fiscal responses in 2008-09 and 2020-21. Instead, we would expect a debate on fiscal stimulus next year to end similarly to 1990-1991, when divided government thwarted White House attempts at fiscal support (Exhibit 15, left). That said, there are a number of smaller tax policies that Congress is more likely to address in 2023 that would largely preserve current policy (e.g. preserving the expensing of R&D costs). These could be paired with a slight expansion of tax benefits to households, though the fiscal effect would likely be worth a few tenths of a percent of GDP at most.

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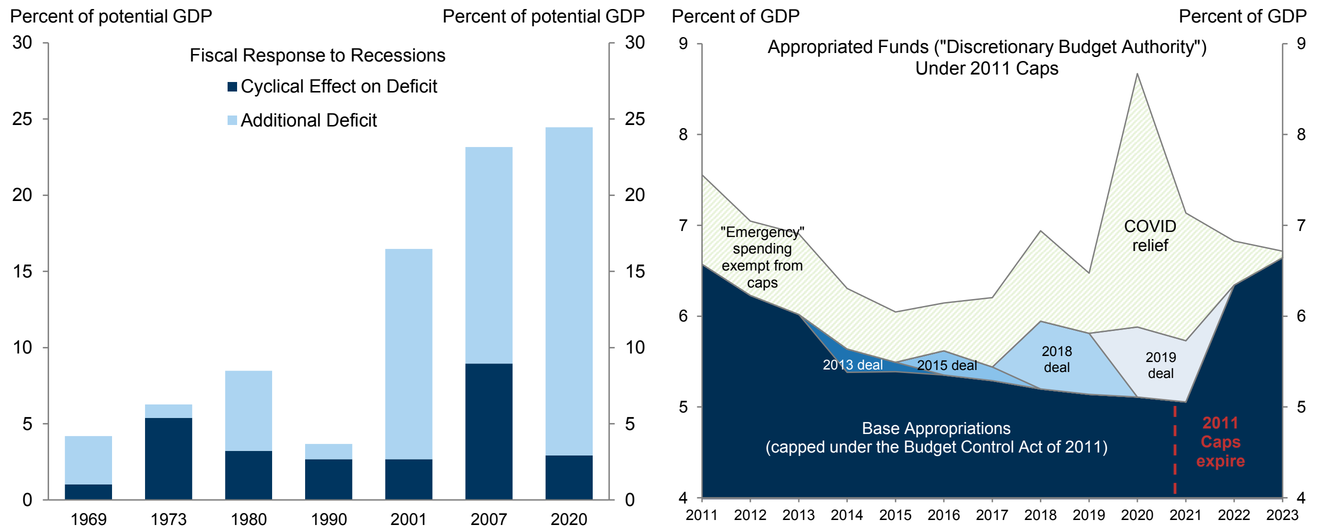
Exhibit 16: Major Fiscal Support is Unlikely in 2023, as Is Major Fiscal Restraint



Source: Congressional Budget Office, Office of Management and Budget, Department of Commerce, Goldman Sachs Global Investment Research

Second, the debt limit deadline could lead to spending cuts, but here again the odds lean against substantial changes. Congressional Republicans are apt to seek some type of spending cuts in return for an increase in the debt limit. In 2011, these demands resulted in caps on discretionary spending over the next decade that would have reduced spending by 1.2% of GDP over that period, though Congress softened the cuts several times along the way (Exhibit 15, right). However, we expect President Biden to reject attempts at negotiation, and we would be surprised if Congress approved more than half as much fiscal restraint next year as it agreed to in 2011.

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The US Economic and Financial Outlook

(% change on previous period, annualized, except where noted)

	2020	2021	2022	2023	2024	2025	2022				2023			
			(f)	(f)	(f)	(f)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
OUTPUT AND SPENDING														
Real GDP	**-2.8**	**5.9**	*2.0*	*1.3*	*1.6*	*1.9*	**-1.6**	**-0.6**	**3.2**	*1.7*	*0.8*	*1.0*	*1.3*	*1.3*
Real GDP (annual=Q4/Q4, quarterly=yoy)	**-1.5**	**5.7**	*0.7*	*1.1*	*1.9*	*1.9*	**3.7**	**1.8**	**1.9**	*0.7*	*1.3*	*1.7*	*1.2*	*1.1*
Consumer Expenditures	**-3.0**	**8.3**	*2.9*	*2.1*	*1.8*	*1.9*	**1.3**	**2.0**	**2.3**	*3.5*	*2.0*	*1.5*	*1.5*	*1.5*
Residential Fixed Investment	**7.2**	**10.7**	*-10.7*	*-17.1*	*-0.1*	*2.0*	**-3.1**	**-17.8**	**-27.1**	*-27.0*	*-17.5*	*-10.0*	*-5.0*	*0.0*
Business Fixed Investment	**-4.9**	**6.4**	*3.6*	*2.3*	*3.3*	*3.6*	**7.9**	**0.1**	**6.2**	*0.5*	*2.0*	*2.2*	*2.4*	*3.0*
Structures	**-10.1**	**-6.4**	*-8.2*	*-3.8*	*2.4*	*3.0*	**-4.4**	**-12.7**	**-3.6**	*-13.9*	*0.0*	*0.0*	*1.0*	*2.0*
Equipment	**-10.5**	**10.3**	*4.7*	*2.6*	*2.6*	*3.0*	**11.4**	**-2.1**	**10.6**	*3.0*	*1.0*	*1.5*	*1.5*	*2.5*
Intellectual Property Products	**4.8**	**9.7**	*8.8*	*4.9*	*4.3*	*4.5*	**10.8**	**8.9**	**6.8**	*5.5*	*4.0*	*4.0*	*4.0*	*4.0*
Federal Government	**6.2**	**2.3**	*-3.1*	*-0.8*	*-0.1*	*0.0*	**-5.3**	**-3.4**	**3.7**	*-3.0*	*-1.0*	*-1.0*	*0.0*	*0.0*
State & Local Government	**0.4**	**-0.5**	*0.6*	*1.3*	*1.0*	*1.0*	**-0.4**	**-0.6**	**3.7**	*1.3*	*1.0*	*1.0*	*1.0*	*1.0*
Net Exports ($bn, '12)	**-923**	**-1,233**	*-1,370*	*-1,298*	*-1,343*	*-1,362*	**-1,489**	**-1,431**	**-1,269**	*-1,293*	*-1,283*	*-1,288*	*-1,299*	*-1,320*
Inventory Investment ($bn, '12)	**-55**	**-19**	*113*	*75*	*66*	*60*	**215**	**110**	**39**	*88*	*75*	*75*	*75*	*75*
Industrial Production, Mfg.	**-6.3**	**5.7**	*3.4*	*1.6*	*2.6*	*3.2*	**3.6**	**2.9**	**-0.4**	*2.8*	*1.4*	*1.5*	*1.8*	*2.1*
HOUSING MARKET														
Housing Starts (units, thous)	**1,395**	**1,605**	*1,611*	*1,570*	*1,570*	*1,570*	**1,720**	**1,647**	**1,450**	*1,627*	*1,570*	*1,570*	*1,570*	*1,570*
New Home Sales (units, thous)	**831**	**769**	*629*	*549*	*722*	*786*	**776**	**609**	**597**	*532*	*496*	*528*	*559*	*613*
Existing Home Sales (units, thous)	**5,638**	**6,127**	*5,057*	*3,831*	*4,147*	*4,509*	**6,057**	**5,373**	**4,770**	*4,028*	*3,750*	*3,793*	*3,858*	*3,924*
Case-Shiller Home Prices (%yoy)*	**9.5**	**18.8**	*4.3*	*-7.5*	*-2.2*	*3.8*	**20.0**	**19.6**	**13.1**	*4.3*	*-3.8*	*-8.8*	*-8.2*	*-7.5*
INFLATION (% ch, yr/yr)														
Consumer Price Index (CPI)**	**1.3**	**7.1**	*6.7*	*3.2*	*2.6*	*2.5*	**8.0**	**8.6**	**8.3**	*7.2*	*5.6*	*3.8*	*2.9*	*3.0*
Core CPI **	**1.6**	**5.5**	*5.7*	*3.2*	*2.7*	*2.5*	**6.3**	**6.0**	**6.3**	*6.0*	*5.5*	*4.6*	*3.7*	*3.2*
Core PCE** †	**1.5**	**5.0**	*4.4*	*2.9*	*2.4*	*2.2*	**5.3**	**5.0**	**4.9**	*4.7*	*4.2*	*3.7*	*3.3*	*3.0*
LABOR MARKET														
Unemployment Rate (%)^	**6.7**	**3.9**	*3.7*	*4.1*	*4.2*	*4.2*	**3.6**	**3.6**	**3.5**	*3.7*	*3.7*	*3.8*	*3.9*	*4.1*
U6 Underemployment Rate (%)^	**11.7**	**7.3**	*6.9*	*7.7*	*7.9*	*7.9*	**7.0**	**6.6**	**6.7**	*6.9*	*6.9*	*7.1*	*7.4*	*7.7*
Payrolls (thous, monthly rate)	**-774**	**562**	*376*	*56*	*51*	*60*	**539**	**349**	**366**	*249*	*142*	*33*	*25*	*25*
Employment-Population Ratio (%)^	**57.4**	**59.5**	*59.9*	*59.6*	*59.4*	*59.2*	**60.1**	**59.9**	**60.1**	*59.9*	*59.9*	*59.8*	*59.7*	*59.6*
Labor Force Participation Rate (%)^	**61.5**	**61.9**	*62.2*	*62.1*	*62.0*	*61.8*	**62.4**	**62.2**	**62.3**	*62.2*	*62.2*	*62.2*	*62.2*	*62.1*
Average Hourly Earnings (%yoy)	**4.9**	**4.2**	*5.2*	*4.5*	*3.6*	*3.3*	**5.4**	**5.3**	**5.2**	*4.9*	*4.8*	*4.7*	*4.5*	*4.1*
GOVERNMENT FINANCE														
Federal Budget (FY, $bn)	**-3,132**	**-2,775**	**-1,375**	*-1,250*	*-1,350*	*-1,600*	--	--	--	--	--	--	--	--
FINANCIAL INDICATORS														
FF Target Range (Bottom-Top, %)^	**0-0.25**	**0-0.25**	*4.25-4.5*	*5-5.25*	*4.25-4.5*	*3.5-3.75*	**0.25-0.5**	**1.5-1.75**	**3-3.25**	*4.25-4.5*	*4.75-5*	*5-5.25*	*5-5.25*	*5-5.25*
10-Year Treasury Note^	**0.93**	**1.52**	*4.10*	*4.30*	*4.05*	*4.05*	**2.32**	**2.98**	**3.83**	*4.10*	*4.35*	*4.50*	*4.40*	*4.30*
Euro (€/$)^	**1.22**	**1.13**	*1.05*	*1.05*	*1.10*	*1.10*	**1.11**	**1.05**	**0.98**	*1.05*	*0.95*	*0.98*	*1.02*	*1.05*
Yen ($/¥)^	**103**	**115**	*135*	*125*	*115*	*115*	**121**	**136**	**145**	*135*	*145*	*133*	*128*	*125*

* Weighted average of metro-level HPIs for 381 metro cities where the weights are dollar values of housing stock reported in the American Community Survey. Annual numbers are Q4/Q4.
** Annual inflation numbers are December year-on-year values. Quarterly values are Q4/Q4.
† PCE = Personal consumption expenditures. ^ Denotes end of period.
Note: Published figures in bold.

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Economic Releases

Date		Time (ET)	Indicator	Estimate GS	Consensus	Last Report
Tue	**Dec 27**	8:30	Wholesale Inventories (November preliminary)			+0.5%
		8:30	**Advance Goods Trade Balance (November)**	**-$99.2bn**	**-$96.8bn**	**-$99.0bn**
		9:00	FHFA House Price Index (October)		-0.6%	+0.1%
		9:00	**S&P/Case-Shiller Home Price Index (October)**		**-1.40%**	**-1.24%**
		10:30	Dallas Fed Manufacturing Index (December)			-14.4
Wed	**Dec 28**	10:00	Richmond Fed Manufacturing Index (December)			-9
		10:00	**Pending Home Sales (November)**		**-1.0%**	**-4.6%**
Thu	**Dec 29**	**8:30**	**Initial Jobless Claims**			**216k**
		8:30	Continuing Claims			1,672k
Fri	**Dec 30**	**8:30**	**Chicago Purchasing Managers' Index (December)**		**40.0**	**37.2**

Source: Goldman Sachs Global Investment Research

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Disclosure Appendix

Reg AC

We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Joseph Briggs, Ronnie Walker, Tim Krupa and Manuel Abecasis, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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