# **US Economics Analyst** 2022 US Economic Outlook: Early Liftoff (Mericle)

- The US economy largely followed the rapid road to recovery that we expected this year and is on track to round out the recovery next year as most of the remaining effects of the pandemic fade. But this year also brought a major surprise: a surge in inflation that has already reached a 30-year high and still has further to go. Mainly for this reason, we recently pulled forward our forecast of the timing of the Fed's first rate hike to July 2022, shortly after tapering ends.
- We expect the economy to reaccelerate to a 4%+ growth pace over the next few quarters as the service sector continues to reopen, consumers spend part of their pent-up savings, and inventory restocking gets underway. These forces will contend with a large and steady headwind from diminishing fiscal support that we expect will ultimately leave GDP growth near potential by late 2022.
- The labor market should reach maximum employment by the middle of next year as red-hot demand for workers and the end of enhanced unemployment benefits bring solid job gains. We expect the unemployment rate to reach 3.7% at mid-year and 3.5%—the pre-pandemic 50-year low—by end-2022. While labor force participation is likely to remain below its pre-pandemic trend, this looks structural or voluntary in an environment where job opportunities are plentiful.
- The inflation overshoot has been startling, but so far is attributable to a surge in durable goods prices driven by surprisingly severe and persistent supply-demand imbalances. We do expect persistent inflationary pressure from faster growth of wages and rents, but only enough to keep inflation moderately above 2%, in line with the Fed's goal under its new framework. The current inflation surge will get worse this winter before it gets better, but as supply-constrained categories shift from a transitory inflationary boost to a transitory deflationary drag, we expect core PCE inflation to fall from 4.4% at end-2021 to 2.3% at end-2022.
- The FOMC is scheduled to complete the taper in mid-June 2022. Inflation will have run far above target for a while by then, and we think a seamless move from tapering to rate hikes will be the path of least resistance, with a first hike in July and a second in November. Because we expect growth and inflation to settle down by year-end without a need for aggressive monetary policy tightening, we have penciled in a slower pace of two hikes per year thereafter.

Jan Hatzius +1(212)902-0394 | jan.hatzius@gs.com Goldman Sachs & Co. LLC

Alec Phillips +1(202)637-3746 | alec.phillips@gs.com Goldman Sachs & Co. LLC

David Mericle +1(212)357-2619 | david.mericle@gs.com Goldman Sachs & Co. LLC

Spencer Hill, CFA +1(212)357-7621 | spencer.hill@gs.com Goldman Sachs & Co. LLC

Joseph Briggs +1(212)902-2163 | joseph.briggs@gs.com Goldman Sachs & Co. LLC

Ronnie Walker +1(917)343-4543 | ronnie.walker@gs.com Goldman Sachs & Co. LLC

# 2022 US Economic Outlook: Early Liftoff

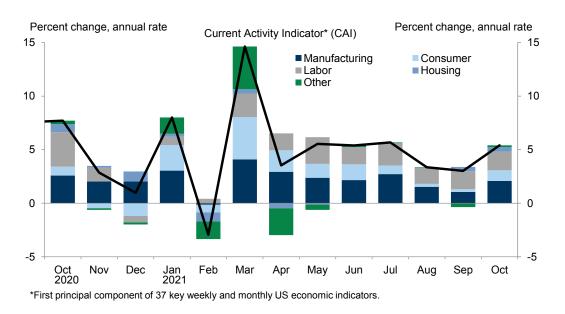
This year brought both the quick recovery we expected and several surprises. A common theme among the surprises is that many changes in economic life caused by the pandemic persist half a year after vaccines became widely available in the US. Some consumers continue to avoid high-contact services and tilt their consumption heavily toward durable goods instead, resulting in very elevated demand for some items even without a broader overheating of aggregate demand. Some workers remain remote, resulting in a still-depressed office-adjacent economy and strong demand for more housing space. Some individuals exited the labor force and remain out because of Covid fears, lifestyle changes, fiscal policy changes, or wealth gains, resulting in a much tighter labor market than the unemployment rate suggests. Some companies have found that miscalculations early in the pandemic are hard to fix, resulting in production blockages and shortages. And some foreign governments retained tighter virus restrictions than the US, aggravating disruptions to global supply chains vulnerable to the weakest link.

These issues underlie the supply-demand imbalances that have fueled the biggest surprise of the year, an inflation overshoot driven by durable goods that has reached a 30-year high. It is now clear that these imbalances will last longer than initially expected and that inflation will therefore remain quite high for some time. As a result, we recently pulled forward our forecast of the timing of the Fed's first rate hike to July 2022, shortly after tapering ends, even as we maintained our core view that growth and inflation will settle down by the end of 2022 without a need for aggressive monetary policy tightening.<sup>1</sup>

## **Rounding Out the Recovery**

The US economy largely followed the rapid road to recovery that we expected this year and is on track to round out the recovery next year as most of the remaining effects of the pandemic fade. Our current activity indicator illustrates the trajectory of the year to date (Exhibit 1). The economy awoke from a slowdown caused by last winter's Covid wave with large spikes in consumer spending in January and March following the disbursement of stimulus checks. Growth remained strong from April through July as mass vaccination allowed the service sector to reopen, but slowed in late summer as the Delta wave spread in the US and abroad, hitting hiring, consumer spending, and manufacturing. The economy now appears to be reaccelerating as the worst effects of the Delta wave fade.

<sup>&</sup>lt;sup>1</sup> David Mericle and Jan Hatzius, "From Tapering to Rate Hikes," US Economics Analyst, October 29, 2021.



#### Exhibit 1: The Recovery Accelerated in the First Half of the Year Thanks to Fiscal Stimulus and Vaccination, Slowed During the Delta Wave, and Is Now Reaccelerating

Source: Goldman Sachs Global Investment Research

We expect GDP growth to pick up to a 4%+ pace in 2021Q4 and 2022H1, driven mainly by three positive impulses. First, the service sector has plenty of room for further reopening, especially in high-contact and office-adjacent services (Exhibit 2). The quick and easy part of reopening is now behind us—restaurant spending is largely back to normal, for example—and recovery in these still-depressed sectors will be more gradual, especially if Covid spread rises this winter. But new antiviral drugs should increase comfort with high-contact activities, and the rebound in international tourism will help too.<sup>2</sup>

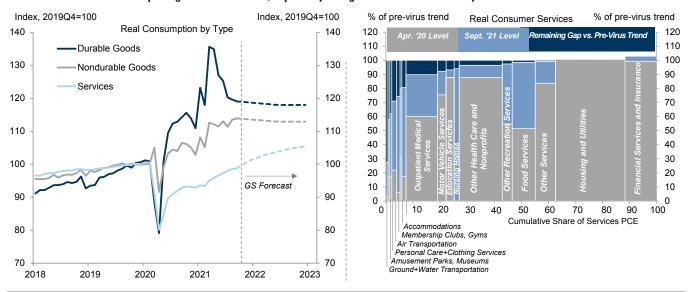
Second, we still see room for consumers to supplement their spending by drawing on a larger share of their pent-up savings accumulated during the pandemic as well as their wealth gains from asset price increases.<sup>3</sup> The saving rate has now returned to the pre-pandemic rate, but should undershoot it a bit if households spend some of their pent-up savings on top of a normal share of their income.

Third, auto dealers and other retailers will need to rebuild depleted inventories, which should sustain demand for goods even as final consumer demand moderates somewhat. Business fixed investment should grow strongly next year too, led by equipment and software rather than structures.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> Ronnie Walker, "Consumer Spending: A Harder Path Ahead," US Economics Analyst, September 6, 2021; "Coming to America: The Effect of Lifting Travel Restrictions on Spending and Employment," US Daily, September 23, 2021.

<sup>&</sup>lt;sup>3</sup> Joseph Briggs, "Updating Our Distributional Income and Spending of Pent-Up Savings Estimates," US Daily, October 27, 2021; Joseph Briggs and David Mericle, "Pent-Up Savings and Post-Pandemic Spending," US Economics Analyst, February 15, 2021.

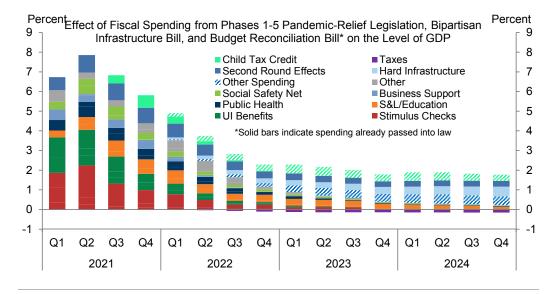
<sup>&</sup>lt;sup>4</sup> Spencer Hill, "Inventory Restocking and the Growth Outlook," US Daily, July 28, 2021; Joseph Briggs, "The Capex Reset: New Investment for the New Work Environment," US Economics Analyst, August 16, 2021.



#### Exhibit 2: Service Sector Reopening Has Further to Go, Especially in High-Contact and Office-Adjacent Sectors

Source: Department of Commerce, Goldman Sachs Global Investment Research

These positive impulses will contend with a substantial, steady headwind from diminishing fiscal support, even if the reconciliation package is passed largely as we expect (Exhibit 3).<sup>5</sup> This reduction in fiscal support will do far more to tap the brakes on the economy in 2022 than any tightening by the Fed.



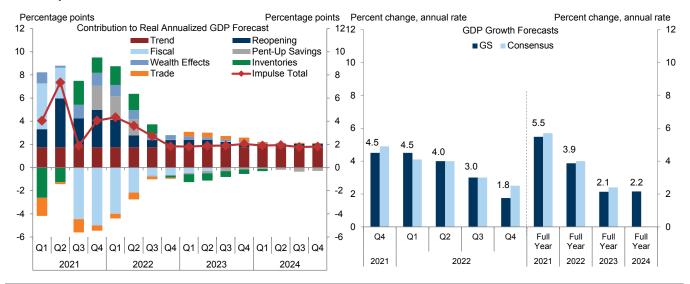


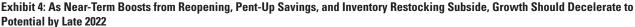
Source: Goldman Sachs Global Investment Research

Our analysis of these key growth impulses suggests that the positive forces should outweigh the fiscal drag for the next few quarters (Exhibit 4). But eventually the room for further reopening will diminish, the pent-up savings of those most likely to spend them will be exhausted, and the inventory rebuild will reach its peak pace. We expect

<sup>&</sup>lt;sup>5</sup> Alec Phillips, "Front-loaded Benefits, Clean Energy, and Corporate Tax Hikes," US Daily, October 28, 2021.

### this to leave GDP growth near our 134% estimate of potential by 2022Q4.6





Source: Goldman Sachs Global Investment Research, Bloomberg

# An Evolving View of Maximum Employment

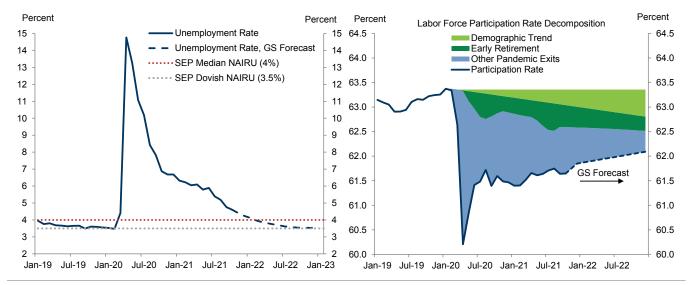
Red-hot demand for workers and the end of enhanced unemployment benefits should bring solid job gains for a while. We doubled down on our below-consensus unemployment rate forecast this fall after showing that job-finding among the unemployed increased disproportionately in the 25 states that chose to end enhanced federal unemployment benefits early.<sup>7</sup> We now expect the unemployment rate to fall to 3.7% by mid-2022 and 3.5%—the pre-pandemic 50-year low—by end-2022 (Exhibit 5, left).

The labor force participation rate presents more of a puzzle. In spite of the strong job market and the vaccination of most American adults, participation has not rebounded since the late summer of 2020. We see a number of reasons for this, including Covid fears, lifestyle changes following a lengthy period of not working, the child tax credit and other fiscal policy changes, and wealth gains.<sup>8</sup> Labor force participation should recover somewhat as Covid risks decline and workers exhaust their financial cushions from the pandemic. But participation is likely to remain below the pre-pandemic demographic trend, with most of the early retirees—who account for almost 40% of the remaining gap—staying out, and even some of the younger and middle-aged workers staying out too. We expect the participation rate to reach 62.1% by end-2022, ½pp below the pre-pandemic trend (Exhibit 5, right).

<sup>&</sup>lt;sup>6</sup> Joseph Briggs, "Updating Our Growth Impulses and GDP Forecast," US Daily, October 10, 2021; Joseph Briggs and David Mericle, "Adding up the Growth Impulses: A Second Look," US Economics Analyst, June 6, 2021.

<sup>&</sup>lt;sup>7</sup> Joseph Briggs, "Estimating the Impact of Unemployment Insurance Benefit Expiration on Employment Using the August Microdata," US Daily, September 16, 2021; Joseph Briggs and Ronnie Walker, "Back to Work When Benefits End," US Economics Analyst, August 21, 2021.

<sup>&</sup>lt;sup>8</sup> Joseph Briggs, "Why Isn't Labor Force Participation Recovering?" US Daily, November 11, 2021.

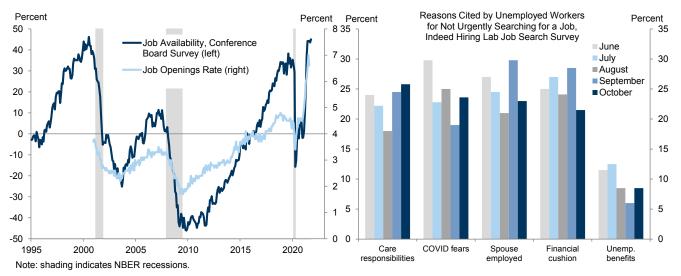


# Exhibit 5: We Expect the Unemployment Rate to Return to Its 3.5% Pre-Pandemic Low in 2022, but Labor Force Participation Is Likely to Remain Below Its Pre-Pandemic Trend

Source: Department of Labor, Goldman Sachs Global Investment Research

Even so, we think it would be fair to characterize our forecast for the labor market as constituting maximum employment by the middle of next year. Last cycle, both we and the Fed leadership argued that participation was depressed for cyclical reasons—a lack of job opportunities that led to widespread worker discouragement—and the FOMC kept monetary policy easy until the job market strengthened enough to bring workers back. But the current environment is very different. With job opportunities plentiful (Exhibit 6, left), any decline in the participation rate that remains by the middle of next year is likely to be mostly voluntary or structural. Workers cite several non-economic reasons for not looking for work (Exhibit 6, right), and fiscal policy changes being considered in the reconciliation package—especially the child tax credit and the child care tax credit—could have meaningful and offsetting effects on the structural participation rate, though the net effect will not be clear until the bill is finalized.

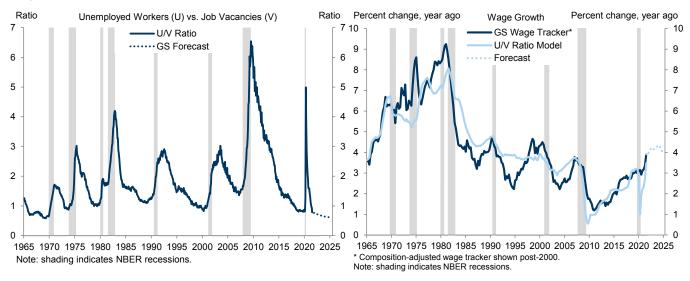




Source: The Conference Board, Department of Labor, Indeed Hiring Lab

Strong labor demand coupled with tight labor supply should generate sustainably strong wage growth. Some wage measures have run at a 5-6% annualized pace over the last half year, when enhanced unemployment benefits remained in place and labor shortages generated very strong wage gains for low-paid workers.<sup>9</sup> Both our wage growth model and our wage survey leading indicator suggest that wage growth will moderate to just over 4% as labor supply returns, stronger than the 3% peak reached last cycle, but—after netting out productivity growth—compatible with the Fed's inflation goal.<sup>10</sup>

Exhibit 7: Strong Labor Demand and Reduced Labor Supply Should Keep Wage Growth Just Above 4%, Stronger Than Last Cycle but Compatible with the Fed's Inflation Goal



Source: Goldman Sachs Global Investment Research

# Inflation Will Get Worse Before It Gets Better

The inflation debate this year has centered on a persistent vs. transitory dichotomy that oversimplifies things a bit.

In the spring, we argued that stronger wage growth, firmer shelter inflation, and a moderate upward reanchoring of inflation expectations would generate persistently higher inflation this cycle than last, enough for the Fed to achieve its goal of raising inflation about 50bp from the sub-2% rate seen late last cycle to somewhat above 2%. We also argued that the same three factors were the most important upside inflation risks, if any turned out to be too much of a good thing.<sup>11</sup> So far, these three factors have pushed services inflation up to roughly the mid-2000s rate that we think is needed to achieve the Fed's goal in the medium run. We do see some upside risk from these three factors—wage growth was very hot while enhanced unemployment benefits were

<sup>&</sup>lt;sup>9</sup> Spencer Hill, "How High Is Low-End Wage Growth?," US Daily, September 20, 2021; David Mericle and Ronnie Walker, "Will Unemployment Benefit Expiration Slow Wage Growth? An Early Look from Ride-Hailing Services," US Daily, August 13, 2021; David Mericle and Laura Nicolae, "The Inflation Risks from Stronger Low-End Wage Growth," US Daily, June 30, 2021.

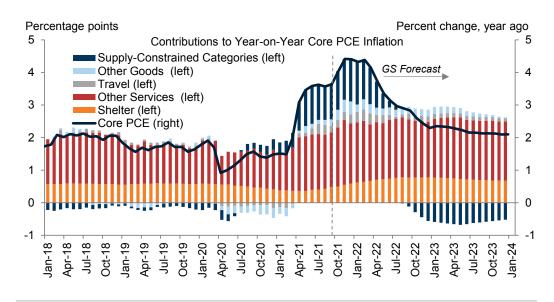
<sup>&</sup>lt;sup>10</sup> Joseph Briggs, "Wage Growth Should Stabilize Around 4%, Consistent with the Fed's Inflation Goal," US Daily, November 3, 2021.

<sup>&</sup>lt;sup>11</sup> David Mericle and Laura Nicolae, "The Inflation Risks That Matter for the Fed," US Economics Analyst, May 16, 2021.

in place, our shelter inflation tracker has surged even faster than we expected<sup>12</sup>, and our short-run business inflation expectations tracker has reached a very high level.<sup>13</sup> But our best guess is that while these persistent drivers of higher inflation might run hot a little longer, they will eventually settle in a place compatible with core PCE inflation of 2-2.5%.

The startling overshoot of the moderately higher inflation rate the Fed intended is so far entirely attributable to a surge in durable goods prices, and this we expect to prove transitory. Both very strong demand for durable goods and supply chain problems in the auto and other sectors have lasted longer than expected, resulting in supply-demand imbalances and unusual shortages and price spikes in most durable goods categories. We expect these problems and the inflation surge they produced to get worse before they get better.<sup>14</sup> But eventually, demand for goods should moderate as the peak stay-at-home and stimulus effects fade, and supply chain problems should be gradually resolved.<sup>15</sup> While it is hard to know exactly when, this should eventually cause the supply-constrained categories to shift from a transitory inflationary boost to a transitory deflationary drag (Exhibit 8). This shift and a diminishing boost from the surge in commodities prices<sup>16</sup> over the last year are the main reasons we expect core PCE inflation to fall from 4.4% at end-2021 to 2.3% at end-2022.

Exhibit 8: Core PCE Inflation Will Rise Further This Winter, but Should Eventually Fall to the Low 2s as a Transitory Inflation Boost from Durable Goods Becomes a Transitory Deflationary Drag in Late 2022 and 2023



Source: Goldman Sachs Global Investment Research

<sup>12</sup> Ronnie Walker, "The Housing Shortage: Prices, Rents, and Deregulation," US Economics Analyst, October 11, 2021; Ronnie Walker, "Shelter Inflation and Booming House Prices," US Daily, May 15, 2021.

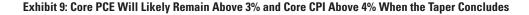
<sup>13</sup> Ronnie Walker, US Monthly Inflation Monitor, October 29, 2021; Ronnie Walker, "Higher Business Inflation Expectations Are Mostly a Short-Term Signal," US Daily, June 18, 2021.

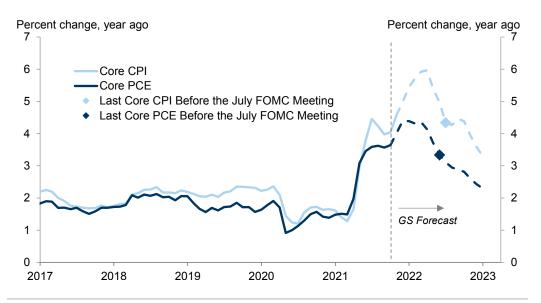
<sup>14</sup> Spencer Hill and David Mericle, "2022 Inflation Outlook: Getting Worse Before It Gets Better," US Economics Analyst, November 7, 2021.

<sup>15</sup> Spencer Hill, "Track My Package: A Roadmap for Supply Chain Normalization," US Economics Analyst, October 26, 2021.

<sup>16</sup> Ronnie Walker, "The Growth and Inflation Consequences of Higher Energy Prices," US Daily, October 19, 2021; Ronnie Walker, "The Commodities Boom and Consumer Prices," US Economics Analyst, July 5, 2021.

Adding to the Fed's winter inflation woes, core CPI is likely to exceed core PCE by more than usual, owing to the larger weights on durable goods and shelter and a spike in the health insurance component of the CPI.<sup>17</sup> We expect core CPI to peak at about 6%, and even by the time the FOMC meets next July, core PCE is likely to remain above 3% and core CPI above 4% (Exhibit 9).





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

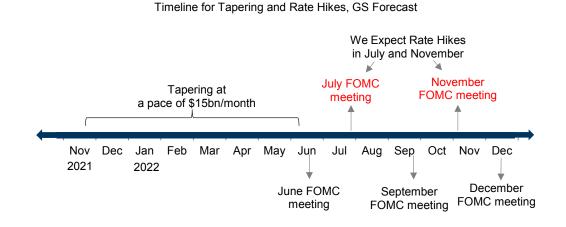
## From Tapering to Rate Hikes

The FOMC is scheduled to complete the taper by mid-June 2022. Inflation will have run far above target for a while by then, and we think a seamless move from tapering to rate hikes will be the path of least resistance, with a first hike in July and a second in November (Exhibit 10). High inflation prints through the winter are likely to keep market debate about accelerating the taper alive, but we assume Fed officials largely foresaw the coming inflation path when they settled on a \$15bn per month pace and would see limited value in speeding up the taper by 2-3 months. If they feel the need to tighten more quickly, hiking in June and then twice more in September and December seems like the simpler option.

The biggest risk to our expectation of an early liftoff is the guidance in the FOMC statement that even the first rate hike requires maximum employment. However, with inflation far above target, unemployment likely below the median participant's 4% NAIRU estimate, and plenty of jobs available, we think the FOMC will conclude that most if not all of the remaining weakness in labor force participation is structural or voluntary. A few dovish FOMC participants might object, pointing to either participation or some shortfall from the Fed's broad-based and inclusive maximum employment goal.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> David Mericle and Spencer Hill, "US Daily: A Wider CPI-PCE Gap and a Hotter Inflation Dashboard in 2022," US Daily, October 28, 2021.

<sup>&</sup>lt;sup>18</sup> Joseph Briggs, Ronnie Walker, and Laura Nicolae, "The Fed's Broad and Inclusive Maximum Employment



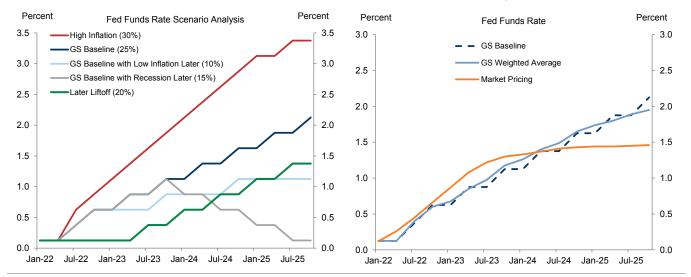
### Exhibit 10: We Expect a Seamless Transition from Tapering to Rate Hikes, With Liftoff in July 2022

Source: Goldman Sachs Global Investment Research

Because we expect growth and inflation to settle down by year-end without a need for aggressive monetary policy tightening, we have penciled in a slower pace of two hikes per year starting in 2023. We see this pace as plausible either as a dovish response if inflation remains modestly above 2%—with less urgency to normalize back to neutral than under the Fed's more preemptive approach last cycle—or as an average outcome if inflation fluctuates above and below 2%.

The range of possible outcomes is wide, especially in the longer term. We recently provided a stylized scenario analysis of possible paths for the Fed weighted by our judgmental estimates of their probabilities (Exhibit 11, left), in order to make our views more comparable to market pricing. We see two main takeaways. First, the risks around our baseline look reasonably symmetric, which is not always the case. Second, our weighted average view implies that the market is pricing a bit too much tightening up front and a bit too little later on, even relative to our baseline expectation of a fairly slow pace and our view that there is some chance of hikes pausing if inflation falls below 2% down the road.

Goal," US Economics Analyst, March 22, 2021.



### Exhibit 11: Our Fed Scenario Analysis Suggests That the Market Is Pricing a Bit Too Much Tightening Up Front and a Bit Too Little Later On

Source: Goldman Sachs Global Investment Research

## **David Mericle**

# The US Economic and Financial Outlook

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

	2019	2020	2021	2022	2023	2024	2021				2022			
			(f)	(f)	(f)	(f)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
OUTPUT AND SPENDING														
Real GDP	2.3	-3.4	5.5	3.9	2.1	2.2	6.3	6.7	2.0	4.5	4.5	4.0	3.0	1.8
Real GDP (annual=Q4/Q4, quarterly=yoy)	2.6	-2.3	4.9	3.3	1.9	2.2	0.5	12.2	4.9	4.9	4.4	3.7	4.0	3.3
Consumer Expenditures	2.2	-3.8	7.9	3.4	2.1	2.2	11.4	12.0	1.6	3.8	3.5	3.0	2.0	2.0
Residential Fixed Investment	-0.9	6.8	9.3	1.1	2.6	2.0	13.3	-11.7	-7.7	3.2	4.0	4.0	3.0	3.0
Business Fixed Investment	4.3	-5.3	7.5	4.8	3.6	3.7	12.9	9.2	1.8	5.0	6.1	4.4	4.0	3.4
Structures	2.1	-12.5	-8.0	-0.3	2.0	2.6	5.4	-3.0	-7.2	-2.2	2.0	2.0	2.0	2.0
Equipment	3.3	-8.3	13.2	5.1	2.8	2.8	14.1	12.2	-3.2	6.4	8.0	5.0	4.0	2.5
Intellectual Property Products	7.2	2.8	10.3	6.9	5.0	5.2	15.6	12.5	12.2	7.0	6.0	5.0	5.0	5.0
Federal Government	3.8	5.0	0.9	-1.7	-0.8	-0.1	11.3	-5.3	-4.7	-1.0	-1.0	-1.0	-1.0	-1.0
State & Local Government	1.3	0.9	0.6	2.6	1.6	1.0	-0.1	0.2	4.4	2.3	2.5	2.5	2.5	2.5
Net Exports (\$bn, '12)	-905	-943	-1,279	-1,381	-1,352	-1,321	-1226	-1245	-1312	-1333	-1353	-1382	-1393	-1398
Inventory Investment (\$bn, '12)	75	-42	-86	150	105	60	-88	-169	-78	-11	80	150	190	180
Industrial Production, Mfg.	-2.0	-6.6	6.5	5.1	2.2	1.8	2.8	4.9	5.3	5.9	6.0	5.1	3.7	2.4
HOUSING MARKET														
Housing Starts (units, thous)	1.292	1,397	1.616	1.680			1,599	1.588	1.566	1.711	1.693	1.667	1.637	1.723
New Home Sales (units, thous)	683	828	824	910	933	927	896	737	738	924	933	894	867	944
Existing Home Sales (units, thous)	5,327	5.658	6.070	6.159	6,247	6,324	6,303	5.833	6,057	6.087	6.117	6.146	6,175	6,200
Case-Shiller Home Prices (%yoy)*	3.4	9.9	15.4	9.8	7.5	5.9	11.7	15.9	15.3	15.4	13.3	11.3	10.5	9.8
( ) ))			-							-				
INFLATION (% ch, yr/yr)														
Consumer Price Index (CPI)**	2.3	1.3	6.8	3.0	2.6	2.5	1.9	4.8	5.3	6.6	6.7	5.6	4.6	3.3
Core CPI **	2.2	1.6	5.4	3.3	2.6	2.5	1.4	3.7	4.1	5.0	5.9	4.9	4.4	3.6
Core PCE** †	1.6	1.5	4.4	2.3	2.1	2.2	1.7	3.4	3.6	4.3	4.3	3.4	2.9	2.4
LABOR MARKET														
Unemployment Rate (%) <sup>^</sup>	3.6	6.7	4.2	3.5	3.3	3.2	6.0	5.9	4.8	4.2	3.9	3.7	3.5	3.5
U6 Underemployment Rate (%) <sup>A</sup>	6.8	11.7	7.7	6.7	6.3	6.1	10.7	9.7	8.5	7.7	7.2	7.0	6.8	6.7
Payrolls (thous, monthly rate)	168	-785	570	223	127	99	518	615	629	519	317	230	180	167
Employment-Population Ratio (%) <sup>^</sup>	61.0	57.4	59.2	59.9	60.0	59.9	57.8	58.1	58.9	59.5	59.5	59.7	59.8	59.9
Labor Force Participation Rate (%)^	63.3	61.5	61.9	62.1	62.0	61.9	61.5	61.6	61.6	61.9	61.9	62.0	62.0	62.1
GOVERNMENT FINANCE														
Federal Budget (FY, \$bn)	-984	-3,129	-2,800	-1,200	-1,250	-1,300								-
FINANCIAL INDICATORS														
FF Target Range (Bottom-Top, %)^	1.5-1.75	0-0.25	0-0.25	0.5-0.75	1-1.25	1.5-1.75	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0.25-0.5	0.5-0.75
10-Year Treasury Note^	1.92	0.93	1.70	2.00	2.40	2.45	1.74	1.45	1.52	1.70	1.80	1.90	1.95	2.00
Euro (€/\$)^	1.12	1.22	1.15	1.18	1.22	1.25	1.17	1.18	1.16	1.15	1.17	1.18	1.16	1.18
Yen (\$/¥)^	109	103	114	111	107	1.23	111	111	112	114	114	113	113	11
Yen (\$/¥)^ * Weighted average of metro-level HPIs for 381 me							1				!	-		

\* 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.

Source: Goldman Sachs Global Investment Research

# **Economic Releases**

				Estin		
Date		(ET)	Indicator	GS	Consensus	Last Report
Mon	Nov 15	8:30	Empire Manufacturing Index (November)	n.a.	21.6	19.8
Tue	Nov 16	8:30	Retail Sales (October)	+1.1%	+1.1%	+0.7%
			Ex Autos	+0.7%	+0.9%	+0.8%
			Ex Autos & Gas	+0.5%	+0.5%	+0.7%
			Ex Autos, Bldg Materials & Gas	+0.5%	+0.9%	+0.8%
		8:30	Import Price Index (October)	n.a.	+1.0%	+0.4%
		9:15	Industrial Production (October)	+1.1%	+0.8%	-1.3%
			Capacity Utilization	75.2%	75.8%	75.2%
			Manufacturing Production	+1.0%	+0.9%	-0.7%
		10:00	Business Inventories (September)	n.a.	+0.6%	+0.6%
		10:00	NAHB Housing Market Index (November)	n.a.	80	80
Wed	Nov 17	8:30	Housing Starts (October)	+1.0%	+1.6%	-1.6%
		8:30	Bulding Permits (October)	n.a.	+2.8%	-7.7%
Thu	Nov 18	8:30	Initial Jobless Claims	265k	260k	267k
			Continuing Claims	n.a.	n.a.	2,160k
		8:30	Philadelphia Fed Manufacturing Index (October)	23.0	24.0	23.8
		11:00	Kansas City Fed Survey (November)	n.a.	30	31

Source: Goldman Sachs Global Investment Research

# **Disclosure Appendix**

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We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Joseph Briggs and Ronnie Walker, 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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