



**Sonoma County  
Economic Development Collaborative**



# Forging Ahead: Regional Economic Outlook

Sonoma County, 2025

# Table of Contents

Foundation Sponsors	3	All Eyes on the Bond Market	21
Board of Directors	4	Good as it Gets	21
Summary	5	Federal Reserve Pauses	21
Recent Performance	6	10-year T-yields Surge	23
Near-term Outlook	7	Bond Market Selloff Scenario	25
Employment, Recent Performance	9	Vulnerable Economy	26
Long-term Outlook: Positive Factors	11	Forecast Assumptions	28
Index of Relative Business Costs	12	Monetary Policy	28
Employment Diversity and Volatility	12	Fiscal Policy	28
Long-term Outlook: Negative Factors	14	U.S. Dollar	29
Income	15	Energy Prices	29
Demographic Trends	16	Geopolitical Risks	29
Workforce Readiness	17	About Moody's Analytics	30
Residential Real Estate	18		
Commercial Real Estate	19		
Forecast Risks	19		
Executive Summary	21		

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JANUARY 2025

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**CONTENTS**

Summary ..... 1  
 Recent Performance.....2  
 Near-term outlook .....3  
 Employment, Recent Performance.....5  
 Long-term outlook: Positive factors .....7  
 Index of Relative Business Costs .....8  
 Employment Diversity and Volatility .....8  
 Long-term outlook: Negative factors...10  
 Income.....11  
 Demographic trends.....12  
 Workforce readiness .....13  
 Residential real estate .....14  
 Commercial real estate .....15  
 Forecast risks.....15  
 Executive Summary .....17  
 All Eyes on the Bond Market.....17  
 Good as it gets .....17  
 Federal Reserve pauses.....17  
 10-year T-yields surge .....19  
 Bond market selloff scenario .....21  
 Vulnerable economy .....22  
 Forecast Assumptions .....24  
 Monetary Policy .....24  
 Fiscal policy.....24  
 U.S. dollar.....25  
 Energy prices.....25  
 Geopolitical risks .....25

# Forging Ahead: An Economic Outlook for Sonoma County

## Regional Economic Outlook Sonoma County CA

**SUMMARY**

Sonoma's economy is performing well. Monthly job gains have abated in recent months, but on a year-ago basis, employment is on par with that of the state and nation. Healthcare is making steady gains, but the county's key driver, tourism, struggles to maintain momentum and sits approximately at the same level as a year earlier. The jobless rate has climbed more than 1 percentage point from its low in mid-2022. The uptick has paused, but this is largely because of modest declines in the size of the labor force in 2024. Finally, the housing market remains cool. House price appreciation is ticking higher because of extremely limited supply, and transactions remain near a decade low.

The near-term outlook for Sonoma County is on stable footing. Job growth will slow in the coming quarters, as the local economy has recouped all its job losses from the pandemic and the labor market is growing increasingly tight, but receding inflation and a pullback in interest rates will give a bit more runway to the labor market. Job growth will decelerate during the next two years, supported by the county's vital tourism industry. Consumer spending is remarkably stable and remained so even as inflation was raging. Spending growth remains an important driver of economic activity. Consumers remain willing to save less than they did in the years leading up to the pandemic. Surging wealth may also be contributing to this healthy spending and restrained saving. However, as long as consumer uncertainty remains high, the potential for a slowdown in spending growth remains.

After a strong harvest season for wine grape growers in 2023, early reports from the 2024 harvest are similarly upbeat. The harvest season began in mid-August and was a welcome return to normal after a delayed start in 2023. Nearly perfect weather conditions bode well for the quality of the harvest: an initially cool spring before warming up with long periods of hot weather during the peak of the growing season and culminating with more mild temperatures and cool nights as the harvest season approaches. Overall, early reports indicate that wine grape volume and quality should be strong when next year's grape crush report is compiled.

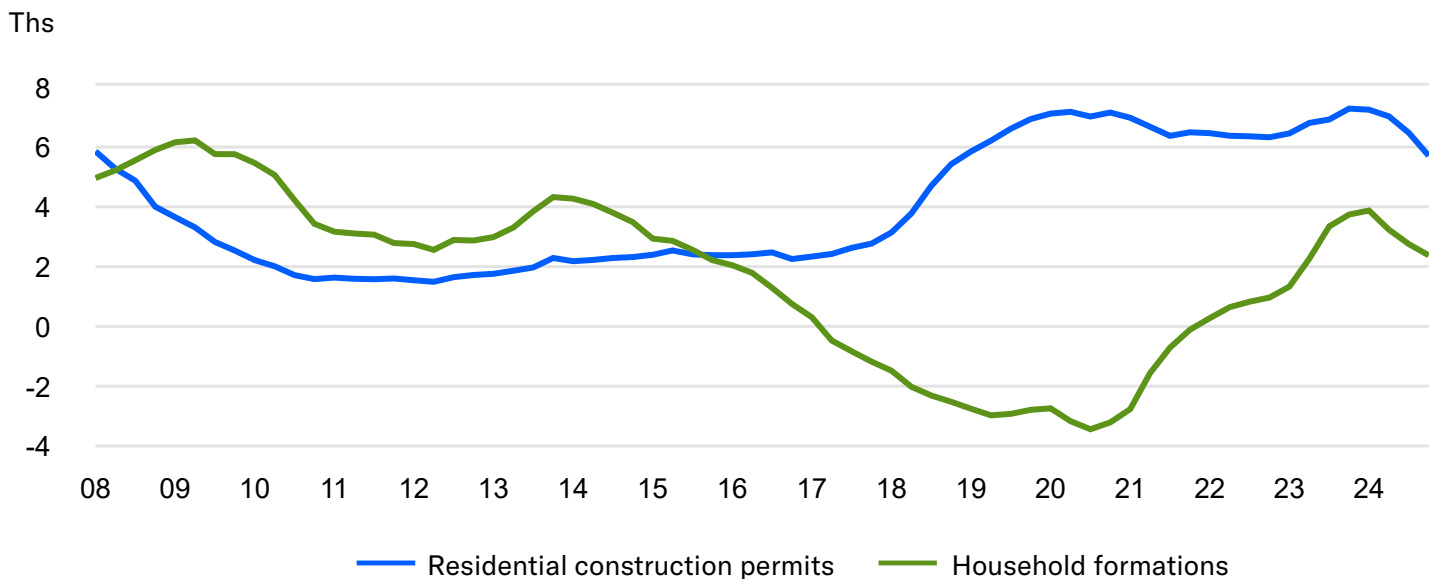
Sonoma has shed residents in seven consecutive years, though the pace of departures halved in 2023 and timely Equifax data show less out-migration during the past year. Nonetheless, housing affordability, which ranks among the worst nationally, is pricing residents out and pushing some to relocate to lower-cost areas in the state. Cooling house price appreciation will help

alleviate some of the affordability concerns, moving the Moody's Analytics affordability index off its bottom from late 2022. Furthermore, while affordability remains a chief concern, the county does rank favorably relative to the state and nearby metro areas, which could help swing migration patterns in its favor.

## RECENT PERFORMANCE

Sonoma's economy is performing well. Monthly job gains have abated in recent months, but on a year-ago basis, employment is on par with that of the state and nation. Healthcare is making steady gains, but the county's key driver, tourism, struggles to maintain momentum and sits approximately at the same level as a year earlier. The jobless rate has climbed more than 1 percentage point from its low in mid-2022. The uptick has paused, but this is largely because of modest declines in the size of the labor force in 2024. Finally, the housing market remains cool. House price appreciation is ticking higher because of extremely limited supply, and transactions remain near a decade low.

## Housing Supply-Demand Balance



Sources: Census Bureau, Moody's Analytics

However, as mentioned in the last update, job growth during the past year is likely overstated. The more accurate but lagged Quarterly Census of Employment and Wages paints a bleaker picture of the employment situation, with modest declines for much of 2023 before rallying in early 2024. Job growth will likely be revised lower when the Bureau of Labor Statistics does its annual employment benchmark in early 2025.

Healthcare is still the standout—as it is nationally—and its contribution to keeping the labor market chugging along cannot be overstated. Healthcare job growth has more than doubled total employment for the better part of the last two years, and the county's healthcare industry is hiring more rapidly than the region.

After a strong harvest season for wine grape growers in 2023, early reports from the 2024 harvest are similarly upbeat. The harvest season began in mid-August and was a welcome return to normal after a delayed start in 2023. Nearly perfect weather conditions bode well for the quality of the harvest: an initially cool spring before warming up with long periods of hot

weather during the peak of the growing season and culminating with more mild temperatures and cool nights as the harvest season approaches. Overall, these early reports indicate that wine grape volume and quality should be strong when next year's grape crush report is compiled.

Sonoma County's agriculture industry had a bounce-back year in 2023, per the latest Sonoma County Crop Report and the latest data available. More favorable precipitation levels and better weather for the county's stable of crops led to a swift recovery in production values. The county finally emerged from a multiyear drought, while above-average rainfall replenished groundwater supplies and filled reservoirs. This, in turn, lowered input costs and led to strong harvests across a variety of crops. According to the 2023 Sonoma County Crop Report, the total value of crops produced in the county increased by around 19%.

Tourism payrolls pulled back at the start of the year but are once again trending higher and are flat on a year-over-year basis. The retreat was likely caused by some overhiring late last year, but economic fundamentals have improved and visitor statistics point to a sustained improvement in tourist arrivals. Air passenger traffic nationally and at Charles M. Schulz–Sonoma County Airport are on the ascent. Data through October point to a 16% rise in passenger totals and a sustained increase in recent months thanks to a resilient labor market and receding inflation. Furthermore, Sonoma County relies heavily on local visitors who arrive by car, and cooling gasoline prices helped sustain demand from those visitors and buoyed overall spending.

## NEAR-TERM OUTLOOK

The near-term outlook for Sonoma County is on stable footing. Job growth will slow in the coming quarters, as the local economy has recouped all its job losses from the pandemic and the labor market is growing increasingly tight, but receding inflation and a pullback in interest rates will give a bit more runway to the labor market. Job growth will decelerate during the next two years, supported by the county's vital tourism industry. Consumer spending is remarkably stable and remained so even as inflation was raging. Spending growth remains an important driver of economic activity. Consumers remain willing to save less than they did in the years leading up to the pandemic. Surging wealth may also be contributing to this healthy spending and restrained saving. However, as long as consumer uncertainty remains high, the potential for a slowdown in spending growth remains.

**Travel and tourism.** As inflation recedes and consumer sentiment improves, a resilient U.S. economy will further buoy tourism spending. Employment in leisure/hospitality is expected to recover after struggling in 2024 and stabilize at a more sustainable growth rate. Payrolls have recouped their losses from the pandemic and staffing levels are normalizing. The total number of passengers moving through Charles M. Schulz–Sonoma County Airport is running significantly above last year's pace; new routes this year have expanded the airport's contribution to the local economy. Visitors will fuel spending at hotels, restaurants and retail shops.

Sonoma County's allure as a global destination for high-end wines, craft beer, outdoor recreation, and cutting-edge cuisine will ensure it garners a growing share of overall tourism spending. Sonoma County has some of the strongest tourism resources in the country, which will help it outcompete for tourist dollars throughout the next several years. However, the pool of dollars available to attract tourists will grow at a much slower rate than in recent years.

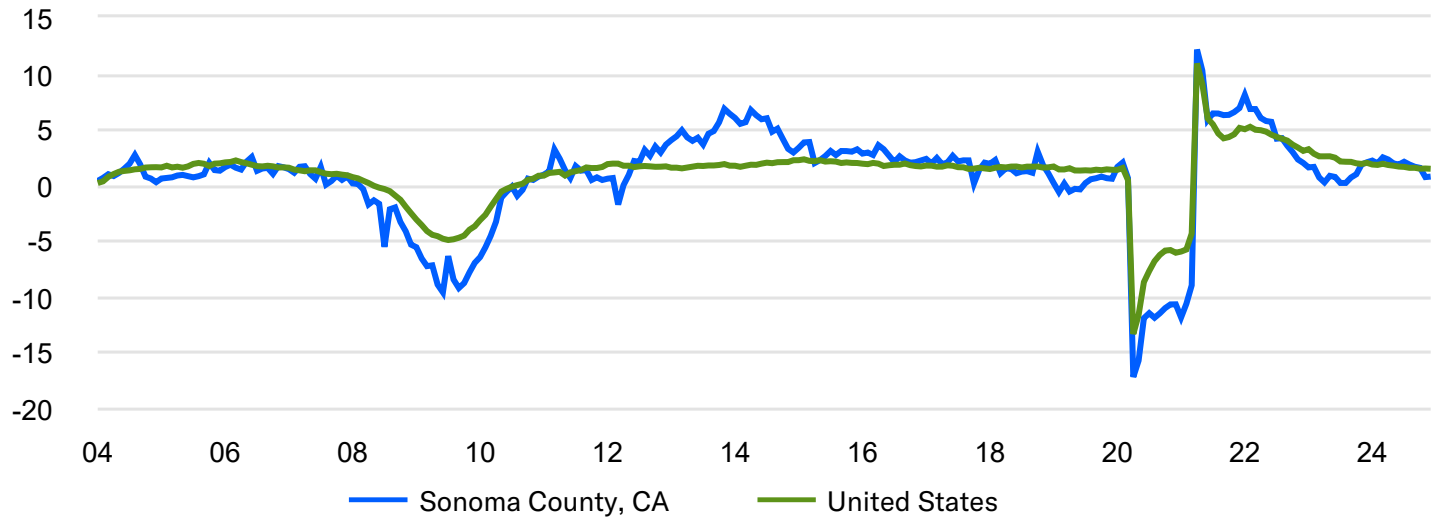
The outlook for Sonoma County's tourism has improved since the beginning of the year—recession odds have backtracked significantly with inflation nearly back to the Federal

Reserve's target range and the labor market remains strong. Avoiding a recession will be crucial for tourist-centric metro areas, including Sonoma County, as these economies are more sensitive to macroeconomic tailwinds and swings in discretionary spending.

**Manufacturing.** Manufacturers will have reason to celebrate heading into next year as goods demand begins to rise. U.S. manufacturing has been stuck in a holding pattern for two years as high inflation and rising interest rates have sapped goods demand, forcing firms to cut back on production and investment in new equipment. Nevertheless, manufacturers

## Employment Growth

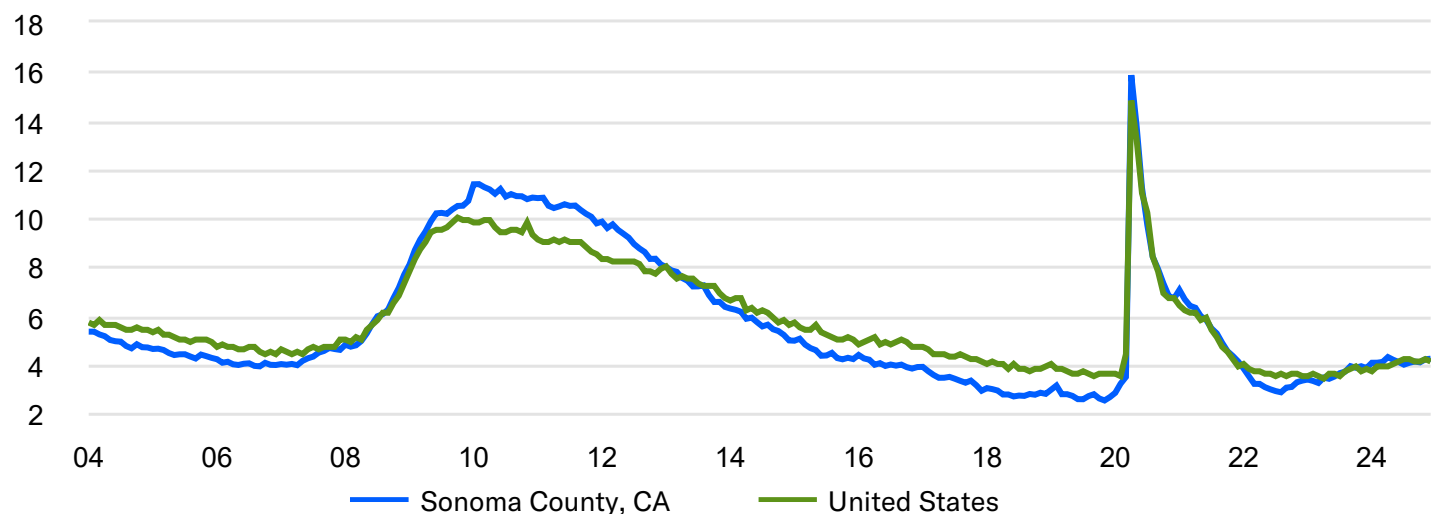
% change yr ago



Sources: BLS, Moody's Analytics

## Unemployment Rate

%



Sources: BLS, Moody's Analytics



## Employment, Recent Performance

Dec 2024

	Annualized growth rate				
	3-mo	6-mo	12-mo	5-yr	10-yr
Total	1.9	0.7	0.7	-0.0	0.9
Construction	1.8	-0.4	-0.2	-0.5	4.5
Manufacturing	8.1	-3.7	-3.6	-0.8	0.6
Wholesale Trade	0.0	0.0	-1.7	-2.9	-0.7
Retail Trade	-4.0	-0.2	1.9	-0.5	-0.4
Transportation and Utilities	-4.6	-1.4	3.9	1.9	1.2
Information	11.7	-5.1	-4.2	-2.0	-1.4
Financial Activities	9.1	4.9	3.6	-0.9	0.3
Professional and Business Services	-1.8	5.6	-0.2	0.6	2.0
Education and Health Services	2.3	1.5	2.7	1.3	1.9
Leisure and Hospitality	1.5	-1.7	-2.1	0.0	0.8
Government	3.5	2.9	4.9	-0.6	-0.8
			%		
Unemployment rate	4.2	4.1	4.1	4.9	4.2

Sources: BLS, Moody's Analytics

have held their own. Like many other businesses, they have successfully passed higher input costs to downstream customers, raising profit margins above normal. In response to weaker demand, manufacturers have mostly opted to cut hours while keeping most of their full-time staff for fear of being unable to find workers when demand recovers. A strong financial standing and an available workforce will enable manufacturers to quickly restart production as falling interest rates unleash pent-up demand for goods.

Sonoma's County's base of manufacturers will follow a similar trend, though the outlook for employment growth is only modest. Productivity enhancements in the food and beverage industry have meant that even while output climbs, employment has been slow to advance. Still, with inflation receding and interest rates retreating, investment in new facilities will improve, boosting margins for the county's food and beverage manufacturers.

The mainstreaming of the organic food movement will create new opportunities for county producers, especially as some consumers prioritize environmental and ethical practices in the production of the food and clothing they purchase. The county's reputation as a haven for sustainable and organic farming practices will help burnish its advantage as organic food sales grow as a share of total food sales, but mass-market organic brands at large food stores will require Sonoma County's brands to stay ahead of the curve.

Robust growth of food and beverage manufacturing facilities has also cleared some of the industrial space inventory. Still, recent progress in industrial building is a welcome sign. According to commercial real estate firm Keegan & Coppin, several planned expansions

### MIGRATION FLOWS INTO SONOMA COUNTY, CA

	Number of Migrants
San Rafael CA	1,953
San Francisco CA	1,812
Oakland CA	1,638
Sacramento CA	828
Los Angeles CA	575
San Jose CA	551
Napa CA	512
Vallejo CA	405
San Diego CA	359
Anaheim CA	268
<i>Total in-migration</i>	<i>15,551</i>

### FROM SONOMA COUNTY, CA

Sacramento CA	1,122
Oakland CA	906
San Rafael CA	862
San Francisco CA	830
Los Angeles CA	493
Vallejo CA	431
San Diego CA	388
Napa CA	360
Boise City ID	338
Phoenix AZ	336
<i>Total out-migration</i>	<i>16,965</i>
<b>Net migration</b>	<b>-1,414</b>

will increase the supply of industrial buildings in the county and enable firms to expand their operations.

Land and labor constraints rearing their heads throughout the state are becoming even more apparent in coastal areas; Sonoma County is already experiencing waning housing affordability. Net domestic migration remained negative in 2023, although the county lost fewer residents on net than in the previous two years. High-frequency data from Equifax suggest modest improvement in 2024. Immigration has also rallied, but this support is already fading. Demographic trends will be crucial to incentivize more firms to locate in Sonoma County. The housing market will rebalance, and a slower pace of house price appreciation will improve affordability—but it is crucial that this happens quickly to ensure the supply of workers continues to grow and outruns labor supply shortages.

**Agriculture.** Vastly improved weather conditions and groundwater and reservoir replenishments augur a continued improvement for Sonoma County's crucial agriculture industry. Farms struggled under severe drought conditions in previous years, but those have completely dissipated thanks to higher precipitation levels in the past two years. According to the U.S. Drought Monitor, only a handful of areas in the Central Valley are even considered abnormally dry. Improved soil quality and more abundant groundwater will benefit Sonoma County farmers in many ways. Wine grape tonnage should improve if these favorable weather patterns persist, and input costs will pull back, given that reservoirs are far above their levels of recent years. A continued pullback in interest rates will also provide a modicum of support. The Fed has begun interest rate cuts that will proceed in the next two years, which will provide some modest relief. While still elevated relative to 2019, retreating interest rates will lower the cost of borrowing and could entice some capital improvements and expansions among Sonoma County farmers.

After a strong harvest season for wine grape growers in 2023, early reports from the 2024 harvest are similarly upbeat. The harvest season began in mid-August and was a welcome return to normal after a delayed start in 2023. Nearly perfect weather conditions bode well for the quality of the harvest: an initially cool spring before warming up with long periods of hot weather during the peak of the growing season and culminating with more mild temperatures and cool nights as the harvest season approaches. Overall, early reports indicate that wine grape volume and quality should be strong when next year's grape crush report is compiled.

**Retail/wholesale trade.** With the U.S. economy on firm footing and interest rates set to decline further, the stage is set for Sonoma's wholesale and retail trade industries to stabilize. Wholesale trade employment has already been in decline given efficiency enhancements and a cost disadvantage relative to neighboring counties. Sizable manufacturing and agriculture industries will ensure that wholesale trade remains an important, if small, part of the local economy. Manufacturing is in a lull similar to the one seen nationally. This, combined with a reduction in goods spending as consumer spending has normalized, has been a headwind for wholesale traders. However, the outlook is brighter in the coming quarters. Lower interest rates will decrease borrowing costs in the capital-intensive agriculture and manufacturing industries. As these industries find a footing, so will wholesale trade.

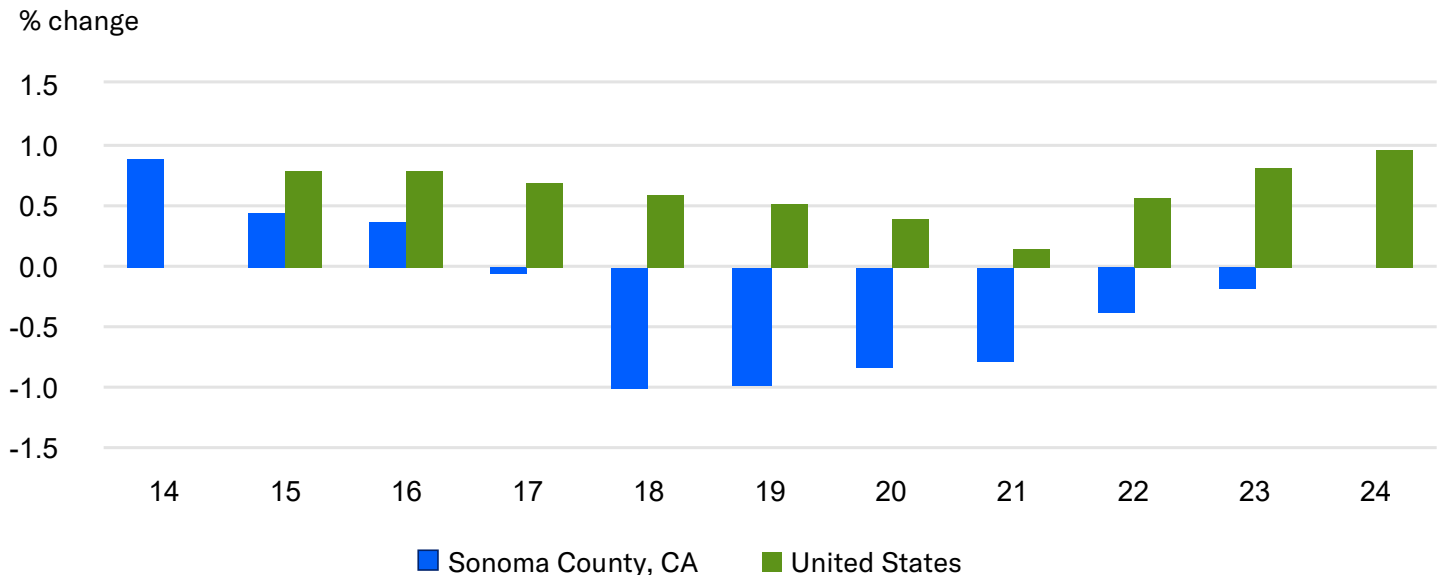
Retail trade is already doing better than wholesalers, and the resilience of the U.S. economy bodes well for the county's retailers. Income growth is outpacing inflation, leading to real income gains that are sustaining consumer spending. Excess savings built up during the pandemic are being churned through, but there are significant supports to spending, especially for higher-income households, which make up the bulk of consumer spending. House prices are still cresting new heights, and the stock market reaches record highs seemingly daily. Consumer debt burdens are also low by historical standards, and the wealth effect from rising house and equity prices will provide generous tailwinds to consumer spending, ensuring it remains strong even as the labor market continues to slow. Real consumer spending growth will remain around 2%, which will provide the runway for retailers to keep adding jobs at

a modest pace. Resilient consumer spending and a slower rate of population losses will pave the way for modest growth in Sonoma County's retail base in the near term. Still, retail employment will struggle to move the needle. Efficiency gains via automation and a shift toward e-commerce have led to secular declines in employment even as retail sales in the county remain strong.

**Healthcare.** Healthcare is still the standout—as it is nationally—and its contribution to keeping the labor market chugging along cannot be overstated. Healthcare job growth has more than doubled total employment for the better part of the last two years, and the county's healthcare industry is hiring more rapidly than the region.

In the near term, the outlook is still bright. The aging of the local population will necessitate additional hires as the elderly consume a disproportionate share of health services. In the long term, this recent pace of growth is unsustainable. Population trends have improved slightly in the last few years, but Sonoma County still suffers net out-migration. A dwindling base of young working-age residents will have two effects. It will limit the supply of workers necessary to keep healthcare employment trending higher, and it will also be a headwind to growth as a smaller local population requires fewer healthcare workers to service it.

## Population



Sources: Census Bureau, Moody's Analytics

## LONG-TERM OUTLOOK: POSITIVE FACTORS

Sonoma County's prestige in winemaking, craft beverage production, artisanal food products, and high-tech research and design endow it with considerable long-run growth potential. These industries build on the comparative advantages that are inherent in the county's resources—its workforce, its natural resources, and its capital.

These resources are abundant. For example, educational attainment is relatively high among the county's workforce. According to the 2021 American Community Survey, 38% of the adult population has a college degree, which is above the U.S. rate of 35% and higher than the California average of 36%, trailing only a handful of some of the most dynamic metro areas in the state. Its natural resources are bountiful, as evidenced by its rich soil, mild climate, extensive shoreline, and forests and parklands. The county has built up local capital through

## Index of Relative Business Costs

all	Labor cost		Tax burden		Energy Cost		Office Space		Overall	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Santa Rosa CA	91	294	107	60	256	3	96	27	135	16
San Francisco-Redwood City-South San Francisco CA	138	1	107	60	256	3	313	1	202	1
San Jose-Sunnyvale-Santa Clara CA	116	6	107	60	256	3	204	3	170	2
Oakland-Hayward-Berkeley CA	100	145	107	60	256	3	126	12	127	28
Santa Maria-Santa Barbara CA	98	175	107	60	256	3	110	19	141	8
Santa Cruz-Watsonville CA	91	281	107	60	256	3	148	6	146	7
Portland-Vancouver-Hillsboro OR-WA	106	68	111	55	91	286	115	17	104	71
Sacramento--Roseville--Arden-Arcade CA	95	223	107	60	256	3	80	71	134	19
Salinas CA	86	353	107	60	256	3	87	48	131	22
Boulder CO	120	2	96	186	96	245	118	15	112	44
Provo-Orem UT	102	116	100	155	75	372	85	6292	189	
Atlanta-Sandy Springs-Roswell GA	99	158	81	348	95	254	87	5394	137	

### Notes:

- Rank is out of 403 metro areas.
- U.S. average=100.
- Labor costs are measured by total earnings per employee at the 3-digit NAICS level.
- Tax burdens are measured by all taxes excluding severance, education, and hospital taxes relative to personal income.
- Energy costs are measured by cents per kWh for industrial and commercial users.
- Office costs are measured by rent per square foot.
- In the overall index, labor costs have 65% weight, energy costs have 15% weight, and office costs and taxes have 10% weight.

Source: Moody's Analytics

## Employment Diversity and Volatility

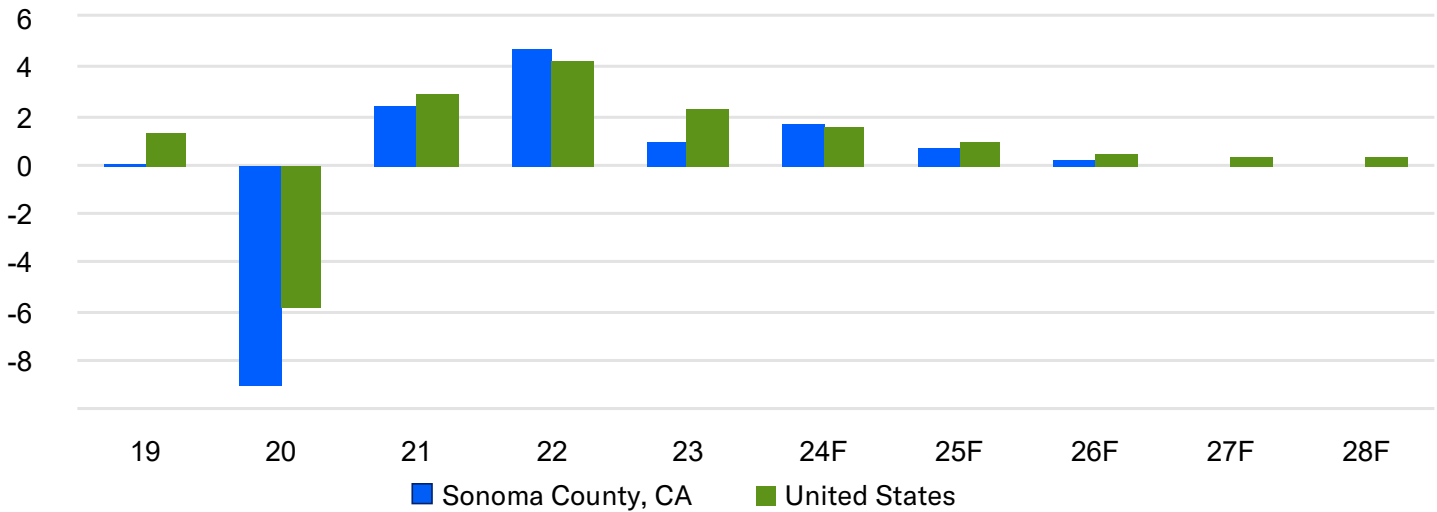
	Diversity <sup>1</sup>	Total <sup>2</sup>	Volatility 2023		Beta <sup>4</sup>
	2023		Systematic <sup>3</sup>	Nonsystematic <sup>3</sup>	
Santa Rosa CA	0.48	152	94	6	1.43
San Francisco-Redwood City-South San Francisco CA	0.21	161	90	10	1.45
Oakland-Hayward-Berkeley CA	0.66	128	97	3	1.24
Vallejo-Fairfield CA	0.53	123	96	4	1.17
Portland-Vancouver-Hillsboro OR-WA	0.70	116	98	2	1.13
United States	1.00	100	100	0	1.00
Median	0.49	97	94	6	0.90

### Notes:

- Diversity is defined as the extent to which a state's industrial structure approximates that of the nation. The more closely the state's economy resembles the national economy, the higher the value. The diversity measure is bounded between 0 and 1. 1 means the state has the same industrial structure as the U.S., 0 means it has a totally different industrial structure than the U.S. Diversity is estimated.
- Total volatility is the standard deviation of a state's employment growth. This relative deviation has been indexed to the United States = 100. Volatility is estimated.
- Systematic fluctuation is that portion of an area's economy that is associated with national economic fluctuations. Nonsystematic volatility is that portion of an area's volatility not associated with national economic fluctuations.
- Beta measures the magnitude of an area's sensitivity to national economic conditions. The U.S. average, by definition, is 1. A one percentage point increase in national employment will cause that portion of a metro area's employment base to rise by the percentage value of beta.

## Long-Term Outlook: Employment

% change



Sources: BLS, Moody's Analytics

entrepreneurship during the last three decades, and its capacity for innovation, as measured by utility patents per capita, is among the highest of midsize U.S. counties.

The long-term outlook for Sonoma County's winemaking industry remains solid, but another year of declining wine consumption and the specter of continued climate events due to climate change is clouding the outlook. Sonoma County's vintners have established a deep-rooted legacy, and the unique and sophisticated flavors and branding of Sonoma County's wines ensure that the area will remain a premier destination for both seasoned and casual drinkers. Consumers' maturing tastes will continue to tilt purchasing decisions toward more artisanal options, and Sonoma County's vintners stand to benefit as consumers slake a thirst for more sophisticated wines. Consumers across the income spectrum are trading up to more expensive wines, and a growing middle class developing a taste for wine in emerging markets will provide another avenue for growth as incomes rise.

Sonoma County's diverse constellation of wine, beer and spirits makers has put it on the map for a broader range of beverage enthusiasts. Sonoma County will remain a top destination for these visitors as it cements its status as a craft beverage hot spot along with its already-distinguished wine heritage. Though the craft beer scene is becoming increasingly saturated nationwide, several Sonoma County brewers have already gained traction nationally and announced plans for expansion within and outside the county. Expanding breweries will draw additional visitors, necessitate more hires in beverage manufacturing, and generate spillover growth in transportation and warehousing.

The region's burgeoning craft beverage presence, esteemed winemaking legacy, and abundant natural beauty augur a bright outlook for tourism. Outdoor recreation companies are thriving; visitors arriving to sample the county's wines, beers and artisan foods are increasingly looking for opportunities to enjoy Sonoma County's luscious outdoor beauty through canopy tours, cycling events and kayak tours. Outdoor recreation companies are capitalizing on swaths of tourists already in the county, and nationwide spending on outdoor recreation will continue its ascent as disposable incomes rise and consumers become more willing to open their wallets.

As consumers grow increasingly health-conscious, Sonoma County's status as a haven for artisanal food and beverage products will be an additional source of strength. Though organic

produce, dairy, meat and snack foods tend to be more expensive than conventional offerings, organic purchases are rising across income levels. The millennial cohort in particular has embraced the organic food movement wholeheartedly, signaling a big new wave of organic consumers on the horizon as they age into their prime earning years. The mainstreaming of the organic food movement will create new opportunities for county producers, especially as consumers prioritize environmental and ethical practices in producing the food and clothing they purchase.

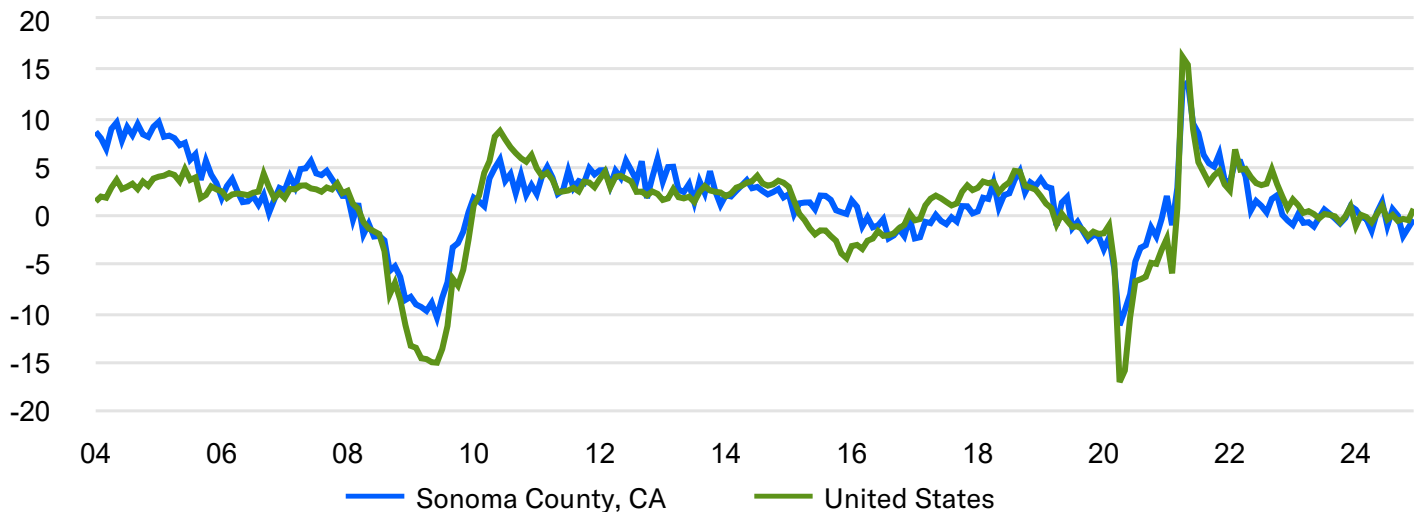
## LONG-TERM OUTLOOK: NEGATIVE FACTORS

Sonoma County's chief economic drivers are at the mercy of the ebbs and flows of the U.S. and global economies. With its heavy reliance on discretionary spending to power tourism inflows and visitor spending, Sonoma County is highly vulnerable to external shocks. This means that it is susceptible to a more pronounced slowdown than elsewhere if a recession occurs. Still, recession odds have receded considerably and our baseline outlook is for the U.S. to grow, albeit at a slower pace, in the next few years rather than fall into recession.

The high degree of specialization in Sonoma County's economy is another source of weakness. The county's industrial base is highly concentrated, as evidenced by its low industrial diversity index score of 0.45, which ranks in the bottom half of metro areas nationwide. Despite recent growth in food and beverage manufacturing, Sonoma County has made only modest progress in diversifying its economy during the past decade—and its reliance on consumer-driven industries and volatile tech services could result in another sharp downturn.

## Industrial Production

% change yr ago



Source: Moody's Analytics

Tepid population gains will put a speed limit on long-term growth. Rapidly eroding housing affordability has priced out some potential residents, who are opting for lower-cost inland metro areas with similar job opportunities. The proliferation of remote work and the effects on population growth thus far suggest that Sonoma County's high costs are outweighing the benefits of its high quality of life and natural amenities in drawing remote workers, but the slowdown in out-migration in the past few years is an encouraging sign. Fewer prime-age

workers will step in to take the reins from retiring baby boomers, and lackluster labor force gains will hamstring job growth in the medium term.

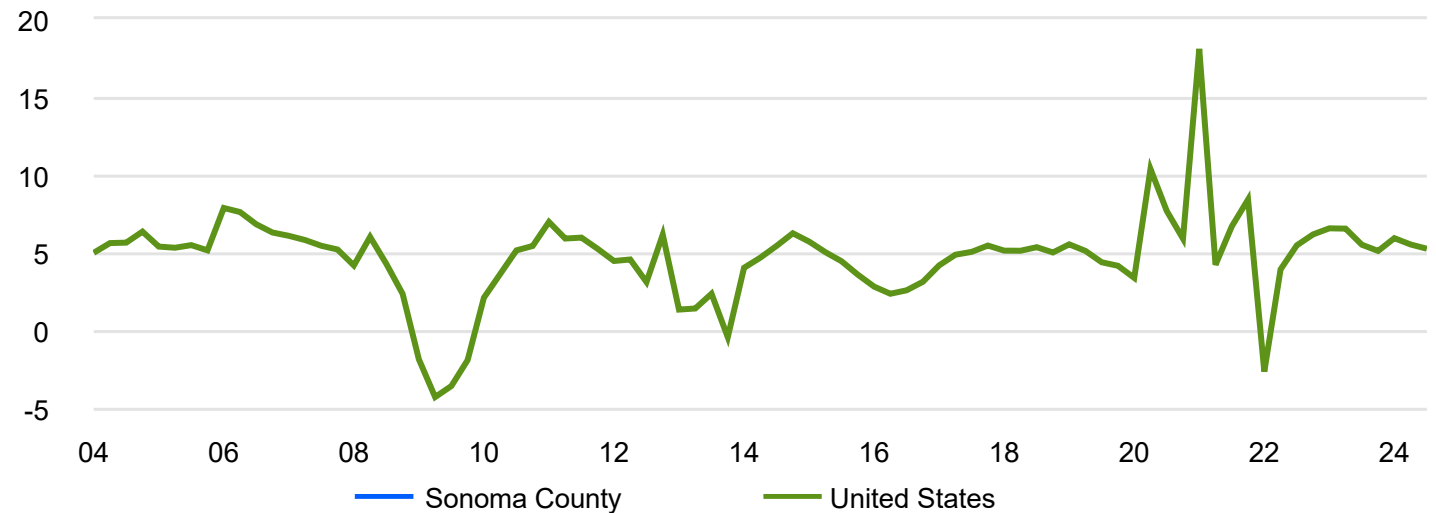
Despite a highly educated population, Sonoma County exhibits a notable shortage of high-wage jobs. According to the Moody’s Analytics Skills Mismatch Index, Sonoma County ranks in the top third of California metro areas in over-education. Its job mix demands fewer college-educated workers than are currently supplied; however, the county has the necessary human capital to expand its base of high-wage jobs. The share of high-wage jobs has steadily contracted in the past two business cycles, and a lack of high-wage jobs will put further pressure on in-migration and population growth.

## INCOME

Personal income growth at both the state and county level advanced solidly in 2023 thanks to a labor market that held firmly in the wake of stubbornly high inflation. Personal income growth slightly outpaced the state average last year and compares relatively favorably to its pre-pandemic pace.

### Personal Income

% change yr ago



Sources: BEA, Moody’s Analytics

Hiring has cooled in 2024, and some tightness in the labor market is being alleviated. The employment cost index for the third quarter provided additional evidence that wage growth is moderating as the labor market softens. Wage growth for private industry workers peaked at 5.7% in the second quarter of 2022 and has consistently slowed to its current rate of 3.8%, which is in line with other measures of average hourly earnings. The strong job growth in early 2024 that was fueled by robust labor supply gains has subsided and, therefore, is not expected to put any additional pressure on wage growth. Nominal income gains in the county clocked in at around 5.4% in 2024, a slight moderation from 2023. We expect this to decelerate further as wage growth slows.

## DEMOGRAPHIC TRENDS

Immigration will undoubtedly fall in the next few years; indeed, the slowing has already begun. Even before President Biden's executive order effectively closed the U.S. border in the second half of 2024, international arrivals were already declining, according to data from the U.S. Customs and Border Protection. However, President Trump has pledged a far more restrictive immigration policy than his predecessor. Large-scale deportations will present significant logistical, legal and political barriers. Until specific policies are apparent, we have not taken such events into account in our forecast. At a minimum, however, we expect immigration to fall faster and to a flow comparable to Trump's previous presidency, as this time around his administration is set to move more rapidly. Using net immigration at the end of his first presidency as a guide, immigration could fall as much as 80% to 90% by 2028.

As immigration tumbles, the labor market will get tighter, putting a brake on labor force growth and the economy's potential growth. Even accounting for the strong recent immigration, labor force growth is estimated to be near 2% per annum. Given Trump's stance on immigration, we estimate that labor force growth will slow to only 0.5% per annum.

This will weigh most heavily on industries with a substantial reliance on immigrant labor. Agriculture, construction, manufacturing and leisure/hospitality will feel the brunt of slower labor force growth. This industrial mix will hurt Sonoma County to varying degrees. Its reliance on agriculture and leisure/hospitality—and thus the hit to labor supply in those industries—will likely lead to a significant increase in labor supply challenges that have already become apparent. Input costs due to higher wage growth will climb and chip away some growth that would have otherwise occurred with more lenient immigration policies.

According to the ACS, about 9% of Sonoma County's residents are not U.S. citizens. This puts Sonoma County just outside the top 50 metro areas and divisions nationally and speaks to the impact of more restrictive immigration policy. Reduced immigration and self-deportations will weigh on population and labor force growth, exacerbating existing demographic challenges that already plague the county.

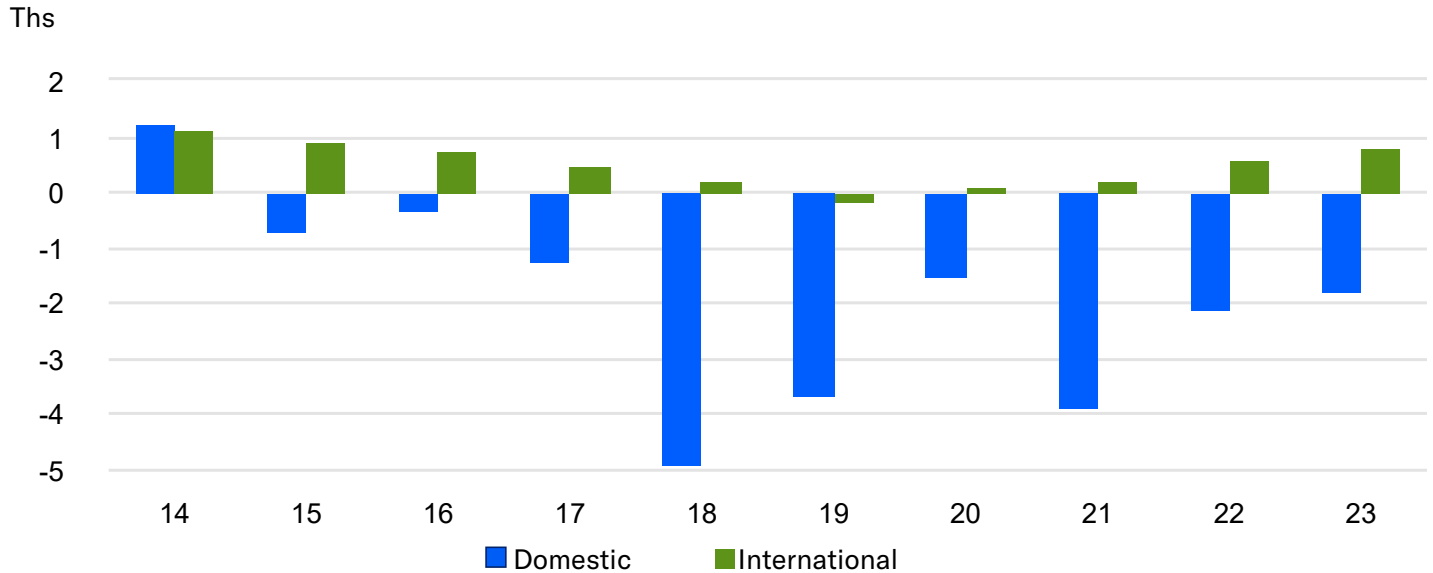
Sonoma has now shed residents in seven consecutive years, though the pace of departures halved in 2023 and timely Equifax data show less out-migration during the past year. Nonetheless, housing affordability, which ranks among the worst nationally, is pricing residents out and pushing some to relocate to lower-cost areas in the state. Cooling house price appreciation will help alleviate some of the affordability concerns, moving the Moody's Analytics affordability index off its bottom from late 2022. Furthermore, while affordability remains a chief concern, the county does rank favorably relative to the state and nearby metro areas, which could help swing migration patterns in its favor.

These demographic challenges are the biggest obstacles facing the county and the fundamental reason for the slightly below-average medium- and long-run outlooks. Out-migration, largely resulting from affordability issues that have intensified in the last decade because of the blockbuster run of house price appreciation, will hamstring growth in various industries. Fortunately, there appears to be some respite in the future. House price appreciation will take a breather when more supply comes on line as mortgage rates retreat. This will give time for incomes to catch up and bring affordability down, albeit slightly. Migration patterns, while still a net negative, are improving. Population losses in 2023 were the smallest since 2016, and we expect this to improve further. One upside is Sonoma County's relative affordability compared with neighboring Napa County and most of the Bay Area. Combined with the mortgage rate lock-in effect, this will muffle out-migration slightly in the years ahead.

Barring a significant increase in net migration, Sonoma County will struggle to maintain adequate labor force growth into the next decade. During the next few years, many of the baby boomers will have retired and left the labor force. However, in contrast to previous



## Net Migration



Sources: Census Bureau, Moody's Analytics

generations, there are fewer prime-age workers available to step in and take their place. The county's prime-age cohort (age 25 to 54) has stabilized after an outright decline in the wake of the tech bust. The ranks of prime-age workers have not noticeably increased in the past 15 years, and the forecast calls for a steady decline in the coming years.

If unchecked, the shortage of prime-age workers will limit labor force growth and, ultimately, the county's long-term potential. Slower growth in the prime-age cohort could also curb productivity gains. On average, prime-age workers are more likely to start a business, switch jobs in search of better job opportunities, and work longer hours than other cohorts. To bolster population gains and long-run growth prospects, the county must build more affordable housing, attract new migrants, and ensure that younger workers receive the proper training to fully participate in the county's workforce.

### WORKFORCE READINESS

The cautious outlook for population growth underscores the importance of training a new generation of workers. According to the Census Bureau, the educational attainment of Sonoma County's workforce aligns with the education requirements of the county's major industries. For instance, approximately one-third of county jobs necessitate a bachelor's degree or higher, which is similar to the proportion of Sonoma's adult population holding a bachelor's or graduate degree. This includes a growing number of white-collar positions in engineering, consulting and software. However, given the changing demographics and increasing diversity of Sonoma County's workforce, it becomes crucial to enhance the educational attainment, vocational skills and work experience of job seekers.

While the Hispanic community has made significant strides in raising secondary educational attainment in the past decade, still-relatively lower rates of post-secondary educational attainment highlight the role of training and workforce development in accessing higher-paying opportunities. The Census Bureau reveals that while 40% of Sonoma County's jobs require an associate's degree or higher, only 20% of Hispanic adults have achieved this milestone. To address these challenges, it will be essential to build upon the success of

existing workforce development programs and expand their reach. As more employers in the county prioritize post-secondary degrees and workplace experience, and as the labor market becomes increasingly competitive, efforts to enhance human capital through internships, vocational training, adult education and other opportunities will yield positive outcomes. In the long run, improving the readiness, skills and educational attainment of Sonoma County's labor force will be crucial for boosting labor productivity. Since the prime-age workforce is expected to remain relatively stable in the next decade, initiatives that connect workers with Sonoma County's leading industries will be vital. Additionally, county-level programs supporting young entrepreneurs will contribute to job growth as new businesses expand locally and nationally.

## RESIDENTIAL REAL ESTATE

The residential real estate market is struggling, but it appears the worst is in the rearview mirror. The housing market has been frozen for the better part of the last two years as mortgage rate lock-in effects weigh on supply. The decline in mortgage rates will help unlock supply, though it will take some time to meaningfully improve. Most homeowners did an admirable job of refinancing and locking in record-low mortgage rates that prevailed during the pandemic. Nationally, nearly 90% of households with mortgages have a rate that is below 6%. Since mortgage rates jumped as high as 8% with the Fed's tightening, there was no economic sense for homeowners to move and give up their low-rate mortgages for a much higher rate.

We expect home sales to remain tepid in the coming months given expectations for mortgage rates to remain elevated. Fears of rising inflation, stemming from tariffs and expected increases in deficit-financed government spending, are driving bond investors to demand higher yields on long-term Treasury bonds. Bond yields and mortgage rates will remain elevated unless these fears are overblown. For-sale inventories and sales will gradually increase as homeowners find their existing houses no longer meet their needs. When deciding to move to a new location, some owners will look beyond the cost of giving up a low interest-rate mortgage. A gradual upward adjustment in the months' supply of homes for sale will put downward pressure on prices. Decreased affordability due to rising rates, insurance costs and property taxes will force sellers to make price concessions.

House prices in the county will advance at a much more modest pace than in recent years as supply inches higher and demand is hamstrung by low affordability. House prices will still climb, but more slowly than in the pre-pandemic years, helping to alleviate some of those affordability challenges.

Construction will continue chipping away at the long-run housing deficit. Nearly a third of all homes available for sale nationally are new construction, reflecting the rapid pace of homebuilding and a lack of existing-home listings. The increased supply of homes and apartments will push vacancy rates higher across markets, causing asking rents to stabilize, if not fall.

The long-run outlook for the residential real estate market will rely partly on Sonoma County's demographic fortunes, but the county is already facing a housing shortage. Even with slower population growth, homebuilders will have to manufacture at substantially higher rates to replenish housing units lost to fires and to keep up with household formation. Given constraints on the availability of developable land, there will be greater demand for high-density units. Onerous zoning laws statewide have restricted the supply of available houses. Up-zoning to allow for high-density units would create a larger pool of lots for affordable housing developments.

With the impending changing of the demographic guard, millennials are diving into homeownership as they age into having families. Still-strong income gains will stir even more young households to plunge into homeownership, especially when mortgage rates begin to recede. This will boost home sales and new construction. The recent improvement in the national homeownership rate suggests that this is already happening. Household formation is expected to accelerate in the county after declining in recent years, but demographic headwinds, including an outsize senior cohort and weak population growth, mean it will take until late 2026 or 2027 to regain its previous highs.

## COMMERCIAL REAL ESTATE

Easing monetary policy will help slow the bleeding in the ailing commercial real estate market, but fundamentals will weigh on key property types, including offices. While interest rates on CRE loans remain much higher than just two years ago, the Fed's cuts will help reduce some of the risk of more severe price declines. The amount of CRE debt that will need to be refinanced in the coming year is down from a year earlier, and those property owners will be able to access more affordable financing. Additionally, while the net share of banks continues to report that lending standards are tighter than historically on CRE loans, this share has decreased steadily during the year. Lending standards will ease through the end of 2025.

Nevertheless, for some segments of commercial real estate, net absorption rates are weak, vacancy rates are on the rise, and property prices are falling. The Moody's Analytics Total Value-Weighted Commercial Real Estate Price Index has already fallen nearly 15% since 2022 and is expected to decline further in the next two years.

The office sector is set for the sharpest price declines. The pandemic boosted remote work and permanently decreased the need for office space. As a result, businesses can now add workers without expanding space. Consequently, the office vacancy rate has hit a record high of just less than 20%. The Moody's Analytics baseline forecast calls for office prices to fall about 40% peak to trough through 2025. The price decline will be gradual rather than a large shock since a typical office lease is three to five years—and businesses will wait for their leases to end before adjusting their office footprint.

## FORECAST RISKS

Labor shortages are a downside risk to the labor-intensive tourism and agriculture industries. Trump is also set to impose a much more restrictive immigration policy, particularly when it comes to the estimated more than 11 million unauthorized immigrants already living in the U.S. During his campaign, he consistently talked of deporting these immigrants. Some of this is political bluster since the logistics of mass deportation are not feasible. Still, the new Trump administration is likely to pursue deportations aggressively. Moreover, given increased pressure from U.S. Immigration and Customs Enforcement and other authorities, employers will be more reluctant to hire immigrants, forcing fearful immigrants to self-deport. Trump will use executive orders and supercharge successful strategies developed during the Biden administration to significantly restrict asylum seekers. Immigration to the U.S., which averaged just over 1 million per annum before the recent post-pandemic surge, is expected to fall to nearly 500,000 per annum in Trump's second term.

More severe weather patterns brought about by climate change are an important risk. Uncertainty about agriculture conditions could depress investment, and a return of drought conditions would hamper the quality and quantity of harvests. If grape quality—and thus wine quality—suffers, given more volatile and extreme weather conditions, Sonoma County's distinct comparative advantage could erode, with far-reaching consequences for its economic potential.

Tariffs pose another threat to Sonoma County's agriculture industry. The fallout from a trade war with the U.S.'s major trading partners could mean that retaliating countries target the U.S. agriculture industry, which would specifically hurt Sonoma County if wine or dairy is in the crosshairs.

However, there are upside risks for the Sonoma County economy as well. Growing recognition for the county's breweries, spas and organic eateries could draw more niche visitors. The rising popularity of Sonoma County's craft beers has already led to rapid growth. The snowball effect may pick up speed as craft beer customers value variety and will flock to areas with a high concentration of breweries. Since fans of craft brews are typically more likely to consume beer at the source, this could translate into more visitor arrivals and positive spillovers for nearby restaurants and accommodations.

Consumer spending could exceed expectations and drive faster growth. The labor market is loosening but remains tight, keeping job and income growth elevated. Businesses are correctly calculating that the labor supply issues in the aftermath of the pandemic are here to stay. This is leading them to keep staff despite slowing demand. That dynamic could push Sonoma County's household incomes up faster than expected. As much of that income is spent, the county's economy would grow above expectations.

# All Eyes on the Bond Market

BY MARK ZANDI

The U.S. economy is performing exceptionally well, but there are mounting threats. The most immediate is higher interest rates, as the Federal Reserve appears for now to have paused its rate cutting, and long-term interest rates have jumped.

## GOOD AS IT GETS

The U.S. economy's performance is about as good as it gets. Growth is strong. Real GDP is on track to grow near 3% annualized in the fourth quarter of 2024 and almost that for the entire year. This is well above the economy's estimated long-term growth potential, which is closer to 2%. Indeed, because of extraordinary labor force gains fueled by foreign immigration and a revival in productivity growth, the economy's potential growth last year was closer to 4%. That is not sustainable, as immigration and labor force growth are already slowing. Still, the pickup in the economy's potential came at an opportune time, helping to cool the job market and inflation.

The job market arguably could not be better. Job growth has slowly throttled back, and abstracting from the vagaries of the data, payrolls are increasing by approximately 150,000 per month. Hiring is down, but so too are layoffs. The pace of job growth is sufficient to generate enough income to fuel sturdy consumer spending, the principal driver of overall economic growth. However, it is not so strong that it would cause the tight labor market to tighten further, undesirably pumping up wages and inflation. Unemployment remains remarkably stable at near 4%—the Moody's Analytics estimate of full employment—across all demographic groups and from coast to coast.

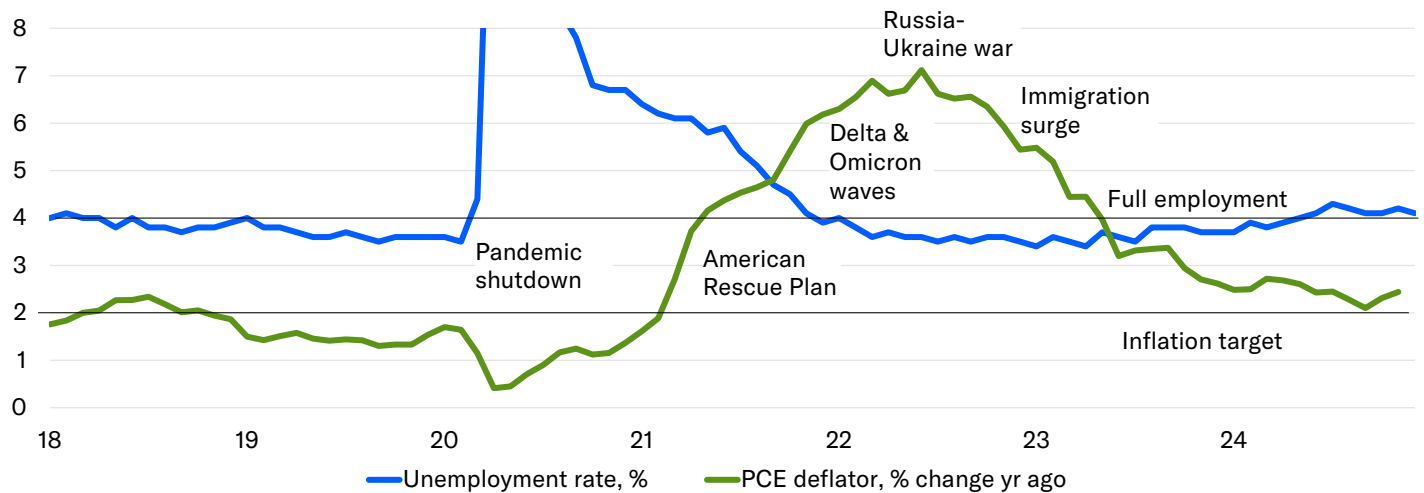
Inflation has been a bit sticky lately, hovering just over the Federal Reserve's 2% inflation target, but that is only because of the stubbornly slow moderation in the cost of housing. But housing costs are ultimately tied to rents, and the rents that new tenants are paying have gone sideways for more than two years. This follows the pandemic-era surge in rents due to less housing construction—the result of supply-chain problems, difficulty finding construction workers, and a big increase in rental demand. Rents paid by existing renters, which have lagged as landlords were uncomfortable jacking up their rents all at once, have just about caught up. So, the growth in the cost of housing will continue to slow and overall inflation will soon be back to the Fed's target.

## FEDERAL RESERVE PAUSES

The Fed has thus effectively achieved its dual mandate of full employment and low and stable inflation (see Chart 1). This does not happen often and historically has rarely lasted long, since the Fed inevitably must respond to new shocks and shifting economic policies. We have been fortunate that the economy has been shock-free as of late. The banking crisis precipitated by the Fed's aggressive interest rate hikes and the resulting hit to banks' bond portfolios were nearly two years ago. The Russian invasion of Ukraine and the surge in energy and agricultural prices happened three years ago, and most significantly, the highly disruptive pandemic began five years ago.

From the Fed's perspective, economic policy under the Biden administration has also been largely benign. Given a divided government, there were no policy changes with broad

## Chart 1: The Federal Reserve Achieves Its Dual Mandate



Sources: BLS, Moody's Analytics

economic implications in the last two years of Biden's term. And while the COVID-19 relief in the American Rescue Plan adopted at the start of his presidency was deficit-financed, the other big policy changes legislated in his first two years, including the infrastructure legislation, the CHIPS Act, and the Inflation Reduction Act were paid for. The federal deficit-to-GDP ratio is uncomfortably large at close to 6%, but it has been stuck there since early in Biden's presidency. Fiscal policy has neither added to nor restrained growth.

It was, therefore, a surprise to global investors when the Fed made clear that its latest rate cut in December would likely be the last one for a while. Behind the Fed's reluctance to cut rates further is uncertainty regarding the equilibrium rate—that federal funds rate that neither supports nor restrains economic growth. Not too long ago, it would have been hard to fathom that the equilibrium rate would be anywhere near its current just under 4.5%. But the strong, resilient economic growth and arguably easy financial conditions (consider the record stock prices and paper-thin corporate bond spreads) suggest it might be. The equilibrium rate is not etched in stone—and is likely to soon fall back—but until it does, the Fed feels it has latitude to curtail rate cuts.

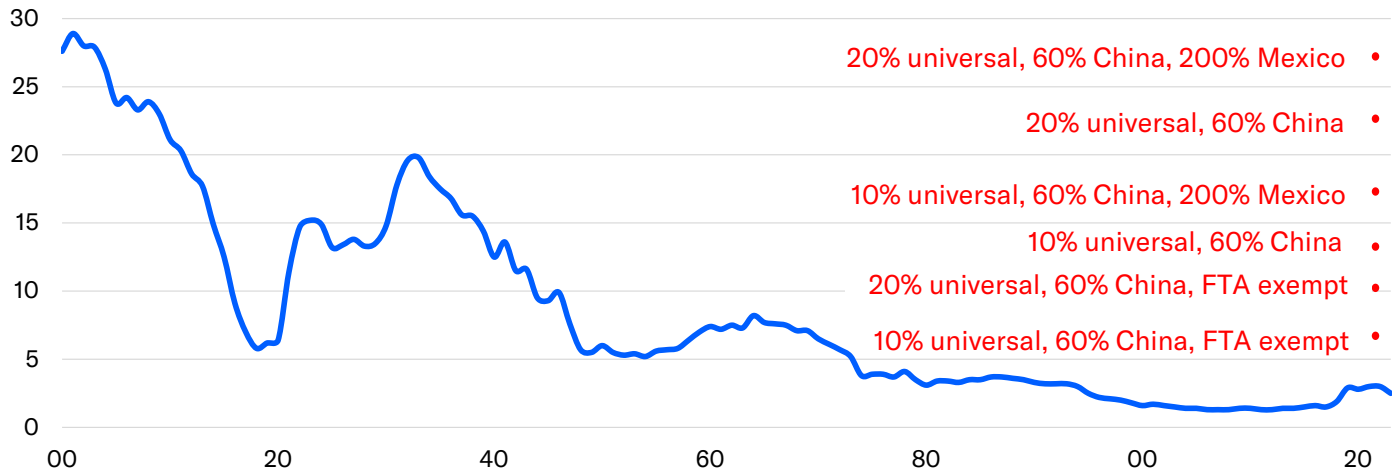
Also motivating the Fed to sit on its hands is the extraordinary uncertainty regarding President Trump's economic policies. In the minutes of the Fed's December Federal Open Market Committee meeting, policymakers expressed concern about Trump's insistence on broad-based increases in tariffs and a much stricter foreign immigration policy, including mass deportations. Both policies can be implemented quickly under executive order, at least in part, and depending on how aggressively Trump pursues these policies, they will stoke inflationary pressures (see Chart 2).

The reasonable worry is that, just as inflation is coming back to target, higher tariffs and mass deportations will reignite it.

Our baseline outlook has the Fed holding monetary policy unchanged until rate cuts slowly resume in September. By that time, officials should have a reasonably good fix on Trump's policies and their economic fallout. Tariffs and deportations will add to inflation, but they will also diminish growth and be more-or-less a wash for monetary policy. With the equilibrium rate trending lower, the Fed will cut rates once a quarter until the federal funds rate returns

## Chart 2: Uncertainty Regarding the Coming Tariffs and Their Fallout

Effective tariff rate under different Trump tariff proposals, %



Sources: Yale Budget Lab, Moody's Analytics

to 3%—our estimate of the equilibrium rate in the longer run. This is more or less consistent with global investors' expectations for the Fed's path.

### 10-YEAR T-YIELDS SURGE

The Fed's pause and investor concerns about what Trump's tariffs and immigration policy mean for inflation are also behind the recent surge in long-term interest rates. Since the 10-year Treasury yield hit a recent low of 3.6% in September, it has risen a full percentage point to 4.6%. It is likely no coincidence that by mid-September Trump was decidedly winning the election in the polls and betting markets. Of the 100-basis point increase in the 10-year T-yield since then, approximately 15 basis points are due to higher expected real short-term rates or Fed policy, and 25 basis points are due to higher inflation expectations (see Chart 3).

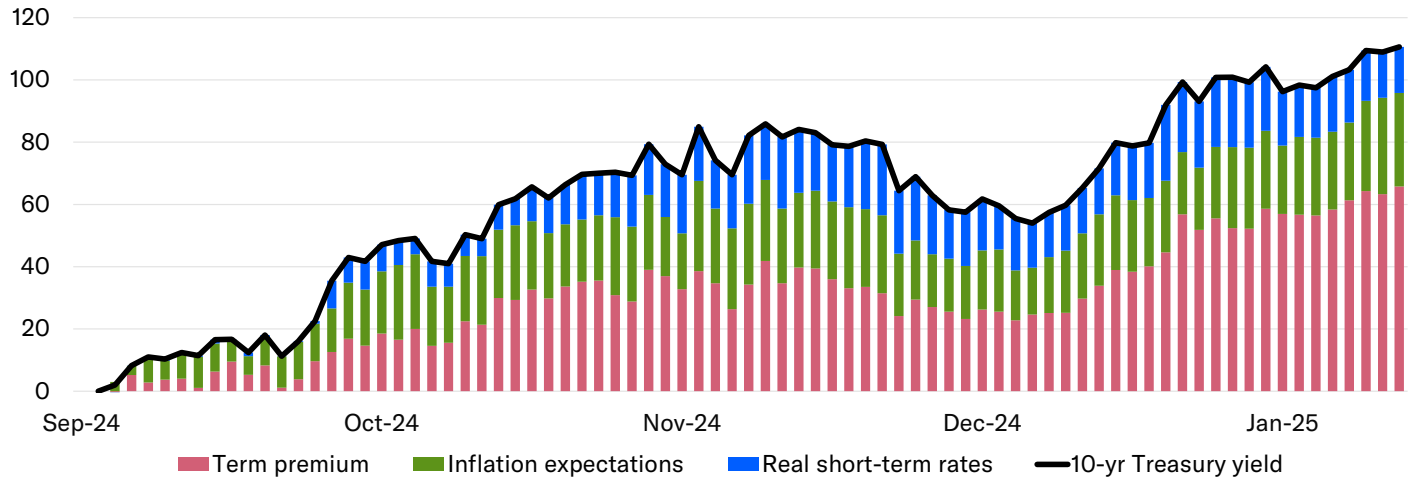
The largest contributor to the increase in long rates, some 60 basis points, is a significant widening in the term premium. The term premium is the extra yield investors demand for buying a long-term bond instead of a short-term security. It can be impacted by a wide range of factors, including uncertainty over future inflation and growth. The greater that uncertainty, the wider the term premium. And there is plenty of uncertainty over Trump's economic policies and their fallout.

The term premium is likely also widening due to prospects for more tax cuts under Trump that will be deficit-financed, at least in part. There will be more tariff revenues, and government spending growth will be more restrained, but this will not be enough to pay for the tax cuts Trump seems to have in mind. Global bond investors appear increasingly nervous about the U.S. government's fiscal position. Credit default swap spreads on Treasury bonds represent the cost of buying insurance to protect against a default by the U.S. Treasury. These spreads have risen considerably since the 2023 Treasury debt limit battle and remain higher than spreads on the debt of many other sovereigns (see Chart 4).

Further suggesting the previously unheard-of possibility of a Treasury default is the widening spread between 10-year Treasury and SOFR (secured overnight financing rate) swap yields.

### Chart 3: What's Behind the Recent Runup in 10-Year Treasury Yields?

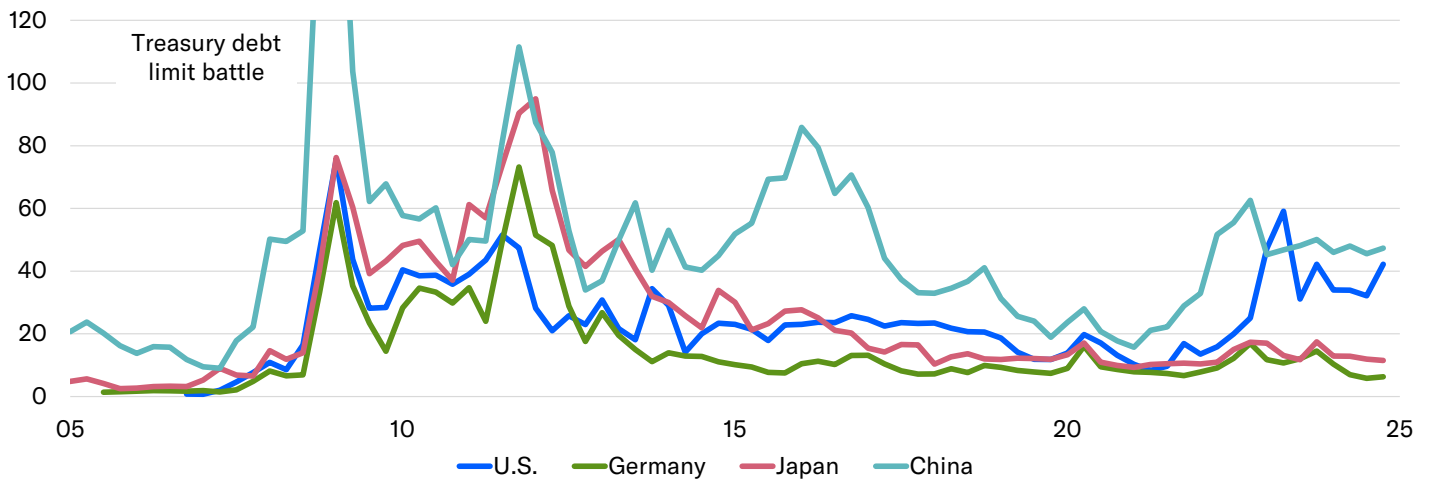
Change in 10-yr Treasury yield since mid-Sep, bps



Sources: Federal Reserve, Moody's Analytics

### Chart 4: How Risk-Free Is U.S. Treasury Debt?

Sovereign debt CDS spreads



Sources: ISDA, Moody's Analytics

Also reflected in the higher yields may be investors' latent worries over Federal Reserve independence. Trump has publicly ruminated that he believes the president should have a say in the Fed's interest rate policy decisions. That will not happen while Jay Powell is Fed chair, but his term as chair is up in early 2026. As Fed positions roll over, Trump will push to put in members with views consistent with his own. Historically, whenever central bank independence has been impaired—here, as in the Nixon administration, or overseas—it has ended in higher inflation.



In our baseline outlook, these worries largely abate and long-term rates fall back a bit in coming months. For all this year, we expect the 10-year Treasury yield to average just under 4.5%, and fixed mortgage rates, currently more than 7%, will average just below 7%. Thus, the spread between mortgage rates and the 10-year T-yield will remain unusually wide at close to 250 basis points. Typically, the spread averages 175 basis points. The persistently wider spread is due in significant part to heightened inflation and interest rate volatility, which increases the prepayment risk to investors in mortgage-backed securities and demand for extra yield to compensate for that risk.

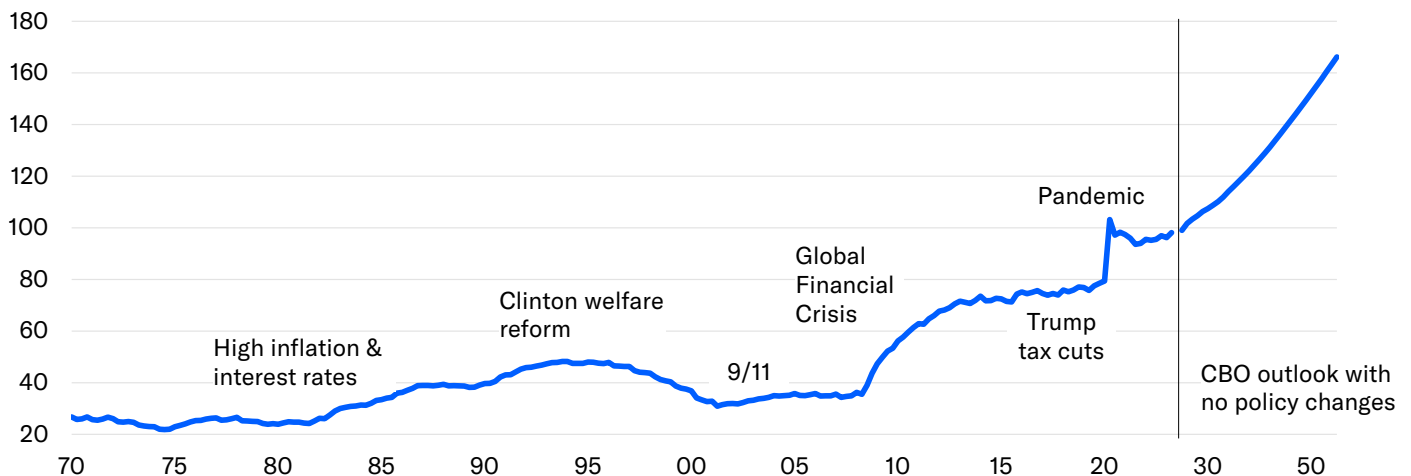
## BOND MARKET SELLOFF SCENARIO

In our baseline, the Fed's pause and higher long-term interest rates will weigh on the economy's growth this year but will not undermine it. However, forecasting interest rates is a wildly intrepid affair, and the risks to our baseline are skewed to even higher rates. Indeed, there is a meaningful threat of a selloff in the bond market with a spike in long-term rates this year that does significant economic damage.

The bond market feels fragile. The broker-dealers that make many of the trades in the Treasury bond market have not expanded their balance sheets consistent with the increase in the significant amount of Treasury debt outstanding (see Chart 5).

## Chart 5: On an Unsustainable Fiscal Trajectory

Ratio of U.S. federal debt held by the public and GDP, %



Sources: U.S. Treasury, BEA, Moody's Analytics

This may be due to stiffer capital and liquidity requirements for large banks with these operations. Or perhaps the banks are questioning the business model since trading will likely increasingly be done by clearinghouses. Whatever the reason, Treasury bond trading is getting sloppier, adding to the volatility in interest rates. In times past, a move of a few basis points in 10-year Treasury yields in a day was considered a big one. Yields now seem to move tens of basis points within seconds.

The holders of Treasury bonds are also shifting. The Fed continues to reduce its Treasury and mortgage security holdings via its quantitative tightening policy. Chinese investors are also reducing their exposure due to the decoupling of the U.S. and Chinese economies.

Japanese investors have become more circumspect as interest rates on their own bonds have risen and are more attractive. U.S. banks that were burned on their bond portfolios when the Fed aggressively tightened policy a couple of years ago also remain cautious buyers. This leaves highly price-sensitive hedge funds to fill the void. These investors are big buyers of Treasuries when conditions are opportune but run for the doors when they are not.

It is hard to predict what the catalyst for a bond market selloff would be, but a messy political battle over increasing or suspending the Treasury debt limit is a good candidate. The debt limit was reinstated at the start of the year, and the Treasury is running down its cash to pay the government's bills. We expect that the department would run out of cash and default on the government's obligation—this is the so-called X-date—sometime between mid-July and mid-August.

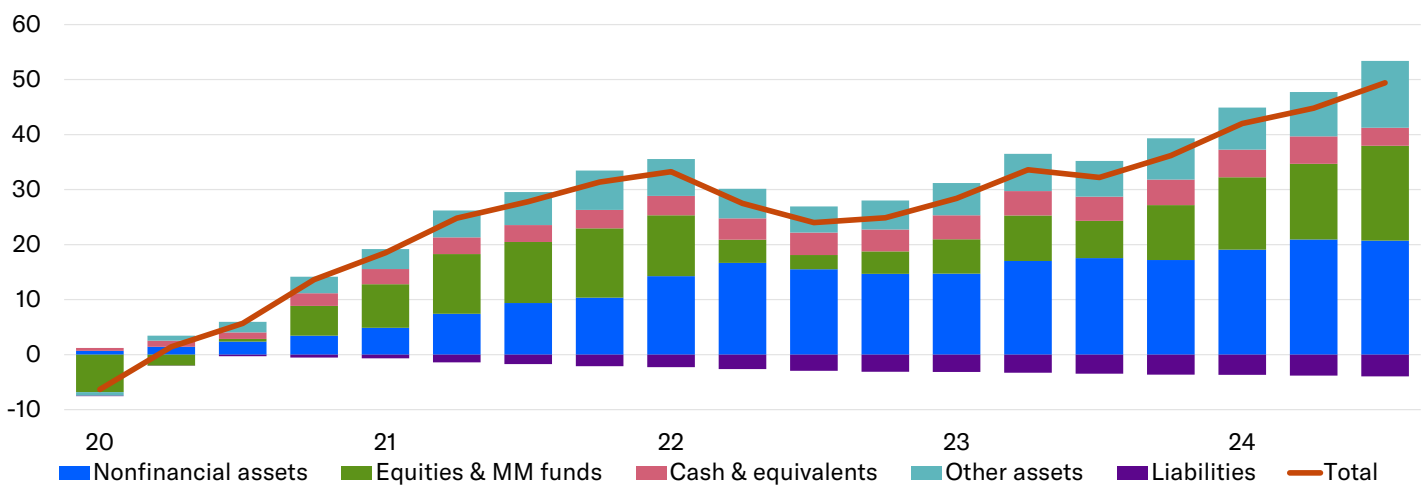
With the federal government under Republican control, it seems that lawmakers would be able to address the debt limit well before the X-date, perhaps as part of the big reconciliation bill that they have already begun working on. But given the thin Republican majority in the House and the vocal group of Republican representatives who have all but sworn a blood oath not to increase the debt limit without significant government spending cuts, Republicans may need some votes from the Democrats. It is unimaginable that lawmakers would not resolve the debt limit before the X-date given the dire implications if they do not. But the process may be so ungainly that it unnerves rating agencies and investors, and interest rates soar.

## VULNERABLE ECONOMY

The economy is particularly vulnerable in this scenario. Asset prices, which are high and arguably overvalued, would get hit hard. Most worrisome are stock prices. They have just about doubled since just prior to the pandemic. The enormous wealth this has created has incited well-to-do households with large stock portfolios to lower their saving rate and significantly increase their spending (see Chart 6).

### Chart 6: Increasing Household Wealth Supercharges Spending

Household net worth, change from 2019Q4, \$ tril



Sources: Federal Reserve, Moody's Analytics

This positive wealth effect has been a critical tailwind to consumer spending and the broader economy. A spike in interest rates would likely knock the wind out of stock prices and—via a negative wealth effect—consumer spending and the broader economy.

House prices are also threatened in this scenario. Prices have risen more than 50% since just before the pandemic, especially lifting middle-income homeowners' wealth and spending. Homeowners with mortgages are already unlikely to move at the current 7%-plus mortgage rate. Rates even higher will not make much of a difference to the housing supply. But the higher rates will hit housing affordability and demand hard, likely causing house prices to decline. Given the considerable buildup of homeowner equity since the pandemic, a modest decline in house prices would not result in a significant increase in mortgage defaults and foreclosures, but it will hurt consumer spending.

Commercial real estate prices will also come under renewed pressure with the higher rates. CRE prices had stabilized, but if borrowing costs push up again, property owners will find it difficult to refinance mortgages that are rolling over. Banks and other lenders have been willing to provide considerable forbearance to owners, thinking that rates ultimately would move down and make the financial arithmetic work. However, if rates spike instead, lenders will give up, concluding that property owners will not be able to figure it out, and defaults and foreclosures will rise. The CRE doom loop, which had seemed to peter out, could be reignited.

To gauge how high long-term interest rates would have to rise and for how long for this scenario to push the economy into recession, we conducted a number of simulations of the Moody's Analytics model of the U.S. and global economies. The bottom line is that 10-year Treasury yields would need to spike to near 7% and remain there for a couple of quarters. This would cause two quarters of contraction in real GDP—a good proxy for recession. This seems an unlikely dark scenario, but given the current uncertainty over economic policy and its fallout, it is the most significant threat to our generally sanguine baseline economic outlook. All eyes on the bond market.

## FORECAST ASSUMPTIONS

BY MARK ZANDI

### MONETARY POLICY

The Federal Reserve has been steadily normalizing interest rates since September, lowering the federal funds rate from nearly 5.5% to its current close to 4.5%. Moody's Analytics expects the Fed to pause its rate cutting to assess the impact of the economic policy changes coming under the new Trump administration.

The policy changes are likely to include broad-based tariff increases, increased deportations of unauthorized immigrants, and tax cuts that will be at least in part deficit-financed. These policies are inflationary, although to what degree depends on how aggressively the new administration pursues them. Until there is more clarity on these policies and their fallout, the Fed will keep monetary policy on hold.

We expect that clarity by the September 2025 Federal Open Market Committee meeting. The Fed will then resume cutting rates, by 25 basis points each quarter until the federal funds rate returns to its so-called equilibrium rate—that rate consistent with monetary policy neither restraining nor supporting growth. The estimated equilibrium rate, or *r*-star, stands unusually high near 4%. This reflects in part the economy's extraordinary interest rate insensitivity after many households and businesses were able to refinance their debt during the worst of the pandemic, when rates were at record lows. However, we do expect *r*-star to drift lower and settle near 3% by mid-decade. Our outlook for the federal funds rate is more-or-less consistent with global investors' expectations and the Fed's forecast.

The Fed continues to engage in quantitative tightening by allowing its Treasury holdings to mature. However, we expect it to end QT in the next few months with just under \$7 trillion of assets on its balance sheet. This will ensure ample reserves for the central bank to conduct monetary policy efficiently.

The 10-year Treasury yield has jumped recently to near 4.75%, above our estimate of its long-run equilibrium of 4% to 4.5%. The equilibrium rate is consistent with our estimate of nominal potential GDP growth.

While we expect the 10-year yield to settle back down into its equilibrium range, there is a consequential risk that yields will remain above that range until the dust settles on the new administration's policies and it appears the Fed will resume cutting short-term rates.

### FISCAL POLICY

With President Trump's re-election and Congress under Republican control, economic policy is poised to undergo significant changes this year. Trump is expected to significantly increase tariffs across a broad array of products and countries. The effective tariff rate is expected to increase from its current near 3% to as high 10% by the end of this year before slowly falling back in 2026.

Immigrant deportations are also expected to pick up significantly, pushing net foreign immigration down to 500,000 per annum in the next four years. This compares to closer to 2 million per annum over the past four years, and just over 1 million per annum in the decade before that.

Trump and Congress are also expected to pass legislation under reconciliation by this summer to extend the individual tax cuts passed under the 2017 Tax Cuts and Jobs Act that are otherwise set to expire at the end of 2025. The tax legislation is also expected to include another cut in the corporate tax rate and a number of smaller cuts to business taxes.

We also expect passage of another reconciliation bill late in 2025 (at the start of fiscal 2026) that focuses on restraining government spending. This will feature cuts to nondefense discretionary spending. We do not expect meaningful cuts to the entitlement programs.

These changes are not expected to improve the nation's fiscal situation. The federal government's budget deficit is close to 6% of GDP, which is uncomfortably large. The nation's publicly traded debt-to-GDP ratio is just under 100%, up from 80% before the pandemic, and it will continue to increase.

## U.S. DOLLAR

The broad trade-weighted value of the U.S. dollar is high and received a boost with the U.S. election results and the prospects for higher broad-based tariffs. Prospects that the Fed has paused its rate cuts, at least for a while, are also supporting the dollar, as is the flight to quality into U.S. assets prompted by heightened global uncertainties.

The dollar's value is expected to moderate later this year once it becomes clear the Fed will resume lowering rates, but it will remain high by historical standards for the foreseeable future given global uncertainties. And the dollar's reserve currency status will remain unchallenged.

## ENERGY PRICES

Global oil prices have pushed higher in recent trading, closing in on the \$80 per barrel range. Prompting the higher prices are renewed sanctions on Russian oil supplies and the OPEC+ delay in increasing production. The conflicts in the Middle East, which threaten to disrupt Iranian oil prices, are also a factor.

However, the global oil market appears well supplied given the increases in production in the U.S., Brazil, Norway and Guyana. We also anticipate that OPEC+, which has significant excess capacity, will pump enough oil to ensure that the supply and demand balance in the market does not change much anytime soon, suggesting prices will remain in their current range this year and next.

## GEOPOLITICAL RISKS

No geopolitical risks appear set to boil over and significantly impact the U.S. economy. The most serious geopolitical risk is the vexed relationship between the U.S. and China. While tense, it appears more-or-less stable.

The Russian-Ukraine war will continue for the foreseeable future, but its impact on energy, agriculture, other commodity markets, and the global economy continues to fade. The Israel-Hamas conflict is not expected to spread, and this should mitigate any disruption to energy markets and global shipping through the Suez Canal. We expect any remaining global economic impacts from the pandemic to largely wind down in coming months.

## About Moody's Analytics

In an increasingly interconnected and complex operating environment, organizations face challenges decoding the intricacies of the global economy. Moody's Analytics Economics team delivers timely and in-depth data, forecasts and analysis of the global economy's latest developments and trends—empowering organizations and policymakers to identify and manage risks, seize new growth opportunities, respond to geopolitical threats, and thrive in an ever-evolving landscape.

The Economics team has more than 35 years of dedicated experience in economic forecasting and research. Leveraging our team's global coverage and local expertise, our economists provide unrivalled insight on pivotal economic topics, including labor markets, housing and consumer spending, among others, across the Americas, Europe, the Middle East, and APAC. We also provide real-time monitoring of economic indicators, scenario analysis, and thought leadership on critical themes such as monetary and fiscal policy and sovereign risk—all of which support decision makers and policymakers in strategic planning, product and sales forecasting, stress testing, credit risk management, and investment decisions.

By combining economic modeling, expansive data resources, and innovative technology solutions, we equip business leaders with critical insights to navigate the complexities of an ever-changing economic landscape. Recognized for our industry-leading solutions and commitment to quality, client service, and integrity, more than 1,000 organizations worldwide—including multinational corporations, governments, financial institutions, real estate firms, and professional investors—trust us to help them turn today's risks into tomorrow's opportunities.

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