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March 2023 Report

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THE UCLA ANDERSON FORECAST FOR THE NATION AND CALIFORNIA

March 2023 Report

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THE UCLA ANDERSON FORECAST FOR THE NATION

MARCH 2023 REPORT

Recession or No Recession? That is the Question

Recession or No Recession? That is the Question

The UCLA Anderson Forecast Team
March 2023

As with the last quarterly forecast, we are presenting a two-scenario approach for the current economic forecast. One scenario is no recession, where economic growth slows but remains positive, inflation ebbs, labor markets remain robust, and the Federal Reserve takes a less aggressive approach to monetary policy tightening.

The second scenario is a recession, occurring toward the end of this year, where inflation would have continued to run hot if not for aggressive Federal Reserve action. In this scenario, the Federal Reserve forces a mild recession and

accepts an economic contraction and higher unemployment to combat inflation.

Importantly, the difference in the two scenarios is the decision of the Federal Reserve in setting monetary policy. This decision is endogenous. The Fed has said it will be data dependent. If the data show the labor market remains robust but inflation remains sticky, the Fed will likely err on the side of tightening monetary policy more aggressively.

The table below summarizes the key differences between the two scenarios:

EXHIBIT 1

Key differences between the recession and no-recession scenarios

Scenario:	Recession	No Recession
Federal Funds Rate	5.75-6.0%	5.0-5.25%
Economic growth	Contraction in 23Q3, 23Q4, and 24Q1 (deepest), then growth	Slowdown but no contraction in 23Q3, 23Q4, or 24Q1
Peak unemployment rate	4.7% (mild recession)	Eases up to 3.8%
Peak 30Y fixed mortgage rates	7.5%	6.8%
Housing starts	1.2M in '23	1.4M in '23
Autos	15.1M in '23	16.8M in '23
Inflation	Stickier, requires recession to come down	Eases down more quickly on its own
Defense spending	Up	Up
Infrastructure spending	Up	Up
Government shutdown	Not modeled	Not modeled
WTI oil prices	\$65 pb by '24	\$75 pb by '24

The trajectory of the economy remains sufficiently uncertain that we feel it would be a disservice to present an average of two divergent possibilities, and hence, presenting the two-scenario approach is appropriate. In 2022 Q4, the economy continued expanding, even though many economists had thought a recession would have already begun, given the aggressive pace of monetary tightening. In fact, the majority of US consumers believed we were in an economic recession throughout most of 2022, even though the economy continued to grow and add jobs and even though consumers continued to spend.¹

We are not currently in a recession, and if any recession does occur, we expect it will only begin toward the end of 2023, with the important caveat that the US economy might avoid a recession altogether throughout our forecast horizon.

Right now, in 2023 Q1, the economy is still expanding and adding jobs, consumers are still spending, and businesses are still investing. If the Fed eases interest rate increases in the coming months and inflation ebbs mostly on its own, because of easing supply constraints or consumer satiation, then the underlying strength of demand currently in place leads to the forecast of a no-recession scenario.

On the other hand, if the Fed continues to aggressively tighten monetary policy until contemporaneous inflation rates come in below a year-over-year 3% target rate, then the contraction in interest sensitive sectors is forecast to generate a recession later in 2023. This is a big “if”. The Fed’s FOMC policy board is not bound by policy rules and may make either decision or some hybrid of them. We should know in the next few quarters whether we are in the no-recession or recession scenario, but right now, it is too soon to tell.

As in the last quarterly forecast, the reason we are uncertain about Federal Reserve policy is that the Federal Reserve itself seems uncertain. Just one month after the Fed slowed its pace of rate hikes, with a 25 bps increase at its last FOMC meeting, Fed Chair Jay Powell stated:²

In light of the cumulative tightening of monetary policy and the lags with which monetary policy affects economic activity and inflation, the Committee slowed the pace of interest rate increases over its past two meetings. We will continue to make our decisions

meeting by meeting, taking into account the totality of incoming data and their implications for the outlook for economic activity and inflation...The latest economic data have come in stronger than expected, which suggests that the ultimate level of interest rates is likely to be higher than previously anticipated. If the totality of the data were to indicate that faster tightening is warranted, we would be prepared to increase the pace of rate hikes.

Financial markets are now pricing a 50 bps increase at the next FOMC meeting. In just over one month, financial markets went from thinking inflation was slowing and the Fed was close to reaching its terminal rate to realizing faster tightening may be warranted and ultimately, we may need a higher terminal rate than previously anticipated.

While the economy has so far remained resilient to higher interest rates outside of some moderate softening in construction and housing-related sectors, that resiliency is what might lead to the recession scenario path. The more consumers continue to spend despite higher prices and higher interest rates, the more gradually demand-induced inflation will come down, and the more the Federal Reserve might be expected to tighten monetary policy to combat inflation. The “might” here could well be mitigated by falling commodity prices and slower inflation in new rental lease contracts.

Additionally, the data revisions have been chaotic. Since the Fed is considering “the totality of the data,” we need to be prepared for the fact that data is inherently messy, and one month of data does not make a trend.

For example, in the January Advance Retail Sales report, consumers remained resilient and continued to spend. Consumer spending grew the most in food services & drinking places followed by motor vehicle & parts dealers, after a disappointing retail sales report in December. But beware of seasonal adjustments. Consumer spending actually declined between December 2022 and January 2023, just not by as much as it usually does.

If consumers are no longer behaving in the same ways they did before the pandemic—for example, if they are buying more cars in January because it has been harder to buy cars at other times of the year or if they are going out more to

1. For example, Cardi B tweeted on June 5, 2022, “When y’all think they going to announce that we going into a recession?” See <https://twitter.com/iamcardib/status/1533483036783697920>. Consumer recession sentiment based on Numerator Survey Data, monthly surveys throughout 2022, available at: <https://www.numerator.com/coronavirus/consumer-sentiment>.

2. Chair Jerome H. Powell, Semiannual Monetary Policy Report to the Congress, March 7, 2023, available at: <https://www.federalreserve.gov/news-events/testimony/powell20230307a.htm>.

restaurants and bars because they are still making up for lost time during COVID (recall that the previous holiday season was a bit of a dud because of Omicron)—then it’s not clear the economy is really growing as fast, in a sustainable way, as the data seem to suggest.

If in January consumers are buying more cars than they normally do or going out to restaurants and bars more than they normally do, does that mean they’ll buy fewer cars than normal and go out a bit less than normal to restaurants and bars in the coming months? We saw something similar to this in the data this past holiday season. Because many large retailers such as Amazon, Walmart, and Target pulled forward the beginning of their holiday promotions (recall Amazon’s October Prime Day event), we had stronger retail sales in October but weaker retail sales in November and December. It is not that consumers bought less overall during the holiday season, they just bought earlier.

The January Jobs Report tells a similar story. Although headlines say the economy added a whopping 517,000 payroll jobs in January, that’s not the whole story. The economy actually lost 2,505,000 jobs between December and January, but it “normally” loses 3,022,000 jobs. Relative to “typical” Januaries, the economy added 517,000 jobs in January 2023.

The question is whether we have been experiencing a “typical” labor market. It has been challenging for businesses to hire workers, with approximately two job openings for

every unemployed worker. It is not surprising that many businesses, especially those in the leisure and hospitality sector, have been more reluctant to lay-off workers between December and January this year. But if we now have fewer seasonal layoffs, does that also mean we’ll have less seasonal hiring in the spring and summer?

All this means we should be aware of seasonality and consider incoming data more thoughtfully. The fact that the economy may be unseasonably strong right now might also mean that it will be unseasonably weaker later on. Economists like to joke that if you torture the data enough, it will eventually confess. Right now, the data may be giving us some false confessions. With a data-dependent Federal Reserve — as Fed Chair Jay Powell said, “we have some potentially important data coming up... those will be important and we’ll scrutinize them”—that means we may follow different economic paths depending on how the data evolve over time and how the Federal Reserve chooses to react to incoming data.

In what follows, we present the no-recession scenario and the recession scenario together for ease of comparison.

1. Economic Growth

For both scenarios, we expect continued quarterly GDP growth in 2023 Q1 of 2.3% SAAR driven by consumption and business investment.

EXHIBIT 2: Quarterly Real GDP Growth, Seasonally Adjusted Annual Rates



Source: UCLA Anderson Forecast, U.S. Bureau of Economic Analysis

3. Nick Timiraos, “Jerome Powell Says Data Will Determine Size of Next Rate Increase,” *Wall Street Journal*, March 8, 2023, available at: <https://www.wsj.com/articles/fed-chair-jerome-powell-returns-to-congress-for-second-day-of-hearings-e58457f7>.

RECESSION OR NO RECESSION? THAT IS THE QUESTION

The scenarios then diverge. In the no-recession scenario, quarterly GDP growth slows to 1.8% SAAR in 2023 Q2. It remains below 1.0% in 2023 Q3 and 2023 Q4 and then picks up in 2024 and through 2025. In the recession scenario, the economy contracts beginning in 2023 Q3, the contraction deepens in 2023 Q4 and 2024 Q1, and then the economy begins to rebound.

These differences in quarterly growth rates imply that in the no-recession scenario, the economy will have grown

by 1.0% YOY by 2024 Q1 versus -0.5% in the recession scenario. In other words, the impact of a recession is to reduce economic output by 1.5% relative to what it would have been in the no-recession scenario by Q1 2024. By Q1 2024, the real GDP gap between the two scenarios is \$316 Billion, but this gap narrows as the economy rebounds more quickly out of a recession.

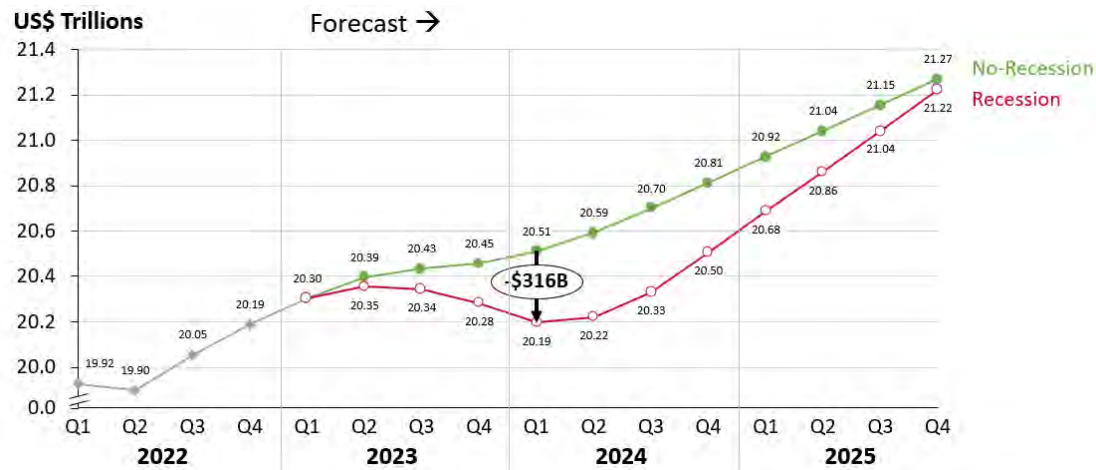
Consumer resilience is a key factor for why the recession scenario features a relatively mild and brief recession. In

EXHIBIT 3: Quarterly Real GDP Growth, Year-Over-Year



Source: UCLA Anderson Forecast and U.S. Bureau of Economic Analysis

EXHIBIT 4: Real GDP Levels, US\$ Trillions, Chained 2012 Prices, Seasonally Adjusted Annual Rates



Source: UCLA Anderson Forecast and U.S. Bureau of Economic Analysis

the recession scenario, consumption is flat in 2023 Q2 and contracts modestly in 2023 Q3 through 2024 Q1. In 2024 and 2025, both scenarios feature consumption growth.

Fed-driven increases in interest rates typically induce declines in investment, both business and residential (we discuss housing starts in a later section). But personal consumption has remained robust. Businesses need to balance

present consumption demands with expectations about future consumption. With increasing interest rates and uncertainty about future consumption, our forecast is that businesses slow down capital investment in the no-recession scenario later in 2023. For the recession scenario, our forecast is that businesses cut back on capital investment starting at the end of 2023 until the middle of 2024.

EXHIBIT 5: Real Personal Consumption, US\$ Trillions, Chained 2012 Prices, Seasonally Adjusted Annual Rates



Source: UCLA Anderson Forecast, U.S. Bureau of Economic Analysis

EXHIBIT 6: Real Private Fixed Investment, US\$ Trillions, Chained 2012 Prices, Seasonally Adjusted Annual Rates



Source: UCLA Anderson Forecast, U.S. Bureau of Economic Analysis

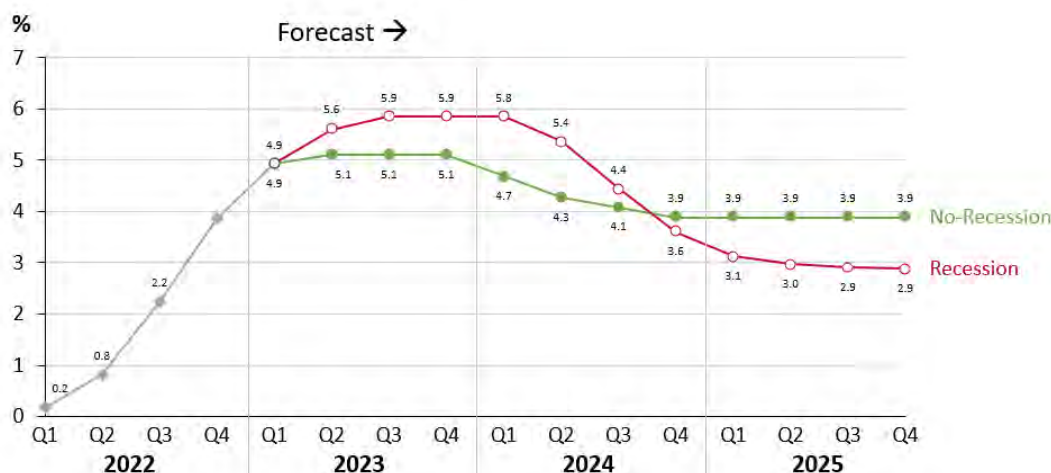
2. Monetary Policy Reaction and Inflation

The key assumptions driving our economic projections depend on how aggressively the Federal Reserve tightens monetary policy. In the no-recession scenario, the Fed stops tightening when the target Federal Funds Rate reaches 5.0-5.25% in the second quarter of 2023. In the recession scenario, the Fed continues to increase its benchmark rate up to 5.75-6.0% in the third quarter of 2023. In the recession scenario, the Fed keeps rates higher for longer, and only begins cutting in response to higher unemployment. In the no-recession scenario, the Fed begins to cut interest rates once it's clear that inflation has stabilized (although our forecast does not see core PCE inflation returning to the Fed's 2%

target).⁴ Achieving full employment and stable prices, the Fed maintains rates at 3.75-4.0% in the no-recession scenario through 2025, whereas it's forced to continue cutting interest rates in the recession scenario to achieve full employment.

In both scenarios, inflation remains elevated through 2023, but it is stickier in the recession scenario, requiring tighter monetary policy to achieve disinflation. In the no-recession scenario, we have assumed that supply chain pressures ease more rapidly, and therefore, inflation comes down more quickly on its own creating the rationale for a more moderate monetary policy, whereas in the recession scenario, the assumption is that a greater proportion of the observed inflation is demand-driven—related to tight labor markets—and therefore, inflation remains sticky for longer.

EXHIBIT 7: Federal Funds Benchmark Rate



Source: UCLA Anderson Forecast and Federal Reserve Board

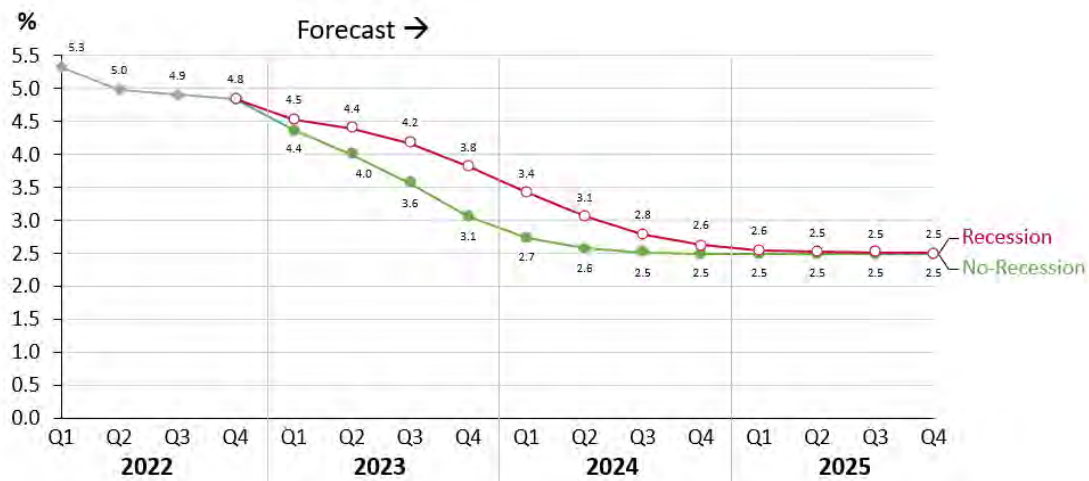
4. Why would the Fed cut its benchmark rate in the no-recession scenario when unemployment is at 3.8%? Our assumption here is that the Fed is forward-looking. As inflation declines, if the Fed did not lower its benchmark rate, it would effectively be allowing monetary policy to continue tightening (through higher real interest rates). We therefore model modest cuts in the Fed's benchmark policy rate to maintain monetary policy neutral (neither restrictive nor accommodative) and to maintain unemployment at 3.8%. In the absence of rate cuts in the no-recession scenario, we would expect unemployment to increase because real interest rates are increasing as inflation comes down, which means monetary policy would be de facto becoming more restrictive.

For neither scenario do we forecast a return to the Fed's 2% inflation target by the end of the forecast horizon. Some members of the UCLA Forecast team believe we have entered a different inflationary regime than in the 2010s, with less disinflationary pressure from "secular stagnation" and with less disinflationary pressure related to offshoring production to lower labor-cost countries.

3. Employment

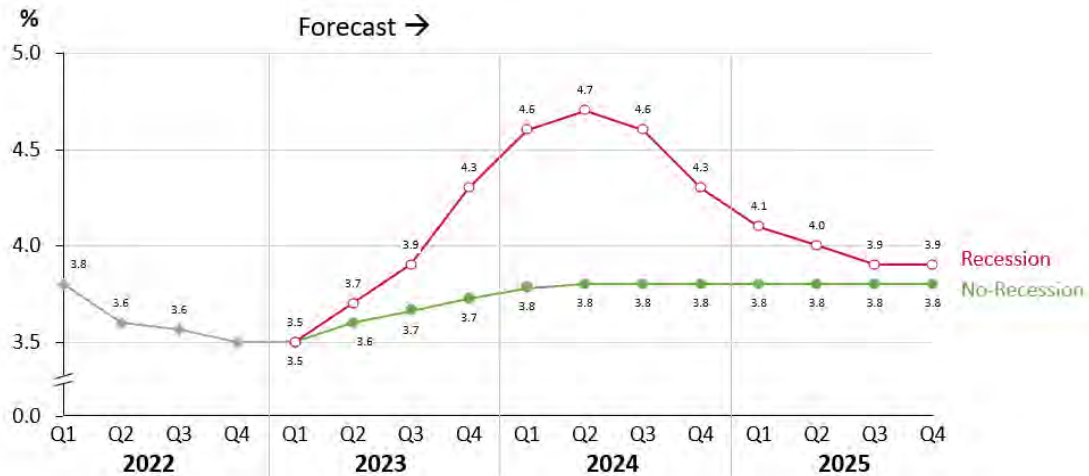
In the recession scenario, unemployment rises throughout 2023 and into 2024, peaking at 4.7% in 2024 Q2. In the no-recession scenario, the Fed is able to achieve disinflation with unemployment only increasing from its current low of 3.5% to a high of 3.8%.

EXHIBIT 8: Core PCE Inflation, % YOY



Source: UCLA Anderson Forecast and U.S. Bureau of Labor Statistics

EXHIBIT 9: Unemployment Rate



Source: UCLA Anderson Forecast and U.S. Bureau of Labor Statistics

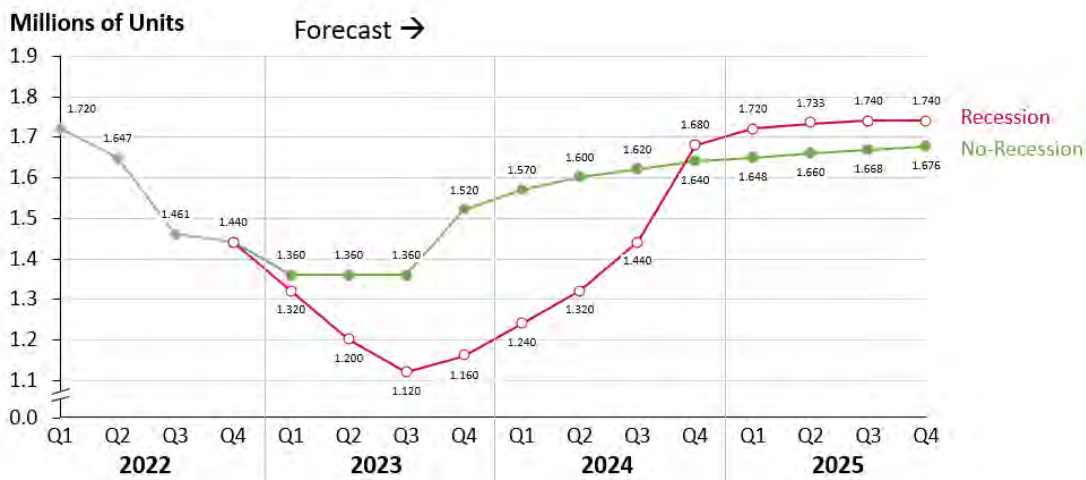
4. Housing Markets

In the no-recession scenario, housing starts remain flat at just under 1.4M units through 2023 Q3, and thereafter housing construction picks up to 1.6M units in 2024 and almost 1.7M units by the end of 2025. In the recession scenario, housing starts fall, reaching a trough of 1.1M units SAAR in 2023 Q3, and then housing construction rebounds gradually in anticipation and as the Fed begins cutting interest rates, having managed to control inflation and turning its attention to the goal of full employment. Given the higher lending standards since the Great Financial Crisis, both scenarios feature modest declines in home prices, on the order of 5-8% peak to trough nationally, but nothing on the order of magnitude as what occurred immediately following the Great Financial Crisis.

5. Conclusion

Given the uncertain macroenvironment, we have presented two scenarios: one where economic growth slows, but not by enough to create a recession, and one where the economy experiences a comparatively mild and brief recession starting in late 2023. The economy has remained resilient in the last two quarters of 2022 and through the first quarter of 2023, consumers have continued to spend, and despite earlier warnings from business leaders about fears of an imminent recession, businesses have continued investing. Whether we experience a recession later in 2023 depends largely on inflation stickiness, job market tightness, and the reactions of a data-dependent Federal Reserve.

EXHIBIT 10: Housing Starts, Millions, Seasonally Adjusted Annual Rates



Source: UCLA Anderson Forecast and U.S. Bureau of Labor Statistics

THE UCLA ANDERSON FORECAST FOR THE NATION

MARCH 2023 REPORT

Tables

FORECAST TABLES - SUMMARY (NO RECESSION SCENARIO)

**Table 1: Summary of the UCLA
Anderson Forecast for the Nation**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
GDP (% Change)										
Real GDP	1.7	2.2	2.9	2.3	-2.8	5.9	2.1	1.9	1.3	2.2
Price Indices (% Change)										
GDP Price Index	1.0	1.9	2.4	1.8	1.3	4.5	6.6	2.1	2.8	2.5
Consumer Price Index (CPI)	1.3	2.1	2.4	1.8	1.2	4.7	8.1	4.4	2.9	2.7
CPI Excluding Food and Energy	2.2	1.8	2.1	2.2	1.7	3.6	6.2	4.8	2.9	2.6
Pers. Cons. Expenditure (PCE) Index	1.0	1.8	2.1	1.5	1.1	4.0	6.2	3.5	2.9	2.6
PCE Index Excl. Food and Energy	1.6	1.7	2.0	1.7	1.3	3.5	5.0	3.7	2.6	2.5
Producer Price Index (PPI)	-1.0	3.2	3.0	0.8	-1.3	8.9	12.9	-0.3	-0.5	0.7
Interest Rates (%)										
Fed Funds	0.4	1.0	1.8	2.2	0.4	0.1	1.8	5.1	4.2	3.0
90-day Treasury Bill	0.3	0.9	2.0	2.1	0.4	0.0	2.1	5.1	4.2	3.1
10Y Treasury Bond	1.8	2.3	2.9	2.1	0.9	1.4	3.0	4.3	4.2	4.2
30Y Treasury Bond	2.6	2.9	3.1	2.6	1.6	2.0	3.1	4.6	4.5	4.5
Corp AAA Bond	2.7	3.0	3.5	2.8	1.7	1.9	3.6	4.9	5.0	4.9
Federal Fiscal Policy (% Change)										
Defense Purchases										
Current \$	0.4	2.1	5.9	6.7	3.2	1.6	3.4	7.4	4.7	4.8
Constant \$	-0.1	0.4	2.8	4.8	2.0	-2.3	-2.5	1.9	1.1	1.1
Other Expenditures										
Transfers to Persons	2.8	3.6	4.6	6.0	44.9	8.1	-21.8	0.6	5.6	6.3
Grants to S&L Govt	4.4	0.7	3.9	4.5	44.3	26.5	-14.7	0.4	1.9	0.6
As Shares of GDP (%) Unified Budget Basis, Fiscal Year										
Receipts	17.7	17.3	16.6	16.3	15.9	18.0	19.5	18.7	17.8	17.5
Outlays	20.6	20.8	20.5	20.8	28.4	31.6	25.0	23.8	23.0	23.2
Surplus or Deficit	-2.9	-3.5	-3.9	-4.5	-12.4	-13.6	-5.5	-5.0	-5.2	-5.7
Details of Real GDP (% Change)										
Real GDP	1.7	2.2	2.9	2.3	-2.8	5.9	2.1	1.9	1.3	2.2
Consumption	2.5	2.4	2.9	2.0	-3.0	8.3	2.8	2.5	1.3	2.3
Nonres Fixed Investment	0.9	4.1	6.5	3.6	-4.9	6.4	3.6	5.6	2.7	4.3
Equipment	-1.8	2.8	6.6	1.3	-10.5	10.3	4.6	4.3	4.6	4.4
Intellectual Prop	8.8	5.6	8.1	7.3	4.8	9.7	9.1	9.9	0.2	3.6
Structures	-4.3	4.4	4.1	2.3	-10.1	-6.4	-9.3	-3.3	3.9	5.7
Residential Construction	6.6	4.0	-0.6	-1.0	7.2	10.7	-9.7	-5.7	8.4	5.2
Exports	0.4	4.3	2.8	0.5	-13.2	6.1	6.6	-0.4	5.3	4.8
Imports	1.5	4.5	4.2	1.1	-9.0	14.1	8.5	1.9	4.7	4.5
Federal Defense Purchases	-0.1	0.4	2.8	4.8	2.0	-2.3	-2.5	1.9	1.1	1.1
Federal Non-Defense Purchases	1.2	-1.3	1.7	1.3	11.5	10.4	-5.3	-2.0	1.4	1.9
State & Local Purchases	2.7	0.0	0.6	3.3	0.3	0.4	1.4	0.8	0.4	0.4
Billions of 2012 Dollars										
Real GDP	17,680	18,077	18,609	19,036	18,509	19,610	20,015	20,395	20,653	21,097
Final Sales	17,645	18,040	18,543	18,963	18,564	19,629	19,911	20,338	20,612	21,081
Inventory Change	36	36	66	73	-55	-19	104	57	40	16

FORECAST TABLES - SUMMARY (NO RECESSION SCENARIO)

**Table 2: Summary of the UCLA
Anderson Forecast for the Nation**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Industrial Production and Resource Utilization										
Industrial Production (% Ch.)	-2.2	1.4	3.2	-0.7	-7.0	5.0	4.4	1.0	-0.4	2.7
Capacity Utilization (%)	75.3	76.5	79.5	78.3	72.6	77.4	80.3	80.5	79.8	80.5
Real Bus. Invest. (% of GDP)	13.8	14.1	14.6	14.7	14.4	14.5	14.7	15.2	15.4	15.8
Labor Markets										
Total Nonfarm Emp. (mil)	151.4	153.3	155.8	157.5	147.8	152.6	158.4	160.3	162.0	162.6
Nonfarm Payroll Emp. (mil)	144.3	146.6	148.9	150.9	142.1	146.1	152.0	154.5	155.6	156.1
Unemployment Rate (%)	4.9	4.4	3.9	3.7	8.1	5.4	3.6	3.6	3.8	3.8
Avg. Hours of Work per Week	33.6	33.6	33.7	33.6	34.0	34.3	34.0	33.8	33.8	33.8
Participation Rate (%)	62.8	62.9	62.9	63.1	61.8	61.7	62.3	62.6	63.0	62.9
Avg. Hourly Wage, Prod & Non-sup. Emp.	21.54	22.04	22.70	23.51	24.69	25.90	27.46	28.47	29.36	30.27
Factors Related to Inflation (% Ch.)										
Nonfarm Business Sector										
Total Compensation (Emp. Cost Index)	2.2	2.4	2.8	2.7	2.6	3.3	4.9	3.4	2.6	3.2
Productivity	-0.1	1.0	1.3	1.1	3.7	2.5	-1.7	0.8	0.2	1.7
Unit Labor Costs	1.2	2.9	2.2	2.5	3.8	2.8	8.3	3.5	2.5	1.3
Unit Total Costs	-0.6	4.4	2.6	2.4	4.6	6.1	4.6	-1.3	0.8	1.4
World Food Price Index	1.3	0.6	0.3	-3.8	7.1	30.8	18.3	-9.0	-12.9	-1.3
WTI Crude Oil Price (\$/barrel)	43.2	50.9	64.8	57.0	39.3	68.0	95.2	76.8	76.3	77.0
Housing										
FHFA Home Price Index, All Trans.	5.2	5.4	5.5	4.6	5.1	13.7	15.7	0.3	1.6	3.3
Case-Shiller Home Price Index, Comp-10	4.4	5.3	5.4	2.0	5.0	16.1	12.7	-7.3	-2.7	1.4
Med sales price exist SF home, \$ SA (thous)	233.7	247.5	259.5	272.3	298.8	354.0	388.3	367.3	372.8	387.2
Income, Consumption, and Saving (% Ch.)										
Disposable Income	2.9	4.6	5.5	5.0	7.4	5.9	-0.2	4.7	4.9	4.3
Real Disposable Income	1.8	2.7	3.3	3.5	6.2	1.9	-6.2	1.2	2.0	1.7
Real Consumption	2.5	2.4	2.9	2.0	-3.0	8.3	2.8	2.5	1.3	2.3
Savings Rate (%)	7.0	7.3	7.6	8.8	16.8	11.9	3.6	2.5	3.0	2.4
Housing and Automobiles										
Housing Starts (mil)	1.177	1.205	1.247	1.291	1.395	1.605	1.567	1.400	1.607	1.663
Home Sales, SF New (mil)	0.561	0.615	0.614	0.683	0.831	0.769	0.648	0.540	0.708	0.775
Home Sales, SF Existing (mil)	4.822	4.904	4.736	4.746	5.059	5.418	4.710	3.882	4.332	4.611
Auto & Light Truck Sales (mil)	17.5	17.2	17.3	17.1	14.6	15.1	13.5	16.8	17.9	17.3
Trade										
Current Account Bal. of Payments (% GDP)	-2.1	-1.9	-2.1	-2.1	-2.9	-3.6	-3.9	-4.1	-3.9	-3.7
Trade Balance (% GDP)	-4.3	-4.4	-4.7	-4.7	-5.0	-6.3	-6.9	-7.2	-7.4	-7.5
Real Effective Exchange Rate (% Ch.)	4.1	-0.3	-1.0	2.9	1.4	-2.2	10.1	6.7	-1.7	-2.7

FORECAST TABLES - QUARTERLY SUMMARY (NO RECESSION SCENARIO)

Table 3: Summary of the UCLA

Anderson Forecast for the Nation	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
GDP (% Change)												
Real GDP YOY	1.9	2.5	1.9	1.3	1.0	1.0	1.3	1.7	2.0	2.2	2.2	2.2
Real GDP QOQ Annualized	2.3	-0.6	0.8	0.4	1.1	1.6	2.1	2.2	2.2	2.2	2.2	2.2
Price Indices (% Change QOQ Annualized)												
GDP Price Index	2.2	1.5	2.7	3.1	3.4	2.9	2.1	2.2	2.6	2.7	2.6	2.5
Consumer Price Index (CPI)	4.4	3.6	2.7	2.8	3.0	3.0	2.7	2.7	2.7	2.7	2.6	2.3
CPI Excluding Food and Energy	4.8	3.8	3.2	2.9	2.8	2.8	2.7	2.6	2.6	2.7	2.6	2.6
Pers. Cons. Expenditure (PCE) Index	3.3	2.9	2.4	2.5	3.1	3.2	2.8	2.6	2.6	2.7	2.5	2.3
PCE Index Excl. Food and Energy	3.8	3.2	2.8	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Producer Price Index (PPI)	-1.7	-0.3	0.1	-0.4	0.2	-2.4	0.0	0.7	0.9	1.3	1.5	1.6
Price Indices (% Change YOY)												
GDP Price Index	3.3	1.5	1.1	2.4	2.7	3.0	2.9	2.6	2.4	2.4	2.5	2.6
Consumer Price Index (CPI)	6.2	4.5	3.8	3.4	3.0	2.9	2.9	2.8	2.8	2.7	2.6	2.6
CPI Excluding Food and Energy	6.0	5.2	4.4	3.7	3.2	2.9	2.8	2.7	2.7	2.6	2.6	2.6
Pers. Cons. Expenditure (PCE) Index	4.5	3.5	3.0	2.8	2.7	2.8	2.9	2.9	2.8	2.7	2.6	2.5
PCE Index Excl. Food and Energy	4.4	4.0	3.6	3.1	2.7	2.6	2.5	2.5	2.5	2.5	2.5	2.5
Producer Price Index (PPI)	3.3	-1.9	-1.7	-0.6	-0.1	-0.6	-0.7	-0.4	-0.2	0.7	1.1	1.3
Interest Rates (%)												
Fed Funds	4.9	5.1	5.1	5.1	4.7	4.3	4.1	3.9	3.9	3.9	3.9	3.9
90-day Treasury Bill	4.9	5.0	5.0	5.0	4.6	4.2	4.0	3.9	3.9	3.9	3.9	3.9
10Y Treasury Bond	4.2	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2
30Y Treasury Bond	4.5	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Corp AAA Bond	4.7	4.9	5.0	5.0	5.1	5.0	4.9	4.9	4.9	4.9	4.9	4.9
Federal Fiscal Policy (% Change QOQ Annualized)												
Defense Purchases												
Current \$	4.2	4.8	4.7	4.8	4.8	4.7	4.6	4.7	4.8	4.9	4.9	4.8
Constant \$	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Other Expenditures												
Transfers to Persons	0.7	-0.5	1.9	5.1	6.2	8.4	8.1	5.8	5.3	7.6	5.4	5.2
Grants to S&L Govt	2.6	1.9	1.7	2.2	2.5	1.3	1.4	1.2	1.1	-0.2	-0.4	-0.5
As Shares of GDP (%) Unified Budget Basis, Fiscal Year												
Receipts	19.8	18.2	18.6	18.3	18.1	17.8	17.7	17.6	17.5	17.5	17.5	17.4
Outlays	25.2	24.5	22.6	22.8	22.9	23.0	23.1	23.1	23.1	23.2	23.2	23.2
Surplus or Deficit	-5.4	-6.3	-4.0	-4.4	-4.8	-5.2	-5.4	-5.5	-5.6	-5.7	-5.7	-5.7
Details of Real GDP (% Change QOQ Annualized)												
Real GDP	2.3	1.8	0.8	0.4	1.1	1.6	2.1	2.2	2.2	2.2	2.2	2.2
Consumption	5.3	0.9	-0.5	0.8	1.7	1.7	2.1	2.3	2.3	2.3	2.4	2.3
Nonres Fixed Investment	9.6	8.9	3.0	-0.6	1.5	3.5	4.7	4.7	4.7	4.0	3.8	3.4
Equipment	4.8	4.8	4.7	4.7	4.6	4.6	4.5	4.5	4.4	4.4	4.3	4.3
Intellectual Prop	16.1	14.7	1.3	-6.3	-2.4	1.4	4.1	3.5	4.4	3.5	3.2	2.3
Structures	1.6	1.6	1.6	1.6	3.6	5.6	6.1	6.0	5.8	3.9	3.8	3.8
Residential Construction	-1.8	2.1	9.6	11.8	9.7	7.5	6.0	5.8	5.0	4.6	4.4	4.2
Exports	-5.6	-1.2	3.7	6.2	6.3	6.0	5.8	5.0	4.6	4.6	4.4	4.2
Imports	0.6	8.0	6.1	4.1	4.4	4.1	4.5	4.5	4.6	4.4	4.3	4.0
Federal Defense Purchases	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Federal Non-Defense Purchases	2.7	2.5	1.1	1.0	1.1	1.5	1.7	1.8	1.9	2.0	2.1	2.1
State & Local Purchases	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Billions of 2012 Dollars												
Real GDP (SAAR)	20,302	20,392	20,433	20,453	20,510	20,591	20,698	20,811	20,925	21,039	21,154	21,269
Final Sales (SAAR)	20,318	20,346	20,324	20,363	20,448	20,549	20,666	20,787	20,906	21,022	21,141	21,254
Inventory Change (SAAR)	-16	46	109	91	61	42	32	25	19	17	13	15

FORECAST TABLES - QUARTERLY SUMMARY (NO RECESSION SCENARIO)

Table 4: Summary of the UCLA

Anderson Forecast for the Nation	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
Industrial Production and Resource Utilization												
Industrial Production (% Ch. QOQ Ann.)	-0.6	-0.4	0.8	-0.5	-1.7	-0.9	0.6	1.9	3.1	4.0	4.5	4.3
Capacity Utilization (%)	81.0	80.8	80.5	79.7	79.6	79.7	79.9	80.1	80.2	80.4	80.5	80.7
Real Bus. Invest. (% of GDP)	15.0	15.2	15.3	15.3	15.3	15.4	15.5	15.6	15.7	15.7	15.8	15.8
Labor Markets												
Total Nonfarm Emp. (mil)	159.8	159.9	160.4	160.9	161.4	161.9	162.2	162.4	162.6	162.6	162.7	162.7
Nonfarm Payroll Emp. (mil)	154.1	154.3	154.6	155.0	155.3	155.5	155.7	155.9	156.0	156.0	156.1	156.2
Unemployment Rate (%)	3.5	3.6	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Avg. Hours of Work per Week	33.9	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
Participation Rate (%)	62.5	62.5	62.6	62.8	62.9	63.0	63.1	63.0	63.0	62.9	62.9	62.8
Avg. Hourly Wage, Prod & Non-sup. Emp.	28.1	28.4	28.6	28.8	29.0	29.2	29.5	29.7	29.9	30.2	30.4	30.6
Factors Related to Inflation (% Ch. QOQ Annualized)												
Nonfarm Business Sector												
Total Compensation (Emp. Cost Index)	3.1	3.0	2.8	2.5	2.5	2.5	2.7	3.0	3.3	3.5	3.6	3.7
Productivity	0.3	1.4	-0.4	-0.9	-0.2	0.5	1.3	1.6	1.9	2.1	2.1	2.1
Unit Labor Costs	3.8	1.6	3.5	4.1	2.7	1.7	1.3	1.2	1.2	1.3	1.5	1.5
Unit Total Costs	-0.3	-0.8	1.1	0.8	1.3	-0.1	1.1	1.5	1.5	1.6	1.7	1.9
World Food Price Index	-6.0	-11.2	-7.2	-16.4	-17.6	-18.5	-2.2	3.3	1.8	-0.9	-3.4	-3.2
WTI Crude Oil Price (\$/barrel)	79.0	78.3	75.0	75.0	75.0	76.0	77.0	77.0	77.0	77.0	77.0	77.0
Housing												
FHFA Home Price Index, All Trans.	-1.5	0.6	0.7	0.3	0.9	2.7	3.7	3.6	2.8	3.5	3.4	3.5
Case-Shiller Home Price Index, Comp-10	-9.2	-5.7	-5.0	-5.1	-3.7	-0.4	1.5	1.8	0.9	2.0	1.9	2.0
Med sales price exist SF home, \$ SA (thous)	369.2	367.4	366.7	365.7	366.7	370.4	374.8	379.2	381.8	385.4	389.0	392.5
Income, Consumption, and Saving (% Ch. QOQ Annualized)												
Disposable Income	1.1	5.2	5.1	5.1	4.6	5.0	4.8	4.4	4.0	4.4	4.2	4.0
Real Disposable Income	-2.2	2.2	2.6	2.5	1.5	1.8	1.9	1.8	1.4	1.7	1.7	1.7
Real Consumption	5.3	0.9	-0.5	0.8	1.7	1.7	2.1	2.3	2.3	2.3	2.4	2.3
Savings Rate (%)	1.7	2.1	2.9	3.2	3.1	3.1	3.0	2.9	2.6	2.5	2.3	2.1
Housing and Automobiles												
Housing Starts (mil)	1.360	1.360	1.360	1.520	1.570	1.600	1.620	1.640	1.648	1.660	1.668	1.676
Home Sales, SF New (mil)	0.521	0.510	0.510	0.620	0.669	0.697	0.722	0.743	0.755	0.770	0.782	0.794
Home Sales, SF Existing (mil)	3.895	3.792	3.772	4.068	4.199	4.295	4.378	4.455	4.518	4.584	4.642	4.702
Auto & Light Truck Sales (mil)	15.6	16.8	17.6	17.2	17.6	18.0	18.0	18.0	17.6	17.2	17.2	17.2
Trade												
Current Account Bal. of Payments (% GDP)	-3.9	-4.1	-4.2	-4.1	-4.0	-3.9	-3.8	-3.8	-3.8	-3.8	-3.7	-3.7
Trade Balance (% GDP)	-6.8	-7.2	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.5	-7.5	-7.5
Real Eff. Exchange Rate (% Ch. QOQ Ann.)	3.8	-0.4	-0.7	-0.4	-3.2	-1.0	-3.1	-2.7	-3.3	-2.7	-2.2	-1.9

FORECAST TABLES - SUMMARY (RECESSION SCENARIO)

**Table 1: Summary of the UCLA
Anderson Forecast for the Nation**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
GDP (% Change)										
Real GDP	1.7	2.2	2.9	2.3	-2.8	5.9	2.1	1.5	0.0	3.1
Price Indices (% Change)										
GDP Price Index	1.0	1.9	2.4	1.8	1.3	4.5	6.6	2.2	2.9	3.4
Consumer Price Index (CPI)	1.3	2.1	2.4	1.8	1.2	4.7	8.1	4.6	3.0	3.4
CPI Excluding Food and Energy	2.2	1.8	2.1	2.2	1.7	3.6	6.2	5.3	3.3	2.7
Pers. Cons. Expenditure (PCE) Index	1.0	1.8	2.1	1.5	1.1	4.0	6.2	3.6	2.9	3.4
PCE Index Excl. Food and Energy	1.6	1.7	2.0	1.7	1.3	3.5	5.0	4.2	3.0	2.5
Producer Price Index (PPI)	-1.0	3.2	3.0	0.8	-1.3	8.9	12.9	-0.8	-0.8	3.0
Interest Rates (%)										
Fed Funds	0.4	1.0	1.8	2.2	0.4	0.1	1.8	5.6	4.8	3.0
90-day Treasury Bill	0.3	0.9	2.0	2.1	0.4	0.0	2.1	5.5	4.9	3.1
10Y Treasury Bond	1.8	2.3	2.9	2.1	0.9	1.4	3.0	4.2	3.6	3.5
30Y Treasury Bond	2.6	2.9	3.1	2.6	1.6	2.0	3.1	4.5	4.0	3.8
Corp AAA Bond	2.7	3.0	3.5	2.8	1.7	1.9	3.6	4.9	4.4	4.2
Federal Fiscal Policy (% Change)										
Defense Purchases										
Current \$	0.4	2.1	5.9	6.7	3.2	1.6	3.4	7.6	4.9	5.0
Constant \$	-0.1	0.4	2.8	4.8	2.0	-2.3	-2.5	1.9	1.1	1.1
Other Expenditures										
Transfers to Persons	2.8	3.6	4.6	6.0	44.9	8.1	-21.8	1.2	6.7	6.0
Grants to S&L Govt	4.4	0.7	3.9	4.5	44.3	26.5	-14.7	0.5	2.0	1.3
As Shares of GDP (%) Unified Budget Basis, Fiscal Year										
Receipts	17.7	17.3	16.6	16.3	15.9	18.0	19.5	18.7	17.9	17.5
Outlays	20.6	20.8	20.5	20.8	28.4	31.6	25.0	23.8	23.5	23.4
Surplus or Deficit	-2.9	-3.5	-3.9	-4.5	-12.4	-13.6	-5.5	-5.1	-5.6	-5.9
Details of Real GDP (% Change)										
Real GDP	1.7	2.2	2.9	2.3	-2.8	5.9	2.1	1.5	0.0	3.1
Consumption	2.5	2.4	2.9	2.0	-3.0	8.3	2.8	2.1	0.2	3.0
Nonres Fixed Investment	0.9	4.1	6.5	3.6	-4.9	6.4	3.6	4.8	-1.1	7.2
Equipment	-1.8	2.8	6.6	1.3	-10.5	10.3	4.6	0.0	0.2	3.3
Intellectual Prop	8.8	5.6	8.1	7.3	4.8	9.7	9.1	12.6	-3.1	11.5
Structures	-4.3	4.4	4.1	2.3	-10.1	-6.4	-9.3	-4.5	0.7	4.3
Residential Construction	6.6	4.0	-0.6	-1.0	7.2	10.7	-9.7	-5.8	7.5	5.9
Exports	0.4	4.3	2.8	0.5	-13.2	6.1	6.6	-0.6	4.8	5.3
Imports	1.5	4.5	4.2	1.1	-9.0	14.1	8.5	1.5	3.2	5.8
Federal Defense Purchases	-0.1	0.4	2.8	4.8	2.0	-2.3	-2.5	1.9	1.1	1.1
Federal Non-Defense Purchases	1.2	-1.3	1.7	1.3	11.5	10.4	-5.3	-2.0	1.4	1.9
State & Local Purchases	2.7	0.0	0.6	3.3	0.3	0.4	1.4	0.8	0.4	0.4
Billions of 2012 Dollars										
Real GDP	17,680	18,077	18,609	19,036	18,509	19,610	20,015	20,319	20,312	20,951
Final Sales	17,645	18,040	18,543	18,963	18,564	19,629	19,911	20,268	20,307	20,922
Inventory Change	36	36	66	73	-55	-19	104	51	4	29

FORECAST TABLES - SUMMARY (RECESSION SCENARIO)

**Table 2: Summary of the UCLA
Anderson Forecast for the Nation**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Industrial Production and Resource Utilization										
Industrial Production (% Ch.)	-2.2	1.4	3.2	-0.7	-7.0	5.0	4.4	0.6	-2.8	4.9
Capacity Utilization (%)	75.3	76.5	79.5	78.3	72.6	77.4	80.3	80.1	77.9	79.8
Real Bus. Invest. (% of GDP)	13.8	14.1	14.6	14.7	14.4	14.5	14.7	15.1	15.0	15.6
Labor Markets										
Total Nonfarm Emp. (mil)	151.4	153.3	155.8	157.5	147.8	152.6	158.4	159.9	160.7	162.3
Nonfarm Payroll Emp. (mil)	144.3	146.6	148.9	150.9	142.1	146.1	152.0	154.2	154.4	155.8
Unemployment Rate (%)	4.9	4.4	3.9	3.7	8.1	5.4	3.6	3.9	4.6	4.0
Avg. Hours of Work per Week	33.6	33.6	33.7	33.6	34.0	34.3	34.0	33.8	33.8	33.8
Participation Rate (%)	62.8	62.9	62.9	63.1	61.8	61.7	62.3	62.6	63.0	62.9
Avg. Hourly Wage, Prod & Non-sup. Emp.	21.54	22.04	22.70	23.51	24.69	25.90	27.46	28.47	29.37	30.32
Factors Related to Inflation (% Ch.)										
Nonfarm Business Sector										
Total Compensation (Emp. Cost Index)	2.2	2.4	2.8	2.7	2.6	3.3	4.9	3.5	2.9	3.9
Productivity	-0.1	1.0	1.3	1.1	3.7	2.5	-1.7	0.6	-0.6	2.1
Unit Labor Costs	1.2	2.9	2.2	2.5	3.8	2.8	8.3	3.6	3.6	1.8
Unit Total Costs	-0.6	4.4	2.6	2.4	4.6	6.1	4.6	-1.6	1.0	3.0
World Food Price Index	1.3	0.6	0.3	-3.8	7.1	30.8	18.3	-9.7	-15.5	5.7
WTI Crude Oil Price (\$/barrel)	43.2	50.9	64.8	57.0	39.3	68.0	95.2	71.4	65.6	75.2
Housing										
FHFA Home Price Index, All Trans.	5.2	5.4	5.5	4.6	5.1	13.7	15.7	0.2	0.8	4.4
Case-Shiller Home Price Index, Comp-10	4.4	5.3	5.4	2.0	5.0	16.1	12.7	-7.4	-3.8	3.1
Med sales price exist SF home, \$ SA (thous)	233.7	247.5	259.5	272.3	298.8	354.0	388.3	364.7	365.7	392.8
Income, Consumption, and Saving (% Ch.)										
Disposable Income	2.9	4.6	5.5	5.0	7.4	5.9	-0.2	4.7	4.6	5.3
Real Disposable Income	1.8	2.7	3.3	3.5	6.2	1.9	-6.2	1.0	1.6	1.9
Real Consumption	2.5	2.4	2.9	2.0	-3.0	8.3	2.8	2.1	0.2	3.0
Savings Rate (%)	7.0	7.3	7.6	8.8	16.8	11.9	3.6	2.6	3.9	2.8
Housing and Automobiles										
Housing Starts (mil)	1.177	1.205	1.247	1.291	1.395	1.605	1.567	1.200	1.420	1.733
Home Sales, SF New (mil)	0.561	0.615	0.614	0.683	0.831	0.769	0.648	0.434	0.608	0.812
Home Sales, SF Existing (mil)	4.822	4.904	4.736	4.746	5.059	5.418	4.710	3.546	4.004	4.618
Auto & Light Truck Sales (mil)	17.5	17.2	17.3	17.1	14.6	15.1	13.5	15.1	17.0	17.3
Trade										
Current Account Bal. of Payments (% GDP)	-2.1	-1.9	-2.1	-2.1	-2.9	-3.6	-3.9	-4.0	-3.7	-3.8
Trade Balance (% GDP)	-4.3	-4.4	-4.7	-4.7	-5.0	-6.3	-6.9	-7.2	-7.2	-7.5
Real Effective Exchange Rate (% Ch.)	4.1	-0.3	-1.0	2.9	1.4	-2.2	10.1	7.9	-1.4	-4.8

FORECAST TABLES - QUARTERLY SUMMARY (RECESSION SCENARIO)

Table 3: Summary of the UCLA

Anderson Forecast for the Nation	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
GDP (% Change)												
Real GDP YOY	1.9	2.3	1.4	0.5	-0.5	-0.7	-0.1	1.1	2.4	3.2	3.5	3.5
Real GDP QOQ Annualized	2.3	-0.6	-0.2	-1.2	-1.7	0.5	2.2	3.5	3.6	3.4	3.5	3.5
Price Indices (% Change QOQ Annualized)												
GDP Price Index	2.5	2.1	2.3	2.5	3.1	3.1	3.1	3.6	4.0	3.6	2.8	2.1
Consumer Price Index (CPI)	4.9	4.4	2.0	2.3	2.8	3.5	3.8	3.6	3.7	3.2	2.7	2.3
CPI Excluding Food and Energy	5.5	4.7	4.0	3.5	3.2	2.9	2.7	2.6	2.6	2.7	2.7	2.6
Pers. Cons. Expenditure (PCE) Index	3.8	3.7	1.9	1.9	2.9	3.7	3.9	3.6	3.6	3.2	2.6	2.2
PCE Index Excl. Food and Energy	4.4	4.1	3.6	3.2	2.8	2.6	2.5	2.5	2.5	2.5	2.5	2.5
Producer Price Index (PPI)	-1.7	-1.1	-1.8	-2.1	-1.2	-2.3	3.0	4.4	4.2	3.0	2.1	1.1
Price Indices (% Change YOY)												
GDP Price Index	3.4	1.7	1.3	2.4	2.5	2.7	2.9	3.2	3.5	3.6	3.5	3.1
Consumer Price Index (CPI)	6.3	4.8	3.9	3.4	2.9	2.7	3.1	3.4	3.7	3.6	3.3	3.0
CPI Excluding Food and Energy	6.1	5.6	5.0	4.4	3.8	3.4	3.1	2.9	2.7	2.7	2.6	2.6
Pers. Cons. Expenditure (PCE) Index	4.7	3.8	3.2	2.8	2.6	2.6	3.1	3.5	3.7	3.6	3.3	2.9
PCE Index Excl. Food and Energy	4.5	4.4	4.2	3.8	3.4	3.1	2.8	2.6	2.6	2.5	2.5	2.5
Producer Price Index (PPI)	3.3	-2.1	-2.4	-1.7	-1.5	-1.8	-0.7	0.9	2.3	3.7	3.4	2.6
Interest Rates (%)												
Fed Funds	4.9	5.6	5.9	5.9	5.8	5.4	4.4	3.6	3.1	3.0	2.9	2.9
90-day Treasury Bill	4.9	5.6	5.9	5.9	5.8	5.4	4.4	3.6	3.2	3.1	3.0	3.0
10Y Treasury Bond	4.2	4.2	4.2	4.1	3.8	3.6	3.5	3.5	3.5	3.5	3.5	3.5
30Y Treasury Bond	4.4	4.5	4.5	4.4	4.3	4.1	4.0	3.8	3.8	3.8	3.8	3.8
Corp AAA Bond	4.7	4.9	5.0	4.9	4.6	4.5	4.3	4.2	4.2	4.2	4.2	4.2
Federal Fiscal Policy (% Change QOQ Annualized)												
Defense Purchases												
Current \$	4.4	5.0	5.0	5.0	4.9	4.8	4.8	5.0	5.1	5.1	5.0	4.9
Constant \$	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Other Expenditures												
Transfers to Persons	1.2	1.0	2.2	7.1	7.7	9.5	8.5	4.7	4.7	7.3	4.8	5.1
Grants to S&L Govt	3.2	2.6	1.0	1.7	2.3	1.8	2.4	2.2	2.1	0.3	-0.2	-0.6
As Shares of GDP (%) Unified Budget Basis, Fiscal Year												
Receipts	19.8	18.2	18.6	18.4	18.1	17.9	17.8	17.7	17.6	17.5	17.5	17.4
Outlays	25.2	24.6	22.7	22.9	23.2	23.4	23.6	23.7	23.6	23.5	23.4	23.2
Surplus or Deficit	-5.4	-6.3	-4.0	-4.6	-5.1	-5.6	-5.9	-6.0	-6.0	-6.0	-5.9	-5.8
Details of Real GDP (% Change QOQ Annualized)												
Real GDP	2.3	1.0	-0.2	-1.2	-1.7	0.5	2.2	3.5	3.6	3.4	3.5	3.5
Consumption	5.3	-0.1	-1.4	-0.6	-1.0	1.4	2.1	3.3	3.1	3.1	3.6	3.4
Nonres Fixed Investment	9.7	7.4	0.8	-5.4	-5.9	-0.5	4.4	7.8	8.8	8.3	8.1	7.4
Equipment	-1.6	-2.3	-2.3	-2.0	-0.1	2.2	3.5	3.4	3.4	3.4	3.3	3.3
Intellectual Prop	24.5	19.0	3.6	-9.9	-12.6	-3.9	5.5	12.9	15.1	13.6	13.1	11.4
Structures	-0.4	-0.4	-0.4	-0.4	-0.4	1.9	2.7	3.9	4.7	5.0	5.3	5.9
Residential Construction	-1.8	2.1	9.1	11.3	8.0	5.9	5.4	6.5	6.5	5.9	5.3	4.9
Exports	-5.6	-1.8	3.2	5.8	5.1	5.5	6.0	5.4	5.3	5.1	4.9	4.9
Imports	0.6	7.1	5.2	2.4	1.1	2.8	4.5	5.8	6.5	6.2	6.3	5.9
Federal Defense Purchases	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Federal Non-Defense Purchases	2.7	2.5	1.1	1.0	1.1	1.5	1.7	1.8	1.9	2.0	2.1	2.1
State & Local Purchases	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Billions of 2012 Dollars												
Real GDP (SAAR)	20,302	20,352	20,342	20,281	20,194	20,219	20,330	20,505	20,685	20,858	21,040	21,222
Final Sales (SAAR)	20,318	20,306	20,242	20,206	20,160	20,224	20,340	20,506	20,669	20,830	21,008	21,181
Inventory Change (SAAR)	-16	46	100	75	34	-5	-10	-1	16	29	32	41

FORECAST TABLES - QUARTERLY SUMMARY (RECESSION SCENARIO)

Table 4: Summary of the UCLA

Anderson Forecast for the Nation	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
Industrial Production and Resource Utilization												
Industrial Production (% Ch. QOQ Ann.)	-0.5	-1.0	-0.6	-2.9	-5.5	-4.4	-0.6	3.6	6.7	8.1	8.1	7.1
Capacity Utilization (%)	81.0	80.6	79.9	78.7	77.8	77.5	77.8	78.4	79.0	79.5	80.0	80.6
Real Bus. Invest. (% of GDP)	15.0	15.2	15.3	15.1	14.9	14.9	15.0	15.1	15.3	15.5	15.7	15.8
Labor Markets												
Total Nonfarm Emp. (mil)	159.8	159.8	160.0	160.0	160.1	160.4	160.8	161.6	162.1	162.3	162.5	162.5
Nonfarm Payroll Emp. (mil)	154.1	154.1	154.2	154.1	154.0	154.1	154.4	155.1	155.5	155.7	155.9	156.0
Unemployment Rate (%)	3.5	3.7	3.9	4.3	4.6	4.7	4.6	4.3	4.1	4.0	3.9	3.9
Avg. Hours of Work per Week	33.9	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
Participation Rate (%)	62.5	62.5	62.6	62.8	62.9	63.0	63.1	63.0	63.0	62.9	62.9	62.8
Avg. Hourly Wage, Prod & Non-sup. Emp.	28.1	28.4	28.6	28.8	29.0	29.3	29.5	29.7	30.0	30.2	30.4	30.7
Factors Related to Inflation (% Ch. QOQ Annualized)												
Nonfarm Business Sector												
Total Compensation (Emp. Cost Index)	3.2	3.1	2.8	2.4	2.5	2.9	3.5	4.1	4.2	4.0	3.8	3.6
Productivity	0.3	1.0	-0.8	-1.1	-2.0	-0.3	1.0	1.6	2.4	2.8	3.0	3.4
Unit Labor Costs	3.8	2.1	3.9	4.0	4.6	3.0	2.6	2.7	1.9	1.2	0.8	0.0
Unit Total Costs	-0.2	-1.2	0.1	-0.2	1.3	0.5	3.6	4.4	3.8	2.5	1.7	0.9
World Food Price Index	-5.9	-11.4	-10.5	-20.2	-21.2	-22.9	-2.2	12.5	14.4	9.6	2.2	-1.3
WTI Crude Oil Price (\$/barrel)	79.0	78.3	66.0	62.2	60.7	63.4	67.8	70.5	73.8	75.4	75.9	75.9
Housing												
FHFA Home Price Index, All Trans.	-1.0	0.6	0.3	-1.6	-1.0	2.5	4.4	5.2	4.4	4.4	4.3	4.0
Case-Shiller Home Price Index, Comp-10	-8.6	-5.9	-5.6	-7.9	-6.4	-0.6	2.7	4.3	3.4	3.4	3.2	2.6
Med sales price exist SF home, \$ SA (thous)	369.8	366.2	363.9	358.8	355.8	359.9	368.4	378.5	385.5	390.8	395.6	399.2
Income, Consumption, and Saving (% Ch. QOQ Annualized)												
Disposable Income	1.3	5.2	4.6	4.1	3.6	5.0	5.7	5.9	5.4	5.2	4.7	4.2
Real Disposable Income	-2.4	1.5	2.7	2.2	0.7	1.3	1.7	2.2	1.7	1.9	2.0	2.0
Real Consumption	5.3	-0.1	-1.4	-0.6	-1.0	1.4	2.1	3.3	3.1	3.1	3.6	3.4
Savings Rate (%)	1.7	2.1	3.1	3.7	4.1	4.0	3.9	3.6	3.3	3.0	2.6	2.3
Housing and Automobiles												
Housing Starts (mil)	1.320	1.200	1.120	1.160	1.240	1.320	1.440	1.680	1.720	1.733	1.740	1.740
Home Sales, SF New (mil)	0.499	0.425	0.383	0.429	0.494	0.549	0.626	0.764	0.793	0.808	0.820	0.828
Home Sales, SF Existing (mil)	3.827	3.519	3.350	3.489	3.679	3.849	4.067	4.420	4.522	4.593	4.652	4.705
Auto & Light Truck Sales (mil)	14.4	14.8	15.0	16.4	16.5	16.8	17.2	17.6	17.6	17.2	17.2	17.2
Trade												
Current Account Bal. of Payments (% GDP)	-3.9	-4.1	-4.0	-3.9	-3.7	-3.6	-3.6	-3.7	-3.7	-3.8	-3.8	-3.8
Trade Balance (% GDP)	-6.8	-7.2	-7.4	-7.3	-7.2	-7.2	-7.2	-7.2	-7.3	-7.4	-7.5	-7.6
Real Eff. Exchange Rate (% Ch. QOQ Ann.)	4.3	3.7	1.1	-0.5	-0.2	-1.4	-7.5	-6.5	-6.0	-3.1	-2.3	-1.9

THE UCLA ANDERSON FORECAST FOR THE NATION

MARCH 2023 REPORT

Charts

CHARTS – FORECAST (NO RECESSION SCENARIO)

Chart 1: Annualized % Change in Real GDP

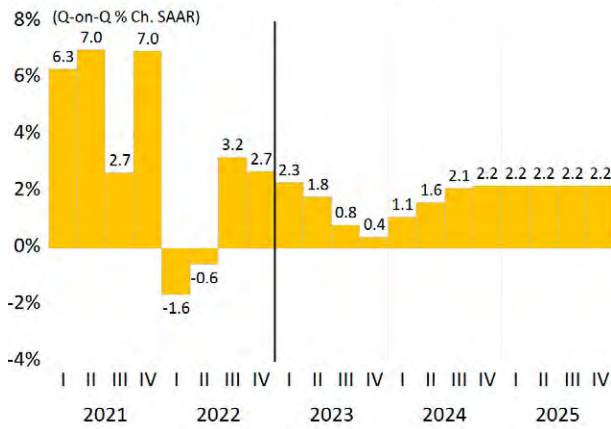


Chart 2: Real GDP

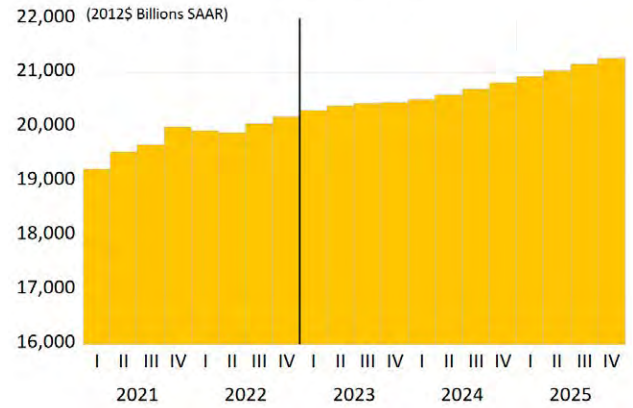


Chart 3: Q4-to-Q4 % Change in Real GDP

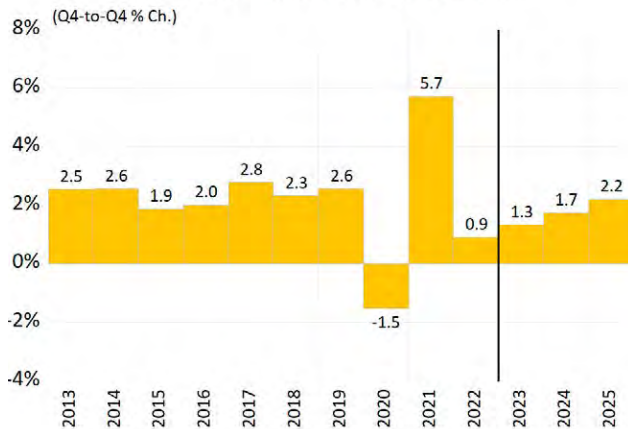
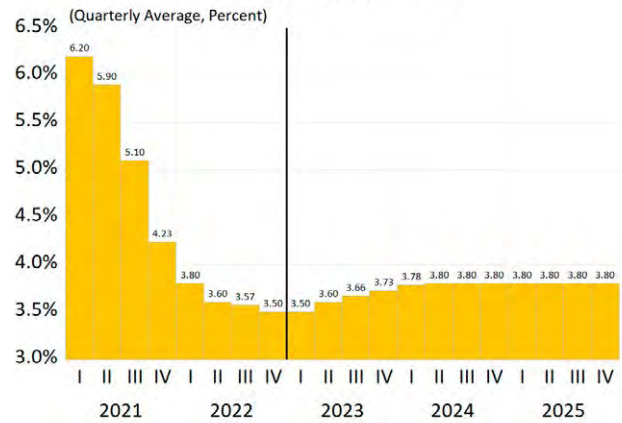


Chart 4: Unemployment Rate



CHARTS - FORECAST (NO RECESSION SCENARIO)

Chart 5: Civilian Labor Force Participation Rate
(Quarterly Average, Percent)

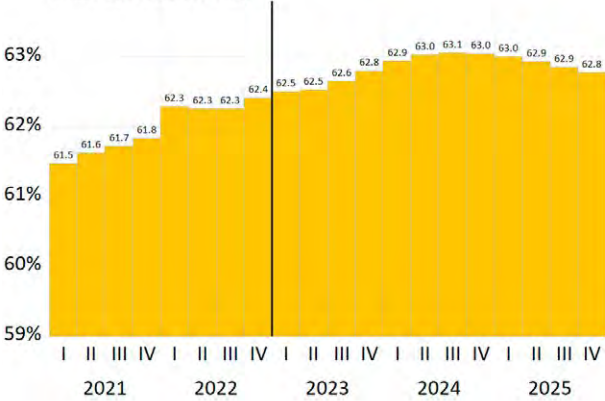


Chart 6: Total Nonfarm Payrolls

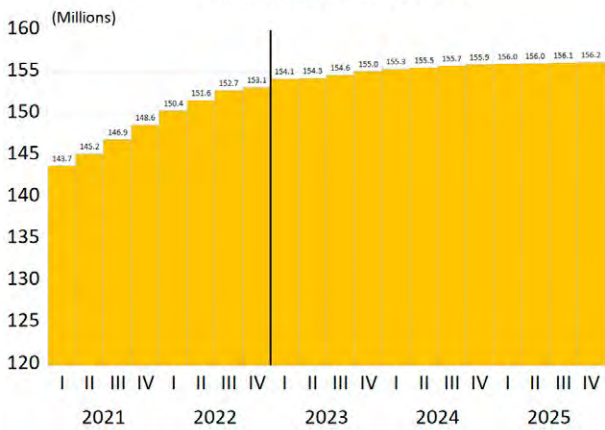


Chart 7: PCE Inflation

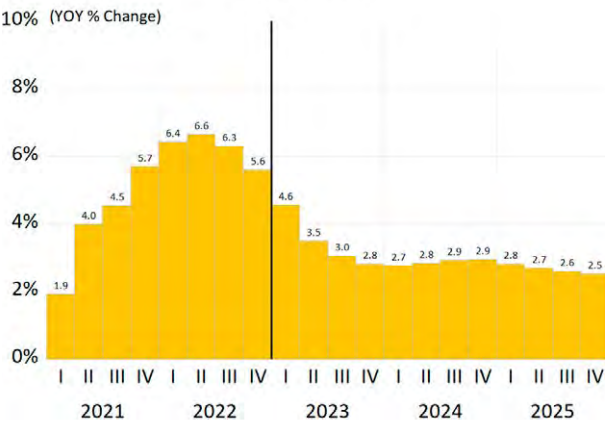


Chart 8: Core PCE Inflation, Excl. Food & Energy

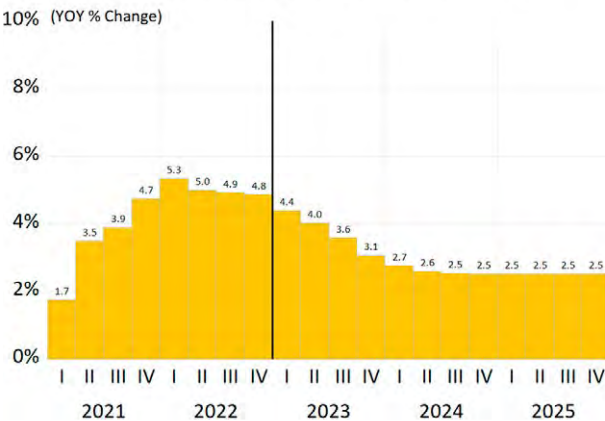


Chart 9: CPI Inflation, All-Urban

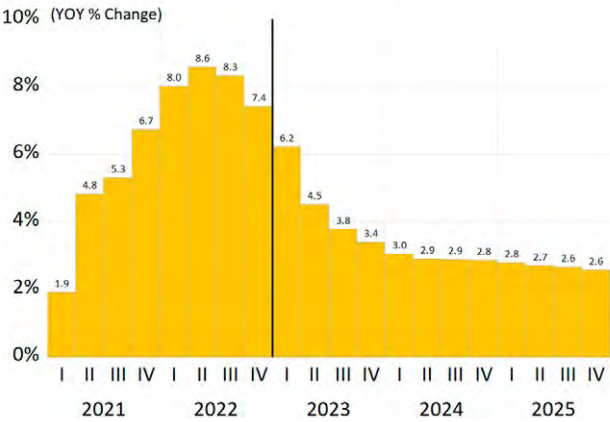


Chart 10: Core CPI Inflation, Excl. Food & Energy, All-Urban

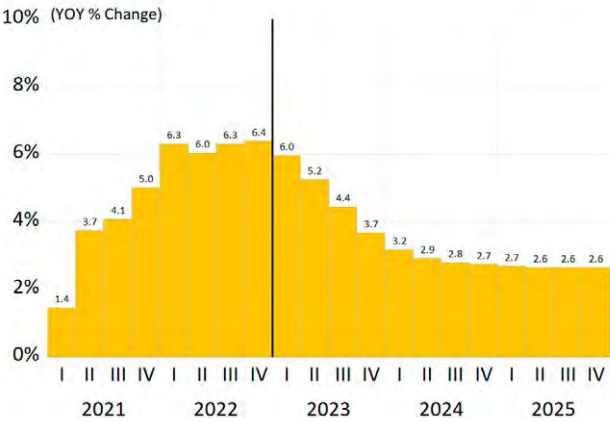
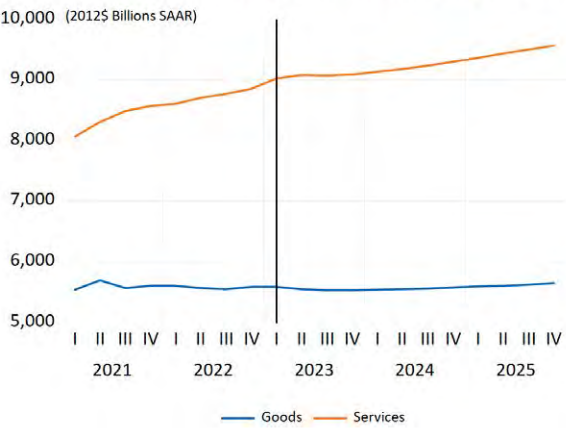


Chart 11: Real Pers. Disp. Income and Consumer Spending



Chart 12: Real Consumer Spending on Goods and Services



CHARTS - FORECAST (NO RECESSION SCENARIO)

Chart 13: Real Consumer Spending on Goods and Services, % Change

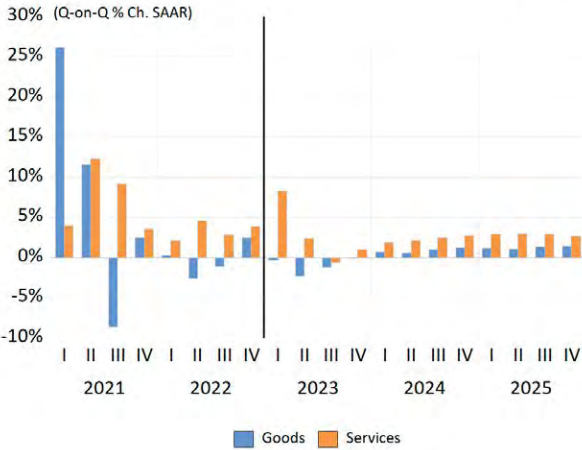


Chart 14: Personal Saving, % of Disposable Income

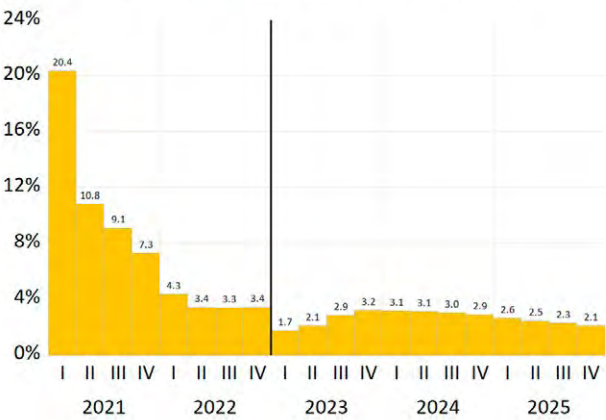


Chart 15: Real Private Fixed Investment

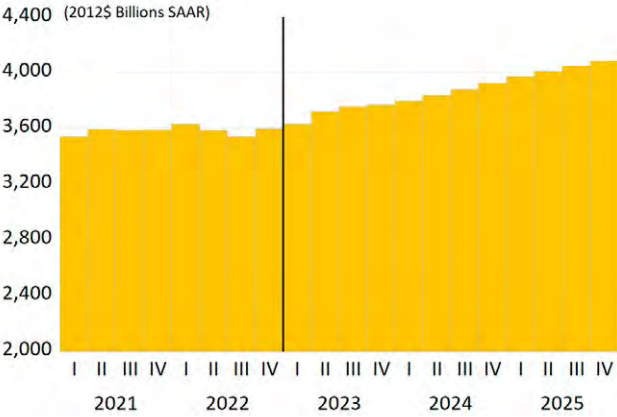


Chart 16: Real Private Residential Fixed Investment

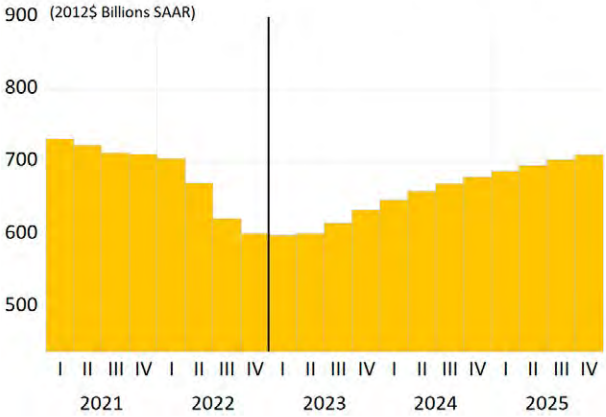


Chart 17: Real Private Business Investment

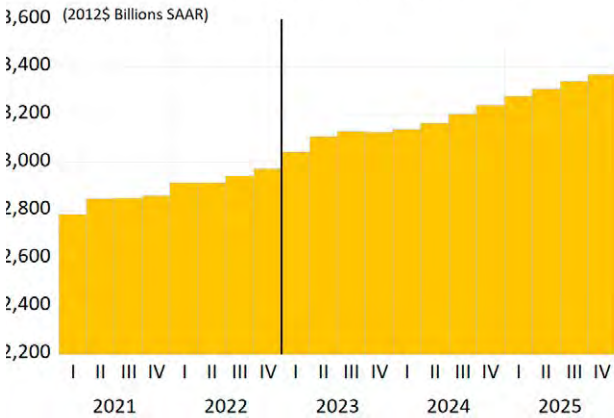


Chart 18: Real Change in Business Inventories

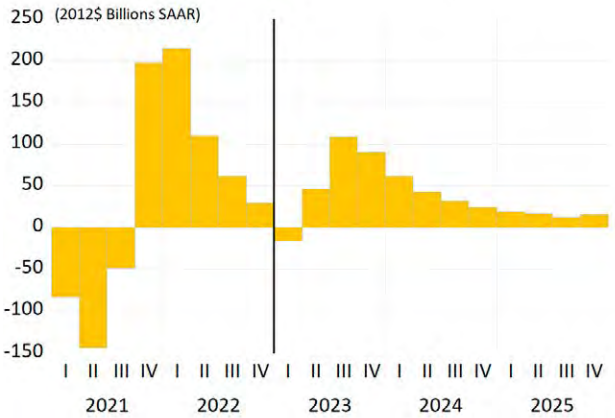


Chart 19: Housing Starts

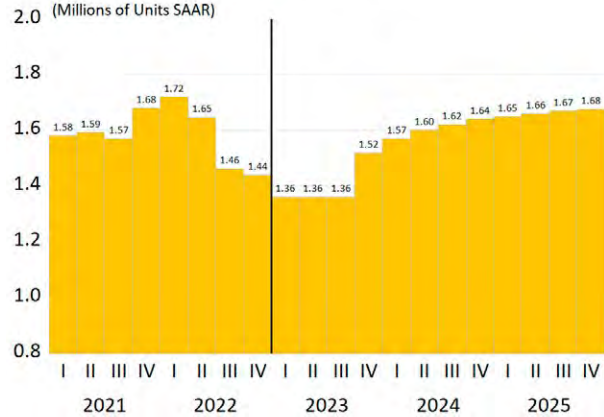


Chart 20: Federal Government Expenditures and Revenues

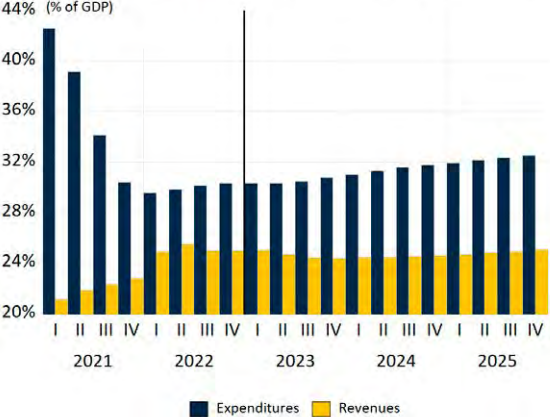


Chart 21: Federal Deficit, % of GDP

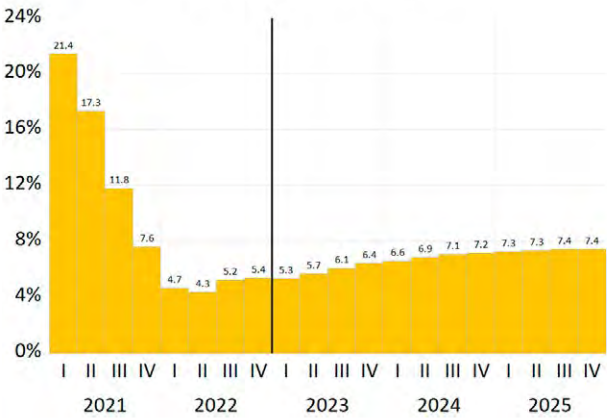


Chart 22: Real Exports and Imports of Goods and Services

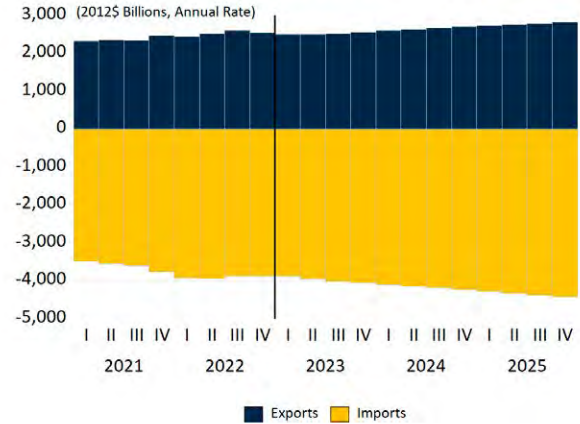


Chart 23: Real Net Exports of Goods and Services

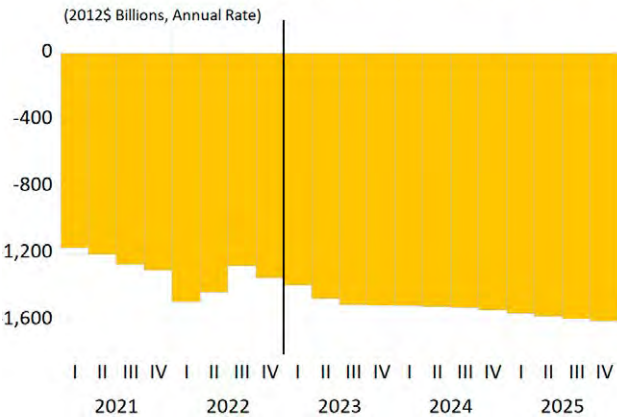


Chart 1: Annualized % Change in Real GDP

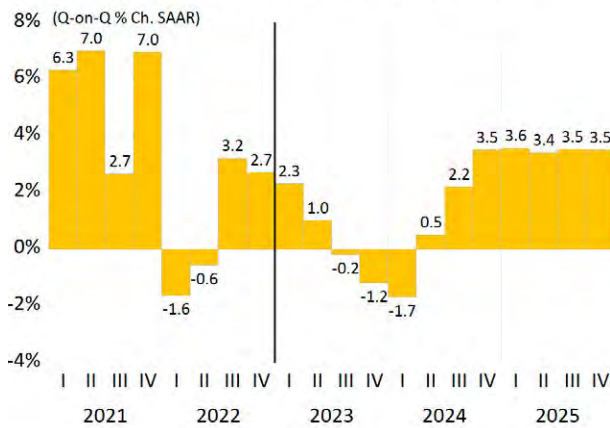


Chart 2: Real GDP

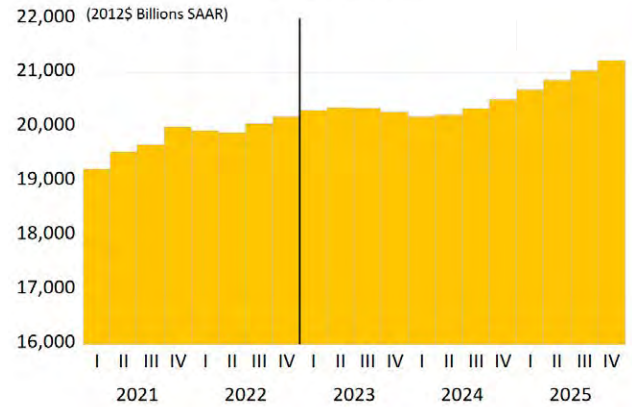
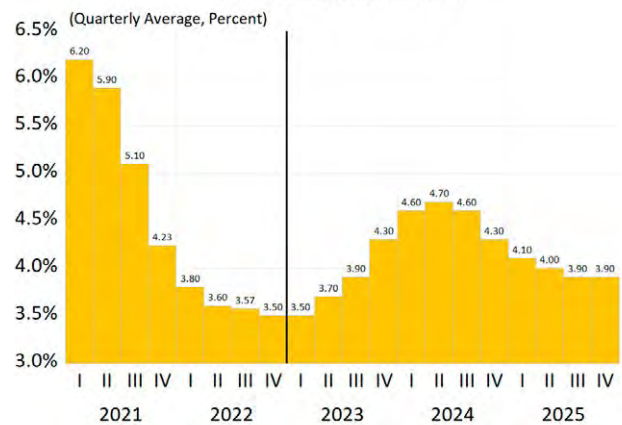


Chart 3: Q4-to-Q4 % Change in Real GDP



Chart 4: Unemployment Rate



CHARTS - FORECAST (RECESSION SCENARIO)

Chart 5: Civilian Labor Force Participation Rate
(Quarterly Average, Percent)

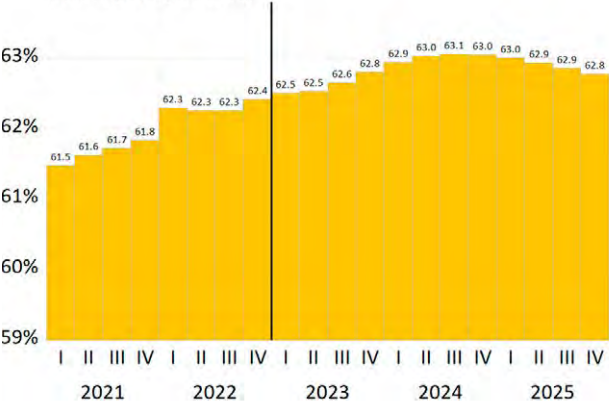


Chart 6: Total Nonfarm Payrolls

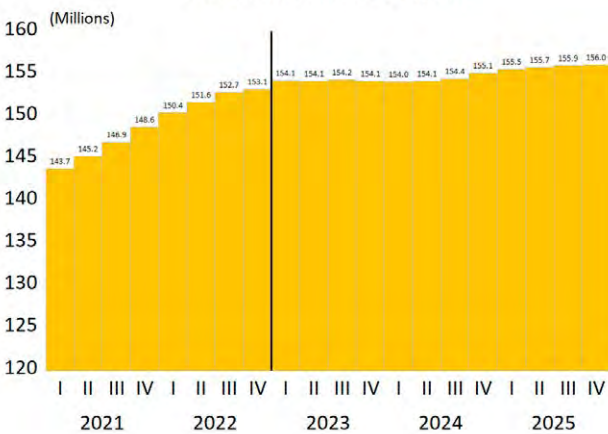


Chart 7: PCE Inflation

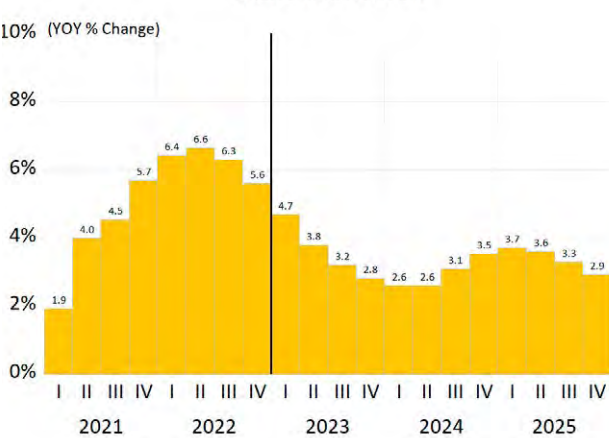


Chart 8: Core PCE Inflation, Excl. Food & Energy

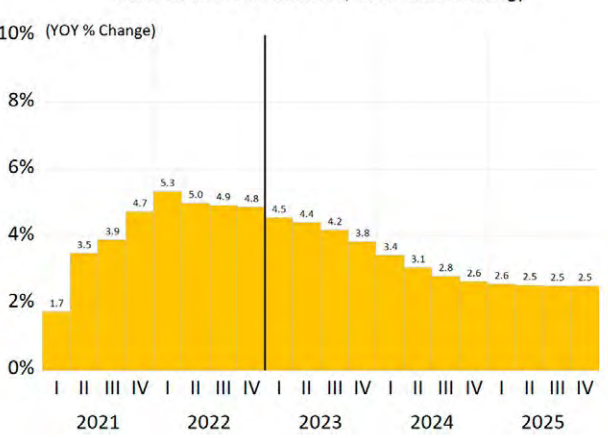


Chart 9: CPI Inflation, All-Urban

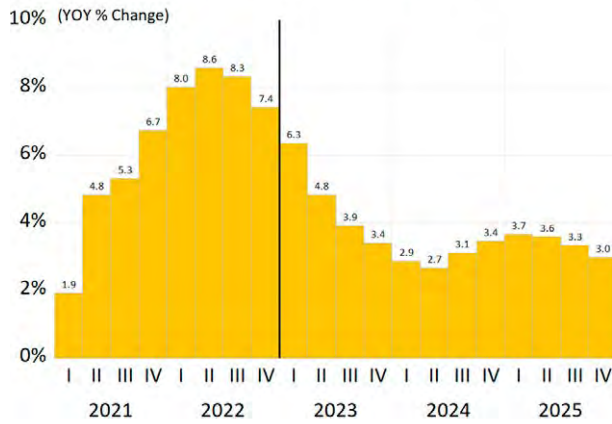


Chart 10: Core CPI Inflation, Excl. Food & Energy, All-Urban

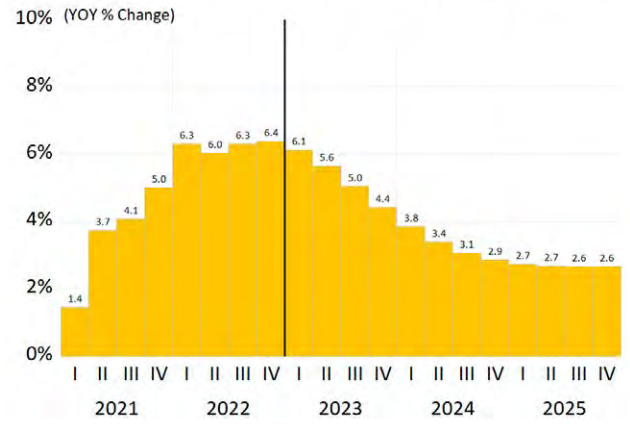


Chart 11: Real Pers. Disp. Income and Consumer Spending

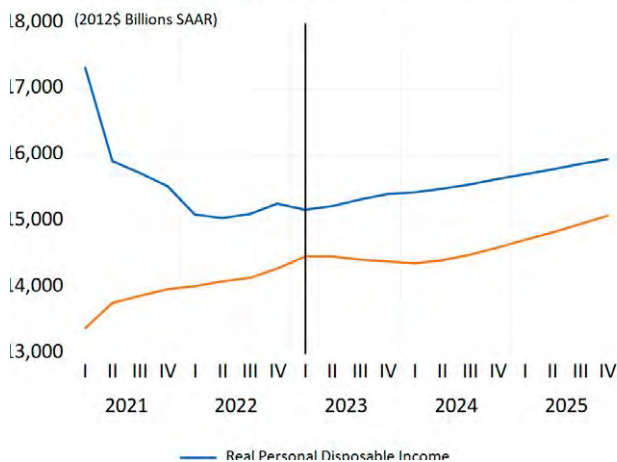
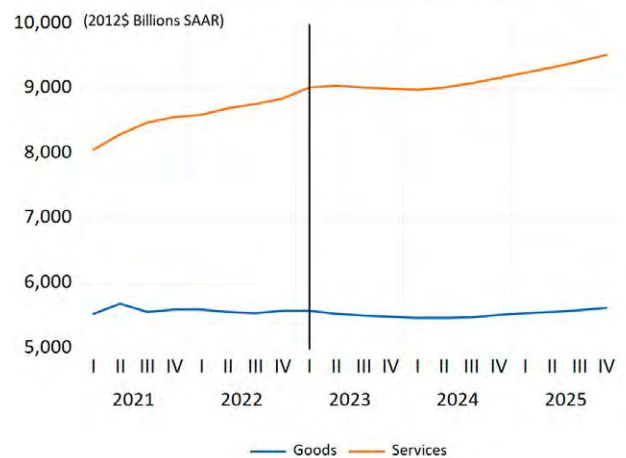


Chart 12: Real Consumer Spending on Goods and Services



CHARTS - FORECAST (RECESSION SCENARIO)

Chart 13: Real Consumer Spending on Goods and Services, % Change

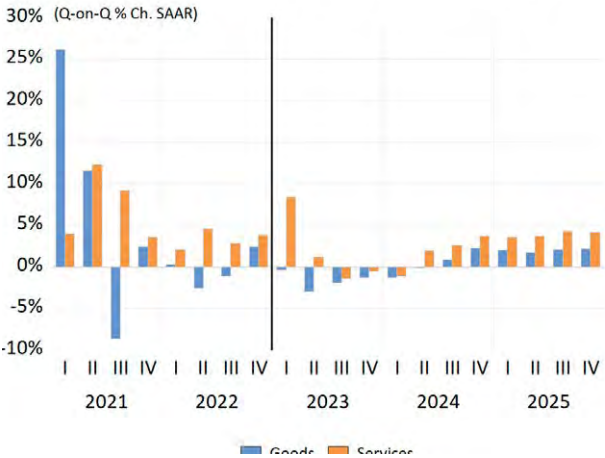


Chart 14: Personal Saving, % of Disposable Income

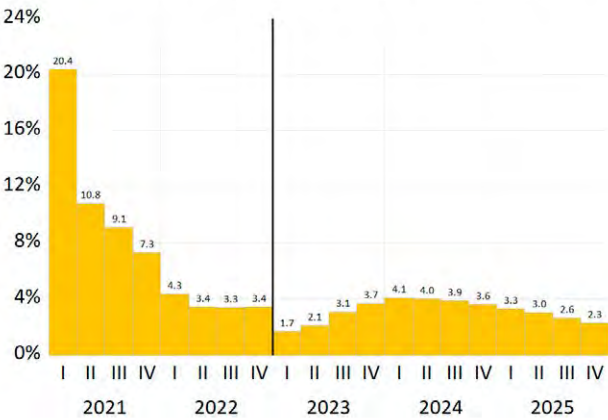


Chart 15: Real Private Fixed Investment

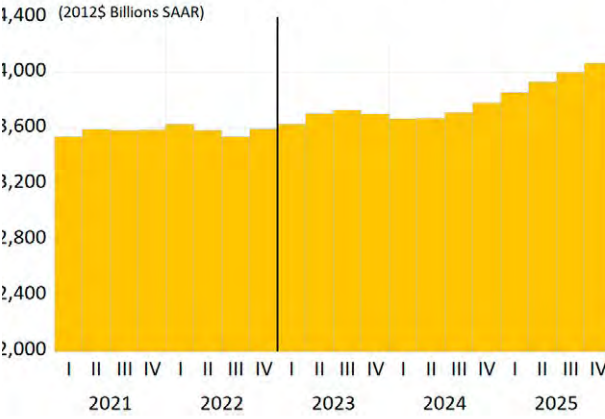


Chart 16: Real Private Residential Fixed Investment

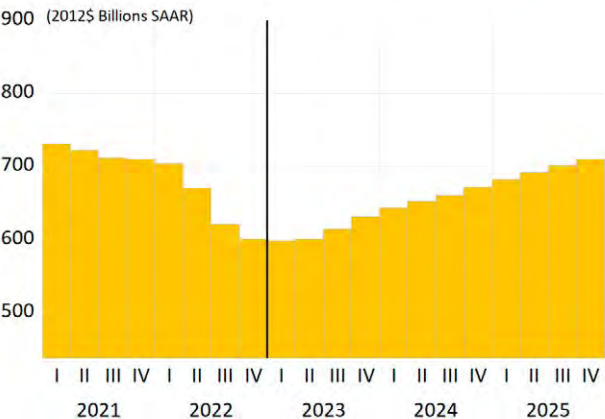


Chart 17: Real Private Business Investment

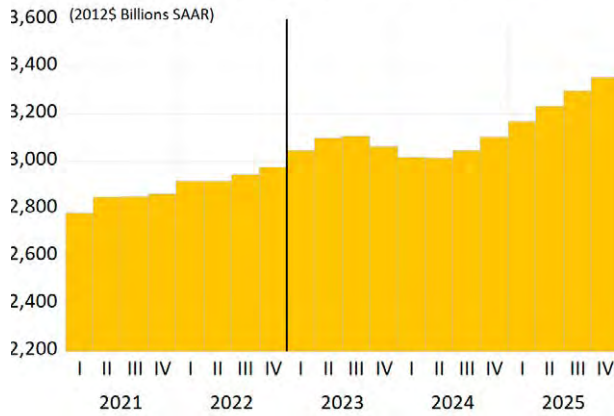


Chart 18: Real Change in Business Inventories

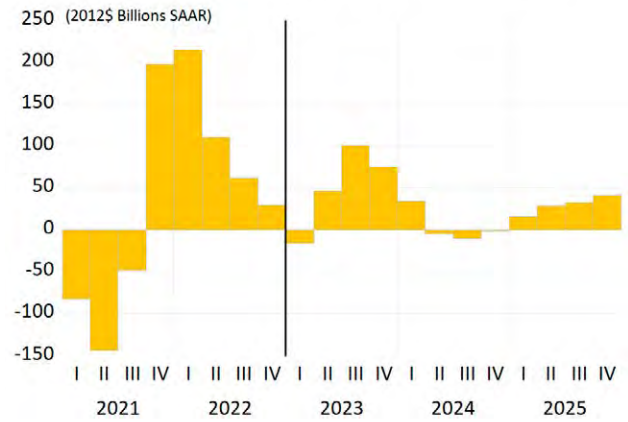


Chart 19: Housing Starts

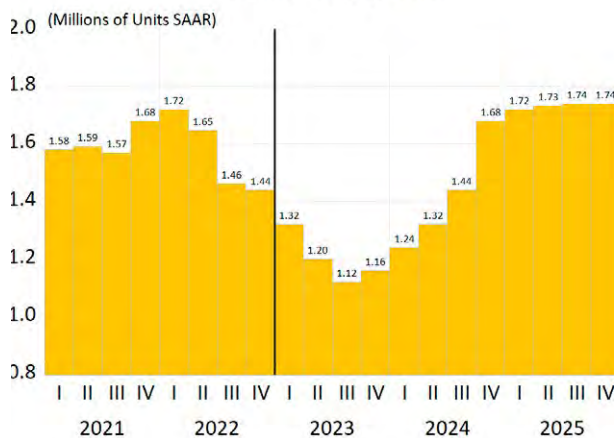


Chart 20: Federal Government Expenditures and Revenues

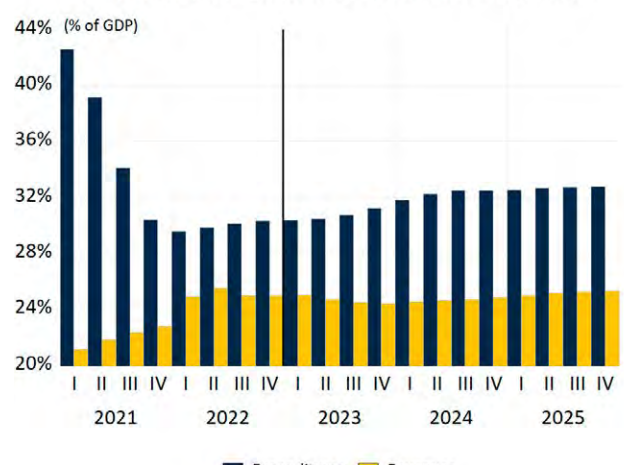


Chart 21: Federal Deficit, % of GDP

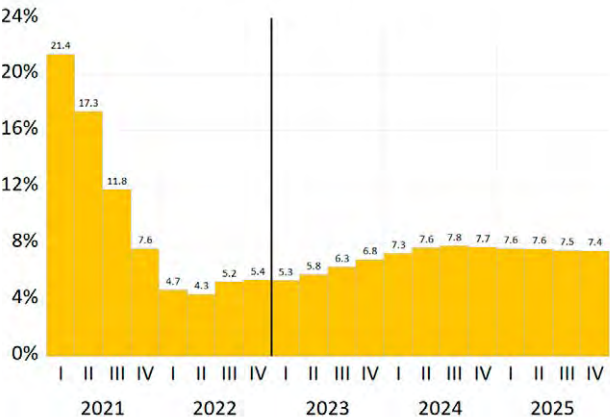


Chart 22: Real Exports and Imports of Goods and Services

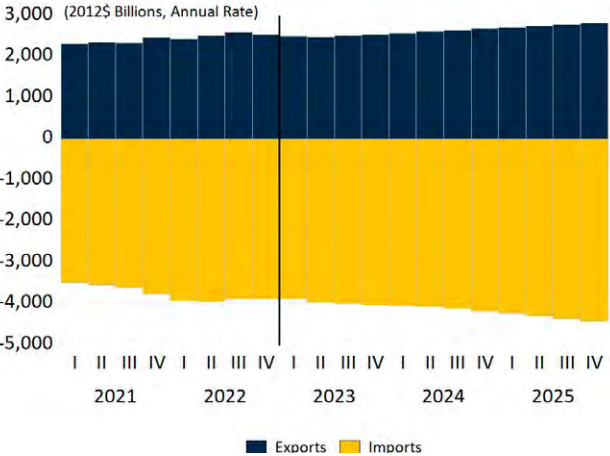
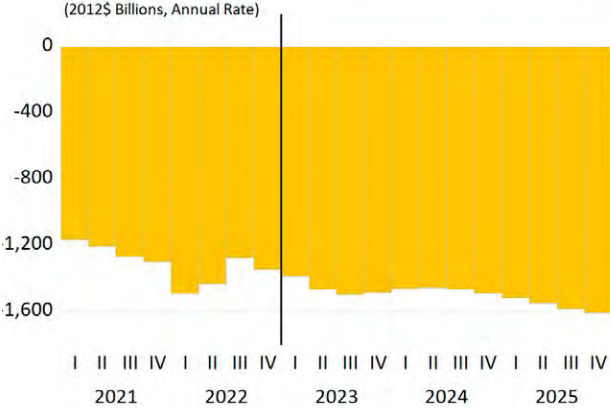


Chart 23: Real Net Exports of Goods and Services



THE UCLA ANDERSON FORECAST FOR CALIFORNIA

MARCH 2023 REPORT

Unbalanced Growth with Interest Rate Headwinds

Unbalanced Growth with Interest Rate Headwinds: The California Report

Jerry Nickelsburg
Director, UCLA Anderson Forecast
March 2023

Introduction

Uncertainty about California's 2023 economic outlook still abounds. The most important source of this uncertainty is national economic policy. With the Federal Reserve having moved from rule-based policy to discretionary policy, the March forecast for the state, following the March U.S. forecast, will consist of two scenarios. It is not quite, choose your own forecast. Rather, it is a guide. In the coming months, the Federal Reserve will reach that fork in the road between continued aggressive tightening and moderation, and it must decide which path to take. The two scenarios will provide the most likely outcome for California of each, given the data currently available.

The good news is that unlike the past four slowdowns in economic growth we expect a milder impact on California's economy from whichever path the Federal Reserve decides to take. This California report begins with a look at the current employment situation including a discussion of three key sectors: technology, housing and construction, and logistics. The report concludes with a discussion of the two economic outlook scenarios for 2023 and the implications for 2024 and 2025.

Employment Retrospective

There are normally two measures of employment considered when analyzing labor markets in California; the household survey metric which counts the number of people employed and the enterprise survey metric which counts the number of payroll jobs. The household survey reports that the number of people employed in December 2022 was 1.6% below

the number in February 2020, the same percentage as the decline in the labor force over that period; a decline attributable to retirements, migration out-of-state, and individuals choosing to spend their time in non-market activities such as child raising.

Over the same period, California's non-farm payroll jobs exceeded the pre-pandemic level by 70,000 jobs. The difference between the two metrics can be partly explained by the difference in the definition of the surveys. The household survey is a measure based on the domicile of the worker. If a former San Francisco office worker is now remote in Phoenix, then they would be counted as a drop in the labor force and employment in California in the household survey. However, if their job was at an enterprise in San Francisco, they would remain in the enterprise survey as employed in San Francisco. They are working in San Francisco (virtually) and living in Phoenix (in true life).

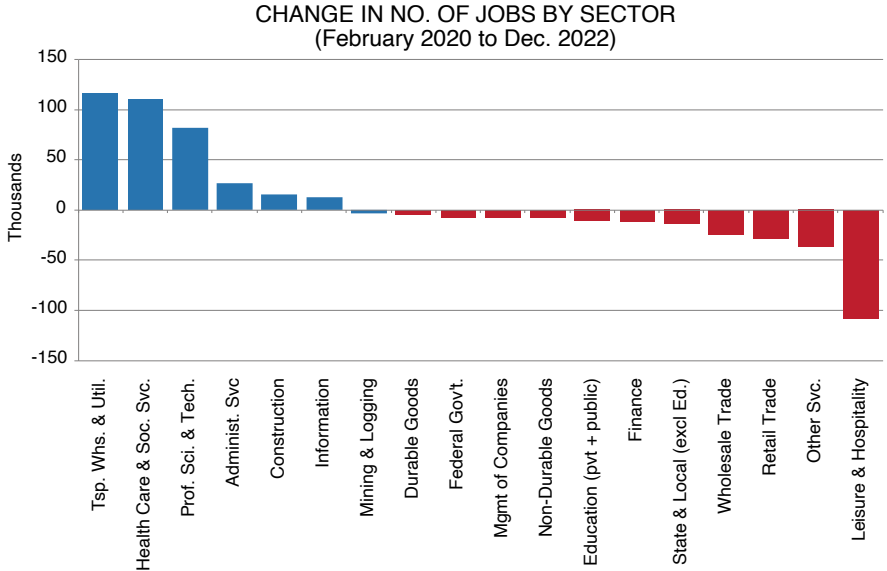
The second explanation comes from the fact that unemployment is extremely low in most major employment centers in California; for example, San Mateo 1.9%, San Francisco and Santa Clara 2%, Orange County 2.5%, and Contra Costa and San Diego 2.9%. With low unemployment rates firms are incentivized to convert temporary employees and independent contractors to payroll employees with full benefits and to hire new entrants to the labor force as payroll employees from the start. In the case of a conversion from a 1099 independent contractor to a payroll employee, there is an increase in the number of payroll employees (enterprise survey) without a change in the number of people employed (household survey).

Importantly, many of the new jobs are in sectors different from those where job loss was the most acute. This disparity is evident in Chart 1. About 145,000 payroll jobs in the leisure and hospitality, and other services sectors have not returned. In the logistics, technology (professional, technical, and scientific services and information) and health care sectors, rapid job creation has numerically made up for more than the aforementioned sectoral job loss. This, in part, explains why California’s GDP growth has been

faster than the nation. Tech and logistics, the more rapidly growing sectors, are on average high-income sectors while the slow-growth sectors are on average low-income sectors.

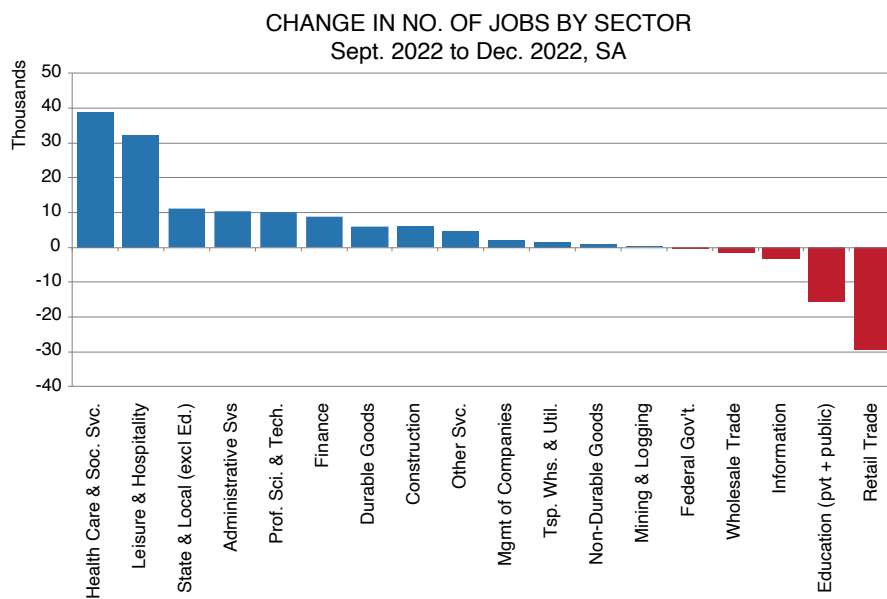
Over the last three months the picture has changed a bit. The two sectors with the largest gains in jobs have been the health care and social services, and leisure and hospitality sectors (Chart 2). The remaining missing jobs in leisure and hospitality are disproportionately found in the Bay Area and

Chart 1



Source: edd.ca.gov

Chart 2



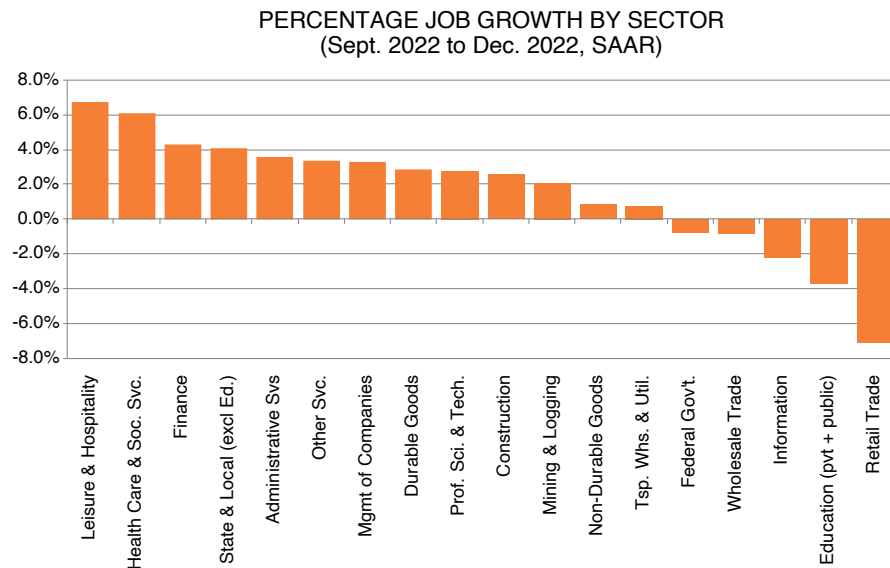
Source: edd.ca.gov

in Los Angeles. This is due in part to remote work keeping the demand for restaurant and tavern services in these cities below pre-pandemic levels and in part due to the absence of foreign, particularly Chinese, tourists in the state. At least part of the reduction due to fully remote work at the height of the pandemic will be recovered by a return to the office and a hybrid return to the office. In China, the 180 degree turn on Zero-COVID policies portends a return of Chinese

tourists, and this ought to further increase jobs in leisure and hospitality and in retail in these cities.

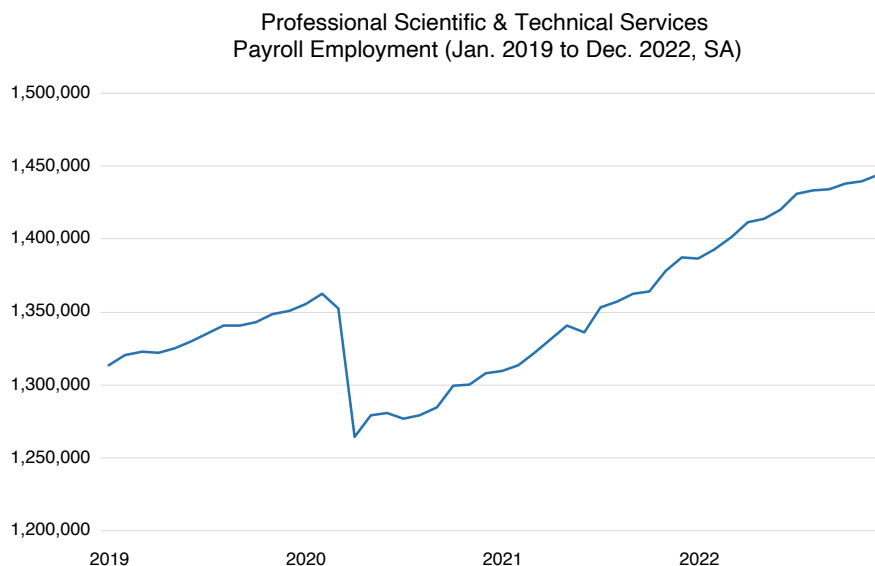
Though not the fastest growing sector by the number of net new jobs (Chart 2) nor on a percentage growth basis (Chart 3), technology continued to post gains in employment over the last three months. The announced layoffs at large tech companies such as Twitter, Google and Salesforce might be

Chart 3



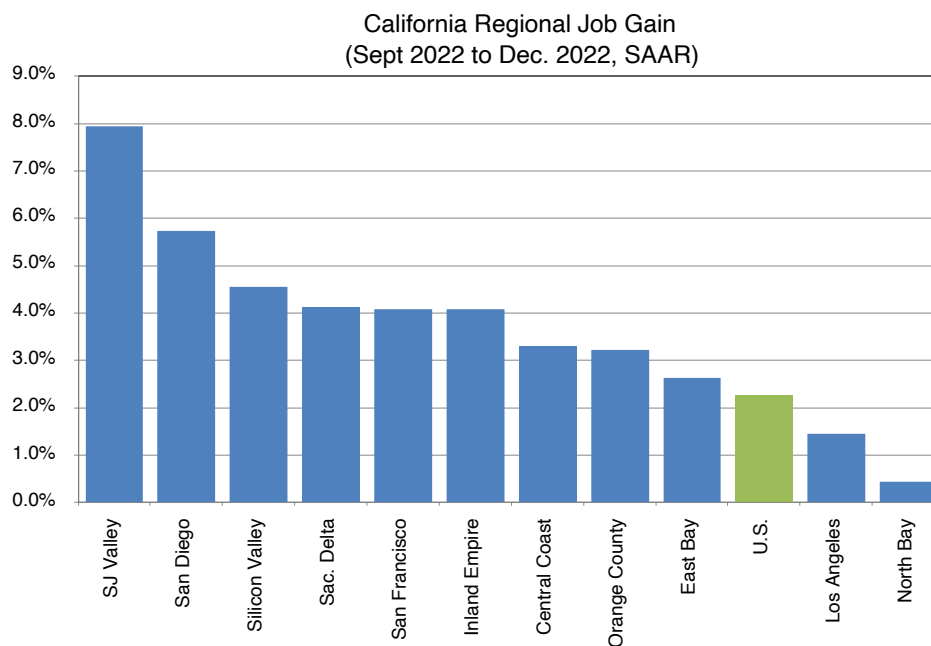
Source: edd.ca.gov

Chart 4



Source: edd.ca.gov

Chart 5



Source: edd.ca.gov

an indication of a contraction overall in tech¹, but the data do not show it as yet (Chart 4). The professional, scientific, and technical services sector, a tech intensive sector containing many of the firms announcing layoffs, hit record levels of payroll employment in the 4th quarter of 2022. The layoffs might be happening, but in California, the state's portion of the 100,000 jobs lost cited in the NYT article have been replaced by new hiring. This does not mean that future contractions are not in the offing, only that these sectors are not cratering as they did in 2001. One key difference between projected future layoffs in tech today and those in 2001 is that today tech is imbedded in more sectors and there exists a higher probability that green tech, med tech, aerospace tech and the like will be able to absorb those layoffs. In addition, the firms announcing layoffs might be California based, but they are mostly large multi-national firms with the announced layoffs extending across the globe.

The pace of employment growth in California is geographically variable. The North Bay and Los Angeles grew at rates slower than the U.S. in the 4th quarter of 2022 (Chart 5). In the North Bay sluggishness in Marin and Napa counties pulled down the average from a better than the U.S. growth rate in Sonoma County. All three counties in the North Bay have unemployment rates significantly below the national average. Though Los Angeles employment grew slower than the US in the 4th quarter, for the entire year 2022 growth was slightly more rapid than in the nation. In the first 9 months of the year the Central Valley, Central Coast and East Bay payroll employment lagged the US and the northernmost counties experienced both an employment decline of 6.5% and a significant population decline. The recent data show the pattern of growth seen over the last decade in which the coastal cities experience the bulk of the job growth in the state is continuing.

1. Erin Griffith. "Tech's Talent Wars Have Come Back To Bite It." *New York Times*. November 10, 2022. <https://www.nytimes.com/2022/11/10/technology/big-tech-layoffs.html>

Housing markets and construction

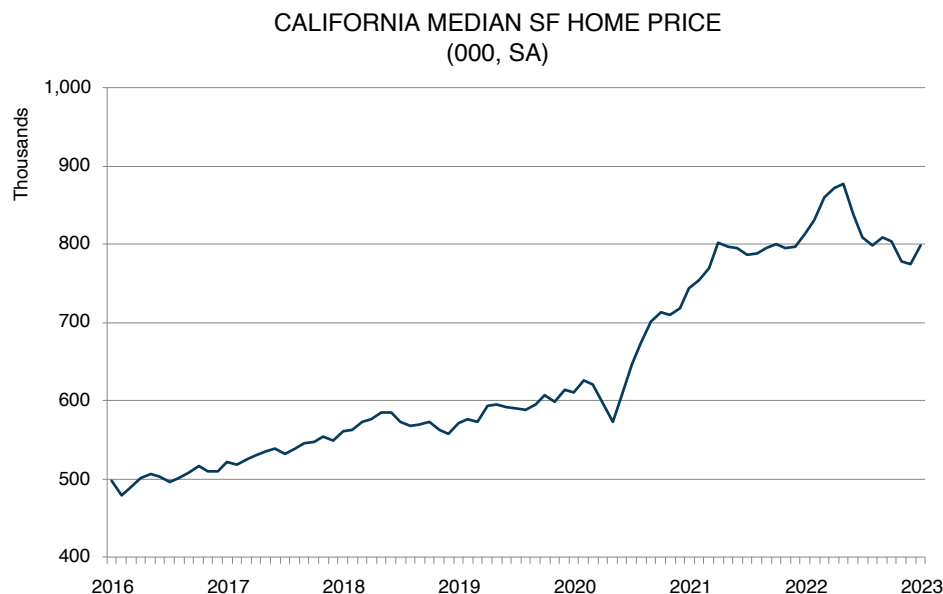
Interest rates are up, and California housing markets are down. The median price of single-family homes in the state has declined on a seasonally adjusted basis. As of January 2023, the median price is 9% below its previous peak and is now back to early 2021 levels (Chart 6). However, that does not mean all homes have lost 9% of their value. The median is the price at which half the homes sold for more, and half for less. If the high end of the market is weaker than the low end, the median falls. The S&P Case-Shiller Home Price Indexes for San Diego, Los Angeles and San Francisco confirm a loss in home values. The Case-Shiller Indexes, though falling, were 18% above the 2016 to 2019 trend. This datum together with the fact that January home sales were 44% below their previous peak suggests that there is more running room for home price declines over the next six months (Chart 7)

When it comes to the building of new homes the picture is mixed. Payroll employment in the construction of residential structures in December 2022 was the highest it has been since December 2007, immediately before the speculative housing boom turned into the 2008 recession. This is in part due to the new home construction friendly laws passed in Sacramento and partly to the still robust demand for homes,

rental or purchased, throughout the state. But continued falling home prices and increases in mortgage rates ought to lead to less construction as those projects currently permitted are completed.

Nationwide the higher mortgage interest rates are also taking their toll on new home sales and therefore new home construction. The December U.S. forecast has national homes starts, an important component of the business cycle, as well as associated construction employment, falling. But housing is everywhere local. This is seen graphically in Chart 8. In 2022 home construction volumes deteriorated. Both California and Texas defied this trend to fewer homes being built, but even in these two states the rate of increase moved to a crawl. Our expectation is that the new home products in the state and eased permitting processes will help ease the nationwide residential building downturn's impact on the state. This fact, along with the multi-family builder sentiment expressed in the Winter 2023 Allen Matkins UCLA Anderson Forecast California Commercial Real Estate Survey (conducted in November 2022) leads to a forecast of the volume of new building increasing through the forecast horizon of 2025. In the more aggressive Fed Funds rate increase/recession scenario, the expectation is for a milder hit to 2023 residential construction in the state than in the U.S.

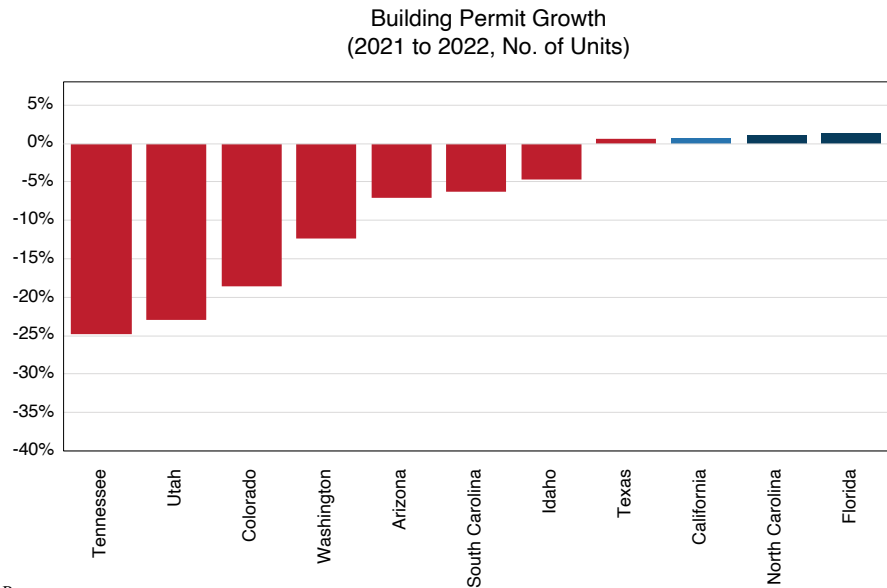
Chart 6



Source: California Association of Realtors

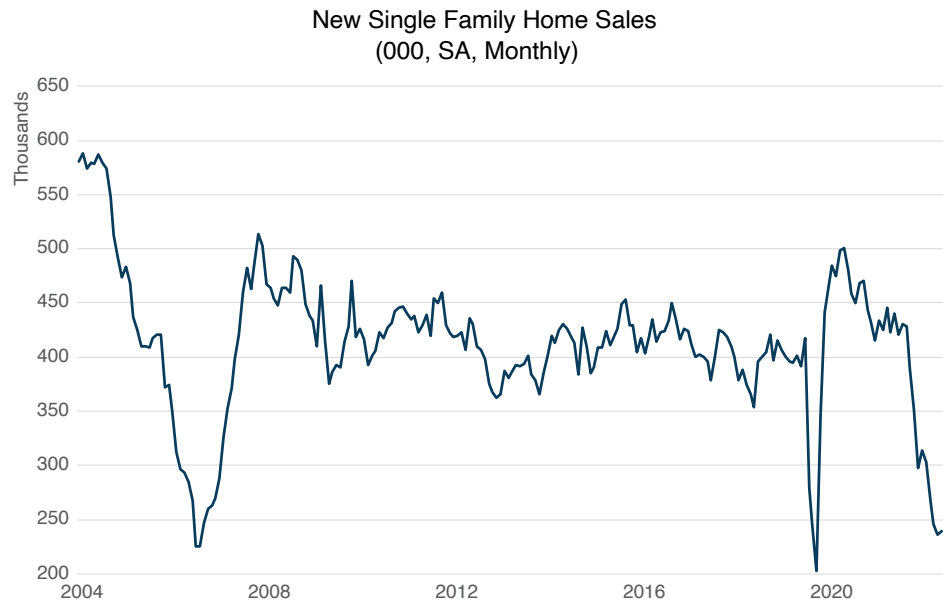
2. 1994/1995 and 2004/2006 saw similar declines in home sales as the Federal Reserve raised interest rates. CAR.org reports that the share of homes in the \$1M plus category fell relative to the share of home in the lower priced categories. <https://www.car.org/marketdata/data/countysalesactivity>

Chart 8



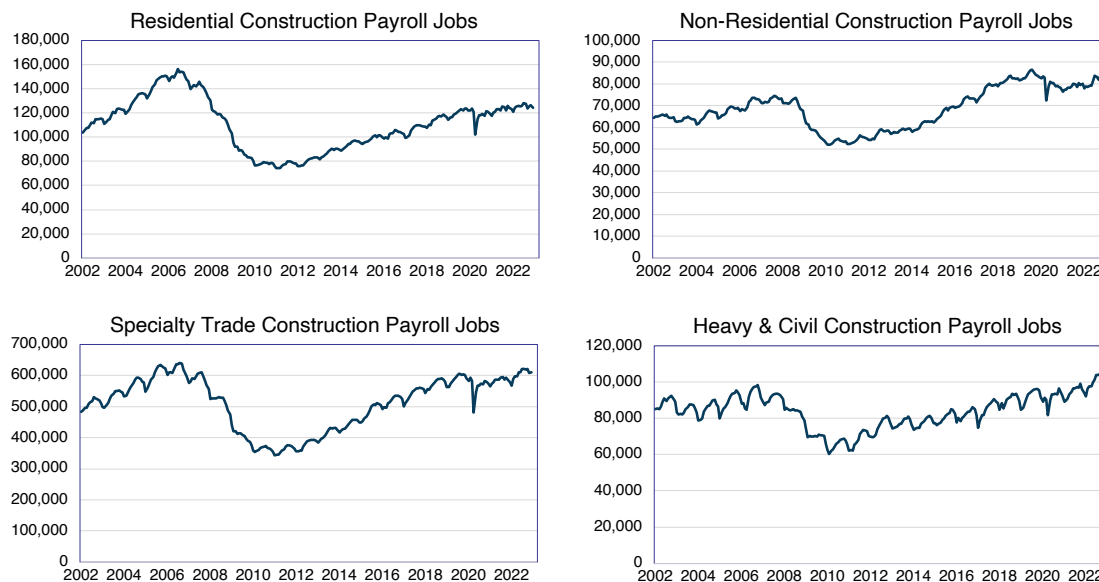
Source: U.S. Census Bureau

Chart 7



Source: California Association of Realtors

Chart 9



Source: edd.ca.gov

Total construction payroll employment at the end of 2022 was higher by 1.7% from February 2020 and grew at a 2.1% annual rate from the previous quarter. The Winter 2023 Allen Matkins UCLA Anderson Forecast Survey results also indicate a strong demand for continued warehouse and industrial building development.³ Heavy and civil construction employment is at a 20-year high and specialty contractor employment is very close to its peak during the building boom of 2005-2006 (Chart 9). While non-residential construction employment is off from its pre-pandemic peak

due to the absence of a significant number of new projects in the office, hospitality, and retail space, it is higher than any period other than that pre-pandemic peak over the last 20 years. These trends will weaken with a weaker economy. Nevertheless, with current work in progress and a smaller impact of interest rates on new housing starts in the state, construction ought not contract in the slower Fed Funds rate/no recession scenario, and by a smaller decrease than in the U.S. in the more rapid Fed Funds rate/recession scenario.

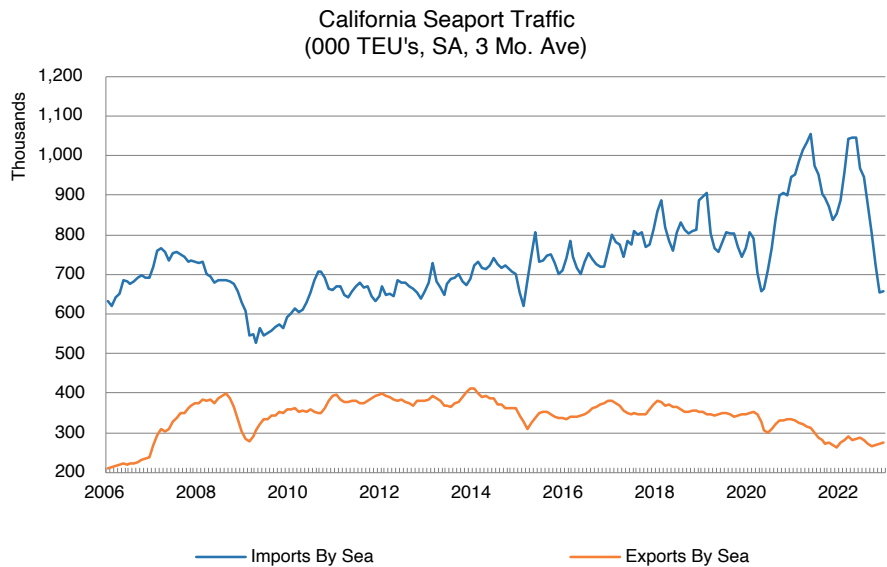
3. Jerry Nickelsburg, "Interest rates and recession concerns weigh on California Commercial Real Estate," Allen Matkins / UCLA Anderson California Commercial Real Estate Survey, Winter 2023.

Logistics

In the last two California reports we documented the slow-down in goods movements through the seaports and airports of the state. The new data show an ever so slightly changed picture. The downturn in goods movement at the three major seaports has ceased (Chart 10). Some of the downturn was due to trans-Pac shipping being diverted to East Coast ports as part of a risk mitigation strategy in the face of a potential labor action at West Coast ports, and some was due to a shift by households from goods purchases back to services consumed. Imports, while down below pre-pandemic levels, have begun to increase. Exports through the seaports ended a long decline as the world economy is now growing and the dollar is weakening. As the West Coast port labor issues are resolved, the volume of imports processed should return to slow growth resulting in an overall increase in goods movement.

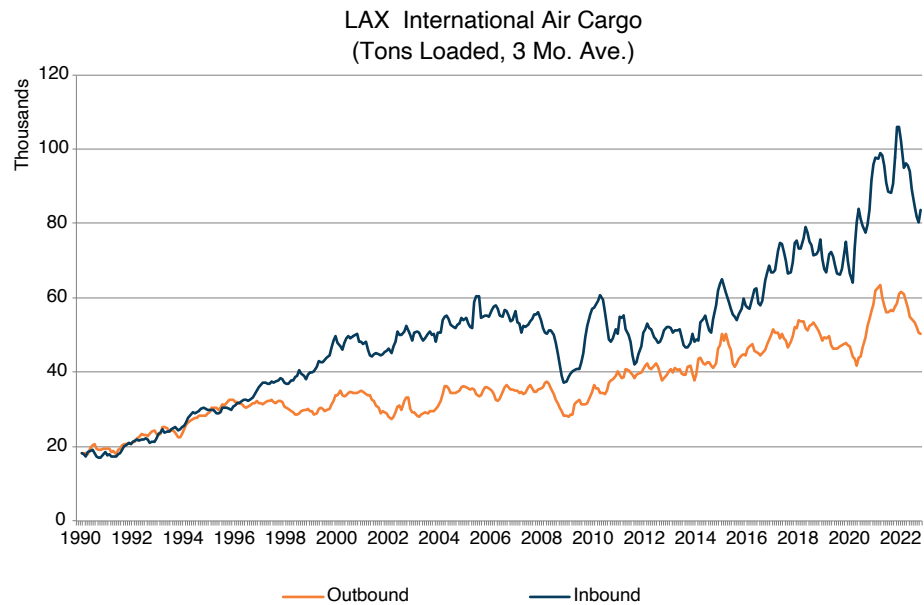
California’s airports tell a more optimistic story (Chart 11). Even though international air cargo at LAX is lower than its mid-pandemic peak, it remains above pre-pandemic levels for both imports and exports. The decline in domestic goods movement by air has ended and the level of air freight is now greater than pre-pandemic levels in Southern California and equal to it in Northern California (Chart 12). For both seaports and airports, the soft-landing/no-recession scenario has logistics growing in 2023 in large part due to solid growth in both imports and exports and a declining real exchange rate. As economic growth picks up in 2024 and 2025 with a concomitant growth in imports and a continued shift to online goods purchases, an acceleration of logistics demand is expected to be seen. In the recession scenario, logistics employment experiences little growth in 2023, and the forecast for 2024 and 2025 is for a recovery commensurate with robust growth in international trade.

Chart 10



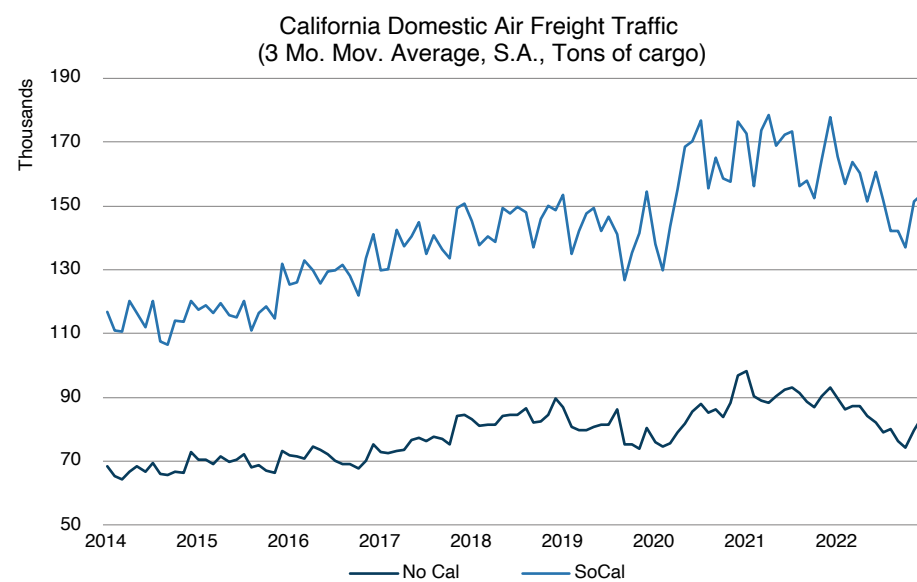
Source: Various

Chart 11



Source: LAX

Chart 12



Source: Various

The Forecast Scenarios

In the soft-landing scenario, California grows, and in fact continues to grow faster than the US, led by more construction, an ample rainy-day fund for state government, increased demand for defense goods, and increased demand for labor saving equipment and software. In this scenario the unemployment rate averages for 2023, 2024 and 2025 are expected to be 4.0%, 3.9% and 3.6% respectively. Non-farm payroll jobs are expected to grow at 2.3%, 1.2% and 1.4% rates during the same three years. Real personal income is forecast to grow by -0.2% in 2023 and to grow by 1.7% in 2024 and by 2.1% in 2025. In spite of higher mortgage interest rates, the continued demand for a limited housing stock coupled with the enactment of laws permitting

ADUs to be built in single-family house zoned neighborhoods throughout the state leads to a forecast of increase homebuilding through 2025. Our expectation is for permits to grow to 150K in 2025.

In the recession scenario, the California economy declines, but by less than the US. In this scenario the unemployment rates for 2023, 2024 and 2025 are expected to be 4.3%, 4.8% and 3.7% respectively. Non-farm payroll jobs are expected to grow at 1.1%, -1.2% and 1.9% rates during the same three years. Real personal income is forecast to grow by -0.4% in 2023, 1.3% in 2024 and is expected to grow by 2.5% in 2025. Our housing forecast is for 92K net new units to be permitted in 2023 and permits to grow to 152K in 2025.

THE UCLA ANDERSON FORECAST FOR CALIFORNIA

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Tables

FORECAST TABLES - SUMMARY (NO RECESSION SCENARIO)

Summary of the UCLA Anderson Forecast
for California by Calendar Year

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income and Taxable Sales											
Personal Income											
(Bil. \$)	2125.4	2218.5	2318.3	2431.8	2567.4	2790.5	3006.2	3007.0	3115.7	3266.2	3427.6
(% Ch.)	7.3	4.4	4.5	4.9	5.6	8.7	7.7	0.0	3.6	4.8	4.9
Real Personal Income											
(Bil. 2012 \$)	2028.3	2069.4	2100.3	2124.3	2179.8	2326.6	2407.8	2243.3	2239.1	2277.9	2325.4
(% Ch.)	5.8	2.0	1.5	1.1	2.6	6.7	3.5	-6.8	-0.2	1.7	2.1
Taxable Sales											
(Bil. \$)	638.0	653.2	677.0	706.1	731.9	706.2	862.2	939.4	972.2	995.7	1030.7
(% Ch.)	3.7	2.4	3.6	4.3	3.7	-3.5	22.1	9.0	3.5	2.4	3.5
Real Taxable Sales											
(Bil. 2012 \$)	608.9	609.3	613.3	616.8	621.4	588.7	689.9	701.1	698.7	694.5	699.3
(% Ch.)	2.2	0.1	0.7	0.6	0.7	-5.3	17.2	1.6	-0.3	-0.6	0.7
Price Inflation (% Change)											
Consumer Prices	1.4	2.3	3.0	3.7	2.9	1.8	4.2	7.3	3.8	3.0	2.8
Employment and Labor Force (Household Survey)											
Employment (% Ch.)	2.2	1.8	1.6	1.1	0.8	-8.7	3.1	5.0	0.7	0.6	0.3
Labor Force (% Ch.)	0.8	1.0	0.9	0.6	0.6	-2.3	0.1	1.4	0.2	0.5	0.0
Unemployment Rate (%)	6.2	5.5	4.8	4.3	4.1	10.5	7.7	4.5	4.0	3.9	3.6
Nonfarm Employment (Payroll Survey, % Change)											
Total Nonfarm	3.0	2.7	2.1	2.1	1.5	-7.1	3.2	5.1	2.3	1.2	1.4
Natural Resources & Min.	-9.8	-15.6	-1.8	2.7	0.4	-11.6	-4.5	1.0	8.4	1.1	-6.9
Construction	8.5	5.9	4.5	6.2	2.9	-3.3	2.8	3.7	-1.7	0.8	3.8
Manufacturing	1.8	0.5	0.2	0.9	0.2	-4.7	0.6	2.8	1.0	-0.5	0.7
Nondurable Goods	1.3	0.9	-0.6	-1.2	-0.4	-6.6	1.7	3.3	-0.7	-1.8	1.3
Durable Goods	2.1	0.3	0.7	2.0	0.6	-3.6	0.1	2.4	1.9	0.1	0.3
Tran., Warehousing & Utility.	6.3	6.6	6.3	5.2	5.9	3.9	7.8	6.9	0.8	-0.4	-0.8
Trade	1.8	0.9	0.5	-0.1	-1.4	-7.6	3.4	2.4	2.6	-0.3	-0.4
Information	5.3	7.8	0.6	2.6	3.5	-4.6	5.7	6.2	1.8	4.6	8.0
Financial Activities	2.5	2.6	1.2	0.6	0.4	-2.8	0.7	1.4	0.8	2.8	3.0
Professional & Bus. Servs.	2.6	1.6	2.0	3.4	2.0	-4.5	4.0	4.8	2.7	3.2	3.4
Educational & Health Servs.	3.6	3.6	3.8	2.7	3.1	-2.5	2.7	4.2	1.4	-0.7	2.1
Leisure & Hospitality	4.1	4.1	2.7	2.0	2.2	-27.1	9.9	16.2	7.7	4.6	-0.6
Other Services	1.6	1.8	1.9	1.4	0.8	-17.2	4.7	9.7	3.4	0.1	0.6
Federal Government	0.8	1.3	0.2	-0.8	0.8	4.8	-3.5	-1.8	-0.6	-0.5	-0.3
State and Local Government	2.2	2.3	1.7	1.3	0.6	-4.9	-0.7	2.9	1.4	0.7	-0.2
Nonfarm Employment (Payroll Survey, Thousands)											
Total Nonfarm	16049.2	16478.6	16825.7	17172.2	17431.0	16186.9	16705.8	17551.4	17946.9	18168.7	18420.3
Natural Resources & Min.	26.4	22.3	21.9	22.5	22.6	20.0	19.1	19.3	20.9	21.1	19.6
Construction	731.8	775.1	810.3	860.7	885.5	856.8	880.4	913.3	898.1	905.3	939.9
Manufacturing	1303.0	1309.7	1312.2	1323.6	1326.3	1264.4	1272.5	1307.6	1320.1	1312.9	1321.8
Nondurable Goods	482.4	486.7	483.8	478.3	476.3	444.9	452.4	467.4	464.0	455.9	462.0
Durable Goods	820.6	823.0	828.4	845.3	850.0	819.5	820.1	840.1	856.1	857.0	859.8
Tran., Warehousing & Utility	557.6	594.6	632.0	664.8	704.3	731.5	788.7	843.5	849.9	846.9	840.5
Trade	2350.0	2372.2	2383.4	2381.2	2348.4	2169.9	2244.4	2299.2	2358.3	2350.9	2340.9
Information	488.4	526.2	529.1	542.9	561.9	535.8	566.6	601.4	612.4	640.4	691.7
Financial Activities	802.4	822.9	832.6	837.9	841.1	817.5	823.1	834.4	840.7	864.1	889.7
Professional & Bus. Servs.	2491.1	2531.7	2582.5	2670.2	2723.8	2600.0	2703.4	2833.9	2911.2	3004.4	3107.6
Educational & Health Servs.	2464.4	2552.0	2650.3	2722.3	2807.3	2736.5	2809.1	2926.9	2967.2	2946.8	3007.3
Leisure & Hospitality	1828.6	1902.8	1953.6	1993.1	2036.3	1483.9	1630.6	1895.6	2041.6	2135.1	2122.7
Other Services	543.4	553.5	563.7	571.7	576.2	477.4	500.0	548.4	567.3	567.6	570.9
Federal Government	244.4	247.5	248.1	246.2	248.2	260.0	251.0	246.5	245.1	243.8	242.9
State and Local Government	2217.9	2268.2	2305.9	2335.3	2349.1	2233.2	2217.0	2281.4	2314.2	2329.4	2325.0
Construction Activity, Auto Registrations, and Population											
Residential Building Permits (Thous. Units)	98.2	98.8	112.7	114.1	110.8	100.1	121.5	112.9	109.4	137.4	150.4
Nonresidential Construction											
Value (Mil. 2012 \$)	24003.8	23875.6	24854.0	28005.8	26456.6	18475.8	13063.8	14566.6	13257.0	14398.3	15543.2
Value (Mil. \$)	26263.0	26178.8	27945.3	31960.1	31420.9	22240.8	16396.0	21057.7	19398.0	21243.8	23213.7
Auto Registrations (Mil.)	2.0	2.0	1.9	1.9	1.8	1.4	1.6	1.4	1.5	1.6	1.4
Net Immigration (Thous., Past Year)	25.1	-7.9	-17.5	-43.4	-116.0	-176.6	-387.6	-357.6	-25.5	69.0	140.5
Population (Thous.)	38876.9	39100.4	39300.5	39451.8	39519.3	39504.4	39268.5	39056.5	39168.9	39367.1	39628.4
(% Ch.)	0.7	0.6	0.5	0.4	0.2	-0.0	-0.6	-0.5	0.3	0.5	0.7

FORECAST TABLES - QUARTERLY SUMMARY (NO RECESSION SCENARIO)

Summary of the UCLA Anderson Forecast
for California by Quarter

	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4
Personal Income and Taxable Sales													
Personal Income													
(Bil. \$, S.A. Annualized)	3059.6	3066.7	3095.9	3131.4	3169.0	3205.4	3245.7	3286.9	3326.7	3365.6	3407.5	3448.3	3488.9
(% Ch. A. R.)	5.2	0.9	3.9	4.7	4.9	4.7	5.1	5.2	4.9	4.8	5.1	4.9	4.8
Real Personal Income													
(Bil. 2012 \$, S.A. Annualized)	2248.6	2231.3	2233.6	2240.7	2250.8	2260.0	2271.3	2284.2	2296.0	2306.7	2319.2	2331.4	2344.1
(% Ch. A. R.)	3.0	-3.0	0.4	1.3	1.8	1.6	2.0	2.3	2.1	1.9	2.2	2.1	2.2
Taxable Sales													
(Bil. \$, S.A. Annualized)	933.4	956.3	970.2	979.9	982.6	986.8	992.8	997.9	1005.5	1014.6	1024.2	1035.8	1048.2
(% Ch. A. R.)	9.9	10.2	6.0	4.1	1.1	1.7	2.4	2.1	3.1	3.7	3.8	4.6	4.9
Real Taxable Sales													
(Bil. 2012 \$, S.A. Annualized)	686.0	695.8	700.0	701.2	697.9	695.7	694.7	693.5	694.0	695.4	697.1	700.3	704.3
(% Ch. A. R.)	7.6	5.8	2.4	0.7	-1.9	-1.2	-0.6	-0.7	0.3	0.8	1.0	1.9	2.3
Price Inflation (% Change Annualized Rate)													
Consumer Prices	2.1	4.1	3.4	3.4	3.0	3.0	3.0	2.8	2.8	2.8	2.8	2.7	2.5
Employment and Labor Force (Household Survey)													
Employment (% Ch. A. R.)	-1.9	0.4	0.4	0.5	0.4	0.7	0.6	0.7	0.3	0.2	-0.0	0.2	0.6
Labor Force (% Ch. A. R.)	0.7	-0.1	-0.1	0.3	0.5	0.7	0.6	0.4	0.1	-0.0	-0.2	-0.3	-0.3
Unemployment Rate (% S.A.)	4.2	4.1	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.7	3.7	3.6	3.4
Nonfarm Employment (Payroll Survey, % Change Annualized Rate)													
Total Nonfarm	2.1	2.4	0.9	2.1	1.9	1.3	0.5	0.5	1.3	1.1	1.9	2.1	2.5
Natural Resources & Min.	0.7	32.1	4.8	2.0	-1.4	0.7	2.3	0.6	2.3	-4.2	-10.6	-19.1	-29.3
Construction	0.4	-2.2	-9.3	-2.3	2.7	1.1	2.6	1.8	3.7	5.0	4.4	3.9	3.2
Manufacturing	1.7	2.1	-0.9	-0.6	-0.6	-1.0	-0.4	0.1	0.5	1.3	1.5	0.4	-0.8
Nondurable Goods	1.3	-2.1	-2.9	-2.3	-2.1	-2.8	-1.6	0.0	1.6	2.5	3.3	0.6	-2.4
Durable Goods	1.8	4.5	0.2	0.3	0.2	0.0	0.2	0.1	-0.1	0.7	0.6	0.3	0.0
Tran., Warehousing & Utility	2.1	-7.4	4.8	7.4	1.5	-0.8	-4.0	-4.8	-3.5	-1.0	1.0	3.8	6.5
Trade	-3.6	13.0	-0.2	-1.4	0.1	-0.5	0.2	-0.3	-0.4	-1.0	0.1	-0.7	0.1
Information	-0.9	-0.7	2.7	1.8	3.5	5.0	5.9	6.0	6.9	7.6	8.8	10.1	12.1
Financial Activities	2.9	0.7	-1.0	0.9	2.7	3.5	3.7	3.7	3.4	3.0	2.6	2.3	2.1
Professional & Bus. Servs.	3.1	2.1	1.5	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.5	3.6	3.8
Educational & Health Servs.	6.3	-1.8	-0.9	-0.3	0.5	-1.4	-1.8	-0.1	0.7	2.7	3.1	3.9	5.1
Leisure & Hospitality	7.0	4.6	8.2	15.3	6.4	6.5	-0.9	-3.1	1.1	-3.1	0.6	1.8	2.2
Other Services	2.4	9.4	0.9	-1.7	0.1	0.1	0.4	0.4	0.6	0.6	0.6	0.5	0.8
Federal Government	0.1	0.4	-1.1	-1.0	-0.6	-0.5	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3
State and Local Government	-0.5	2.0	1.4	0.1	0.8	0.4	0.6	1.0	1.1	-0.7	-0.8	-1.1	-1.2
Nonfarm Employment (Payroll Survey, Thousands, S.A.)													
Total Nonfarm	17744.5	17850.3	17888.1	17983.3	18065.9	18124.9	18147.9	18170.6	18231.4	18281.2	18365.7	18460.2	18574.1
Natural Resources & Min.	19.3	20.7	20.9	21.0	20.9	21.0	21.1	21.1	21.2	21.0	20.4	19.4	17.8
Construction	920.9	915.8	893.7	888.4	894.4	896.9	902.7	906.7	914.9	926.1	936.0	945.1	952.5
Manufacturing	1317.1	1324.0	1320.9	1318.8	1316.7	1313.5	1312.0	1312.2	1313.8	1318.0	1323.0	1324.4	1321.6
Nondurable Goods	471.1	468.6	465.1	462.4	459.9	456.8	455.0	455.0	456.8	459.6	463.3	463.9	461.1
Durable Goods	846.0	855.4	855.7	856.4	856.7	856.7	857.1	857.3	857.0	858.4	859.7	860.5	860.5
Tran., Warehousing & Utility	850.3	834.1	844.0	859.2	862.4	860.6	851.8	841.4	833.8	831.7	833.8	841.5	854.8
Trade	2292.1	2363.1	2362.1	2353.8	2354.1	2351.4	2352.6	2351.1	2348.5	2342.3	2342.9	2339.0	2339.4
Information	607.8	606.7	610.7	613.5	618.8	626.3	635.3	644.6	655.5	667.6	681.8	698.5	718.7
Financial Activities	838.6	840.0	837.9	839.7	845.3	852.5	860.3	868.1	875.4	881.9	887.5	892.4	897.0
Professional & Bus. Servs.	2870.9	2885.5	2896.2	2919.5	2943.6	2967.5	2992.0	3016.6	3041.6	3067.0	3093.3	3120.5	3149.5
Educational & Health Servs.	2986.2	2972.7	2965.9	2963.3	2966.8	2956.1	2942.6	2941.7	2946.8	2966.5	2989.1	3018.0	3055.5
Leisure & Hospitality	1945.6	1967.6	2006.9	2079.8	2112.2	2145.9	2140.8	2123.9	2129.7	2112.9	2115.9	2125.1	2136.9
Other Services	554.9	567.5	568.7	566.4	566.6	567.2	567.2	567.8	568.7	569.5	570.4	571.2	572.3
Federal Government	245.8	246.0	245.3	244.7	244.3	244.1	243.9	243.6	243.5	243.2	243.0	242.8	242.6
State and Local Government	2295.1	2306.7	2314.8	2315.3	2319.9	2322.4	2325.6	2331.7	2337.8	2333.5	2328.6	2322.3	2315.5
Construction Activity, Auto Registrations, and Population													
Residential Building Permits (Thous. Units, S.A. Annualized)	84.1	100.4	108.9	112.8	115.7	121.3	134.0	143.3	150.9	152.7	149.7	149.2	150.1
Nonresidential Construction													
Value (Mil. 2012 \$, S.A. Annualized)	12671.5	13852.8	13154.1	13518.0	12503.0	13153.4	13666.6	15061.7	15711.2	15567.0	15459.7	15737.7	15408.3
Value (Mil. \$, S.A. Annualized)	18953.2	20376.2	19138.7	19704.5	18372.4	19460.0	20210.7	22183.3	23121.3	23009.9	23013.3	23593.6	23238.0
Auto Registrations (Mil., S.A. Annualized)	1.5	1.5	1.5	1.6	1.5	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.3
Net Immigration (Thous., Past 4 Qtrs.)	-233.0	-141.5	-51.4	29.5	61.3	78.0	65.2	65.8	66.8	88.9	118.8	154.6	199.5
Population (Thous.)	39054.0	39085.5	39144.6	39195.5	39250.1	39296.0	39340.1	39389.4	39442.9	39508.9	39580.9	39664.0	39759.9
(% Ch. A. R.)	0.3	0.3	0.6	0.5	0.6	0.5	0.4	0.5	0.5	0.7	0.7	0.8	1.0

FORECAST TABLES - SUMMARY (RECESSION SCENARIO)

Summary of the UCLA Anderson Forecast
for California by Calendar Year

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income and Taxable Sales											
Personal Income											
(Bil. \$)	2125.4	2218.5	2318.3	2431.8	2567.4	2790.5	3006.2	3007.0	3111.7	3249.4	3445.8
(% Ch.)	7.3	4.4	4.5	4.9	5.6	8.7	7.7	0.0	3.5	4.4	6.0
Real Personal Income											
(Bil. 2012 \$)	2028.3	2069.4	2100.3	2124.3	2179.8	2326.6	2407.8	2243.3	2233.7	2262.6	2320.2
(% Ch.)	5.8	2.0	1.5	1.1	2.6	6.7	3.5	-6.8	-0.4	1.3	2.5
Taxable Sales											
(Bil. \$)	638.0	653.2	677.0	706.1	731.9	706.2	862.2	939.4	931.6	928.0	978.2
(% Ch.)	3.7	2.4	3.6	4.3	3.7	-3.5	22.1	9.0	-0.8	-0.4	5.4
Real Taxable Sales											
(Bil. 2012 \$)	608.9	609.3	613.3	616.8	621.4	588.7	689.9	701.1	668.9	646.2	658.7
(% Ch.)	2.2	0.1	0.7	0.6	0.7	-5.3	17.2	1.6	-4.6	-3.4	1.9
Price Inflation (% Change)											
Consumer Prices	1.4	2.3	3.0	3.7	2.9	1.8	4.2	7.3	3.9	3.1	3.4
Employment and Labor Force (Household Survey)											
Employment (% Ch.)	2.2	1.8	1.6	1.1	0.8	-8.7	3.1	5.0	0.3	-0.2	1.2
Labor Force (% Ch.)	0.8	1.0	0.9	0.6	0.6	-2.3	0.1	1.4	0.1	0.3	0.0
Unemployment Rate (%)	6.2	5.5	4.8	4.3	4.1	10.5	7.7	4.5	4.3	4.8	3.7
Nonfarm Employment (Payroll Survey, % Change)											
Total Nonfarm	3.0	2.7	2.1	2.1	1.5	-7.1	3.2	5.1	1.1	-1.2	0.9
Natural Resources & Min.	-9.8	-15.6	-1.8	2.7	0.4	-11.6	-4.5	1.0	7.9	-0.9	-6.8
Construction	8.5	5.9	4.5	6.2	2.9	-3.3	2.8	3.7	-3.4	-2.7	5.3
Manufacturing	1.8	0.5	0.2	0.9	0.2	-4.7	0.6	2.8	-0.3	-2.0	1.7
Nondurable Goods	1.3	0.9	-0.6	-1.2	-0.4	-6.6	1.7	3.3	-1.1	-3.6	1.5
Durable Goods	2.1	0.3	0.7	2.0	0.6	-3.6	0.1	2.4	0.1	-1.1	1.8
Tran., Warehousing & Utility	6.3	6.6	6.3	5.2	5.9	3.9	7.8	6.9	0.6	-1.0	-0.6
Trade	1.8	0.9	0.5	-0.1	-1.4	-7.6	3.4	2.4	2.2	-1.1	0.5
Information	5.3	7.8	0.6	2.6	3.5	-4.6	5.7	6.2	-3.4	-5.0	2.5
Financial Activities	2.5	2.6	1.2	0.6	0.4	-2.8	0.7	1.4	-0.4	-1.7	2.4
Professional & Bus. Servs.	2.6	1.6	2.0	3.4	2.0	-4.5	4.0	4.8	-0.7	-3.8	-1.5
Educational & Health Servs.	3.6	3.6	3.8	2.7	3.1	-2.5	2.7	4.2	1.1	-1.5	2.7
Leisure & Hospitality	4.1	4.1	2.7	2.0	2.2	-27.1	9.9	16.2	7.3	3.8	0.3
Other Services	1.6	1.8	1.9	1.4	0.8	-17.2	4.7	9.7	3.0	-1.0	1.9
Federal Government	0.8	1.3	0.2	-0.8	0.8	4.8	-3.5	-1.8	-0.6	-0.6	-0.4
State and Local Government	2.2	2.3	1.7	1.3	0.6	-4.9	-0.7	2.9	1.3	0.1	-0.1
Nonfarm Employment (Payroll Survey, Thousands)											
Total Nonfarm	16049.2	16478.6	16825.7	17172.2	17431.0	16186.9	16705.8	17551.4	17745.3	17539.0	17700.9
Natural Resources & Min.	26.4	22.3	21.9	22.5	22.6	20.0	19.1	19.3	20.8	20.6	19.2
Construction	731.8	775.1	810.3	860.7	885.5	856.8	880.4	913.3	882.3	858.5	903.9
Manufacturing	1303.0	1309.7	1312.2	1323.6	1326.3	1264.4	1272.5	1307.6	1303.6	1278.1	1299.7
Nondurable Goods	482.4	486.7	483.8	478.3	476.3	444.9	452.4	467.4	462.4	445.7	452.6
Durable Goods	820.6	823.0	828.4	845.3	850.0	819.5	820.1	840.1	841.2	832.4	847.1
Tran., Warehousing & Utility	557.6	594.6	632.0	664.8	704.3	731.5	788.7	843.5	848.3	840.2	835.1
Trade	2350.0	2372.2	2383.4	2381.2	2348.4	2169.9	2244.4	2299.2	2350.2	2323.3	2336.0
Information	488.4	526.2	529.1	542.9	561.9	535.8	566.6	601.4	581.1	551.9	565.9
Financial Activities	802.4	822.9	832.6	837.9	841.1	817.5	823.1	834.4	831.4	816.9	836.6
Professional & Bus. Servs.	2491.1	2531.7	2582.5	2670.2	2723.8	2600.0	2703.4	2833.9	2813.8	2706.4	2666.8
Educational & Health Servs.	2464.4	2552.0	2650.3	2722.3	2807.3	2736.5	2809.1	2926.9	2958.0	2913.2	2992.9
Leisure & Hospitality	1828.6	1902.8	1953.6	1993.1	2036.3	1483.9	1630.6	1895.6	2033.9	2112.2	2119.1
Other Services	543.4	553.5	563.7	571.7	576.2	477.4	500.0	548.4	564.7	558.9	569.4
Federal Government	244.4	247.5	248.1	246.2	248.2	260.0	251.0	246.5	245.0	243.7	242.7
State and Local Government	2217.9	2268.2	2305.9	2335.3	2349.1	2233.2	2217.0	2281.4	2312.1	2315.1	2313.5
Construction Activity, Auto Registrations, and Population											
Residential Building Permits (Thous. Units)	98.2	98.8	112.7	114.1	110.8	100.1	121.5	112.9	92.1	104.9	151.8
Nonresidential Construction											
Value (Mil. 2012 \$)	24003.8	23875.6	24854.0	28005.8	26456.6	18475.8	13063.8	14566.6	12985.3	11564.3	13574.7
Value (Mil. \$)	26263.0	26178.8	27945.3	31960.1	31420.9	22240.8	16396.0	21057.7	18936.7	16883.0	20632.6
Auto Registrations (Mil.)	2.0	2.0	1.9	1.9	1.8	1.4	1.6	1.4	1.5	1.5	1.3
Net Immigration (Thous., Past Year)	25.1	-7.9	-17.5	-43.4	-116.0	-176.6	-387.6	-357.6	-26.3	66.1	150.7
Population (Thous.)	38876.9	39100.4	39300.5	39451.8	39519.3	39504.4	39268.5	39056.5	39168.1	39363.4	39635.0
(% Ch.)	0.7	0.6	0.5	0.4	0.2	-0.0	-0.6	-0.5	0.3	0.5	0.7

Source for residential and nonresidential permit and construction data: Construction Industry Research Board (CIRB), a service provided by the California Homebuilding Foundation (CHF). <http://www.cirbreport.org/>

FORECAST TABLES - QUARTERLY SUMMARY (RECESSION SCENARIO)

Summary of the UCLA Anderson Forecast
for California by Quarter

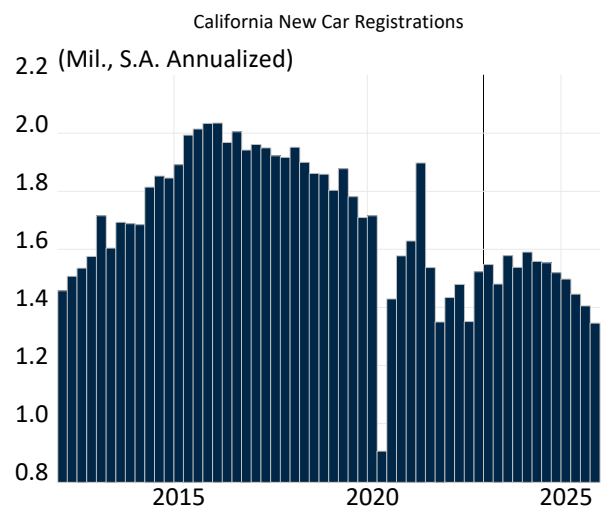
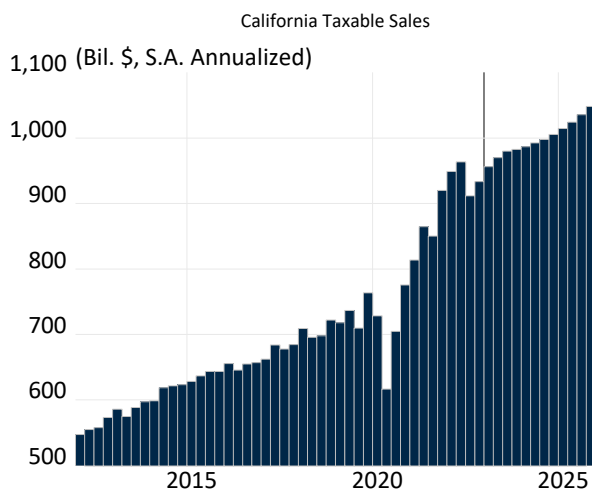
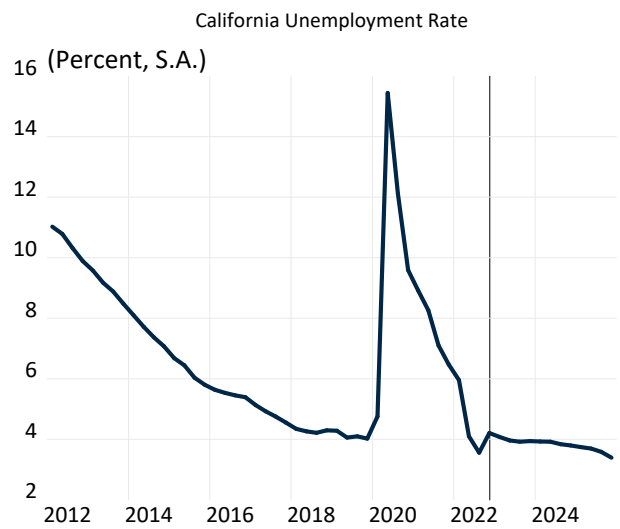
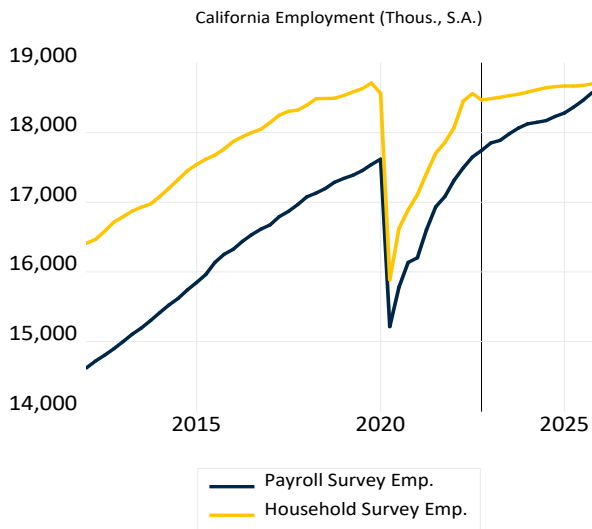
	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4
Personal Income and Taxable Sales													
Personal Income													
(Bil. \$, S.A. Annualized)	3059.6	3067.1	3096.0	3127.6	3156.1	3183.2	3222.0	3269.6	3322.8	3373.9	3423.8	3471.0	3514.6
(% Ch. A. R.)	5.2	1.0	3.8	4.1	3.7	3.5	5.0	6.0	6.7	6.3	6.0	5.6	5.1
Real Personal Income													
(Bil. 2012 \$, S.A. Annualized)	2248.6	2229.2	2228.1	2235.7	2241.9	2245.7	2254.1	2267.0	2283.5	2297.8	2312.7	2327.9	2342.6
(% Ch. A. R.)	3.0	-3.4	-0.2	1.4	1.1	0.7	1.5	2.3	2.9	2.5	2.6	2.7	2.6
Taxable Sales													
(Bil. \$, S.A. Annualized)	933.4	945.0	936.3	927.0	918.1	913.9	921.9	931.9	944.2	961.5	971.6	981.2	998.7
(% Ch. A. R.)	9.9	5.1	-3.6	-3.9	-3.8	-1.8	3.6	4.4	5.4	7.6	4.2	4.0	7.3
Real Taxable Sales													
(Bil. 2012 \$, S.A. Annualized)	686.0	686.9	673.8	662.7	652.2	644.7	645.0	646.1	648.8	654.8	656.3	658.1	665.7
(% Ch. A. R.)	7.6	0.5	-7.4	-6.5	-6.2	-4.5	0.2	0.7	1.7	3.7	0.9	1.1	4.7
Price Inflation (% Change Annualized Rate)													
Consumer Prices	2.1	4.5	4.0	2.7	2.5	2.8	3.4	3.7	3.6	3.7	3.3	2.9	2.5
Employment and Labor Force (Household Survey)													
Employment (% Ch. A. R.)	-1.9	0.4	-0.6	-0.7	-1.3	-0.7	0.2	1.3	2.1	1.4	0.6	0.8	0.6
Labor Force (% Ch. A. R.)	0.7	-0.1	-0.3	0.0	0.3	0.5	0.5	0.4	0.2	-0.0	-0.2	-0.3	-0.2
Unemployment Rate (% S.A.)	4.2	4.1	4.2	4.3	4.7	5.0	5.1	4.9	4.4	4.1	3.9	3.6	3.4
Nonfarm Employment (Payroll Survey, % Change Annualized Rate)													
Total Nonfarm	2.1	0.9	-0.7	-0.2	-0.8	-2.0	-1.8	-1.1	0.5	0.6	1.9	2.8	3.6
Natural Resources & Min.	0.7	31.6	4.4	0.9	-3.4	-2.4	0.1	-0.9	1.7	-4.0	-9.8	-17.9	-27.9
Construction	0.4	-11.0	-4.1	-4.0	-1.0	-4.9	-2.3	-1.7	2.3	6.2	8.6	11.4	10.9
Manufacturing	1.7	0.2	-3.1	-2.8	-2.3	-3.0	-1.6	-0.0	1.2	2.6	3.1	2.2	1.0
Nondurable Goods	1.3	-2.3	-3.4	-3.2	-3.7	-5.3	-4.3	-1.8	1.3	3.3	4.5	1.8	-1.2
Durable Goods	1.8	1.7	-2.9	-2.6	-1.6	-1.7	-0.1	0.9	1.2	2.2	2.4	2.3	2.3
Tran., Warehousing & Utility	2.1	-7.6	4.5	7.0	0.9	-2.0	-4.5	-5.0	-3.5	-0.9	1.3	4.4	7.2
Trade	-3.6	12.6	-0.7	-2.1	-1.1	-2.5	-0.2	0.0	0.6	0.1	1.3	0.7	1.5
Information	-0.9	-6.7	-5.8	-9.1	-7.0	-5.8	-2.9	-1.6	0.6	2.2	4.3	6.8	10.1
Financial Activities	2.9	0.5	-2.0	-3.2	-3.3	-2.4	-1.2	0.5	2.7	3.4	3.2	2.8	2.2
Professional & Bus. Servs.	3.1	-1.0	-5.2	-4.1	-3.6	-4.6	-3.4	-2.9	-2.5	-2.1	-0.9	1.1	2.7
Educational & Health Servs.	6.3	-2.2	-1.4	-0.9	-0.3	-2.9	-2.7	-0.4	1.0	3.5	4.2	5.5	7.0
Leisure & Hospitality	7.0	4.2	7.6	14.6	5.2	4.7	-1.3	-2.7	2.1	-2.3	1.6	3.3	3.9
Other Services	2.4	8.9	0.2	-2.5	-1.5	-2.4	-0.3	0.7	2.1	2.1	2.2	2.4	2.6
Federal Government	0.1	0.4	-1.3	-1.0	-0.8	-0.4	-0.3	-0.3	-0.3	-0.5	-0.5	-0.5	-0.5
State and Local Government	-0.5	2.0	1.3	-0.2	0.2	-0.3	-0.2	0.6	1.1	-0.5	-0.4	-0.6	-0.8
Nonfarm Employment (Payroll Survey, Thousands, S.A.)													
Total Nonfarm	17744.5	17783.0	17750.5	17741.1	17706.6	17618.0	17538.5	17489.1	17510.5	17538.3	17621.4	17743.8	17899.9
Natural Resources & Min.	19.3	20.6	20.9	20.9	20.7	20.6	20.6	20.6	20.6	20.4	19.9	19.0	17.5
Construction	920.9	894.5	885.1	876.0	873.8	862.9	858.0	854.3	859.1	872.1	890.3	914.6	938.6
Manufacturing	1317.1	1317.9	1307.6	1298.2	1290.6	1281.0	1275.9	1275.9	1279.7	1287.9	1297.8	1304.8	1308.2
Nondurable Goods	471.1	468.4	464.3	460.5	456.2	450.1	445.2	443.1	444.5	448.2	453.2	455.2	453.9
Durable Goods	846.0	849.5	843.3	837.7	834.4	830.9	830.8	832.7	835.2	839.7	844.7	849.6	854.3
Tran., Warehousing & Utility	850.3	833.7	843.0	857.4	859.3	854.9	845.1	834.2	826.8	825.0	827.6	836.5	851.3
Trade	2292.1	2360.9	2356.9	2344.7	2338.2	2323.3	2322.0	2322.2	2325.8	2326.2	2333.5	2337.8	2346.7
Information	607.8	597.3	588.4	574.5	564.2	555.8	551.7	549.6	550.4	553.4	559.3	568.6	582.3
Financial Activities	838.6	839.6	835.4	828.7	821.9	816.8	814.4	815.4	820.9	827.7	834.2	839.9	844.5
Professional & Bus. Servs.	2870.9	2863.4	2825.4	2795.8	2770.6	2738.4	2714.9	2694.7	2677.6	2663.3	2657.1	2664.6	2682.3
Educational & Health Servs.	2986.2	2970.0	2959.5	2952.5	2950.0	2928.0	2908.0	2904.8	2912.2	2937.1	2967.8	3007.8	3059.0
Leisure & Hospitality	1945.6	1965.6	2001.8	2070.9	2097.4	2121.8	2115.0	2100.5	2111.4	2099.2	2107.5	2124.6	2145.2
Other Services	554.9	566.9	567.1	563.5	561.3	557.9	557.5	558.6	561.5	564.5	567.5	570.9	574.6
Federal Government	245.8	246.0	245.3	244.7	244.2	244.0	243.8	243.6	243.4	243.1	242.8	242.5	242.3
State and Local Government	2295.1	2306.7	2314.2	2313.2	2314.5	2312.6	2311.6	2315.0	2321.1	2318.4	2315.9	2312.2	2307.6
Construction Activity, Auto Registrations, and Population													
Residential Building Permits (Thous. Units, S.A. Annualized)	84.1	95.1	95.3	91.0	87.1	88.2	96.7	107.6	127.0	143.7	150.2	154.9	158.2
Nonresidential Construction													
Value (Mil. 2012 \$, S.A. Annualized)	12671.5	13827.7	12989.2	13172.8	11951.5	10440.1	10850.5	12092.9	12873.7	13250.7	13410.0	13894.5	13743.7
Value (Mil. \$, S.A. Annualized)	18953.2	20345.4	18889.9	19121.4	17390.0	15216.0	15779.8	17603.4	18932.7	19810.3	20348.9	21269.1	21101.9
Auto Registrations (Mil., S.A. Annualized)	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.3	1.2
Net Immigration (Thous., Past 4 Qtrs.)	-233.0	-141.5	-51.3	28.6	59.0	74.5	60.9	62.6	66.4	92.4	127.3	167.5	215.7
Population (Thous.)	39054.0	39085.5	39144.7	39194.6	39247.7	39292.5	39335.8	39385.2	39440.1	39509.0	39585.1	39672.7	39773.3
(% Ch. A. R.)	0.3	0.3	0.6	0.5	0.5	0.5	0.4	0.5	0.6	0.7	0.8	0.9	1.0

THE UCLA ANDERSON FORECAST FOR CALIFORNIA

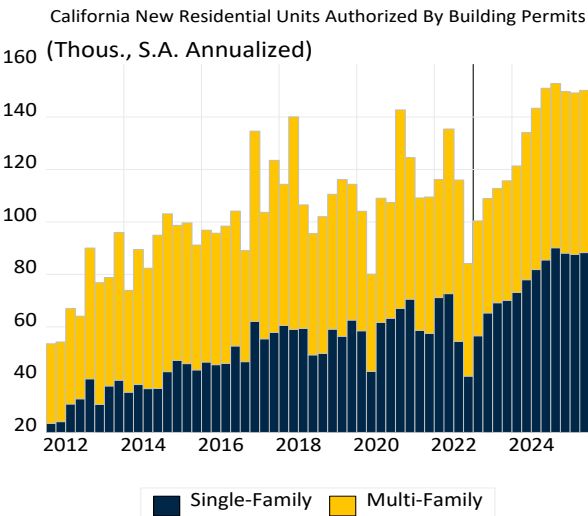
MARCH 2023 REPORT

Charts

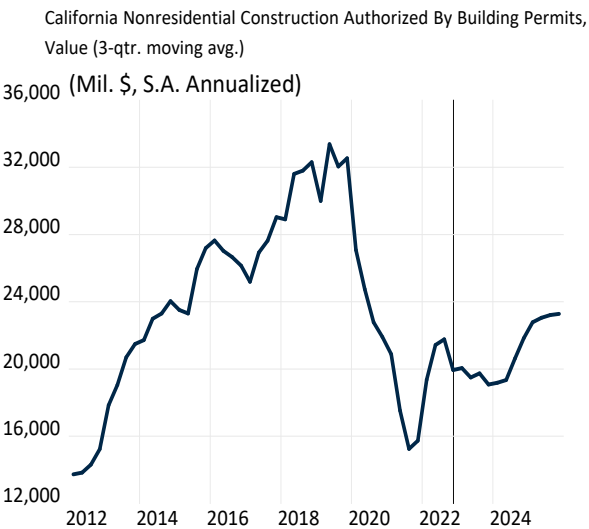
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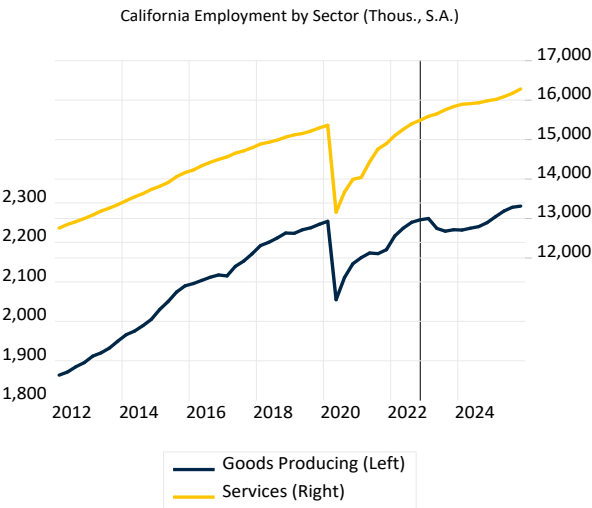
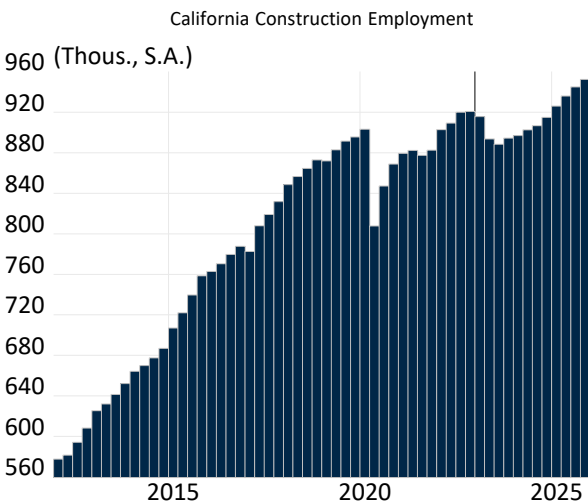
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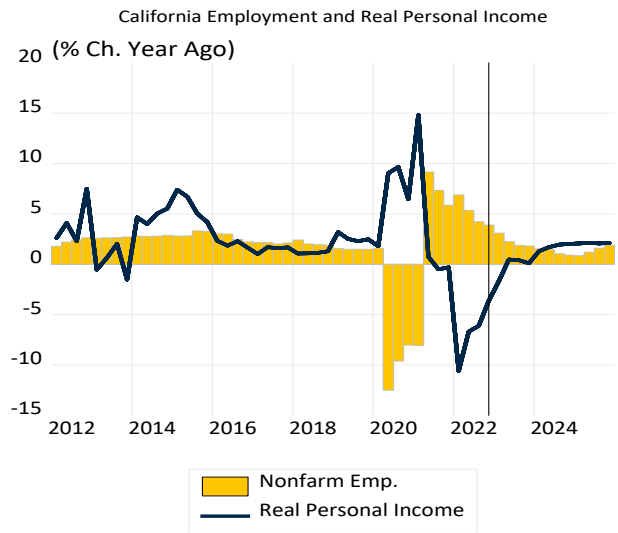
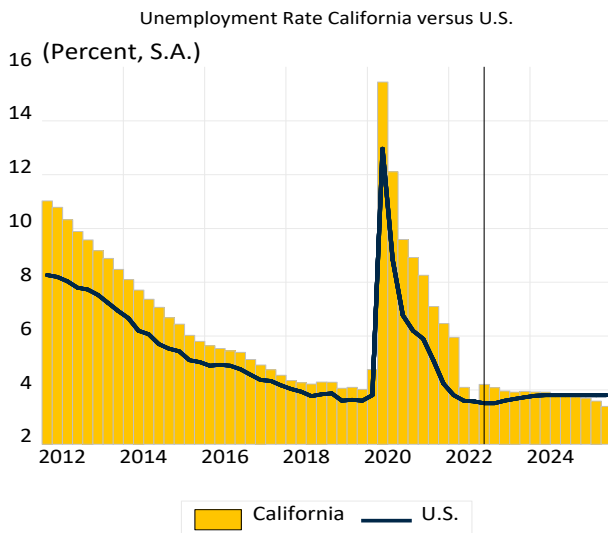
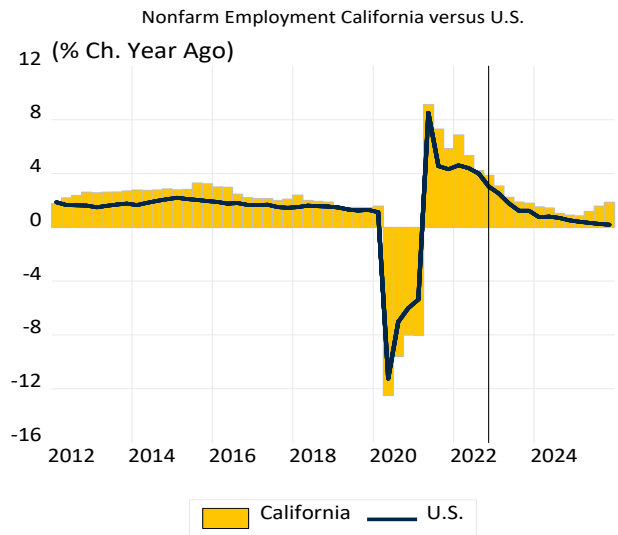
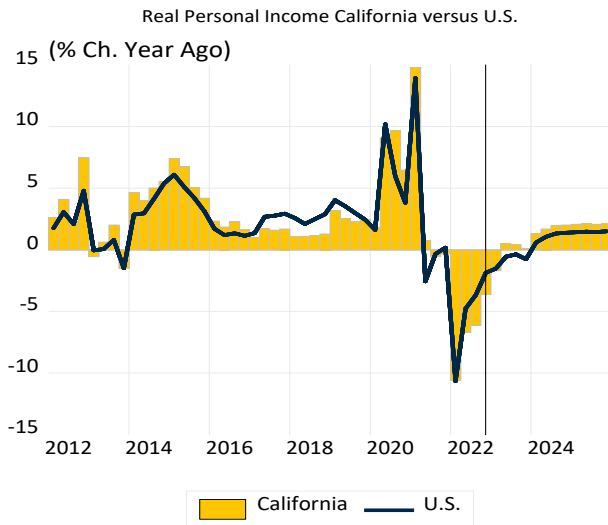
Source for residential and nonresidential permit and construction data: Construction Industry Research Board (CIRB), a service provided by the California Homebuilding Foundation (CHF). <http://www.cirbreport.org/>



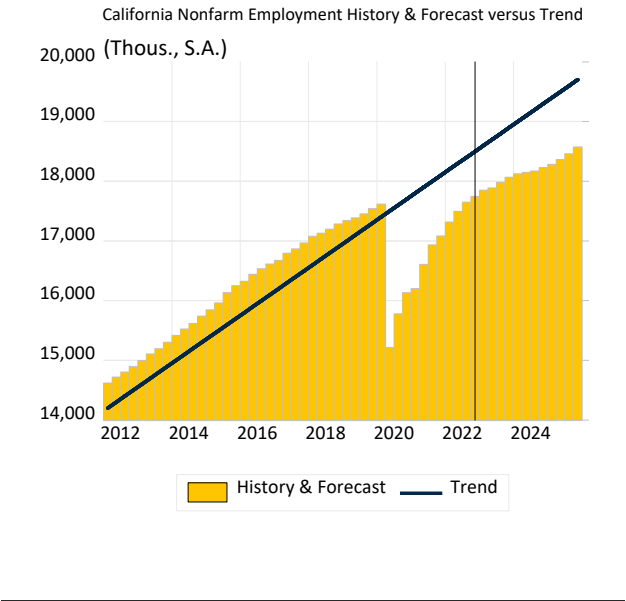
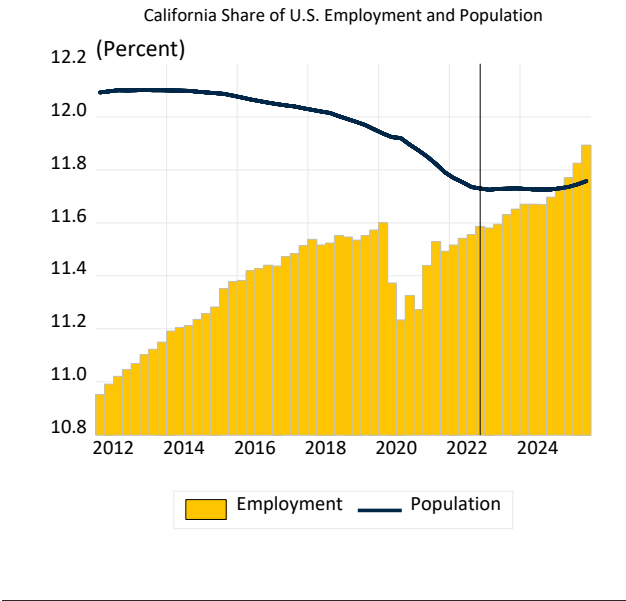
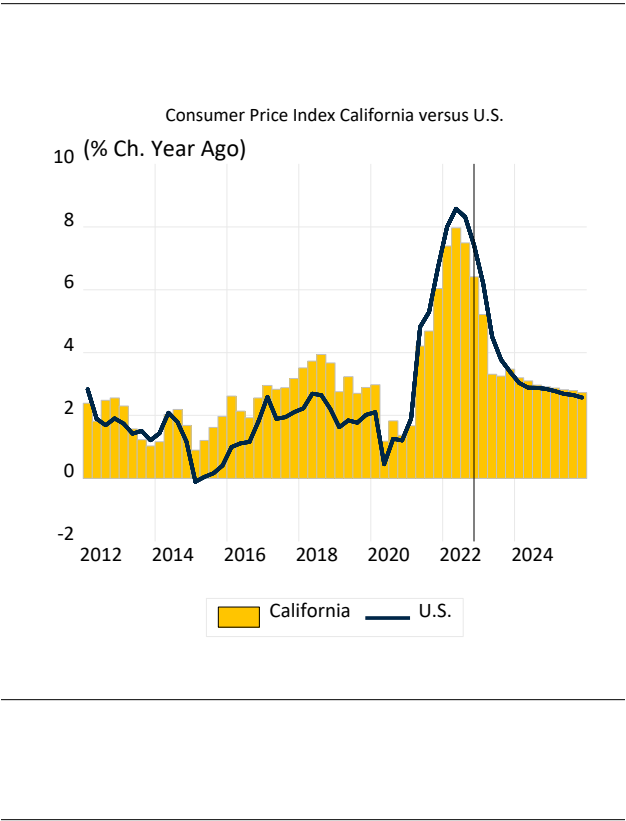
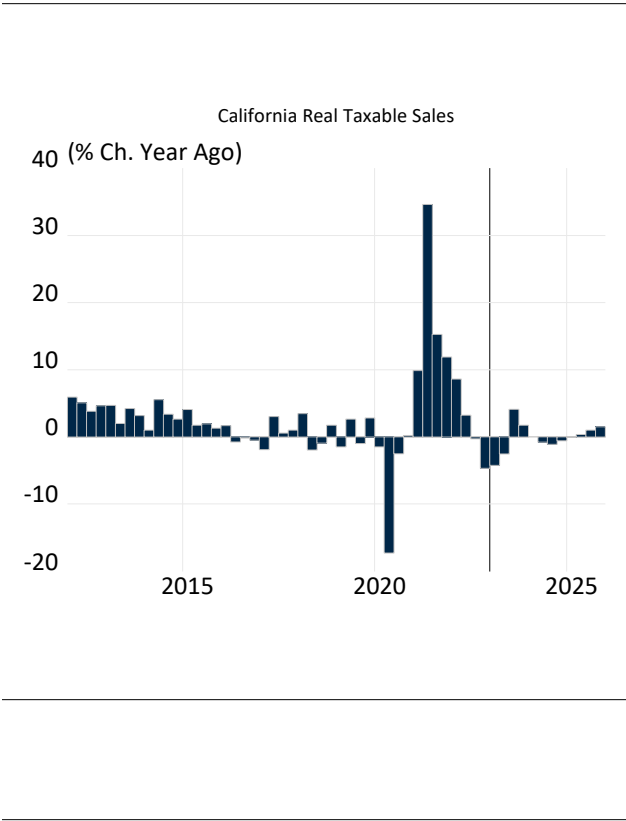
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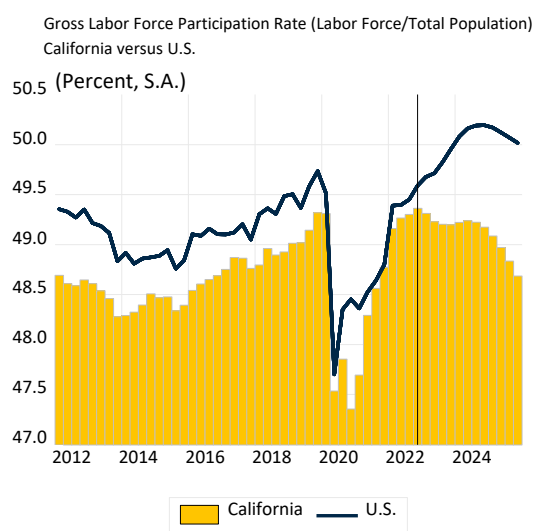
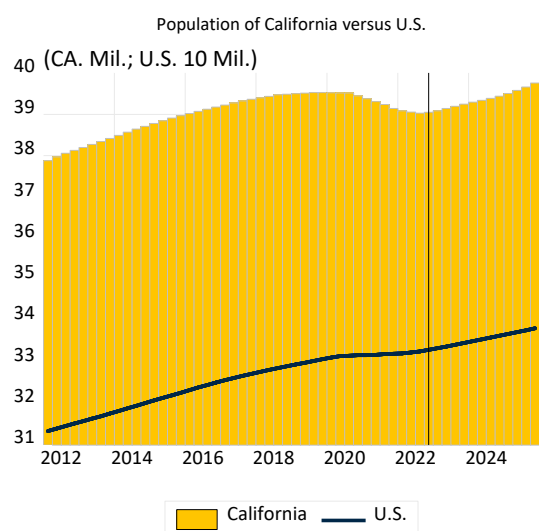
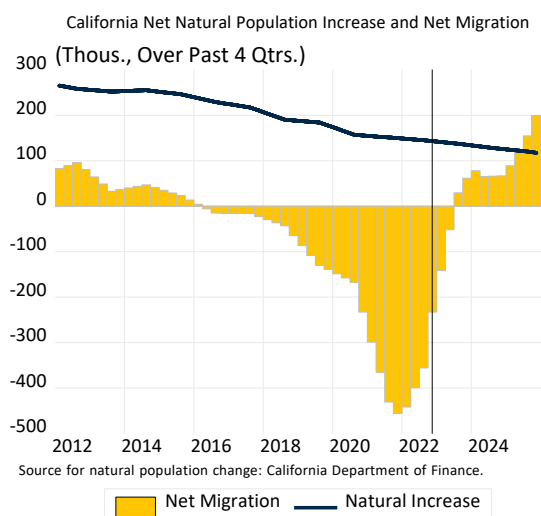
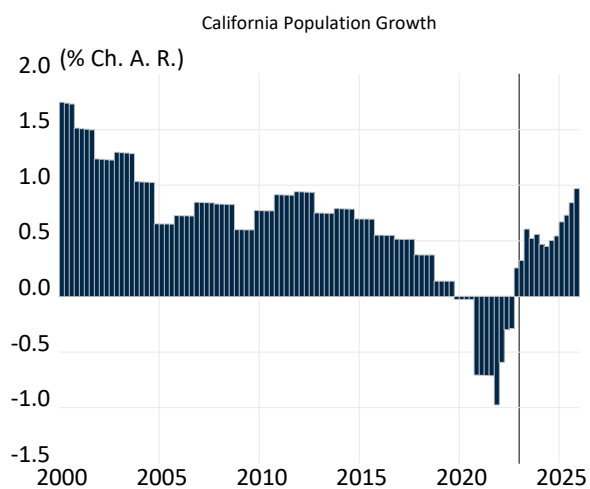
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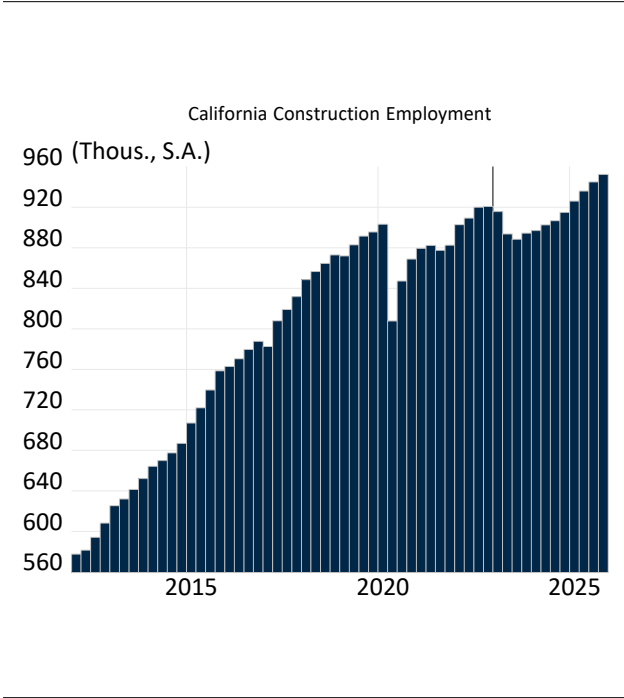
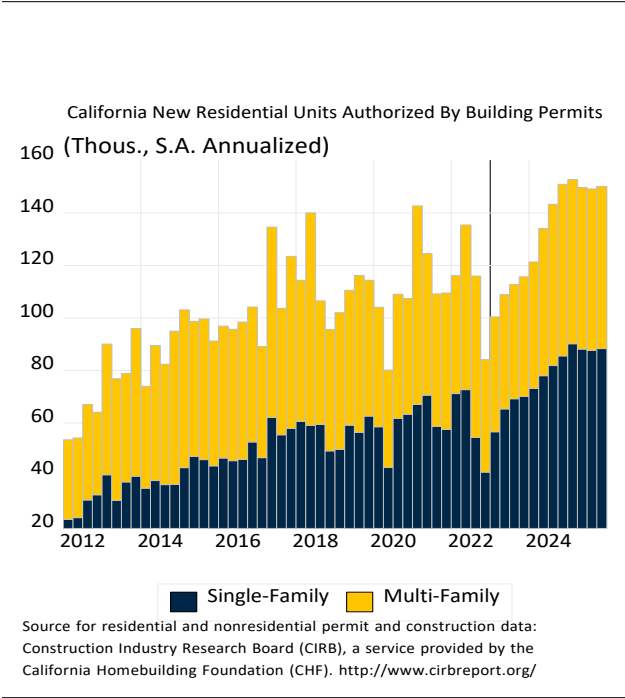
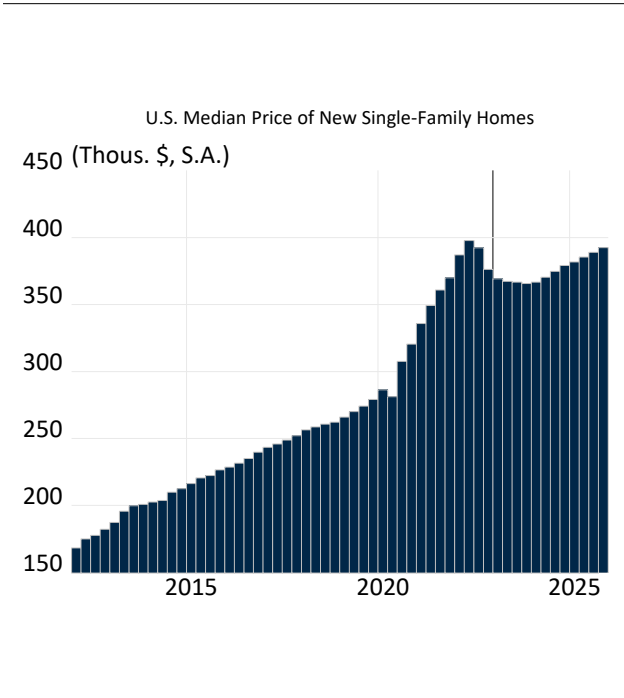
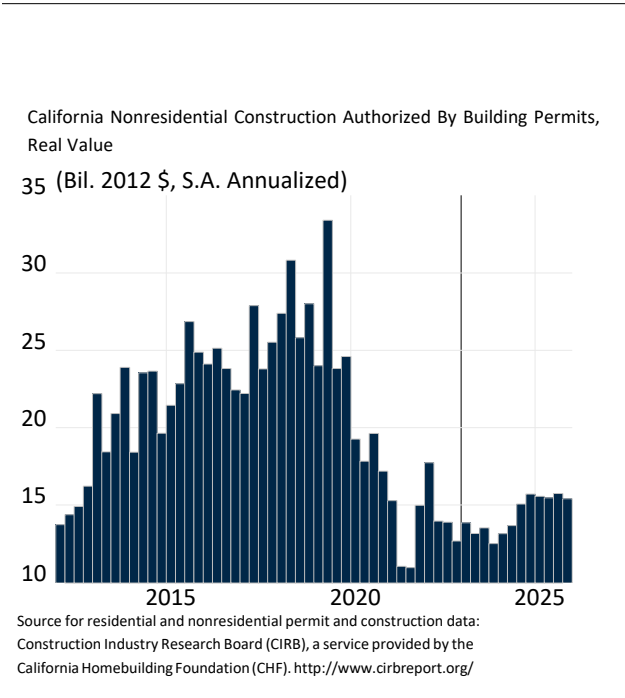
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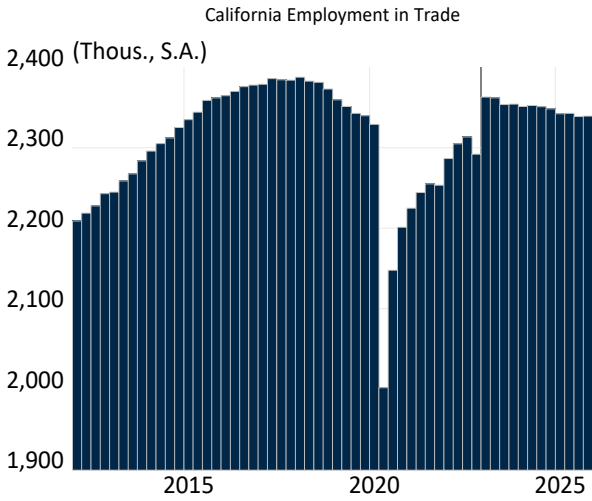
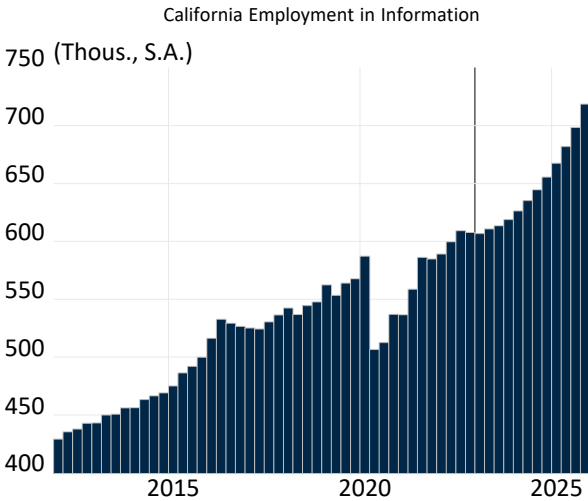
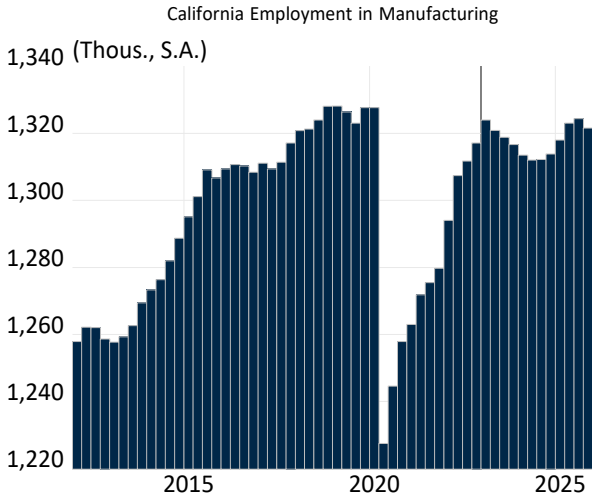
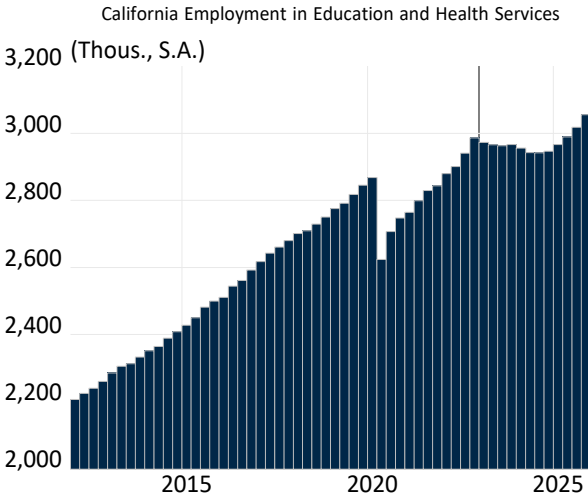


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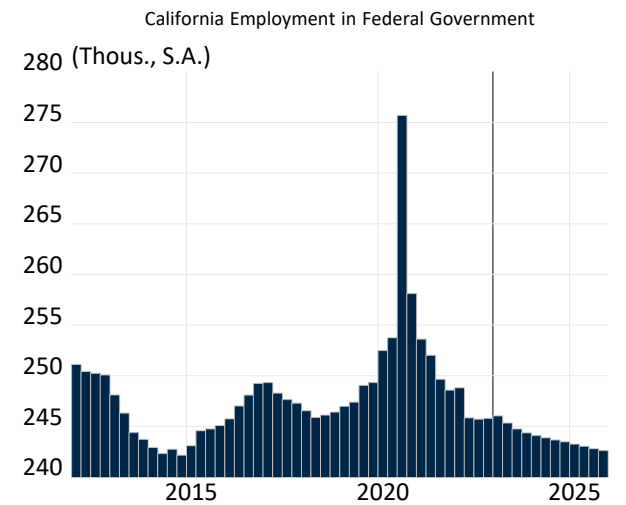
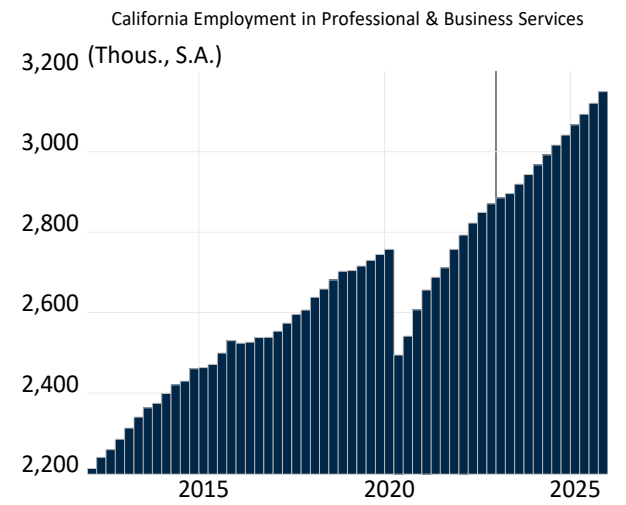
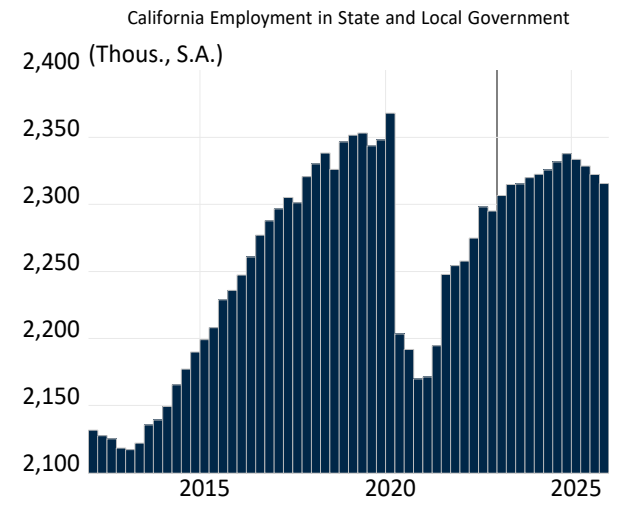
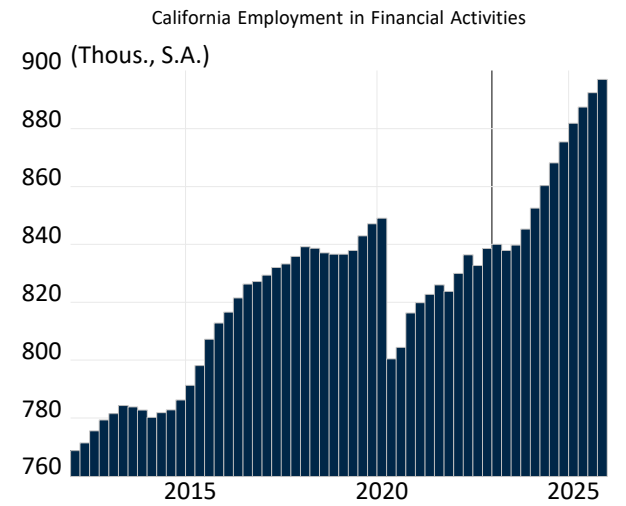


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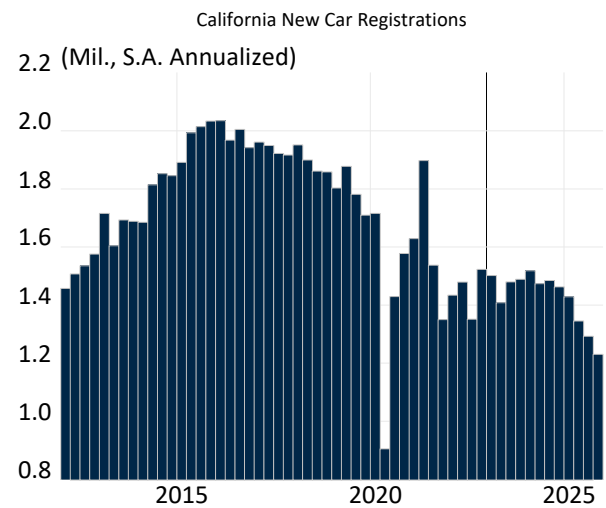
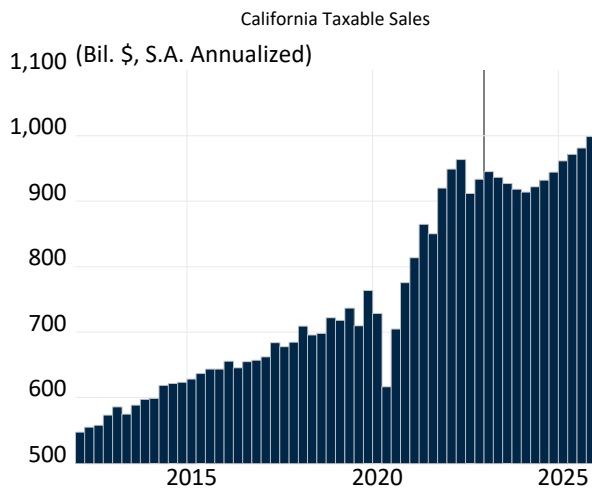
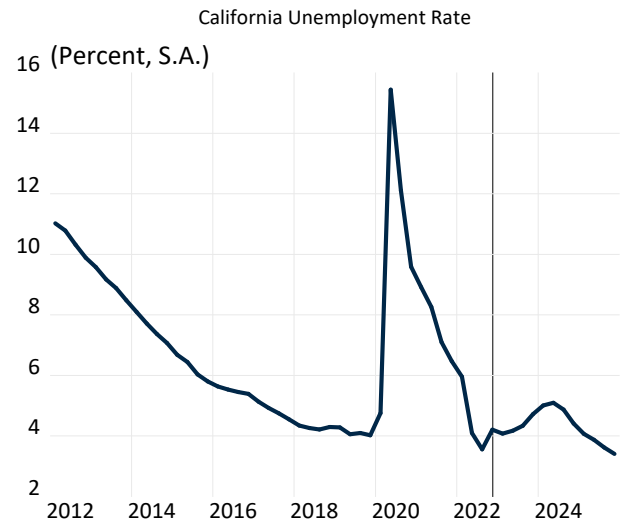
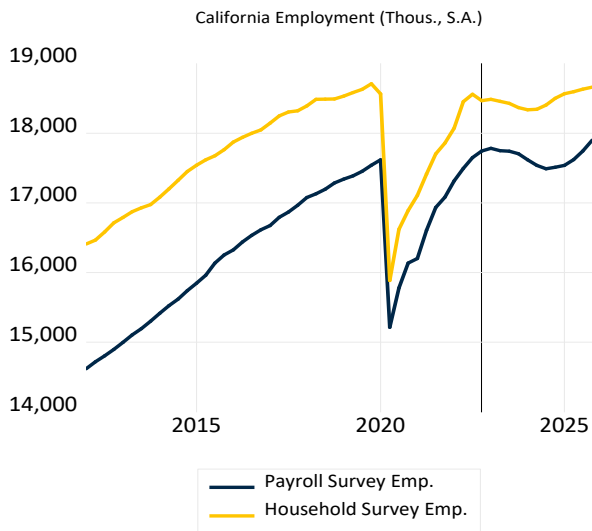




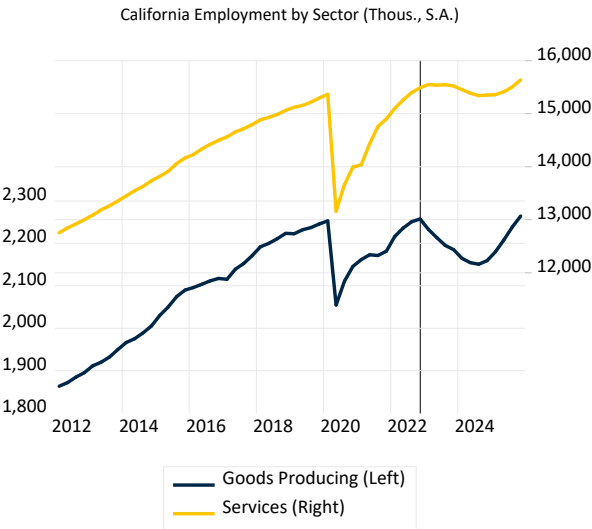
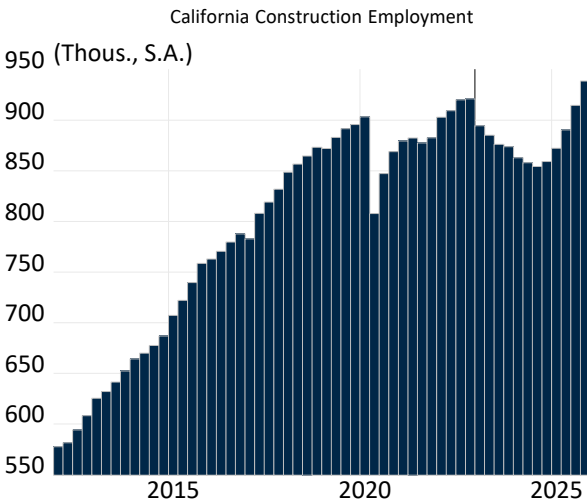
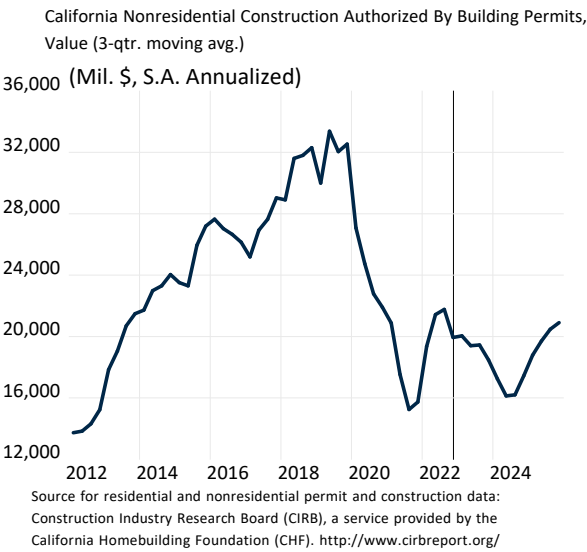
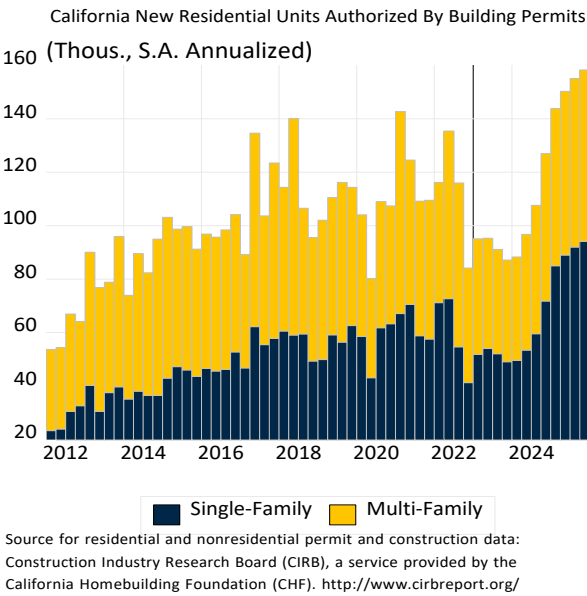
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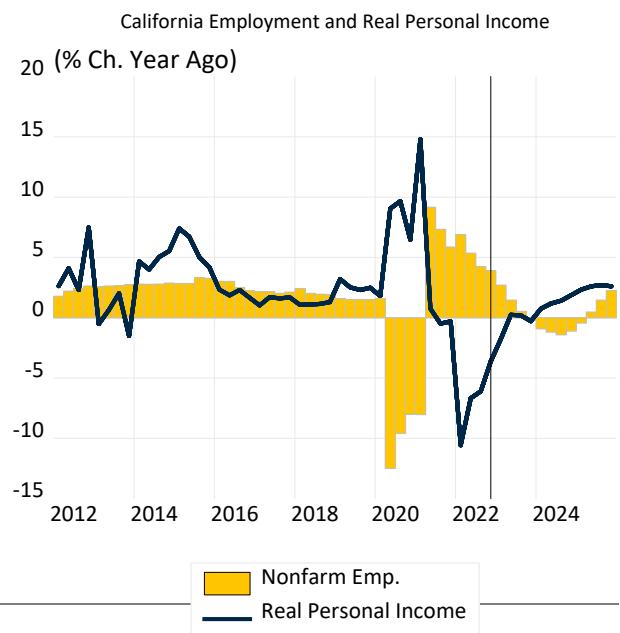
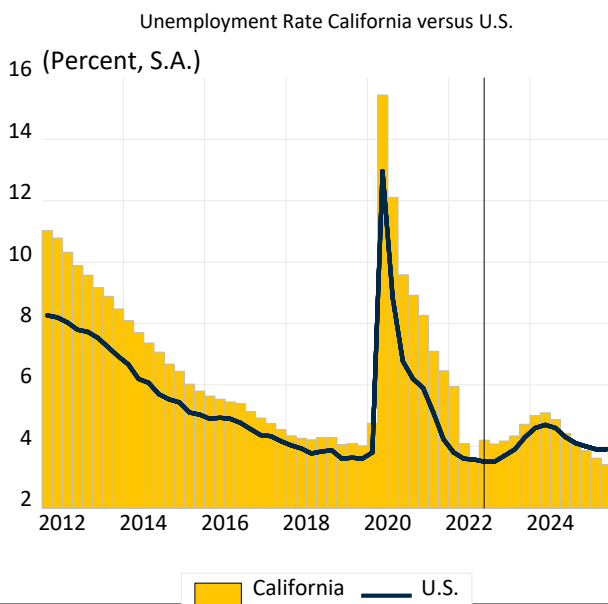
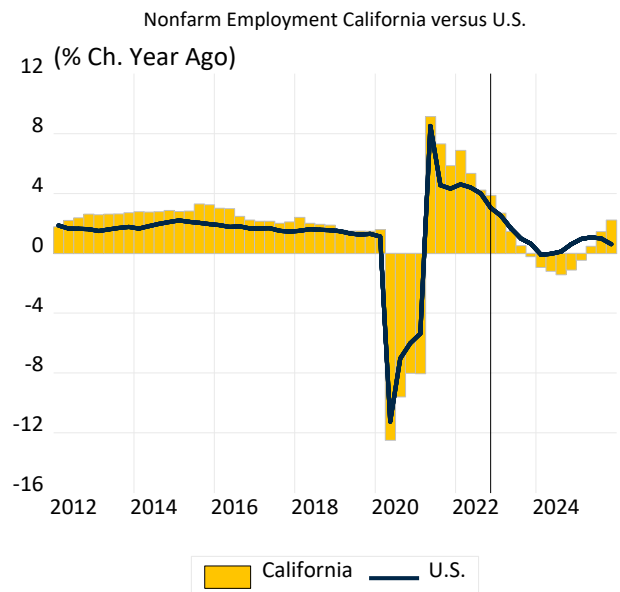
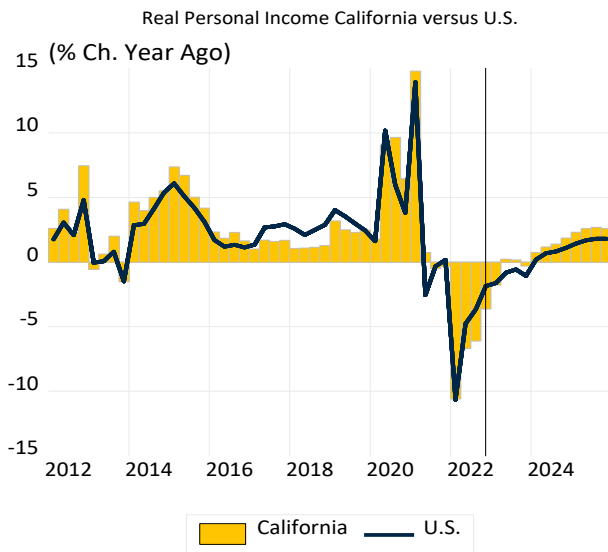
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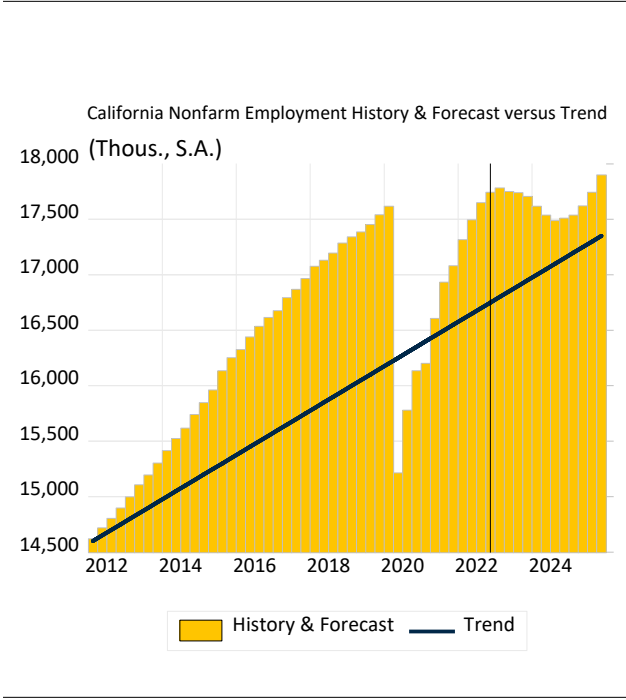
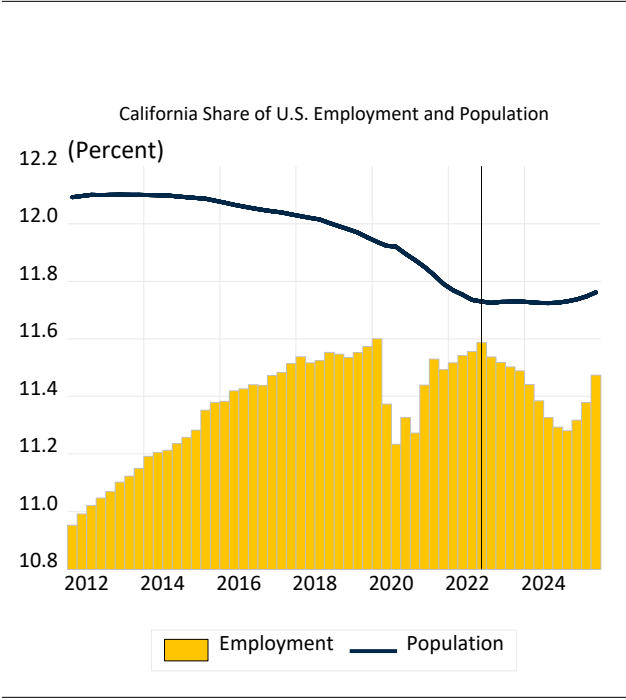
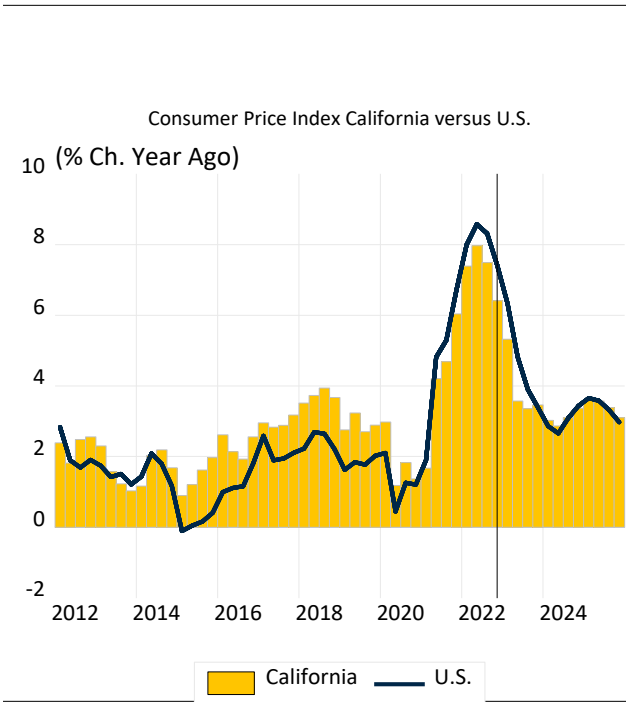
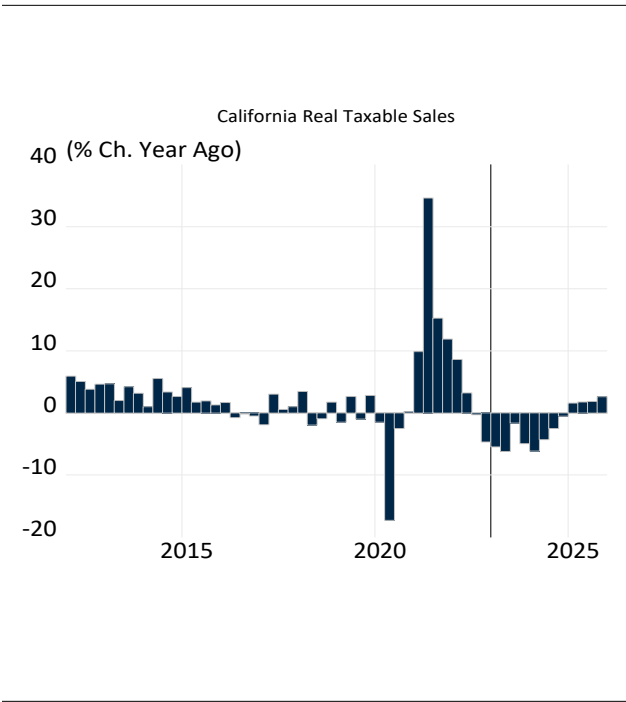
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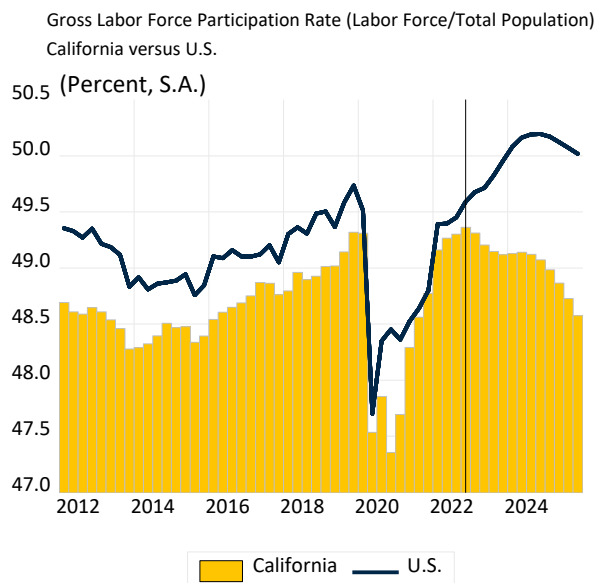
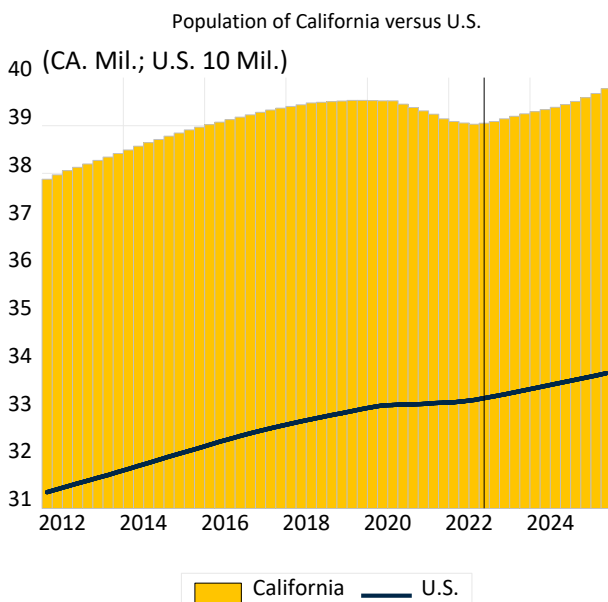
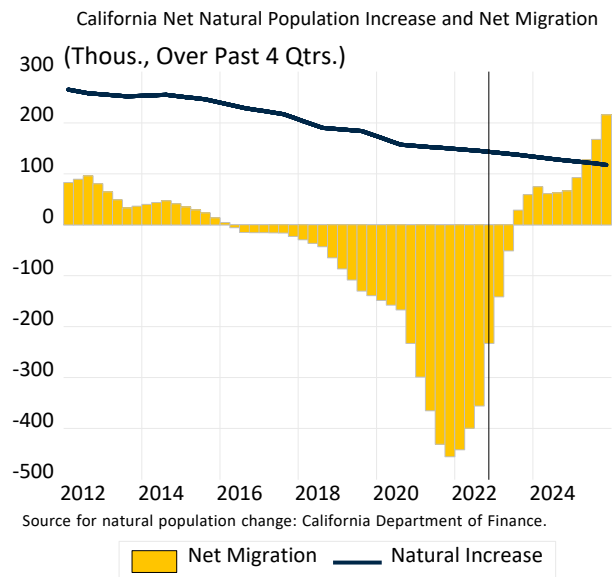
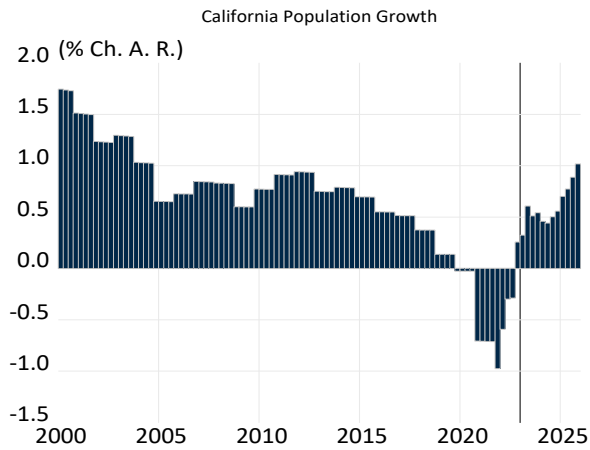


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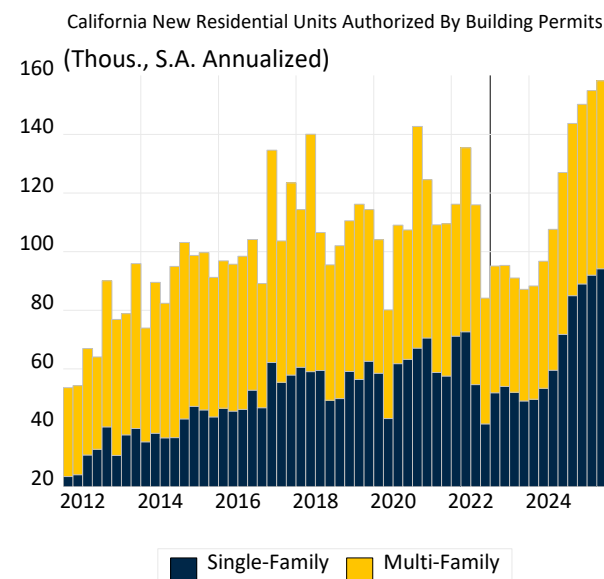
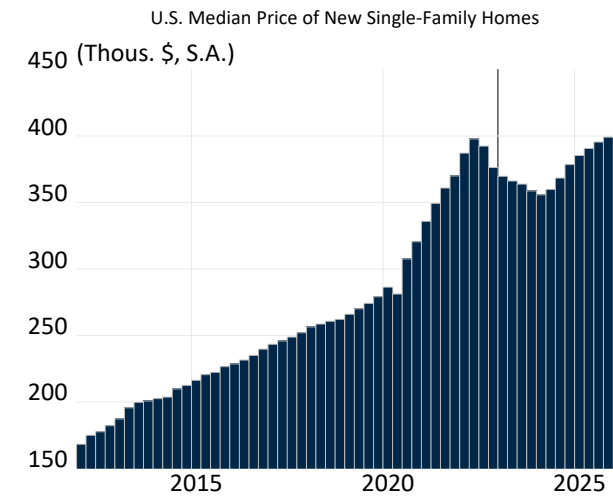
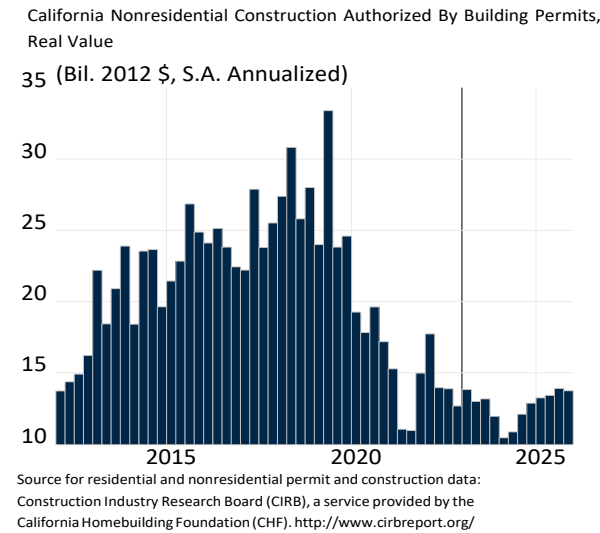


CHARTS - FORECAST (RECESSION SCENARIO)

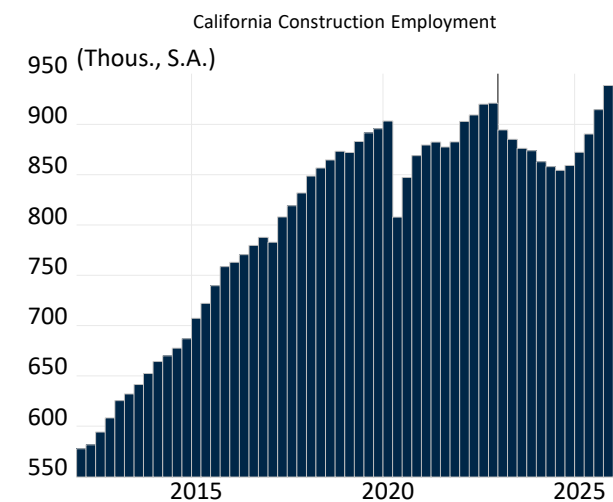




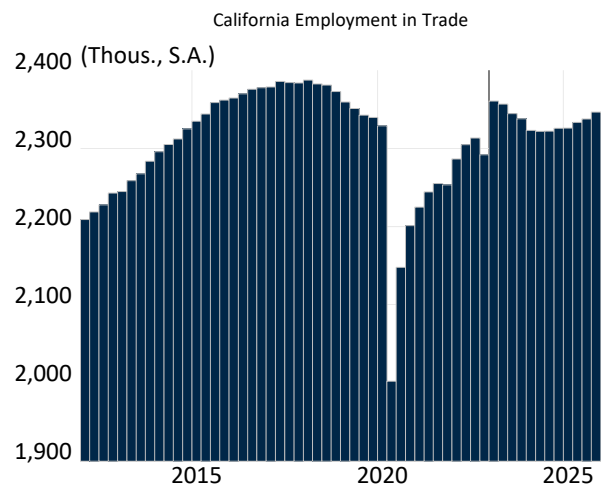
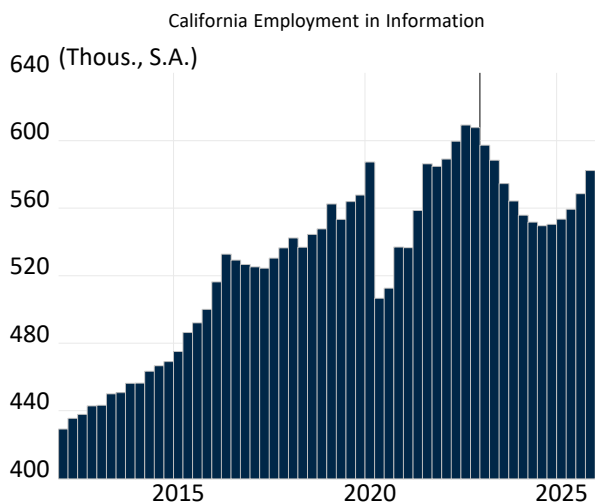
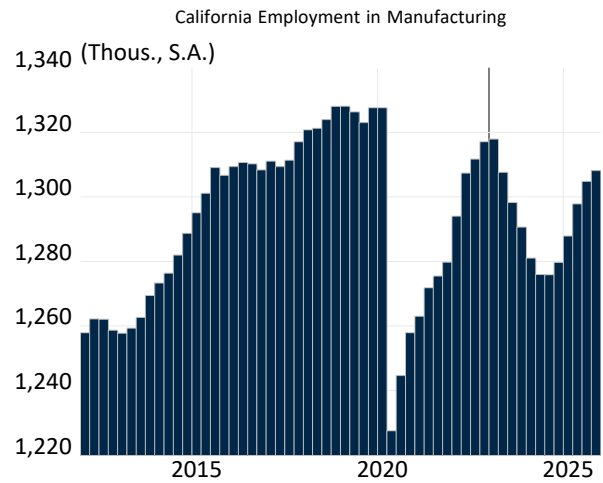
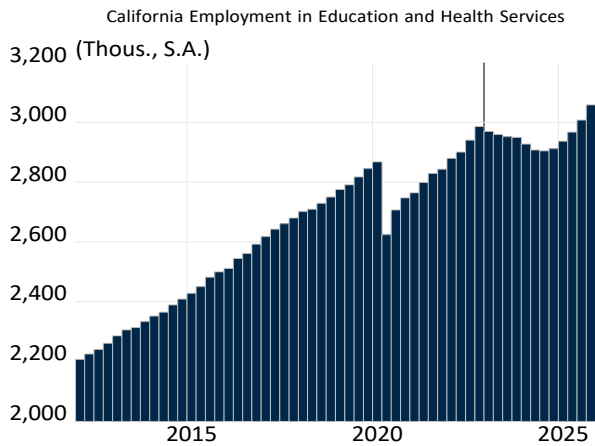
CHARTS – FORECAST (RECESSION SCENARIO)



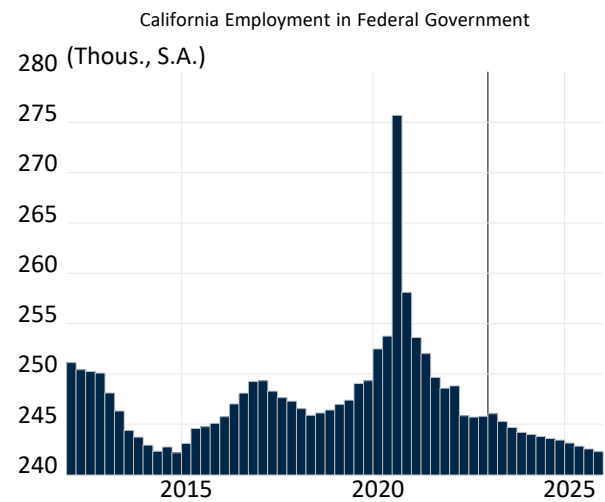
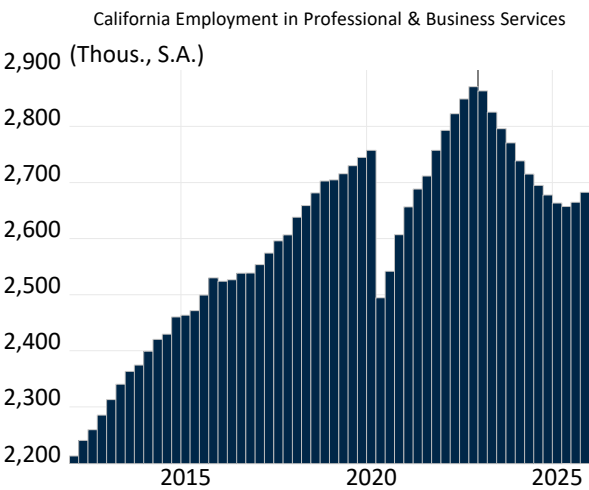
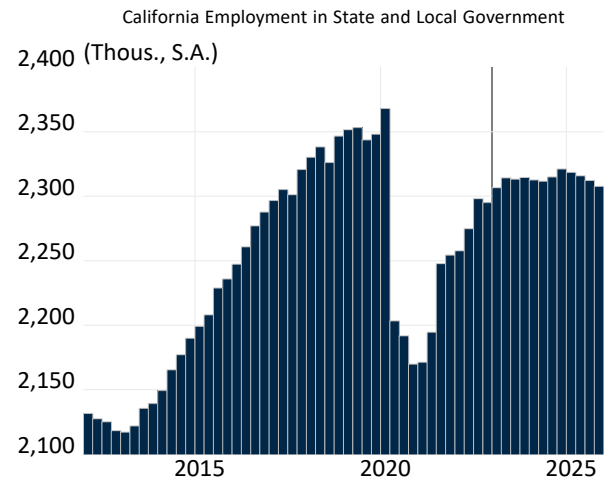
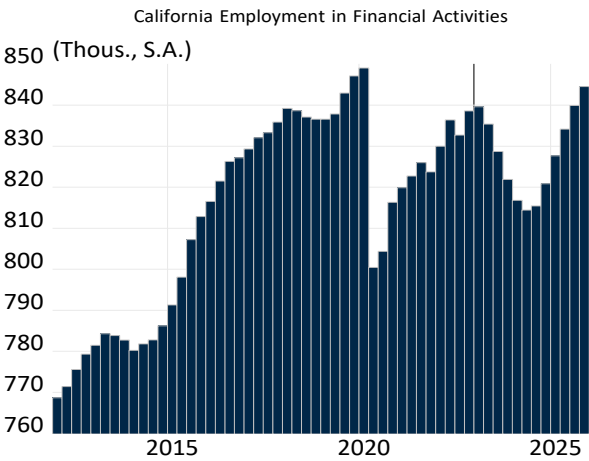
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CHARTS - FORECAST (RECESSION SCENARIO)



CHARTS - FORECAST (RECESSION SCENARIO)





The Los Angeles Department of Water and Power (DWP), established at the beginning of the century is the largest municipally-owned utility in the nation. It exists under and by virtue of the Charter of the City of Los Angeles enacted in 1925.

With a work force in excess of 9,000, the DWP provides water and electricity to some 3.5 million residents and businesses in a 464-square-mile area.

DWP's operations are financed solely by the sale of water and electric services. Capital funds are raised through the sale of bonds. No tax support is received.

A five-member Board of Water and Power Commissioners establishes policy for the DWP. The Board members are appointed by the Mayor and confirmed by the City Council for five-year terms.



The Los Angeles Regional Consortium (LARC) consists of 19 community colleges in Los Angeles County. It serves to coordinate, collaborate, organize, and facilitate interaction in the region to ensure workforce training is provided to all in a way that is accessible, efficient, responsive, data-driven and improves outcomes. Champions of students, up-skillers, re-skillers and employers, the work of the Los Angeles Regional Consortium (LARC) is to bridge the gap between employer needs and workforce preparedness. The depth, breadth, and scope of LARC's industrial complex offer a myriad of middle skill occupations that pay well and provide the upward mobility that is foundational to economic security. Yet many of these jobs remain unfilled. Residents struggle to find work and companies struggle to find qualified, middle-skilled employees. Within this 'skilled worker supply/demand challenge' lies the LARC objective — to increase the availability of a well-trained skilled workforce in LA County to close the immense supply and demand gap.



The Los Angeles County Metropolitan Transportation Authority (Metro) is unique among the nation's transportation agencies. It serves as transportation planner and coordinator, designer, builder and operator for one of the country's largest, most populous counties. More than 9 million people – one-third of California's residents – live, work, and play within its 1,433-square-mile service area.

Besides operating over 2,000 coaches in the Metro Bus fleet, Metro also designed, built and now operates over 73 miles of Metro Rail service. The Metro Rail system currently consists of 62 stations and several more are in the planning and/or design stage.

In addition to operating its own services Metro funds 16 municipal bus operators and funds a wide array of transportation projects including bikeways and pedestrian facilities, local road and highway improvements, goods movement, and the popular Freeway Patrol and Call Boxes.

Recognizing that no one form of transit can solve urban congestion problems, Metro's multimodal approach uses a variety of transportation alternatives to meet the needs of the highly diverse population in the region.

Metro's Mission is to insure the continuous improvement of an efficient and effective transportation system for Los Angeles County. In support of this mission, our team members provide expertise and leadership based on their distinct roles: operating transit system elements for which the agency has delivery responsibility, planning the countywide transportation system in cooperation with other agencies, managing the construction and engineering of transportation system components and delivering timely support services to the Metro organization.

Metro was created in the state legislature by Assembly Bill 152 in May 1992. This bill merged the Los Angeles County Transportation Commission (LACTC) and the Southern California Rapid Transit District (RTD) to become the Los Angeles County Metropolitan Transportation Authority. The merger became effective on April 1, 1993.

Metro is governed by a 13-member Board of Directors comprised of: the five Los Angeles County Supervisors, the Mayor of Los Angeles, three Los Angeles mayor-appointed members, four city council members representing the other 87 cities in Los Angeles County and one non-voting member is appointed by the Governor of California.

Allen Matkins



From its Los Angeles base, Allen Matkins has conquered California, opening up offices in San Francisco, San Diego, Century City, and Irvine. With approximately 200 lawyers, the firm is known as a top real estate practice in the Golden State.

Grown in the City of Angels

Allen Matkins has built its empire in the state where residents elect bodybuilders and shrug off earthquakes. Founded in Los Angeles in 1977, Allen Matkins has achieved notable success in corporate and hospitality work, as well as in the securities, employment, bankruptcy, and tax arenas. The firm has earned accolades from west coast publications like the Los Angeles Business Journal and the San Diego Business Journal. Its real strengths lie, however, in its real estate and litigation practices. The firm's litigation department has focuses in real estate, commercial, financial services, construction, environmental, and labor and employment litigation.

The firm has not only worked with local clients-like representing a public-private partnership to modernize the Los Angeles Air Force Base-but has also secured nationally known clients including Wells Fargo Bank, Sares-Regis Group, AT&T, Black & Decker, Met Life, The Home Depot, Blackstone Real Estate Advisors, and Capmark Finance.

Buying and Selling Up the California Coast

Real estate is where the firm shines-Allen Matkins has ranked the No. 1 real estate law firm in California for a decade, according to Chambers & Partners. California Real Estate Journal has also placed Allen Matkins on the top of its real estate firm list, which was based on the number of real estate attorneys in each outfit. The firm's real estate practice handles all aspects of the real estate world, including litigation over construction, land use, landlord tenant, and condemnation issues.

And handling the real estate transactions of the present is not enough for the firm; Allen Matkins seeks to predict the future. The firm has developed a partnership with UCLA Anderson Forecast, an organization of economists who attempt to posit unbiased forecasts for California's economy and the nation's. Allen Matkins and the Anderson Forecast put out commercial real estate forecasts, covering rental and vacancy rates.

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More than half a century ago, we opened our doors at Cathay Bank to serve the growing Chinese American community in Los Angeles. Then, as now, we helped our customers put down new roots with loans to purchase cars and homes. We supported their businesses, which continue to sustain generations. We worked with them to cultivate communities united by a shared drive to create and build lives in Southern California.

Over time, we have expanded along with our customers. Today, we're a subsidiary of Cathay General Bancorp (Nasdaq: CATY). We have over 60 branches across the United States, a branch in Hong Kong, and three representative offices in Beijing, Shanghai and Taipei.

While the people we serve have evolved and changed, the spirit that makes up our customers remains the same. Every one believes in the power of initiative and perseverance. Each aims to achieve what's possible. All strive to live their best lives. And we're happy to work alongside them—providing the tools and services to get them where they want to go.

As the state's primary energy policy and planning agency, the California Energy Commission is committed to reducing energy costs and environmental impacts of energy use - such as greenhouse gas emissions - while ensuring a safe, resilient, and reliable supply of energy.



Mission Statement

The mission of the Inland Empire Center for Economics and Public Policy (IEC) at Claremont McKenna College is to provide Inland Empire leaders with expert analysis of the region's unique political and economic landscape.

Background

The IEC was founded in 2010 as a collaborative effort by the Rose Institute of State and Local Government and the Lowe Institute for Political Economy, both based at Claremont McKenna College. While the Inland Empire is one of California's fast growing areas, there was little political and economic analysis specific to the region. Recognizing this void and the increasing importance of the area to California's economy, the two research institutes saw the need for an organization that could deliver analysis on current issues impacting the Inland Empire.

The Rose Institute and the Lowe Institute were uniquely positioned to create the IEC because their staffs both specialized in political and economic analysis and were familiar with the Inland Empire. The IEC brings together experts from both founding institutions. Marc Weidenmier, Ph.D., director of the Rose Institute, is a Research Associate of the National Bureau of Economic Research and a member of the Editorial Board of the *Journal of Economic History*. Andrew Busch, Ph.D., director of the Lowe Institute, is an expert in American government and politics. Manfred Keil, Ph.D., an expert in comparative economics, has extensive knowledge on economic conditions in the Inland Empire. Kenneth P. Miller, J.D., Ph.D., is an expert in California politics and policy who studies political developments in the Inland Empire.

The primary ways that the IEC presents its analysis is through publications and conferences. The *Inland Empire Outlook*, which provides analysis on the Inland Empire's political and economic developments, is the IEC's predominant recurring publication. Its inaugural issue was published in Winter 2010. Besides publications, the IEC also hosts conferences throughout the Inland Empire. The conferences bring together panels of experts and business and political leaders in the Inland Empire to address current topics affecting the region. The annual economic forecast conference held at the Citizens Business Bank Arena in Ontario is in cooperation with the UCLA Anderson Forecast.



The State of California's Department of Finance is responsible for submitting to the State's fiscal year budget to the Governor in January of each year. The Department is part of the State's Executive Branch and part of the Governor's Administration. The Director of Finance is appointed by the Governor and is his chief fiscal advisor. The Director sits as a member of the Governor's cabinet and senior staff. Principal functions include:

- Establish appropriate fiscal policies to carry out the Administration's Programs.

- Prepare, enact and administer the State's Annual Financial Plan.

- Analyze legislation which has a fiscal impact.

- Develop and maintain the California State Accounting and Reporting System (CALSTARS).

- Monitor/audit expenditures by State departments to ensure compliance with approved standards and policies.

- Develop economic forecasts and revenue estimates.

- Develop population and enrollment estimates and projections.

- Review expenditures on data processing activities of departments.

In addition, the Department of Finance interacts with the Legislature through various reporting requirements, by presenting and defending the Governor's Budget and in the legislature.

The Department interacts with other State departments on a daily basis on terms of administering the budget, reviewing fiscal proposals, establishing accounting systems, auditing department expenditures and communicating the Governor's fiscal policy to departments.

SEMINAR MEMBERS



The Labor Market Information Division (LMID) of the Employment Development Department is the official source for California's labor market information.

The LMID promotes California's economic health by providing information to help people understand California's economy and make informed labor market choices.

We collect, analyze, and publish statistical data and reports on California's labor force, industries, occupations, employment projections, wages, and other important labor market and economic data.

California's vast labor market includes over 1.5 million employers covered by Unemployment Insurance and over 19 million people in its civilian labor force.

For more information, visit our website at <http://www.labormarketinfo.edd.ca.gov/> or call

916-262-2162.



The nonpartisan Legislative Analyst's Office (LAO) has been providing fiscal and policy advice to the California Legislature for more than 65 years. It is particularly well known for its fiscal and programmatic expertise and nonpartisan analyses relating to the state budget, including making recommendations for operating programs in the most effective and cost-efficient manner possible. Its responsibilities also include making economic and demographic forecasts for California, and fiscal forecasts for state government revenues and expenditures. It also prepares fiscal analyses for all propositions that appear on the California statewide ballot, including bond measures.

For more information about the LAO, please visit our website at www.lao.ca.gov or call us at 916-445-4656.



The energy industry is changing rapidly and dramatically. As global competition transforms the way companies do business, energy issues are no longer simply local, or even national. At the same time, it's clear that the importance of providing reliable local service has never been more important.

Our heritage at Southern California Edison is based on reliability. For more than 100 years we have provided high-quality, reliable electric service to more than 4.2 million business and residential customers over a 50,000 square mile service area in coastal, central, and southern California.

Of course, recent changes in the California's electric industry have affected us as well. In 1997, as part of the restructuring of the electric industry in our state, SCE sold its 12 fossil fuel generating stations and overhauled nearly every aspect of its business to prepare for the changing environment. While we still own and operate hydro and nuclear power facilities that serve our area, our main role is that of power transmission and distribution. The power needed for our customers is largely purchased from the California Power Exchange and provided by SCE to our customers without a price markup.

At SCE we want you to know that even in times of change, we retain our proven commitment to service, reliability, innovation, and the community.



State Controller Betty T. Yee was elected in November 2014, following two terms of service on the Board of Equalization. As Controller, she continues to serve the Board as its fifth voting member.

The State Controller is the Chief Fiscal Officer of California, the sixth largest economy in the world. She helps administer two of the largest public pension funds in the nation and serves on 78 state boards and commissions. These are charged with duties ranging from protecting our coastline to helping build hospitals. The Controller is the state's independent fiscal watchdog, providing sound fiscal control over more than \$100 billion in receipts and disbursements of public funds a year, offering fiscal guidance to local governments, and uncovering fraud and abuse of taxpayer dollars.

The State Controller's Functions

- Account for and control disbursement of all state funds.
- Determine legality and accuracy of every claim against the State.
- Issue warrants in payment of the State's bills including lottery prizes.
- Administer the Uniform State Payroll System.
- Audit and process all personnel and payroll transactions for state civil service employees, exempt employees and California State University employees.
- Responsible for auditing various state and local government programs.
- Inform the public of the State's financial condition.
- Administer the Unclaimed Property Law.
- Inform the public of financial transactions of city, county and district governments.

Venture Forward

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At GoDaddy, small business is at the heart of what we do every day. We help millions of entrepreneurs globally start, grow, and scale their businesses. They come to us to name their idea, build a professional website, attract customers, sell their products and services, and accept payments online and in-person.

With our mission of empowering entrepreneurs everywhere and making opportunity more inclusive for all, we started Venture Forward in 2018. It is a research initiative that quantifies the impact of over 20 million online microbusinesses (those with 10 or less employees), and provides insights into the attitudes, demographics, and needs of their owners. It has been GoDaddy's privilege to partner with UCLA Anderson Forecast in uncovering new insights on their economic impact, and we want to be a part of the solution to unlocking their potential. That's why our microbusiness data is regularly updated and made available, for free, on our website. We invite you to explore it for yourself at www.GoDaddy.com/VentureForward.

Seminar

Avenu Insights and Analytics
 California Air Resources Board
 California Department of Finance
 California Department of Water and Power
 California Energy Commission
 California State Controller's Office
 California State University Dominguez Hills
 Cathay Bank
 Claremont McKenna Lowe Institute
 County of Los Angeles Chief Executive Office
 Los Angeles Metropolitan Transportation Authority
 Los Angeles Regional Consortium
 Orange County Transportation Authority
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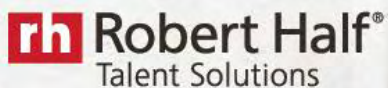
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GoDaddy's Venture Forward research initiative quantifies the impact of 20+ million microbusinesses on their local economies, providing a unique view into their attitudes, demographics, and needs. We've joined forces with the leading economists at the UCLA Anderson Forecast to empower entrepreneurs together. Our data is available for free on the [Venture Forward website](#).

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Each additional microbusiness per 100 people in a community can increase the annual median household income by almost \$200.

2 for 1

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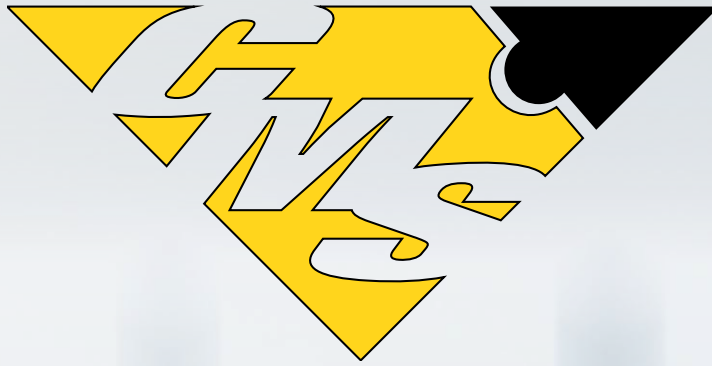
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Jerry Nickelsburg
Director

Jerry Nickelsburg joined the UCLA's Anderson School of Management and The Anderson Forecast in 2006. Since 2017 he has been the Director of The Anderson Forecast. He teaches economics in the MBA program with a focus on Asian economies. As the Director of The Anderson Forecast he plays a key role in the economic modeling and forecasting of the National, and California economies. He has conducted research in the areas of labor economics, industrial organization, statistics, and international monetary economics, focusing on the development of new data and the application of economic theory and statistical methods to policy issues. His current academic research is on specific skills, structural unemployment, and on energy efficiency in transportation. He is a regular presenter at Economic Conferences and is cited in the national media including the Financial Times, Wall Street Journal, New York Times, Los Angeles Times, and Reuters.

He received his Ph.D. in economics from the University of Minnesota in 1980 specializing in monetary economics and econometrics. He was formerly a professor of Economics at the University of Southern California and has held executive positions with McDonnell Douglas, FlightSafety International, and FlightSafety Boeing during a fifteen-year span in the aviation business. He also held a position with the Federal Reserve Board of Governors developing forecasting tools, and has advised banks, investors and financial institutions.

From 2000 to 2006, he was the Managing Principal of Deep Blue Economics, a consulting firm he founded. He has been the recipient of the Korda Fellowship, USC Outstanding Teacher, India Chamber of Commerce Jubilee Lecturer, and he is a Fulbright Scholar. He has published over 100 scholarly and popular articles on monetary economics, economic forecasting and analysis, labor economics, and industrial organization and he is the author of two books on monetary economics and exchange rates.



William Yu
Economist

William Yu joined the UCLA Anderson Forecast in 2011 as an economist. At Forecast he focuses on the economic modeling, forecasting, and Los Angeles economy. He also analyzes the U.S. and China's economies. His research interests include a wide range of economic and financial issues, such as time series econometrics, data analytics, housing markets, human capital, and innovation. Meanwhile, he teaches time series and predictive analytics at the UCLA Anderson School's Master of Business Analytics program and data science certificate courses, including machine learning, at UCLA Extension. In 2019, he received the distinguished instructor award for digital technology from UCLA Extension. He also serves as a faculty advisor for Applied Management Research and Business Creation Option Programs at Anderson School.

He has published over a dozen research articles in Journal of Forecasting, International Journal of Forecasting, Journal of International Money and Finance, Journal of Real Estate Finance and Economics, etc. He developed the City Human Capital Index, the Los Angeles City Employment Estimate, and wrote the US-China economic reports. With his colleagues, he developed a microbusiness index tracking online business activities across the country. He has been cited in the local, national and overseas media frequently including Wall Street Journal, Los Angeles Times, New York Times, Washington Post, Time, Bloomberg, CBS, NBC, ABC, CNBC, L.A. Business Journal as well as various Chinese and Korean media. He was invited as a speaker for various events, including the annual Woo Greater China Business Conference, Cathay Bank economic outlook luncheons, and National Association for Business Economics.

He received his bachelor's degree in finance from National Taiwan University in 1995 and was an analyst in Fubon Financial Group in Taipei from 1997 to 2000. In 2006, he received his Ph.D. degree in economics from the University of Washington where he was also an economics instructor and won two distinguished teaching awards. In 2006, he worked for the Frank Russell Investment Group for Treasury and corporate yields modeling and forecasting. From 2006 to 2011, he served as an assistant and an associate professor of economics at Winona State University where he taught courses including forecasting methods, managerial economics, international economics, and macroeconomics.



Leo Feler
Senior Economist

Leo Feler joined the UCLA Anderson School of Management and the UCLA Anderson Forecast in 2020. He has conducted research and written articles in the areas of labor economics, urban economics, trade, banking and mergers and antitrust. He is responsible for the U.S. macroeconomic forecast.

Prior to joining UCLA, Leo worked in management consulting at Cornerstone Research and Boston Consulting Group. At Cornerstone Research, he advised the U.S. government and corporations on antitrust litigation and economic disputes. At Boston Consulting Group, he advised clients in the consumer retail industry on revenue growth and supply chain optimization strategies.

From 2010 to 2016, Leo was an assistant professor of international economics at Johns Hopkins University. He also worked at the World Bank, where he was an advisor to the country director for Brazil.

Leo received his Ph.D. in economics from Brown University in 2010, specializing in urban and labor economics; his M.A. in international policy studies from Stanford University in 2002; and his B.A. in economics and international relations from Stanford University in 2002.



Edward Leamer
Distinguished Professor

Edward Leamer served as UCLA Anderson's Chauncey J. Medberry Professor of Management and professor of economics, professor of statistics and director of the UCLA/Anderson Business Forecast Project. His philosophy on education is straightforward.

After serving as assistant and associate professor at Harvard University, Leamer joined the UCLA faculty in 1975 as professor of economics. In 1990 he moved across campus to UCLA Anderson and was appointed to the Chauncey J. Medberry Chair. He is a fellow of the American Academy of Arts and Sciences, and a fellow of the Econometric Society. In 2014 he won the award for Outstanding Antitrust Litigation Achievement in Economics, awarded annually by the American Antitrust Institute.

Leamer's work has been impactful beyond the classroom and his academic research. As director of the UCLA Anderson Forecast, he influenced business practitioners in every field. For example, in his December 2000 forecast, the UCLA Anderson Forecast stood virtually alone in predicting the 2001 recession. In a special release on December 12, 2001, the Forecast correctly analyzed the likely unimportance of 9/11 for the evolution of the recession. In December 2002, Leamer began warning about a momentum-driven overheated housing market that was sure to cause problems for the economy in the future.

Leamer is a research associate of the National Bureau of Economic Research and has been an occasional visiting scholar at the IMF and the Board of Governors of the Federal Reserve System. He has served on the Councils of Economic Advisors or Governor Wilson, Governor Schwarzenegger and Mayor Garcetti. He has been on the Advisory Board of the Bureau of Economic Analysis.

He has published over 120 articles and five books and reminds those interested to hurry to Amazon.com to purchase his most recent books: either *Macroeconomic Patterns and Stories*, or *The Craft of Economics*. His research papers in econometrics have been collected in *Sturdy Econometrics*, published in the Edward Elgar Series of Economists of the 20th Century. His research in international economics and econometric methodology has been discussed in *New Horizons in Economic Thought: Appraisals of Leading Economists*.

BOARD OF ADVISORS



Stephanie Bontemps (BA '82, MBA '87)
Executive Vice President &
Chief Risk Officer,
First Republic Bank

Stephanie Bontemps serves as First Republic Bank's Chief Risk Officer and is responsible for maintaining a robust enterprise risk management program that supports the strategic goals of the Bank and builds upon its longstanding conservative risk culture and client service focused business model. At First Republic, she previously served as an Executive Loan Committee Member and Director of Credit Administration.

Prior to joining First Republic, Stephanie worked for Citibank in corporate and investment banking in New York and San Francisco where she held global leadership positions in both relationship management and credit risk management.

Stephanie serves as a Board member for Hope Solutions, a Bay Area non-profit that provides permanent supportive housing and support services to highly vulnerable families and individuals. She is also a member of Financial Women of San Francisco and Chief.

Stephanie graduated from the Anderson School at UCLA (MBA) and UCLA (BA, Economics).



Brandi Britton
Executive Director,
Contract Finance and Accounting,
Robert Half

Brandi Britton serves as executive director with responsibility for overseeing Robert Half's contract finance and accounting practice group. In this role, she leads global operational strategy for the placement of highly skilled finance and accounting professionals on a contract basis, for short- and long-term assignments.

Since joining Robert Half, Brandi has held several leadership positions with the company, most recently serving as district president for professional talent solutions in Southern California. During her tenure, Brandi has achieved companywide recognition for outstanding leadership and production.

Brandi joined Robert Half International in 1999 and has served as an invaluable source and staffing and consulting expert for national and regional media outlets including CBS, Wall Street Journal, Los Angeles Times, Los Angeles Business Journal, among others. Brandi graduated from California Polytechnic State University with a Bachelor of Science degree in Social Sciences.

Brandi actively leads her teams to give back to the communities in which they live and work through a variety of initiatives, including an annual suit drive for Dress for Success and similar non-profits, during which time the company collects donations for low-income women looking to enter – or re-enter – the employment market. Brandi also oversees an annual holiday toy drive benefitting local non-profits, for which she collects gifts for local at-risk youth.



Joe Brusuelas
Principal & Chief Economist,
RSM US LLP

Joe Brusuelas, an award-winning economist, has more than 20 years' experience analyzing U.S. monetary policy, labor markets, fiscal policy, international finance, economic indicators and the condition of the U.S. consumer. A member of the Wall Street Journal's forecasting panel, Brusuelas regularly briefs members of Congress and other senior officials regarding the impacts of federal policy on the factors by which executives make business decisions.

He also frequently offers his insights on the U.S., Canadian and global economies in the financial media, including CNBC, Cheddar, NPR's Marketplace, Yahoo! Finance, Financial Times, The New York Times, Wall Street Journal, Washington Post, Axios and Politico. (Recent broadcast coverage and other media commentary can be found [here](#).) In 2020, he was named one of the 100 most influential economists by Richtopia.

Before joining RSM in 2014, Brusuelas spent four years as a senior economist at Bloomberg L.P. and the Bloomberg Briefs newsletter group, where he co-founded the award-winning Bloomberg Economic Brief. Earlier in his career, he was a director at Moody's Analytics covering the U.S. and global economies for the Dismal Scientist website. He also served as chief economist at Merk Investments L.L.C. and chief U.S. economist at IDEAglobal.

Brusuelas completed all economy and public policy dissertation requirements for his Ph.D. at the University of Southern California.



Anthony Chow (EMBA '09)
CEO,
Newegg

Since 2020, Mr. Chow has served as Chief Executive Officer of Newegg Commerce, Inc. ("Newegg"), a leading e-commerce company offering direct sales and an online marketplace platform for computer components, consumer electronics, entertainment, smart home and gaming products and third-party logistics services. In this role, he is responsible for ensuring the continued success of the company's business model and its e-commerce ecosystems, including helping merchants sell their products through the company's marketplace platform.

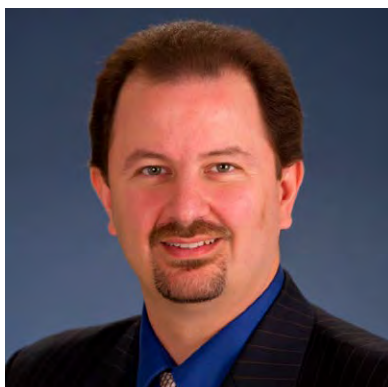
Earlier in his career, Mr. Chow held executive positions at several global e-commerce corporations. He served as Vice President of Newegg's North American business from 2006 until 2008. From 2008, he served as President of Newegg's China operation and OZZO Logistics, China, a subsidiary of Newegg. In 2011, he became CEO of OTTO Group China where he served until 2015, and then was Vice President of Haier Group Corporation from 2015 until 2019.

Upon rejoining Newegg in 2019, Mr. Chow made sweeping changes to refine Newegg's value proposition to position the company for future success. This began with a complete redesign of Newegg's global platform by unifying the company's vendor-direct and marketplace sales models. Additionally, he implemented a streamlined, domain-driven organizational structure optimized for modern scalable ecommerce operations.

Mr. Chow has earned extensive industry accolades in recent years, including his induction into the Digital Ecosystem Hall of Fame in August 2020; First China Cross-Border E-Commerce Outstanding Leader Golden Eagle Award in November 2020; Outstanding Contributor to Credit China in December 2020; Leading Cross-Border E-Commerce Enterprise Award in January 2021; appointed Chairman of the Special Committee of Shanghai Cross-Border E-Commerce Industry Association in January 2021; Cross-Border E-Commerce Person of the Year Award in December 2021; LA Times CFO&CEO Leadership Award in August 2021; and featured on the cover of Foreign Trade Magazine in November 2021.

Mr. Chow earned a Bachelor's degree in electrical engineering from the University of Toledo in 1989, and a Master of Business Administration from the University of California Los Angeles Anderson School of Management in 2010. Additionally, he is a member of the Institute of Electrical and Electronics Engineers (IEEE).

BOARD OF ADVISORS



John Coscia, CFA
Senior Vice President,
Director, Portfolio & Funding,
City National Bank

John Coscia has been with City National Bank since 2000. He is responsible for managing and coordinating all market transaction activities within City National's Treasury Department. This includes the strategic direction and oversight of the Bank's fixed income portfolio, daily cash position, off-balance sheet hedging, wholesale borrowings, and Loan Pricing Desk. It also includes the management of the Bank's debt, capital, derivatives, and balance sheet position.

John has an MBA from USC's Marshall School of Business and a BS in Probability & Statistics from the University of California at Santa Barbara.



TaMiya Dickerson
Partner,
Americas FSO Business Consulting
EY

TaMiya is a partner in EY's FSO Technology Risk practice, based in Los Angeles, California. She has more than twenty years of experience and focuses on technology risk management and corporate governance for publicly traded and regulated organizations across the financial services industry. She has a focus on emerging companies, FinTech and transaction settlement. Based on her experience serving, emerging companies, regional and global Fortune 100 entities, TaMiya is adept at creating effective programs and risk-based approaches for engagements.

TaMiya's experience includes enterprise risk management, general computer controls, technology operations reviews, Service Organization Control (SOC) reports, Sarbanes Oxley (SOX) IT compliance services, systems selection and configuration across the lifecycle.

TaMiya has a passion for business transformation - especially where technology and change management are foundations for change. Over the years she worked in London, Geneva, Kuala Lumpur, and Puerto Rico and has a reputation for excellence as a trusted business partner.

TaMiya received a master's degree in accounting and a bachelor's degree in business administration from the University of Southern California. She is a certified public accountant licensed in California. TaMiya is a member of the American Institute of Certified Public Accountants, National Association of Black Accountants, and the CalCPA. As a servant leader in the community, TaMiya is a member of the Board of Managers of the Ketchum YMCA. She is also a formal mentor at the University of Southern California for both the Marshall Business School and the Black Alumni Association. Outside of the office, TaMiya spends time with her family and their dog Rison. You may see her outdoors snowboarding, SCUBA diving or out for a round of golf.



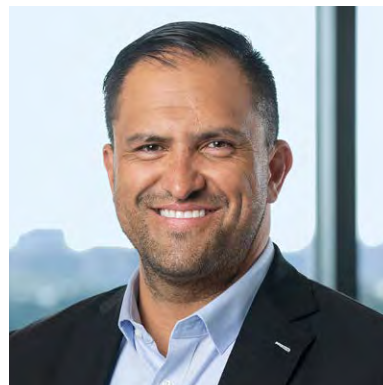
Ross Gerber
President & CEO,
Gerber Kawasaki Wealth and
Investment Management

Ross Gerber is the Co-Founder, President, and CEO of Gerber Kawasaki Wealth and Investment Management. Ross oversees Gerber Kawasaki's corporate and investment management operations as well as serves individual clients. Ross has become one of the most influential investors on social and traditional media. His investment ideas and advice have made him a regular in global business news as well on many of the most popular podcasts. He is a regular on Bloomberg, Reuters, Fox Business, Yahoo Finance, CNN, CNBC as well as a contributing writer for Forbes.com. He has appeared on many of the most popular podcasts including HyperChange TV, The Dave Portnoy Show, Meet Kevin on YouTube, The Pomp Podcast, and more.

Ross and the Gerber Kawasaki team oversee \$2.1 billion of investments as of 10/21/21 focused on technology, electric vehicles, consumer, media, and entertainment companies for clients and the firm. Gerber Kawasaki is a leader in Fintech innovation leveraging technology and social media to work with a large diverse client base providing financial advice in scale. GK has grown to over 8000 clients and was listed as one of the fastest-growing companies in Los Angeles according to the LABJ. GK received several Diversity and Inclusion Awards within the financial industry and prides itself in representing the community.

GK is a leader in providing investment advice for the younger generation through its Wealth Building & Get Invested programs and the first major RIA to partner with Gemini and begin offering Digital Assets to clients. Ross is an expert in online marketing and social media as well as a co-developer of the company's app for IOS, my-moneypage.

Ross received his BA in Communications from the Annenberg School at the University of Pennsylvania concentrating in Business Law at the Wharton School of Business, graduating class of 1993. Ross also received a second concentration in Classical Music Studies at the University of Pennsylvania and attended the Grove School of Music. He was born and raised in Los Angeles, CA, and attended Brentwood High School with the graduating class of 1989.



Carlos Gonzalez
Division President, Western Region,
Clark Construction Group

Carlos Gonzalez provides executive leadership for Clark Construction Group's Southern California Region.

Carlos is responsible for the region's day-to-day operations, business development, and preconstruction from project inception, contract negotiations, and monitoring construction progress.

Throughout his tenure at Clark, Carlos has served in project management, field supervision and overall leadership roles throughout Southern California, for clients including the San Diego Padres, Los Angeles County Museum of Art, Delta Airlines, Los Angeles World Airports, Walt Disney Imagineering, State of California, JMI Realty, Host Hotels & Resorts, NAVFAC, General Services Administration, Department of Veterans Affairs, University of California, and the California State University.

Carlos previously served as general manager for Clark Concrete in the Mid-Atlantic Region, leading Clark's self-perform structural concrete business unit.

Carlos earned his bachelor's degree in civil engineering from San Diego State University, his master's degree in civil engineering from San Diego State University, and his master of business administration from the University of California, San Diego.

Carlos serves on the board of directors of the National ACE Mentor Program and Hope Builders. He also serves as a member of the Civil Engineering Advisory Board at San Diego State University.



Vincent Iacopella
Executive Vice President, Growth & Strategy,
Alba Wheels Up International

Vincent Iacopella is the Executive Vice President Growth and Strategy at Alba Wheels Up International Inc.

Vince's responsibilities include leading Alba's expansion into new markets and to increase the portfolio of product offerings with a focus on trade sensitive imports and exports, as well as smart supply chain technology that drives value to importers and exporters.

At Alba, Vince, along with the owners and senior management team is responsible for leading efforts in sustainable topline growth and development and implementation of an integrated approach to sales and business development. Vince is responsible for driving creation and development of product and service enhancements aligned with CBP, FDA, and EPA's Trade Modernization initiatives in the Automated Commercial Environment (ACE) as well as development of freight and supply chain products and their marketing to customers.

Along with the owners Vince works on Alba's strategic partnerships in the market to drive value to Alba's customers. Vince is based in the Los Angeles office, but works on behalf of the entire company.

Vince is a licensed Customs Broker and served as past president of the Los Angeles Customs Brokers and Forwarders Association. He is current president of the Pacific Coast Council of Customs Brokers and Freight Forwarders. In March 2013, he was appointed to the 13th Advisory Committee on Commercial Operations of Customs and Border Protection, better known as COAC. This 20-member council advises the secretaries of the Department of the Treasury and the Department of Homeland Security on the commercial operations of CBP and related DHS and Treasury functions. He currently serves on the COAC and as Trade co-chair of the 14th COAC Committee on Commercial Operations of Customs and Border Protection, better known as COAC.



Chang M. Liu (BA '90)
President & CEO,
Cathay Bank

Chang M. Liu is the President and Chief Executive Officer of Cathay Bank and a member of the Board of Directors of Cathay Bank and its holding company.

Chang joined Cathay Bank in 2014 and, prior to assuming the position of President and Chief Executive Officer in 2020, was responsible for, among other things, managing and overseeing all commercial and real estate lending, business development, and various operations.

Prior to his current role at Cathay Bank, Chang was the Executive Vice President and Chief Lending Officer at Banc of California (formerly known as "Pacific Trust Bank") and under his leadership, increased the commercial real estate loan portfolio by \$400 million in three years and the bank grew from \$875 million to \$3 billion in asset size. Chang received a Bachelor of Arts in Economics degree at UCLA and has more than 31 years of banking experience.

Aside from his business pursuits, Chang is a Board member of the Foothill Family, which provides comprehensive mental health care, early childhood development programs, and social services throughout the Greater Los Angeles region.



Julie Miller-Phipps
President, Southern California and Hawaii,
Kaiser Permanente

Julie Miller-Phipps is president of Kaiser Permanente Southern California Region and Hawaii Market, Foundation Health Plan and Hospitals. Since 2016, she has directed the Southern California Hospital and Health Plan operations and partnered with the leadership of the Southern California Permanente Medical Group to improve the health of more than 4.8 million members and their communities in an area that extends from Bakersfield to San Diego. Nearly 76,000 employees collaborate with more than 7,800 Southern California Permanente Medical Group physicians to deliver high-quality, affordable care through this region's 15 hospitals and 235 medical offices.

In late 2020, Miller-Phipps also undertook responsibility for the Hawaii Market Hospital and Health Plan operations, working closely with the local leadership, including the Hawaii Permanente Medical Group (HPMG), to improve the health of nearly 263,000 members and their communities. Some 4,400 employees work with nearly 500 HPMG physicians to deliver high-quality care through the Kaiser Permanente Moanalua Medical Center in Honolulu and 28 medical offices and clinic locations on the islands of Oahu, Maui, Hawaii, and Kauai.

In addition to her operations responsibilities, Miller-Phipps oversees funding and grants for programs that cultivate improvements in the economic, social, and environmental factors that strengthen the quality of health in Southern California and Hawaii. Annually, this equates to over \$1 billion in Southern California and \$1.2 million in Hawaii in support of Kaiser Permanente's mission to help communities thrive.

Miller-Phipps earned her master's degree in health care administration from the University of La Verne, and her bachelor's degree from California State University, Fullerton. She also completed the Executive Leadership Program at the University of North Carolina.

She was also listed in the Los Angeles Business Journal 2018, 2019, and 2020 LA500, the publication's selection of the most influential people in Los Angeles. In January 2020, the University of La Verne presented Miller-Phipps with an honorary doctorate of humane letters.



Brian Saenger (BA '95, CERT '19)
President & CEO,
The Ratkovich Company

Brian Saenger is the President and Chief Executive Officer of The Ratkovich Company, a Los Angeles-based real estate development company specializing in urban infill and historic rehabilitation of landmark properties. He previously served as the Company's Chief Operating Officer and General Counsel and was responsible for overseeing the Company's operations, including development management, property management, and legal and administrative functions. In 2021, Brian was named to the Los Angeles Business Journal's list of 500 Most Influential People in Los Angeles.

Brian serves on the Los Angeles Area Chamber of Commerce's "The CEO Council," an advisory group of top business leaders focused on ensuring affordable housing for middle-income families and building a workforce that is prepared for the good-paying jobs of the future. He is also a member of the Urban Land Institute (ULI) and serves on the Urban Development and Mixed-Use Council. ULI is the oldest and largest network of cross-disciplinary real estate and land use experts in the world. Additionally, Brian is a member of the Board of Directors for the San Gabriel Valley Economic Partnership. He has previously served on the Board of Directors for the California YMCA Youth & Government program and was a past Chair of the Board.

Brian joined The Ratkovich Company as the Vice President of Acquisitions and played a leading role in the Company's acquisition of The Bloc, a 1.8 million square foot, mixed-use property in downtown Los Angeles consisting of retail, office and hospitality uses. He also represented the Company in the successful negotiation of a 66-year ground lease for the development of West Harbor (formerly known as the San Pedro Public Market), a \$150 million transformation of a 42-acre site along the Los Angeles waterfront in San Pedro. In August 2021, West Harbor was featured in the Los Angeles Times for landing seven high-profile restaurant and entertainment leases during the pandemic.

Prior to joining the Company, Brian served as the Company's outside counsel when he practiced with the international law firms of DLA Piper LLP (US) and Pillsbury Winthrop Shaw Pittman.

Brian received his Juris Doctorate from Loyola Law School, Los Angeles, with honors, where he served as the Editor-in-Chief of the Loyola of Los Angeles Law Review. He received his Bachelor of Arts degree from the University of California, Los Angeles. Brian is a member of the State Bar of California and a licensed California real estate broker.

BOARD OF ADVISORS



Eugene D. Seroka
Executive Director,
Port of Los Angeles

Gene Seroka is the Executive Director of the Port of Los Angeles, the busiest container port in North America. He was nominated by Los Angeles Mayor Eric Garcetti on May 27, 2014, and confirmed by the Los Angeles City Council on June 11, 2014.

As Executive Director, Seroka is responsible for managing a \$939 million budget, advancing major capital projects; growing trade volumes and promoting innovative, sustainable practices that strengthen the region's economy. His duties involve interacting with a wide range of stakeholders, including Port customers around the globe, industry partners, elected and appointed officials at all levels, harbor area residents and business leaders.

Seroka brings more than 25 years of experience in shipping, global logistics and executive management to the Port. Most recently, he was Head of Commercial in the Americas Region for American President Lines (APL) Limited. After several key overseas positions for APL, he returned to the U.S. in 2010 to become President - Americas for APL Limited in Phoenix where he managed APL's Liner Shipping business, including 1,000 employees, and was responsible for all commercial, port terminal, intermodal, land transportation and labor activities throughout the region.

Seroka joined APL, a wholly owned subsidiary of Singapore-based Neptune Orient Lines (NOL) and the world's seventh largest ocean carrier, in 1988 as a sales support representative in the company's Cincinnati office after earning an MBA and Bachelor of Science in Marketing from the University of New Orleans. Over the years, he has held various positions in sales and management with increasing responsibility and high-level assignments all over the world. Throughout his career, he played a key role in global marketing and corporate strategies for APL.

Seroka's first overseas posting was in Shanghai where he served as Director of Sales and Marketing for North and Central China from 1999 to 2003. He then moved to Jakarta where he was President Director of PT APL and APL Logistics in Indonesia for two years before relocating to Singapore in 2005 to become Vice President of APL Logistics' business units in 26 countries in the company's Asia/Middle East and South Asia regions. From 2008 to 2010, he served as Vice President for APL and APL Logistics Emirates LLC in Dubai where he managed APL's business in the Middle East and East Africa Region.



John Tipton
Partner,
Allen Matkins

John Tipton, a partner in the Century City office and immediate past Chair of Allen Matkins' real estate department, is one of the top real estate attorneys in California with respect to acquisitions and dispositions, leasing, and asset management. John represents his clients in actively buying, financing, developing, leasing and selling office centers, shopping centers, mixed use projects, studios, hotels and multi-family projects throughout the United States. He also has extensive experience in representing owners, operators, and partners in all types of development, construction, management, and operating agreements.

John is a founder and lead attorney in the ongoing partnership producing the Allen Matkins/UCLA Anderson Forecast Commercial Real Estate Survey, a twice-annual survey involving the top commercial real estate owners, investors, and developers in California and provides a three-year economic outlook on a range of asset classes and geographical regions throughout the state. A frequent public speaker, John co-authored the chapter on Construction Agreements in the second edition of the California Continuing Education of the Bar Commercial Project Practice Guide, the legal education reference book on project management for California attorneys. John is a member of the Los Angeles County Bar Association, the Urban Land Institute and served as Chair of the Board of Junior Achievement of Southern California (2019-2021), a non-profit dedicated to teaching financial literacy, work readiness and entrepreneurship to Southern California youths.



David L. Tuyo, II
President & CEO,
University Credit Union

David L. Tuyo II, DBA, MBA serves as the President and CEO of University Credit Union. Dr. Tuyo is a veteran of the financial services industry where he has served financial institutions in a multitude of roles including COO, CFO, and Chief Investment Officer. His career in the financial services industry spans over 20 years, with the majority dedicated to serving credit unions. Dr. Tuyo's education includes a DBA from California Southern University, an MBA from Mississippi State University and a Bachelors in Finance from the University of Mobile.

UCLA Anderson Forecast Fellows Program

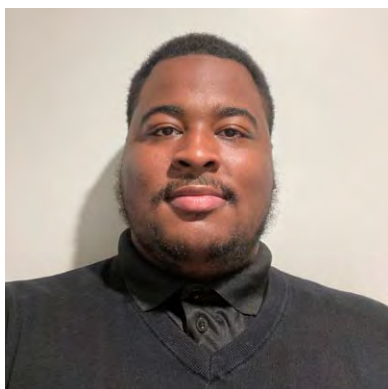
The UCLA Anderson Forecast Fellows Program was officially launched in January 2022 to award one-year fellowships to two undergraduate students currently enrolled at California State University, Dominguez Hills (CSUDH).

Over the course of the initial year, CSUDH faculty and staff as well as Forecast economists will be serving as sponsors and be paired with each fellow to provide a supportive environment to ensure their success. The sponsors will work with the fellows on training, software, research progress, and other aspects of the program to maximize the overall experience. At the same time, the fellows will be invited and encouraged to attend selected MBA lectures in order to gain a better understanding of the overall graduate school experience.

At the conclusion of the year, the fellows will have completed a research paper, which will be published by the Forecast and featured at a quarterly conference.

The UCLA Anderson Forecast extends its appreciation and a sincere thanks to Edison International for their generosity in bringing this initiative to fruition.

2022-23 Forecast Fellows



Christopher Hendrix



Bernisha Williams

SPECIAL FORECAST SUPPORTERS

STEVEN C. GORDON



RICHARD S. ZIMAN

THE ROSALINDE AND ARTHUR
GILBERT FOUNDATION



