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Lots Of Stuff May Or May Not Happen In 2023 . . .

As far as 2023 outlooks go, that's about as clear and concise, not to mention precise, as we can be. Consider it the triumph of experience over hope. Really, if the experience of the past three years hasn't been enough to dissuade one from making detailed predictions as to how the coming year will play out, nothing will. Even if everyone gets a pass for 2020, there are still those pesky predictions for 2021 and 2022 to account for. Okay, fine, if in your 2022 outlook you had Russia invading Ukraine and thus adding further fuel to already elevated inflation, the FOMC raising the Fed funds rate by over four hundred basis points, TCU in the national title game, mortgage interest rates doubling and sending the housing market reeling, a notably resilient labor market being seen by many analysts and central bankers as more of a threat than as a valued ally in a still supply-constrained economy, and the S&P 500 turning in its worst year since 2008 then, by all means, step right up and present your 2023 outlook.

Sure, there's something to be said for getting back on the horse, but that kind of depends on whether the horse is a sedate show pony or a deranged wild mustang with a particular dislike for humans. The last three years have felt much more like a ride on the latter than on the former. Okay, that may be a reach, but not too much of one. The pandemic and the policy response to it contributed to significant imbalances in economies across the globe. And, at least in case of the U.S. economy, contributed to existing imbalances, such as those in the housing market and the labor market, becoming even more pronounced than was the case prior to the pandemic. Surging demand in a supply-constrained economy helped push inflation up to a more than four-decade high in 2022, with an unwelcome boost from even higher food and energy prices in the wake of Russia's invasion of Ukraine.

The surge in inflation, in the U.S. and across much of the globe, sent central banks scrambling, aggressively pushing policy rates higher in an attempt to pull inflation back toward target rates and restore credibility lost by downplaying inflation concerns when inflation started to accelerate sharply in the spring of 2021. Unable to directly address supply-side constraints, central banks have seen pushing down demand, via higher interest rates, as the channel through which they can impact inflation. While there are clear signs that supply-side constraints have eased and clear signs that inflation has peaked, that doesn't mean central banks are done, even as they repeatedly note that changes in monetary policy work with long and variable lags.

To the extent that is the case, at least outside of the already-reeling housing market, the implication is that the full effects of rate hikes implemented to date have not yet been felt. That won't,

however, deter central banks from pushing interest rates higher. Particularly here at home, as many FOMC members see a recession as less costly than inflation expectations running free, hence the odd spectacle of central bankers openly talking about the degree of pain they will have to inflict upon the economy.

So, in the early days of 2023, there remains a considerable degree of uncertainty as to how much further the FOMC (and, for that matter, other central banks) will go, how that will impact market interest rates and overall financial conditions, and how that in turn will impact the broader economy. Any forecast of how the economy will fare in 2023 is contingent upon the assumptions made for each of those steps, which right off the bat leaves lots of opportunities for forecasts to veer off track. That doesn't necessarily make forecasting the economy's path in 2023 any more perilous than it is in any other year. One thing that does, at least to us, make getting a 2023 forecast right much harder is that even if we knew the answers to the questions of how far central banks will go and how that would impact market interest rates and overall financial conditions, how that would impact the broader economy is much less clear these days than would have been the case prior to the pandemic.

Two things we have consistently noted since the onset of the pandemic are that normal seasonal patterns of economic activity have been if not broken then at least significantly disrupted, and that typical patterns of interaction between economic variables are in many cases simply not as strong as has historically been the case. To the second point, when adjusted for inflation, after-tax personal income was on course to decline by roughly 6.5 percent in 2022 while real consumer spending was on course to increase by roughly 3.0 percent, not the relationship you'd typically expect. Each of these traits, however, reflects lingering distortions from the pandemic and the policy response to it, with these distortions impacting the supply side and the demand side of the economy.

These are at least known unknowns that don't necessarily make it harder to produce a forecast, but they do make it harder to have a lot of confidence in a forecast. Add to that the potential for, if not the likelihood of, significant disruption from what in the early days of 2023 remain the unknown unknowns, and it is reasonable to ask how much confidence one should have in a forecast that extends past the end of this week let alone through the end of this year. Really, think back over the past three years and see how many economy-disrupting, market-moving events there have been that you didn't see coming.

We won't presume to speak for anyone else, but for us, that's a big enough number to make us wary of laying out a detailed set of predictions as to how 2023 will play out for the U.S. economy. We do, as is the case in each edition of our *Monthly Economic Outlook*, devote the last page of this month's edition to a summary of our updated baseline forecast. One of the hard lessons of the

past three years, however, is how quickly and drastically things can change, and over that span it has often been the case that our baseline forecast has changed meaningfully from one month to the next. This reflects factors such as an unusually high degree of volatility in the data, pronounced shifts in fiscal and/or monetary policy, and a series of external shocks.

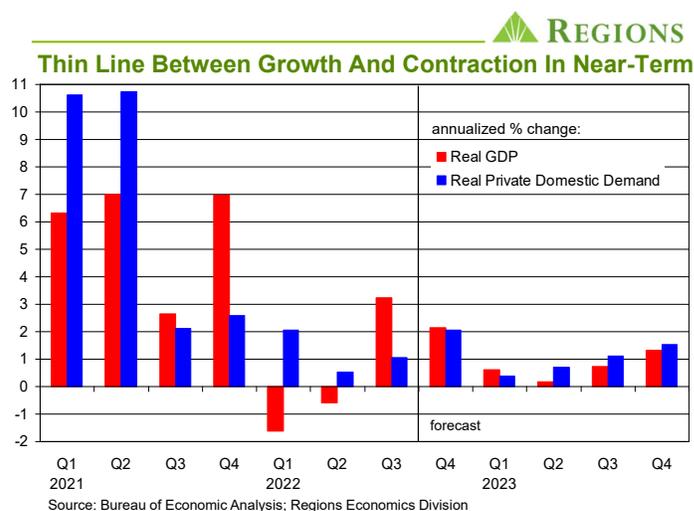
As such, while in what follows we'll lay out how, as of early-January, we expect the U.S. economy to perform in 2023, we think it more useful to spend more time discussing some of the key factors that will determine how the economy actually performs in 2023. To be sure, our expectations around consumer spending, business investment, the labor market, the housing market, inflation, and FOMC policy, amongst other factors, are built into our January baseline forecast. But, understanding how quickly the data, and perceptions of the data amongst policy makers and market participants, can change, we know not to get too attached to any month's baseline forecast. Hence, our focus on laying out what we see as some of the key drivers of the economy's path over the course of 2023 rather than on how, as of early-January, we see these factors playing out.

2023 Overview: After what we expect will be full-year 2022 real GDP growth of 2.0 percent, our baseline forecast anticipates real GDP growth of around 1.0 percent in 2023. While we anticipate 2023 being a challenging year for the U.S. economy, we do not have a recession as our base case, putting us at odds with many of our counterparts. The last time we found ourselves so out of step with recession calls was 2019 when, coming into that year, many thought that the age of the expansion which started in 2009 meant that it was destined to end. That was of course nonsensical, but the case for recession in 2023 is much stronger, and it isn't just economists who are predicting recession, with many CEOs making the same calls of late, some more colorfully than others (bracing for an economic "hurricane"). That last point – CEOs making recession calls, not how they are making them – is not a trivial one, as we believe it is possible to talk yourself into a recession. If enough of those with ultimate responsibility for calls on hiring and capital spending act accordingly, the effects will certainly be felt throughout the economy, particularly to the extent that consumers begin to doubt their job and income prospects and act accordingly when making spending decisions.

There is no denying that a period of significantly elevated inflation and rising interest rates has soured consumer and business sentiment. And, as noted above, with the full effects of higher interest rates having not yet made their way through the economy coupled with the likelihood of at least some further rate hikes, the pace of economic activity seems likely to slow further over the next few quarters. Many of those forecasting recession point to the FOMC raising the Fed funds rate to the point that, given the knock-on effects on market interest rates and broader financial conditions, they push the economy into recession. What have traditionally been signals of impending recession, such as the shape of the yield curve, would seem to support recession calls.

While we'll concede an elevated probability of recession, we do not at present have recession at our base case. In one sense, we don't think whether or not the U.S. economy will slip into recession in 2023 to be all that interesting of a question. After all, there is very little difference between our January baseline forecast and the brief and mild recession envisioned by many, if not most, of those

with recession as their base case. We anticipate only tepid growth in real private domestic demand – combined consumer spending, residential fixed investment, and business fixed investment – and expect the pace of job growth to fall below even the meandering pace needed to keep the jobless rate constant, with the result being an increase in the unemployment rate over coming quarters.



In other words, our baseline forecast wouldn't feel that much different than the brief and mild recession many are expecting. To be sure, there are meaningful downside risks to our baseline forecast that, should they materialize, could push the economy into recession. For instance, the FOMC continuing to push the Fed funds rate higher amid clearly slowing growth and inflation could trigger commensurate changes in market interest rates and broader financial conditions that would further suppress growth. Renewed disruptions in global supply chains, renewed spikes in energy prices, and heightened financial volatility all pose downside risks to our baseline outlook. Moreover, with growth as tepid as we and most others expect will be the case, the economy simply has little capacity to absorb adverse shocks, i.e., the unknown unknowns that lurk as threats to growth.

At the same time, however, there are a number of supports for the economy that can, and we think will, help fend off recession. Household and business balance sheets remain notably healthy, with ample liquidity buffers and low debt service burdens even with interest rates having risen and corporate profit margins that, while off their peaks, remain easily above longer-term norms. Stronger labor force participation than we now anticipate would provide a lift to growth and dampen wage pressures. And, while we expect inflation to slow further over the course of 2023, the deceleration in inflation could be even faster than we now anticipate will be the case. On the whole, we see the downside and upside risks to our baseline forecast as being more or less balanced, even if many others see only the downside risks.

But, as we all by now know well, stuff happens and things change, to use highly technical language, and our forecast can and will change as the year progresses. As such, we think it worth a more detailed discussion of some of the main factors that will shape the economy's path over the remainder of this year. While by no means discounting the possibility of exogenous shocks, they are called unknown unknowns for a reason, meaning that unless and

until they materialize, we can't really address them. While the rest of our discussion will focus on the known unknowns, it helps to keep in mind that most, if not all, of these factors are intertwined, such that being wrong on a forecast of one of them likely means being wrong on most, if not all, all of them.

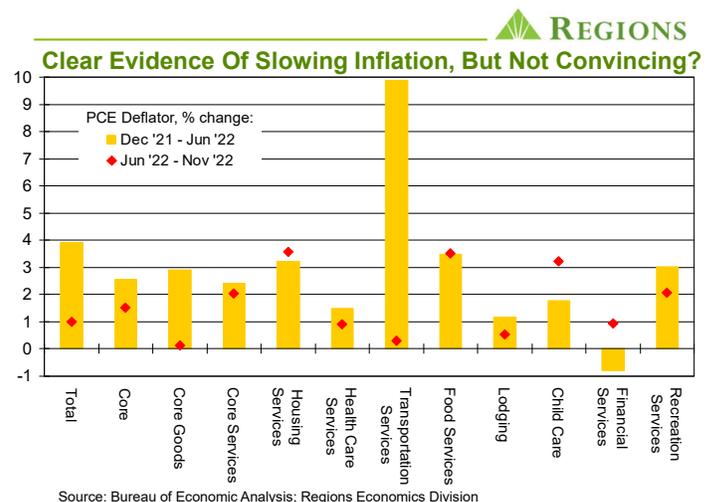
Inflation: Lower, but still too high? As measured by the Consumer Price Index (CPI), inflation hit 9.1 percent in June, and hit 7.0 percent as measured by the PCE Deflator, the FOMC's preferred gauge of inflation. Since then, inflation has slowed by both measures, which is consistent with the behavior of the more commonly watched leading indicators. Global shipping rates, energy prices, and commodity prices have been declining steadily while measures of global supply chain stresses have eased substantially and are closing in on "normal" readings. At the same time, the gauge of non-labor input prices in the ISM Manufacturing Index has declined substantially, dropping by 47.7 percentage points over the past nine months. All of which is consistent with patterns in core goods prices (consumer goods excluding food and energy). Whether measured by the CPI or the PCE Deflator, core goods prices posted sequential declines in October and November (the December data are not available as of this writing), which we expect to persist, leading to year-on-year declines later in 2023.

That's all well and good, but even though inflation has slowed, it nonetheless remains considerably above the FOMC's 2.0 percent target rate, with PCE inflation at 5.5 percent as of November. While goods price inflation has slowed and will, we expect, give way to outright goods price deflation, services price inflation has proven to be more persistent. Some of this persistence, however, reflects nothing more than the lag with which falling market rents and now falling house prices will enter into measures of inflation. But, that will ultimately come, at which point services price inflation will slow materially, thus pulling overall inflation lower.

The FOMC, however, remains unconvinced. Indeed, Chair Powell has taken to citing "core services excluding housing" as evidence of lingering inflation pressures, noting that this is the area of the economy most sensitive to labor costs, which have shown few signs of decelerating, hence the only modest slowing in prices for core services excluding housing. Indeed, Chair Powell has stated that it will "take substantially more evidence to give comfort that inflation is declining." By extension, unless and until they see signs of meaningful deceleration in wage growth, many FOMC members, including Chair Powell, will not be convinced that inflation will come closer to the FOMC's 2.0 percent target rate, which obviously has implications for the stance of monetary policy.

We have a different take on the data and see more progress than cited by Chair Powell. For instance, if we use June as a point of demarcation, simply because June marked the peak of inflation, inflation across a host of services categories has been slower since June than it was in the six months ending with June. The following chart illustrates our point. The gold bars show the increase in prices, as measured by the PCE Deflator, in the six months ending with June 2022, while the red diamonds show the increases between June and November. To be sure, we'd rather have six months of data on the back side of this comparison to make it symmetrical, but it is unlikely that using the December data, when they are available, would change the results, particularly as the monthly increases in core services prices were sequentially smaller in both October and November. That housing services inflation,

dominated by rents, has been slightly higher over the past five months than over the prior six months isn't surprising. That will, as noted above, ultimately change, and will change significantly as falling shelter prices enter the inflation data. Recall, however, that Chair Powell has specifically pointed to core services excluding housing. With the exceptions of child care services and financial services (which includes insurance), services inflation has clearly slowed and came into 2023 will less momentum.

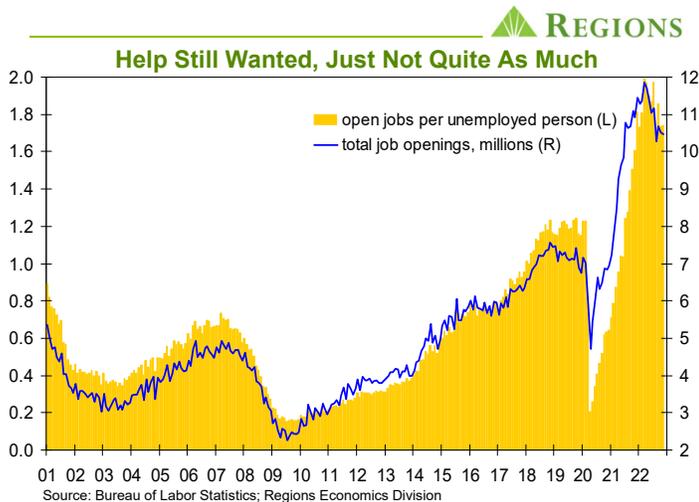


While it is the case that inflation is typically measured on a year-on-year basis, we think the above cut is useful as a gauge of the underlying trends and, at least to us, those trends are showing a clear slowdown in services price inflation. The FOMC, however, remains unconvinced, meaning they will be inclined to continue pushing the Fed funds rate higher, even if in smaller increments. That we are not on the same page as the FOMC in terms of the inflation outlook is nothing new. From day one, we were on the other side of the "transitory" argument, having written back in April 2021 that we thought inflation would prove to be higher, more broadly based, and more persistent than those in the transitory camp were expecting. Still, by no means did we at that point envision inflation hitting the heights it hit in 2022. Our sense now, however, is that inflation could decelerate more quickly than many, including the FOMC, are now anticipating. If so, how market interest rates react will depend on who market participants believe more, the FOMC or the data, and this will in turn impact the performance of interest sensitive sectors of the economy in 2023.

Is the labor market mocking the FOMC? That is how one analyst put it in response to recent data showing the labor market remains notably resilient despite the FOMC's aggressive course of Fed funds rate hikes. To the extent the FOMC sees wage pressures as a key source of broader inflation pressures, it follows that the more resilient the labor market proves to be, the more the FOMC will feel inclined to keep pushing the Fed funds rate higher. While it is true that there has been some cooling in labor demand, there is still a meaningful imbalance between labor supply and labor demand, which poses a dilemma for the FOMC.

As in the broader economy, the FOMC sees reducing the demand for labor as the channel through which it can slow wage growth. How that reduction in labor demand manifests itself matters for how the broader economy fares in 2023, with three possible

channels – lower job vacancies, reductions in hours worked, and layoffs. What makes this cycle different than past cycles is the role of job vacancies which, while off record highs, remain significantly above the number of potential workers.



As of November, there were over 10.4 million open jobs across the U.S. economy, down from a record of over 11.8 million in March 2022 but still roughly fifty percent above pre-pandemic levels (which, by the way, were record highs at the time). This translates into 1.7 open jobs for each unemployed person, but even if we expand the pool of potential workers to include those not in the labor force but who want a job, the ratio is still near an all-time high. The FOMC believes that a meaningful decline in job vacancies would take some of the pressure of wage growth, and we do not disagree with that. Keep in mind that, as with the number of job vacancies, the number of workers voluntarily quitting jobs remains far above pre-pandemic norms, and that those workers who change jobs reap larger pay increases than those who stay in place. As such, declining numbers of job vacancies should mean firms have to offer less to compete for workers and that workers have fewer opportunities to bump up earnings by changing jobs.

What is puzzling, however, is that even with the economy having slowed and at best modest expectations for 2023, job vacancies remain so high. Moreover, vacancies remain elevated across industry groups, even those in which there have been recent layoffs. That said, the first manifestation of cooling demand for labor would be further, and meaningful, declines in job vacancies. The second would be reductions in hours worked which, though often overlooked, has historically been a key lever used by firms in managing total labor input before they resort to outright layoffs. Though average weekly hours worked have fallen over recent months, there is still considerable capacity for firms to cut hours worked, based on past economic downturns, before letting workers go becomes the more feasible alternative.

Given how hard it has been for firms to find and retain workers, we think it unlikely they would quickly reverse course and begin laying off workers in large numbers. While that may seem at odds with recent high-profile announcements of job cuts, overall layoff rates remain far below pre-pandemic norms and still-high numbers of job vacancies suggest those workers who are laid off are able

to find new jobs more easily than has been the case in past cycles. That many who do expect a recession in 2023 expect it to be brief and mild further goes to our point that firms would be more likely to use hours worked as a means of managing total labor input as opposed to cutting workers. That we expect the unemployment rate to rise over coming quarters reflects a slower pace of hiring far more than it does rising layoffs. If we are wrong on this point, however, that will clearly have implications for growth in labor income and, in turn, in personal income and consumer spending.

Despite decades of evidence to the contrary, many continue to firmly cling to the notion of a Phillips Curve relationship, by which tight labor market conditions fuel faster inflation in the broader economy. We have on several occasions noted our disagreement with this view. Those who adhere to this view seem to see workers as nothing more than consumption machines who make no contribution to growth in output, which begs the question of why firms would remain so intent, even at prevailing wage rates, on adding unproductive assets who make no contribution to their bottom lines. That view becomes even more curious in a still supply-constrained economy.

Do consumers have the means and the will to spend? As we noted above, on an inflation-adjusted basis disposable (after-tax) personal income was on course to decline by roughly 6.5 percent for full-year 2022, while real consumer spending was on course to increase by roughly 3.0 percent. The decline in real after-tax income primarily reflects the decline in transfer payments from the elevated levels of 2020 and 2021 combined with significantly higher inflation in 2022. That spending held up to the extent it did last year is largely a function of the extent to which households across all income levels had been able to utilize pandemic-related transfers to build savings buffers. While these buffers have thinned out some, they nonetheless remain a meaningful support for U.S. consumers, and data from the Federal Reserve's *Distributional Financial Accounts* show this to be the case across all household income levels. That said, the jump in credit card debt over the back half of 2022 hasn't escaped notice and could indicate growing financial distress across a certain segment of households.

If our expectations of how the labor market will fare in 2023 are on or near the mark, we should see solid, albeit slower, growth in labor earnings, the largest component of personal income. This, along with slower inflation, would in turn support growth in real after-tax income. It may come down to not whether consumers are able to spend but instead whether they are willing to spend, and based on the monthly surveys on consumer confidence, it might not seem so. As we routinely note, however, regardless of what the headline confidence numbers may say, it's more a matter of how consumers feel about their own job and income prospects. If the labor market fares as we expect, a rising jobless rate could weigh on consumers, sapping support for discretionary spending.

We think the bigger questions around consumer spending are whether easing inflation frees up a bit more cash for discretionary spending and the extent to which the distortions in patterns of consumer spending stemming from the pandemic and the policy response to it continue to unwind over the course of 2023. Recall that consumer spending on goods, particularly consumer durable goods, spiked early in the pandemic, reflecting sizable financial transfers and much of the services sector being limited. We began

to see some reversal of these patterns over the second half of 2022 as consumers returned to activities such as travel, tourism, recreation, entertainment, and dining out in greater numbers. At the same time, demand for many types of consumer goods had largely been sated while higher interest rates made financing purchases of consumer durables more costly.

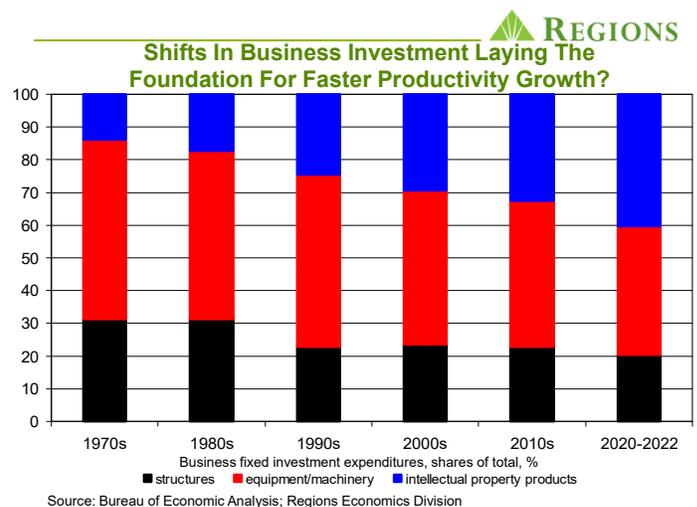
Just as the rush of spending on consumer goods subsided, we expect that will be the case with services spending. Then again, we'd been looking for that to happen as the summer of 2022 came to an end, which proved not to be the case, and we know that travel-related spending was strong during the holiday season, which supported Q4 2022 spending. Our baseline forecast does anticipate growth in services spending, which accounts for roughly two-thirds of all consumer spending, to shift into a slower pace in the first quarter of 2023 and remain fairly slow and steady through the year. Coupled with only modest growth in consumer spending on goods, this yields much slower growth in consumer spending in 2023 than was the case in 2022. In terms of growth in total consumer spending, we do not see the rate of growth in credit card debt seen over the back half of 2022 as being sustainable, and we think consumers will make an effort to preserve at least some of the savings buffers they took into 2023, particularly with the incentive offered by higher interest rates. But, if our calls on the labor market, inflation, and interest rates are off the mark, so too will be our call on consumer spending.

Business investment: Robots of the world unite? Firms making decisions on the path of capital spending are facing strong cross-currents that are complicating the decision making process. Just as some of these cross-currents reflect shorter-term factors, such as the path of demand over coming quarters, and some reflect longer-term factors, such as the availability and cost of labor, the decisions ultimately made will have both shorter-term and longer-term impacts on real GDP growth. In addition to being a component of GDP, business investment is also a key driver of any economy's sustainable rate of growth over time. For now, at least, the shorter-term considerations seem to be winning the day, as there are signs of a clear slowing in business investment.

The monthly data on orders for so-called core capital goods, or, nondefense capital goods excluding aircraft & parts, show a sharp deceleration in orders growth, to the point that we expect orders to have been flat in Q4 (the December data are not yet available). Why this matters is that core capital goods orders are an early indicator of business investment in equipment and machinery as reported in the GDP data. We expect this weakness to persist into 2023 and can't rule out declines in core capital goods orders in the months ahead. What we've seen, and expect to see, in the data are consistent with what we've heard from CEOs and CFOs, mainly in commentary on corporate earnings, indicating scaled down plans for capital spending amid slowing economic growth.

As such, we've downgraded our forecasts of business investment and now expect weaker growth than we had a few months ago. This is one reason our forecasts of 2023 real GDP growth have come down over recent months. Diminished expectations for growth in capital spending have less to do with higher interest rates – empirically, there is only a weak relationship between the two – and more to do with dimming expectations of corporate profits, reflecting a slower and more uncertain economic backdrop.

One issue facing many firms is trying to gauge the strength of demand, both near-term and long-term. While many firms faced extraordinarily rapid growth in demand over much of 2021 and 2022, that growth was in many cases a function of two factors. One, firms rushing to fill in the gaps left by production having been disrupted by the effects of the pandemic on the labor market, supply chains, and shipping networks, and, two, firms building up inventories to levels higher than were considered normal prior to the pandemic as a hedge against further supply chain/labor supply disruptions. Much of that catch-up/precautionary demand began to wane in late-2022, leaving firms trying to right-size production plans. If firms are gearing up for a slower trend rate of demand growth, they will have less need to engage in capital spending.



That of course does not mean all forms of capital spending will suffer equally, and the chart above is a useful way to illustrate our point. Spending on equipment and machinery is the component of total business investment that will be the weakest over coming quarters, as it is more closely aligned with shifting perceptions of near-term demand. Going to our point about longer-term factors impacting current capital spending decisions, business investment in intellectual property products, the vast majority of which consist of software and R&D, has been and will remain the strongest component. Spending on IP tends to front-run changes in labor productivity, which will be increasingly important given what will likely be structurally weak long-term growth in labor supply.

This is a topic we were writing about long before the pandemic, as the demographic writing has been on the wall for years. Our premise is that firms will become increasingly reliant on enhanced labor productivity – less labor must be made more productive – and on automation/technology to not only to enhance the productivity of labor but to some extent to substitute for labor. At some point this enhanced automation will boost spending in equipment, but at present will provide a bigger boost to IP spending. To the extent this is the case, enhanced labor productivity can offset slower growth in labor supply, whether partially or fully remains to be seen, thus mitigating the impacts of unfavorable demographic trends on trend real GDP growth.

Our forecast anticipates IP spending will grow at a faster rate than overall business investment in 2023. It is also worth noting that, though having been notably weak since the onset of the pandemic,

business spending on structures has shown signs of life of late. To some extent, this reflects “onshoring” activity, specifically, the chip plants that have begun to spring up across the U.S. To the extent we see continued onshoring activity, this will support growth in business spending on structures over the longer-term, but at the same time energy-related investment seems unlikely to return to its former role as a support for structures spending. As we see it, the main risk to our forecast of business investment in 2023 is that spending on equipment and machinery may be weaker than we anticipate, while outlays with a longer-term focus should survive even if real GDP growth is even weaker than we anticipate.

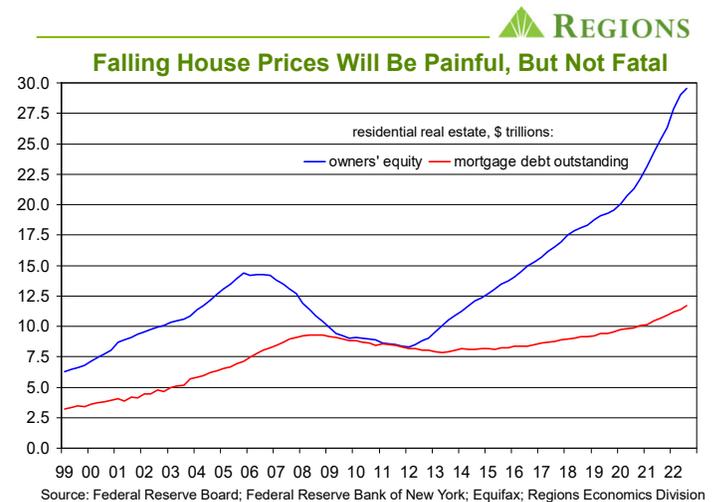
The housing market: Oh no, here we go again? Not oh no, just no. The housing market is typically the first casualty of rising interest rates, and the sharp declines in single family construction and sales have been well-chronicled. What many fail to recall, however, is that rising mortgage interest rates did not trigger the declines in home sales, as both new and existing home sales began to decline in mid-2021. Those initial declines reflected inventory constraints, with supply simply unable to keep pace with demand. The declines in sales kicked into a higher gear as mortgage rates began to rise in 2022, but it is nonetheless the case that what is now a demand-side story started as a supply-side story.

We think that matters in understanding why we think that, for the housing market, now is not then, with then being the mid-2000s collapse in the housing market, with the effect of that collapse lingering for years. Most significantly, the levels of single family construction have yet to return to what at one point would have been seen as a “normal” annual rate of around 1.25 million units. Sure, extraordinarily low mortgage rates in 2020 and 2021 led to a surge in demand for home purchases, but that worsened what was already a meaningful imbalance between supply and demand which, in turn, pushed house price appreciation into a higher gear. Notably low mortgage rates cushioned the blow to affordability, but that quickly changed as mortgage rates began rising, and the subsequent plunge in demand has led to falling house prices.

Our baseline forecast anticipates a decline in the mid-single digits nationally, with larger declines in those markets seeing the most rapid price appreciation over recent years. That would, however, be a much smaller decline than seen in the past cycle which many seem to think we’re destined to repeat. We do not believe that will be the case given what remains a deep pool of pent-up demand for home purchases. Indeed, applications for purchase mortgage loans were quick to respond to the dip in mortgage rates in late-2022, and we think that will also be the case as lower prices and falling mortgage rates ease affordability constraints as we move through 2023. That isn’t to say we expect a surge in home sales such as that seen in mid-2020, but instead a more gradual increase in sales as the year progresses.

Even should house prices fall further than we now anticipate, the effects would compare to those seen in the prior cycle. That mortgage lending standards have been much more stringent over the past several years means the credit quality of borrowers has been significantly higher, and equity positions are stronger than has been the case since the mid-1980s. To be sure, falling house prices will push equity lower, but with a much higher starting point than was the case in the last cycle and a less severe decline in house prices, there is much less danger of borrowers being pushed

into negative equity positions, with those having bought a home in the past twelve-to-eighteen months being the most vulnerable.



The biggest downside risk to our housing market outlook is a more severe deterioration in labor market conditions than our forecast anticipates, which would further sap demand for home purchases. The same would be the case should inflation catch a second wind in 2023, resulting in further increases in mortgage interest rates. Even should these downside risks materialize, we still would not expect the fallout to be as severe as what we saw in the last cycle.

FOMC: One, or two, and done? Yes, with the emphasis on “done.” We anticipate the FOMC raising the Fed funds rate by twenty-five basis points at their January 31-February 1 meeting, with another like-sized increase possible at their March meeting. With clear, and at least to us convincing, evidence of the economy slowing, the labor market cooling, and inflation decelerating, we expect the FOMC to wind down its series of rate hikes. Winding down rate hikes, however, does not by any means suggest rate cuts are soon to follow and, with inflation lingering above their 2.0 percent target through most or all of the year, we do not anticipate the FOMC will cut the funds rate in 2023. There are obviously risks both ways; higher and more persistent inflation would surely lead to further rate hikes, a more severe slowdown in the broader economy could be the catalyst for rate cuts, but neither is part of our baseline forecast.

Final Thoughts: As a general rule, it’s never wise to get too attached to any forecasts one makes, at least any economic forecasts. That there are so many variables that can change so quickly tends to give these forecasts a short shelf life, even under the best of circumstances. If the past three years haven’t hammered that lesson home, nothing ever will. As we wrapped last year’s outlook, we noted that we found ourselves wondering whether we’d settled into a new normal in which the only thing normal is that nothing is normal. In hindsight, thinking that 2022 would help answer that question was, well, hopeful, naïve, or just downright foolish, take your pick. Then again, that we’re still asking that question may in and of itself be the answer to that question. Either way, 2023 is likely to be quite challenging for the U.S. economy. About the only thing we can be certain of is that by the end of 2023 the economy is unlikely to look as we now expect it to. What we don’t know right now is why that will be the case.

ECONOMIC OUTLOOK

Q2 '22 (a)	Q3 '22 (a)	Q4 '22 (f)	Q1 '23 (f)	Q2 '23 (f)	Q3 '23 (f)	Q4 '23 (f)	Q1 '24 (f)		2020 (a)	2021 (a)	2022 (f)	2023 (f)	2024 (f)
-0.6	3.2	2.2	0.6	0.2	0.7	1.3	1.5	Real GDP ¹	-2.8	5.9	2.0	1.1	1.5
2.0	2.3	2.8	0.5	0.6	1.0	1.2	1.6	Real Personal Consumption ¹	-3.0	8.3	2.8	1.4	1.6
0.1	6.2	4.0	2.3	0.7	0.3	2.3	3.7	Real Business Fixed Investment ¹	-4.9	6.4	3.9	2.4	3.0
-2.0	10.6	2.7	-0.9	-4.3	-4.8	0.3	3.4	Equipment ¹	-10.5	10.3	4.7	0.0	1.7
8.9	6.8	6.2	5.3	4.3	4.2	4.0	4.1	Intellectual Property and Software ¹	4.8	9.7	8.8	5.4	4.2
-12.7	-3.6	1.6	3.1	4.9	3.8	3.1	3.4	Structures ¹	-10.1	-6.4	-7.3	1.3	2.9
-17.8	-27.1	-22.0	-12.6	3.5	7.5	5.1	4.2	Real Residential Fixed Investment ¹	7.2	10.7	-10.4	-10.9	5.1
-1.6	3.7	2.2	0.1	0.1	0.1	0.0	0.4	Real Government Expenditures ¹	2.6	0.6	-0.7	0.8	0.5
-1,430.5	-1,268.8	-1,273.0	-1,302.3	-1,301.3	-1,295.3	-1,303.3	-1,334.0	Real Net Exports ²	-922.6	-1,233.4	-1,365.3	-1,300.6	-1,371.6
1,086	905	835	792	808	822	845	873	Single Family Housing Starts, ths. of units ³	1,002	1,131	1,004	817	912
561	545	572	533	514	489	481	475	Multi-Family Housing Starts, ths. of units ³	393	474	553	504	473
17.3	11.4	6.6	-0.5	-5.8	-5.5	-4.7	-2.0	CoreLogic House Price Index ⁵	6.7	15.6	13.4	-4.1	0.9
13.3	13.4	14.2	14.9	14.2	14.6	14.9	15.2	Vehicle Sales, millions of units ³	14.5	14.9	13.8	14.7	15.5
3.6	3.6	3.6	3.6	3.9	4.1	4.3	4.3	Unemployment Rate, % ⁴	8.1	5.4	3.6	4.0	4.4
4.4	4.0	3.3	2.4	1.8	1.1	0.7	0.4	Non-Farm Employment ⁵	-5.8	2.8	4.1	1.5	0.4
-2.3	1.0	2.2	6.3	1.4	3.9	4.1	5.4	Real Disposable Personal Income ¹	6.2	1.9	-6.5	3.0	4.2
7.6	7.1	6.0	4.5	3.0	2.6	2.6	2.5	GDP Price Deflator ⁵	1.3	4.5	6.9	3.2	2.1
6.6	6.3	5.5	4.1	3.1	2.7	2.5	2.5	PCE Deflator ⁵	1.1	4.0	6.2	3.1	2.1
8.6	8.3	7.1	5.2	3.5	2.8	2.6	2.6	Consumer Price Index ⁵	1.2	4.7	8.0	3.5	2.3
5.0	4.9	4.7	4.0	3.4	2.9	2.6	2.4	Core PCE Deflator ⁵	1.3	3.5	5.0	3.2	2.1
6.0	6.3	5.9	5.1	4.2	3.3	2.9	2.7	Core Consumer Price Index ⁵	1.7	3.6	6.1	3.9	2.4
0.81	2.24	3.71	4.57	4.88	4.88	4.88	4.67	Fed Funds Target Rate Range Mid-Point, % ⁴	0.42	0.13	1.73	4.80	3.58
2.93	3.11	3.83	3.69	3.68	3.66	3.61	3.55	10-Year Treasury Note Yield, % ⁴	0.89	1.44	2.95	3.66	3.44
5.27	5.62	6.66	6.45	6.35	6.23	6.09	5.91	30-Year Fixed Mortgage, % ⁴	3.12	2.96	5.34	6.28	5.65
-3.8	-3.4	-3.5	-3.7	-3.6	-3.4	-3.4	-3.3	Current Account, % of GDP	-2.9	-3.6	-3.7	-3.5	-3.3

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