US Economics Analyst

Missing Workers and Rising Wages (Briggs / Mericle)

- The Great Resignation consists of two quite different but connected trends: millions of workers have left the labor force, and millions more have quit their jobs for better, higher-paying opportunities. These trends have pushed wage growth to a rate that increasingly raises concern about the inflation outlook.
- How did the US wind up with a historically tight labor market so soon after a recession? While total labor demand—employment plus vacancies—is roughly in line with its pre-pandemic trend, labor supply remains substantially depressed.
- The most visible sign of depressed labor supply is that the participation rate remains 1.2pp below its pre-pandemic rate. This gap consists of a 0.2pp drag from population aging and an unexpected 1pp drag—equivalent to 2½ million missing workers—from other factors. Roughly 0.8 million of these have retired early, many having benefited from rising home and equity prices. This leaves 1.7 million people who are more likely candidates to return to the labor force.
- Why haven't those 1.7 million come back yet? Workers give three main reasons: they have Covid-related concerns, they have a financial cushion, or their lifestyle has changed. These explanations suggest that some people are likely to come back if virus spread falls or antiviral pills reduce health risks, and others are likely to come back once they exhaust their savings, especially now that most special pandemic fiscal transfer payments have expired. In support of this expectation, most prime-age workers who left the labor force say they intend to re-enter.
- We forecast that about 1 million people will return to the labor force this year, raising the participation rate to 62.6% by year-end, and that more will come back in later years. Even so, the depressed participation rate implies that workers will be even harder to find than the unemployment rate suggests.
- The tight labor market has boosted wage growth to a 6% pace, perhaps with an assist from high inflation expectations. But surveys show that employers expect wages to rise at a more sustainable 4% pace this year. We put weight on both signals and therefore forecast 5% wage growth this year, implying 3% unit labor cost growth after netting out 2% productivity growth. Faster growth of labor costs than is compatible with the 2% inflation goal is likely to keep the FOMC on a consecutive hiking path and raise the risk of a more aggressive response.

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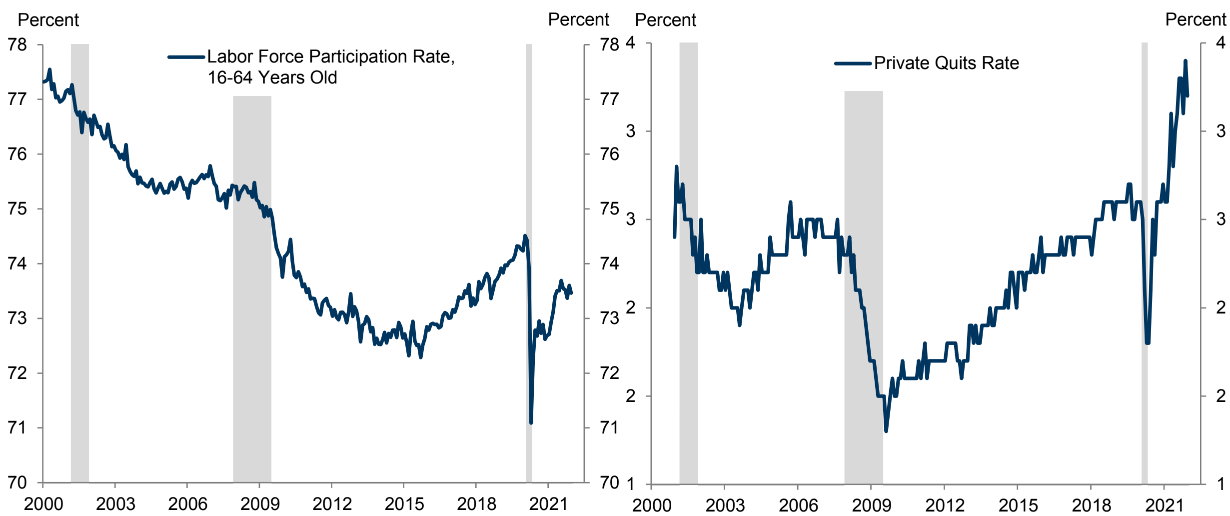
Missing Workers and Rising Wages

The so-called "Great Resignation" consists of two quite different but connected trends: millions of workers have left the labor force since the start of the pandemic, and millions more have taken advantage of the resulting tight labor market to quit their jobs for better, higher-paying opportunities (Exhibit 1). In combination, these trends have pushed wage growth to a rate that increasingly raises serious concerns about the inflation outlook. In this week's *Analyst*, we discuss how the labor market became so tight so quickly, who left the labor force, why they left, whether they'll come back, and what it all means for wage growth, inflation, and the Fed.

Exhibit 1: The Great Resignation Consists of Two Distinct Trends: Labor Force Exit and a High Quits Rate

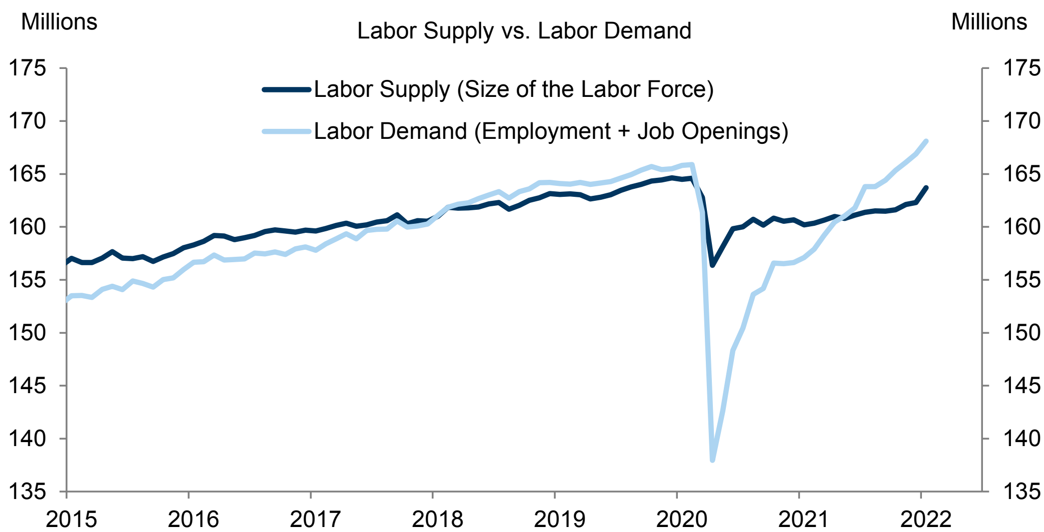


Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

Why Is the Labor Market So Tight?

How did the US labor market get so tight so soon after a recession? Labor demand rebounded quickly as lockdowns eased in 2020, reaccelerated last spring as widespread vaccination led to a quick reopening of the service sector, and continued to grow steadily this fall and winter (Exhibit 2). At this point, labor demand has recovered to above its pre-pandemic level and is close to its pre-pandemic trend. In contrast, labor supply has recovered much more sluggishly, and remains almost 1mn below its pre-pandemic level and much further below its pre-pandemic trend, even after the upward revisions due to the BLS's annual population adjustments in the January household survey.

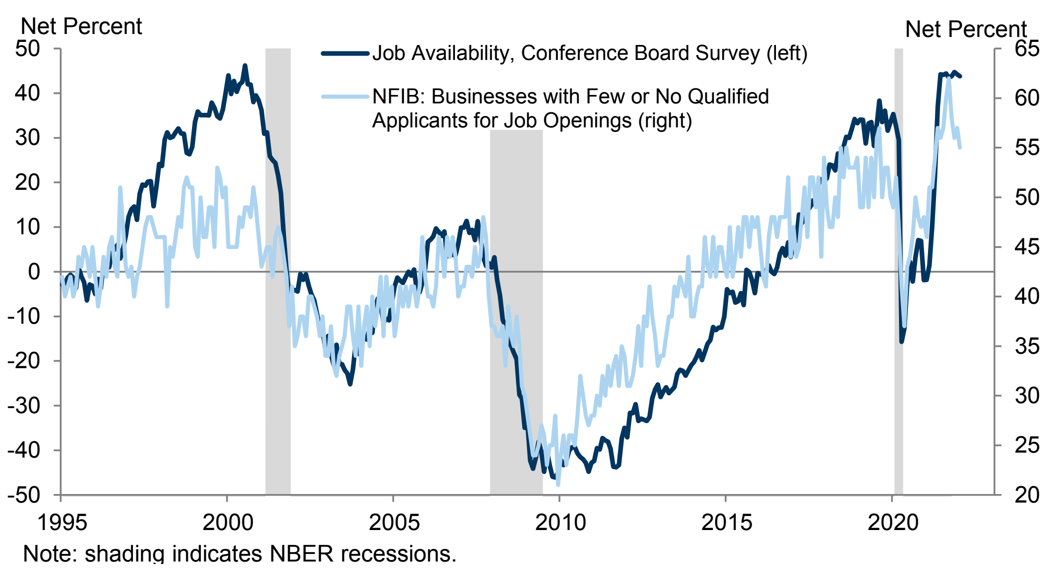
Exhibit 2: Labor Demand Is Close to Its Pre-Pandemic Trend, While Labor Supply Is Still Depressed



Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

The rapid recovery of labor demand and sluggish recovery of labor supply has led to a historically tight labor market. In surveys, workers say it is very easy to find a job and employers say it is very hard to find workers (Exhibit 3), and the quits rate, the job openings rate, and the ratio of job vacancies to unemployed workers all stand near record highs.

Exhibit 3: Both Workers and Employers Say the Labor Market Is Very Tight



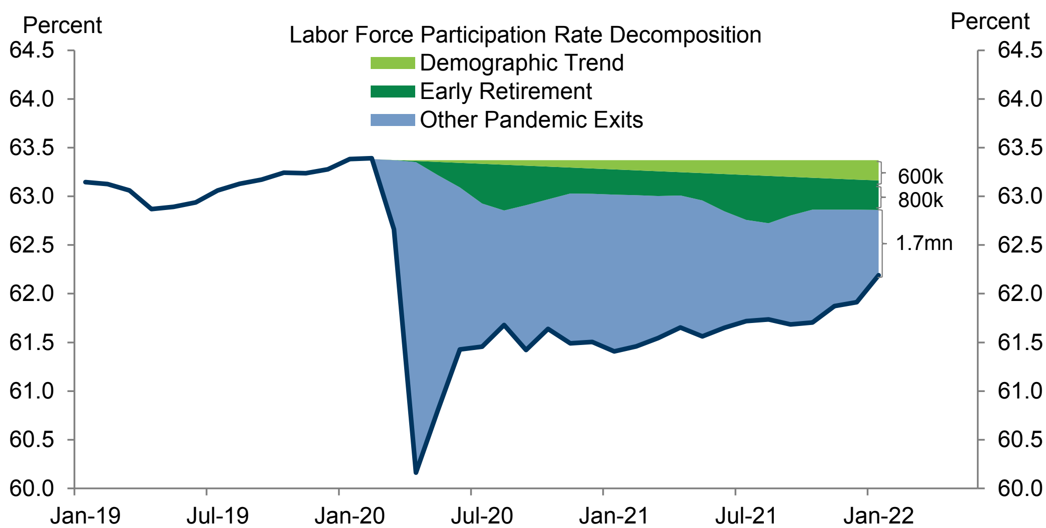
Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

We turn next to understanding why labor supply remains so depressed by asking who left the labor force, why they left, and whether and when they will return.

Who Left the Labor Force?

The labor force participation rate has declined by 1.2pp since the start of the pandemic from 63.4% to 62.2%. We estimate that about 0.2pp of this decline can be explained by population aging. The remaining 1pp—equivalent to 2½mn workers—reflects a large increase in early retirements that have reduced the labor force by about 0.8mn workers, as well as another 1.7mn labor force exits for other reasons (Exhibit 4).

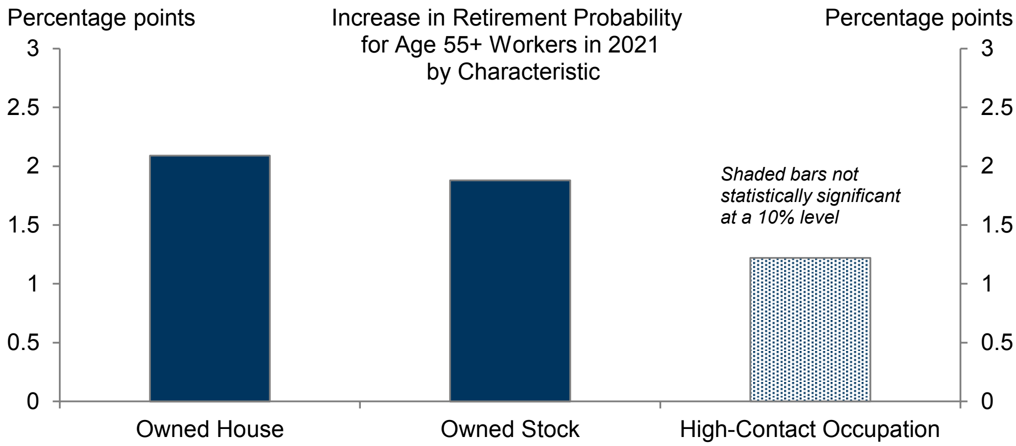
Exhibit 4: The Labor Force Participation Rate Has Declined by 1.2pp and Is 1pp Below the Pre-Pandemic Demographic Trend, an Unexpected Loss of 2.6mn Workers



Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

Among the early retirees, we see limited scope for most to return to the labor market because retirement tends to be persistent. Furthermore, the surge in early retirements has been largely driven by increased labor force exits among older individuals who owned homes and equities. Our regression analysis indicates that retirement rates for such individuals jumped by around 2pp for those that owned one or the other and 4pp for those that owned both (vs. a 14% baseline retirement rate) in 2021 relative to prior years (Exhibit 5). These patterns suggest that many early retirees benefited from rapid asset price appreciation during the pandemic that may have allowed them to feel comfortable retiring earlier than they originally planned.

Exhibit 5: Early Retirees Were More Likely to Own a Home and Equities, Suggesting Asset Price Appreciation Contributed to Some Early Retirement Decisions



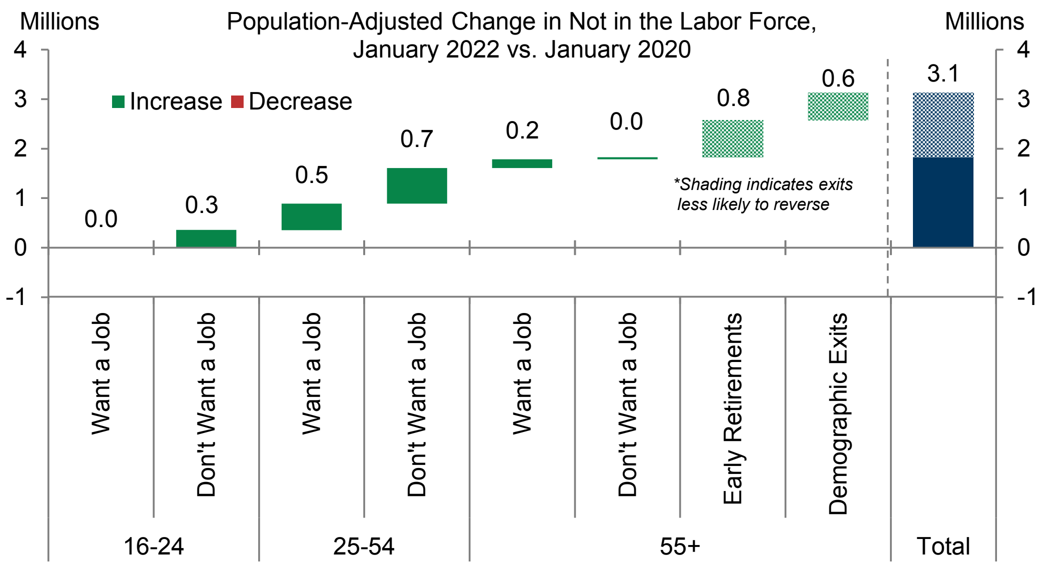
*Estimates from a panel regression using the CPS ASEC sample and indicate the change in retirement probability in 2021 relative to prior years associated with indicated characteristic.

Source: Census Bureau, Goldman Sachs Global Investment Research

We see more scope for labor force reentry among the other 1.7mn non-retired people who left the labor force. Exhibit 6 provides a detailed snapshot of the workers who have left the labor force since the start of the pandemic. Two key points stand out. First, most of the 1.7mn are either prime-age (1.2mn) or young (0.3mn). Second, a larger share of the 1.7mn who have left say that they do not want a job right now (1mn) than say they want a job now (0.7mn), and the number of workers who have left the labor force because of discouragement about job prospects is only slightly higher than before the pandemic.[1]

[1] We are not considering the decline in immigration in 2020 here because it affects both labor supply and labor demand, since immigrants who did not come to the US do not consume in the US either. We discussed this at length in an earlier piece.

Exhibit 6: The 2½mn Workers Who Unexpectedly Left the Labor Force Include 0.8mn Early Retirees, 0.7mn Workers Who Want a Job, and 1mn Workers Who Don't Want a Job

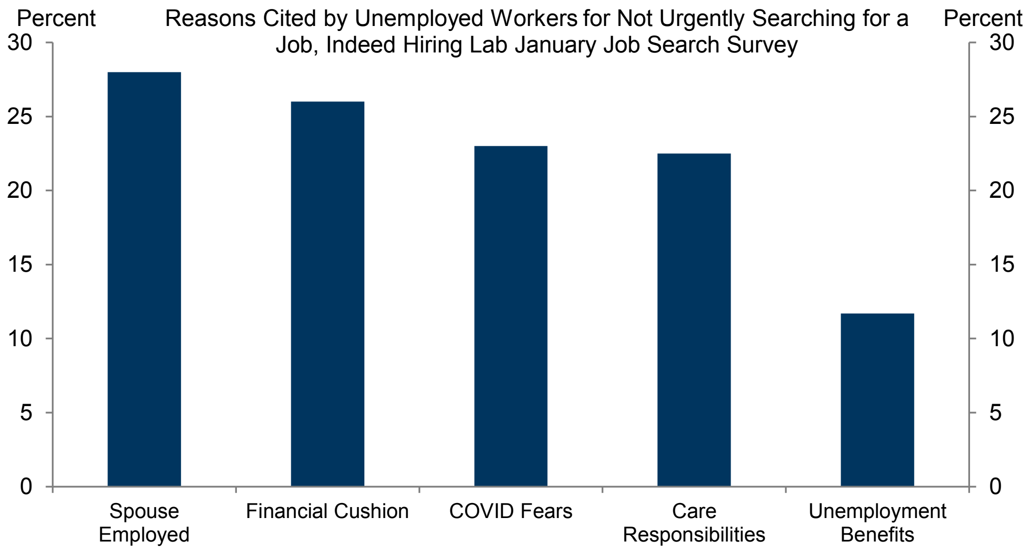


Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

Will the Workers Come Back?

The best insight we have into why workers have not returned to the labor force comes from surveys. Workers give three main reasons: they have Covid-related health concerns or care responsibilities; they have a financial cushion that lowers the pressure to go back to work right now; or they have changed their lifestyle and can rely on a family member's income to get by without working (Exhibit 7). The first two explanations provide a reason to think that some workers might come back this year.

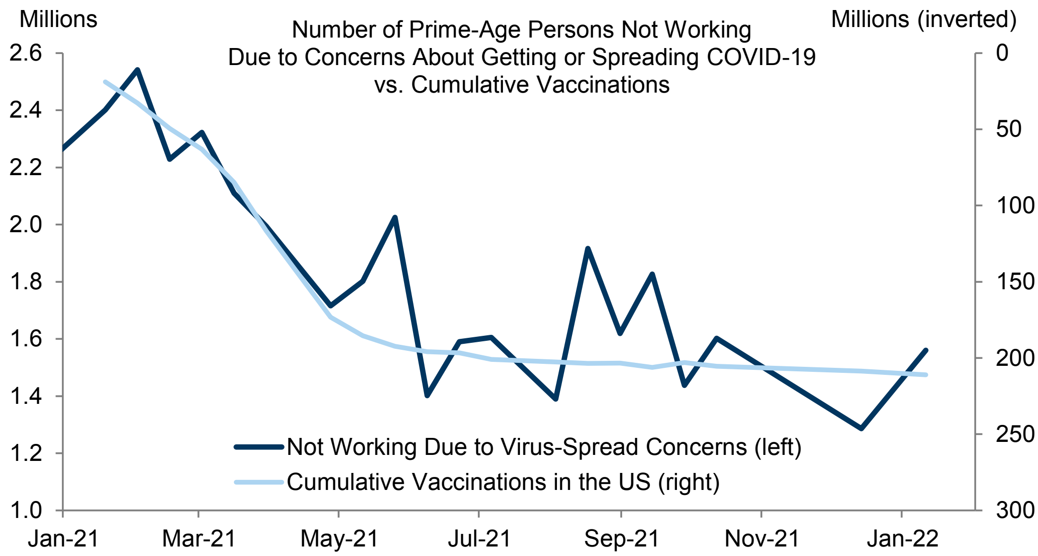
Exhibit 7: Reasons for Labor Force Exit Include Covid Fears and Life Disruptions, a Larger Financial Cushion, and Lifestyle Changes



Source: Indeed, Goldman Sachs Global Investment Research

Covid-related issues still appear to be a major drag on labor supply. While vaccination clearly helped in 2021, roughly 1.6mn prime-age people are still not working due to concerns about getting or spreading Covid, according to the Census Pulse Household Survey (Exhibit 8). Recent academic research also suggests that long Covid symptoms may be reducing labor supply by over 1mn workers. These estimates should be interpreted cautiously because they appear to over-explain the labor supply surprise, but they suggest that Covid concerns are still a significant drag on participation. Of course, this also suggests that some people will likely return if virus spread falls or antiviral pills reduce health risks.

Exhibit 8: About 1.5mn Prime-Age Persons Are Not Working Due to Concerns About Getting or Spreading Covid

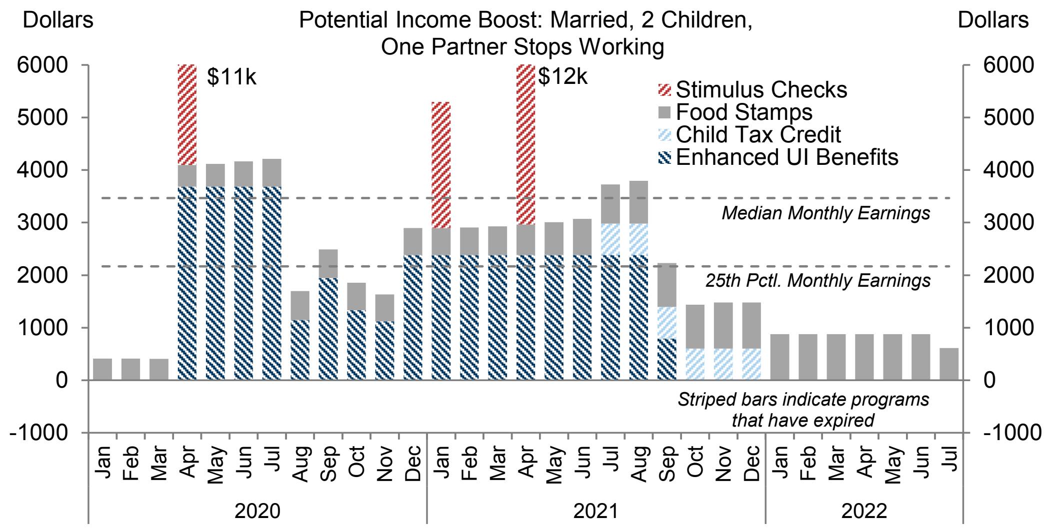


Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

Many workers also appear to be out of the labor force for now because they have a financial cushion. This can include excess savings from reduced spending during the pandemic, increased net worth from rising asset prices, or more generous government income support. In 2020 and 2021, fiscal support kept total income at a level comparable to normal wages for many workers (Exhibit 9).

Of course, these financial cushions will not last forever either. We previously estimated that workers relying solely on their excess savings to cover their spending needs would exhaust them in 2-3 months. In addition, most of the special pandemic fiscal transfer payments have now expired. While increased food stamps are still available, households can no longer rely on stimulus checks, enhanced unemployment benefits, or the expanded child tax credit. This too suggests that some workers who have left the labor force are likely to come back this year.

Exhibit 9: Fiscal Support Was Comparable to Wages for Some Workers, but Most of It Has Now Expired

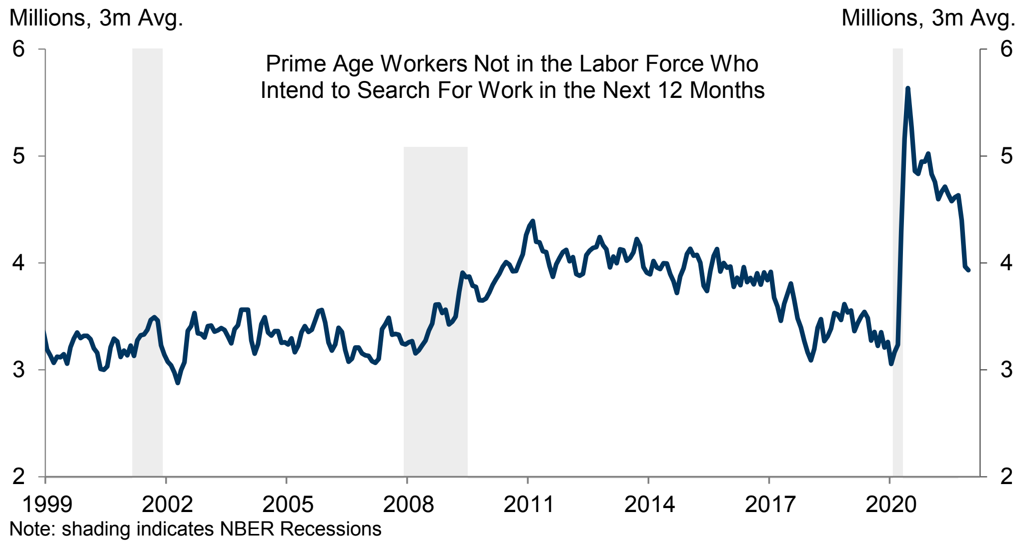


Source: Goldman Sachs Global Investment Research

Of course, it is difficult to know each individual's true motivations for having left the labor force, and not everyone is likely to come back this year. The pandemic has been a time of experimentation for both employers and workers, and some workers' preferences and lifestyles appear to have changed after almost two years out of the labor force, a development that is visible in social media trends. For those who can rely on a family member's income, it might be feasible to stay out indefinitely.

But our assumption that many workers are likely to return eventually is supported by survey evidence. Nearly the entire decline in the prime-age labor force is matched by an increase in the number of prime-age people who say they intend to re-enter in the next 12 months (Exhibit 10). This is a sharp contrast to the rise in the number of nonparticipants who had no intention of returning after the Great Recession.

Exhibit 10: Most of the 1.2mn Prime-Age People Who Left the Labor Force During the Pandemic Appear to Intend to Reenter in 2022



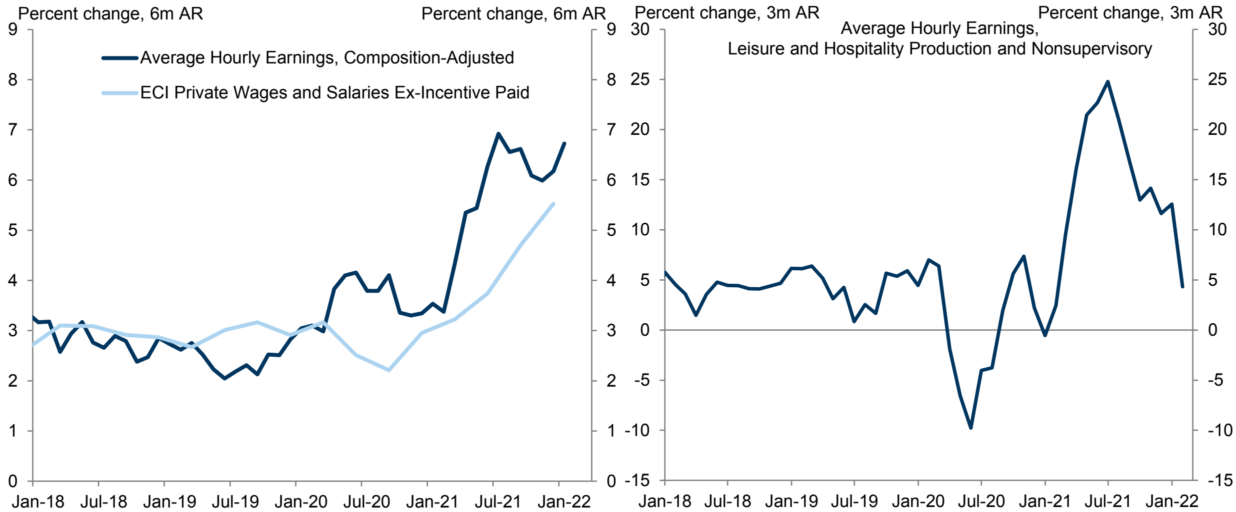
Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

We have updated our labor force forecast to assume that about 1mn of the unexpected labor force exits reverse in 2022, raising the participation rate to 62.6% by year-end, and that more workers will come back in later years. Even so, the depressed participation rate implies that workers will be even harder for employers to find than the unemployment alone rate suggests. So far, the depressed participation rate has meant an effectively tighter labor market because non-participants' spending power—and therefore ultimately demand for workers—has been kept intact by fiscal support more than would usually be the case for people without jobs, though this should become less true going forward.

The Risks for Wage Growth, Inflation, and the Fed

The tightness of the labor market has boosted overall wage growth to a roughly 6% annualized pace recently (Exhibit 11, left), even though wage growth for the lowest-paid workers has come down following the expiration of enhanced unemployment benefits in September (Exhibit 11, right). It is possible that some of that 6% pace represents the effect of higher short-term inflation expectations passing through to wage growth, but it is hard to know for sure. In any case, 6% wage growth—if it persists—is unlikely to be compatible with the Fed's 2% inflation target.

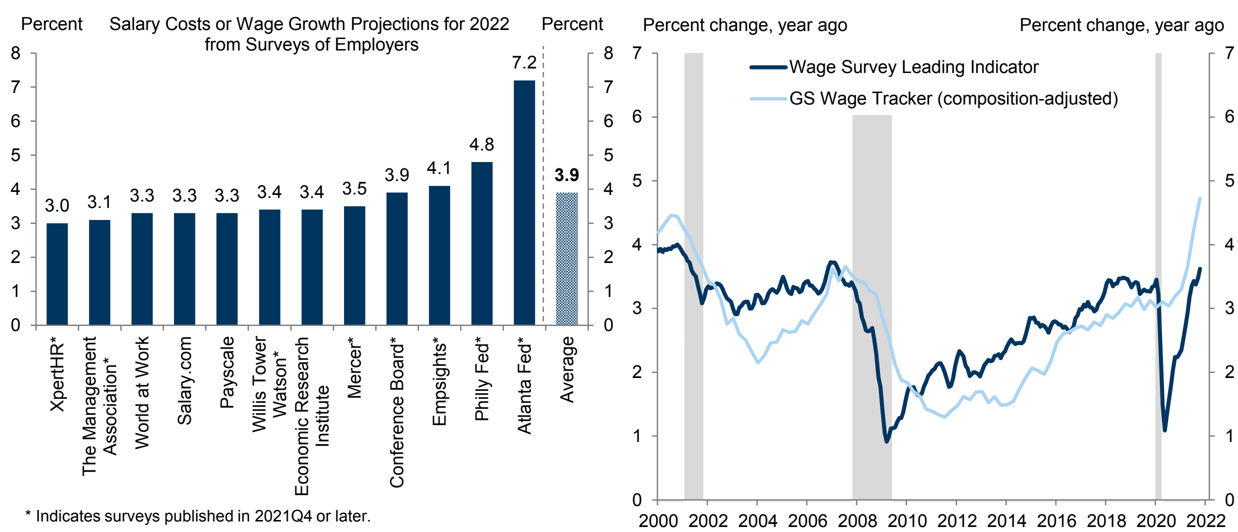
Exhibit 11: Wage Growth Is Still Running Near 6%, Even Though Wage Gains for Low-Paid Workers Have Slowed Since Enhanced Unemployment Benefits Expired



Source: US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

However, surveys indicate that on average, employers expect salary and wage costs to rise at a more sustainable 4% pace this year (Exhibit 12, left). While many of these surveys are fairly new, historically survey expectations of wage growth from businesses and workers, captured by our wage survey leading indicator, have been a decent leading indicator of actual wage growth (Exhibit 12, right).

Exhibit 12: Surveys of Employers Point to 4% Wage Growth and Have Been a Good Leading Indicator in the Past



Source: Goldman Sachs Global Investment Research

We put weight on both signals and therefore forecast 5% wage growth this year. This would imply roughly 3% unit labor cost growth after netting out 2% productivity growth. Our rule of thumb is that about two-thirds of an acceleration in wage growth gets passed along to consumer prices and one-third comes at the expense of corporate profits, though the share passed to prices might be somewhat higher in an environment with high short-run inflation expectations.

While Fed officials might downplay spikes in the prices of items like used cars, they cannot ignore unsustainably fast wage growth. Persistent growth of labor costs at a faster pace than is compatible with the Fed's 2% inflation goal is likely to keep the FOMC on a trajectory of tightening at consecutive meetings for now. If wage growth continues running closer to 6% than to 4%, it would eventually raise the risk of an even more aggressive Fed response.

Joseph Briggs

David Mericle

The US Economic and Financial Outlook

THE US ECONOMIC AND FINANCIAL OUTLOOK
(% change on previous period, annualized, except where noted)

	2019	2020	2021 (f)	2022 (f)	2023 (f)	2024 (f)	2025 (f)	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
OUTPUT AND SPENDING															
Real GDP	2.3	-3.4	5.7	3.2	2.2	2.2	2.3	6.3	6.7	2.3	6.9	0.5	3.5	3.0	2.0
Real GDP (annual=Q4/Q4, quarterly=yoy)	2.6	-2.3	5.5	2.2	2.0	2.2	2.2	0.5	12.2	4.9	5.5	4.1	3.3	3.4	2.2
Consumer Expenditures	2.2	-3.8	7.9	2.8	2.0	2.2	2.2	11.4	12.0	2.0	3.3	1.5	2.5	2.0	2.0
Residential Fixed Investment	-0.9	6.8	9.0	0.3	2.6	2.0	2.0	13.3	-11.7	-7.7	-0.8	4.0	4.0	3.0	3.0
Business Fixed Investment	4.3	-5.3	7.3	3.8	3.4	3.7	3.9	12.9	9.2	1.6	2.0	5.6	3.8	3.2	3.2
Structures	2.1	-12.5	-8.2	-2.3	1.6	2.6	3.0	5.4	-3.0	-4.1	-11.4	1.0	1.0	1.0	1.0
Equipment	3.3	-8.3	12.9	2.7	2.6	2.8	3.0	14.1	12.2	-2.4	0.8	3.5	4.0	2.5	2.5
Intellectual Property Products	7.2	2.8	10.2	8.2	5.0	5.2	5.2	15.6	12.5	9.1	10.6	10.0	5.0	5.0	5.0
Federal Government	3.8	5.0	0.6	-2.4	-0.8	-0.1	0.0	11.3	-5.3	-5.1	-4.0	-1.2	-1.0	-1.0	-1.0
State & Local Government	1.3	0.9	0.3	1.7	1.6	1.0	1.0	-0.1	0.2	4.9	-2.2	2.3	2.5	2.5	2.5
Net Exports ($bn, '12)	-905	-943	-1,281	-1,343	-1,310	-1,274	-1,261	-1226	-1245	-1317	-1338	-1314	-1342	-1356	-1360
Inventory Investment ($bn, '12)	75	-42	-38	138	109	60	60	-88	-169	-67	174	65	130	180	175
Industrial Production, Mfg.	-2.0	-6.6	6.2	3.4	2.2	1.8	2.1	2.8	5.0	3.9	4.9	1.7	3.7	3.6	2.4
HOUSING MARKET															
Housing Starts (units, thous)	1,292	1,397	1,598	1,679	1,726	--	--	1,599	1,588	1,562	1,644	1,687	1,661	1,640	1,728
New Home Sales (units, thous)	683	828	765	895	934	928	919	896	737	699	728	890	881	864	946
Existing Home Sales (units, thous)	5,327	5,658	6,132	6,407	6,498	6,577	6,655	6,303	5,833	6,057	6,333	6,363	6,393	6,422	6,448
Case-Shiller Home Prices (%yoy)*	3.4	9.5	15.1	9.0	2.7	3.5	3.8	12.3	16.9	19.7	15.1	12.5	11.3	10.1	9.0
INFLATION (% ch, yr/yr)															
Consumer Price Index (CPI)**	2.3	1.3	7.1	4.2	2.9	2.5	2.4	1.9	4.8	5.3	6.7	7.5	7.0	6.0	4.6
Core CPI **	2.2	1.6	5.5	4.0	2.8	2.6	2.5	1.4	3.7	4.1	5.0	6.3	5.6	5.1	4.3
Core PCE** †	1.6	1.5	4.9	2.9	2.2	2.3	2.2	1.7	3.4	3.6	4.6	5.1	4.4	3.9	3.2
LABOR MARKET															
Unemployment Rate (%)^	3.6	6.7	3.9	3.4	3.2	3.1	3.0	6.0	5.9	4.7	3.9	3.7	3.4	3.4	3.4
U6 Underemployment Rate (%)^	6.8	11.7	7.3	6.6	6.2	6.0	5.9	10.7	9.7	8.5	7.3	7.0	6.7	6.6	6.6
Payrolls (thous, monthly rate)	164	-774	555	215	150	99	90	645	422	543	611	322	200	180	157
Employment-Population Ratio (%)^	61.0	57.4	59.5	60.4	60.6	60.6	60.5	57.8	58.1	58.9	59.8	59.9	60.2	60.3	60.4
Labor Force Participation Rate (%)^	63.3	61.5	61.9	62.6	62.6	62.5	62.4	61.5	61.6	61.7	61.9	62.2	62.3	62.4	62.6
Average Hourly Earnings	3.3	4.9	4.2	5.5	4.5	4.2	4.0	5.0	2.2	4.5	5.2	5.7	4.7	4.7	4.8
GOVERNMENT FINANCE															
Federal Budget (FY, $bn)	-984	-3,129	-2,772	-1,100	-1,050	-1,150	-1,300	--	--	--	--	--	--	--	--
FINANCIAL INDICATORS															
FF Target Range (Bottom-Top, %)^	1.5-1.75	0-0.25	0-0.25	1.25-1.5	2-2.25	2.5-2.75	2.5-2.75	0-0.25	0-0.25	0-0.25	0-0.25	0.25-0.5	0.5-0.75	1-1.25	1.25-1.5
10-Year Treasury Note^	1.92	0.93	1.52	2.00	2.30	2.50	2.60	1.74	1.45	1.52	1.52	1.75	1.90	1.95	2.00
Euro (€/$)^	1.12	1.22	1.13	1.15	1.20	1.25	1.25	1.17	1.18	1.16	1.13	1.14	1.13	1.14	1.15
Yen ($/¥)^	109	103	115	115	110	105	105	111	111	112	115	116	117	117	115

* 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.

Source: Goldman Sachs Global Investment Research

Economic Releases

Date		Time (ET)	Indicator	Estimate GS	Consensus	Last Report
Tue	**Feb 08**	6:00	NFIB Small Business Optimism (January)	n.a.	97.5	98.9
		8:30	**Trade Balance (December)**	**-$84.2bn**	**-$83.0bn**	**-$80.2bn**
Wed	**Feb 09**	10:00	Wholesale Inventories (December final)	n.a.	+2.1%	+2.1%
Thu	**Feb 10**	**8:30**	**Consumer Price Index (January)**	**+0.50%**	**+0.4%**	**+0.5%**
		8:30	**Ex Food and Energy (January)**	**+0.52%**	**+0.5%**	**+0.6%**
		8:30	**Initial Jobless Claims**	**230k**	**230k**	**238k**
		8:30	Continuing Claims	n.a.	1,618k	1,628k
Fri	**Feb 11**	**10:00**	**UMich Consumer Sentiment (February preliminary)**	**66.7**	**67.5**	**67.2**

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

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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