ECONOMIC OUTLOOK

Despite increased economic uncertainties surrounding highly publicized tech sector layoffs and a banking crisis that saw three of the four largest bank failures in U.S. history in March and April 2023, the U.S. and California economies have seen continued deceleration of inflation and steady though slowing job growth within a tight labor market. U.S. Gross Domestic Product (GDP) grew by 1.1 percent in the first quarter of 2023, buoyed by strong consumption as American consumers have remained resilient. Having recovered all the jobs lost during the COVID-19 Pandemic, both the U.S. and California economies are now firmly in the post-pandemic and subsequent recovery period.

Inflation has decelerated more rapidly than projected in the Governor's Budget, with U.S. inflation at 5 percent year-over-year in March compared to a 5.9 percent projection and a peak of 9.1 percent in June 2022. California inflation was at 5.4 percent year-over-year in February 2023 (the latest available data) compared to a projection of 7.1 percent and a peak of 8.3 percent in June 2022. However, headline inflation remains elevated even as the Federal Reserve has increased target interest rates by 5 percentage points since March 2022 with the most recent increase of 0.25 base percentage point in May 2023. Port and trucking congestion, fuel prices, and microchip shortages all eased in late 2022, contributing to generally lower inflation for most goods, although inflation in most services remained elevated as demand shifts away from goods. Shelter inflation, the largest component of services, has not yet begun to fall on a year-over-year basis despite recent declines in market rents, and continued to accelerate through early 2023, reflecting rapid rent increases during the last two years.

The U.S. and California labor markets continue to add jobs, but at slower rates as they move beyond the period of rapid recovery from pandemic-induced losses and approach steady-state levels consistent with historical trends. California's nonfarm employment grew by an average of 32,700 jobs monthly during the first quarter of 2023, less than half the monthly average gain of 68,200 jobs from a year ago in the first quarter of 2022, but higher-than-average monthly gains of 23,100 jobs in the first quarter of each year during the post-Great Recession period of 2015 to 2019. Likewise, the U.S. added an average of 344,700 jobs monthly in the first quarter of 2023, considerably less than the 560,700 average monthly jobs added in the first quarter of 2022, but above the nearly 200,000 average monthly job gain in the first quarter of the five years from 2015 to 2019.

The May Revision forecast projects the U.S. economy to grow slowly through the third quarter of 2023, with U.S. real GDP growth averaging 0.5 percent in the second and third quarters amidst tighter financial conditions. Both high interest rates and increasingly cautious lending in the wake of recent major bank failures are expected to limit interest-sensitive spending such as business expansions and building construction. The Federal Reserve is projected to ease monetary policy by the end of 2023 as inflation is projected to continue cooling. This, in turn, will lead business investment to recover and the economy to return to its projected long-run average quarterly growth range of 1.5 to 2 percent beginning in the fourth quarter of 2023.

Concerns over the financial and tech sectors due to the fallout in the banking industry and announced tech industry layoffs have exacerbated uncertainties for California's economic outlook. The financial activities and information sectors (the latter containing many firms typically considered to be tech firms) provide many of the state's highest paying jobs and contribute a disproportionate share towards the state's income tax revenues. These two sectors have lost 8,500 jobs (0.6 percent of their combined December 2022 total) in the first three months of 2023, compared to a gain of 14,600 jobs in the same period a year ago. These recent job losses kept nonfarm employment in the financial activities sector below its pre-pandemic (February 2020) level. Meanwhile, information employment remains above its pre-pandemic level, despite recent job losses. The immediate actions of the Treasury Department, the Federal Reserve, and central banks around the world have so far prevented a systemic contagion effect from the banking crisis, and the May Revision forecast does not project any further drags on the economy as a result.

Many of the layoffs in the tech sector seem to be located outside the state and represent a correction to apparent over-hiring at some firms during the pandemic. The state's tech firms are projected to resume adding jobs by the end of the year as financial conditions stabilize. As such, the May Revision forecast projects no further major financial or tech industry-related disruptions within the forecast window (2023 through 2026).

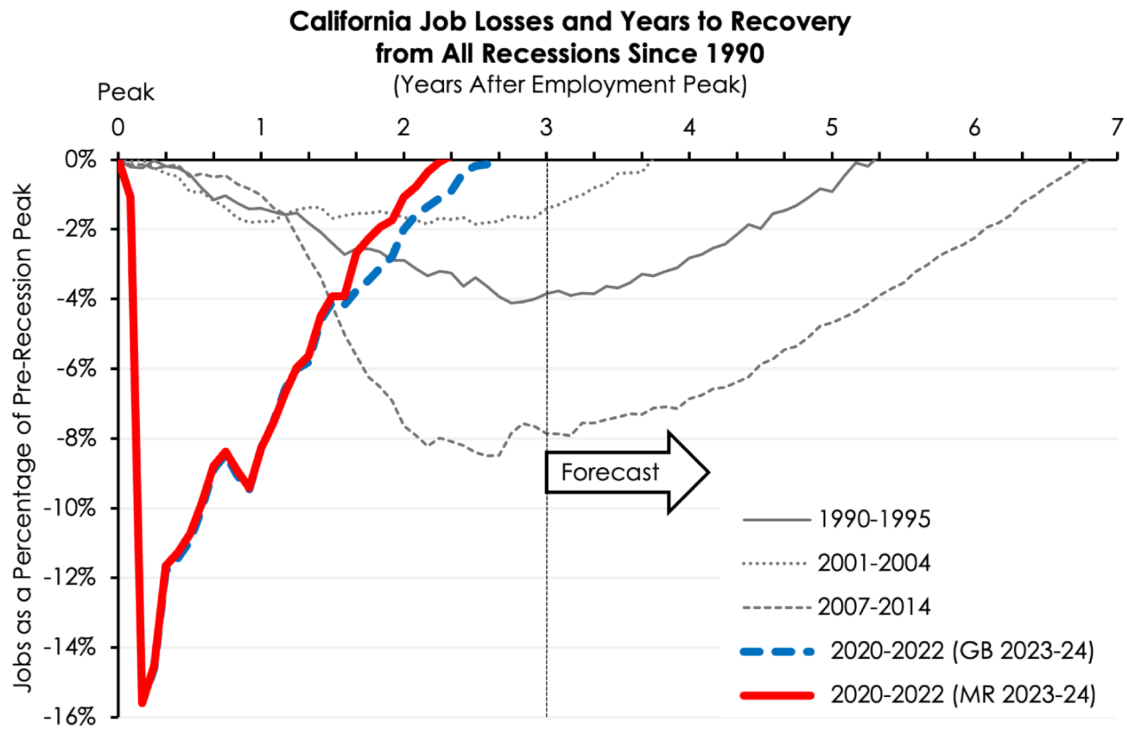
CALIFORNIA JOB GROWTH NORMALIZES, WAGE GROWTH STALLS

According to the annual benchmark revisions to California labor market data released in March 2023, California recovered all of the nearly 2.8 million jobs lost at the onset of the COVID-19 Pandemic in March and April 2020 by June 2022—five months earlier than previously estimated in the Governor's Budget forecast. (See figure on California Job Losses and Years to Recovery.) The stronger nonfarm job recovery was driven by gains in high-wage sectors which recovered to their pre-pandemic February 2020 level in April 2022, followed by low-wage sectors in July 2022.

Low-wage sectors—industries with average wages below the 2019 average wage for all industries—lost a higher share of jobs than high-wage sectors did during the COVID-19 Recession, but now see more robust job growth. Recent tech-related layoffs significantly weakened job growth in high-wage sectors. As of March 2023, the latest data available, California's high-wage sectors gained an average of 8,700 jobs per month during the first quarter of 2023, compared to 30,800 average monthly job gains in the first quarter of 2022. In contrast, low-wage sectors gained about 24,000 average jobs per month in the first quarter of 2023, compared to 37,400 monthly job gains in the same period in 2022.

Unlike the nonfarm job recovery, California's labor force has yet to recover to its pre-pandemic level as of March 2023 growing by 1.4 percent in 2022, somewhat lower than the Governor's Budget projection of 1.9 percent. Despite the labor force growing at twice the 2019 pre-pandemic growth of 0.7 percent, only 77.7 percent of the just over 1 million people that left the workforce in the first three months of the COVID-19 Pandemic have returned as of March 2023. The slow growth in the labor force has contributed to a rapid decline in unemployment despite tepid household employment growth. California's unemployment rate averaged 4.2 percent in 2022, 0.2 percentage point lower than the Governor's Budget forecast of 4.4 percent.

Following annual benchmark revisions to labor market data, the state's unemployment rate fell to its record-low rate of 3.8 percent in July and August 2022, two months earlier



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, 2023-24 May Revision Forecast.

than previously estimated in the Governor's Budget. The nation reached its record-low (since 1953) unemployment rate of 3.4 percent in January 2023, five months later. U.S. civilian (household) employment recovered to its pre-pandemic level in the fourth quarter of 2022, while California's civilian employment has plateaued since the middle of 2022.

The state's highest paying sectors (information and finance in particular) saw significant wage declines in 2022, due largely to much lower levels of irregular payments such as bonuses and options, as rising interest rates contributed to a 19.4-percent decline in the S&P 500 stock index over the course of the year. Thus, California's average wage growth fell to just 0.1 percent in 2022 after strong growth of 11.1 percent in 2020 and 7.5 percent in 2021.

THE FORECAST: PROJECTED SLOWING GROWTH

As with the Governor's Budget, economic growth is projected to continue in the May Revision forecast, driven by stronger levels of consumption relative to other components. However, GDP growth is projected to slow through the third quarter of 2023 as high interest rates and tighter financial conditions dampen consumer and business demand, slowing interest-sensitive consumption and investment. Credit conditions are projected to begin easing in late 2023, and GDP is then projected to recover to steady-state growth rates of between 1.5 and 2 percent through 2026. (See figure on Economic Indicators at the end of this chapter.)

INFLATION PROJECTED TO COOL

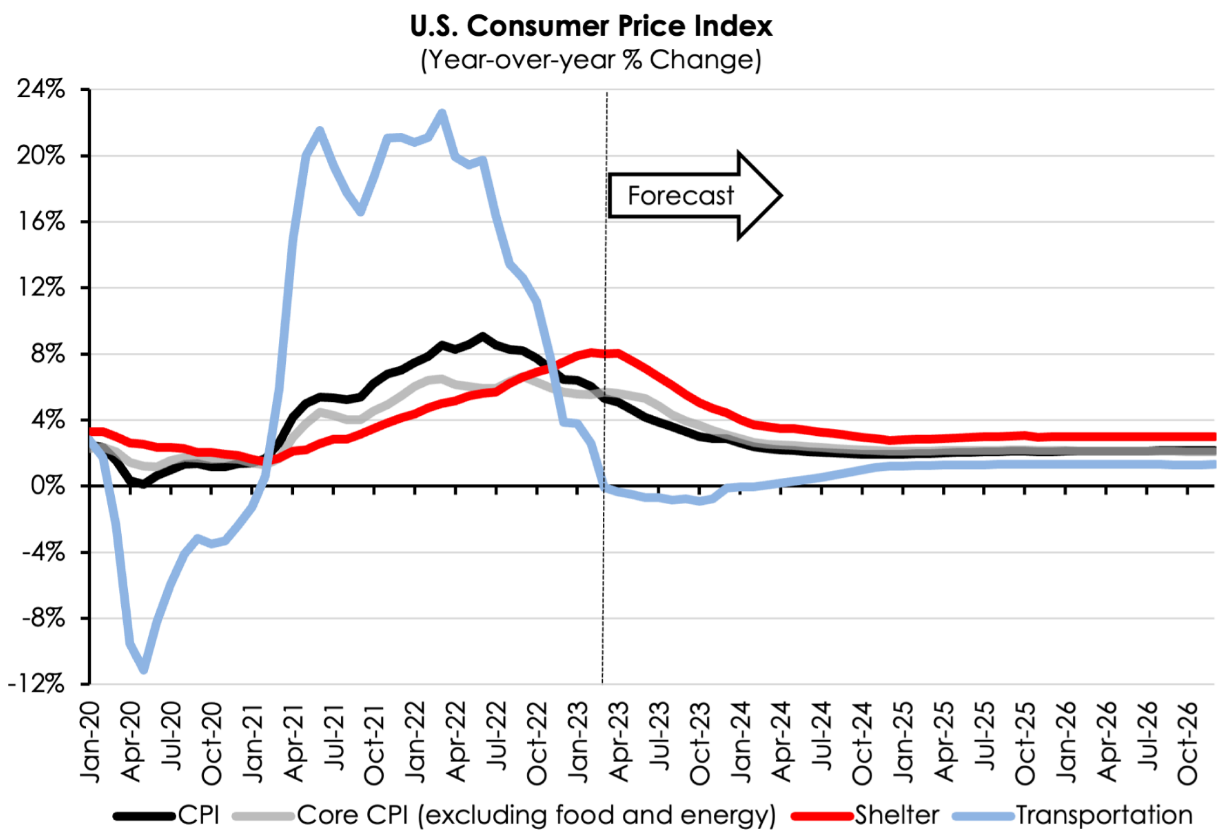
The May Revision forecast projects that U.S. headline inflation will continue to slow due to cooling demand as the Federal Reserve maintains the restrictive monetary policy stance it adopted in March 2022 through the rest of 2023. The supply chain issues that contributed to high inflation in 2021 and much of 2022 have mostly been resolved; as a result, inflation in most categories of goods has been slowing, although inflation in service sectors has been more persistent as consumption shifts towards services and away from goods.

Shelter inflation remains high, as average rents on existing leases are still well above their early 2022 levels even as asking rents on units currently on the market have stagnated for several months. Shelter inflation is projected to ease, slowing to historical rates of slightly above 2 percent for the nation and 3 percent for the state by late 2024. (See figure on U.S. Consumer Price Index.)

STEADY JOB GROWTH PROJECTED TO RETURN

California's nonfarm job growth is projected to slow in 2023 and into early 2024, in line with the slowing of U.S. real GDP growth. Recent data indicates that nonfarm employment growth is reverting to historical trends and entering a new normal after the rapid post-pandemic recovery period. The current high interest rate environment and more cautious lending by banks are expected to create tighter credit conditions that would curtail job growth in credit-sensitive sectors. California companies' venture capital funding boomed following the pandemic but declined to pre-pandemic levels in late 2022 and early 2023. As a result, the information sector is projected to lose 15,600 jobs from 2022 to 2024 compared to a projected gain of 15,300 in the Governor's Budget forecast.

California's labor force is projected to continue growing, though at a slower rate of 1 percent in 2023 as it approaches its pre-pandemic level. Thereafter, it is projected to slow to 0.5-percent growth in 2026 partially due to revised population projections, especially for working-age individuals between the ages of 16 and 64. Similarly, California's civilian employment is projected to recover in late 2025 as the labor market



Source: U.S. Bureau of Labor Statistics; CA Department of Finance, 2023-24 May Revision Forecast.

further relaxes in response to the Federal Reserve's monetary policy and as economic activity slows.

California's unemployment rate is projected to increase through 2025 as current tight financial conditions soften the labor market. The unemployment rate is projected to peak in early 2025 at 5.2 percent before moderating to 5 percent thereafter. Historically, California's unemployment rate has been slightly above but closely correlated to the U.S. rate. However, recent trends have somewhat diverged as the state's labor market has softened at a faster pace than the nation's, which was at 3.5 percent unemployment in March 2023.

MODEST WAGE GROWTH PROJECTED

California average wage growth is projected to recover to around 3 percent in 2023 and 2024, as the Federal Reserve winds down its current tight monetary policy, inflation eases, and employment growth slows. Wage growth in the highest-paying sectors is projected to be very slow in 2023 as companies adjust to the post-pandemic period and irregular payments remain at fairly low levels. As these sectors recover somewhat, average wages are then projected to grow by around 4 percent in 2025 and 2026, similar to the growth rates in 2018 and 2019 before the COVID-19 Pandemic began.

PERSONAL INCOME GROWTH CONTINUES DESPITE SLOWER WAGE GROWTH

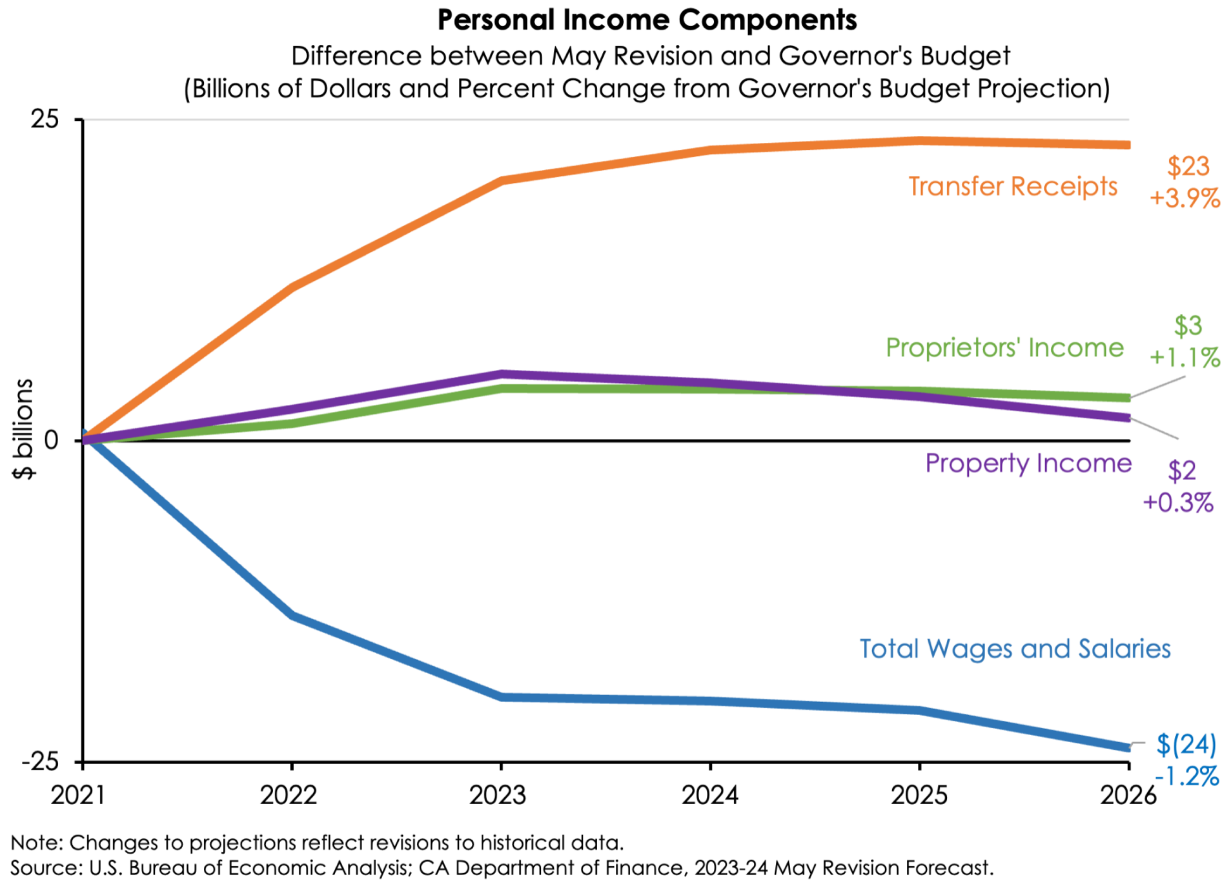
Actual California headline personal income growth in 2022 matched the Governor's Budget projection of 0.4 percent. The May Revision forecast incorporated two additional quarters of data and revisions to historical data. The revisions showed personal income growth was slightly slower in the first half of 2022—contracting 3.3 percent compared to a projected 2.4-percent contraction in the Governor's Budget with minor revisions to its components. Headline personal income growth is still projected to moderate in 2024 (to 4.1 percent) in line with slower growth in nonfarm payroll employment in late 2023 into 2024.

Total wages and salaries saw the largest downward revision to actual data with a level shift down of about $14 billion through 2022. (See figure on Personal Income Components.) Despite this, total wages are still projected to continue to drive headline growth throughout the forecast window, as they make up more than half of total personal income, but at a slowing rate as high interest rates hamper nonfarm job growth in 2023 and early 2024. Weaker job growth is also projected to slightly slow growth in proprietors' income, or the profits of non-corporate businesses.

Property income is the sum of interest, rental, and dividend income, and is projected to have its largest growth over the forecast window in 2023 driven by interest income which is largely pegged to the federal funds rate. Rental income, which tends to be driven by shelter inflation, is also expected to peak in 2023 and remain elevated through early 2024 as rents begin to ease in line with slowing shelter inflation. Dividends are expected to see slower growth as higher interest rates lead to more risk and increased investor uncertainty in the stock market.

Transfer receipts saw the largest upward revision to data, with a level shift up of about $12 billion in 2022. This increase was mainly driven by higher-than-projected transfer receipts in the fourth quarter of 2022.

Compared to the Governor's Budget, there are no significant changes expected for headline personal income growth. Assuming interest rates begin to ease in 2024, the majority of the personal income components would begin reverting to their historical growth trends in 2025 and 2026. Headline growth is projected to average 4.5 percent throughout the May Revision forecast window.



PERMITS TO DECLINE IN 2023 BUT PROJECTED TO GROW THEREAFTER

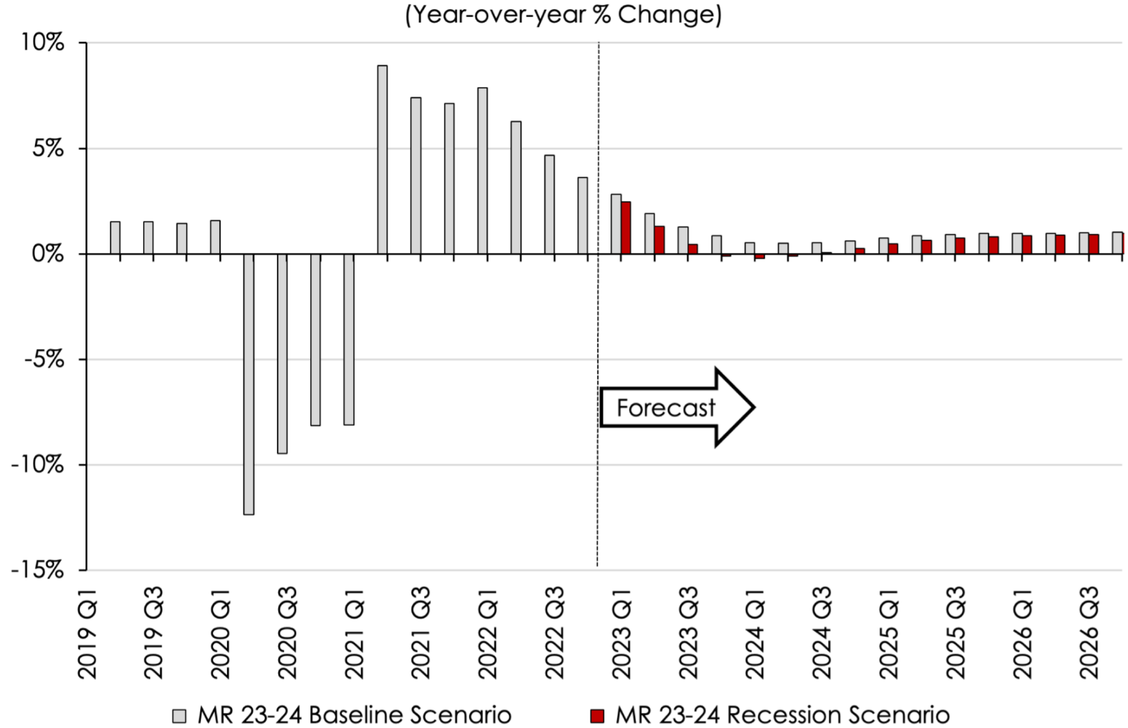
As California population growth slows and projections of future growth decreases, California is now estimated to need around 148,000 housing units permitted annually (down from the Department of Housing and Community Development's 2018 estimate of 180,000) to keep pace with projected population growth. Even with this updated projection, California still has an ongoing critical housing shortage. The May Revision forecast projects a continued decline in permits due to increased interest rates slowing the demand for housing and making construction loans more expensive. Residential permits are then expected to begin growing in 2024 through 2026 as the Federal Reserve cuts interest rates, averaging 121,600 units annually which could increase the gap between supply and demand and exacerbate the housing crisis.

RISKS TO THE FORECAST

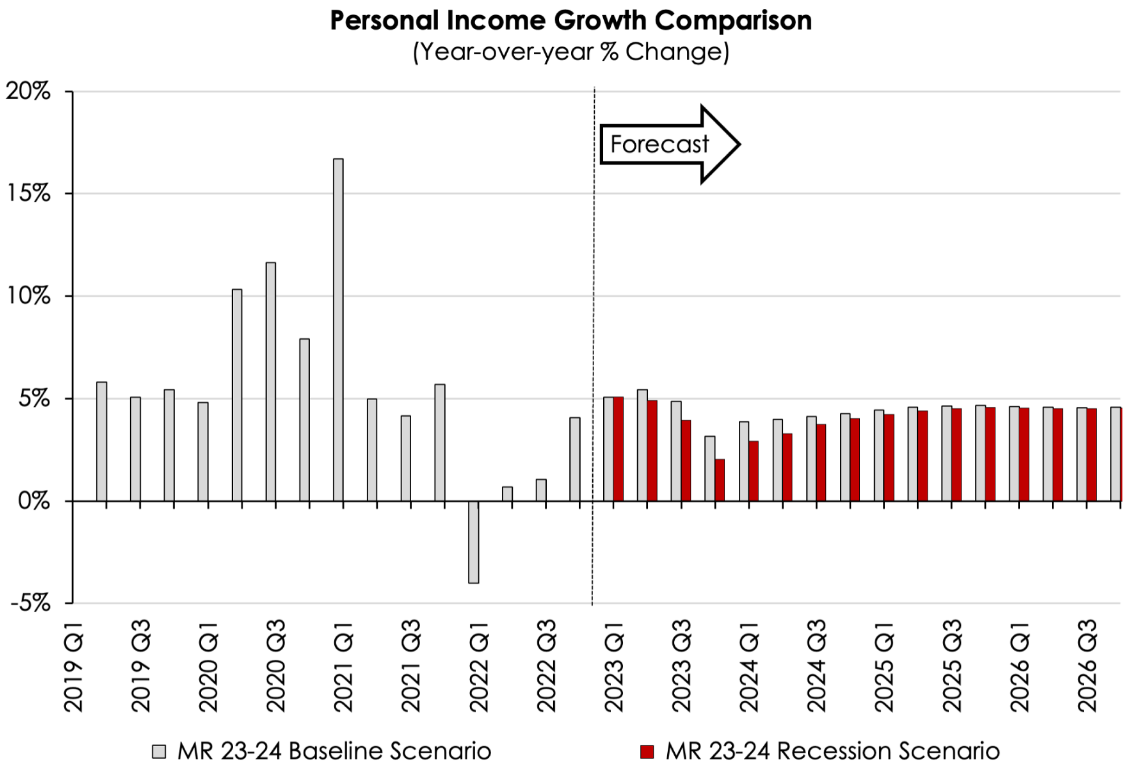
Additional layoffs in the tech industry that may spill over into ancillary industries and residual concerns over conditions in the banking sector pose significant risks to the May Revision forecast. The tech firms that employ many of the state's highest earners could see further layoffs to correct for over-hiring during the height of the COVID-19 Pandemic. Also, the collapses of Silicon Valley Bank, Signature Bank, and First Republic Bank have sparked additional risk in the banking sector, and the economic outlook could worsen if banks further curtail lending to bolster their reserves. The Federal Reserve could also potentially hamper economic activity if it keeps target interest rates too high for too long—even while banks are lending less under tighter lending conditions.

While the May Revision forecast does not project a recession in the forecast window, Finance has developed an alternative scenario. This alternative scenario projects a relatively mild recession beginning at the end of 2023 driven by a deeper slump in the tech and financial sectors, further slowing nonfarm employment and wage growth especially in high-income sectors. A potential recovery to steady-state growth would begin toward the end of 2024. However, a more moderate recession could occur due to a prolonged downturn in the tech and financial sectors and banking worries take longer to ease and asset markets soften further. This scenario would see weaker economic activity and increased job losses that would spread to other sectors. A moderate recession would last through the end of 2024 and recovery would not begin until 2025 heading into 2026. (See figures on Nonfarm Employment Growth Comparison and Personal Income Growth Comparison.)

Nonfarm Employment Growth Comparison
(Year-over-year % Change)



Source: U.S. Bureau of Economic Analysis, CA Department of Finance, 2023-24 May Revision Forecast.



Source: U.S. Bureau of Economic Analysis, CA Department of Finance, 2023-24 May Revision Forecast.

Other risks to the forecast also remain, including an escalation of tensions between China and Taiwan that could disrupt the world economy, or a protracted standoff over the federal debt ceiling later this spring that could roil financial markets as the Treasury's "extraordinary measures" are estimated to only last through early June. Long-term structural downside risks to the state economy and budget also remain, including climate change and its attendant more frequent extreme weather events such as wildfires, drought, and floods, chronic stock market volatility, high housing and living costs, and income inequality.

Economic Indicators
Annual Percentage Change unless Otherwise Indicated

Column1	2019	2020	2021	2022	Forecast 2023	2024	2025	2026
United States								
Real GDP								
May Revision, April 2023	2.3%	-2.8%	5.9%	2.1%	1.0%	1.5%	1.5%	1.7%
Governor's Budget, November 2022	2.3%	-3.4%	5.7%	1.7%	0.9%	1.3%	1.9%	1.9%
Unemployment Rate (percent)								
May Revision, April 2023	3.7%	8.1%	5.4%	3.6%	3.6%	4.1%	4.4%	4.5%
Governor's Budget, November 2022	3.7%	8.1%	5.4%	3.7%	3.9%	4.5%	4.7%	4.6%
Nonfarm Employment								
May Revision, April 2023	1.3%	-5.8%	2.9%	4.3%	1.6%	-0.4%	-0.2%	0.1%
Governor's Budget, November 2022	1.3%	-5.8%	2.8%	4.0%	0.9%	-0.5%	0.0%	0.4%
Personal Income								
May Revision, April 2023	5.1%	6.7%	7.4%	2.4%	4.9%	4.7%	4.4%	4.4%
Governor's Budget, November 2022	4.1%	6.5%	7.5%	3.0%	4.6%	3.9%	4.5%	4.5%
CPI Inflation Rate (percent)								
May Revision, April 2023	1.8%	1.2%	4.7%	8.0%	4.2%	2.1%	2.0%	2.1%
Governor's Budget, November 2022	1.8%	1.2%	4.7%	8.1%	4.7%	2.5%	2.3%	2.3%
California								
Unemployment Rate (percent)								
May Revision, April 2023	4.1%	10.2%	7.3%	4.2%	4.6%	5.1%	5.2%	5.0%
Governor's Budget, November 2022	4.1%	10.3%	7.4%	4.4%	4.5%	5.1%	5.2%	5.0%
Civilian Labor Force								
May Revision, April 2023	0.7%	-2.3%	0.1%	1.4%	1.0%	0.8%	0.6%	0.5%
Governor's Budget, November 2022	0.6%	-2.5%	-0.1%	1.9%	1.4%	0.9%	0.7%	0.5%
Nonfarm Employment								
May Revision, April 2023	1.5%	-7.1%	3.5%	5.6%	1.7%	0.5%	0.9%	1.0%
Governor's Budget, November 2022	1.5%	-7.1%	3.6%	6.2%	1.6%	0.5%	0.8%	1.0%
Residential Permits (thousands of units)								
May Revision, April 2023	110	106	120	114	109	115	121	129
Governor's Budget, November 2022	110	106	120	121	122	127	134	142
Average Wages								
May Revision, April 2023	4.4%	11.2%	7.5%	0.1%	3.0%	3.0%	3.7%	3.9%
Governor's Budget, November 2022	4.4%	11.1%	7.4%	0.5%	3.4%	3.0%	3.7%	3.9%
Real Average Wages								
May Revision, April 2023	1.4%	9.5%	3.2%	-7.3%	-1.3%	-0.1%	0.8%	0.9%
Governor's Budget, November 2022	1.4%	9.4%	3.1%	-7.2%	-1.9%	-0.6%	0.5%	0.8%
Personal Income								
May Revision, April 2023	5.6%	8.7%	7.7%	0.4%	4.6%	4.1%	4.6%	4.6%
Governor's Budget, November 2022	5.6%	8.7%	7.7%	0.4%	4.5%	4.1%	4.6%	4.7%
CPI Inflation Rate (percent)								
May Revision, April 2023	3.0%	1.7%	4.3%	7.4%	4.3%	3.1%	2.9%	3.0%
Governor's Budget, November 2022	3.0%	1.7%	4.3%	7.7%	5.3%	3.6%	3.2%	3.1%

2023-24 May Revision Forecast based on data available as of April 2023.
Governor's Budget Forecast based on data available as of November 2022. Figures in italics indicate forecasts, including 2022 figures for Governor's Budget Forecast.
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 May Revision Forecast.