CONOMIC OUTLOOK A REGIONS March 2023



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Putting A Wrap On Holiday Season Sales, Hiring

After having taken a pass in both 2020 and 2021, we ventured back into the holiday season sales forecasting game in 2022, which included returning to our custom of presenting and discussing our holiday sales forecast in the November edition of the Outlook. Sure, the 2022 holiday shopping season is well into the rear view mirror at this point, but the credit card bills will continue to line the road ahead for a while yet, and if that doesn't help preserve the holiday spirit, well, okay, fine, never mind . . . In any event, given the usual lags in reporting some categories of the retail sales data and the usual revisions to the initial estimates, we finally have enough data at hand to see how our forecast of 2022 holiday season sales fared. And, with complete, and revised, data now at hand, we can see how holiday season hiring in retail trade and warehousing and delivery fared relative to our expectations, which we also discussed in the November 2022 Outlook.

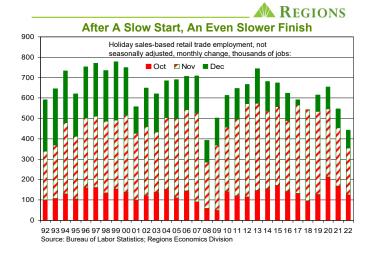
As returns to the game go, well, it may not be guite like Michael Jordan returning from a two-year diversion to capture three more NBA titles, but our 2022 holiday sales forecast did hit the mark. Kind of. On a nominal basis, our measure of holiday season sales rose by 5.8 percent in 2022, matching the forecast we presented in our November 2022 Outlook. Though considerably smaller than the increases in holiday season sales in both 2020 and 2021, the 5.8 percent increase in 2022 was, with the exception of 2017, larger than the increase in any year between 2006 and the onset of the pandemic. After accounting for price changes, however, holiday season sales rose by just 0.7 percent in 2022, shy of the 1.2 percent increase our forecast anticipated. As such, aside from the declines seen in 2008 and 2009, 2022 was the weakest year for real holiday season sales in the 31-year life of our series.

As we noted in our original discussion of our 2022 holiday season sales forecast, while we've traditionally used the Consumer Price Index (CPI) measure of core goods (consumer goods excluding food and energy) prices to deflate our series on nominal sales, since the onset of the pandemic we've used the BLS's measure of core goods excluding used motor vehicles in our calculation of real holiday season sales. This change keeps our measure of real holiday season sales from being skewed by the outsized influence of used vehicle prices in the overall measure of core goods prices, given how sharply used vehicle prices have swung since the onset of the pandemic. To that point, steep declines in prices of used motor vehicles pushed the CPI measure of core goods prices lower over the last three months of 2022, but prices of core goods excluding used motor vehicles rose modestly over that same span. The increases in November and December ran counter to what our forecast anticipated, which accounts for our forecast of real holiday season sales being a bit too high.

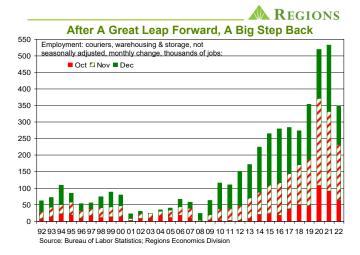
As was the case in both 2020 and 2021, despite an impressive over-the-year increase, our holiday sales composite (total retail sales excluding drug store, grocery store, motor vehicle, gasoline, and building materials sales) posted sequential declines in both November and December, which we suspected would be the case. To some extent, this reflected smaller than normal increases in not seasonally adjusted sales in each month being treated harshly by seasonal adjustment. These smaller than normal increases in part reflected October sales being pumped up by retailers rolling out holiday sales promotions earlier than they otherwise would have in an attempt to pare down unwanted inventories. At the same time, shifts in consumer spending patterns meant that more emphasis was being placed on spending on services such as travel, entertainment, recreation, and dining out while less emphasis was being placed on spending on goods, counter to the patterns seen over the prior two holiday seasons. It helps to remember that, given the extent to which spending on goods was bolstered by the policy response to the pandemic in 2020 and 2021, there was simply little pent-up demand left by time the 2022 holiday sales season rolled around. We discussed these issues in detail in our November 2022 Outlook and have discussed them more than once in our write-ups of the monthly data on retail sales and personal income/spending, so won't go into any more detail here. As a final note on 2022 holiday season sales, while online sales posted the largest increase of any of the individual components, up 10.0 percent, that increase was much smaller than those seen in 2020 and 2021, which in part reflects greater in-store traffic flows in 2022 than seen in either of the prior two years.

As we also discussed in our holiday season sales preview, that we had low expectations for holiday season sales meant we had similarly low expectations for holiday season hiring in retail trade and in warehousing and delivery services. Our low expectations for holiday season hiring mainly reflected the extent of hiring in both of these sectors done well ahead of the 2022 holiday sales season, while the aforementioned shift in consumer spending patterns also figured to weigh on holiday season hiring. Keep in mind that, while measures of holiday season sales capture spending done in November and December, holiday season hiring typically begins to ramp up in October of any given year. And, just as we exclude certain categories of retail sales from our measure of holiday season sales, we eliminate the same categories from the employment data when tallying up holiday season hiring. Our basis for comparison is not seasonally adjusted hiring over the October through December period in the relevant categories of retail trade and warehousing and delivery services.

As it turns out, our low expectations were warranted. Over the final three months of 2022, not seasonally adjusted payrolls in retail trade, adjusted to match our measure of sales, rose by only 442,300 jobs. While that may seem a rather substantial increase, we nonetheless say "only" because that marks the smallest such increase since 2008, when the economy was mired in the severe 2007-09 recession. Moreover, this is the second smallest such increase going back to 1992, when our series on holiday sales and hiring begin, as shown in the following chart.



The story wasn't much different when it came to holiday season hiring amongst warehousing and delivery services. After increases of over half a million jobs in each of the prior two years, not seasonally adjusted payrolls amongst warehousing and delivery services rose by 349,900 jobs over the final three months of 2022, the smallest such increase since 2018. Keep in mind, however, how strong hiring in warehousing and delivery was from the back half of 2020 through 2021, reflecting the extent to which online shopping replaced in-store shopping after the onset of the pandemic. But, as consumer spending patterns began to shift in the months ahead of the 2022 holiday shopping season, some providers of warehousing and delivery services began to shed workers to align with fading demand, which was one reason we did not expect 2022 holiday season hiring to be nearly as strong as in the prior two years.



As can be seen in the above two charts, a key difference between retail trade and warehousing and delivery services is that, though not stacking up, literally or figuratively, to hiring in the prior two years, 2022 holiday season hiring amongst warehousing and delivery services was nonetheless strong by historical standards,

in stark contrast to 2022 holiday season hiring in retail trade. This is simply a reflection of the long-running growth in online shopping at the expense of in-store shopping.

Our purpose here was to put a wrap on the 2022 holiday season. And, really, anyone who laid down money on our 2022 holiday season sales forecast landing exactly on the mark, then, by all means go out and buy a few Powerball tickets. On the whole, 2022 holiday season shopping and hiring played out pretty much as we expected, conveying little new information about either the state of U.S. consumers or the labor market. That point, however, would have been lost on those who took the monthly data over the last few months of 2022 in isolation, rather than putting the data in the context of the prior several months.

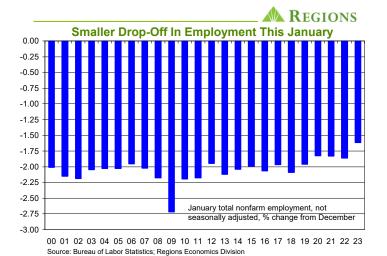
All The News Noise That's Fit To Print . . . And React To

Much has been made of the "reacceleration" of growth in the U.S. economy in early-2023. While many have made note of this, few have been able to satisfactorily explain it, particularly given that it comes after the FOMC aggressively raised the Fed funds rate in 2022 and market interest rates followed suit. Some have argued that this is another illustration of the general rule that monetary policy works with long and variable lags, meaning that the full effects of the increases in interest rates seen in 2022 have yet to work their way through the economy. Others have argued that the reacceleration in economic growth is evidence that monetary policy is no longer as potent as has historically been the case. Either way, almost across the board, the economic data for the month of January surprised to the upside, often in a big way, including the data on employment, personal income, consumer spending, and business investment in equipment and machinery.

Our question isn't so much why the pace of growth picked up so strongly in January, but instead whether the pace of growth really picked up to anywhere near the extent suggested by the economic data for the month of January. Recall that, as originally reported, nonfarm employment rose by 517,000 jobs in January, private sector labor earnings rose by over 1.0 percent, and total retail sales rose by 3.0 percent. Even business orders for core capital goods, an early indicator of business investment in equipment and machinery in the GDP data, surprisingly reversed several months of weakness and rose by 0.8 percent. Along with revised data from the Consumer Price Index (CPI) showing faster inflation over Q4 2022 than had previously been reported, the "strong" January data significantly altered market participants' expectations of how much higher the FOMC will push the Fed funds rate and how long they will remain on hold after reaching the terminal funds rate.

If the numbers cited above seem too good to be true, that's because they pretty much are. That almost across the board the January data surprised to the upside reflects the extent to which the January data were flattered by seasonal adjustment, in effect making the economy looking much more robust than was actually the case. In any given year, there is typically a pronounced lull in the pace of activity across a wide swath of the economy in the month of January. For instance, seasonal workers hired during the previous holiday season tend to be let go, while consumer spending slows sharply after the holiday season splurge and winter

weather acts as a meaningful drag on construction activity, to name but a few of the more obvious examples. This January's lull, however, was decidedly less pronounced than is typically the case for the month, meaning that we saw smaller than normal declines in metrics such as nonfarm employment and consumer spending. As such, seasonal adjustment over-compensated for the January lull, making the seasonally adjusted data look stronger.



The chart above helps illustrate our point. On a not seasonally adjusted basis, total nonfarm employment fell by 1.61 percent in January, which is not only smaller than the average January decline but the smallest January decline in any year over the 1990-2023 period. In most cases, seasonal adjustment factors are based on the most recent years of data, and over the previous five years the average January decline in nonfarm employment was 1.91 percent. If there doesn't seem to be a huge difference between a 1.61 percent decline and a 1.91 percent decline, keep in mind that we're talking about a base of over 150 million jobs. As such, a "typical" January would have seen unadjusted nonfarm payrolls decline by around 500,000 more jobs than was actually the case this year, meaning the increase in employment on a seasonally adjusted basis would have been well short of the increase – 517,000 jobs – originally reported for January.

We can make the same comparison with almost all of the January data. For instance, not seasonally adjusted control retail sales fell by 23.2 percent in January while on a seasonally adjusted basis control retail sales are reported to have risen by 1.7 percent. The not seasonally adjusted data show core capital goods orders fell by 9.9 percent in January while on a seasonally adjusted basis core capital goods orders are reported to have risen by 0.8 percent. Almost across the board, the declines in the unadjusted January data were smaller than the typical January declines, making for outsized increases on a seasonally adjusted basis. The one notable exception to the "not nearly as strong as it seems" pattern in the January data is new home sales, with the unadjusted data showing a much stronger January increase than is typical for that series.

One could argue that the less pronounced lull in activity in January was itself proof that the U.S. economy had, despite the odds, strengthened at the start of 2023. This, however, is where the point we made in the prior section about the need to put a given data point in a given month in the context of the prior months'

observations comes into play. For instance, in the prior section we discussed how 2022 holiday season hiring in warehousing and delivery services and retail trade was weaker than has been the case in recent years. As such, it follows that seasonal layoffs in these areas in January were also smaller, helping hold down the January decline in total nonfarm employment in the not seasonally adjusted data. And, as we've noted in our write-ups of the monthly retail sales data and we discussed in last month's *Outlook*, the increases in unadjusted retail sales in November and December 2022 were far smaller than is typical for those months, meaning that a smaller than normal January decline was to have been expected. Indeed, that was a key component of our well above consensus forecast of January retail sales, which was much closer to the mark than was the consensus forecast.

This is an important point to keep in mind when considering the effects of seasonal adjustment noise — a smaller/larger than normal change in a particular indicator in a given month will tend to be followed by a larger/smaller than normal change in a subsequent month, usually but not always the following month. In other words, it is no mere coincidence that what in the seasonally adjusted data looked to be weak retail sales in December was followed by what in the seasonally adjusted data looked to be notably strong retail sales in January. Again, we could go through any number of data series and make the same December/January comparisons and show the same results.

Our routinely examining the not seasonally adjusted data is by no means anything new. Our spending so much time discussing seasonal adjustment and pointing to what we believe to be a high volume of seasonal adjustment noise across much of the economic data is something new, well, at least relatively new. We have on many occasions noted that what had historically been fairly typical seasonal patterns in economic activity have been significantly disrupted since the onset of the pandemic, which at least in part reflects the effects of the policy response to the pandemic that continue to linger even as COVID-19 itself is much less of a disruption to the economy than was the case in 2020 and 2021.

As we've frequently discussed, these disruptions can still be seen in the data on consumer spending, employment, home sales, and residential construction, among other data series. And, as if to remind us that she still can do so, Mother Nature, the venerable godmother of seasonal adjustment noise, had a hand in the February 2023 employment data. Atypically mild winter weather during the BLS establishment survey period helped push up job counts in construction and leisure and hospitality services in the seasonally adjusted data, thus bolstering headline job growth. Moreover, to our earlier point, a smaller than typical February decline in retail trade payrolls in the not seasonally adjusted data turned into a reported increase of 50,000 jobs in the seasonally adjusted data, adding yet another boost to headline job growth.

Yes, we understand the point of seasonal adjustment and, no, are by no means advocating that it be abandoned. Our point is simply that there are many factors that can throw seasonal adjustment off course and, in turn, contribute to headline numbers that do not accurately portray what is happening in the economy. To our point that such seasonal adjustment noise in one month will trigger an opposite, but not necessarily equal, reaction in a subsequent month, many analysts simply dismiss concerns over seasonal adjustment noise on the premise that over the course of any given

year, it's all a wash. While ideally that is true, it doesn't always work out that way but, even more significantly, analysts, market participants, and policy makers don't wait for a full year's worth of data to react but instead react to the data as they are released each month. Really, as much as you sometimes may wish would be the case, has there ever been an instance of an analyst or policy maker saying "sorry, but so far we've only got nine months of data on nonfarm employment for this year, so it would be premature for me to comment on it"?

There is simply no way around what from time to time will be distortions in the data tied to seasonal adjustment, and we think such instances have almost become routine since the onset of the pandemic. While there is no way around it, we think it incumbent upon analysts to be cognizant of and to account for any such noise before reacting to a given data release. We do not make forecasts of the high frequency indicators without first assessing what the "typical" change in the unadjusted data would look like, and we do not react to any given data release without first comparing the change in the unadjusted data to what is typical for that indicator in that month. This can, and often does, put our reaction to the data at odds with those of many other analysts, not to mention media accounts, which is perfectly fine with us. Our task is to explain, as best as we can, what is actually occurring in the economy, and we've always found the best way we can do so is by relying on the patterns in the raw data. This is why, despite all of the talk of growth having reaccelerated in early-2023, we've said that the economy doesn't look much different to us than it has over the past several months. As such, our view that 2023 will be a challenging year for the U.S. economy hasn't changed.

Can I Get A Witness An Answer?

If we are correct in thinking that there has been a higher volume of seasonal adjustment noise in much of the economic data since the onset of the pandemic, then that has surely influenced perceptions of the underlying health of the U.S. economy, not to mention having helped generate some overly dramatic headlines in media accounts of the economic data. For us, though, it hasn't really changed much, as noted above. There is, however, another issue that is leading us and others to wonder whether even the not seasonally adjusted economic data are as reliable as has been the case in the past. That issue is what across many of the surveys used to collect the data has been a steadily declining rate of responses to the surveys from the government agencies.

For instance, focusing on the labor market data, the Bureau of Labor Statistics (BLS) reports response rates for the surveys used to produce the monthly employment reports, the Employment Cost Index (ECI), and the Job Openings and Labor Turnover Survey (a/k/a the JOLTS data). In each instance, response rates have fallen since the onset of the pandemic and are meaningfully lower than was the case prior to the pandemic. Moreover, response rates had already been drifting lower prior to the onset of the pandemic. The initial response rate to the Current Employment Statistics survey, used to produce estimates of nonfarm employment, hours, and earnings, has fallen below fifty percent, as has the response rate to the survey used to estimate the Employment Cost Index, while the initial response rate to the JOLTS survey has been hovering around thirty percent over the past several months.

A lower response rate means that the BLS has to rely on its own estimates to fill in the gaps in order to produce the initial estimates of nonfarm employment, hours and earnings which are presented in the monthly employment reports. We've argued that lower response rates have lessened the reliability of the initial estimates of monthly job growth. BLS points out that follow-up response rates are much higher, meaning that the second and third estimates of nonfarm employment, hours, earnings are more reliable. That is true, but even the follow-up response rates are lower than had been the case prior to the pandemic. Moreover, it is the initial estimates of job growth and, more recently, wage growth that elicit the biggest responses from market participants. And, even if subsequent estimates are more reliable, that doesn't address our point about the reliability of the initial estimate. To that point, the magnitude of the first-to-third revision of monthly job growth has been meaningfully larger over the past two years than was the case in the two years prior to the pandemic.

It strikes us that, while our collective ability to process data is more advanced than it has ever been, our ability to gather the data remains stuck back in the dark ages. Okay, that last part may be an exaggeration, but our point remains the same. Regardless of how well structured a survey is and how precisely targeted the sample pool is, it isn't plausible to argue that low response rates have no impact on the estimates reported on the basis of those surveys. This isn't to question the professionalism of the people at the various agencies who produce the data or to dismiss the data as being of no value due to low response rates, And, no, we're not wearing tinfoil hats as we write this – why do you ask? Instead, this is simply a continuation of the point of the prior section, which is that analysts, and policy makers, should account for issues such as seasonal adjustment and response rates before reacting to, let alone acting upon, the economic data.

February Employment Report

Total nonfarm payrolls rose by 311,000 jobs in February, with private sector payrolls rising by 265,000 jobs and public sector payrolls up by 46,000 jobs. Prior estimates of job growth in December and January were revised down by a net 34,000 jobs for the two-month period, and while that number is not in and of itself noteworthy, the details are. Estimates of private sector job growth were revised down by 94,000 jobs while estimates of public sector job growth were revised up by 60,000 jobs. Job growth was meaningfully less dispersed across private sector industry groups in February, with the one-month hiring diffusion index slipping to its lowest level since April 2020 and declines in payrolls in finance, manufacturing, transportation & warehousing, and information services. As it is, that average weekly hours were revised lower in January and fell in February could be a sign that firms reluctant to let large numbers of workers go are using hours worked as a lever with to manage total labor input. February also saw an increase in the number of those working part-time due to slack business conditions. And, as noted above, hiring in construction and leisure and hospitality services was bolstered in February by atypically warm winter weather, setting the stage for weaker March hiring in these industry groups, while the reported increase in retail trade payrolls is nothing more than seasonal adjustment noise. Beneath the impressive-looking headline job growth number, falling hours worked, a narrower base of hiring, and a slowing trend rate of growth in labor earnings all point to a cooling labor market.

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Q3 '22 (a)	Q4 '22 (p)	Q1 '23 (f)	Q2 '23 (f)	Q3 '23 (f)	Q4 '23 (f)	Q1 '24 (f)	Q2 '24 (f)		2020 (a)	2021 (a)	2022 (p)	2023 (f)	2024 (f)
3.2	2.7	1.4	0.2	0.8	0.9	1.2	1.4	Real GDP ¹	-2.8	5.9	2.1	1.4	1.2
2.3	1.4	2.6	-0.1	1.5	0.8	0.8	1.3	Real Personal Consumption ¹	-3.0	8.3	2.8	1.5	1.1
6.2	3.3	2.9	1.8	0.5	1.6	2.7	2.9	Real Business Fixed Investment ¹	-4.9	6.4	3.8	2.6	2.3
10.6	-3.2	-2.4	-3.3	-5.9	-2.2	0.8	1.4	Equipment ¹	-10.5	10.3	4.3	-1.6	-0.5
6.8	7.4	6.6	5.9	5.1	4.6	4.3	4.4	Intellectual Property and Software ¹	4.8	9.7	8.9	6.5	4.6
-3.6	8.5	7.5	4.9	5.4	3.3	3.0	2.1	Structures ¹	-10.1	-6.4	-6.9	3.9	3.0
-27.1	-25.9	-5.1	0.6	4.8	4.5	4.9	4.1	Real Residential Fixed Investment ¹	7.2	10.7	-10.7	-10.8	4.3
3.7	3.6	2.7	1.5	1.1	2.5	2.1	1.6	Real Government Expenditures ¹	2.6	0.6	-0.6	2.3	1.8
-1,268.8	-1,238.4	-1,242.3	-1,249.9	-1,260.6	-1,277.7	-1,279.3	-1,291.2	Real Net Exports ²	-922.6	-1,233.4	-1,356.6	-1,257.6	-1,296.9
905	848	813	756	760	779	807	841	Single Family Housing Starts, ths. of units ³	1,002	1,131	1,007	777	855
545	557	511	508	502	485	469	460	Multi-Family Housing Starts, ths. of units ³	393	474	549	502	459
11.4	7.1	1.3	-4.6	-5.6	-6.4	-5.1	-1.8	CoreLogic House Price Index ⁵	6.7	15.7	13.6	-3.8	-1.2
13.4	14.3	15.0	14.4	14.6	14.8	15.0	15.2	Vehicle Sales, millions of units ³	14.5	14.9	13.8	14.7	15.3
3.6	3.6	3.6	3.8	3.9	4.2	4.2	4.3	Unemployment Rate, % ⁴	8.1	5.4	3.6	3.9	4.3
4.2	3.4	3.0	2.4	1.7	1.2	0.6	0.4	Non-Farm Employment⁵	-5.8	2.9	4.3	2.1	0.5
3.2	4.8	5.7	-0.2	0.7	2.7	4.4	3.4	Real Disposable Personal Income ¹	6.2	1.9	-6.1	2.8	3.0
7.1	6.4	5.4	4.0	3.6	3.4	3.0	2.6	GDP Price Deflator⁵	1.3	4.5	7.0	4.1	2.5
6.3	5.7	5.1	4.2	3.9	3.8	3.2	2.7	PCE Deflator⁵	1.1	4.0	6.3	4.2	2.6
8.3	7.1	5.9	4.5	4.0	3.7	3.2	2.8	Consumer Price Index⁵	1.3	4.7	8.0	4.5	2.6
4.9	4.8	4.7	4.4	4.0	3.6	3.0	2.6	Core PCE Deflator⁵	1.3	3.5	5.0	4.2	2.5
6.3	6.0	5.5	5.0	4.3	3.8	3.2	2.8	Core Consumer Price Index⁵	1.7	3.6	6.1	4.7	2.7
2.24	3.71	4.57	5.04	5.13	5.13	5.13	4.88	Fed Funds Target Rate Range Mid-Point, $\%^4$	0.42	0.13	1.73	4.96	4.77
3.11	3.83	3.73	3.88	3.88	3.76	3.70	3.55	10-Year Treasury Note Yield, %4	0.89	1.44	2.95	3.81	3.51
5.62	6.66	6.43	6.68	6.66	6.47	6.27	5.97	30-Year Fixed Mortgage, % ⁴	3.12	2.96	5.34	6.56	5.87
-3.4	-3.3	-3.5	-3.6	-3.4	-3.4	-3.3	-3.2	Current Account, % of GDP	-2.9	-3.6	-3.7	-3.5	-3.2

a = actual; f = forecast; p = preliminary

Notes: 1 - annualized percentage change 2 - chained 2012 \$ billions 3 - annualized rate 4 - quarterly average 5 - year-over-year percentage change