



US Economic Outlook: Q4 2024

We don't expect tariff and immigration policy to throw a wrench in the soft landing.

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Morningstar Equity Research

Preston Caldwell
Chief US Economist

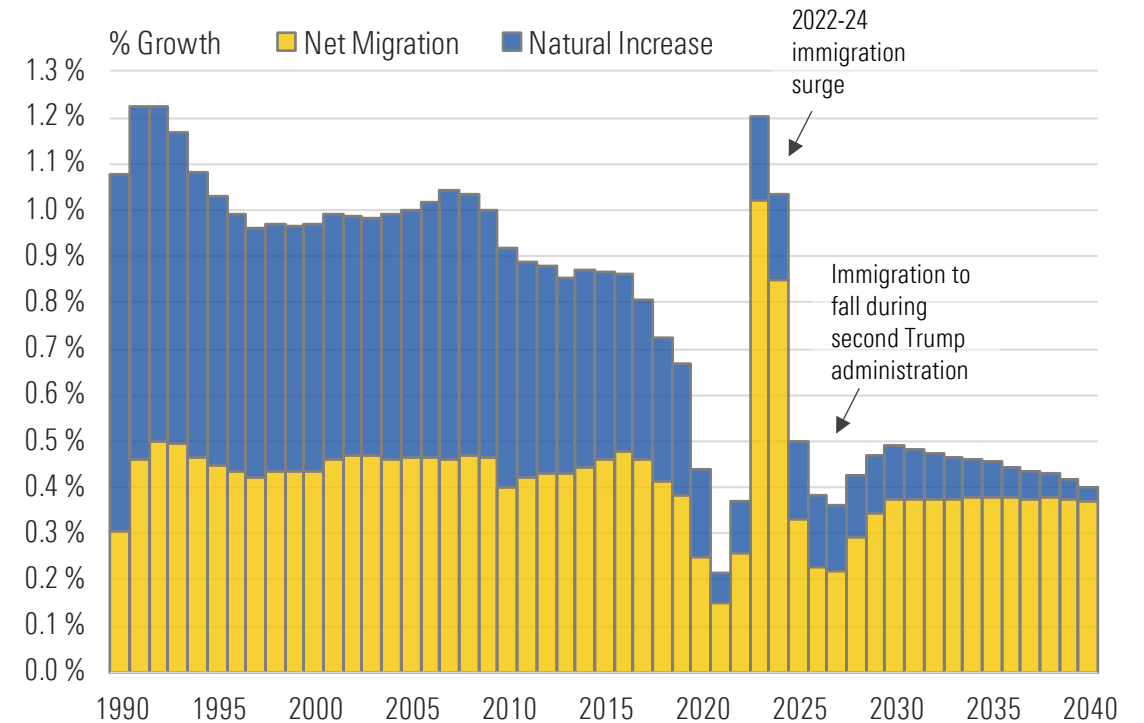
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Key Takeaways

- Our latest population forecasts (Pages 9-13) incorporate expectations of moderate immigration tightening during the second Trump administration, but we think mass deportation of several million is unlikely. This amounts to a negative impact on labor supply of about 0.2% over 2025-28, but after other updates to our model, our projections for labor supply growth are essentially unchanged.
- We've updated our tariff impact analysis originally presented in our [US Economic Outlook: Third-Quarter 2024](#) (Pages 10-14). The probability-weighted impact to the level of real GDP rises to 0.32% from 0.13% previously, which we've incorporated into our forecast.
- With the personal saving rate at a paltry 4.3% (versus the 2019 average of 7.3%), we expect consumers to pull back over the next two years. Along with other factors, this should drive a modest deceleration in GDP growth in 2025 and 2026 and a further uptick in unemployment. Still, we continue to expect a soft landing, with GDP growth remaining well above recessionary territory, even while inflation returns to the Fed's 2% target.

US Population Growth, by Component (%)



CAGR %	1990-2010	2010-2020	2020-2024	2024-2028	2028-2040
Natural Increase	0.58	0.37	0.13	0.15	0.08
Net Migration	0.46	0.42	0.56	0.27	0.37
Total Population	1.04	0.79	0.70	0.42	0.45

Forecast Update

Incorporating modest impact from tariff threat

Normalizing Inflation Will Allow the Fed to Cut Aggressively and Sustain Solid GDP Growth

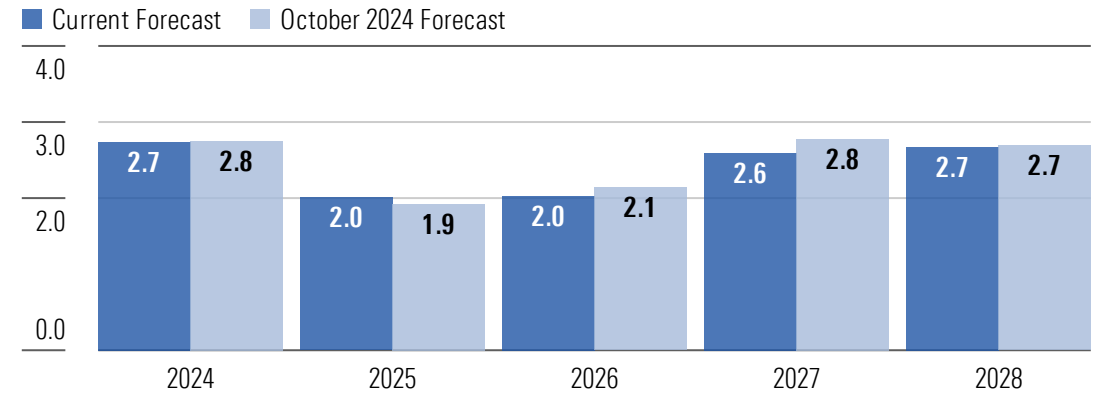
We Expect Growth to Trough Over the Next Two Years but Rebound After That

Our GDP forecasts have ticked down slightly through 2028, owing to an upped probability of tariff hikes. Altogether, we're incorporating a probability-weighted impact to cumulative real GDP growth through 2028 of 0.32% owing to higher tariffs. Our adjustments to our population forecasts, owing to lower immigration (Pages 9-13), also slightly detract from growth, but this is offset by other updates to our labor market forecasts. In the near term, we continue to expect growth to weaken owing to consumer retrenchment and other factors, followed by a rebound over 2027-28 as the effects of Fed rate cuts kick in.

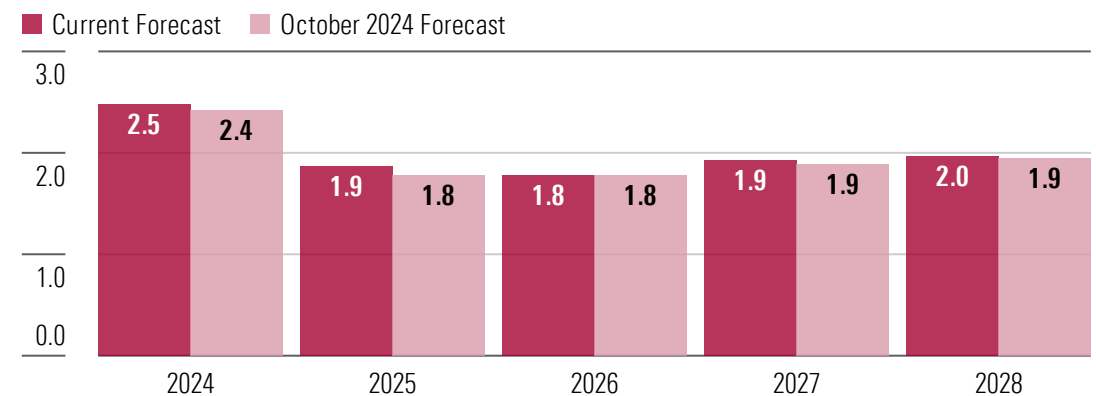
Inflation Should Return to Fed's 2% Target in 2025

Our inflation forecast ticks up slightly owing to upward surprises in recent data and a higher probability of tariffs. Still, we project inflation to dip a hair below 2% in 2025 and 2026 owing to weakening economic growth and ongoing supply-side relief. That will mark a conclusive victory in the Fed's battle against high inflation. But we're currently still marking a relatively low probability of the worst case for tariff hikes, so if we're wrong then it could take longer to return inflation to the Fed's 2% target.

GDP Forecast Revisions



Inflation (PCE) Forecast Revisions



Consensus Has Shifted Closer to Our Optimism on Strong GDP Growth and Mild Inflation

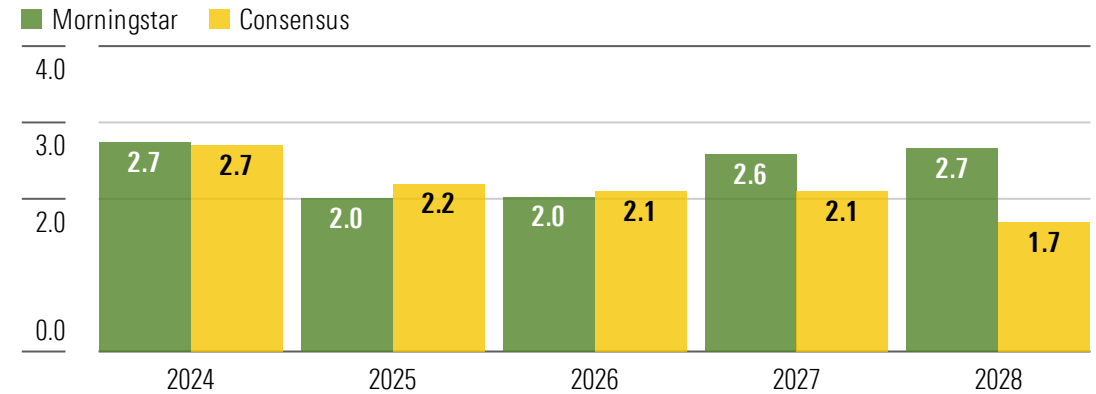
We Start Off More Pessimistic on Growth, but End More Optimistically

We're slightly upbeat on growth in the longer run, as we expect about a cumulative 1.2% more real GDP growth through 2028 than consensus does. This is mainly because of our optimism on labor supply growth, including labor force participation rates, where we expect abundant job availability to draw in more people to the workforce.

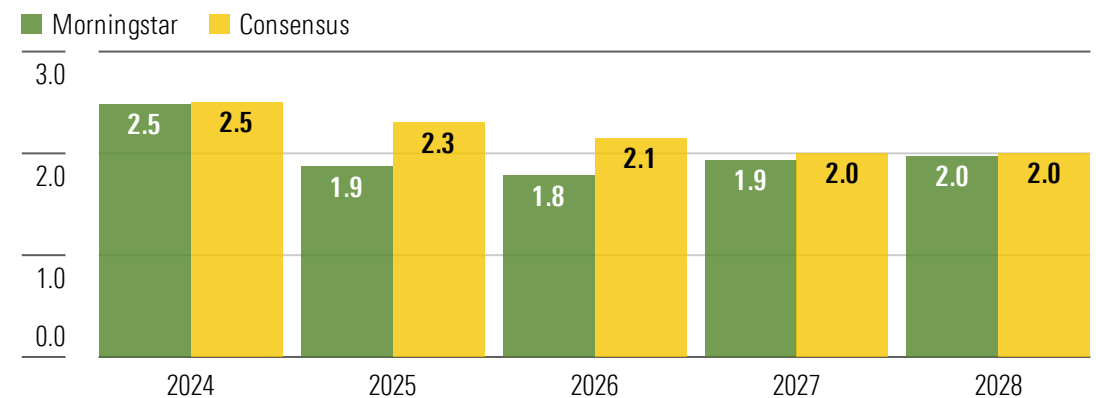
We Expect Inflation to Fall a Bit Greater Than Consensus Does

On inflation we run under consensus expectations over the next few years. This is owing to our view that the economy will be running a bit below potential in 2025, and this slack should generate disinflationary pressure. This should allow for interest-rate cuts more aggressive than the market expects. Even while we expect GDP growth to exceed consensus in 2027 and 2028, this will be amply supported by supply-side expansion, so inflation should remain tame.

GDP Forecast Revisions



Inflation Forecast Revisions



Interest Rates Will Soon Be Headed Back Down

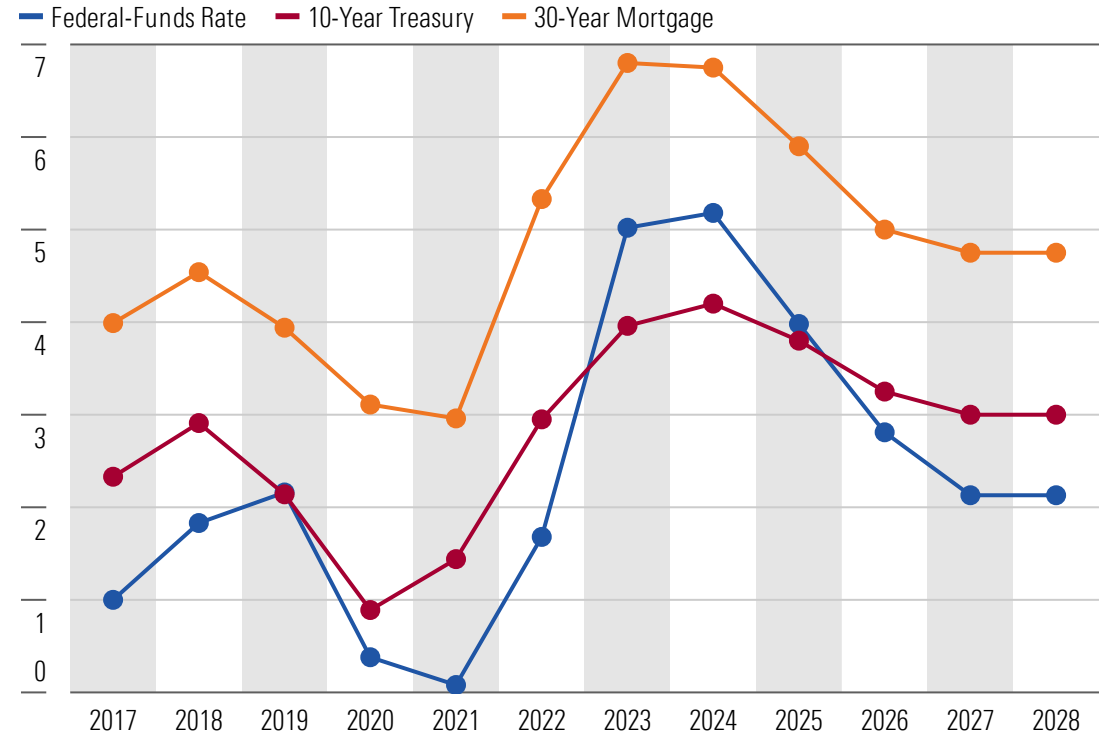
We Expect the Fed to Shift Back to Easing in 2024

The Fed is getting the green light to cut owing to falling inflation and some data pointing to weakening labor markets. We expect the Fed to ultimately reduce the federal-funds rate by 325 basis points, with cutting continuing well into 2026 owing to somewhat elevated unemployment and inflation running slightly below target.

Aggressive rate cuts should allow GDP growth to reaccelerate in late 2025 and 2026. By 2027, we expect monetary policy with a neutral stance, with the fed-funds rate and the 10-year Treasury yield in line with our assessment of their long-run natural levels.

The current 10-year Treasury yield of 4.2% stands above our long-run expectation of 3%. Similarly, the current 5-year Treasury yield of 4.1% implies an average federal-funds rate of 3.6% over the next five years (assuming a 50-basis-points term premium), above our expectation of 2.6%.

Interest-Rate Forecasts (Annual Average)



(%)	2024	2025	2026	2027	2028
Fed Funds Rate	5.18	4.00	2.81	2.13	2.13
10-Year Treasury	4.20	3.80	3.25	3.00	3.00
30-Year Mortgage	6.75	5.90	5.00	4.75	4.75

Our Supply-Side View Drives Our Bullish View on GDP

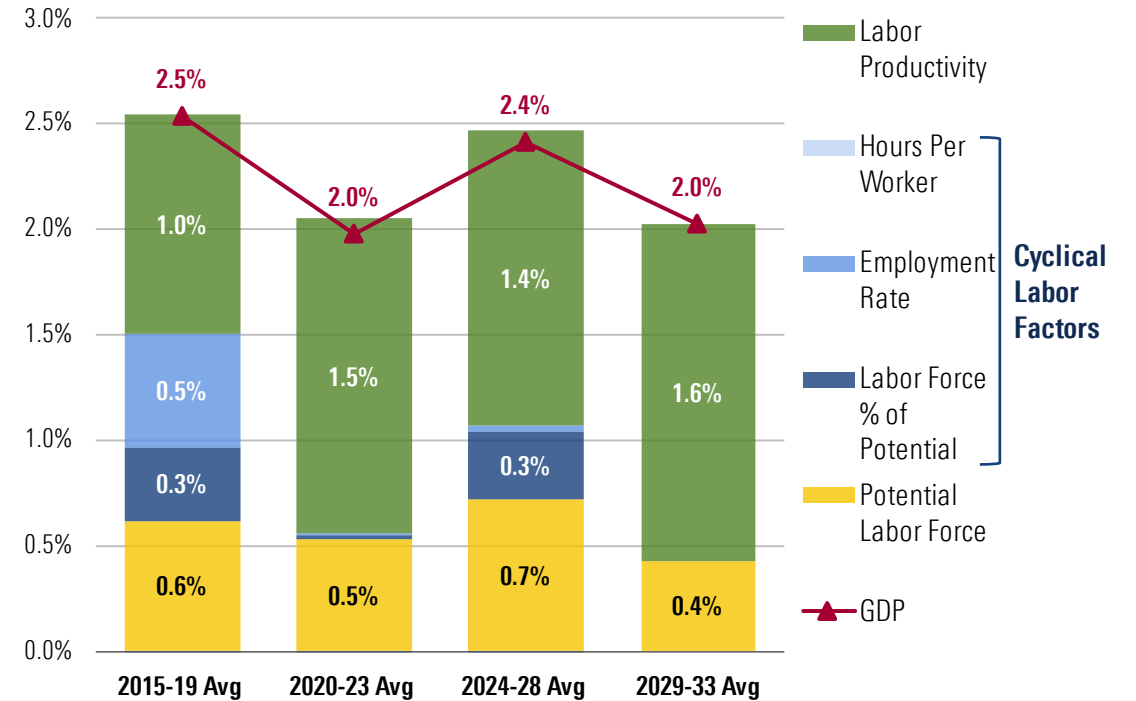
We Expect More Labor Force Expansion Than Consensus

Our longer-run GDP forecast is determined solely by our projections for the supply side of the economy, as we expect the Fed to calibrate aggregate demand so that the economy is operating at full capacity. GDP growth in the prepandemic years was fueled heavily by cyclical labor market expansion (the long recovery from the Great Recession). Therefore, we can't take for granted that prepandemic growth rates represent a good benchmark for long-term growth.

Compared with consensus, our bullish view on GDP through 2028 is driven by our expectations for labor supply. We expect labor force participation (adjusted for demographics) to recover ahead of prepandemic rates as widespread job availability pulls in formerly discouraged workers. Consensus expects labor force participation to struggle to reach prepandemic rates.

Since the start of the pandemic, productivity growth has averaged about 1.5%, and we expect about 1.4% growth over 2024-28.

US Real GDP Growth: Supply-Side Decomposition



Labor Productivity: real GDP/total hours worked

Hours Per Worker: total hours worked/total employment

Employment Rate: total employment/labor force ... also equal to 1 minus the unemployment rate

Labor Force % of Potential: labor force/"potential" labor force

Potential Labor Force: derived from our estimates of cyclically neutral labor force participation rates for each age group in the population

Special Topic: Population

Immigration influx to slightly unwind under Trump.

After Booming Over 2022-24, Immigration to Fall Below Normal in Second Trump Administration

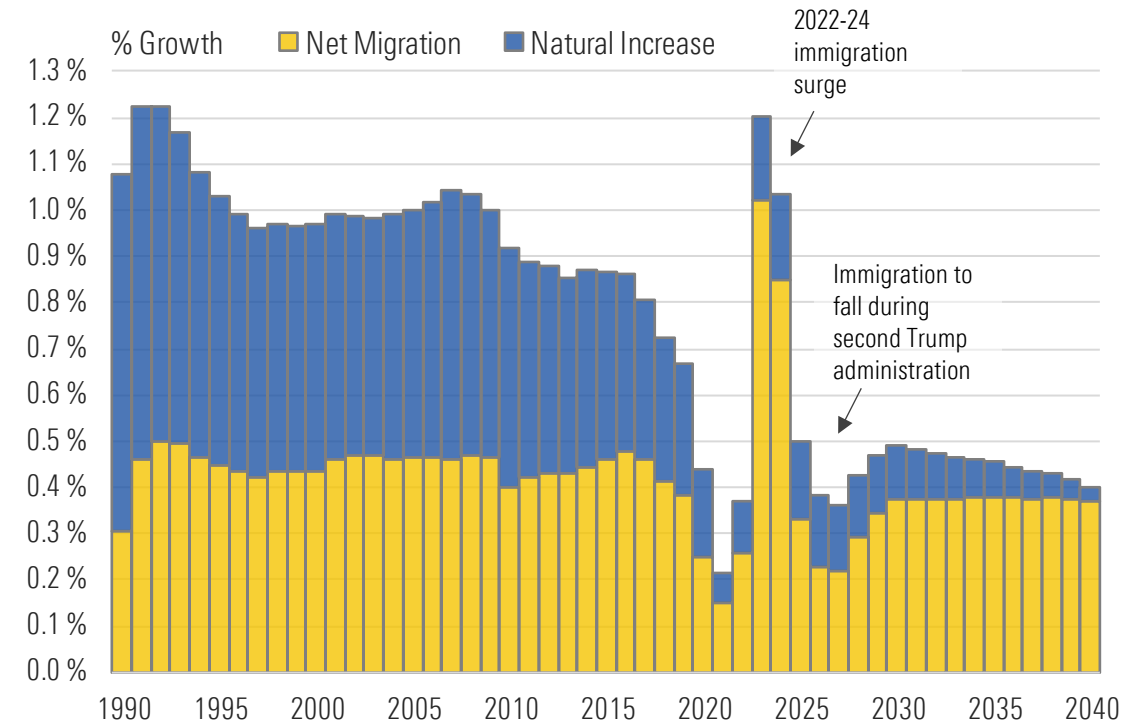
We project US population growth to drop to an annual rate of 0.41% over the 2024-28 period, after averaging 0.70% over 2020-24 and 0.79% over the 2010-20.^{1,2}

Immigration surged over 2022-24 to the highest rate on record, briefly pushing US population growth to its highest levels since the early 1990s.³ We would've expected immigration to drop to more normal levels regardless of the 2024 election outcome. But in addition to stanching the recent flood of new immigrants, we expect a second Trump administration to push the immigration rate below its prepandemic baseline. We project an average net migration rate of 0.27% over 2024-28, below the 2010s average of 0.42%. This is consistent with a moderate tightening of immigration restrictions compared with that decade. But we see mass deportation of several million immigrants as being unlikely.

Population growth has trended down for decades, driven by the drop in the total fertility rate from 3.1 in the 1960s to 2.0 in the 2000s (affecting the "natural increase" component, which is births minus deaths). The total fertility rate slid further, to about 1.6 as of 2024, at which level the UN projects it to remain indefinitely. With fertility below replacement (2.0), US population growth would eventually become negative if not for continued immigration.

1 These are compound annual growth rates calculated from the population as of July 1 for each respective year.
 2 Our population forecast starts with the UN's medium-variant forecast from the [World Population Prospects 2024](#). We adjust the UN's numbers by plugging in our own assumptions for net international migration.
 3 Our estimates for immigration and population growth over 2022-24 come from the [Congressional Budget Office](#). The CBO's figures, which are much higher than the US Census data, draw on analysis of administrative data.

US Population Growth, by Component (%)



CAGR %	1990-2010	2010-2020	2020-2024	2024-2028	2028-2040
Natural Increase	0.58	0.37	0.13	0.15	0.08
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Total Population	1.04	0.79	0.70	0.42	0.45

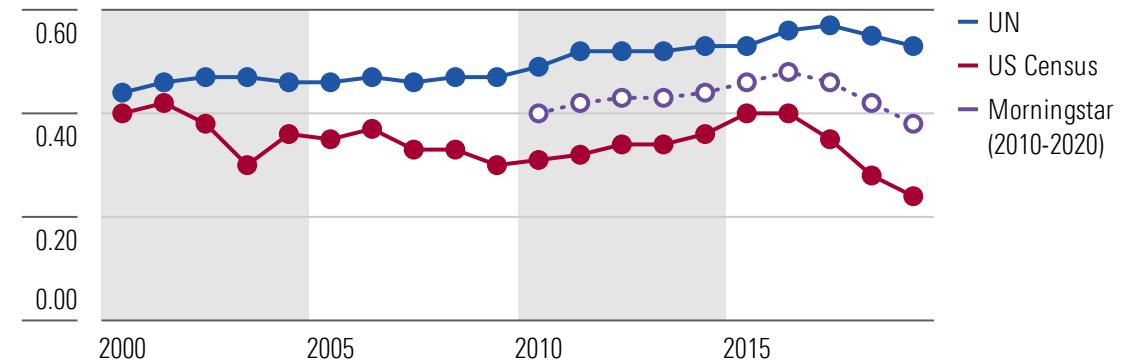
First Trump Administration Did Not See Large Immigration Reduction

Before forecasting immigration, one issue must be cleared up first: what is the historical baseline? Answering this is surprisingly tricky, mainly because of the difficulty in counting unauthorized immigrants. Estimates of the unauthorized immigrant population usually run about 11 million (such as [Pew Research](#)), using US Census survey data. But other research differs, with a [study](#) by Yale researchers using administrative data showing the figure could be well over 20 million.¹ The United Nations estimates a net international migration rate about 0.2% higher on average than the US Census over 2000-2020, according with the notion the Census may be underestimating immigration.

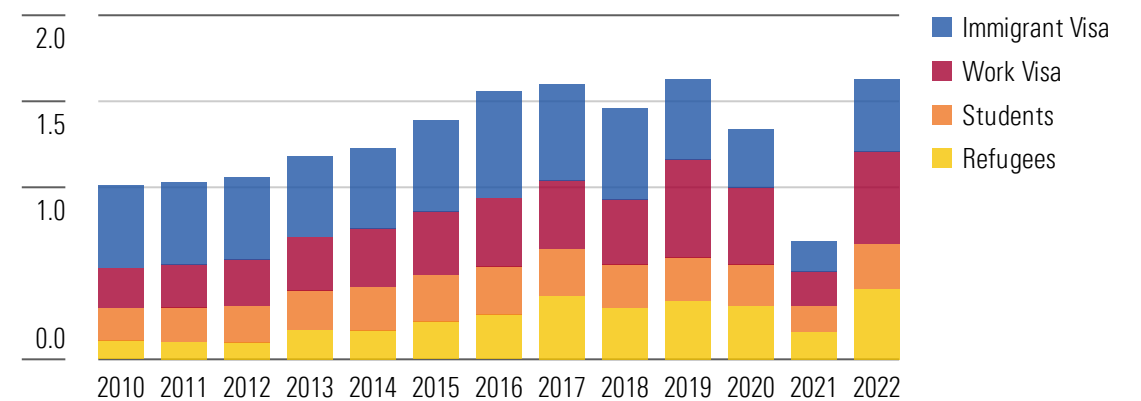
We generally rely on the UN historical data, but for the 2010-20 period we assume the “true” historicals are a 50-50 average of the UN and US Census figures. From this vantage point, one surprising conclusion is that the first Trump administration did not see a large reduction in immigration. The net migration rate over 2017-19 measures at 0.42%, almost in line with the 2010-16 average of 0.44%. Administrative data on legal immigration (such as visa issuance) did not show a drop-off, as outside of refugees, Donald Trump did not erect major barriers to the main channels of legal immigration.² Administrative data on unauthorized immigration is much harder to interpret. But at least qualitatively, the data doesn’t support a massive decrease in the net flow of unauthorized immigrants during Trump’s first term, as his attempts at restriction were stymied by several forces. We saw neither a decrease in border encounters nor a step-up in deportations.

¹ Fazel-Zarandi, Feinstein, and Kaplan. 2018. “The Number of Undocumented Immigrants in the United States”
² See “[The ‘Trump Effect’ on Legal Immigration Levels: More Perception than Reality?](#)” by the Migration Policy Institute.

Estimates of US Net International Migration, % of Population



Gross Legal Immigration Categories



We Expect a Moderate Reduction in Immigration, but Mass Deportations Highly Unlikely

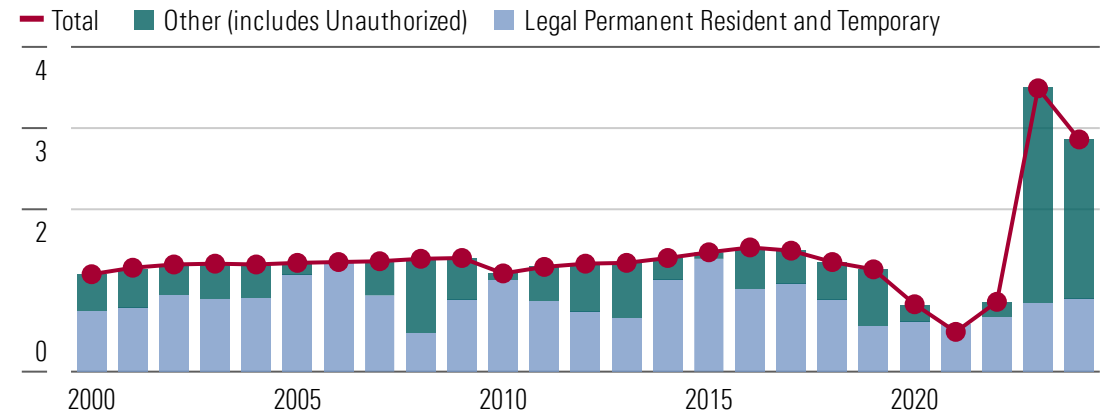
The difference between our projected net migration rate over 2024-28 (0.27%) and the 2010-20 average (0.42%) equates to a cumulative shortfall of 2.1 million immigrants during the second Trump administration.

Where do we expect this shortfall to come from? First, Donald Trump will seek to push the flow of new immigrants below its prepandemic baseline via stronger border enforcement and related policy shifts. This will likely target illegal and quasi-legal forms of immigration (the “other” category in the top chart), which contributed around 0.4 million annually to population growth over 2010-19, by our estimates.

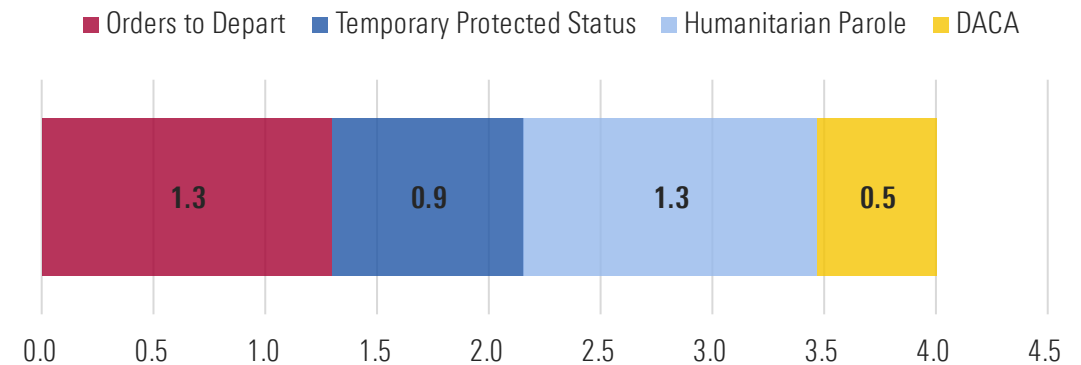
Second, the Trump administration will seek to step up deportations. The first focus will be on those who’ve received orders to depart (around 1.3 million). Additionally, Trump will seek to remove protections for certain quasi-legal categories of immigrants, in preparation for eventual deportation. This includes recipients of temporary protected status and humanitarian parole, comprising mostly recent refugees from countries such as Venezuela, Cuba, Haiti, and Ukraine.

Though there are a range of possible outcomes, our expectation is for a moderate restriction in the flow of new immigrants along with a small step-up in deportations. We expect Trump’s second administration to have more success in its goal of reducing immigration than his first administration. But many of the obstacles that stood in the way of the first administration remain in place, and truly mass deportation looks unlikely.

US Net Migration by Category, Millions



Vulnerable Immigrant Population Categories, Millions



We Expect a Moderate Reduction in Immigration, but Mass Deportations Highly Unlikely (continued)

The first obstacle to immigration restriction is legislative. Any step-up in border enforcement and deportations requires more funding. Trump [was unable](#) to push through a large increase in funding for immigration enforcement during his first term, despite unified control over government during the first two years.

In Trump's second administration, Republicans are pledging to be more aggressive on the legislative front. This includes use of the budget reconciliation procedure to evade the filibuster in the Senate. We expect reconciliation to be successfully used to secure a moderate expansion of border security and immigration enforcement funding, perhaps in the tens of billions.

However, we're extremely skeptical that congressional Republicans would approve the requisite funding for mass deportation of several million immigrants, which would likely cost in the [hundreds of billion of dollars](#). Beyond the direct fiscal cost, the obvious economic ill effects of slashing wide swaths of the workforce would dissuade many moderate Republicans. Republicans are likely to control the House only by less than five votes, compared with a 47-vote margin in 2017. Also, use of the military for mass deportation [looks extremely unlikely](#).

While reconciliation can be used to approve more funding, it's [less likely](#) the procedure can be used to make nonbudgetary adjustments to immigration laws. The proposed bipartisan border bill of 2024 included [measures to restrict the number of asylum recipients](#), but the bill was torpedoed by Trump's influence. Democrats are unlikely to return to the bargaining table on similar terms.

Without changes to asylum, parole, and other laws, many of Trump's attempts to reduce immigration would be challenged in the courts. Indeed, legal challenges were a major impediment to immigration restriction in Trump's first term. The first Trump administration failed in curtailing the Temporary Protected Status program, [owing to several lawsuits](#). Family separation policies were [shot down in courts](#). Many executive actions enacted by the Biden administration in 2024 to reduce use of asylum (in lieu of changes to asylum law) will face heightened legal challenges with Trump occupying the White House.

The rate of deportations [didn't increase](#) during the first Trump administration, not only owing to the aforementioned lack of incremental funding, but also because of [obstruction from state and local governments](#) that oppose more deportations. That factor will remain in place in the second Trump administration. Relatedly, foreign governments like Mexico and Panama have played a crucial role in stemming the tide of new migrants in 2024. Cooperation with those governments could be hindered by a more confrontational approach.

Economic Overview

We expect economic growth to trend down until 2026.

We Expect Economic Growth to Trend Down Until 2026

GDP Growth to Trough at 1.7% Year over Year in Q4 2025

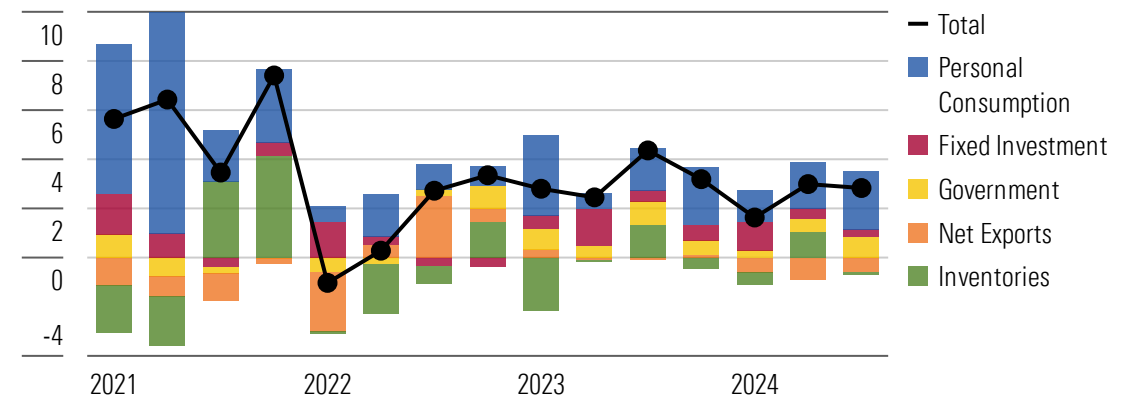
Real GDP expanded at a healthy 2.8% (quarter over quarter, annualized) in the third quarter 2024. Personal consumption grew by a solid 3.5%, contributing the lion’s share (240 basis points) of third-quarter growth. In year-over-year terms, GDP growth was 2.7%, marking a mild deceleration from the recent peak at 3.2% in the fourth quarter 2023.

The Atlanta Fed’s GDPNow [projects](#) fourth-quarter growth at 3.2%. But it’s still early in the quarter, with most of the data yet to report. We expect fourth-quarter growth to come in a bit lower at 2.2%.

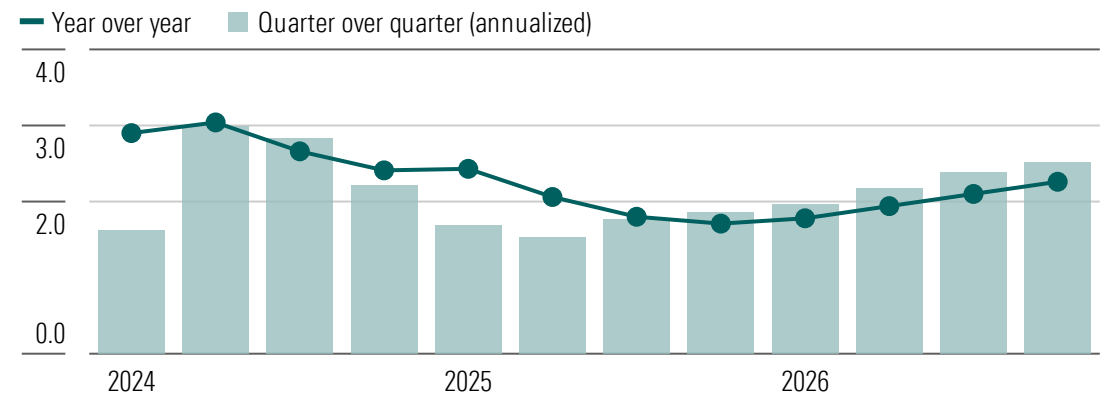
While GDP growth has continued to surprise to the upside, we’re still expecting growth to slow over the next year or so. We expect GDP growth to trend down until hitting 1.7% year over year in the fourth quarter 2025, before gently accelerating again in 2026. Even with the Fed’s cutting, the strain of high interest rates is still weighing on the economy. Most importantly, consumers looked overstretched given low savings rates.

With that said, there’s plenty of uncertainty surrounding the timing and magnitude of an eventual slowdown in GDP growth. Elevated asset prices could sustain a fast rate of growth, while a sharp drop in asset prices could cause GDP growth to decelerate much faster than we’re expecting.

Real GDP by Expenditure, % Quarter-Over-Quarter Growth (Annualized)



GDP Growth, Quarterly Forecast



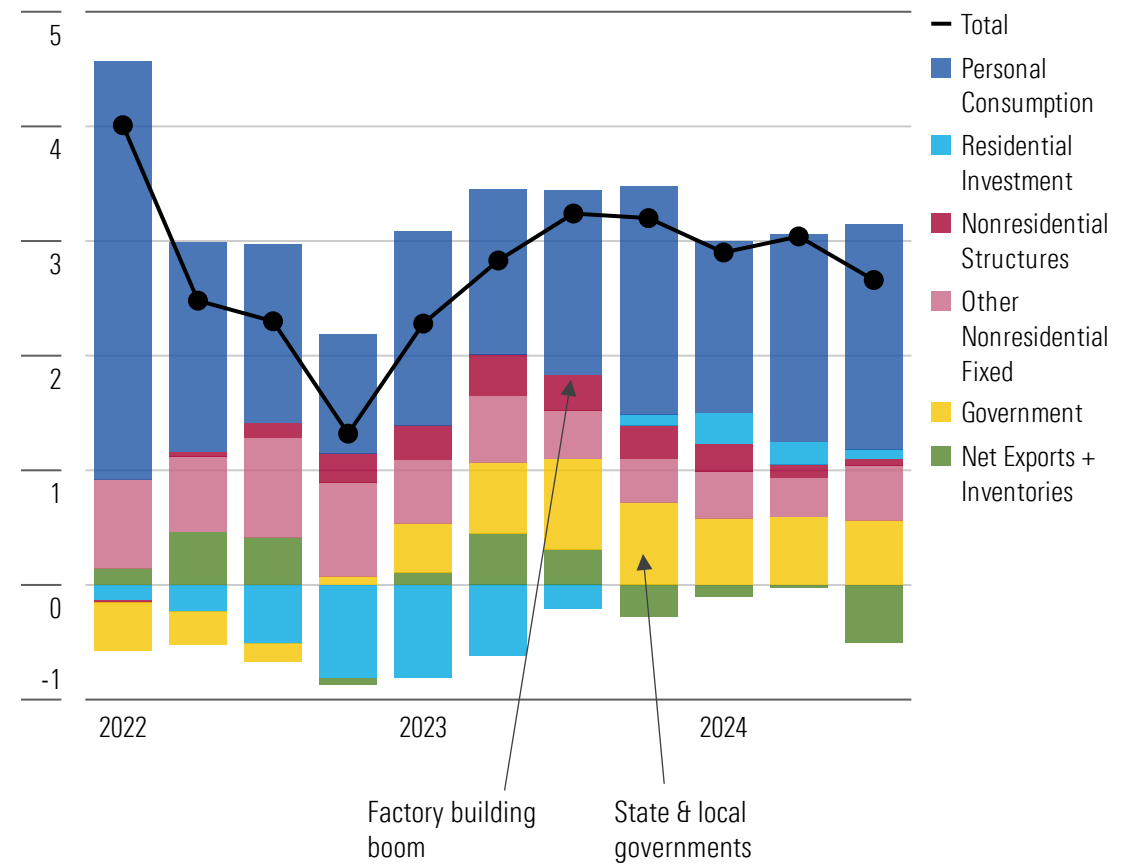
GDP Growth Has Become More Balanced, but Vulnerabilities to High Interest Rates Remain

GDP growth trended down in 2022, as consumers pulled back and residential investment contracted owing to high interest rates. In 2023, consumption growth rebounded, while two other key factors helped to push growth higher. Nonresidential structures investment was propelled higher by a factory building boom. And state and local government spending accelerated owing to spend down of surpluses accumulated during the pandemic.

Those two factors moderated only slightly in 2024. At the same time, consumption growth has strengthened further in 2024, with an absence of upward pressure on the household savings rate as we had seen in 2022 (see Page 22). Housing has also rebounded after dragging on growth in 2023.

As of the third quarter of 2024, growth is fairly balanced across expenditure categories, with personal consumption up 3.0%, nonresidential fixed investment up 3.9%, residential investment up 1.8%, and government spending up 3.4%. Still, the muted response to high interest rates among categories that are normally interest-rate-sensitive (housing, consumer durables) is abnormal. If the Fed cuts in line with our expectations, we expect GDP growth to remain solid. But if the Fed makes few additional rate cuts, we see high risk of a sharper drop in GDP growth (below 1%) some time in the next two years, risking a recession.

Real GDP by Expenditure, % Growth Year Over Year



Supply-Side Expansion Helps Explain Resilient GDP and Falling Inflation

Productivity and Labor Supply Expanding Robustly

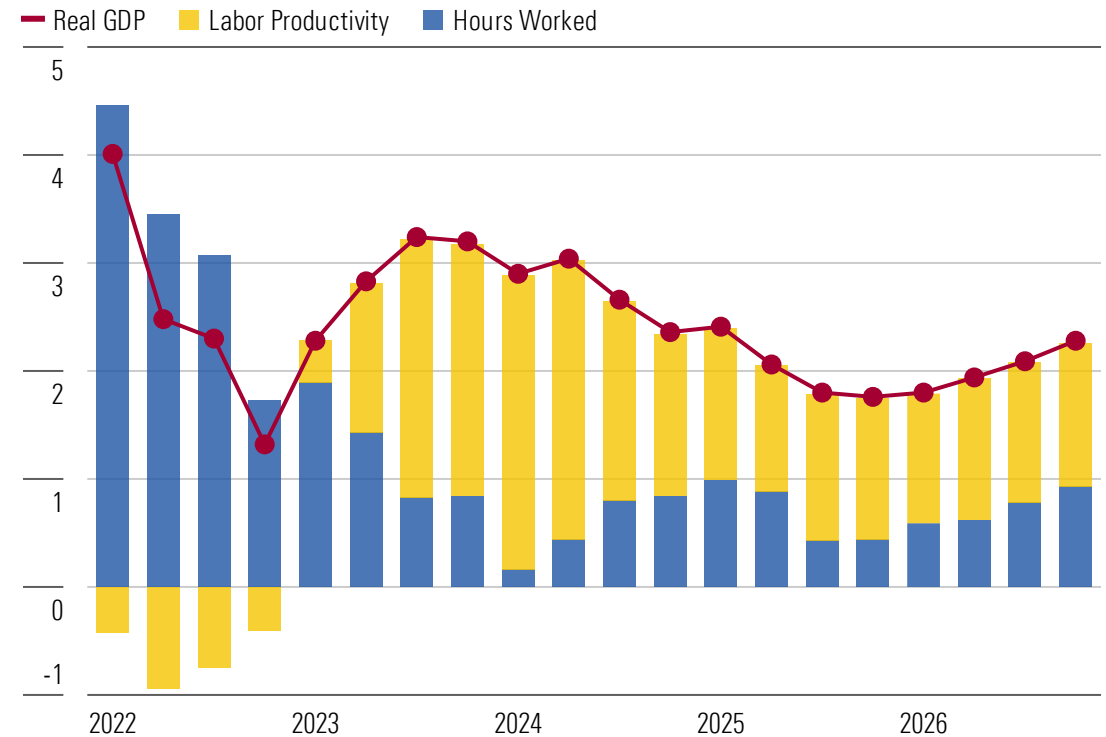
An upsurge of aggregate supply helps explain the paradox of fast real GDP growth despite tight monetary policy and why that fast growth has not stood in the way of falling inflation.

First, productivity has expanded at a fast rate since mid-2023. For 2024 on average, we expect GDP growth at 2.7% and labor input (total hours worked) growth at 0.6%, which translates into productivity growth (output per hour worked) of 2.2%. That's far higher than the pre-pandemic average of 1.0% over 2010-19. The jump in productivity partly reflects the resolution of temporary supply chain issues (rebounding from the productivity dip in 2022). However, a general effort to streamline operations by adopting new technology and methods is also at play, driven by abundant demand and tighter labor markets than most of the 2010s.

Second, an influx of labor supply (driven heavily by immigration) has helped put labor markets back into balance, after the extreme tightness of 2021 through early 2022.

In our view, productivity is capable of persistent growth at around 1.5%, and labor supply can comfortably grow around 1%-1.5% in the next couple of years, making for potential GDP growth of around 2.5%-3% in the next couple of years. Thus, if the Fed can steer real GDP growth slightly below that (as with our forecasts of 2% growth over 2025-26), it should create a modest amount of slack in the economy, ensuring that inflation returns to 2% even without a recession.

GDP by Supply-Side Factor, % Growth Year Over Year



Real Wages Growing Strongly After 2022 Dip

Real wages fell during the 2022 surge in inflation, as inflation outpaced gains in nominal wages.¹ But since then, the fall in inflation has greatly exceeded the drop in wages, so real wage growth has moved into solid positive territory, at about 2.3% year over year as of the third quarter of 2024. That’s a bit above the 1.6% averaged in the 2017-19 prepandemic years.

At the economywide level, the labor share of GDP is related to real wages and productivity (in percentage terms) via the following accounting formula:

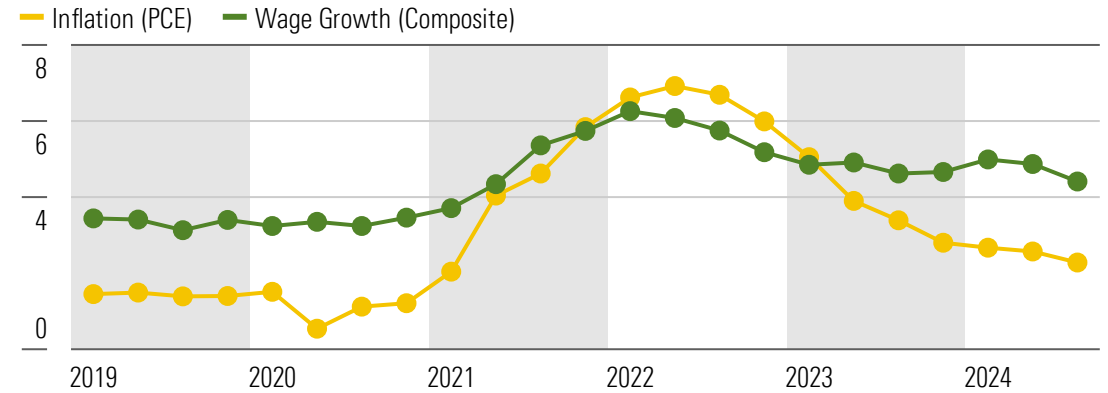
$$\% \Delta \text{ Labor Share} \approx \% \Delta \text{ Real Wages} - \% \Delta \text{ Productivity}$$

While the labor share has bounced back in 2023 on strong real wage growth, it remains about 1.5 percentage points below prepandemic levels.

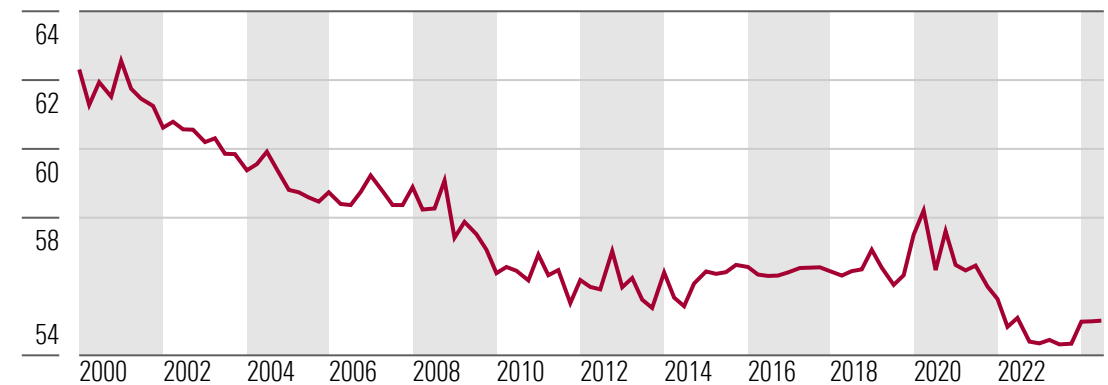
With GDP growth projected to fall over the next year, firms will need to cut back on labor demand, lest productivity suffer. Given solid real wage growth, a decline in productivity growth would push up the labor share of GDP gain at the expense of profits. Admittedly, there’s some room for the labor share of GDP to grow back to prepandemic levels. But we already see signs that firms are moving proactively to contain labor costs and protect profits, as evidenced by the tepid pace of gross hiring and a downtrend in net additions to payrolls.

¹ See Page 31 for details on our composite wage growth measure

Nominal Wage Growth Versus Inflation, % Year over Year



Labor Share (%) of GDP



Trump's Proposed Tariff Hikes Could Cause GDP to Fall by a Combined 1.9%

We've updated our tariff impact analysis originally presented in our [US Economic Outlook: Third-Quarter 2024](#) (Pages 10-14). The probability-weighted impact to the level of real GDP rises to 0.32% from 0.13% previously. That revision mainly reflects the election outcome, since we had placed a 50% probability of a Trump victory. We've also upped our probabilities of tariff implementation conditional on a Trump win, with the 10% uniform tariff hike moving to a 10% probability from 7.5% previously. That's based on recent [saber-rattling](#) from the president-elect on social media.

Still, we think it's more likely than not that tariff threats won't be implemented, especially for the uniform tariff hike. Markets mostly seem to be pricing in the same, given the muted response of stock prices and bond yields to recent Trump rhetoric on the topic. Still, we've shaved 0.3% off our forecasts for cumulative real GDP growth through 2028 to account for the probability-weighted impact.

Higher tariffs would unambiguously reduce real GDP. The degree to which they also impact inflation and other macroeconomic variables is contingent on the fiscal and monetary policy response. For example, if the proceeds from tariffs are used for tax cuts, the tariffs would be more inflationary, or they would lead to higher interest rates owing the Fed's response to inflationary pressures. On the flip side, exchange rate appreciation would dent the inflationary impact of tariffs, at the cost of harming US exporters.

US GDP Impact of Tariff Hike Scenarios

Scenario	Impact (% GDP)	Probability	Probability-Weighted Impact (% GDP)
10% Uniform Hike	1.4%	10%	0.14%
60% on China	0.5%	36%	0.18%
Total	1.9%		0.32%

Consumer Spending

Downtrend not here yet, but we think it's coming.

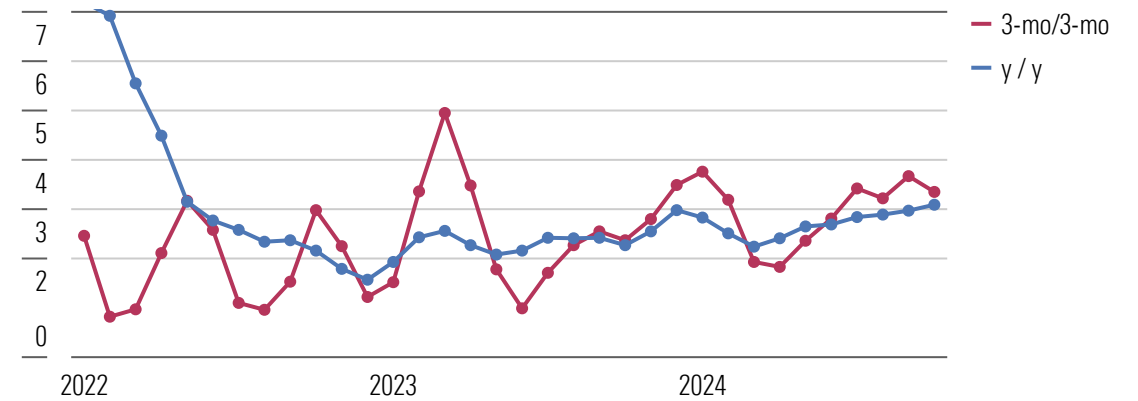
Consumption Is Holding Up Well for Now

Consumption Growth to Slow to 2.0% in 2025 from 2.6% in 2024

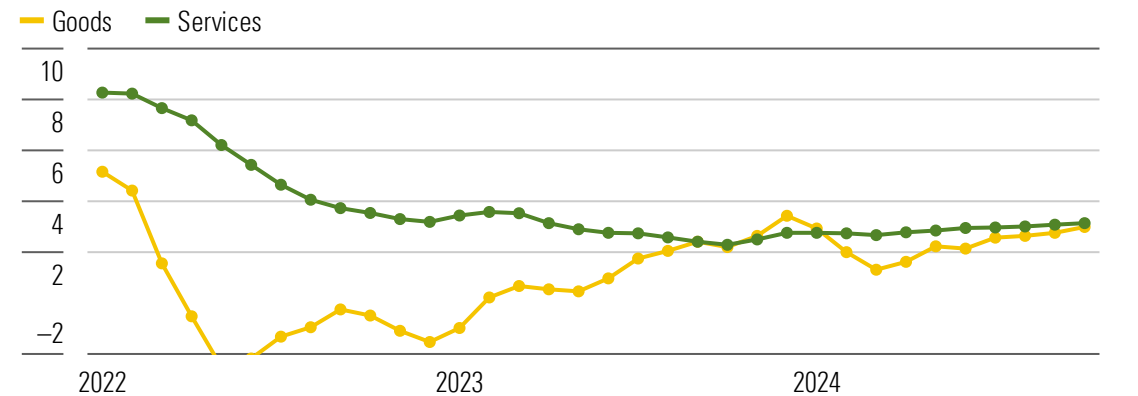
Real personal consumption was up 3.7% in the third quarter (quarter over quarter, annualized). In year-over-year terms, consumption was up 3%, evincing a gradual uptrend compared with early 2024. The uptrend has been driven by a rebound in goods spending growth. The October retail sales data did nothing to dispel this solid picture of consumption growth.

After 2.5% growth in 2023 and 2.6% in 2024, we expect growth in real personal consumption to decelerate to 2.0% in 2025 and 1.9% in 2026. We believe consumers will pull back slightly with the goal of pushing savings rates closer to prepandemic levels.

Real Personal Consumption, % Growth (Annualized)



Goods Versus Services Consumption, % Growth Year Over Year



Exhaustion of Excess Savings Will Push Households to Cut Back on Spending

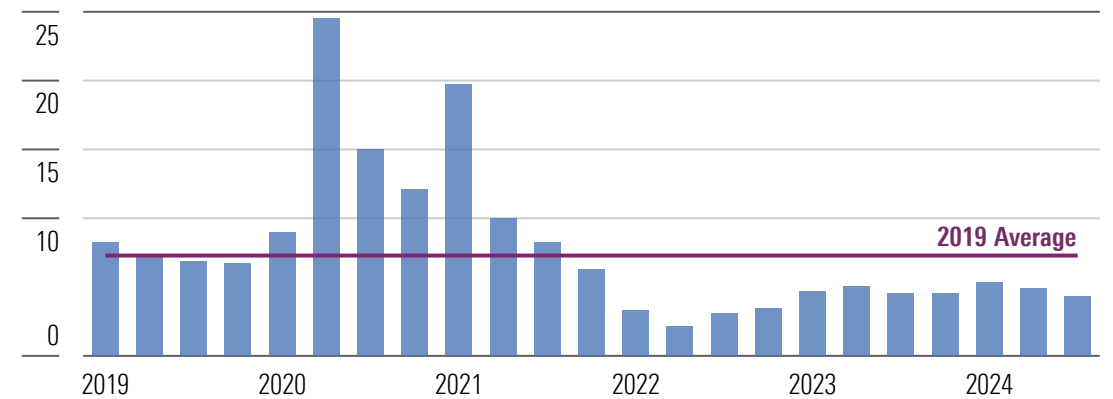
Low Saving Rate Explained by Asset Prices, Excess Savings

While the recent [upward revision](#) to personal income and saving estimates does make consumers look somewhat less spendthrift than before, it's still the case that the savings rates are below pre-pandemic levels. The personal saving rate was a paltry 4.3% in the third-quarter 2024, 3 percentage points below the 2019 average of 7.3% or 2.2 points below the 2017-19 average of 6.5%.

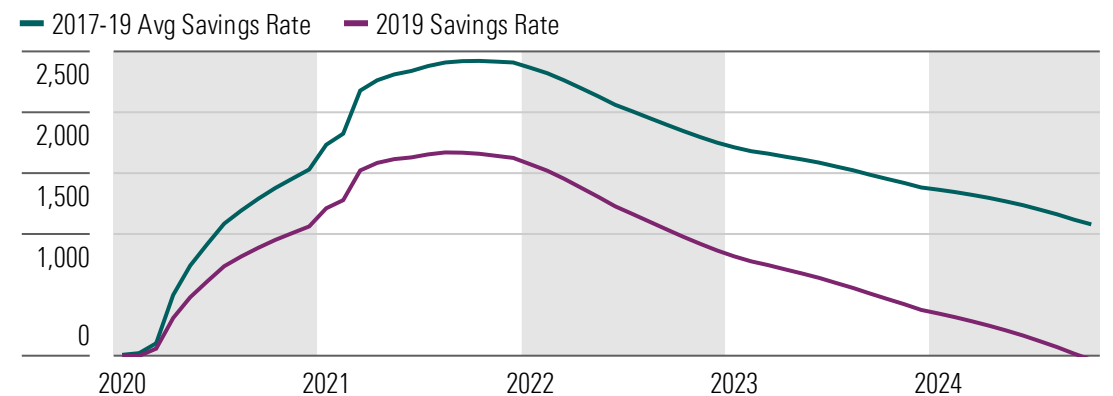
In our [third-quarter 2024 Outlook](#), we estimated that around 1.2 percentage points of the saving rate gap was owing to the wealth effect from high asset prices. We think the rest of the gap is explained by the remaining stockpile of excess saving.

Excess savings are depleting, although the amount of runway left depends on which baseline savings rate you use. Using the 2019 savings rate, excess savings are essentially gone; using the 2017-19 average rate, households still have another two years left. However, it's also quite likely that remaining excess savings are heavily concentrated among higher income households. Rising credit card and auto loan delinquencies also point to stress at the lower end of the income distribution.

Personal Saving Rate (%)



Estimates of Excess Savings, \$ Billion

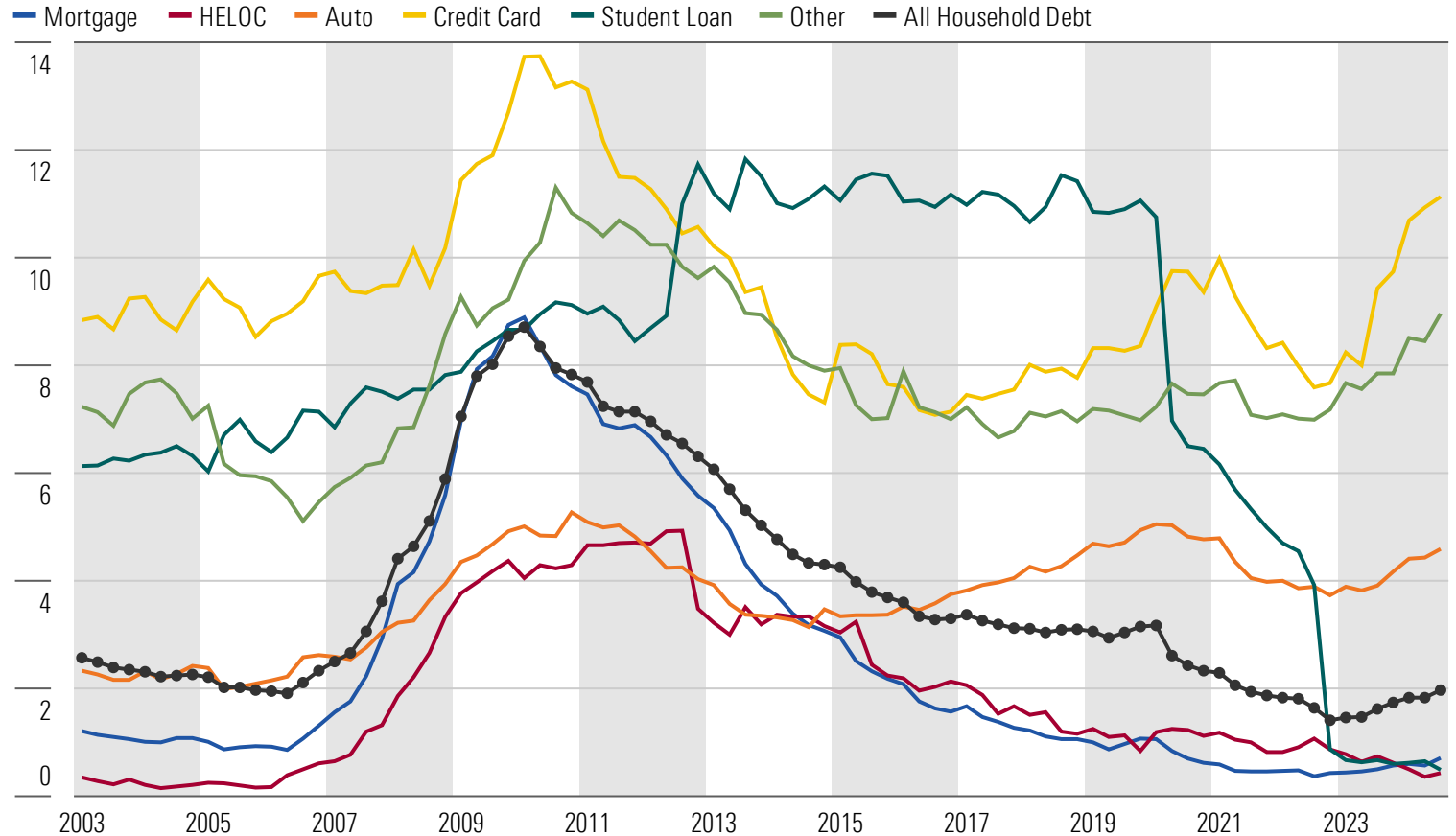


Delinquencies on Household Debt Continue to Rise

The delinquency rate on all household debt is still below prepandemic levels. This is driven greatly by student loans, where borrowers benefited from a three-year moratorium that ended in October 2023 and other relief programs. Mortgage delinquencies are still slightly below prepandemic levels, with a large share of borrowers having locked into low rates during the pandemic.

However, forms of borrowing more sensitive to market interest rates have shown a worrying rise in delinquencies. Auto loan delinquencies have risen steadily over the past two years and now stand in line with prepandemic levels. Credit card delinquencies are now nearly 3 percentage points above prepandemic levels.

Household Debt: Percentage of Loan Balance 90-Plus Days Delinquent



Source: New York Fed/Equifax Consumer Credit Panel, Morningstar.

Investment

Investment to drop as factory building boom subsides.

Private Fixed Investment Likely to Slow in 2024 Under Strain of Higher Rates

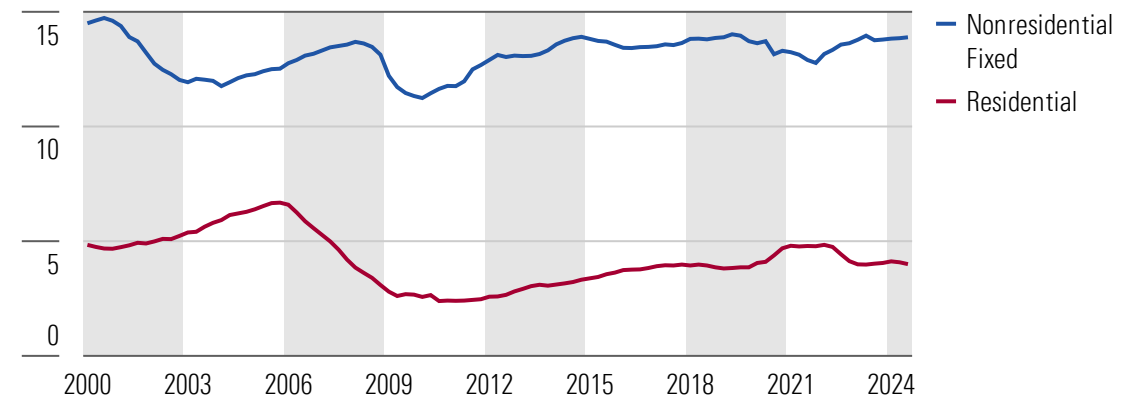
Residential Investment Helped Offset the Pandemic Downturn

Investment spending is a major amplifier of booms and busts in the archetypal business cycle, and it certainly played that role in the two recessions preceding the pandemic. However, the largest Fed rate hikes in 40 years have not deterred investment spending. Residential investment backed off pandemic-era highs but stands no lower as a share of GDP than before the pandemic.

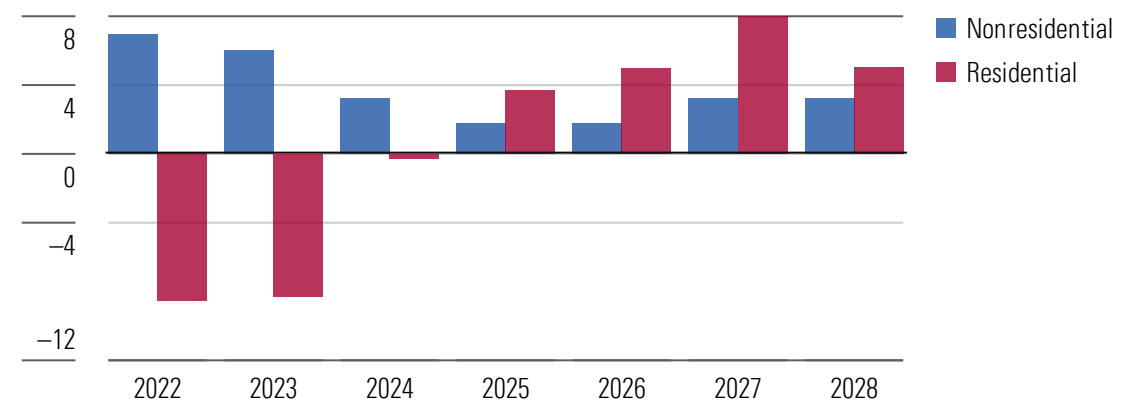
In the typical US business cycle, falling residential investment is the key initiator of the downturn. By contrast, it's not surprising that business investment hasn't yet fallen, as it tends to lag the business cycle. Businesses often behave as if their cost of capital is insensitive to short-term interest-rate fluctuations. However, as a nascent downturn cuts profits, businesses reduce investment.

Business fixed investment growth is set to drop from 6.0% in 2023 to 3.7% in 2024. We expect to fall further to 1.8% in 2025 as businesses respond to the overall decline in economic activity by cutting investment, and weakness in commercial real estate continues to play out. Rebounding economic activity from consumption and homebuilding should push nonresidential investment to grow strongly again over 2026-28.

Private Fixed Investment, % Share of GDP



Real Private Fixed Investment, % Growth

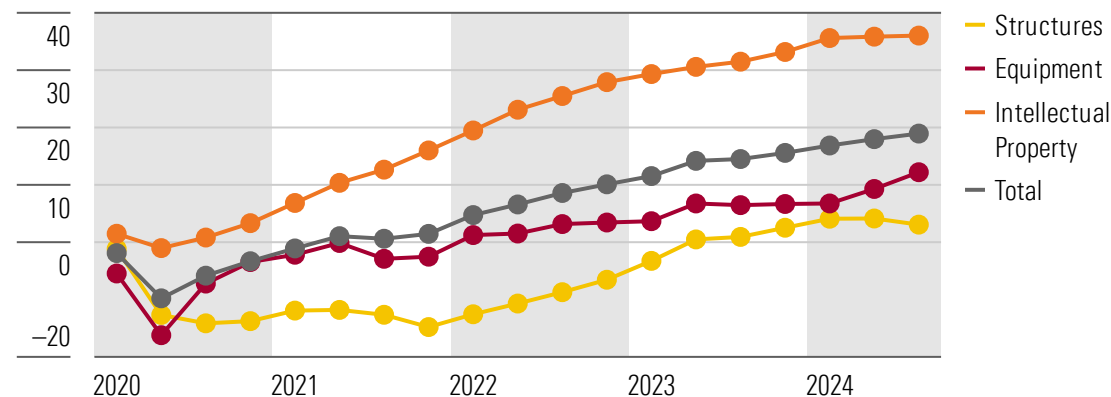


AI-Hype Isn't (Yet) Driving Strong Growth in Business Investment

Artificial Intelligence Hype Not Yet Creating an Investment Boom

Within business fixed investment, intellectual property is up 3.5% year over year, driven primarily by software. This is tepid compared with prepandemic average (2017-19) growth rate of around 7%. Cumulative growth since the start of the pandemic, while strong, is merely in line with the prepandemic trend. Likewise, IT-related equipment investment has merely grown in line with the prepandemic trend. The recent uptick in overall equipment is mostly driven by a catch-up in transportation equipment spending. Hence, the feverish hype around artificial intelligence isn't yet driving a significant increase in aggregate investment spending.

Nonresidential Fixed Investment (Real), % Cumulative Growth Versus Q4 2019

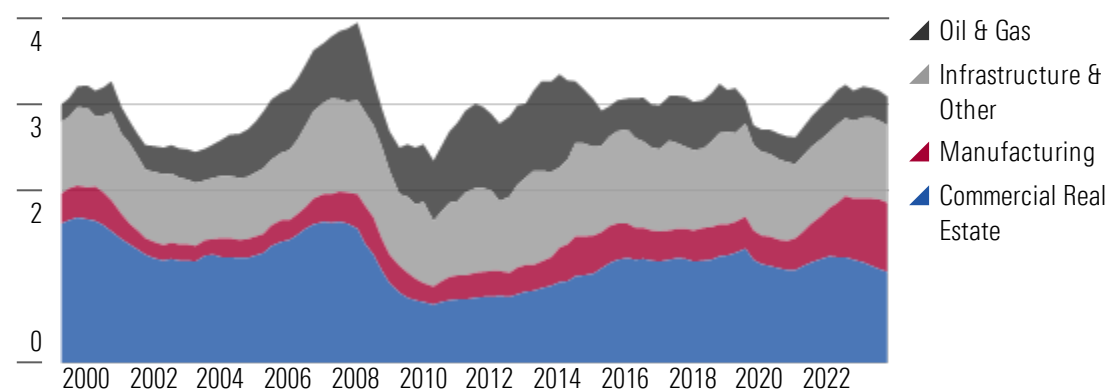


Commercial Real Estate Weakness to Weigh on Structures Investment

Total spending on commercial real estate structures stood at 1.1% of GDP in the third quarter, down about 0.1% compared with a year ago. We expect further reduction in commercial real estate construction, particularly office construction, which is about 0.3% of GDP.

Spending on manufacturing structures has exploded to 0.8% of GDP, up from 0.4% as of 2019 and its highest level since 1981. This has been driven primarily by clean energy (namely batteries) and semiconductors. However, the factory building boom is plateauing in impact and will likely ramp down in 2025 and 2026 as projects are near completion.

Nonresidential Structures Investment, % Share of GDP

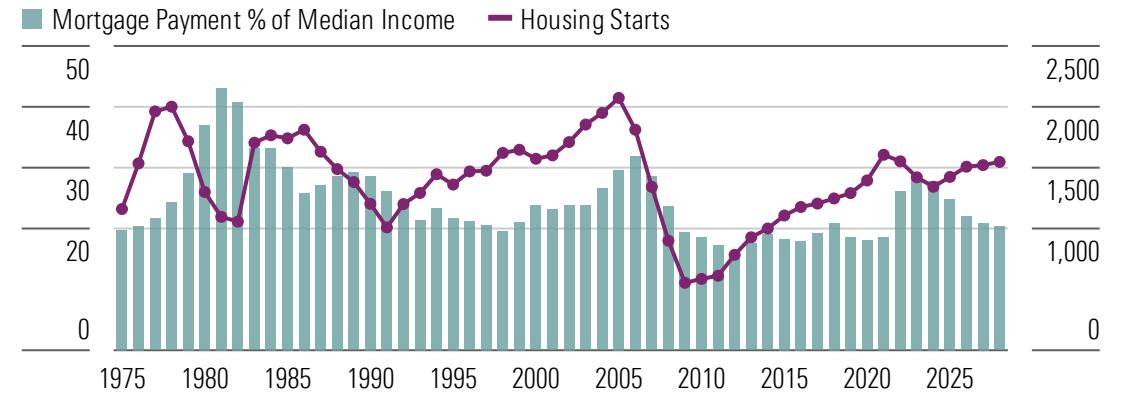


Large Drop in Mortgage Rates Needed for Lasting Housing Recovery

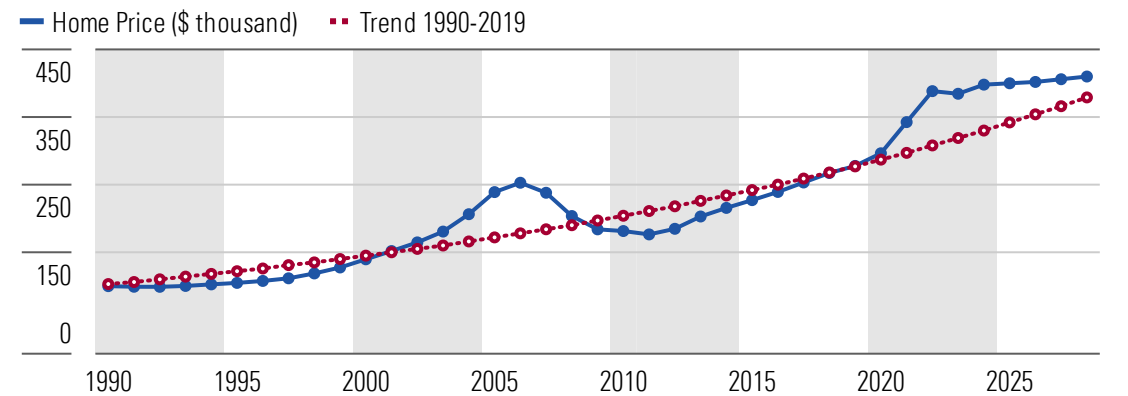
Housing starts in 2024 are down 13% compared with the recent 2022 peak, but that's still 4% above the 2019 level. Given the massive deterioration in housing affordability, we might expect housing demand and activity to be much weaker. Mortgage rates soared to an average of 6.8% in 2023 (and are averaging 6.75% in 2024) versus 3.9% in 2019. The cumulative 40% runup in housing prices since the start of the pandemic has also greatly exceeded income growth. Altogether, the median mortgage payment as a share of household income has risen from 19% in 2019 to 28% as of 2024—the highest since the housing boom peak in 2005-07.

Current homebuyers are mostly placated by the hope of refinancing on an eventual drop in mortgage rates. Mortgage rates will have to fall drastically to justify those hopes—and justify very elevated home prices. If the Fed does not drive down mortgage rates as we expect, then another leg down for housing prices and activity is very likely in our view. Even with monetary easing, we expect tepid home price growth averaging about 1% over 2025-28. That will combine with lower mortgage rates to ease housing affordability and push price/rent ratios almost back to prepandemic levels.

Housing Affordability Versus Housing Starts



Housing Price Forecast



Labor

Recessionary fears have dissipated, but slowdown still coming.

October Data Noisy, but Downtrend in Job Growth Is Evident

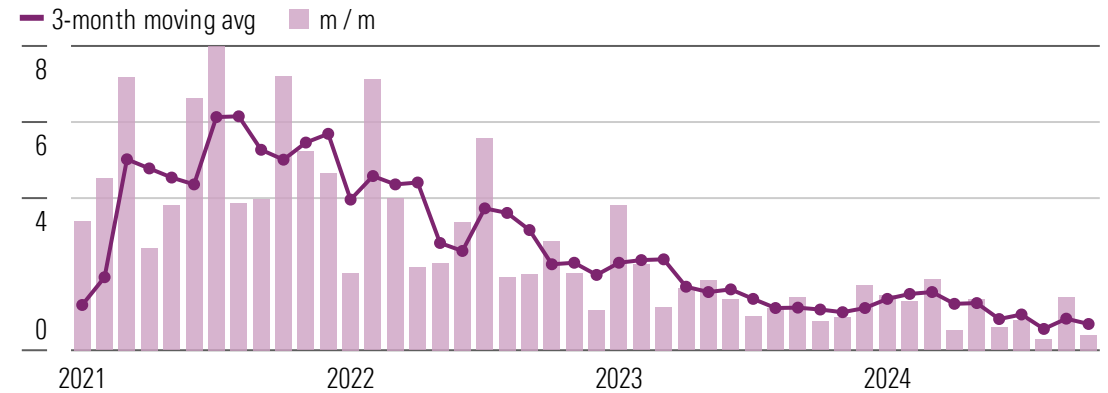
Population Undermeasurement Helps Explain Labor Data Discrepancy

Nonfarm payroll employment grew by a paltry 90,000 jobs in October, but we shouldn't read much into that given the impact of temporary disruptions (strikes, hurricanes). Still, the latest data brought downward revisions to job growth for August and September. Because of that, the three-month growth rate for nonfarm payroll employment dropped to 0.8% annualized as of September. That's a step below the 1.1% pace averaged over the second half of 2023 and first half of 2024. So, the data does point to an ongoing downtrend in job growth.

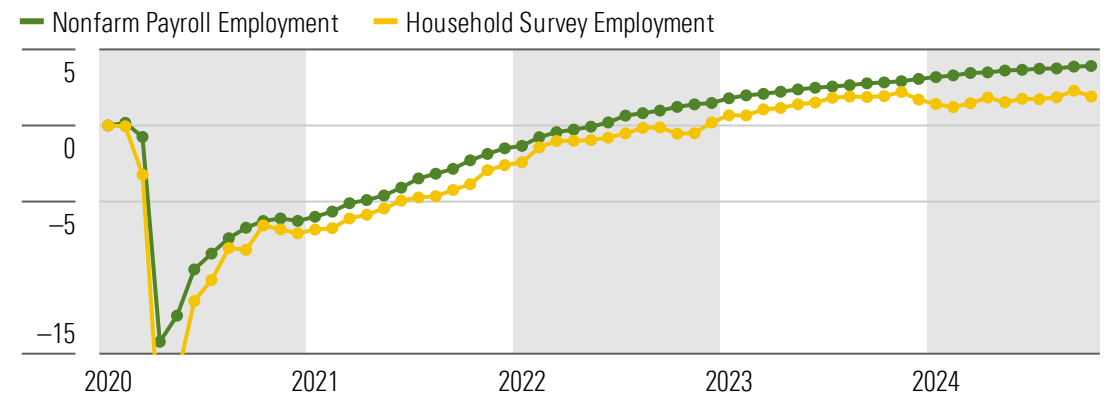
Our population growth estimates (page 10) suggest that the Current Population Survey (derived from Census data) has underestimated adult population growth by a cumulative 1% over 2023 and 2024. The [Current Population Survey](#) (or "household survey") is used to compute the unemployment rate, labor force participation, and other indicators. Employment has expanded by a cumulative 1.9% since January 2020 according to the household survey, while nonfarm payrolls (according to the establishment survey) have expanded by 3.9%. Thus, about one-half of that 2-percentage-point gap is attributable to underestimated population growth in the household survey. The remainder could represent underestimation of labor force participations gains or overestimation of the unemployment rate. Alternatively, it could be that nonfarm payroll growth is still being slightly overestimated.

1 Our estimates make an adjustment for the BLS' [preliminary benchmark announcement](#) that will be incorporated in the official data in February 2025. This adjustment subtracts about 0.2% from the current annualized rate of nonfarm payroll growth.

Nonfarm Payroll Employment¹, % Growth (Annualized)



Nonfarm Payrolls vs. Household Employment, % Cumulative Growth



Labor Market Isn't Sending Recessionary Signal, But Tightness Has Dissipated

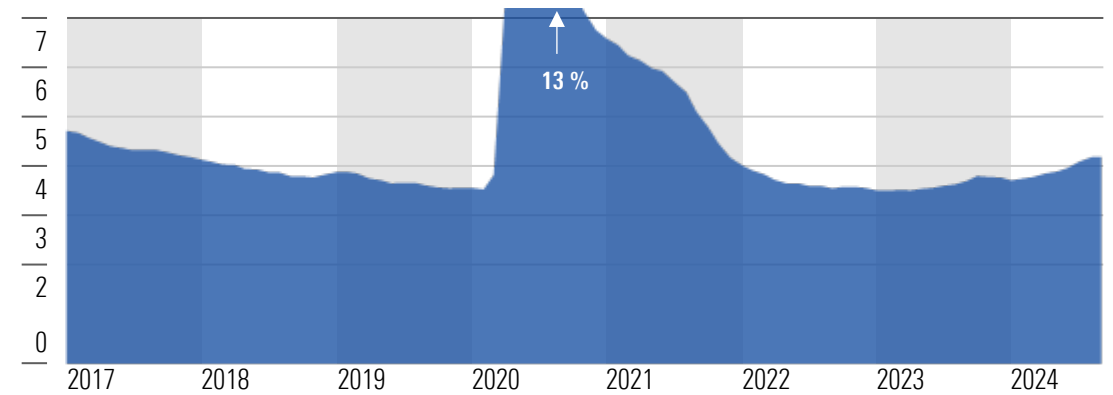
Supply and Demand Have Come into Better Balance

The three-month average of the unemployment rate has ticked down to 4.1% as of October, after reaching 4.2% in August 2024 (which had climbed from 3.6% in August 2023). That latter event had triggered the “Sahm rule,” which says that any tough-to-peak increase in the three-month average unemployment rate of 0.50 percentage points within a 12-month period has always led to a US recession. Now, the Sahm rule is officially untriggered, and markets’ recessionary fears have diminished in recent months.

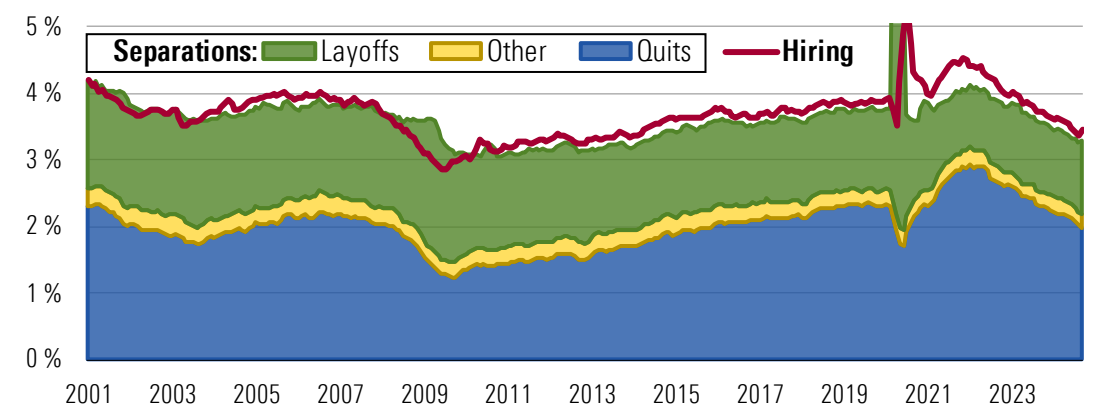
We were never highly worried by the Sahm rule’s triggering, as the increase in unemployment over the past year seems to have been driven by increased labor supply. The layoff rate remains near historical lows, at 1.1%, a tick below the prepandemic (2019) average of 1.2%. Thus, we don’t have a vicious cycle of layoffs leading to household spending cuts, which begets further layoffs.

It is true that labor demand has dropped considerably. The gross hiring rate stood at 3.4% in September, down from a peak of 4.5% in late 2021 and versus the 2019 average of 3.9%. That’s mostly translated into a fall in quits rather than a fall in net hiring, as the frantic job hopping of 2021-22 has disappeared. Net additions to the workforce have come by more easily, as labor supply has been expanded by the population boom over 2023-24. Altogether, the labor market tightness seen in 2021-22 is entirely gone thanks to the drop in labor demand and improvement in labor supply.

Unemployment Rate, % Three-Month Moving Average



Gross Hiring and Separations (% of Employment)

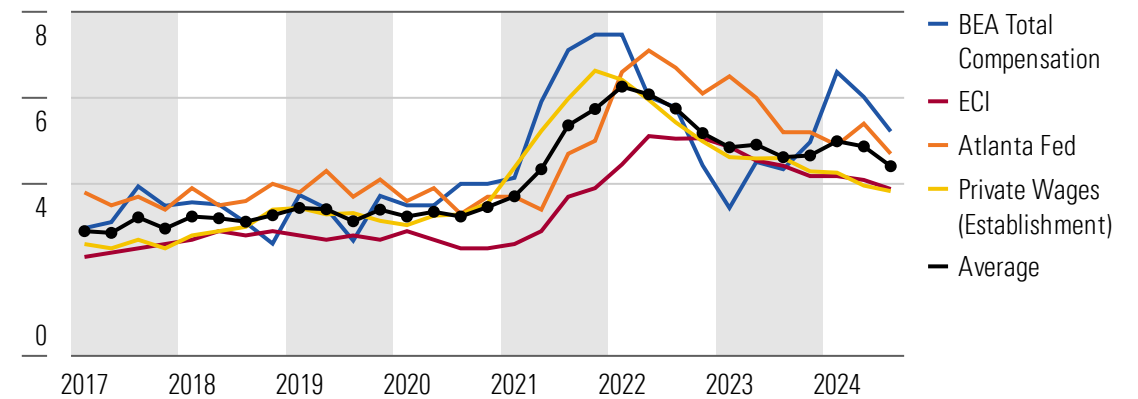


Wage Growth Is Nearly Back to Normal

Wage Growth at 4.4% Year over Year in Q3

Our composite measure of wage growth stood at 4.4% year over year in the third quarter 2024, down markedly from the peak of 6.3% in the first quarter of 2022. Assuming productivity growth of 1.5% and a constant labor share of GDP, 4.4% wage growth is consistent with inflation running at 2.9%. If the labor share expands a bit, we could see a period where inflation returns to normal even though wage growth remains slightly elevated. Regardless, given our expectations of further cooling in the labor market over 2025-26, we expect wage growth to converge back to levels consistent with 2% inflation.

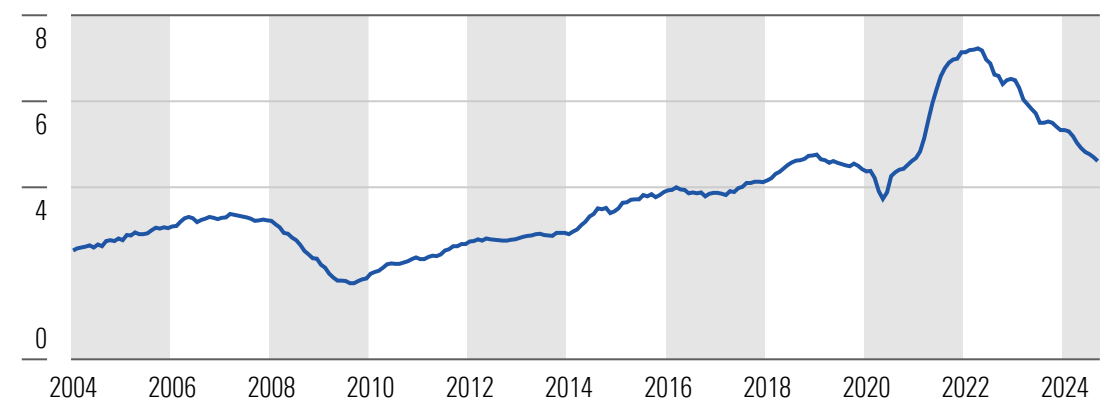
Wage Growth Measures, % Year Over Year



Job Openings Rate Is Back to Normal

The job openings rate has dropped to a three-month average of 4.5% as of September, which is right in line with the 2019 average. That marks a hefty drop compared with the recent peak of 7.3% in April 2022, which was the highest rate since the data began in 2001. This is another indicator that labor market excesses have been corrected. In contrast to many economists' predictions, the job openings rate returned to normal without a massive uptick in unemployment.

Job Openings Rate (3-Month Average)



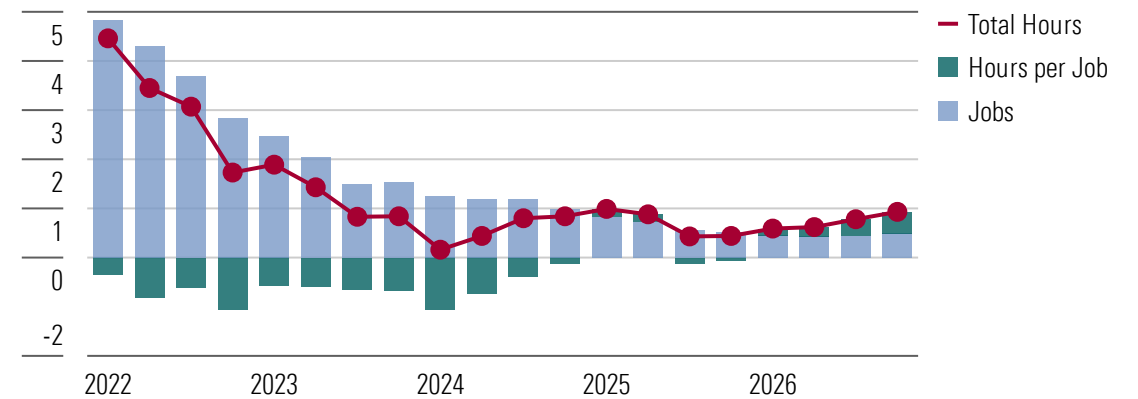
Falling GDP Growth and Limited Room to Cut Hours Should Push Job Growth Lower Through 2026

Employment Growth to Dip Below Normal by Second Half 2025

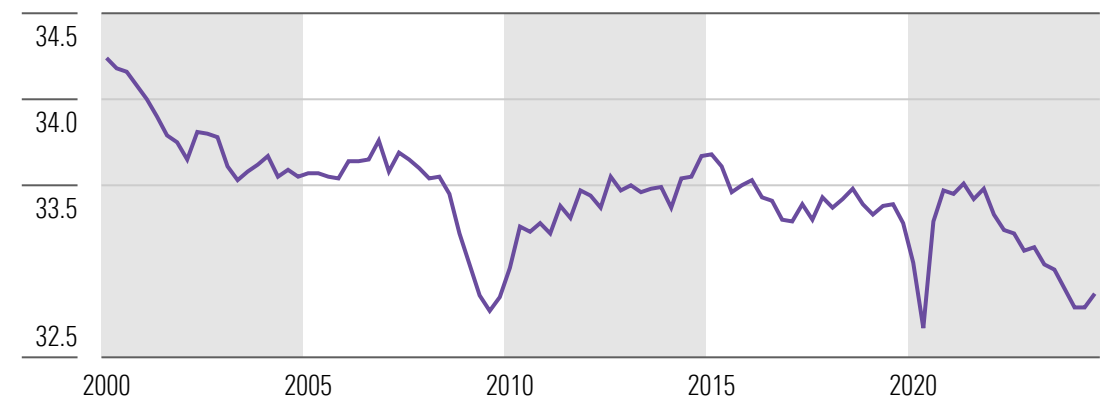
As mentioned on Page 18, despite the brisk pace of GDP growth in 2024, growth in labor input has been meager, as productivity growth has been high. For 2024 on average, we expect total hours worked will have grown 0.6%. While jobs (nonfarm payroll employment) have grown about 1.2% in 2024, that's been offset by a 0.6% decline in average weekly hours per job.

Over 2025-26, with our expectations of declining GDP growth, firms will need to maintain a subdued growth rate in total hours worked, lest labor costs cut into profits. Firms don't likely have much more room to cut hours, with average hours having decreased to historical lows. We expect average hours to stop declining in 2025. Thus, to abate growth in labor costs, firms will have to curb net hiring in 2025. We expect growth in nonfarm payroll employment to drop to 0.5% year over year by the fourth quarter of 2025 and remain at that rate through 2026. Though still positive, that's well below a normal pace, and given the downward trend, it should set off alarm bells for the Fed to loosen monetary policy aggressively in 2025 and into 2026.

Total Hours Worked, % Growth Year over Year



Average Weekly Hours Worked per Employee

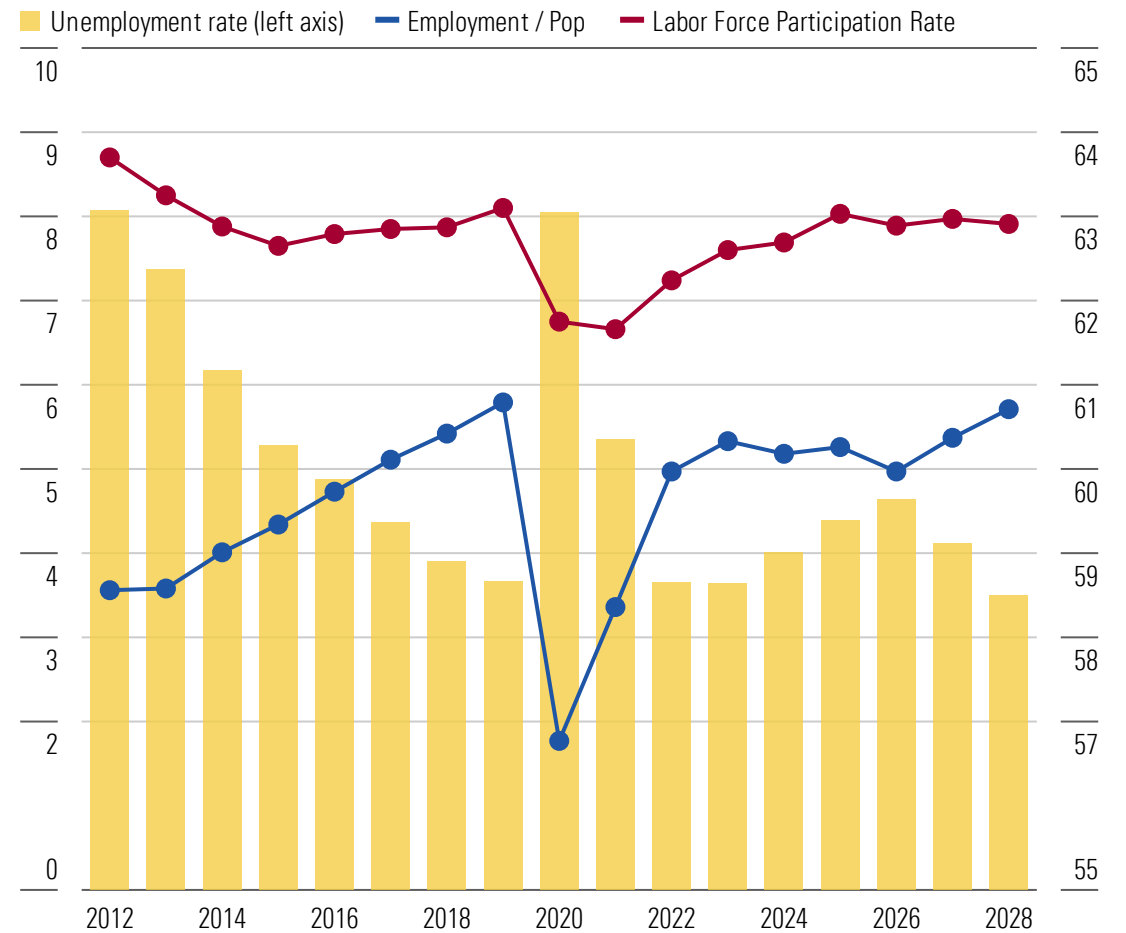


Labor Market Weakness Ahead, Followed by Rebound When Economic Growth Restarts

With employment growth slowing, we expect the unemployment rate to rise to 4.4% on average in 2025 and 4.6% in 2026, up from an average of 3.6% in 2023 and an average of 4.0% in 2024. This would be quite mild compared with US economic slowdowns in recent decades, which is consistent with our expectation that the US will avoid a recession. Nonetheless, this cooling of the labor market should be sufficient to return wage growth back to normal. Our unemployment forecast is slightly higher than consensus, which projects 4.2% in 2025-26 (Survey of Professional Forecasters).

We expect labor markets to recover as economic growth reaccelerates, with the unemployment rate hitting 3.5% (where it was before the pandemic) by 2028. We project a 2028 labor force participation rate of 62.8%, which is 170 basis points higher than the rate yielded by taking 2019 age-specific labor force participation rates and projecting forward with an aging population. Thus, our forecasts actually imply substantial labor force expansion. Our thesis was laid out in detail in our [US Economic Outlook: Second-Quarter 2021](#) (Page 18). As had been occurring over the 2015-19 period, job availability is drawing formerly discouraged people back into the labor force. Furthermore, labor force participation rates should be boosted as new immigrants continue to be onboarded into the workforce. According to [research](#) drawing on BLS data, new cohorts of immigrants typically start with about a 50% labor force participation rate in the first year, but this typically rises well above 70% a few years afterward.

Labor Market Forecasts



Inflation

Inflation still normalizing, though tariffs would jeopardize that.

Inflation Should Continue to Moderate as Housing and Other Categories Come Down

Inflation to Average 1.9% Over 2025-28

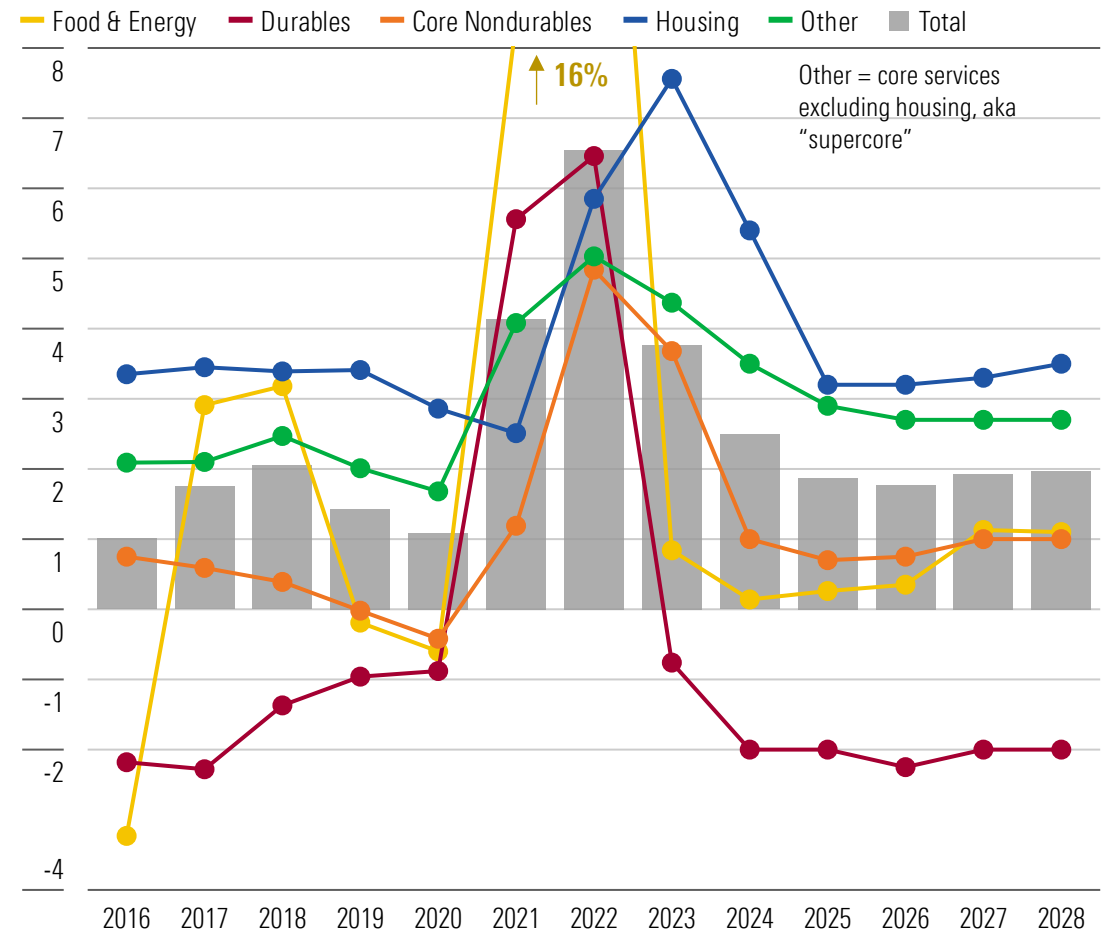
After soaring to 6.6% in 2022 (the highest since 1981), inflation dropped to 3.7% in 2023 and is likely to post at 2.5% for 2024. Altogether, we project an average inflation rate of 1.9% over 2025-28.

Housing inflation should drop considerably in 2025. Easing supply constraints should continue to exert downward pressure on durable goods¹ and other areas. The slowdown in GDP growth that we expect for 2025 and 2026 should add slack into the economy, helping to reduce inflation economywide. This effect will partly channel through the labor market, where we expect further cooling to slow wage growth.

Altogether, we've upped our expectations for inflation over 2025-28 by a cumulative 0.2% owing to the probability-weighted impact of higher tariffs, slightly below the 0.3% negative impact to real GDP growth. Full implementation of the tariffs would probably push the price level up by 1%-2%. Changes in immigration policy could also be inflationary, but we're skeptical that mass deportations affecting wide swaths of the workforce will be implemented.

¹ Note that the BEA/BLS adjust for quality improvements, which means that durable goods inflation usually runs significantly below changes in unit prices.

PCE Inflation Forecast: Key Components (% Growth)



Inflation Is Close to Returning to Normal

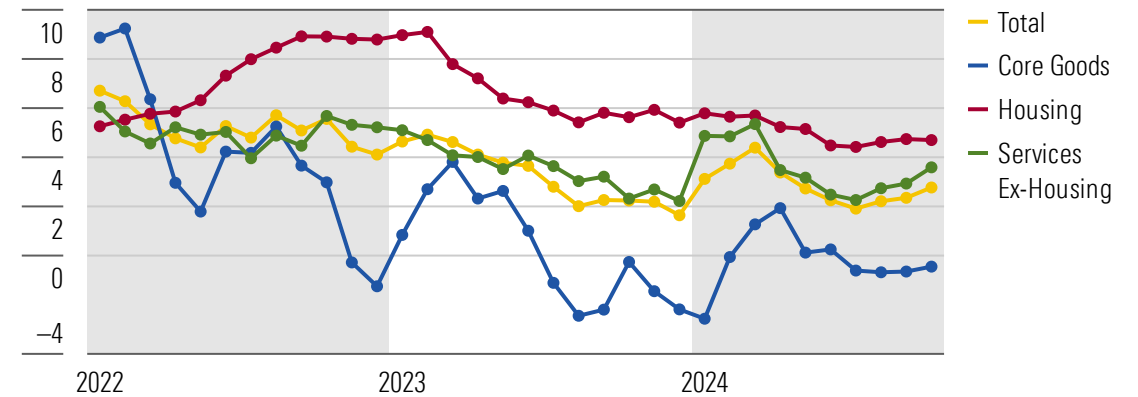
Core Inflation Ticks Up Slightly in Last Three Months

Core inflation was 2.8% annualized in the three months ending in October. That's a moderate uptick from 1.9% as of July, though still far milder than the 4.4% rate as of March 2024. The recent uptick has been driven by an increase in inflation in core services excluding housing, along with the fact that housing inflation remains stubbornly high.

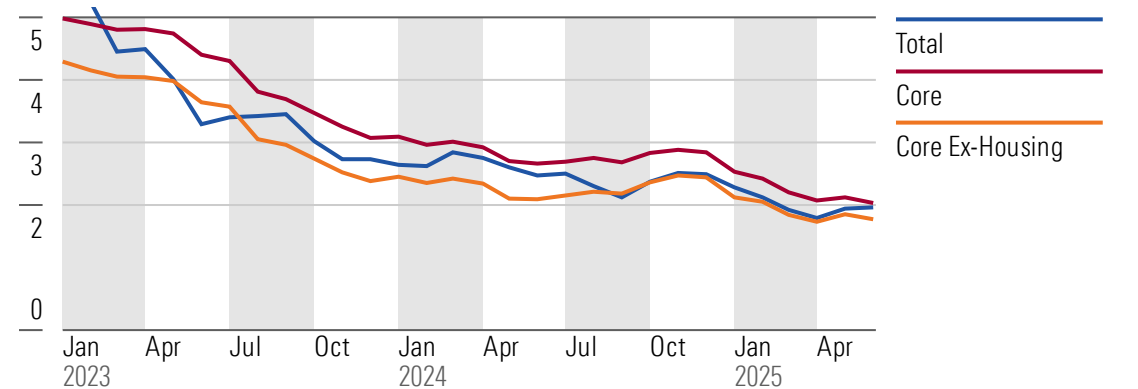
In year-over-year terms, core inflation stands at 2.8% as of October, while overall inflation is 2.3%, with the latter pushed lower by falling energy prices. Core inflation excluding housing is 2.3% year over year, showing that housing is the main driver of inflation's remaining deviation versus the 2.0% target.

We expect core personal consumption expenditures, or PCE, to recede to 2.2% year over year by March 2025 and 2.0% by June. At that point, the Fed will be able to declare mission accomplished in its battle against high inflation. We don't expect the first quarter 2025 to see a repeat of the jump in prices seen in the first quarter of 2024. Moreover, housing inflation should gradually normalize, as indicated by leading edge data on market rents.

Core PCE Components (Three-Month % Change, Annualized)



PCE Inflation Forecasts Monthly, % Growth Year over Year



Housing Inflation Should Recede, Based on Leading-Edge Data

Market Rent Inflation Is Already Rapidly Decelerating

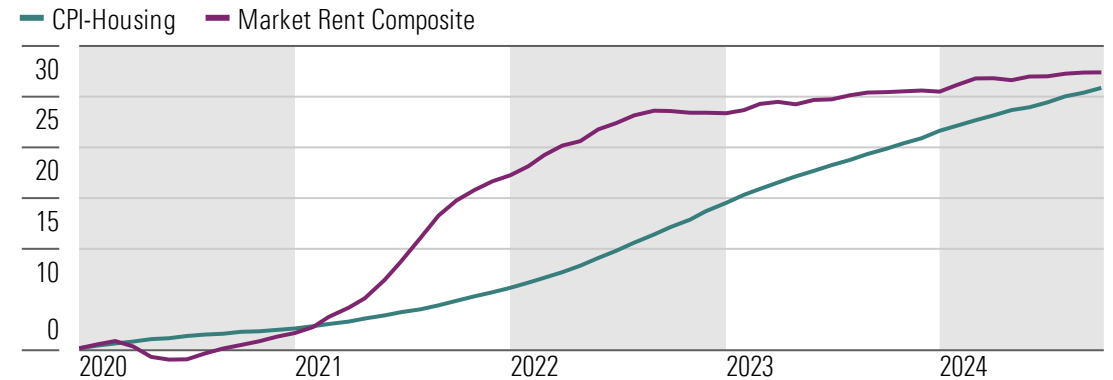
The housing component of the main price indexes (the CPI and PCE) responds with a substantial lag concerning market conditions. Because of this lag, official shelter inflation is still high compared with prepandemic levels, owing to the accumulated runup in market rents since 2021.¹ But market rent growth has decelerated sharply in response to falling housing demand and expanding apartment supply, standing at about 2% year over year as of June. The accumulated gap between market rents and the housing inflation index is closing. This will cause housing inflation to inevitably fall from current levels (5.3% year over year). The exact timing is somewhat uncertain, but we expect a gradual decline over the rest of 2024 and 2025.

Supply Chain Conditions Still Loose

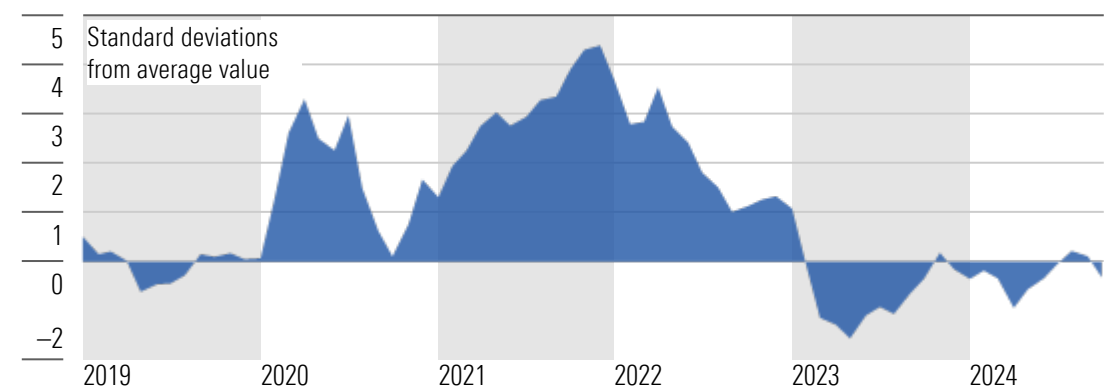
The New York Fed's [Global Supply Chain Pressure Index](#) (which captures ocean shipping costs and delivery times, among other indicators) still shows supply chain conditions as loose as before the pandemic. Recent disruptions to the Red Sea and elsewhere (along with heightened shipping demand in anticipation of potential 2025 tariffs) have caused container freight rates to tick up, but it's not nearly as bad as the 2021-22 runup. Other types of freight costs or metrics like shipping backlogs show fairly loose supply chain conditions.

¹ Our market rent composite measure includes the Zillow Observed Rent Index, CoreLogic Single-Family Rent Index, and Apartment List Rent Indexes.

Rent Inflation Measures, % Cumulative Change Versus January 2020



Global Supply Chain Pressure Index (New York Fed)



Monetary, Fiscal, and Financial

We project more rate cuts than market expectations.

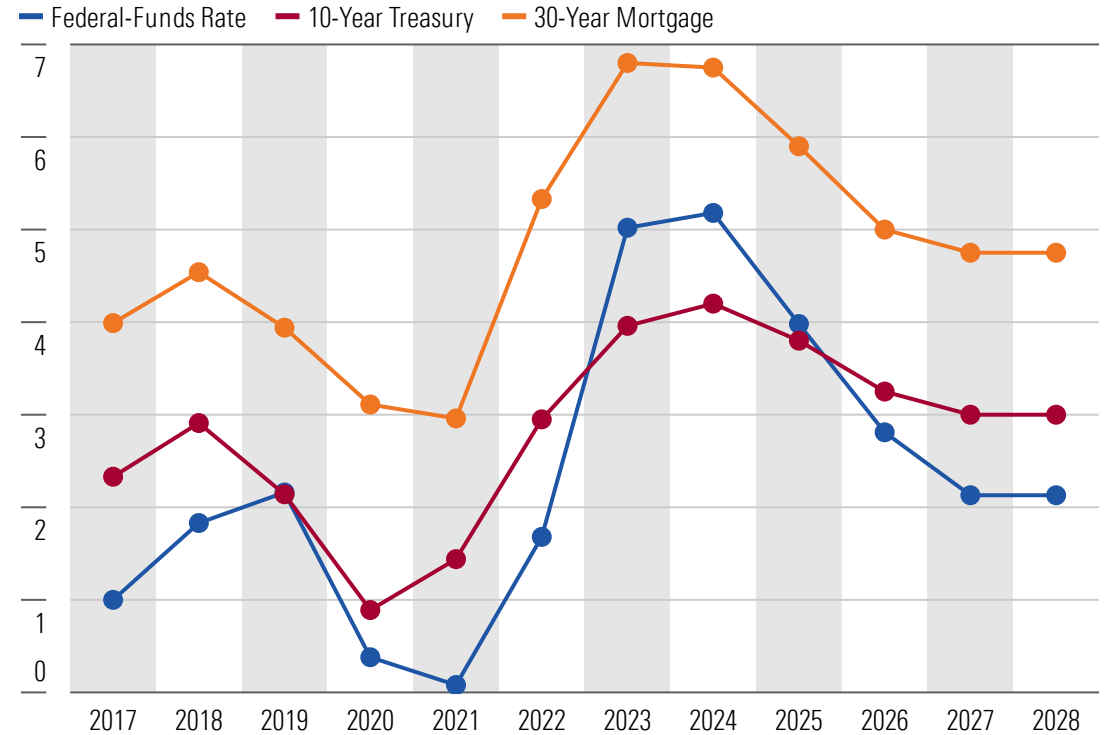
Fed to Drive Interest Rates Lower in Order to Maintain Solid Economic Growth

We Project a 10-year Treasury Yield of 3.00% in 2027 and Later Years

We expect the Fed to cut the fed-funds rate aggressively in coming years, with cumulative rate cuts from September 2024 through end-2026 of 325 basis points. We expect the 10-year Treasury yield to drop from 4.3% currently to an average of 3.25% in 2026 and 3.00% in 2027, which is our long-run expectation. With inflation returning to normal, the Fed’s priority is shifting to maintain economic growth in line with the economy’s potential, which will require substantially lower interest rates, in our view.

While the path of interest rates over the next couple of years is mainly contingent upon the cyclical status of the economy, our long-term interest-rate projections are driven by secular trends. Factors such as aging demographics, slowing productivity growth, and increasing inequality have acted to push down real interest rates for decades, and these forces haven't gone away. The low-interest-rate regime will resume once the dust settles from the pandemic economic volatility. Our long-term views and monetary policy framework are detailed in our [US Outlook for Interest Rates, Inflation, and Monetary Policy](#).

Interest-Rate Forecasts (Annual Average)



(%)	2024	2025	2026	2027	2028
Fed Funds Rate	5.18	4.00	2.81	2.13	2.13
10-Year Treasury	4.20	3.80	3.25	3.00	3.00
30-Year Mortgage	6.75	5.90	5.00	4.75	4.75

The Fed's Aggressive Rate Cuts Are Proceeding

We Expect More Cuts Than The Market

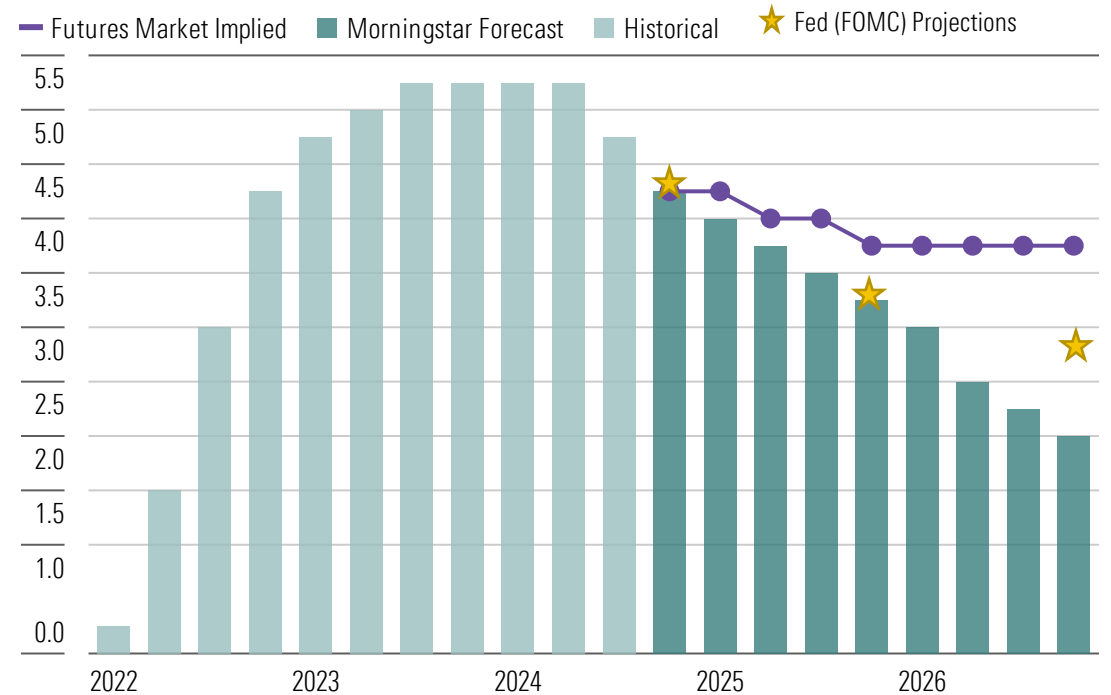
We expect the Fed to proceed with another rate cut in December 2024, bringing the federal-funds rate to a target range of 4.25%-4.50%, down from 4.50%-4.75% currently and the plateau of 5.25%-5.00% which had prevailed from July 2023 through September 2024. We project the federal-funds rate to drop to 3.25%-3.50% at end-2025 (four cuts) and 2.00%-2.25% at end-2026 (five cuts).

While the moderate uptick in inflation in the past few months provides some argument for a pause, inflation is still not far from the Fed’s target, and labor market data still provides some room for concern around downside risks. We expect the Fed to cut in December but skip in January 2025. In 2025, we expect cutting in an every-other-meeting cadence. Falling inflation and slowing economic growth will call for continued cutting of the federal-funds rate, albeit at a measured pace, given the Fed’s uncertainty about the location of the natural rate of interest.

Market expectations for the federal-funds rate path have shifted significantly since late September, with expectations for the year-end 2025 federal-funds rate moving up by around 100 basis points. We think the market is projecting a terminal rate that’s too high, reflecting an overestimate of the natural rate of interest. We wrote about the dangers of keeping rates too high for too long in our [US Financial Health Report 2024](#).

Federal-Funds Rate Expectations, %

Bottom of Target Range



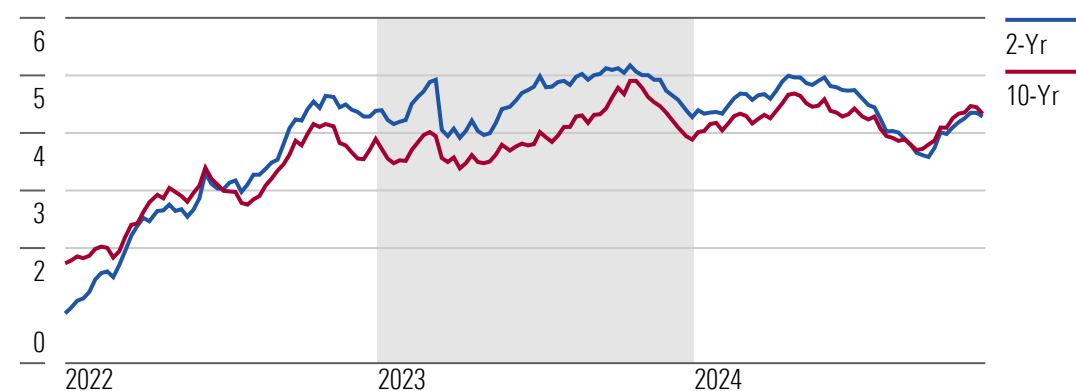
Federal-Funds Rate (%)	2024	2025	2026
Year End, Bottom of Target Range			
Morningstar	4.25	3.25	2.00
Market-Implied	4.25	3.75	3.75
Fed (FOMC)	4.25	3.25	2.75

Despite a Contraction in Credit Issuance, Financial Conditions Have Remained Benign

Treasury Yields Have Increased Recently, But Financial Conditions Still Benign

In line with rising expectations for the federal-funds rate, Treasury yields have increased since late September. The 2-year yield has increased from 3.6% to 4.25%, and the 10-year yield has increased from 3.65% to 4.3%. On the other hand, broader financial conditions have remained quite benign. For example, credit spreads remain considerably tighter than normal. The average option-adjusted spread on a BBB-rated bond stands at just 1.0% according to ICE, below the 2017-19 average of 1.5%. The high yield spread is at 2.6%, well below the 2017-19 average of 3.8%.

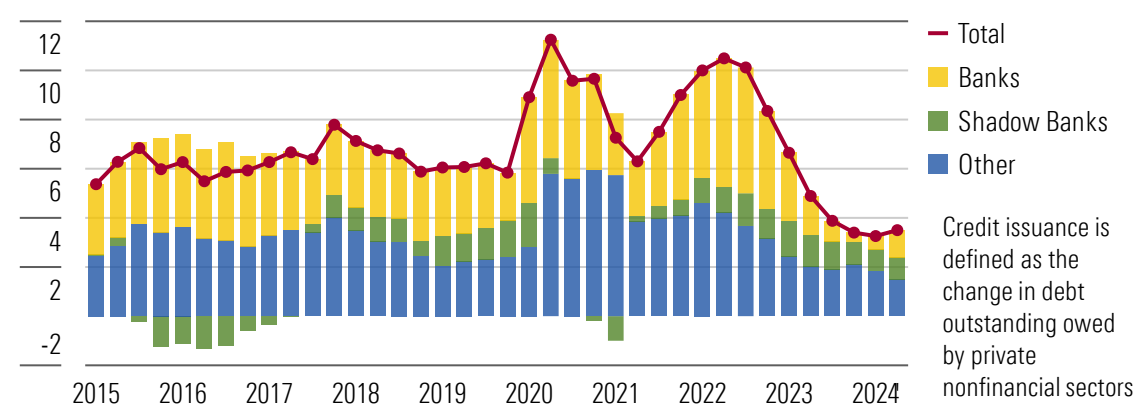
Treasury Yields (%)



Credit Contraction May Be Bottoming Out

While the price of credit increased only moderately during the Fed’s tightening, the quantity of credit provision did shrink considerably in 2023. Credit issuance to private nonfinancial sectors dropped to 3.3% in the 12 months ended December 2023, from a peak of 10% in early 2022. We’ve never seen a reduction in credit issuance this large without a recession. However, the data so far in 2024 has shown that credit issuance has stabilized. Additionally, credit issuance is not a leading indicator, so the economy may get off scot-free.

Credit Issuance to Private Nonfinancial Sectors, % GDP Trailing 12-Month



Appendix

Morningstar - US Economics Dashboard

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 E	2025 E	2026 E	2027 E	2028 E	CAGR:	
																		2014-19	2019-28
U.S. Real GDP by Expenditure (% Growth)																			
Personal Consumption	1.4%	1.7%	2.8%	3.4%	2.5%	2.6%	2.7%	2.1%	-2.5%	8.8%	3.0%	2.5%	2.6%	2.0%	1.9%	2.2%	2.5%	2.7%	2.5%
Residential Investment	13.0%	12.7%	4.3%	10.6%	7.1%	4.3%	-0.7%	-0.9%	7.7%	10.9%	-8.6%	-8.3%	-0.3%	3.7%	5.0%	8.4%	5.0%	4.0%	2.4%
Business Investment	10.6%	6.2%	7.0%	5.0%	-2.1%	4.5%	7.6%	4.3%	-7.9%	7.6%	10.5%	3.2%	4.3%	1.7%	1.7%	3.2%	3.2%	3.8%	2.9%
Government Spending	-2.1%	-2.4%	-0.9%	2.0%	2.0%	0.6%	2.0%	3.9%	3.4%	-0.3%	-1.1%	3.9%	2.7%	1.0%	1.2%	1.2%	1.5%	2.1%	1.5%
Exports	4.0%	3.0%	3.9%	0.3%	0.5%	4.1%	2.9%	0.5%	-13.1%	6.5%	7.5%	2.8%	2.0%	3.2%	3.0%	3.0%	2.8%	1.6%	1.8%
Imports	2.4%	1.2%	5.2%	5.2%	1.5%	4.7%	4.0%	1.2%	-9.0%	14.7%	8.6%	-1.2%	2.0%	1.8%	1.8%	1.5%	1.5%	3.3%	2.2%
GDP Growth %	2.3%	2.1%	2.5%	2.9%	1.8%	2.5%	3.0%	2.6%	-2.2%	6.1%	2.5%	2.9%	2.7%	2.0%	2.0%	2.6%	2.7%	2.6%	2.3%
Nominal GDP - \$ Trillion	16.3	16.9	17.6	18.3	18.8	19.6	20.7	21.5	21.4	23.7	26.0	27.7	29.1	30.2	31.3	32.6	34.1	4.1%	5.2%
% Growth	4.2%	3.9%	4.3%	3.9%	2.8%	4.3%	5.3%	4.3%	-0.9%	10.9%	9.8%	6.6%	5.1%	3.6%	3.6%	4.3%	4.5%		
Inflation (% Growth)																			
GDP Deflator	1.9%	1.7%	1.7%	0.9%	1.0%	1.8%	2.3%	1.7%	1.3%	4.6%	7.1%	3.6%	2.3%	1.6%	1.6%	1.7%	1.8%	1.5%	2.8%
PCE	1.9%	1.3%	1.4%	0.2%	1.0%	1.7%	2.0%	1.4%	1.1%	4.1%	6.6%	3.8%	2.5%	1.9%	1.8%	1.9%	2.0%	1.3%	2.8%
PCE - Core	1.9%	1.5%	1.5%	1.2%	1.6%	1.6%	1.9%	1.6%	1.3%	3.6%	5.4%	4.1%	2.8%	2.1%	1.9%	2.0%	2.1%	1.6%	2.8%
Labor Market																			
Unemployment Rate (%)	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%	3.7%	8.1%	5.3%	3.6%	3.6%	4.0%	4.4%	4.6%	4.1%	3.5%		
Labor Force Participation (%)	63.7%	63.2%	62.9%	62.7%	62.8%	62.9%	62.9%	63.1%	61.7%	61.7%	62.2%	62.6%	62.7%	63.0%	62.9%	63.0%	62.9%		
LFP % - Prime Age	81.4%	81.0%	80.9%	80.9%	81.3%	81.7%	82.1%	82.5%	81.4%	81.6%	82.4%	83.3%	83.4%	83.6%	83.7%	83.9%	84.0%		
Supply Side (% Growth)																			
Total Hours Worked	1.9%	1.3%	2.0%	2.1%	1.2%	1.2%	1.9%	1.0%	-6.5%	4.4%	3.2%	1.2%	0.6%	0.7%	0.7%	1.6%	1.5%	1.5%	0.8%
Labor Productivity	0.4%	0.8%	0.6%	0.8%	0.6%	1.3%	1.1%	1.5%	4.7%	1.6%	-0.6%	1.6%	2.2%	1.3%	1.3%	1.0%	1.2%	1.1%	1.8%
Output Gap (% Potent. GDP)	-5.2%	-5.0%	-4.4%	-3.6%	-3.9%	-3.0%	-2.0%	-1.8%	-4.5%	-0.4%	-0.9%	-0.8%	-0.2%	-1.0%	-1.4%	-0.7%	0.0%		
Other																			
Govt Budget Balance (% GDP)	-9.3%	-5.9%	-5.2%	-4.6%	-5.4%	-4.4%	-6.1%	-6.7%	-14.7%	-11.5%	-3.9%	-7.9%	-8.1%	-8.1%	-8.2%	-7.3%	-7.5%		
Net Exports (% GDP)	-3.4%	-2.8%	-2.9%	-2.9%	-2.7%	-2.8%	-2.9%	-2.7%	-2.9%	-3.6%	-3.7%	-2.9%	-2.8%	-2.8%	-2.8%	-2.8%	-2.7%		
Market (Year Avg)																			
Fed Funds Rate	0.14%	0.11%	0.09%	0.13%	0.40%	1.00%	1.83%	2.16%	0.38%	0.08%	1.68%	5.02%	5.18%	4.00%	2.81%	2.13%	2.13%		
10-Year Treasury Yield	1.80%	2.35%	2.54%	2.14%	1.84%	2.33%	2.91%	2.14%	0.89%	1.44%	2.95%	3.96%	4.20%	3.80%	3.25%	3.00%	3.00%		

Source: Bureau of Economic Analysis, Morningstar.

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22 West Washington Street
Chicago, IL 60602 USA

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