

ECONOMIC OUTLOOK

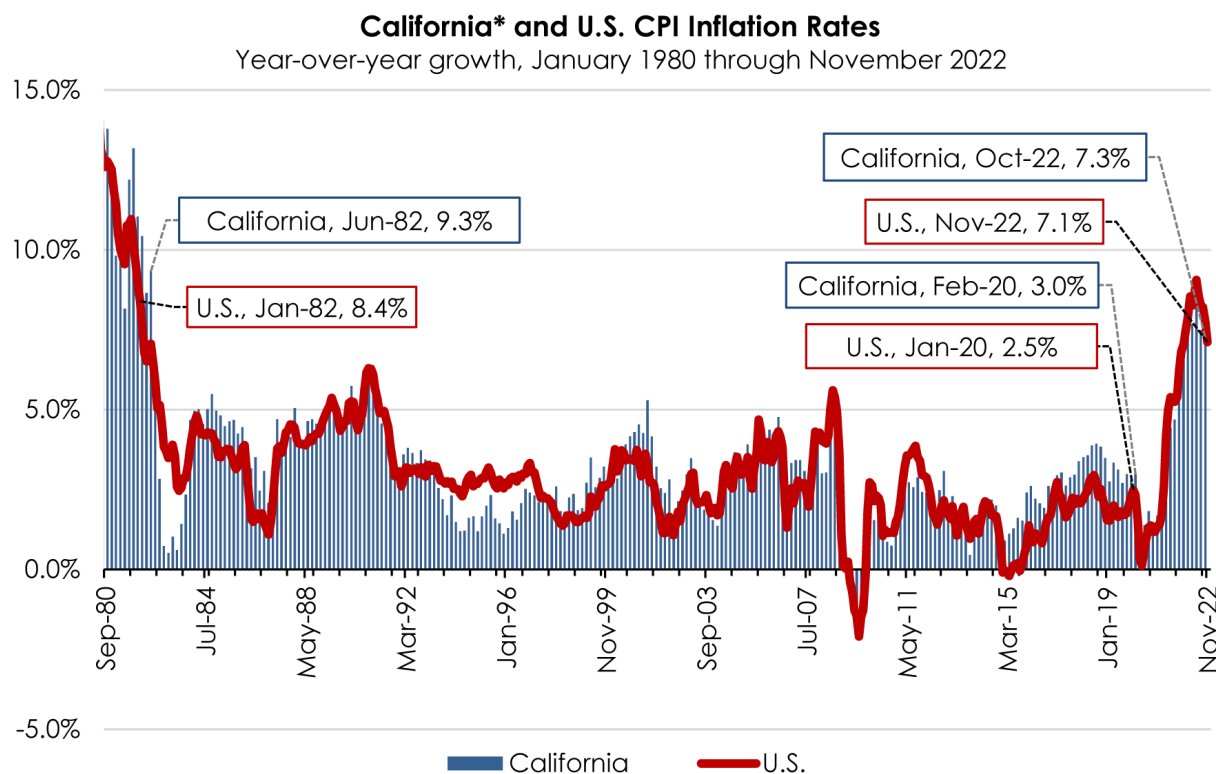
OVERVIEW

Despite stubbornly high inflation, international instabilities, and the ongoing impacts of a global public health pandemic, California and the nation experienced relatively strong nonfarm job growth in 2022. The state recovered all COVID-19 Pandemic-induced job losses as of October 2022, and the unemployment rate fell to a record low in September 2022. While the labor market thrived, U.S. inflation became more broad-based and reached a 40-year high of 8.5 percent by March 2022, leading the Federal Reserve to start raising the target federal funds rate in efforts to cool the overheated economy. (See figure on California and U.S. CPI Inflation Rates.)

Between March and December 2022, the Federal Reserve raised rates seven times to a target range of 4.25 percent to 4.5 percent and has indicated that it will maintain high target rates until inflation slows to the Federal Reserve's target threshold of around 2 percent. The Governor's Budget forecast projects economic growth to continue, albeit at a slower pace in 2023 as interest rates remain high. Nonfarm job and total wage growth are also expected to slow in 2023 before reverting to a trend of more normalized growth.

The uncertain future paths for inflation and Federal Reserve policy pose short-term risks. If high inflation persists longer than expected or if the Federal Reserve policy causes greater pullbacks by businesses or individuals, the economy could tip into a mild recession. This could lead to a steeper decline in investment and interest-sensitive

consumption, which in turn could cause a larger decline in economic growth and reduced nonfarm employment and personal income growth. However, upside risks include a quicker-than-projected easing of inflation and an end to the Russian invasion of Ukraine, which would lead to looser monetary policy and stronger economic growth.



*California inflation rate available through October 2022.
Source: U.S. Bureau of Labor Statistics; California Department of Industrial Relations, CA Department of Finance, Governor's Budget Forecast.

CALIFORNIA JOBS RECOVERY CONTINUES IN 2022 WHILE WAGE GROWTH STALLS

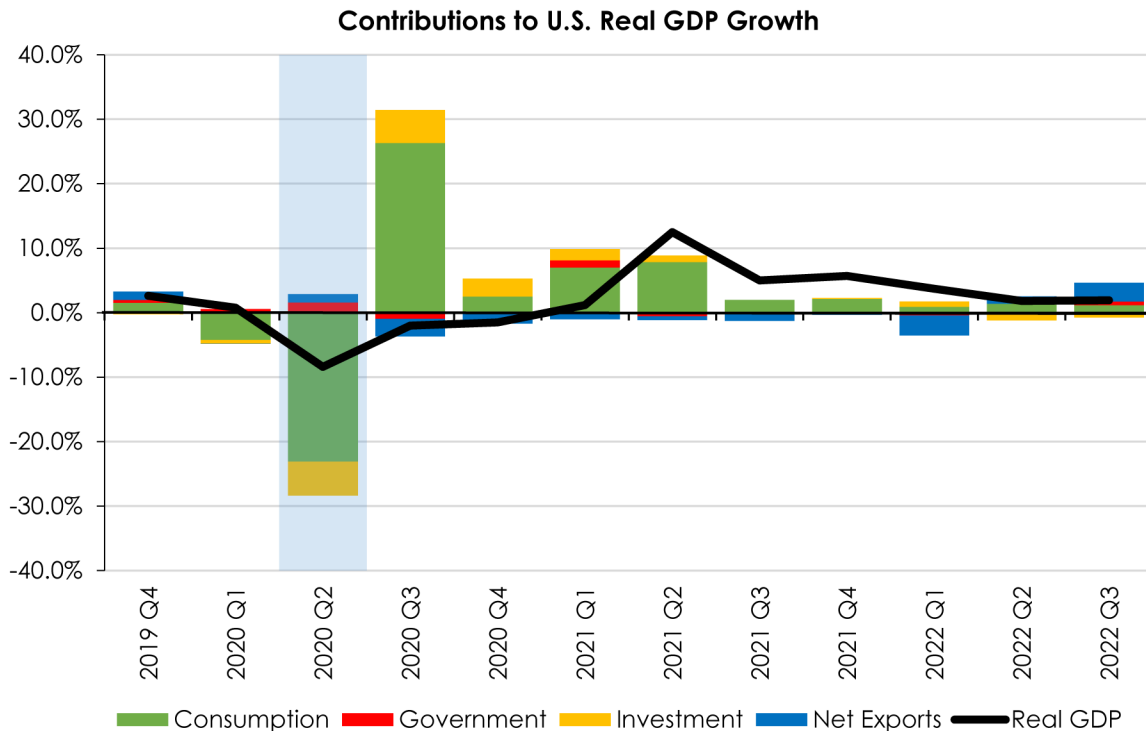
As the state adjusted to living with COVID-19, nonfarm job growth was remarkably strong, growing 3.2 percent annually—its largest growth since 2000. The state recovered the last of the nearly 2.8 million jobs lost as a result of the COVID-19 Pandemic in October. California added nearly 600,000 nonfarm jobs through the first ten months of 2022, a slower pace than in 2021 when the state added more than 900,000 jobs over the same months. Nevertheless, California's job gains in the first ten months of 2022 have accounted for 14.5 percent of the 4 million U.S. jobs added through October, higher than its historical share of U.S. employment of around 12 percent.

Unlike the rapid nonfarm jobs recovery, the state's overall labor force has yet to fully recover to pre-pandemic levels as of October 2022. Despite strong annual labor force growth of 1.7 percent—not seen since the 2000s—only 71 percent of the nearly 1 million people who left the workforce in the first four months of the pandemic had returned as of October 2022. However, California's labor force participation rate is only 0.3 percentage point below its February 2020 pre-pandemic level of 62.6 percent even as the state surpassed the nation's labor force participation rate of 62.2 percent by 0.3 percentage point in June.

As the state's labor force and employment recovery continued throughout 2022, the state's unemployment rate fell to a record-low rate of 3.8 percent in September. Similarly, the nation's unemployment rate fell to 3.5 percent (its lowest rate since 1969) in the same month. The state's employment recovery has followed the nation's trend throughout the year. Even as labor market conditions remained strong, updated data indicate that California's average wage growth in 2021 and in early 2022 was lower than initially estimated. This was in part due to a broad-based slowdown in total wage growth in the first half of 2022, led by contractions in high-wage sectors such as information, financial services, and professional and business services.

THE ECONOMIC FORECAST: SLOWING BUT CONTINUED GROWTH

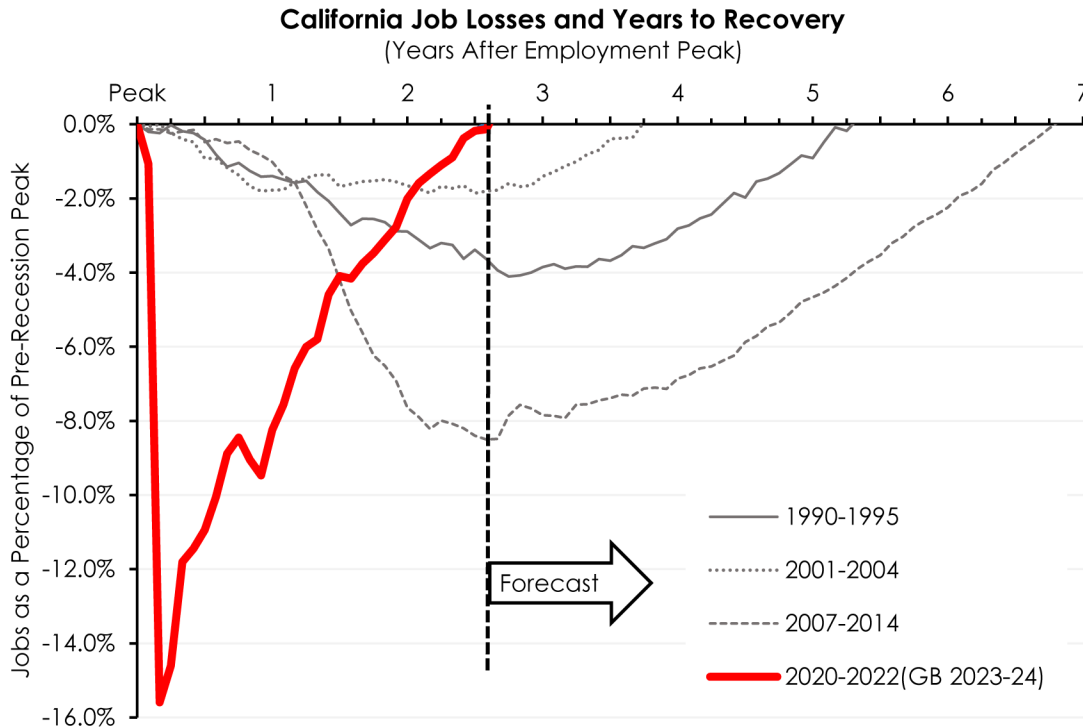
Economic growth is expected to continue, albeit at a slow pace, through 2024 as high interest rates decrease demand. (See figure on Contributions to U.S. Real GDP Growth.) Consumption and exports are also projected to grow more slowly. As a result, U.S. real Gross Domestic Product (GDP) growth is expected to be around 1 percent in 2023 and 2024.



Note: Shaded area indicates recession.
 Source: U.S. Bureau of Economic Analysis; CA Department of Finance, Governor's Budget Forecast.

STRONG STATE JOB GROWTH EXPECTED TO NORMALIZE

In line with slower expected U.S. real GDP growth, California's nonfarm job growth is expected to begin slowing in 2023. Reasons for slowing job growth include weakening demand and the low unemployment environment driven by California's strongest economic recovery since 1960. Nonfarm jobs are then expected to increase across most sectors in California in the second quarter of 2024 as monetary policy eases and, by 2025, both the nation and the state's nonfarm employment growth are projected to return to steady-state trends. The Governor's Budget forecast projects total employment to remain above the pre-pandemic levels throughout the forecast window despite a projected slowdown in job growth. (See figure on California Job Losses and Years to Recovery.)



Lines start from the quarter of each nonfarm employment pre-recession peak.
 Source: CA Employment Development Department, Labor Market Information Division; CA Department of Finance, Governor's Budget Forecast.

California's labor force is projected to grow by 1.4 percent in 2023 and approach its pre-pandemic level even as the labor market weakens. It is projected to moderate thereafter, averaging 0.7 percent growth between 2024 and 2026. Similar to the nation's projections, the state's unemployment rate is projected to peak in 2025 at 5.2 percent before falling to 5 percent in 2026. California's unemployment rate—historically one to two percent higher than the national rate—is expected to stay only one-half point above the national rate over the forecast window.

INFLATION EXPECTED TO MODERATE

Inflation in 2021 was concentrated in energy and transportation and became more broad-based in 2022, spreading to other components including food and shelter. U.S. inflation peaked at 9.1 percent in June 2022, but has since shown signs of easing, slowing to 7.7 percent by October. Likewise, California's inflation peaked at 8.3 percent in June and dropped slightly to 7.5 percent by August, the latest available data when finalizing the forecast.

Despite recent reports of slowing inflation, it remains broad-based but increasingly driven by a backward-looking shelter inflation, which is based on rental contracts over

a fixed period (for example, 6 months or 12 months) and represents about one-third of the overall inflation index. Therefore, shelter inflation tends to decline more slowly than other components. While port and trucking congestion continue to ease, the ongoing shortage of microchips for vehicles continues to hamper production and thus keep new vehicle prices elevated. Food and fuel prices rose sharply after the Russian invasion of Ukraine and have since declined but remain higher than a year ago.

Going forward, headline inflation is expected to continue to decelerate as the labor market cools due to the Federal Reserve's tight monetary policy, supply chain issues continue to resolve, and measured inflation incorporates recent contract rent decreases. However, the forecast projects that the deceleration in shelter inflation will lag other components, reflecting the increases in rents in late 2021 and early 2022. (See figure on Economic Indicators at the end of this chapter.)

MODEST WAGE GROWTH EXPECTED THROUGH FORECAST PERIOD

With the expected easing of inflation and the winding down of the Federal Reserve's tight monetary policy, California average wage growth is projected to moderate throughout the forecast period in comparison to the growth of 11.1 percent and 7.4 percent in 2020 and 2021, respectively. The forecast reflects data revisions released in September 2022 showing a high-wage-sector-driven contraction in total wages in early 2022. Average wages are projected to grow by 3.4 percent in 2023 before averaging 3.6 percent between 2024 and 2026.

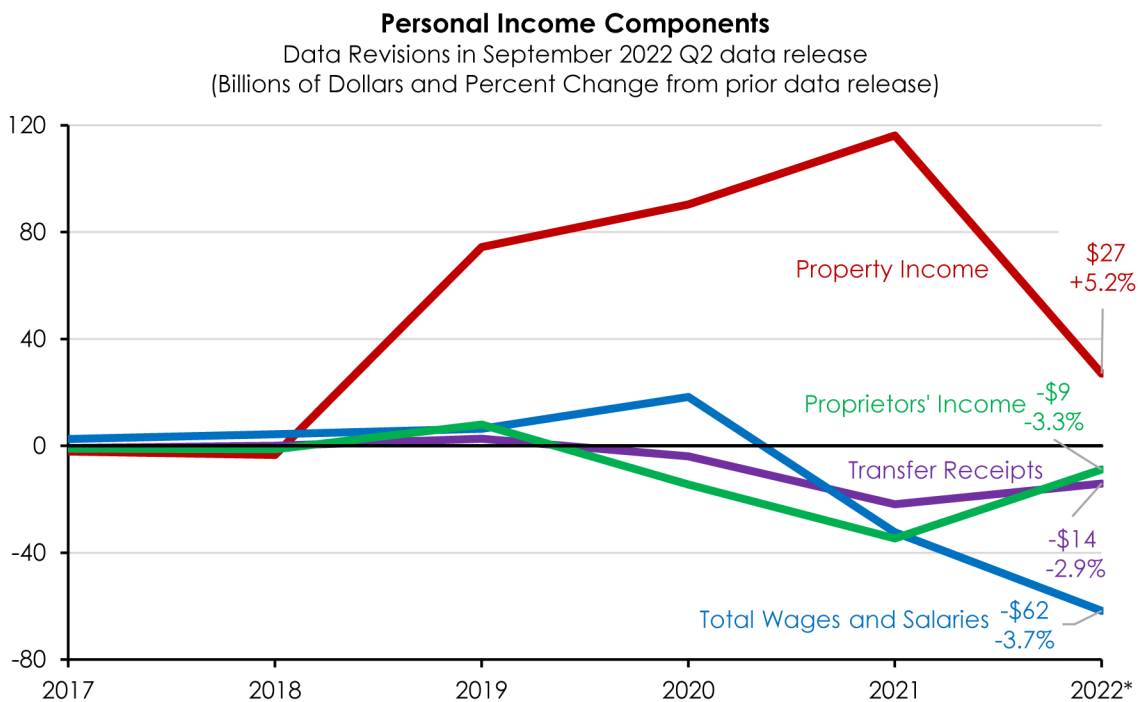
PERSONAL INCOME GROWTH REFLECTS MODERATING WAGE GROWTH

Personal income is projected to have continued growth through 2025, albeit at a slower rate in part due to updated historical data and the labor market response to tighter monetary policy. The Governor's Budget forecast incorporates the second quarter personal income data release, which included revisions to historical data going back to 2017 reflecting more accurate wage data. The data revisions showed a broad-based slowdown in most personal income components, and slower overall headline growth than previously estimated. (See figure on Personal Income Components.) Nevertheless, tighter monetary policy is also expected to curtail headline personal income growth through the forecast window.

Despite the downward revisions to total wages, which makes up more than half of total personal income, the Governor's Budget forecast projects total wages will drive personal income growth. As high interest rates are assumed to cause nonfarm job growth to slow in 2023 and early 2024, total wage growth is expected to see a similar

slowdown. Slower job growth will also be reflected in proprietors' income, which covers the profits of non-corporate businesses and is an indicator of business activity. Business activity is expected to slow due to high interest rates and inflation pushing up business costs, in turn lowering income.

Property income is the sum of interest, rental, and dividend income and is generally driven by interest income. Interest income is projected to grow in line with the expected trajectory of the Federal Reserve's interest rate increases, peaking in 2023 with double-digit growth of 10.8 percent. Rental income is a lagged indicator as it represents contract rents from leases signed over the previous 12 months and tends to follow shelter inflation. It is projected to peak in 2022 due to increases in asking rents in late 2021 and later decelerate through the remainder of the forecast period in line with current rent decreases. Dividend income growth is expected to slow as higher interest rates lead to more risk and investor uncertainty in the stock market. The forecast assumes interest rates will begin to ease by the end of 2023. Beginning in 2024, California personal income is expected to begin reverting to its historical growth trends, averaging 4.7 percent growth in 2025 and 2026.



*Year 2022 only reflects data revisions through the first quarter of 2022. Total wages and salaries were 51 percent of total personal income in 2021, proprietor's income was 8.5 percent, property income was 17.8 percent and transfers was 19.4 percent. Source: U.S. Bureau of Economic Analysis; CA Department of Finance, Governor's Budget Forecast.

HOUSING SHORTAGE PERSISTS

California continues to face a critical housing shortage despite recent declines in the working-age population and various legislative efforts to ease building restrictions. Between January 2000 and January 2022, the state gained 5.9 million new households, but only an additional 2.5 million housing units. Ongoing growth in housing is essential to support long term economic growth in the state. Although the Governor's Budget forecast projects California to average 122,000 permits in 2023, the state would need to permit 180,000 units annually (according to the California Department of Housing and Community Development) to meet housing needs. While building is expected to remain below the necessary number of homes needed to address the state's housing shortage, higher interest rates are expected to limit growth in 2023 and 2024, then as interest rates fall, permit growth is projected to increase in 2025 and 2026.

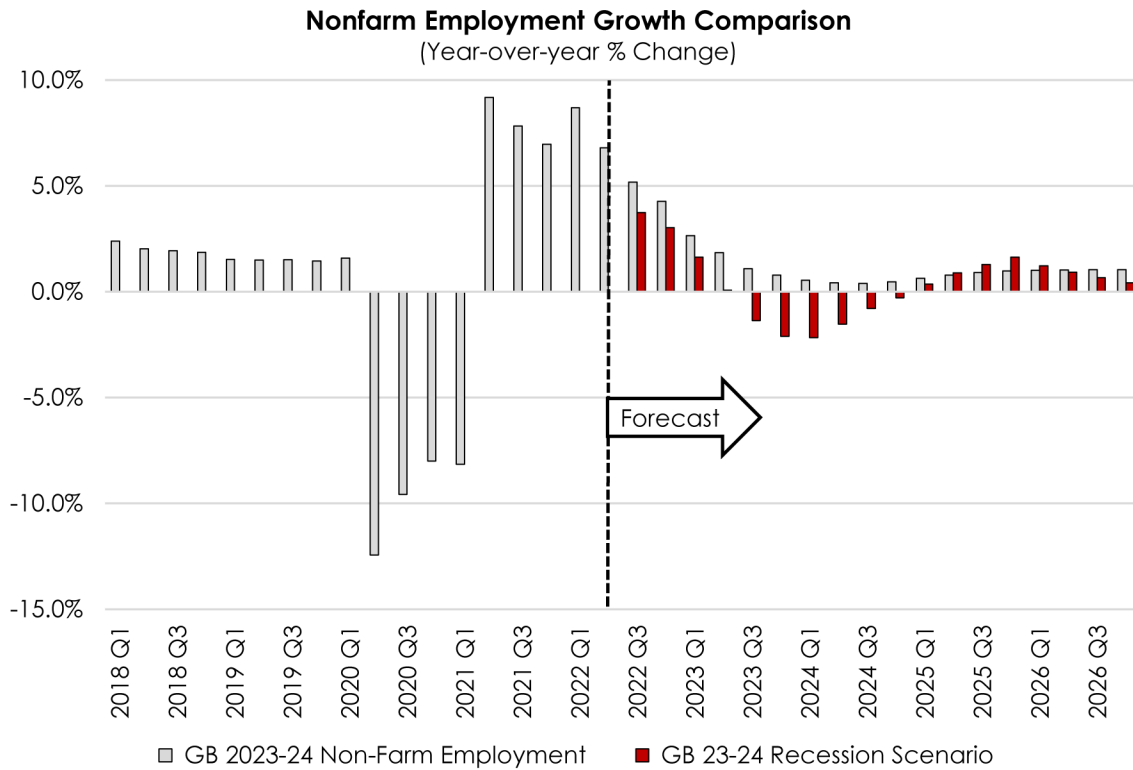
RISKS TO THE FORECAST

The possibility of inflation falling more slowly than expected, or of the Federal Reserve overshooting its policy by tightening more than necessary, poses significant risk to the Governor's Budget forecast. The Federal Reserve has signaled ongoing increases to the target federal funds rate in order to return inflation to its long-term target of around 2 percent, and policy could be tighter than expected if high inflation persists longer than expected. It typically takes several months for the economy to absorb the full effect of policy changes, and there is a risk that the Federal Reserve could raise target interest rates too high and too fast, causing tight credit conditions that may discourage economic activity even after inflation has returned to normal. This could deepen the expected economic slowdown and push the economy into a mild recession.

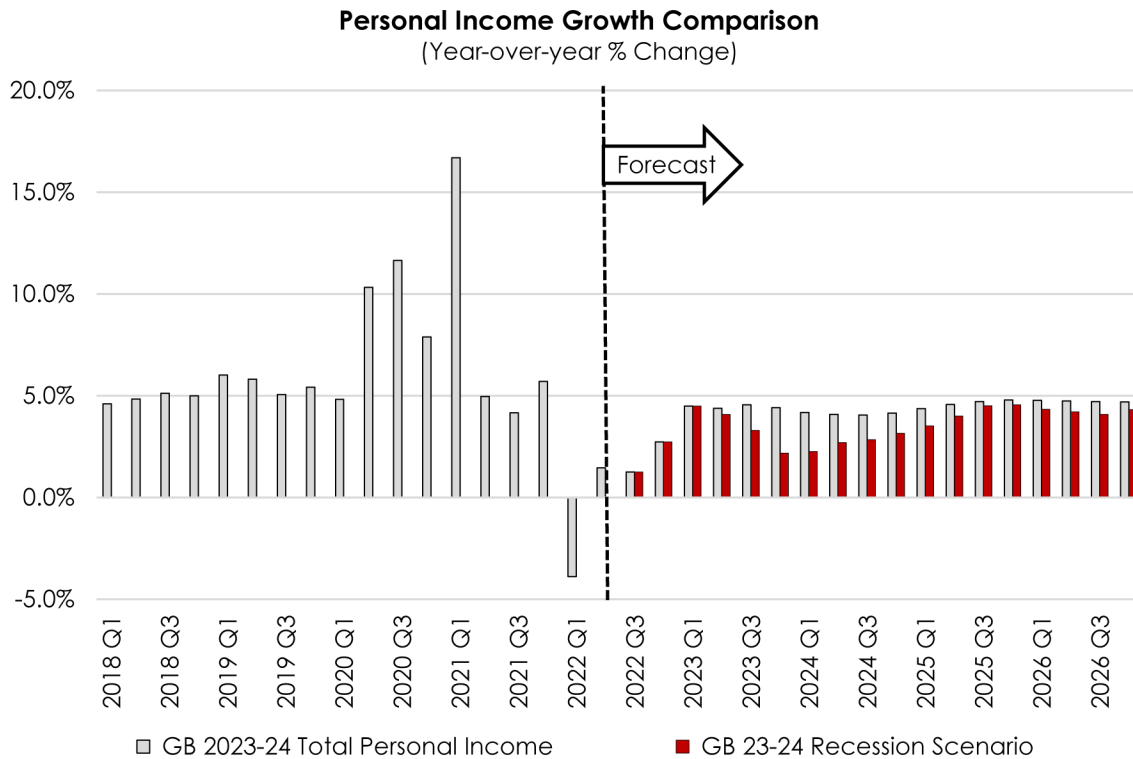
Overreactions from individuals, businesses, and markets to the Federal Reserve's policies, for example, by assuming that future monetary policy would be tighter than it turns out to be and curtailing expansion plans accordingly, could have a similar impact.

A mild recession along the lines described above would likely entail steeper declines in investment and interest-sensitive consumption than in the Governor's Budget baseline forecast. To that end, the Department of Finance has modeled a Recession scenario that projects California nonfarm employment to contract in late 2023 through 2024. Personal income would also grow more slowly in this scenario, as cumulative state personal income would be \$132 billion lower over the forecast window than in the

baseline forecast. (See figures on Nonfarm Employment Growth Comparison and Personal Income Growth Comparison.)



Source: U.S. Bureau of Economic Analysis, CA Department of Finance, 2023-24 Governor's Budget Forecast.



Source: U.S. Bureau of Economic Analysis, CA Department of Finance, Governor's Budget Forecast.

Conditions in China also present a potential forecast risk, as turmoil stemming from continued lockdowns under a zero-tolerance COVID-19 policy, related unrest, and a potential financial crisis could disrupt the global economy. China has also threatened an invasion of Taiwan, which could be more disruptive to the global supply chain than the Russian invasion of Ukraine as Taiwan is the world's largest supplier of semiconductors.

California home prices fell in the second half of 2022, but a steeper decline could depress permit activity more than expected, reducing construction employment and overall economic activity in the state in the short term. While lower housing costs would likely improve the state's long-term competitive position, a sudden drop could lead to a sustained construction slump as it did after the collapse of the housing bubble before the Great Recession.

Potential upside risks to the forecast include faster-than-expected easing of inflation and resolution of the Russian invasion of Ukraine, which could revive European economic growth and increase demand for U.S. exports. Inflationary cooling over the next several months in line with the deceleration in October could lead to less restrictive

monetary policy than expected. Resulting lower interest rates could boost construction spending and other investment.

Economic Indicators

Annual Percentage Change unless Otherwise Indicated

	2019	2020	2021	Forecast				
				2022	2023	2024	2025	2026
United States								
Real GDP	2.3%	-3.4%	5.7%	1.7%	0.9%	1.3%	1.9%	1.9%
Unemployment Rate (percent)	3.7%	8.1%	5.4%	3.7%	3.9%	4.5%	4.7%	4.6%
Nonfarm Employment	1.3%	-5.8%	2.8%	4.0%	0.9%	-0.5%	0.0%	0.4%
Personal Income	4.1%	6.5%	7.5%	3.0%	4.6%	3.9%	4.5%	4.5%
CPI Inflation Rate (percent)	1.8%	1.2%	4.7%	8.1%	4.7%	2.5%	2.3%	2.3%
California								
Unemployment Rate (percent)	4.1%	10.3%	7.4%	4.4%	4.5%	5.1%	5.2%	5.0%
Civilian Labor Force	0.6%	-2.5%	-0.1%	1.9%	1.4%	0.9%	0.7%	0.5%
Nonfarm Employment	1.5%	-7.1%	3.6%	6.2%	1.6%	0.5%	0.8%	1.0%
Residential Permits (thousands of units)	110	106	120	121	122	127	134	142
Average Wages	4.4%	11.1%	7.4%	0.5%	3.4%	3.0%	3.7%	3.9%
Real Average Wages	1.4%	9.4%	3.1%	-7.2%	-1.9%	-0.6%	0.5%	0.8%
Personal Income	5.6%	8.7%	7.7%	0.4%	4.5%	4.1%	4.6%	4.7%
CPI Inflation Rate (percent)	3.0%	1.7%	4.3%	7.7%	5.3%	3.6%	3.2%	3.1%

Governor's Budget Forecast based on data available as of November 2022.

Source: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; U.S. Census Bureau; CA Employment Development Department, Labor Market Information Division; CA Department of Finance, 2023-24 Governor's Budget Forecast.