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Builders Making Little Headway In Clearing Backlogs

As we've often noted, the overriding storyline of the U.S. economy over the past several months has been the growing imbalance between the supply side of the economy and the demand side. The supply side has simply not been able to keep pace with the demand side, and one consequence has been accelerating price inflation. Imbalances, and the faster price inflation that comes with them, have been apparent in markets for raw materials, freight markets, markets for finished consumer goods, and the labor market. In that sense, the housing market is no different than other segments of the economy. What does set the housing market apart, however, is that the imbalance between supply and demand in the housing market didn't arise from the pandemic, but instead has been with us for the past several years.

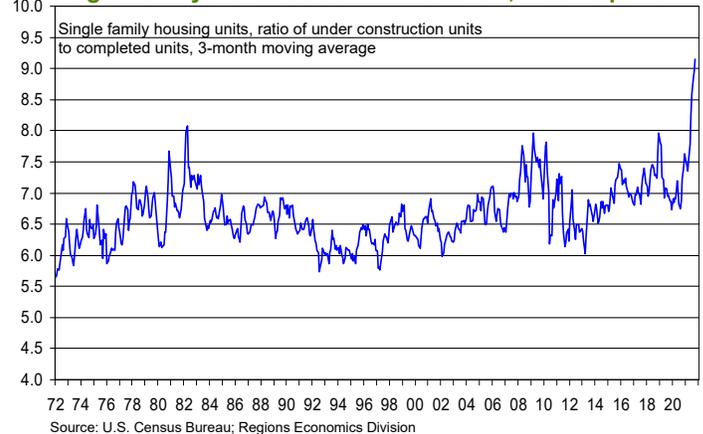
While there are signs that the supply-side constraints that have been weighing down other segments of the economy for the past several months are beginning to abate, it is hard to find any such signs in the housing market. Indeed, backlogs of both single family and multi-family units have gotten larger over recent months, and that holds for both the number of units awaiting the start of the construction process and the number of units awaiting completion. For instance, as of October, there were 725,000 multi-family units under construction, the highest number in any month since August 1974. That actually isn't a new story, as an outsized backlog of under-construction units has been a trait of the multi-family segment of the housing market for the past few years. What is new, however, is the extent to which the backlog of single family units under construction has expanded, as has the backlog of single family units awaiting construction.

There were 726,000 single family units under construction as of October, the most in any month since May 2007. Sure, that may conjure up unpleasant memories for some, as housing market comparisons between now and then tend to do. But, as we often point out, while some of the numbers may be similar, there are actually very few, if any, valid comparisons between housing market conditions now and in the prior cycle. Recall that in May 2007 we were well past the peak in sales, with demand dropping out from under builders at an alarmingly rapid rate. As such, builders were left sitting on growing inventories of unsold homes, but not by choice. At present, however, the market is chronically undersupplied, as it has been for the past several years. While demand remains firm, builders are finding it increasingly difficult to procure materials – construction and finishing – and labor supply constraints continue to hold up the construction process. As such, completion times have been stretching further and further, thus contributing to the growing backlog of single family units under construction. These supply side constraints have

gotten worse over recent months, and builders are expressing little to no optimism that they will end any time soon.



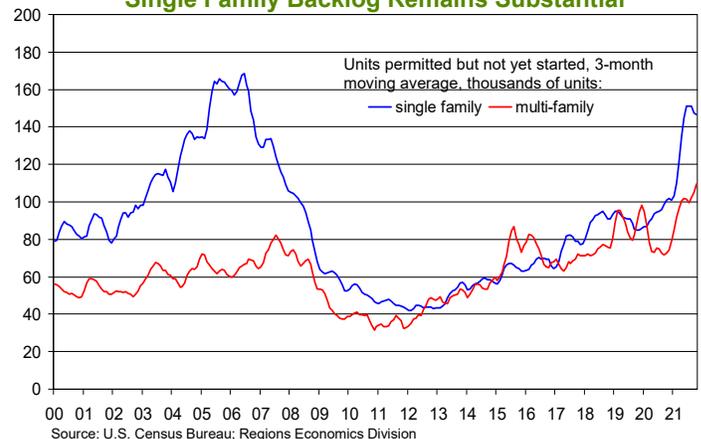
Single Family Construction: A Marathon, Not A Sprint . . .



As a means of putting this backlog into perspective, the above chart shows the ratio of single family units under construction to single family units completed, using a three-month moving average to smooth out some of the inherent volatility in the not seasonally adjusted monthly data. The October data show that for each single family unit completed during the month, there were 9.4 single family units under construction, easily the highest ratio in the life of the data. To our earlier point, note how sharply this ratio has risen over the past several months.



Single Family Backlog Remains Substantial



The growing backlog of under construction single family units is even more striking when you account for the other end of the construction pipeline. As the above chart shows, the number of

single family units permitted but on which construction has not yet started has risen significantly over the past several months (again, we use a three-month moving average to smooth out some of the inherent volatility in the monthly data). As of October, there were 146,300 single family units which had been permitted but not yet started, and while this is down from the recent peak of 155,500 units as of June, the number of such units remains at levels last seen in late-2006. Okay, sure, another one of those comparisons, but while a sizable number of such units back in 2006 never made it to construction given the significant drop in demand, we suspect that the vast majority of the single family units in the construction queue at present will indeed be built.

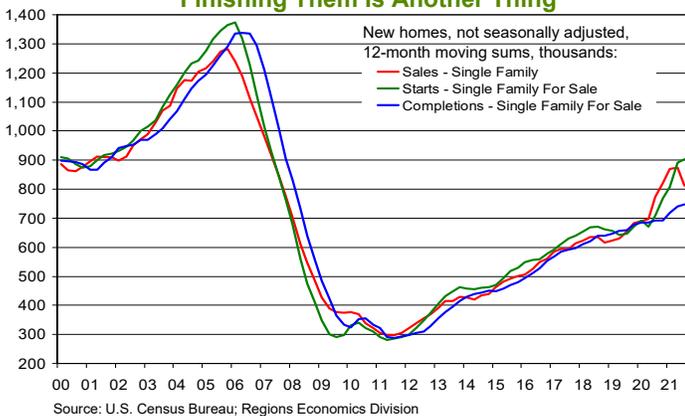
The question of course is when they will be built, and no one, us included, really has a good answer right now. What seems more certain, however, is that when they are built, there will still be buyers waiting for these homes. While that may seem at odds with the pronounced slowdown in the pace of new home sales over the past several months, the reality is that the slowdown in sales has largely been driven by the supply side, not the demand side, of the market. To be sure, affordability constraints have pushed some prospective buyers out of the market, but demand nonetheless remains solid. The slowdown in sales is much more a reflection of self-imposed sales caps many builders instituted over the summer months amid growing backlogs of unfilled orders and increased uncertainty around the availability and pricing of materials.

started began to account for a higher share of total sales, which is not uncommon when the market is heating up. But, sales were piling up significantly faster than builders could deliver homes, as supply chain and labor supply issues put builders even further behind demand than they had been leading up to the pandemic. At the same time, rapidly rising materials prices meant builders were subject to an increasing degree of price risk given that in many cases by the time units were being started, materials costs had blown by those incorporated into contract prices.

By the summer of 2021, this was an increasingly untenable position for builders, and they reacted accordingly. Many builders implemented sales caps, so that rather than pushing for new sales they could focus on clearing backlogs of unfilled orders. This is reflected in the pronounced dip in sales in our previous chart. The not seasonally adjusted data show a total of 179,000 new home sales in Q3 2021, the lowest quarterly total since Q4 2019 and a 26.3 percent decline from the 243,000 new home sales in Q3 2020. Again, while not dismissing affordability constraints, we see this decline in sales as much more of a supply-side story than a demand-side story. Another change many builders made was moving more toward what we refer to as “spec-lite” construction, or, starting units but not pricing them or making them available for sale until construction was well underway. Doing so enabled builders to effectively shift pricing risk to buyers while reducing, at least in theory, uncertainty over delivery times, though as it turns out contracted and actual delivery times continue to diverge.

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Starting Them Is One Thing, Finishing Them Is Another Thing

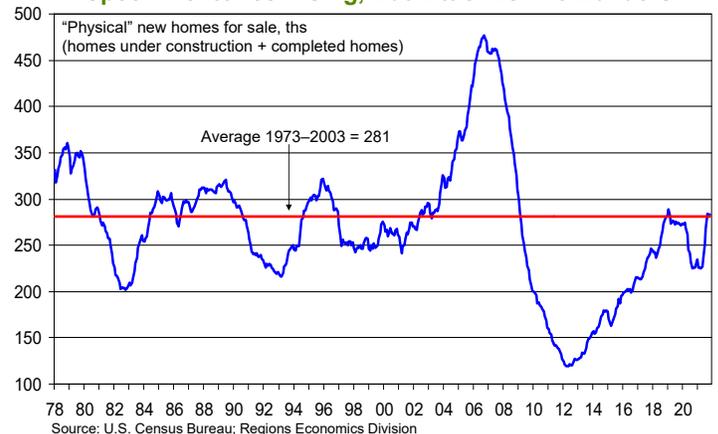


The above chart summarizes our discussion to this point. In interpreting the chart, it helps to keep a few points in mind. First, not all single family units that are constructed end up on the sales market. As defined by the Census Bureau, those units which are custom built (homes built for the landowner by a contractor), owner-built, or built for rent combine to yield a gap between total single family housing starts and single family starts intended for sale. While this distinction is often overlooked, it is single family starts intended for sale that should be compared to new home sales when assessing market conditions. Also, keep in mind that new home sales can take place at any stage of the construction process – before construction has been started, while construction is underway, and after construction has been completed.

When new home sales somewhat surprisingly kicked into a higher gear in summer of 2020, units on which construction had not yet

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Spec Inventories Rising, But Little Risk To Builders



In making this shift, builders were confident that the demand would be there when the homes were made available for sale, and thus far they’ve been proven correct. This is why we refer to this shift as “spec-lite” rather than how we would normally think of speculative construction, though not everyone shares our view. There are some who take the increase in spec inventories, or, the number of homes for sale which are either under construction or finished, as a sign that supply constraints are easing and the new homes market is on its way back to balance. We see it as simply reflecting fewer sales of units on which construction had not yet started and increased sales of units under construction and not made available for sale until builders are better able to price them. To that point, the increase in reported spec inventories over the past several months is solely a function of under construction

units, while the share of new homes for sale accounted for by completed units has fallen to the lowest in the life of the data.

To the extent we are correct in our take on the increase in spec inventories, builders would be much less exposed were there to be a pronounced decline in demand, in that they would not be caught sitting on significant inventories of homes for sale as was the case in the prior cycle. At present, however, that isn't the concern. Despite the increase in measured spec inventories, the market for new homes remains significantly undersupplied, and figures to remain so for quite some time. When we account for notably lean inventories of existing homes for sale, the supply/demand imbalance in the housing market is even more pronounced. So, just as supply/demand imbalances were evident in the housing market well before they were in the broader economy, they will persist for much longer in the housing market than they will in other sectors of the economy.

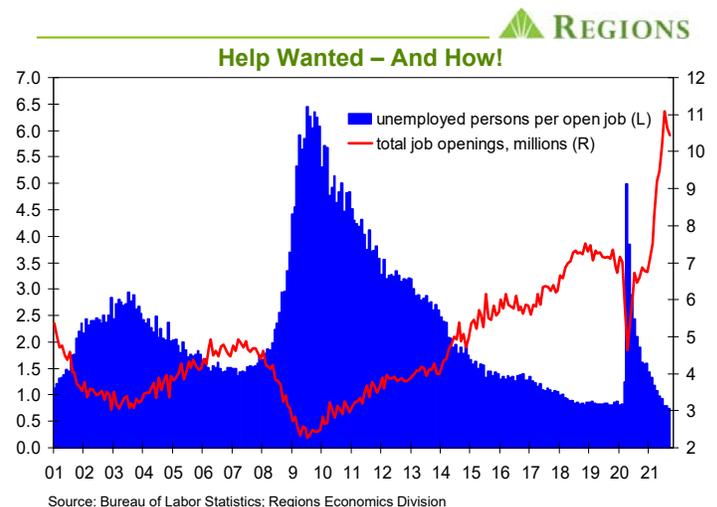
Labor Supply Constraints Were An Issue Prior To Pandemic

Another area of the economy in which there is a significant imbalance between supply and demand is the labor market. Labor force participation fell sharply at the onset of the pandemic and has yet to fully recover. As of November, there were 2.396 million fewer people in the labor force than was the case prior to the pandemic. To be sure, the gap has narrowed considerably since the spring of 2020, but nonetheless remains substantial, and firms across a wide swath of private sector industry groups continue to express frustration over their inability to attract workers. One consequence of what remains a significant gap between labor demand and labor supply has been a pronounced acceleration in the pace of wage growth. Still, despite faster wage growth, many firms continue to struggle to fill open positions.

There has been considerable discussion of this issue, much of it along the lines of "where have all the workers gone, and are they ever coming back?" The details of the BLS's Household Survey (the source of data on labor force participation and the unemployment rate) shed some light on the "where" part of the question. Effects of the pandemic remain a barrier to labor force participation for millions of Americans, such as those whose employer closed or lost business due to the pandemic, those experiencing health issues stemming from the pandemic, those concerned about becoming ill, or those caring for someone suffering from health-related issues. Lack of adequate childcare and lingering uncertainty over schooling arrangements – the possibility that in person instruction could change back to at home instruction with little advance notice – are also keeping people out of the labor force, particularly females. Caregiving responsibilities have fallen more heavily on females, as participation amongst females fell more sharply and remains further from pre-pandemic norms than is true of male participation. The policy response to the pandemic, in the form of expanded unemployment insurance benefits and three rounds of Economic Impact Payments, has also played a part, as such fiscal transfers enabled many households to build up sizable financial buffers that for some have lessened any urgency around returning to the labor force. Finally, participation has also been held down by greater numbers of older workers having exited the labor force since the onset of the pandemic.

As for the "are they ever coming back" part of the question, about the most definitive answer we can give at this point is some of them will, some of them won't. As the financial buffers built up during the pandemic thin out, it is reasonable to expect labor force participation to increase, as we expect to see once we are into 2022. Conversely, however, those older workers who have exited the labor force since the onset of the pandemic are unlikely to return, at least in any great numbers. In part, this is simply a reflection of demographics. Even prior to the pandemic, we were on the verge of what would have been a growing wave of retirements amongst those in the Baby Boomer cohort, and the pandemic acted as an accelerant for this trend. Additionally, to the extent that pandemic-related transfer payments led to greater accumulation of savings amongst this group which, in conjunction with further gains in equity prices, gave them greater financial freedom, it could be that increased numbers of older workers left the labor force earlier than they otherwise would have. We think that exits amongst older workers will remain a drag on the rate at which labor force participation increases for some time to come.

This leaves us with two not unrelated factors that will impact labor force participation over coming quarters. To the extent that COVID lingers, it will continue to impact patterns in economic activity, and this includes labor force participation. As such, direct health and economic impacts from COVID pose an ongoing threat to labor force participation. Additionally, to the extent that repeated spikes in COVID case counts continue to disrupt childcare and schooling arrangements, that will weigh on the extent to which labor force participation amongst females recovers, which in turn would act as a significant drag on the overall participation rate. The late-summer spike in cases stemming from the Delta variant and the more recent emergence of the Omicron variant are unwelcome reminders of how much uncertainty remains around this issue.



There is no denying that the pandemic has contributed to what has become a gaping imbalance between labor demand and labor supply. What has seemingly been forgotten, however, is that this imbalance was an increasingly pressing issue well before the onset of the pandemic. For instance, when the number of open jobs in the U.S. economy topped the 11-million mark in July, the highest number on record, it was big news. But, it was also big news in May 2018 when job openings topped the 7-million mark, which at

the time was the highest on record, and from there monthly job openings averaged 7.2 million until the pandemic arrived. Though down from July’s record-high, the number of open jobs still remains above ten million, easily ahead of the pre-pandemic record. But, when viewed through another lens, the imbalance in the labor market looks very similar to how it did prior to the pandemic. In each month since May, there has been less than one unemployed person for each open job in the U.S. economy. But, the ratio of unemployed persons to open jobs first dipped below 1.0 in January 2018 and was below 1.0 in each of the 24 months prior to the start of the pandemic, as seen in the chart on the prior page. This point seems to have gotten lost amid all of the attention given to the elevated number of open jobs.

Even if, as we expect, people return to the labor force in greater numbers in the months ahead, labor supply constraints will remain an impediment for firms across a wide swath of industry groups, as was the case in the years leading up to the pandemic. The pandemic has heightened the degree to which this is the case, but that’s different than saying the pandemic caused this imbalance. Factors such as skills mismatches and mobility constraints were impediments to hiring prior to the pandemic and will continue to act as impediments going forward. It could be, however, than an increasing number of people exiting the labor force will prove to be a more binding constraint.

One element of the flows data that we have been pointing to over the past several years is the increased rate at which people were transitioning from being employed in one month to being out of the labor force in the following month. As has generally been the case, this pattern was significantly disrupted by the pandemic, but over recent months the number of people transitioning from employed to out of the labor force has risen considerably, and we expect the upward trend in place prior to the pandemic to resume. The counter to these exits comes from people entering, or re-entering, the labor force, and the vast majority of entrants in any given month are employed upon entry. The question, however, is the extent to which inflows to the labor force would be able to keep pace should the rate of exits accelerate.

To be sure, the return of those who exited the labor force since the onset of the pandemic, particularly females, would provide a meaningful offset, but that would reflect more of a “right sizing” of the labor force than a persistent offset to an increased rate of exits. The other offset for employed people exiting the labor force is people transitioning from unemployed to employed. The data on labor force flows, however, show the number of people making this transition on a steady decline in the years leading up to the pandemic, and hovering near the lows in the life of the data at the onset of the pandemic. This suggests factors such as skills mismatches were becoming an increasing constraint on hiring, and it is reasonable to ask why that constraint would be any less binding going forward than was the case prior to the pandemic.

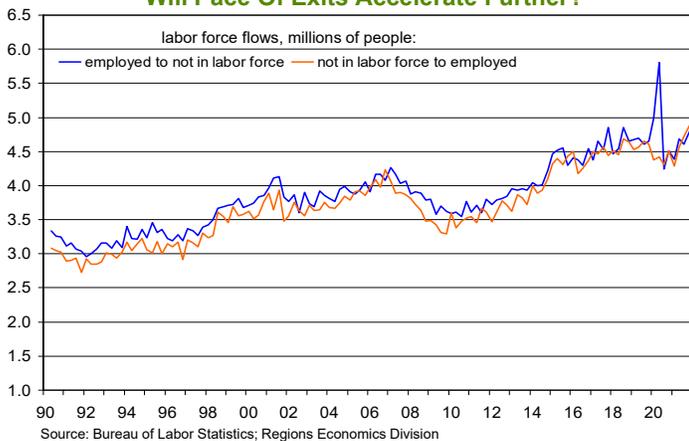
We think the data on labor force flows play an important role in understanding the dynamics of the labor market. While most of the discussion over the past several months has focused on the number of people still “missing” from the labor force, the data on labor force flows show monthly inflows to the labor running easily ahead of pre-pandemic rates. The issue is that these inflows are being largely, if not completely, offset by the rising pace of exits from the labor force, particularly those employed at the time they exit, yielding little net change in the size of the labor force. While we do expect greater numbers of the “missing” workers to return once we get into 2022, this will be a short-lived boost to labor force participation. Once it has run its course, however, increases in the labor force participation rate will be harder to come by, which was becoming a concern prior to the pandemic.

In addition to having implications for the rate of job growth, the extent to which labor force participation increases over coming quarters and how much of that increase can be sustained will have implications for the rate of wage growth. To be sure, with the pandemic having magnified the supply/demand imbalance in the labor market, we have seen a significant acceleration in the pace of wage growth. Again, though, wage growth had been steadily accelerating in the years leading up to the pandemic, reflecting a growing mismatch between labor supply and labor demand. If we are correct in our view that meaningful and sustained growth in the labor force will be harder to come by once the pandemic-related distortions in labor force participation have run their course, it would follow that we will see a return to the trend of steadily accelerating wage growth.

That trend can be seen in the following chart, which shows private sector wage growth as measured by the Employment Cost Index (ECI), which is our preferred measure of wage growth given that it is free of the mix issues that can bias the more widely reported

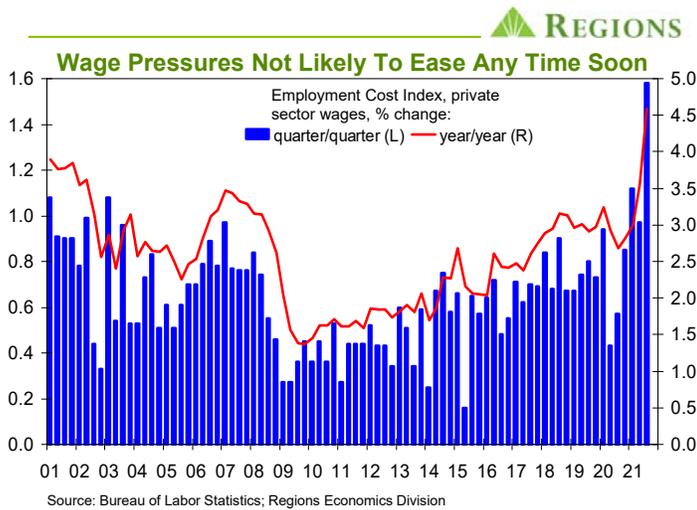


Will Pace Of Exits Accelerate Further?



In the BLS’s Household Survey, one-third of the sample population turns over each month, and based on the two-thirds of the sample population that remains constant over each two-month period, the BLS produces data on labor force flows. Labor force flows track movements into and out of the labor force, and the status of those entering, exiting, and remaining in the labor force. As they are based on a smaller sample, the monthly data on labor force flows tend to be more volatile and, as such, we put more faith in the trends shown in the data than on the values reported for any given category in any given month. Obviously, the largest segment of the labor force is the number of employed, and the vast majority of those employed in one month are employed in the following month. But, in terms of changes in the size of the labor force, the data on transitions into and out of the labor force can provide useful insights, even if they go largely unnoticed in most discussions of labor market conditions.

average hourly earnings metric from the monthly employment reports. Wages for private sector workers as measured by the ECI rose by 1.58 percent in Q3 2021, the largest quarterly increase since Q3 1982, which left private sector wages up 4.59 percent year-on-year. The spike in wage growth over recent quarters raises the possibility that wage growth may be a source of steady inflation pressures going forward. Some are quick to dismiss any such concerns on the grounds that once labor force participation turns higher, wage growth will quickly moderate.



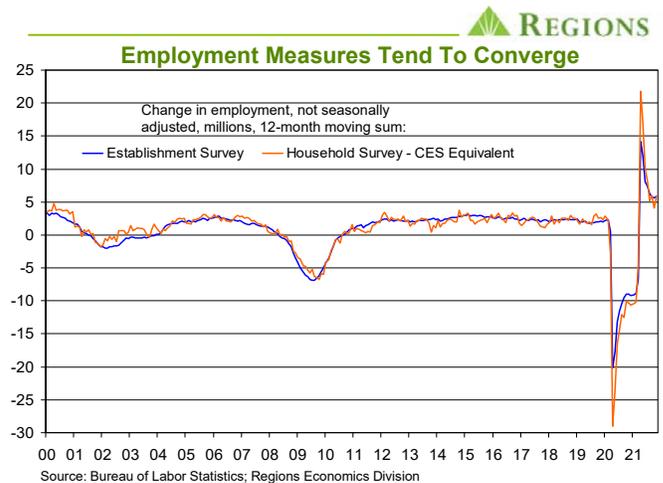
As we’ve discussed above, we continue to harbor concerns over the sustainable rate of growth of the labor force once pandemic-related distortions have run their course. Moreover, even though the pace of wage growth will moderate from the pace seen over recent quarters, note the steady uptrend in the pace of wage growth in the years prior to the pandemic shown in the above chart. If we are correct in our view on labor force growth, that trend will resume. To be sure, faster productivity growth can counter faster wage growth, and it is this relationship which governs whether, or to what extent, there are implications for inflation from faster wage growth. While the recent productivity growth numbers have been somewhat distorted, one manner in which firms are responding to labor supply constraints and higher labor costs is to invest in automation/technology. We were having this very same discussion, quite often, prior to the pandemic, and will likely continue to have this same discussion going forward. We think it useful to remember that the same issues around the labor market, particularly around labor force participation, that were present before the pandemic will still be there once the pandemic-related distortions in the labor market have run their course

November Employment Report

Total nonfarm employment rose by 210,000 jobs in November, far below the half-million (or more) most analysts had been expecting. As forecast misses go, this one stands out, and not in a good way, and sent analysts scurrying to find an explanation. While faulty seasonal adjustment was a prime suspect, our take is that while there was a high degree of seasonal adjustment noise in the November data, it was pretty much of a wash in terms of the net effect on the estimate of nonfarm job growth. We did note the low response rate to the BLS’s establishment survey; at just 65.3

percent, November’s response rate is the lowest in any month since June 2020 and the lowest in any November since 2008. The lower the response rate, the more the BLS must rely on its own model to fill in the gap, and while over time that is not a material source of sample error, it can be in any one month. But, if that was the case in the November data, that error will be rectified in the revisions over the next two months. It is also worth noting that the November survey period ended prior to the middle of the month, meaning some hiring that took place in November will not be picked up until the December survey.

Whatever the reason(s) behind the forecast miss, the details of the November employment report show a stronger labor market than implied by the headline job growth number. For instance, the length of the average workweek rose by one-tenth of an hour, and while that may not sound like much, each one-tenth of an hour change in the average workweek is equivalent to more than 300,000 jobs in terms of the economy’s productive capacity. Even more notable are the details of the BLS’s Household Survey, which is the source of data on the labor force and the unemployment rate. The size of the labor force increased by over half a million people in November, pushing the participation rate up to 61.8 percent, well below the pre-pandemic trend rate but still the highest monthly rate since March 2020. The increase in the labor force was more than absorbed by household employment rising by 1.136 million people, pushing the jobless rate down to 4.2 percent.



The BLS adjusts the household employment series by removing agricultural, non-incorporated self-employed, and unpaid family workers and those employed but absent from work, which yields a measure of employment more comparable to the measure of nonfarm employment derived from the Establishment Survey. The “CES Equivalent” series shows 1.909 million more people working in November than in October, just a tad more than the reported increase in nonfarm employment. November’s gap between the two measures is unusually large, but note from the above chart that the two measures tend to converge over time. To the point that, based on the not seasonally adjusted data, each series shows employment having risen by 5.883 million over the past twelve months. Our general rule has always been that, when the headline number and the details of a given report seem out of line, go with the details. The November employment report is no exception, and the labor market will carry plenty of momentum into 2022.

ECONOMIC OUTLOOK



December 2021

Q2 '21 (a)	Q3 '21 (p)	Q4 '21 (f)	Q1 '22 (f)	Q2 '22 (f)	Q3 '22 (f)	Q4 '22 (f)	Q1 '23 (f)		2019 (a)	2020 (a)	2021 (f)	2022 (f)	2023 (f)
6.7	2.1	6.4	4.0	4.2	4.0	3.4	2.6	Real GDP ¹	2.3	-3.4	5.6	4.4	2.9
12.0	1.7	4.2	2.4	4.0	3.8	3.3	2.8	Real Personal Consumption ¹	2.2	-3.8	8.0	3.8	2.9
9.2	1.5	7.6	9.2	7.8	6.9	6.3	6.0	Real Business Fixed Investment ¹	4.3	-5.3	7.7	7.2	5.8
12.1	-2.4	7.4	11.7	9.2	8.0	7.3	6.2	Equipment ¹	3.3	-8.3	13.4	7.9	6.1
12.5	9.3	8.7	8.3	7.1	6.2	5.5	5.2	Intellectual Property and Software ¹	7.2	2.8	10.1	8.1	5.4
-3.0	-5.0	5.0	3.7	5.0	5.1	5.1	7.2	Structures ¹	2.0	-12.5	-7.3	2.9	5.3
-11.7	-8.3	-0.3	3.8	2.3	5.9	4.8	2.9	Real Residential Fixed Investment ¹	-0.9	6.8	9.0	0.4	3.5
-2.0	0.9	1.5	2.4	2.1	1.4	1.7	1.6	Real Government Expenditures ¹	2.2	2.5	0.7	1.5	1.5
-1,244.5	-1,312.2	-1,283.9	-1,321.2	-1,340.2	-1,355.4	-1,378.1	-1,403.4	Real Net Exports ²	-905.3	-942.7	-1,266.7	-1,348.7	-1,420.6
1,107	1,094	1,057	1,107	1,142	1,167	1,180	1,184	Single Family Housing Starts, ths. of units ³	889	1,004	1,103	1,149	1,193
482	461	466	461	461	459	457	455	Multi-Family Housing Starts, ths. of units ³	403	393	463	460	453
14.7	17.6	16.7	14.0	9.6	6.0	4.7	4.7	CoreLogic House Price Index ⁵	3.9	5.9	14.8	8.4	4.5
16.9	13.3	12.7	13.5	14.1	14.8	15.4	15.7	Vehicle Sales, millions of units ³	17.0	14.5	14.9	14.5	15.9
5.9	5.1	4.4	3.9	3.8	3.7	3.7	3.6	Unemployment Rate, % ⁴	3.7	8.1	5.4	3.8	3.6
8.5	4.7	4.3	4.8	4.2	3.0	2.5	1.8	Non-Farm Employment ⁵	1.3	-5.7	2.7	3.6	1.4
-29.0	-4.0	-5.5	-0.4	2.4	3.3	3.4	4.2	Real Disposable Personal Income ¹	2.3	6.2	2.2	-2.8	3.5
4.0	4.6	5.4	5.4	4.7	3.9	3.2	2.7	GDP Price Deflator ⁵	1.8	1.2	4.0	4.3	2.3
3.9	4.3	5.5	5.7	5.0	4.3	3.4	2.7	PCE Deflator ⁵	1.5	1.2	3.9	4.6	2.3
4.8	5.3	6.5	6.6	5.4	4.4	3.1	2.7	Consumer Price Index ⁵	1.8	1.2	4.6	4.8	2.4
3.4	3.6	4.5	4.9	4.1	3.7	3.2	2.7	Core PCE Deflator ⁵	1.7	1.4	3.3	4.0	2.4
3.7	4.1	5.0	5.8	4.5	3.9	3.3	2.9	Core Consumer Price Index ⁵	2.2	1.7	3.6	4.3	2.7
0.13	0.13	0.13	0.13	0.17	0.40	0.63	0.79	Fed Funds Target Rate Range Mid-Point, % ⁴	2.16	0.42	0.13	0.33	1.09
1.59	1.32	1.53	1.62	1.73	1.84	1.92	2.01	10-Year Treasury Note Yield, % ⁴	2.14	0.89	1.44	1.78	2.11
3.00	2.87	3.05	3.15	3.27	3.39	3.50	3.62	30-Year Fixed Mortgage, % ⁴	3.94	3.12	2.95	3.33	3.73
-3.3	-3.1	-3.3	-3.4	-3.3	-3.4	-3.4	-3.5	Current Account, % of GDP	-2.2	-2.9	-3.3	-3.4	-3.5

a = actual; f = forecast; p = preliminary

Notes: 1 - annualized percentage change 2 - chained 2021 \$ billions 3 - annualized rate 4 - quarterly average 5 - year-over-year percentage change

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