

# 2024 Annual Outlook

## Weathering the Storm

### Summary

- Despite the 525 bps of rate hikes that the Federal Open Market Committee (FOMC) has implemented since March 2022, the U.S. economy generally remains resilient due, in large part, to continued strength in consumer spending. Meanwhile, inflation has receded.
- We believe it would be premature to claim that the economic storm has passed, because the battle against inflation has not yet been decisively won.
- There already are some cracks that are beginning to appear in the economy, and these strains likely will intensify in the coming months as monetary restraint remains in place. Our base case is that real GDP will contract modestly starting in mid-2024.
- We look for the FOMC to cut its target range for the federal funds rate by 225 bps by early 2025, which is more than both Fed policymakers and market participants currently project.
- Even if Fed policymakers are able to pull off a “soft landing,” real GDP growth in 2024 likely will be subpar, at best, due to the elevated level of real interest rates that will be needed to wring inflation out of the economy.
- The Sun Belt and Mountain West have outperformed the Northeast and the Midwest in recent years, and these trends likely will remain in place for the foreseeable future.
- In the commercial real estate market, storm clouds hover above the office sector and the multifamily sector. Fundamentals in the retail and industrial sectors are stronger.
- We believe the global economy will face an unsettled climate in 2024, and the economic storm could be quite severe at certain times and for certain economies. In our view, the Eurozone and United Kingdom will be the hardest hit. China's economy likely will continue to face structural headwinds to growth. In contrast, the economic outlook for 2024 remains relatively sunny and clear in India.
- The U.S. dollar should generally remain well-supported versus most foreign currencies in the first half of 2024. We then look for the trend of U.S. dollar strength to eventually wane and turn to U.S. dollar weakness later in 2024 as the Fed eases monetary policy.

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## Introduction & Summary

### Economic Forecast: Cloudy with Storms on the Horizon

The COVID pandemic imparted a major shock to the global economy. The combination of supply constraints and significant amounts of monetary and fiscal stimulus sent inflation rates soaring in many economies to levels that have not been experienced in decades. The COVID shock was then compounded by the Russian invasion of Ukraine in February 2022, which led to a spike in oil prices. Consequently, the world's major central banks have tightened their policy stances aggressively in an effort to bring inflation rates back to more acceptable levels. The stance of monetary policy today is “restrictive” in most economies, and fiscal support has largely dissipated as well.

Despite the 525 bps of rate hikes that the Federal Open Market Committee (FOMC) has implemented since March 2022, the U.S. economy generally remains resilient due, in large part, to continued strength in consumer spending. Meanwhile, inflation has receded. The year-over-year change in the core PCE deflator, which Fed officials believe is the best measure of the underlying rate of consumer price inflation, printed at 3.7% in September, down from the 5.5% rate that was registered last September. Furthermore, prices rose at an annualized rate of just 2.5% between June and September, which indicates that the year-over-year rate of inflation will moderate further in coming months.

That said, we believe it would be premature to claim that the economic storm has passed, because the battle against inflation has not yet been decisively won. The FOMC will want to be confident that inflation is returning to 2% on a *sustained* basis, so it likely will maintain a restrictive policy stance through the early months of 2024. In our view, the FOMC probably is done hiking interest rates, but it likely will be some time before the Committee begins to ease policy. Therefore, the *real* fed funds rate will creep higher in the coming months as the FOMC maintains its target range for the federal funds rate at its current level of 5.25%-5.50%, while inflation continues to slowly fall toward 2%. This rise in the real fed funds rate will lead to a passive tightening of monetary policy that will exert increasing headwinds on the economy, thereby clouding the economic outlook.

There are already some cracks that are beginning to appear in the economy. The rise in mortgage rates has weighed on the housing market as the number of housing starts looks likely to be down roughly 10% in 2023 compared to last year. Household delinquencies on auto loans and credit cards are moving higher, and growth in business fixed investment spending has downshifted due to rising interest rates. These strains likely will intensify in coming months as monetary restraint remains in place. Our base case is that real GDP will contract modestly starting in mid-2024. As economic resiliency gives way to weakness, we look for the FOMC to cut its target range for the federal funds rate by 225 bps by early 2025, which is more than both Fed policymakers and market participants currently project.

We acknowledge that the FOMC likely will not ease as much as we forecast if the economy manages to avoid a contraction. But even if Fed policymakers are able to pull off a “soft landing,” real GDP growth in 2024 likely will be subpar, at best, due to the elevated level of real interest rates that will be needed

***The FOMC will want to be confident that inflation is returning to 2% on a sustained basis.***

to wring inflation out of the economy. In our view, the U.S. economic outlook over the next year or so is far from sunny. A full-blown economic storm may not develop, but storm clouds likely will dominate the horizon for the foreseeable future.

### The Microclimates of Regional Economies & Real Estate

Not only did the pandemic impart a significant shock to the overall U.S. economy, but it also had differential effects on the country's regional economies. The sharp upturn in housing costs, tight labor markets and the rise of remote work accelerated population shifts away from coastal cities and toward more affordable areas in the Sun Belt and Mountain West. Conversely, the Northeast and Midwest have each shed population in the post-pandemic years. We suspect that these population trends will likely stay in place, at least over the next few years. Although every region of the country likely will experience slower economic growth in 2024, if, as we forecast, a modest contraction in U.S. real GDP occurs, the Sun Belt and Mountain West should outperform regions such as the Northeast and the Midwest.

Commercial real estate, especially the office sector, has experienced stormy conditions this year, and the outlook remains unsettled in 2024 due, at least in part, to the elevated interest rate environment. The rise of remote work has led many firms to recalibrate their office space needs, which likely will keep pressure on the office market for some time. That noted, areas with stronger population growth appear to be at lower risk for severe corrections, and recent population shifts toward smaller metros are fortifying office markets in suburban areas. Stress also appears to be mounting in the multifamily market, because robust construction in recent years has caused supply to outstrip demand. Rising vacancies alongside the increase in cap rates have led multifamily properties to notch the largest price drop of any asset class over the past year.

In contrast, the outlook for industrial and retail properties is partly sunny. There are a few tailwinds that likely will support operating fundamentals in the industrial sector, including government incentives for electric vehicle and semiconductor manufacturing and buoyant demand for warehouses springing from e-commerce. The vacancy rate among industrial properties has crept up recently but from a low level. The vacancy rate in the retail sector is quite low as well, driven by resilient consumer demand and minimal new supply.

### Storm Clouds Threaten Many Foreign Economies as Well

The United States is not the only major economy to be facing stormy economic weather in 2024. Foreign central banks have hiked their respective policy rates aggressively, and the stance of monetary policy is restrictive in most foreign economies. Although we believe most foreign central banks have already reached the end of their respective tightening cycles, it likely will be some time before they begin to ease. Therefore, the stance of monetary policy in many foreign economies will remain restrictive, which will continue to buffet those economies with strong headwinds.

We anticipate these economic storm clouds will have a differing impact across foreign economies, with some experiencing a more pronounced growth slowdown than others. Among major foreign economies, we expect the United Kingdom and the Eurozone to be some of the hardest hit with the former experiencing a modest contraction in economic activity. Although we anticipate the Eurozone will narrowly avoid recession, the sluggish growth rates that we project for 2023 and 2024 are far from robust. The Canadian economy started 2023 with a reasonable degree of momentum, but it slowed more recently. Extensive trade linkages to a slowing U.S. economy should act as a headwind on the Canadian economy in the coming quarters.

The burst of activity that China experienced after the post-COVID reopening of the economy in early 2023 proved to be short-lived. We look for real GDP in China to grow less than 5% per annum in both 2024 and 2025 amid structural headwinds, including real estate sector problems, demographic challenges, sluggish consumption trends and geopolitical tensions. India should outperform most other developing economies over the next two years, but the Indian economy is not large enough to have a meaningful effect on global GDP growth. In that regard, we forecast global GDP will grow only 2.4% in 2024, about a full percentage point below its per annum average over the past 40 years.

The U.S. dollar has generally remained resilient vis-à-vis most foreign currencies in 2023, and we look for elevated U.S. interest rates and the uncertain backdrop to support the greenback in the first half of 2024. But we forecast that the trend of U.S. dollar strength will eventually wane and turn to

***The outlook for commercial real estate remains unsettled due in part to the elevated interest rate environment.***

***We believe most foreign banks have reached the end of their respective tightening cycles.***

depreciation later in 2024 as the Fed eases monetary policy by more than currently expected by financial market participants.

## U.S. Economic Outlook

### The U.S. Economy Has Remained Resilient Thus Far

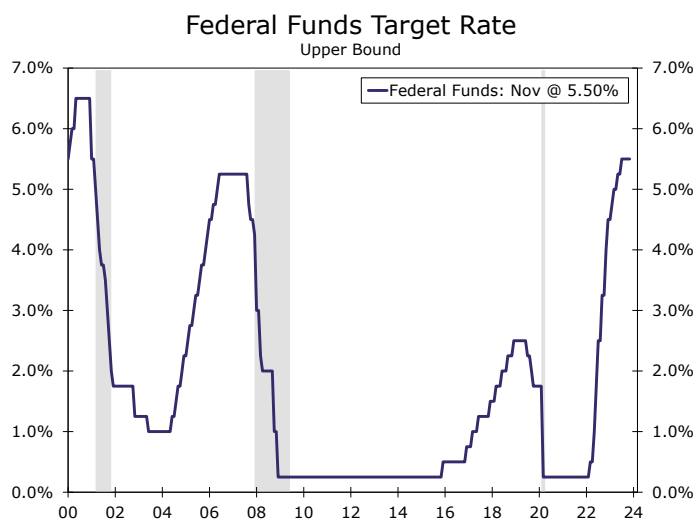
U.S. economic activity has remained strong this year as the economy has withstood the initial shock associated with the rapid pace of monetary tightening better than most analysts initially anticipated. The resilience of the economy to date is due, at least in part, to the traditional yet unpredictable lags associated with monetary policy. More uniquely to this cycle, ample liquidity on both household and business balance sheets has also helped to undergird the economy. The outcome has been a degree of economic resilience that has allowed the Federal Open Market Committee (FOMC) to facilitate a tempering of inflation without the usual fallout in the broader economy, at least so far. The question that remains, however, is the degree to which the economy can continue to weather higher rates going forward.

As a quick recap, Congress has mandated that the Federal Reserve facilitate conditions to promote “maximum employment” and “stable prices” in the U.S. economy. After inflation jumped to a pace not seen in 40 years coming out of the pandemic, the FOMC tightened monetary policy forcibly to guide inflation back to its 2% target. The Committee began to hike its target range for the federal funds rate early last year, lifting it by 525 bps in just over a year and a half, marking the fastest pace of tightening since the early 1980s (Figure 1). The FOMC has also allowed securities to gradually roll off the Fed’s balance sheet throughout most of this period, a process often referred to as “quantitative tightening” (QT). Due to the inherent lags associated with raising interest rates, the economy likely has not yet experienced the full effects of the FOMC’s tightening to date. That noted, inflation has receded over the past year or so.

***Though inflation has receded over the past year or so, the economy likely has not yet experienced the full effects of the FOMC’s tightening to date.***

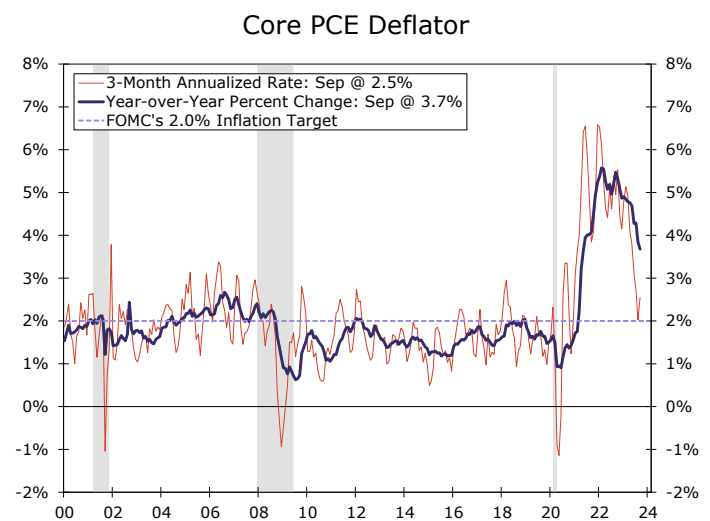
The core PCE deflator, which Federal Reserve policymakers believe is the best measure of the underlying rate of consumer price inflation, rose 3.7% on a year-over-year basis in September. Although that outturn is still nearly double the Fed’s 2% target rate, it marks a considerable improvement from the peak inflation rates of late last year. Moreover, the annualized rate of change in the core PCE deflator of just 2.5% between June and September suggests the year-over-year rate of inflation is on track to recede further in the coming months (Figure 2). In addition, even as the labor market remains remarkably tight, there are some initial signs of wage moderation. Employers continue to add jobs at a strong clip, yet the trend increase in the labor force in recent months is helping to bring the jobs market gradually back into balance and temper upward pressure on wages—an ideal situation for the Federal Reserve.

Figure 1



Source: Federal Reserve Board and Wells Fargo Economics

Figure 2



Source: U.S. Department of Commerce and Wells Fargo Economics

Despite the progress the FOMC has made in returning inflation to target, price growth is not yet all the way back to where it needs to be. Still, with inflation coming down and economic activity holding

up, a soft landing appears more achievable than it did a year ago. Yet, we believe it would be premature to claim that the economic storm has passed. The battle against inflation has not yet been decisively won, and the measures to contain it can lie in wait for a long time before they bite. With further work to be done on the inflation front and little sign of imminent weakness in the labor market, we anticipate the FOMC will maintain a restrictive stance on policy through the early months of 2024. The FOMC is now in the fine-tuning stage of its monetary tightening cycle; we believe the Committee is done hiking interest rates, though it will likely be some time before the FOMC begins to outright ease policy. Specifically, we expect the FOMC to maintain the current range of 5.25%-5.50% on the federal funds rate through the first quarter of next year as it assesses how past tightening is affecting economic activity and inflation.

**We believe the Committee is done hiking rates, though it will likely be some time before it begins to outright ease policy.**

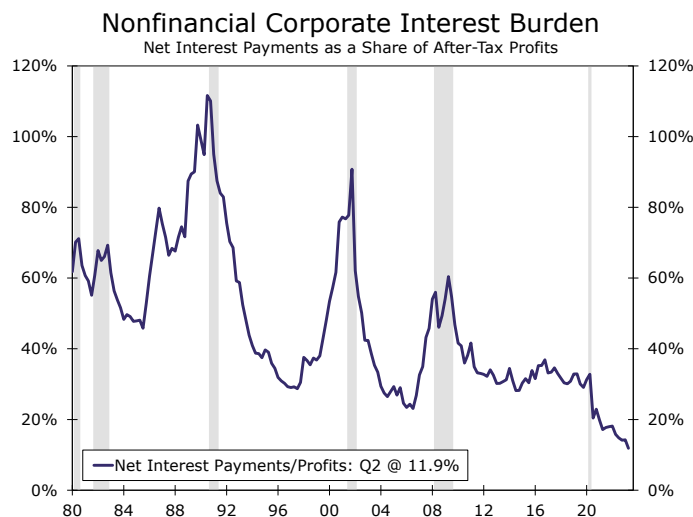
### Clouds Beginning to Gather Across Economic Sectors

While the broad economy has withstood higher rates, some cracks are beginning to emerge. This weakness has been most evident in the residential investment sector, where elevated mortgage rates combined with low levels of existing home inventory for sale have crimped affordability and weighed on sales. We discuss the outlook for the housing market in more detail on [Page 12](#), but in short, we expect activity to remain under pressure in 2024 as rates remain elevated.

Businesses have also pared back new capital expenditures amid increased economic uncertainty and a generally less favorable spending environment. Higher borrowing costs have made it less affordable for businesses to invest, which has deterred new activity. A pullback in commercial and industrial loan growth, which tends to be mostly floating-rate debt, is one relevant example. But firms not requiring access to new capital have otherwise been somewhat insulated from higher rates so far. The average interest rate on all outstanding corporate bond debt remains quite low, as most has yet to be refinanced at higher rates. Another way to think about this is that the net interest expense of non-financial corporate businesses (i.e., the difference between the interest that firms pay on their liabilities and the interest they receive on their assets) has declined even as the FOMC has ratcheted rates higher and remains manageable as a share of profits ([Figure 3](#)). For many businesses, higher rates have translated more quickly into higher receipts on their assets than into higher required payments on their liabilities. As debt is rolled over next year at higher rates, we anticipate that many businesses will experience higher interest expense, which likely will further weigh on their ability to make new capital investments and expand payrolls.

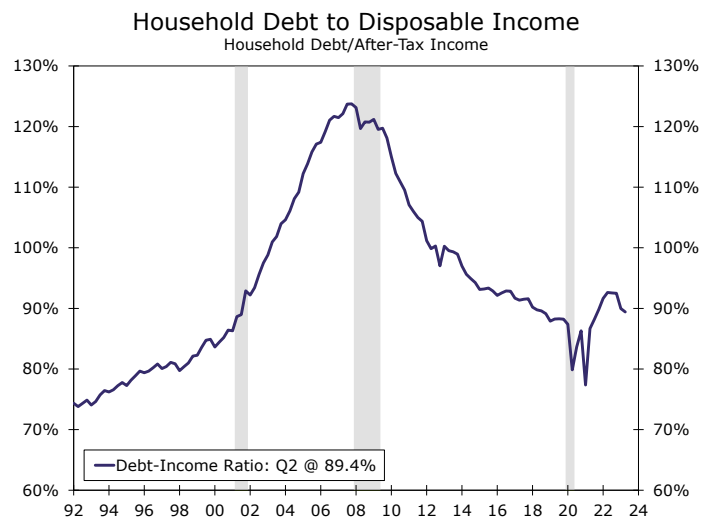
**Businesses have pared back new capital expenditures amid increased economic uncertainty and a less favorable spending environment.**

Figure 3



Source: U.S. Department of Commerce and Wells Fargo Economics

Figure 4



Source: Federal Reserve Board and Wells Fargo Economics

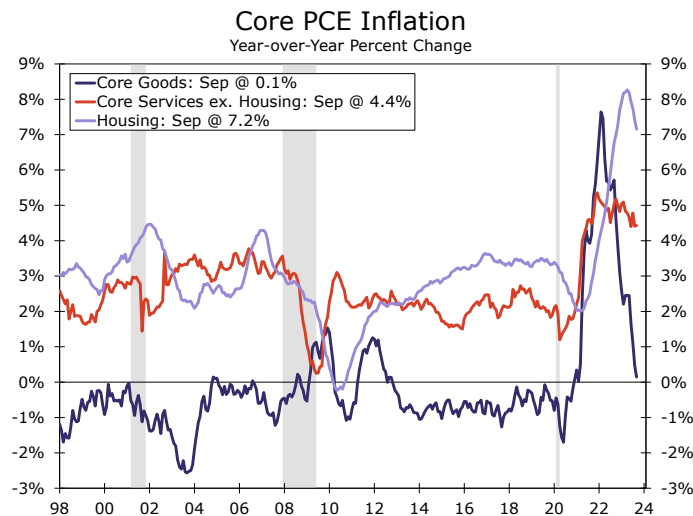
Consumer spending has been one of the most resilient sectors of aggregate spending this year, but the drivers of household purchasing power are shifting. The ability of households to easily rely on their balance sheets to spend in 2024 is fading. Excess liquidity is drying up and is increasingly concentrated among higher-income cohorts, who have a lower propensity to spend. Access to credit is also weakening as banks have become more cautious in making new loan commitments to consumers, which tends to portend a pullback in overall revolving credit. Beyond accessibility, elevated interest

rates make it less affordable for consumers to rely on credit to maintain strong growth in spending. Delinquencies have started to tick up for credit card and auto loans, reaching pre-pandemic levels. That said, overall credit burdens appear manageable in the context of rising incomes at this point, and the household sector does not yet look overleveraged (Figure 4). In short, the financial position of the household sector generally remains in decent shape today, but it is deteriorating at the margin.

Solid household spending in 2023 has helped offset a retrenchment in residential housing and deceleration in capital spending, but that looks less likely to be the case in 2024. Consumer spending is again increasingly dependent on income growth as pandemic-era support fades. Recent strength in hiring remains supportive of labor costs and is a tailwind to spending in the near-term. But the labor market looks set to cool further next year as job openings continue to retreat. Demand for temporary help has also fallen, and the average work week is back to pre-pandemic levels, signaling slower income growth.

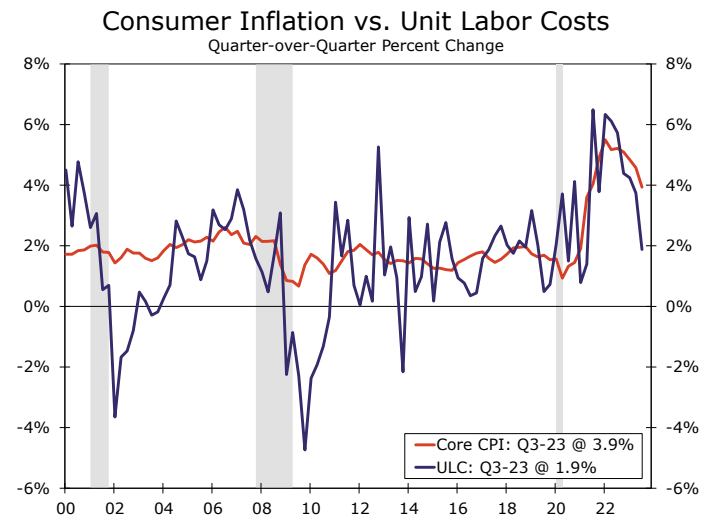
Additional progress in reducing inflation is also increasingly dependent on the trajectory of the labor market. While we anticipate inflation will recede further, additional progress likely will prove slower-going than it has over the past year. Disinflation from a normalization in supply chain constraints has nearly run its course, and it is only a matter of time before shelter (housing) disinflation more materially takes hold and follows the moderation in home and rental prices. Core services inflation excluding shelter, or what the Fed has referred to as “super core,” is the wild card, as it has yet to convincingly slow and is the key to getting inflation back to target (Figure 5). Inflation in this category can be sticky, as it depends on service-sector activity as well as labor costs. The rise in labor costs is still running too high to be consistent with 2% consumer price inflation, but further labor market moderation should lead to a gradual downdraft in super core inflation as well (Figure 6).

Figure 5



Source: U.S. Department of Commerce and Wells Fargo Economics

Figure 6



Source: U.S. Department of Labor and Wells Fargo Economics

### 2024 Growth Prospects Look Dim

Prospects for economic growth are shifting as the economy progresses into 2024, and conditions are tracking toward a below-trend pace of activity amid growing macro vulnerabilities and increasingly tight financial conditions. Although we believe the FOMC's tightening cycle has come to an end, the slow return to 2% inflation suggests the Committee is a long way from easing policy. But even if the FOMC merely maintains the federal funds rate at its current level, policy will tighten on a passive basis via an upward creep in the *real* federal funds rate as inflation slows. That is, the real rate, which we define as the nominal fed funds rate less the year-over-year rate of core PCE inflation, will move higher as inflation continues to recede.

If, as we suspect, the FOMC holds rates at current levels and inflation continues to moderate, then the real fed funds rate will be roughly 2% by the end of this year and approaching 3% by Q2-2024 (Figure 7). The last time the real fed funds rate exceeded 2% was in 2006-2007. While the potential growth rate of the economy is not readily observed, it likely was stronger in those years than it is today. Many

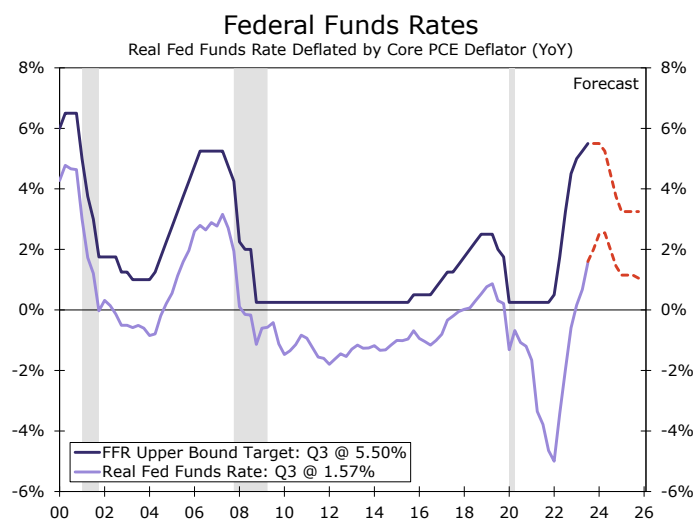


observers estimate it to be around 1.8% today, compared to over 2% a decade or two ago. In other words, the economy was better able to withstand high real interest rates two decades ago than it appears it can in 2024.

Higher real interest rates will exert headwinds on household expenditures and business fixed investment spending, thereby leading to weaker demand for labor. Consequently, a self-reinforcing cycle of slower spending growth leading to slower growth in income that begets even slower growth in spending, etc., should set in. We forecast real GDP growth will slow materially heading into 2024 and look for a modest contraction in economic activity to take hold by the second quarter of next year. Economic weakness, which will help push inflation back toward the Fed's target of 2% on a sustained basis, should then induce the FOMC to begin easing monetary policy. Our base case is that the Committee will cut its target range for the federal funds rate by 225 bps by early 2025, which is more than both Fed policymakers and market participants currently project. The trajectory of QT largely depends on the path of the U.S. economy as well, and a recession next year, consistent with our baseline expectation, would likely lead the Fed to cease QT in mid-2024.

**Higher real interest rates will exert headwinds on household expenditures and business fixed investment, thereby leading to weaker labor demand.**

Figure 7



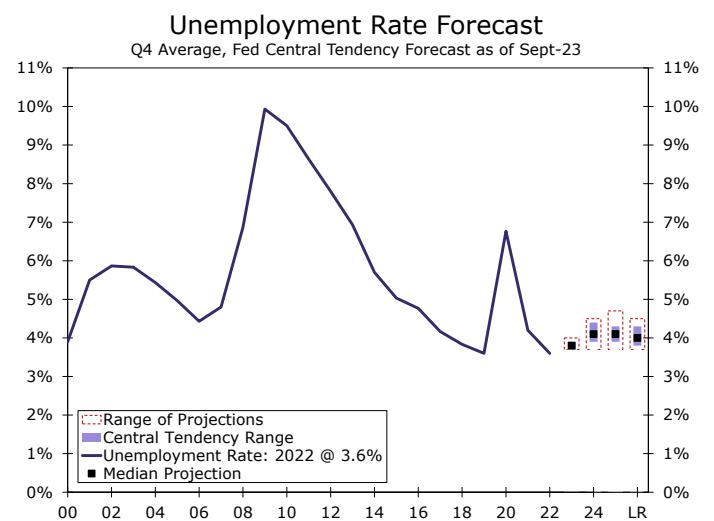
Source: U.S. Department of Commerce, Federal Reserve Board and Wells Fargo Economics

The probability of a “soft landing,” where growth slows but outright contraction is avoided, is not insignificant. Businesses may hold onto their workers a bit longer going into this slowdown, and/or continued spending among wealthier households could offset increasing vulnerabilities toward the lower-end of the income spectrum. If the Federal Reserve does indeed pull off a soft landing, then our forecast for the federal funds rate at the end of next year will be too low and the end-date for QT too early. But even in the event the economy avoids recession, growth in 2024 likely will be subpar, at best, due to the elevated level of real interest rates. Labor market prospects are dimming and consumer spending momentum is fading. We ultimately look for lower rates next year, unless inflation gets sticky. Otherwise, monetary policy will passively grow tighter and tighter.

**Rates to Remain Higher for Longer**

Even as the FOMC eases policy next year, we anticipate rates will settle at a higher level than what prevailed ahead of the pandemic. The Fed's latest Summary of Economic Projections, which was released in September, puts the FOMC's estimate for the long-run equilibrium unemployment rate in a central tendency range of 3.8% to 4.3% (Figure 8). Although the unemployment rate is off its low of 3.4%, it probably is still below where it needs to be to limit its inflationary impulse. In addition to persistent labor shortages stemming from an aging U.S. population and accelerated exodus of retired workers, factors that will likely keep upward pressure on prices going forward include the rise of de-globalization and less revolutionary health care policy ahead. Furthermore, the economy is not as depressed as it was in the aftermath of the financial crisis. Consequently, inflation ran consistently below the Fed's target of 2% during those years. All of these factors will likely cause the FOMC to maintain a tighter policy stance to keep inflation reined in at 2%. In addition, the federal government's

Figure 8



Source: U.S. Department of Labor, Federal Reserve Board and Wells Fargo Economics

**While the probability of a soft landing is not insignificant, growth in 2024 will likely be subpar due to the elevated level of real interest rates.**

large budget deficit may also put upward pressure on longer-term Treasury yields. All told, even as rates start to normalize late next year, borrowing costs are set to remain generally elevated, at least by the standards of the past decade.

## U.S. Regional and Real Estate Outlook

### Demography Is Destiny

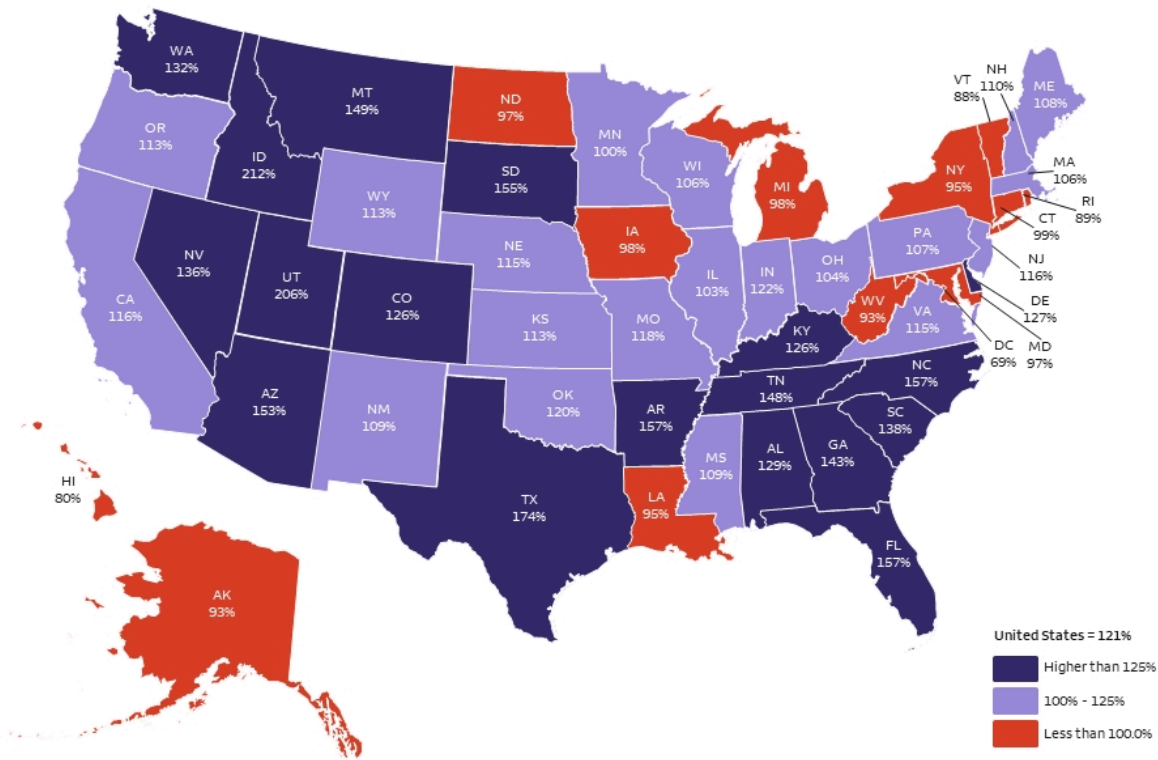
As the popular saying implies, demographic health is often a bellwether of economic strength. Sustainable population growth all but ensures a growing labor force and consumer base, two key ingredients for economic vitality. Alternatively, a shrinking population often ushers in economic stagnation and labor force shortages. The past few years created a perfect storm that sped up pre-existing migration patterns, and these shifts went on to dictate how different regions of the United States fared against the economic shock of the pandemic. Population growth patterns will also underpin how different parts of the country navigate potential economic turbulence next year.

***The sharp upturn in housing costs, tight labor markets and the rise of remote work accelerated population shifts away from coastal cities and toward more affordable areas in the Sun Belt and Mountain West.***

Enough time has passed that payrolls in every major region of the country have surpassed their pre-COVID levels, but this is not true for every individual state. There is a direct correlation between state population growth and labor market health. The sharp upturn in housing costs, tight labor markets and the rise of remote work accelerated population shifts away from coastal cities and toward more affordable areas in the Sun Belt and Mountain West. As per the [map](#) below, states in these regions have registered the largest employment jumps to date. The Northeast and Midwest, alternatively, each shed population in the post-pandemic years. Consequently, these two regions are home to the plurality of states still struggling to recover their pre-pandemic payroll losses. Employee headcounts in New York State lag by the largest number, attributable to the long-standing population exodus from the New York City metro area that has only accelerated after the pandemic.

Figure 9

Percent of March and April 2020 Job Losses Recovered – September 2023



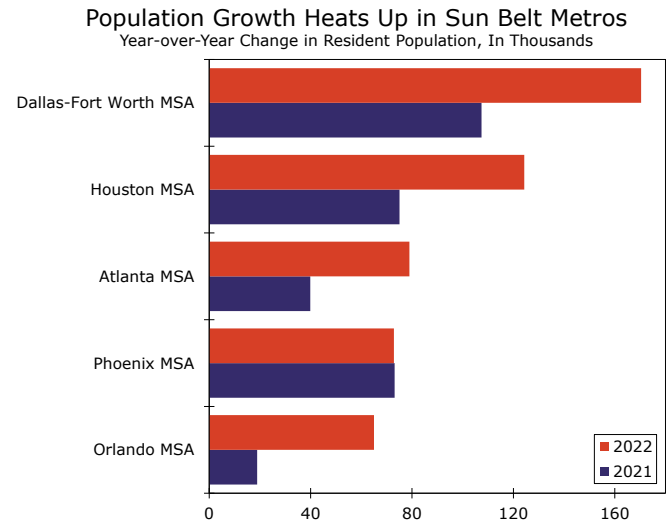
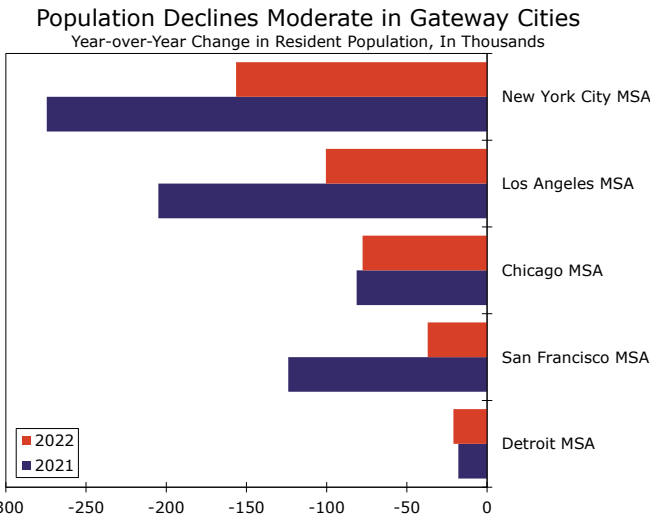
Source: U.S. Department of Labor and Wells Fargo Economics



Current population growth patterns appear set to stay in place. Yet the magnitude of recent migration shifts will likely start to revert to their pre-pandemic trend. Population loss in large metro areas such as New York, Los Angeles and San Francisco proceeded at a slower clip in 2022 than the year prior (Figure 10). This partial reversal reflects some normalization in migration patterns as employers call their workers back to the office. Alternatively, the affordability migration strikes us as a longer-term shift that will continue to define domestic migration in the years ahead. Population growth strengthened last year in Sun Belt metros such as Dallas, Houston and Atlanta, as lower home prices and more favorable weather continue to drive residents South (Figure 11). We expect that ongoing population growth will equip Sun Belt economies to better withstand macroeconomic challenges on the horizon.

Figure 10

Figure 11



Source: U.S. Census Bureau and Wells Fargo Economics

Source: U.S. Census Bureau and Wells Fargo Economics

### The Geography of Industry

Industry makeup can also define regional resilience to national economic turmoil. We expect rising real interest rates will be the culprit behind the impending national economic slowdown, which would put a heavier strain on more interest rate-sensitive sectors. Already, tech hubs along the West Coast have come under disproportionate pressure from the Fed's rapid pace of monetary tightening. This pressure has stressed home prices in Western markets and spurred outright contractions in technology payrolls in California and Washington, weighing on overall job growth in those states.

In contrast, a flood of public and private investment outfitting electric vehicle and semiconductor production facilities has boosted some states' growth prospects. Despite increased pressure on the manufacturing sector, states such as South Carolina, Georgia and Texas have registered marked increases in manufacturing investment as firms look to the Sun Belt to expand domestic production capacity. Other investment has been concentrated in the Midwest. Of note, Michigan, Indiana and Ohio have been targeted for electric vehicle battery production, outlining a new region that has been termed the "Battery Belt."

***A flood of public and private investment outfitting electric vehicle and semiconductor production facilities has boosted some states' growth prospects.***

The geography of industry may also impact how different regions respond to the uptake of artificial intelligence (AI). Industry shifts have long affected the United States, delivering unequal labor market shocks in exchange for wider-spread productivity booms. For example, China's trade liberalization in the early 2000s sparked a broad decline in U.S. manufacturing employment, disproportionately harming Rust Belt states. Yet the volume of U.S. manufacturing output doubled during that time, indicating strong productivity growth in the manufacturing sector.

In the case of AI, the states with the most risk exposure are those with a greater proportion of white-collar occupations. Prior research has identified these as occupations in education & health services and traditional office-using workers. The Northeast dominates the former, with over 20% of workers in New York, Massachusetts and Rhode Island in education & healthcare. Meanwhile, business and legal occupations more inclined to office work make up more than a quarter of overall employment in Virginia, Massachusetts, Colorado, Florida and Delaware. While workers in these states may be at

greater risk for job displacements, the productivity-driven boost to real incomes is harder to quantify and would likely benefit workers across a wider stretch of the country.

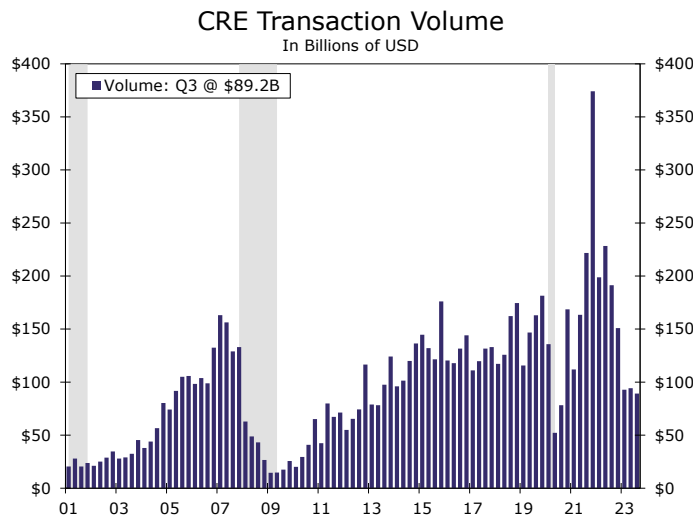
### Storm Clouds Hover Above Segments of the Commercial Real Estate Market

Ongoing weakness in commercial real estate (CRE) stands apart from the broader economic resilience displayed this year. A sharp rise in interest rates jolted CRE. As remote work simultaneously slashed demand for office space, the leg up in financing costs caused sales to tumble and valuations to slide. Heightened risk in the sector also prompted a large swath of banks to tighten credit access for CRE developers. Despite these headwinds, sturdy economic growth has generally prevented a drastic deterioration in CRE operating fundamentals to date. Delinquency rates are starting to inch up amid a drop in property valuations, but they have remained generally steady for non-office properties. Distressed sales have also started to creep up, with \$36 billion of assets entering distressed situations in the first three quarters of 2023. Outside the pandemic, this represents the largest dollar value of assets in distress since the deep recession of 2007-2009. For context, however, sales out of distressed situations only amounted to 1.7% of total sales in Q3-2023, well below the 20% peak reached in Q4-2010.

**Sturdy economic growth has generally prevented a drastic deterioration in CRE operating fundamentals to date.**

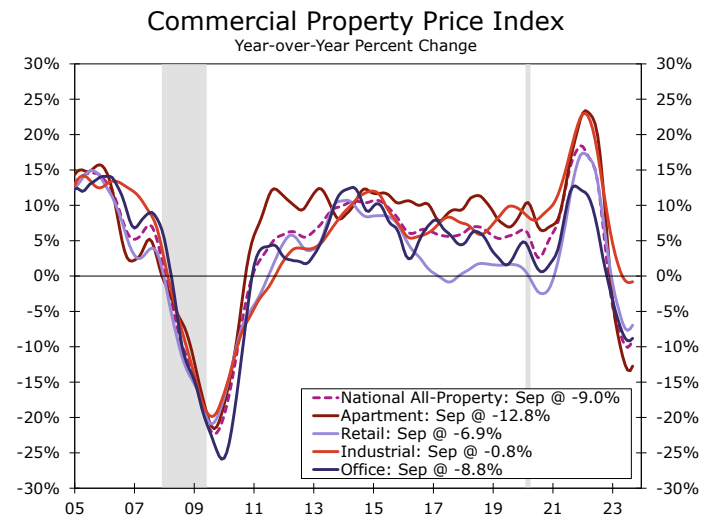
Following a trend decline lasting more than a decade, cap rates have now started to move higher alongside the broader increase in financing costs. Cap rates on average rose nearly 60 bps between Q3-2022 and Q3-2023 for the four core property types. Recent movements in the yield on the benchmark 10-year Treasury note suggest that cap rates have more room to climb. Consequently, property prices have come under pressure (Figure 13). A sharp pullback in transactions has inhibited full price discovery, but the most recent data suggest that prices on average have moved down by roughly 10% from their peak in July 2022. Prices likely have further room to fall as cap rates trend higher. That said, prices remain well above their pre-pandemic levels for most CRE classes.

Figure 12



Source: MSCI Real Capital Analytics and Wells Fargo Economics

Figure 13



Source: MSCI Real Capital Analytics and Wells Fargo Economics

It is important to note that CRE encompasses a diverse array of property types that are under varying levels of stress. Within all CRE sectors, demand has remained more resilient for buildings with greater amenities and more state-of-the-art features than for outdated properties. As we discuss below, the office market has taken the brunt of the blow due to structural, post-pandemic shifts in where we live and how we work. The multifamily sector has also weakened significantly as a barrage of new construction pushes up vacancy rates. Alternatively, strong consumer demand and the shift toward domestic manufacturing has shored up fundamentals in retail and industrial properties. Regional dynamics are also at play. Strong population and industry growth in Sun Belt markets have offset broader macroeconomic risk, keeping demand afloat despite the rise in financing costs. In contrast, West Coast markets such as San Francisco, with ongoing population loss and workforces highly engaged in remote work, are under disproportionate strain.

### Retail Properties Fortified by Consumer Resilience

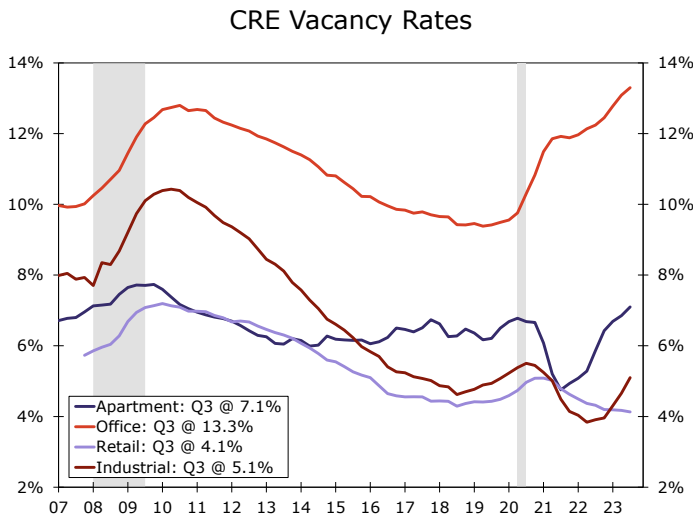
The retail market maintains solid fundamentals in the midst of a tough macroeconomic environment. Resilient consumer demand is a key tailwind. Healthy consumer balance sheets have kept the pace of goods spending above pre-pandemic norms even as consumer demand preferences shift back toward services. Retailers absorbed over 12 million square feet on net in each of the second and third quarters of 2023, reflecting solid demand even as absorption downshifts from the hot pace over the past two years. Supply has also improved on balance this year, with the bulk of new space delivered in Sun Belt markets such as Houston, Austin and Phoenix, as these metros continue to attract droves of new residents. Yet availability remains tight, which has kept rent growth firmly in positive territory. At 4.1% in Q3-2023, the retail market boasts the lowest vacancy rate since at least 2007 (Figure 14). The scarcity of available space will likely keep upward pressure on rents even as consumer spending moderates over the coming quarters.

### Industrial Market Normalizing

The industrial market appears to be normalizing after a strong post-pandemic run. Supply of new industrial space has outpaced demand for five consecutive quarters, pushing the national average vacancy rate to 5.1% in Q3-2023. That said, vacancies remain low in historical context, property prices have largely held up and rent growth continues to advance at a strong pace. There are numerous tailwinds that should support industrial operating fundamentals over the next year. First, government incentives sparked a surge in new industrial construction to expand domestic capacity for electric vehicle and semiconductor manufacturing, buoying the pipeline of new deliveries. Even as the U.S. economy enters a cyclical slowdown, these incentives are likely to bolster U.S. manufacturing capacity for years to come. Second, the rise of e-commerce remains a longer-term tailwind for warehousing. We are not expecting a sharp dip in consumer spending, which should support demand for warehouse space even as firms move back toward a just-in-time inventory model. Finally, new industrial construction seems to be coming off the boil as demand normalizes and development costs remain elevated. The downshift in construction should prevent a rapid upturn in vacancies.

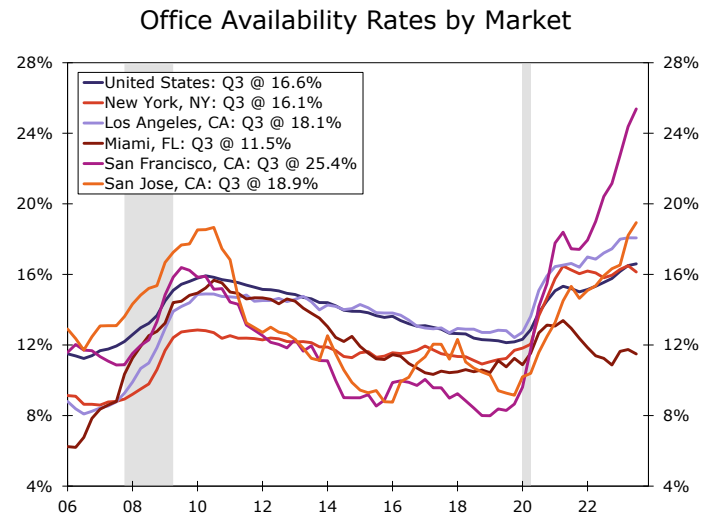
**The industrial market appears to be normalizing after a strong post-pandemic run.**

Figure 14



Source: CoStar Inc. and Wells Fargo Economics

Figure 15



Source: CoStar Inc. and Wells Fargo Economics

### Office Properties Remain Under Pressure

The rise of remote work set off a structural demand decline that triggered a widespread weakening in office market fundamentals. Major cities are under the most pressure, causing office valuations in core downtown areas to retreat below their pre-pandemic level. Kastle Systems reports that average office occupancy across its 10 largest cities is only 50% of what it was in early 2020. Occupancy rates in San Francisco and San Jose are hovering closer to 40% by the same measure. As headcounts in Silicon Valley have taken the deepest dive, office availability rates have posted a much sharper rise in the Bay Area than in other major cities (Figure 15). Larger markets like these with the greatest office exposure may be in store for a more pronounced economic contraction should the nation enter a slowdown.

**Firms now appear to be recalibrating their need for office space, which is apt to keep pressure on the office market for some time.**

Firms now appear to be recalibrating their need for office space, which is apt to keep pressure on the office market for some time. Leasing activity over the past year has run 15% to 20% below pre-pandemic norms, while the amount of space leased on average dropped a similar amount. That said, areas with stronger population growth likely are at lower risk for such severe corrections. Recent population shifts toward smaller metros appear to be fortifying office markets in suburban areas, where property prices remain above their pre-pandemic levels despite the recent downdraft in valuations.

### Mounting Supply Stresses Multifamily

Stress appears to be mounting in the multifamily market. Nearly one million apartment units were under construction in September, near a 54-year high. The robust construction pipeline is increasingly turning into newly delivered supply and putting upward pressure on vacancies. Roughly 150,000 apartment units came to market in each of the second and third quarters of this year, the largest quarterly deliveries on record going back to 2001. This elevated pace of new construction has outstripped demand for two years straight, cooling rents and lifting multifamily vacancy rates 2.3 percentage points from their cycle low in 2021. This is the most substantial surge in vacancy rates outside the office market. Rising vacancies alongside rising cap rates have led multifamily properties to notch the largest price drop of any asset class over the past year.

***Rising vacancies alongside rising cap rates have led multifamily properties to notch the largest price drop of any asset class over the past year.***

While pricing is still clouded by the low level of transactions occurring, lower valuations and a potentially higher interest rate regime could present a challenging backdrop in the years ahead. According to the Mortgage Bankers Association, roughly \$255 billion and \$243 billion of multifamily debt is expected to mature in 2024 and 2025, respectively, up from \$185 billion in 2023. When outstanding debt matures, property owners will be forced to either pay off their loans or refinance at a potentially higher rate. That said, sturdy demand will likely be supportive of multifamily fundamentals through this period of enhanced stress. Demographic trends are producing a growing pool of prime-age renters to shore up apartment demand, while single-family affordability remains out of reach. Builders are also zeroing in on Sun Belt markets such as Austin, Nashville and Charlotte, which have all registered above-average employment and income growth over the past few years, to deliver the bulk of new apartment supply. Finally, builders are pulling back on new development in response to rising vacancies and stricter lending conditions. A downshift in construction next year should help the multifamily market find better balance.

### High Mortgage Rates Pour Cold Water on the Housing Market Recovery

Until recently, the housing market appeared to be on a path toward recovery. Mortgage rates hovered under 6.5% on average for the first five months of the year, prompting a stabilization in demand largely driven by first-time homebuyers. At the same time, current homeowners had little incentive to list their homes for sale, while mortgage rates remained elevated so far above recent norms. Lack of resale supply in turn lifted existing home prices and pushed prospective buyers toward new construction, especially as builders used mortgage rate buy-downs and price cuts to incentivize sales. More favorable conditions in the new home market spurred an increase in new home sales this year alongside a trend improvement in single-family permits. Single-family housing starts picked up as a result, most notably in the South and West where population growth is strongest.

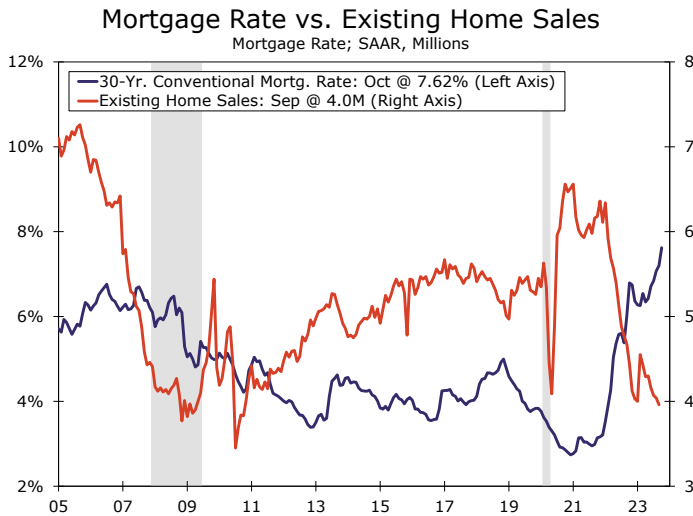
***We look for the pace of single-family building to slow as housing demand remains under pressure.***

Many of the dynamics outlined above are still in play. Builders are still finding success using incentives to sell homes, bringing the pace of new home sales in September to its highest level since February 2022. Single-family construction also remains largely resilient, suggesting that builders are still encouraged by lean resale inventory and their ability to attract buyers with low prices. That said, builder confidence has waned in recent months as the bounce in mortgage rates thins buyer traffic. Per Freddie Mac, the average 30-year fixed mortgage rate has spent 12 consecutive weeks above 7.0%, averaging 7.76% the week of November 2. Mortgage rates are at their highest level since 2000 and add a new layer of financial and psychological strain for buyers. The environment remains much weaker for existing home sales, which as of this writing are sitting at their lowest level since 2010. With near-term affordability relief out of sight, the persistent downward trend in mortgage purchase applications suggests that resales likely have further to fall.

We look for the pace of single-family building to slow as housing demand remains under pressure. Weaker single-family construction alongside outright declines in multifamily building will likely tamp down on residential investment. That said, we forecast mortgage rates will trend lower next year, especially if the Federal Reserve cuts its policy rate around mid-2024 as we currently expect. Although we do not envision a return to sub-5% mortgage rates during our forecast horizon, these

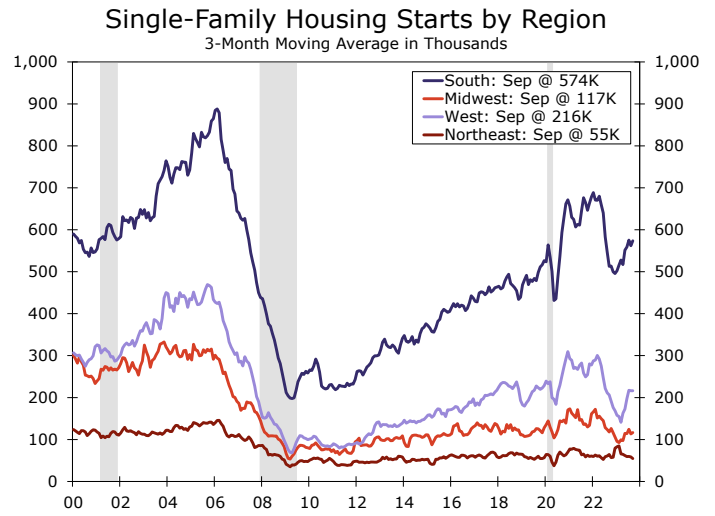
incremental improvements would likely reinvigorate homebuyer demand and produce a better outcome for residential investment in 2024 than in 2023.

Figure 16



Source: NAR, Freddie Mac and Wells Fargo Economics

Figure 17



Source: U.S. Department of Commerce and Wells Fargo Economics

## Global Economic Outlook & FX Forecast

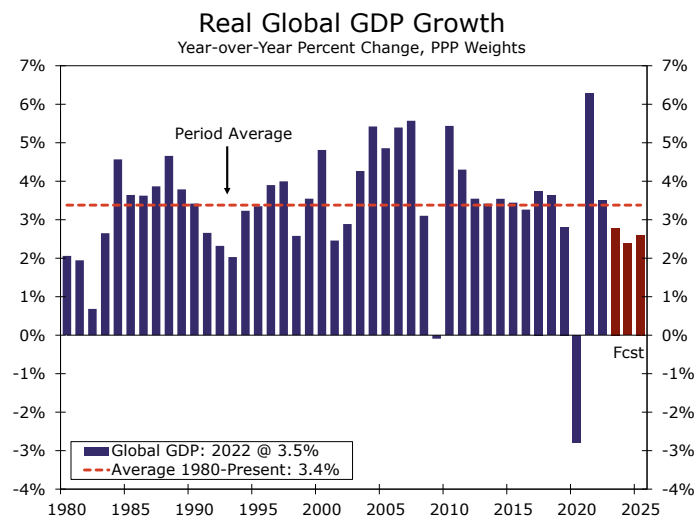
### The Global Economic Climate Is Changing

From an international perspective, we believe the global economy will face an unsettled climate in 2024 and, indeed, the economic storm could be quite severe at certain times and for certain economies. To be sure, the global growth outlook has already been clouded for a while. After global growth of 3.5% in 2022, we estimate that the global economy will grow 2.8% in 2023, and we forecast further deceleration to 2.4% in 2024 (Figure 18). If this forecast is accurate, then the global economy will narrowly avoid recession, one definition of which is global GDP growth of less than 2%.

In our view, the most important factor behind the ongoing slowdown in the pace of global expansion will be the continued impact from the aggressive monetary tightening by most of the world's central banks over the past couple of years. With very few exceptions, central banks have raised interest rates substantially from the lows seen during the pandemic, in many cases lifting policy interest rates out of negative territory. Several central banks have also embarked upon quantitative tightening, shrinking the size of their respective balance sheets by either allowing maturing bond holdings to roll off or actively selling their bond holdings in some instances. As this monetary tightening has proceeded, we estimate that the average short-term nominal interest rate in the G20 economies has risen from below 2% during 2020 to around 5.75% currently (Figure 19). While we believe that many central banks have already reached the end of their rate hike cycles, and indeed some have already begun reducing interest rates, the long and variable lags between changes in monetary policy and their impact on economic growth and inflation mean the effects of restrictive monetary policy will likely continue to be felt for several quarters ahead. As we discuss below, however, that influence will likely be felt differently across major economies.

***The most important factor behind the ongoing slowdown in the pace of global expansion will be the continued impact from the aggressive monetary tightening by most of the world's central banks.***

Figure 18



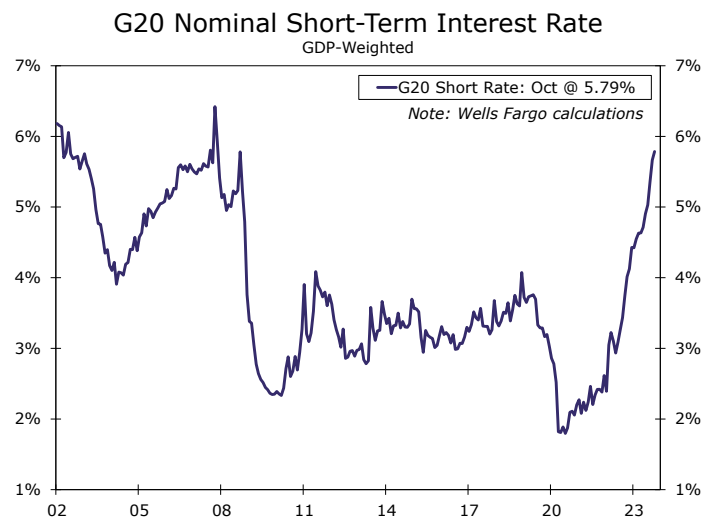
Source: International Monetary Fund and Wells Fargo Economics

We view some other key influences on the global economy as more neutral for economic prospects in 2024 and thus unlikely to offset the impact of restrictive monetary policy. We expect the decline in global inflation that is already under way to continue in 2024, such that we forecast global CPI inflation of 3.7% next year, down from 4.7% in 2023. On one hand, slower inflation should be more supportive of consumer purchasing power, and indeed trends in real household disposable incomes have started to move in a more positive direction for some economies. On the flip side however, to the extent that central banks remain cautious about lowering interest rates too soon or too aggressively—as they seek to return CPI inflation to their respective targets—a passive tightening in monetary policy may occur through a rise in real inflation-adjusted policy interest rates and could still be a restraining influence on global economic activity. Finally, we do not anticipate the restrictive effect of tighter monetary policy will be offset by more expansive fiscal policy. According to IMF estimates, much of the post-pandemic fiscal consolidation is largely complete. The IMF estimates the cyclically-adjusted budget deficit for the G20 economies narrowed from 8.3% of potential GDP in 2020 to 5.7% of GDP in 2022. That consolidation appears to have stalled and indeed partly reversed in 2023, although some further narrowing in the cyclically-adjusted budget deficit is forecast for 2024, to 5.6% of GDP. Overall, even if global fiscal consolidation is nearing an end, there appears to be little prospect of significant fiscal stimulus from economies such as China, the United States or the Eurozone at this point. As a result, we do not expect fiscal policy to provide any significant growth offset to restrictive monetary policy as we head into 2024.

### Differences in How Major Economies Are Weathering the Economic Storm

As we highlighted above, we anticipate the economic storm clouds will have a differing impact across major economies, with some countries likely to experience a more pronounced growth slowdown than others through late 2023 and into 2024. Among the hardest hit are likely to be the economies of the Eurozone and United Kingdom. In fact, for the United Kingdom we forecast that a mild recession will likely commence by late 2023. With inflation finally starting to recede, U.K. real household income trends have returned to positive territory. However, the U.K. consumer still faces challenges, especially as the prevalence of variable rate, or relatively short-dated fixed rate, mortgages has led to a jump in interest costs for U.K. households. To that point, interest costs as a percentage of household disposable income have surged to 5.0%, more than triple their level in late 2021, and are likely to rise further in the quarters ahead (Figure 20). With sentiment surveys also weaker in recent months and GDP growth already essentially at a standstill, we expect the U.K. economy to experience a mild contraction in Q4-2023 and Q1-2024. The prospects for the Eurozone economy are, in our view, not quite as dim. To be sure, economic momentum across Europe has already slowed sharply, and PMI surveys have fallen to levels that are historically consistent with a contracting economy (Figure 21). However, real household income trends have held up reasonably well, and interest costs across the Eurozone have risen far less markedly than in the United Kingdom. Meanwhile, although Eurozone corporate profit growth has slowed, profits have so far not experienced any significant decline. With

Figure 19



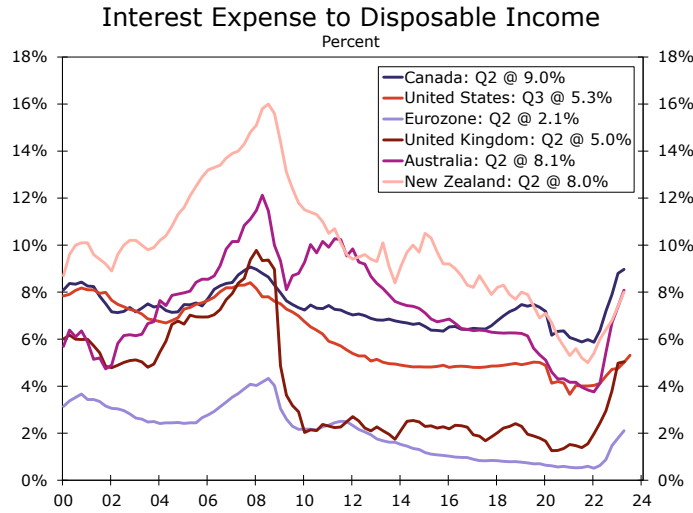
Source: Datastream and Wells Fargo Economics

***We think the Eurozone will narrowly avoid recession, but we forecast the U.K. economy will experience one.***



Eurozone real household income trends improving and corporate profits stable so far, we anticipate these dynamics could see the region narrowly avoid recession. That said, our Eurozone GDP forecast of 0.5% for 2023 and 0.8% for 2024 is far from impressive.

Figure 20

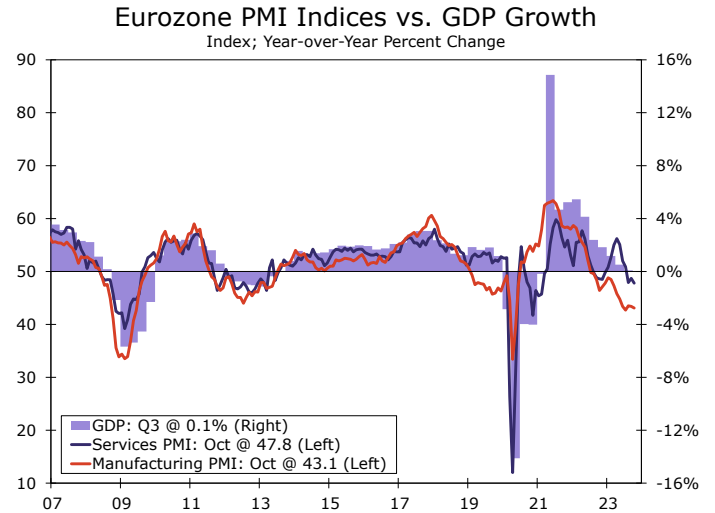


Source: Datastream and Wells Fargo Economics

Two economies that are likely to face occasional economic squalls are China and Canada. In the case of China, the burst of activity seen in early 2023 after the economy reopened post-COVID proved to be relatively short-lived. Economic momentum has already slowed noticeably in 2023, especially in the consumer and services sector, as well as the real estate sector (Figure 22). In response, authorities have delivered a range of measures over the past several months aimed at cushioning the economic slowdown. These measures included, among others, reductions in interbank interest rates and benchmark interest rates such as the Loan Prime Rate or the Medium-Term Lending Facility Rate. Authorities also encouraged lenders to lower rates for homeowners on existing mortgages, as well as reduce down payment requirements. The People's Bank of China also lowered its Reserve Requirement Ratio by 25 bps in September, thereby injecting additional liquidity into the economy. These measures have led to a brief and modest improvement in activity, as Q3 GDP grew more than expected, and activity data has firmed in recent months. Against this backdrop, we have raised our 2023 Chinese GDP growth forecast to 5.2%. That said, China's economy should continue to face structural headwinds to growth. Real estate sector problems, demographic challenges, sluggish consumption trends and geopolitical tensions all likely will place downward pressure on growth prospects over the medium to longer term. We see a renewed slowdown in China's GDP growth, to 4.5% in 2024 and 4.3% in 2025.

Canada's economy showed a reasonable degree of momentum during the first half of 2023 but has now also started to slow more noticeably. Rising interest rates appear to be weighing on consumer spending, even as receding inflation means real household incomes are starting to trend in a more favorable direction. Slower corporate profit growth and worsening business sentiment have also contributed to a deceleration in investment spending. Canada's extensive trade linkages to a slowing U.S. economy should also act as a headwind, and we forecast only moderate GDP growth for Canada of 1.1% in 2023 and 0.7% in 2024.

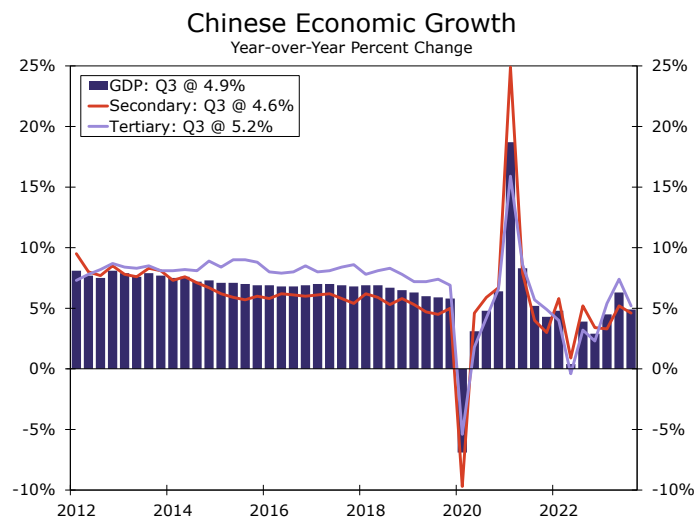
Figure 21



Source: Datastream, Bloomberg Finance L.P. and Wells Fargo Economics

**China's economy should continue to face structural headwinds to growth.**

Figure 22



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Finally, one economy where the outlook for 2024 remains relatively sunny and clear is India. The country's GDP growth firmed to 7.8% year-over-year in Q2-2023, up from 6.1% growth in Q1 (Figure 23). Investment spending has remained quite solid over the past several quarters; meanwhile, a rebound in consumer spending contributed to the recent growth uptick. The resilience of India's economy stems in part from its moderate trade linkages, as exports of goods and services account for around 22% of overall GDP. India's trade linkages with the poorly performing Chinese economy are especially limited. In addition, India's policy interest rates have risen much less sharply than many of its emerging market peers, and real interest rates are only moderately in positive territory. Given the improving performance of India's consumer sector, we also expect the overall economy to perform well and forecast GDP growth of 6.3% in 2024, which would be slightly better than the 6.1% growth we project for 2023.

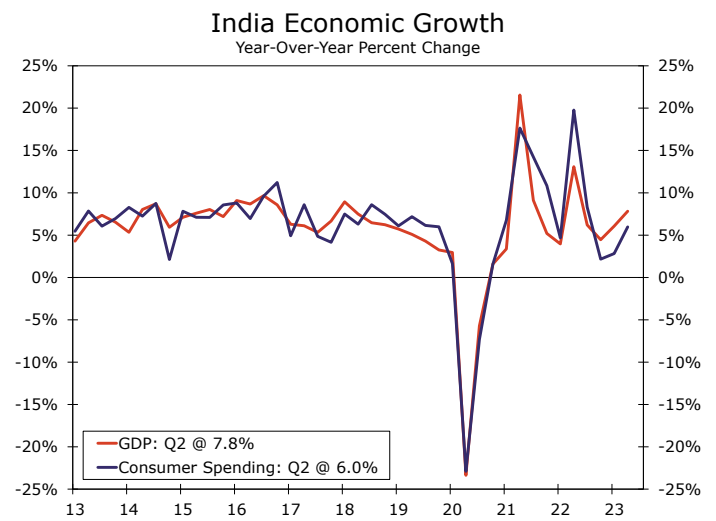
### Central Banks Not Rushing to Provide Shelter for Global Growth Prospects

Even as the global growth clouds gather, we believe it may be some time before central banks offer shelter from the economic storm through a significant reduction in their respective policy interest rates. Inflation, although slowing in many cases, remains well above central bank targets. In particular, wage growth and services inflation is proving stubbornly persistent across many economies. Having perhaps been surprised at the rapidity and extent of the post-pandemic spike in inflation, several central banks are now wary of easing monetary policy prematurely before they are more clearly convinced that inflation is trending sustainably toward their respective targets.

It is against this backdrop that we believe it will be well into 2024 before many G10 central banks begin reducing policy interest rates. In the cases of the European Central Bank (ECB) and the Bank of England (BoE), both central banks have given their clearest indications yet that they may have come to the end of their respective tightening cycles. However, both central banks have also emphasized the need to keep policy interest rates at elevated levels for an extended period to ensure that inflation returns to target over time. As a result, and even with the U.K. recession we forecast, we do not expect the Bank of England to begin lowering interest rates until some time in Q2-2024 (Figure 24). The European Central Bank might begin easing monetary policy even later, perhaps not until June of next year. In a similar vein, with inflation still above target, we expect the Bank of Canada and Reserve Bank of New Zealand to wait patiently before beginning to cut rates in Q2 next year.

Some G10 central banks may lift interest rates further still in an attempt to continue reining in inflation pressures. The clearest example of this is the Norges Bank, Norway's central bank. Against a backdrop of elevated wage growth and underlying inflation, the Norges Bank indicated that there would likely be one more policy rate increase, most probably in December. In Australia, elevated inflation is slowing only gradually and, as a result, further Reserve Bank of Australia (RBA) monetary tightening cannot be ruled out. In addition, with Australia's economy set to slow but avoid recession, we do not expect the RBA to begin cutting rates until Q3-2024. The Bank of Japan has been

Figure 23



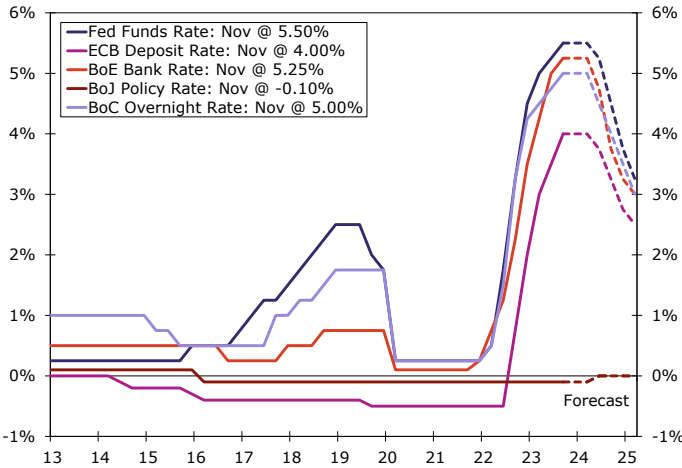
Source: Datastream and Wells Fargo Economics

***Inflation, although slowing in many cases, remains well above central bank targets.***

something of an outlier among G10 central banks as it has maintained broadly accommodative monetary policy, even as it has allowed longer-term Japanese government bond yields to slowly move higher. We believe the Bank of Japan is gradually moving toward a more substantial policy shift. Should wages firm further and steady economic growth persist, we expect a 10 bps policy rate hike in Q2-2024, which would see the Bank of Japan end its negative interest rate policy.

Figure 24

Major Central Bank Policy Rates



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Even for emerging economies, where rate cuts have already begun in some countries, central banks appear likely to take a gradual and cautious approach toward monetary easing. After Chile's central bank kicked off its easing cycle with a 100 bps rate cut, it downshifted to 75 bps and then 50 bps reductions at its subsequent meetings. Brazil's Central Bank appears likely to keep cutting rates in 50 bps increments, rather than accelerating the pace of its easing. Mexico's central bank continues to highlight the need to keep policy rates elevated for an extended period, and we forecast that it will not begin lowering interest rates until Q1-2024.

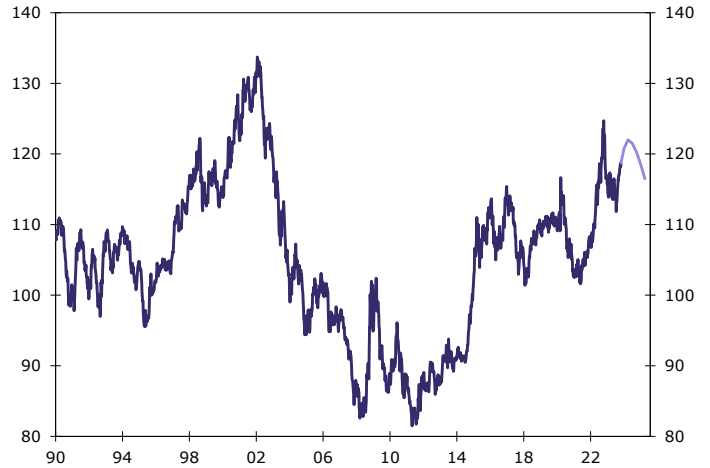
Some of Asia's central banks also appear likely to hold off until 2024 before beginning rate reductions. Bank of Indonesia's desire for currency stability saw the central bank unexpectedly hike interest rates at its most recent policy announcement, and a shift to rate cuts is unlikely until some time next year. Reserve Bank of India policymakers are also maintaining a hawkish policy stance and are unlikely to make an explicit shift to easing until the first half of 2024. Finally, the Philippine Central Bank has also been explicitly hawkish at recent announcements and indeed hiked rates 25 bps in late October in an "off-cycle" move. Further tightening remains possible, and a Philippine pivot to monetary easing is unlikely until well into 2024.

Dollar Should Be a Safe Place During Economic Storm

After an extended period of U.S. dollar strength in 2022, it has been a back-and-forth year for the greenback in 2023. After some U.S. dollar weakness earlier this year, the greenback has rebounded in recent months, such that the trade-weighted dollar versus the currencies of the advanced foreign economies is up around 2.5% so far in 2023 (Figure 25). Given an uncertain backdrop as we head into 2024, we believe the U.S. dollar will remain a safe place to be for at least the next several months. We forecast further U.S. dollar appreciation through at least Q1-2024 and perhaps longer. This outlook for further U.S. dollar gains stems from the ongoing resilience in U.S. activity and improving prospects for a softer landing, which has left open the possibility of a further Fed hike. These factors have contributed to rising U.S. yields, which have offered some direct support for the greenback, as well as indirect safe-haven support for the dollar as higher yields have contributed to uncertainty in broader financial markets. We expect U.S. dollar strength could be particularly noticeable against the euro and British pound, where sharply slower growth along with central banks that have probably reached the end of their tightening cycles are factors likely to weigh on those currencies. Some Latin American currencies could also come under pressure.

Figure 25

Advanced Foreign Economies U.S. Dollar Index  
Index = January 2006



Source: Bloomberg Finance L.P. and Wells Fargo Economics

**We expect the trend of U.S. dollar strength will eventually wane and turn to U.S. dollar weakness later in 2024.**

We expect the trend of U.S. dollar strength will eventually wane and turn to U.S. dollar weakness later in 2024, as our view remains for a mild U.S. recession, and for the Fed to ease monetary policy by more than expected by financial market participants. That said, the outlook is shifting toward less U.S. dollar weakness and less foreign currency strength, with the risks tilted toward a softer landing for the U.S. economy and more gradual Fed easing. Indeed, in that context we have already pushed back our projected timing for Fed easing, with an initial Fed rate cut not expected until June 2024. However, we still believe the Japanese yen—which has been a significant underperformer during the global tightening phase—could be an outperformer among the G10 currencies in 2024 as central banks eventually turn to easing. The risk and commodity sensitive currencies of Australia, Canada and New Zealand may experience moderate gains during 2024, while the pound and euro might continue to underwhelm.

U.S. Forecast Table

Wells Fargo U.S. Economic Forecast																				
	Actual								Forecast								Actual		Forecast	
	2022				2023				2024				2025				2022	2023	2024	2025
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Real Gross Domestic Product (a)	-2.0	-0.6	2.7	2.6	2.2	2.1	4.9	0.7	0.9	-0.3	-1.5	0.3	1.8	3.0	2.8	2.6	1.9	2.4	0.8	1.4
Personal Consumption	0.0	2.0	1.6	1.2	3.8	0.8	4.0	1.5	0.8	0.3	-1.5	-0.5	1.5	2.0	1.8	1.9	2.5	2.2	0.8	0.8
Business Fixed Investment	10.7	5.3	4.7	1.7	5.7	7.4	-0.1	0.2	-0.3	-3.5	-5.5	-1.1	5.3	5.5	8.6	7.1	5.2	4.0	-1.0	2.7
Equipment	16.8	4.9	5.6	-5.0	-4.1	7.7	-3.8	-2.5	0.0	-7.2	-8.9	0.4	8.4	6.7	13.0	7.6	5.2	-0.3	-3.0	3.7
Intellectual Property Products Structures	11.4	8.7	7.1	6.1	3.8	2.7	2.6	2.0	0.9	0.8	-2.3	-1.0	3.8	5.6	6.9	7.6	9.1	4.4	0.9	2.9
Residential Investment	-1.2	-0.5	-1.3	6.5	30.3	16.1	1.6	1.5	-3.6	-5.4	-6.2	-4.4	2.8	3.1	4.2	5.1	-2.1	11.3	-1.6	0.1
Government Purchases	-1.8	-14.1	-26.4	-24.9	-5.3	-2.2	3.9	-1.5	-2.8	-2.2	1.6	2.6	4.1	5.3	6.1	6.4	-9.0	-11.2	-0.7	3.7
	-2.9	-1.9	2.9	5.3	4.8	3.3	4.6	2.0	1.5	1.0	0.8	0.6	0.4	0.3	0.3	0.5	-0.9	3.8	1.9	0.5
Net Exports	-1141.1	-1116.2	-981.2	-965.6	-935.1	-928.2	-937.7	-930.4	-920.3	-886.2	-830.3	-814.6	-822.8	-845.0	-859.0	-869.7	-1051.0	-932.8	-862.8	-849.1
Pct. Point Contribution to GDP	-2.6	0.6	2.6	0.3	0.6	0.0	-0.1	0.1	0.2	0.6	1.0	0.3	-0.1	-0.4	-0.2	-0.2	-0.5	0.5	0.3	0.1
Inventory Change	197.0	92.7	70.7	151.9	27.2	14.9	80.6	39.8	39.8	0.0	-49.7	-29.8	-29.8	29.8	49.7	61.6	128.1	40.6	-9.9	27.8
Pct. Point Contribution to GDP	-0.1	-2.1	-0.7	1.6	-2.2	0.0	1.3	-0.7	0.0	-0.7	-0.9	0.4	0.0	1.1	0.3	0.2	0.5	-0.4	-0.2	0.2
Nominal GDP (a)	6.2	8.5	7.2	6.5	6.3	3.8	8.5	3.5	3.4	1.0	-0.1	2.9	4.6	5.3	5.0	4.9	9.1	6.2	3.1	3.7
Real Final Sales	-1.9	1.5	3.4	0.9	4.6	2.1	3.5	1.4	0.9	0.4	-0.7	-0.1	1.8	2.0	2.4	2.4	1.3	2.8	1.2	1.2
Retail Sales (b)	13.0	9.4	9.9	7.0	4.9	1.6	3.1	3.9	2.9	1.8	-1.2	-3.0	-3.0	-1.8	0.0	1.2	9.7	3.4	0.1	-0.9
Inflation Indicators (b)																				
PCE Deflator	6.6	6.8	6.6	5.9	5.0	3.9	3.4	3.1	2.6	2.3	2.0	2.0	2.0	2.2	2.4	2.3	6.5	3.8	2.2	2.2
"Core" PCE Deflator	5.5	5.2	5.2	5.1	4.8	4.6	3.9	3.5	3.0	2.7	2.5	2.3	2.1	2.1	2.1	2.2	5.2	4.2	2.6	2.1
Consumer Price Index	8.0	8.6	8.3	7.1	5.8	4.1	3.6	3.4	3.1	2.7	2.1	2.1	2.1	2.5	2.7	2.5	8.0	4.2	2.5	2.4
"Core" Consumer Price Index	6.3	6.0	6.3	6.0	5.6	5.2	4.4	4.1	3.8	3.2	3.1	2.6	2.3	2.2	2.2	2.3	6.1	4.8	3.2	2.2
Producer Price Index (Final Demand)	10.8	11.0	8.9	7.3	4.4	1.3	1.8	1.9	2.2	2.8	1.8	1.5	1.6	1.9	2.2	2.3	9.5	2.3	2.1	2.0
Employment Cost Index	4.5	5.1	5.0	5.1	4.8	4.5	4.3	4.3	4.0	3.9	3.6	3.5	3.4	3.3	3.3	3.2	4.9	4.5	3.8	3.3
Real Disposable Income (a)	-9.8	-1.4	3.6	2.2	10.8	3.5	-1.0	0.8	1.5	1.0	-0.6	0.9	1.9	1.8	2.0	2.1	-6.0	4.0	0.8	1.3
Nominal Personal Income (a)	2.4	4.7	6.8	4.7	6.8	4.3	3.5	4.1	4.1	2.4	0.8	3.5	4.6	4.1	4.2	4.3	2.0	5.2	3.3	3.6
Industrial Production (a)	3.7	4.1	2.1	-2.5	-0.3	0.7	2.5	1.2	0.7	-2.0	-3.0	2.4	6.2	2.9	4.8	4.2	3.4	0.5	0.1	2.9
Capacity Utilization	80.0	80.6	80.8	79.9	79.6	79.4	79.6	79.8	79.9	79.5	78.9	79.4	80.5	81.1	82.1	82.9	80.3	79.6	79.4	81.7
Corporate Profits Before Taxes (b)	10.0	9.1	11.5	8.6	4.6	-2.7	-4.0	-2.0	-2.0	-4.0	-2.0	1.0	6.0	10.0	8.0	6.0	9.8	-1.1	-1.7	7.5
Corporate Profits After Taxes	4.0	4.5	7.9	7.1	3.6	-4.1	-5.0	-2.9	-1.5	-3.7	-2.3	0.9	6.1	10.0	7.9	6.0	5.9	-2.2	-1.6	7.5
Federal Budget Balance (c)	-291	153	-860	-421	-679	-292	-303	-480	-714	-223	-433	-545	-704	-206	-445	-562	-1375	-1695	-1850	-1900
Trade Weighted Dollar Index (d)	109.6	114.7	121.4	116.6	116.2	114.8	117.1	120.8	122.0	121.5	120.3	118.5	116.5	115.5	115.0	115.0	115.1	117.2	120.6	115.5
Nonfarm Payroll Change (e)	561	329	423	284	312	201	233	165	105	-17	-208	-50	67	117	135	143	399	228	-43	115
Unemployment Rate	3.8	3.6	3.6	3.6	3.5	3.6	3.7	3.9	3.9	4.1	4.4	4.5	4.4	4.2	4.1	4.0	3.6	3.7	4.2	4.2
Housing Starts (f)	1.72	1.64	1.45	1.41	1.39	1.45	1.36	1.31	1.27	1.31	1.39	1.40	1.40	1.41	1.43	1.44	1.55	1.38	1.34	1.42
Light Vehicle Sales (g)	13.9	13.4	13.6	14.2	15.0	15.8	15.6	15.4	15.0	14.4	14.0	14.6	15.4	16.1	16.6	17.1	13.8	15.4	14.5	16.3
Crude Oil - Brent - Front Contract (h)	95.7	109.8	95.5	87.9	81.9	77.6	85.3	87.8	83.7	76.7	75.3	79.3	82.0	85.3	82.7	82.0	97.2	83.2	78.8	83.0
Quarter-End Interest Rates (i)																				
Federal Funds Target Rate (j)	0.50	1.75	3.25	4.50	5.00	5.25	5.50	5.50	5.50	5.25	4.50	3.75	3.25	3.25	3.25	3.25	2.02	5.31	4.75	3.25
Secured Overnight Financing Rate	0.29	1.50	2.98	4.30	4.87	5.09	5.31	5.35	5.35	5.10	4.35	3.60	3.10	3.10	3.10	3.10	1.64	5.16	4.60	3.10
Prime Rate	3.50	4.75	6.25	7.50	8.00	8.25	8.50	8.50	8.50	8.25	7.50	6.75	6.25	6.25	6.25	6.25	5.02	8.31	7.75	6.25
Conventional Mortgage Rate	4.27	5.58	6.01	6.36	6.54	6.71	7.20	7.45	7.20	6.70	6.40	6.05	5.85	5.85	5.80	5.75	5.38	6.98	6.59	5.81
3 Month Bill	0.52	1.72	3.33	4.42	4.85	5.43	5.55	5.40	5.20	4.80	4.00	3.40	3.10	3.15	3.15	3.15	2.09	5.31	4.35	3.14
6 Month Bill	1.06	2.51	3.92	4.76	4.94	5.47	5.53	5.40	5.10	4.40	3.60	3.25	3.05	3.15	3.15	3.15	2.51	5.34	4.09	3.13
1 Year Bill	1.63	2.80	4.05	4.73	4.64	5.40	5.46	5.15	4.70	3.90	3.40	3.15	3.05	3.20	3.20	3.20	2.80	5.16	3.79	3.16
2 Year Note	2.28	2.92	4.22	4.41	4.06	4.87	5.03	4.80	4.35	3.70	3.40	3.20	3.10	3.25	3.25	3.25	2.99	4.69	3.66	3.21
5 Year Note	2.42	3.01	4.06	3.99	3.60	4.13	4.60	4.45	4.15	3.65	3.45	3.30	3.20	3.30	3.30	3.30	3.00	4.20	3.64	3.28
10 Year Note	2.32	2.98	3.83	3.88	3.48	3.81	4.59	4.50	4.30	3.85	3.65	3.50	3.40	3.50	3.50	3.50	2.95	4.10	3.83	3.48
30 Year Bond	2.44	3.14	3.79	3.97	3.67	3.85	4.73	4.70	4.55	4.15	3.95	3.80	3.75	3.80	3.80	3.80	3.11	4.24	4.11	3.79

Forecast as of: November 09, 2023  
 Notes: (a) Compound Annual Growth Rate Quarter-over-Quarter  
 (b) Year-over-Year Percentage Change  
 (c) Quarterly Sum - Billions USD; Annual Data Represents Fiscal Year  
 (d) Federal Reserve Advanced Foreign Economies Index, 2006=100 - Quarter End  
 (e) Average Monthly Change  
 (f) Quarterly Data - Average Monthly SAAR; Annual Data - Actual Total Houses Started  
 (g) Quarterly Data - Average Monthly SAAR; Annual Data - Actual Total Vehicles Sold  
 (h) Quarterly Average of Daily Close  
 (i) Quarterly Data - Period End; Annual Data - Annual Averages  
 (j) Upper Bound of the Federal Funds Target Range

Source: U.S. Department of Commerce, U.S. Department of Labor, IHS Markit, Federal Reserve Board and Wells Fargo Economics

## International Forecast Table

## Wells Fargo International Economic Forecast

	GDP				CPI			
	2022	2023	2024	2025	2022	2023	2024	2025
Global (PPP Weights)	3.5%	2.8%	2.4%	2.6%	8.7%	4.7%	3.7%	3.4%
Advanced Economies <sup>1</sup>	2.6%	1.8%	1.1%	1.8%	7.3%	5.0%	2.7%	2.3%
United States	1.9%	2.4%	0.8%	1.4%	8.0%	4.2%	2.5%	2.4%
Eurozone	3.3%	0.5%	0.8%	1.7%	8.4%	5.5%	2.6%	2.1%
United Kingdom	4.1%	0.5%	0.1%	1.7%	9.1%	7.4%	3.0%	2.0%
Japan	1.0%	1.9%	1.3%	1.2%	2.5%	3.1%	2.1%	1.7%
Canada	3.4%	1.1%	0.7%	1.9%	6.8%	3.9%	2.6%	2.0%
Switzerland	2.7%	0.8%	1.3%	1.6%	2.8%	2.2%	1.6%	1.5%
Australia	3.7%	1.9%	1.5%	2.1%	6.6%	5.7%	3.5%	2.8%
New Zealand	2.7%	1.3%	1.4%	2.3%	7.2%	5.7%	3.1%	2.2%
Sweden	2.8%	-0.5%	0.5%	1.8%	8.1%	8.4%	3.0%	1.9%
Norway	3.3%	1.2%	0.9%	1.6%	5.8%	5.6%	3.2%	2.5%
Developing Economies <sup>1</sup>	4.1%	3.5%	3.3%	3.2%	9.8%	4.4%	4.5%	4.2%
China	3.0%	5.2%	4.5%	4.3%	2.0%	0.6%	1.8%	1.8%
India	7.2%	6.1%	6.3%	6.3%	6.7%	5.6%	4.8%	4.5%
Mexico	3.9%	3.3%	1.5%	2.5%	7.9%	5.6%	4.1%	3.8%
Brazil	2.9%	3.2%	1.3%	2.0%	9.3%	4.8%	4.1%	3.8%

Forecast as of: November 9, 2023

<sup>1</sup>Aggregated Using PPP Weights

Source: International Monetary Fund and Wells Fargo Economics

## Wells Fargo International Interest Rate Forecast

(End of Quarter Rates)

	Central Bank Key Policy Rate						
	2023		2024				2025
	Current	Q4	Q1	Q2	Q3	Q4	Q1
United States	5.50%	5.50%	5.50%	5.25%	4.50%	3.75%	3.25%
Eurozone <sup>1</sup>	4.00%	4.00%	4.00%	3.75%	3.25%	2.75%	2.50%
United Kingdom	5.25%	5.25%	5.25%	4.75%	3.75%	3.25%	3.00%
Japan	-0.10%	-0.10%	-0.10%	0.00%	0.00%	0.00%	0.00%
Canada	5.00%	5.00%	5.00%	4.50%	4.00%	3.50%	3.00%
Switzerland	1.75%	1.75%	1.75%	1.50%	1.25%	1.00%	1.00%
Australia	4.10%	4.35%	4.35%	4.35%	4.10%	3.85%	3.35%
New Zealand	5.50%	5.50%	5.50%	5.25%	4.75%	4.25%	4.00%
Sweden	4.00%	4.00%	4.00%	3.75%	3.50%	3.25%	3.00%
Norway	4.25%	4.50%	4.50%	4.50%	4.00%	3.50%	3.25%
China <sup>3</sup>	10.50%	10.50%	10.25%	10.25%	10.00%	10.00%	9.75%
India	6.50%	6.50%	6.25%	6.00%	5.75%	5.50%	5.25%
Mexico	11.25%	11.25%	10.75%	10.25%	9.25%	8.25%	7.75%
Brazil	12.25%	11.75%	10.75%	9.75%	8.75%	7.75%	7.25%
Chile	9.00%	8.25%	7.75%	6.75%	6.25%	5.75%	5.50%
Colombia	13.25%	12.75%	11.75%	10.75%	9.25%	7.75%	6.75%
	2-Year Note						
	2023		2024				2025
	Current	Q4	Q1	Q2	Q3	Q4	Q1
United States	4.91%	4.80%	4.35%	3.70%	3.40%	3.20%	3.10%
Eurozone <sup>2</sup>	3.02%	2.95%	2.90%	2.80%	2.65%	2.50%	2.45%
United Kingdom	4.72%	4.65%	4.45%	4.20%	3.70%	3.45%	3.15%
Japan	0.14%	0.15%	0.15%	0.15%	0.20%	0.20%	0.20%
Canada	4.42%	4.40%	4.20%	3.80%	3.40%	3.15%	3.00%
	10-Year Note						
	2023		2024				2025
	Current	Q4	Q1	Q2	Q3	Q4	Q1
United States	4.65%	4.50%	4.30%	3.85%	3.65%	3.50%	3.40%
Eurozone <sup>2</sup>	2.74%	2.65%	2.60%	2.55%	2.50%	2.45%	2.45%
United Kingdom	4.38%	4.30%	4.15%	3.95%	3.60%	3.50%	3.35%
Japan	0.88%	1.00%	1.10%	1.20%	1.10%	1.00%	0.90%
Canada	3.80%	3.70%	3.60%	3.50%	3.30%	3.20%	3.10%

Forecast as of: November 9, 2023

<sup>1</sup> ECB Deposit Rate <sup>2</sup> German Government Bond Yield <sup>3</sup> Reserve Requirement Ratio Major Banks



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