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TABLE OF CONTENTS

MISSION IMPOSSIBLE?
Searching for Growth in an Inflationary Economy

**Economic Outlook and Forecasts:
The Nation, Southern California and Orange County**

Anil Puri, Ph.D., and Mira Farka, Ph.D.

MISSION IMPOSSIBLE?
SEARCHING FOR GROWTH IN AN INFLATIONARY ECONOMY
The Nation, Southern California and Orange County

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MISSION IMPOSSIBLE

"On a long enough timeline, the survival rate for everyone drops to zero."
– The Narrator, Fight Club

Overview

"The first rule of Fight Club is: you do not talk about Fight Club. The second rule of Fight Club is: you DO NOT talk about Fight Club!"

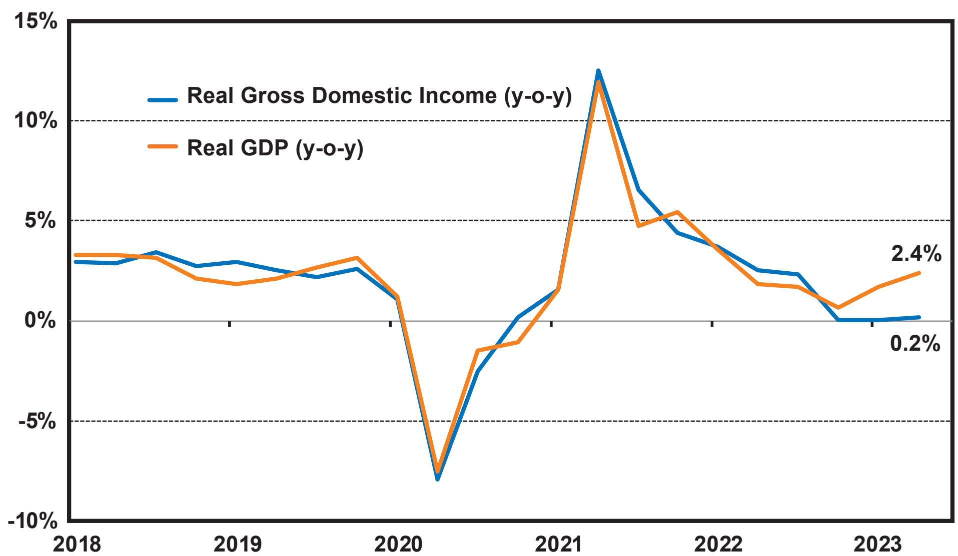
So, let's talk about *Fight Club*, the bold, gritty, unapologetic dark satire-cum-drama film that tackles —with angry, despairing punches — the culture of materialism, consumerism, greed, and American masculinity, with the existential question of the meaning of life, thrown here and there. It is quite a daunting list to be borne alone, which is why the main character, the Narrator — a nameless, mild-mannered insomniac stuck in a soul-crushing job with a penchant for yin-yang IKEA furniture — invents a much darker, violent, charismatic alter-ego, Tyler Durden. Durden is everything the Narrator is not: daring, care-free, unshackled, brimming with swagger and overconfidence, railing against a "system" that is stacked against men like him. The two team up to form Fight Club, a support group of sorts where men meet up to fight each other to a bloody pulp, where it isn't "about winning or losing" and where "nothing was solved, but nothing mattered. We all felt saved." Despite over-the-top violence which progressively devolves into terrorism, the film delivers a scathing rebuke to the senseless anarchism of Fight Club, which replaces the mindless creed of corporatism/consumerism with an equally soulless mantra of violent nihilism. In the end, we are left with a boy and a girl holding hands as the world crumbles around them. So, yes, we are not supposed to talk about it, but once seen, *Fight Club* is hard to forget even nearly a quarter of a century later.

The U.S. economy is in the midst of its own rendition of Fight Club. Part-Narrator, part-Tyler Durden, part yin and part yang, the economy has trudged along offering a complex mix of both good and bad news.

The U.S. economy is in the midst of its own rendition of *Fight Club*. Part-Narrator, part-Tyler Durden, part yin and part yang, the economy has trudged along offering a complex mix of both good and bad news. Real GDP growth posted solid gains in the first half of the year, growing by 2% in the first quarter and by 2.1% in the second. Yet, real Gross Domestic Income — an alternative way of measuring GDP — fell by -3.3% in Q4 2022 and an additional -1.8% in Q1 2023, posting a meager

0.5% in the second quarter (Figure 1). Consumer sentiment, though improved from last year, is still far below average based on the University of Michigan index and just around average according to the Conference Board index. Yet real consumption spending is growing by healthy 2.4% pace this year, up from the 1.7% rate posted in the last quarter of 2022. After nearly twelve months of declines, home prices and building permits have rebounded even as mortgage rates near 7.5%. Corporate earnings fell for three straight quarters, yet the S&P500 staged a spectacular rebound rising by nearly 20% from January until end-July. Tried-and-true indicators, such as the Conference Board Leading Index (LEI) and the yield curve, have been ringing alarm bells that a recession is around the corner for a while, yet the labor market added 1.9 million jobs in the first eight months of the year, as much as it did for the entirety of 2019, right before the pandemic hit. “You met me at a strange time in my life,” the Narrator laments at the end to Marla Singer, the self-destructive support-group addict and perhaps the only truly redeemable character in *Fight Club*. Strange time, indeed.

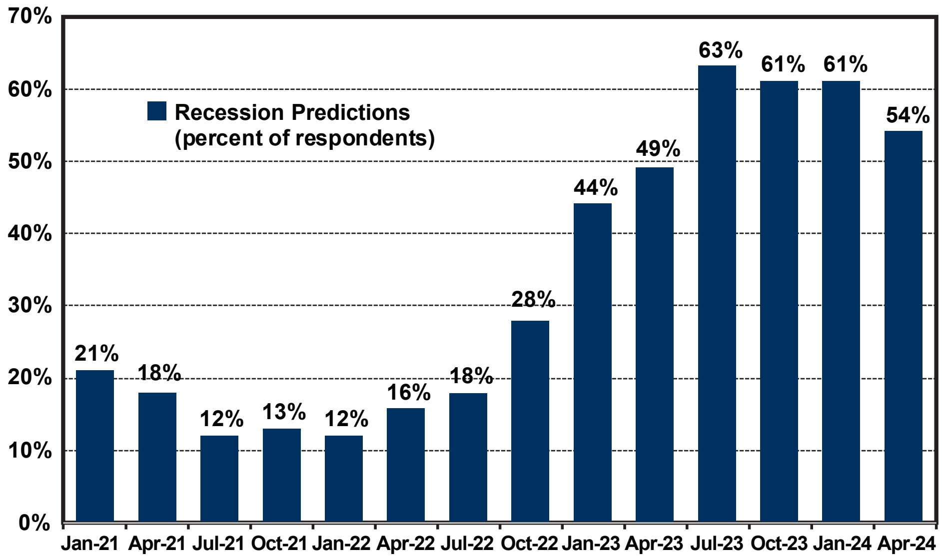
FIGURE 1
How Strong is the Economy? RGDI and RGDP Divergent (y-o-y percent change)



To be sure, the economic landscape was decidedly more dour at the start of the year, when the specter of recession haunted the global economy. “Marla’s philosophy of life is that she might die at any moment,” the Narrator intones in *Flight Club*. “The tragedy, she says, is that she didn’t.” Much like Marla, the U.S. expansion was uncomfortably perched on the cusp of a recession for the better part of the last 18 months, ever since the Fed embarked on its rate-hiking cycle, with fears running sky high that “it might die at any moment.” At the start of the year, a full 70% of economists in the Bloomberg Survey expected the U.S. economy to fall into recession sometime in 2023. In the Wall Street Journal Survey, almost two-thirds of economists expected a recession (Figure 2). The Conference Board put the probability at 99%. The International Monetary Fund and World Bank had penciled in sub-par growth for the global economy of around 2.6% to 2.8%, far below the average expansion of 3.8% and lower than 3% — a sort of unofficial demarcation between a continued expansion and an impending recession. Even the Fed was bracing for a recession – a few quarters of negative growth and a higher unemployment rate than earlier in the year.

The U.S. expansion was uncomfortably perched on the cusp of a recession for the better part of the last 18 months, ever since the Fed embarked on its rate-hiking cycle.

FIGURE 2
Recession Fears Sky-High Early this Year
(percent of WSJ survey respondents)



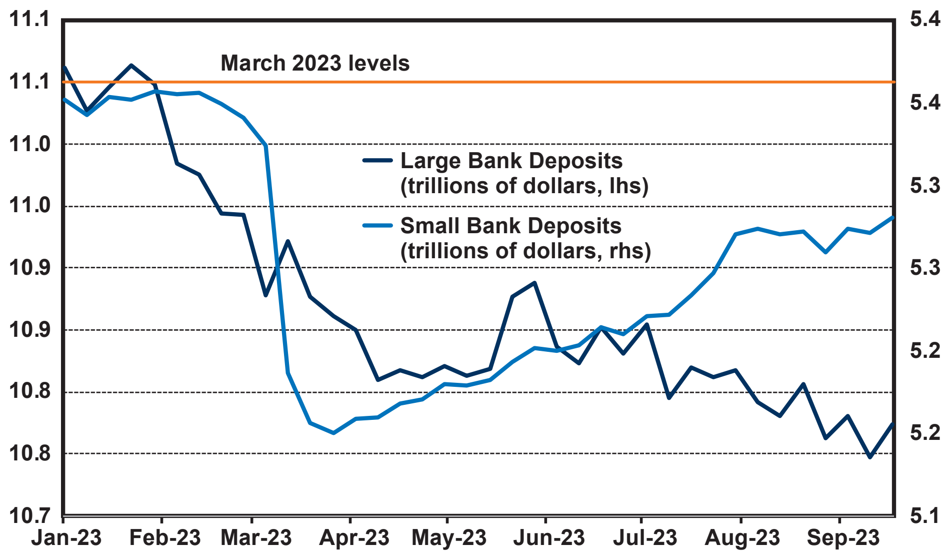
Panic reached fever-pitch when, in mid-March, a spate of U.S. banks and one international behemoth failed and were forced to either shut their doors or merge with other banks. In the U.S. alone, the combined assets of the failed banks totted up to a jaw-dropping $550 billion, higher than the $526 billion (after adjusting for inflation) owned by the 25 banks that failed in 2008, at the onset of the financial crisis. The demise of SVB, Signature, and First Republic account for three of the four largest bank failures in U.S. history (the failure of Washington Mutual in 2008 still holds the top spot). The story of their failure is as pedestrian as it is straightforward: They were not felled by exotic derivatives or clever financial engineering but by a simple duration mismatch between their short-term liabilities and long-term assets, which became more and more deadly as interest rates marched upwards.

"You wanna make an omelet, you gotta break some eggs," crows Tyler Durden in his quest to dissolve modern societal norms and dislodge the established social order. So it is. In its quest to quash inflation, the Fed tightened the screws until something broke. The question is whether the Fed-rate hiking campaign, which has catapulted interest rates from virtually zero in March 2022 to a current 5.5 percent, will claim additional victims. A decade and a half ago, in the throes of a financial crisis, a cascade of bank failures meant banks drastically tightened lending standards, prompting a global credit crunch.

Mercifully, so far, a repeat of the horrors of the Great Recession has failed to materialize, in part because of the swift and extraordinary measures put in place by the Fed and the Treasury.

Mercifully, so far, a repeat of the horrors of the Great Recession has failed to materialize, in part because of the swift and extraordinary measures put in place by the Fed and the Treasury. In the haste to stem the rot from spreading, they broke all cardinal rules of lending in a crisis which postulate that help should be offered only to solvent firms, at a haircut (i.e., at a premium over the policy rate), and against good collateral. Instead, liquidity lines were opened to everyone — through the discount window, Bank Term Funding Program (BTFD), and the Federal Home Loan Bank — at the policy rate and, crucially, at any collateral taken at face value instead of market value, which for some U.S. Treasuries meant a 35% premium over the current market value. This lavish generosity paid off: The stampede of deposits from the banking sector halted, stabilizing at around $800 billion below all-time highs set in March 2022, right before the Fed began its rate-hiking campaign. Small banks have actually added a combined $100 billion to their deposits after leaking around $200 billion during the panic (Figure 3). A financial accident was contained from morphing into a full-blown financial crisis.

FIGURE 3
Deposit Flights Have Stopped
(trillions of dollars)

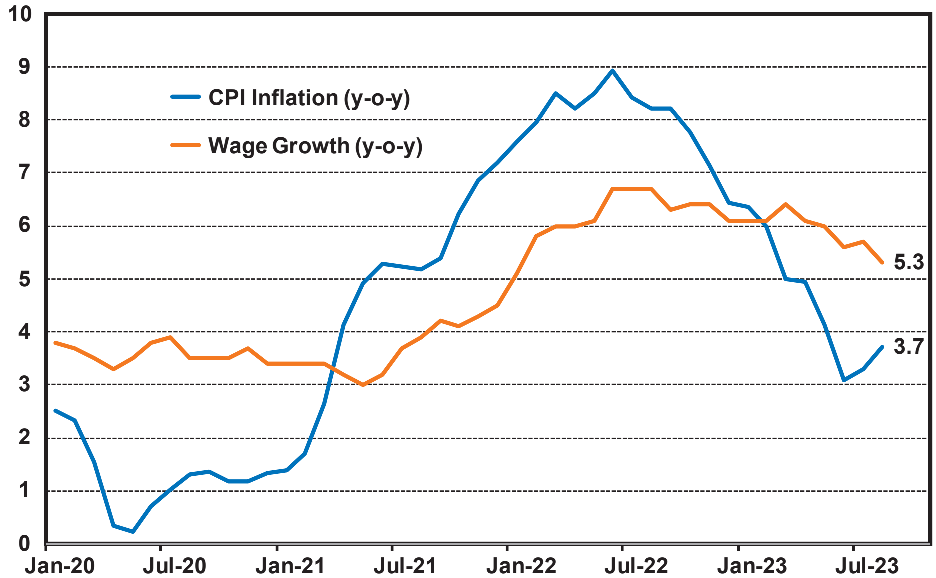


Not surprisingly, the mood about the fate of the economy has lifted considerably as of late upon the realization that, time and again, the economy has come deadly close to a disaster only to escape it relatively unscathed. "Every evening I died, and every evening I was born again, resurrected," says the Narrator about the exhilarating thrill of thrashing and punching in the basement of Fight Club. The U.S. economy has had its own share of thrills: The past year and a half have been chockful of such brushes with calamity, from the fastest rate hike cycle in the past 40 years to sky-high inflation, Russia's invasion of Ukraine, high food and oil prices, a financial market rout, and a banking crisis. Through astonishingly good fortune, the U.S. economy has defied all expectations, un-ringing the bells of its own funeral march which have been blasting loudly but, perhaps, prematurely for the past 18 months.

Through astonishingly good fortune, the U.S. economy has defied all expectations, un-ringing the bells of its own funeral march which have been blasting loudly but, perhaps, prematurely for the past 18 months.

And it is not as if a few gains are eked out here and there: On the face of it, the U.S. economy is steaming full speed ahead. As of this writing, the Atlanta Fed real GDP nowcasting model is pegging third quarter GDP to be an astounding 4.9%, more than double the pace in the first half of the year. Real consumer spending rose at an annualized rate of 3% in July (latest available data), higher than the 2.3% average posted in the first half of the year. Real nonresidential investments posted a solid 6.2% in the second quarter supported primarily by strong growth (11.2%) in structures — mostly manufacturing plants propelled by a swath of new investments in domestic electric vehicles and semiconductor production. Despite the gloom reflected in the ISM manufacturing index (which captures expectations for manufacturing activity over the next six months), industrial production has held up reasonably well. Home prices have rebounded, regaining the peak set last year before the onslaught of rate hikes, and home building has picked up. American workers are also getting a reprieve: For the first time since inflation spiked, wages are growing at a faster pace than inflation (Figure 4). Household wealth — the sum of housing equity and financial wealth — has rebounded by an eyewatering $9.7 trillion since the third quarter of last year, reaching heights last seen at the end of 2021, thanks to a spectacular recovery in equity markets and a reversal in home prices.

FIGURE 4
Wage Growth has Finally Surpassed Inflation
(y-o-y percent change)



Most importantly, all this is occurring under the auspicious background of falling inflation, whose feverish grip on the economy appears to have finally loosened. Consumer price index (CPI) inflation has come down from a 40-year dizzying height of 9.1% in June 2022 to a current 3.7%. The price index for personal consumption expenditures (PCE), a broader measure of consumer basket, has stepped down from a peak of 6.7% to half that, at 3.4%. Even the infamously more stubborn measures of core inflation, which exclude volatile energy and food prices, have cooperated: Core CPI has retreated from a high of 6.6% to a current 4.4% (Figure 5). Core PCE — the Fed's preferred inflation measure — has fallen by one and a half percentage point, from 5.4% to 3.9%. All are still outside the Fed's target of 2%, but there is no denying that significant progress has been made.

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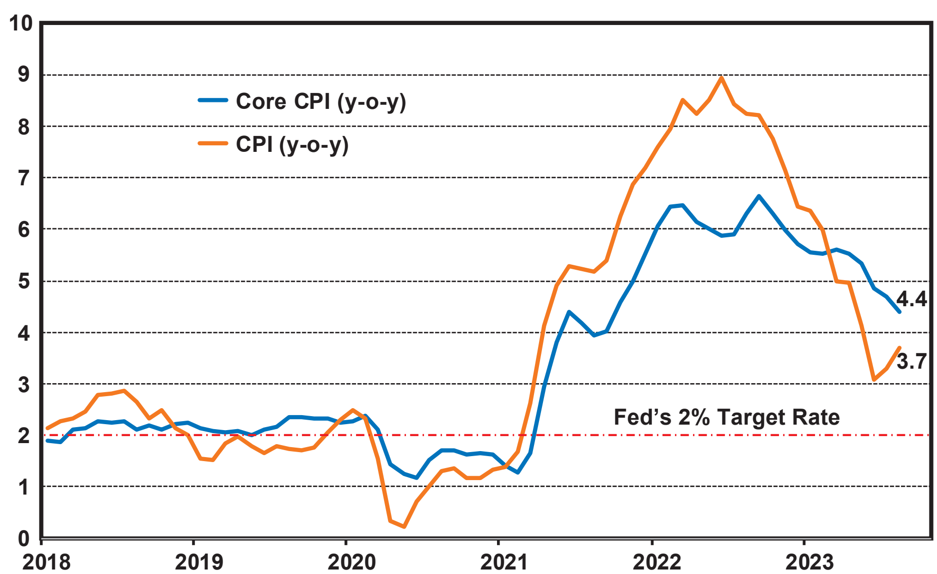
FIGURE 5
Inflation Has Declined...But Not Quite There Yet
(y-o-y percent change)



Perhaps most astonishingly, inflation has fallen without mass casualties. Despite the many ill omens, the single most important indicator of the health of the economy — the labor market — has performed spectacularly well. Employment rolls have swelled by a total of 5.4 million jobs since March 2022, when the Fed embarked on its rate-hike campaign. The unemployment rate has barely budged, rising only a smidgen from 3.6% to a current 3.8% and remains a hair above the all-time historical low. Even the recent uptick portends good news. Unemployment rose not due to mass layoffs but because more people joined the workforce and are looking for work. The labor force grew by 2.9 million workers this year, nearly double the pace of the pre-pandemic era. The employment-to-population ratio for prime-aged workers (those between 25-54 years old) has reached peaks last seen more than two decades ago, when *Fight Club* was breaking knuckles and crushing skulls in theaters across America.

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This perfectly delicate balance — the slaying of inflation without bloodletting in labor markets — defines the very essence of the enduring and, increasingly, incessant debate between the soft-landing vs. hard-landing hard liners. We are not supposed to talk about Fight Club, but for the past eighteen months, the relentless chatter has been all about soft landings and hard crashes, so much so that it's getting harder to keep track of where consensus last landed. In *Fight Club*, to cure his insomnia, the Narrator finds solace in visiting support groups for illnesses he does not have and life-threatening diseases he will not get even though "he wasn't really dying. He wasn't a host of cancer or parasites". Much like the Narrator, the soft landers argue that the economy is fundamentally sound, that it harbors no glaring imbalances (i.e., consumer balance sheets are healthy, debt ratios are low, spending is growing at trend), which means that it can withstand rapid rate hikes without keeling over. The other camp marches to the drum of Durden's beat: "You are not special. You are not a beautiful or unique snowflake. You are the same decaying organic matter as everything else." Soft landings are rare and hard to engineer, the thinking goes, and this expansion is not special, which means that, much like most other expansions, it will likely succumb under the barrage of punches delivered by the Fed, decaying a bit more each day that interest rates continue to remain high.

Call us "reluctantly bearish": Reluctant, because we fervently hope for a better outcome; Bearish, because we are not convinced that this story, ultimately, has a happy ending.

Ever since the debate began, our own outlook for the U.S. economy has consistently, and reluctantly, hewn closer to the Durden-esque view of the world than to its more benign alter-ego. Call us "reluctantly bearish": Reluctant, because we fervently hope for a better outcome; Bearish, because we are not convinced that this story, ultimately, has a happy ending. The economy has shown strength and resilience, but that was not entirely unexpected given the distortions unleashed by the pandemic and lavish fiscal support. As we have written in the past in these pages, a recession was not imminent last year, nor was it unavoidable this year. The true story of this expansion was always going to be written at this juncture, when inflation had eased somewhat but not enough, and when oodles of government cash were nearly spent up. And our view is that while the Fed may soft-land the economy for a bit, it will be unable to stick the landing for long. As such, our outlook calls for a "normal recession" — not the carnage of 2007-2008 or 2020, but a garden-variety type akin to the early 1990s or early 2000s — likely in the second half of 2024.

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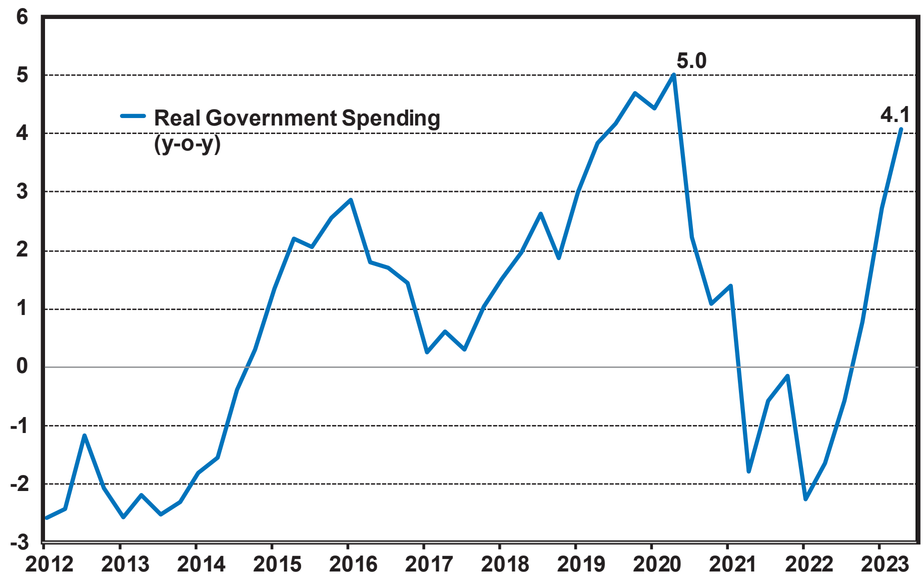
That's because, underneath the hood, fragilities are building, and risks abound. Growth has defied expectations in part because of unprecedented government support, not just during the dark days of the pandemic, but ever since (Figure 6). Real government spending accounted for nearly half of real GDP growth in the first quarter of this year, and for almost one-third of the second quarter, as three successive bills — the Bipartisan Infrastructure Act ($1 trillion), the Inflation Reduction Act (IRA) ($390 billion) and the CHIPS Act ($280 billion) — continued to bolster the economy. Though on the face of it, the three bills tally to around $1.7 trillion, the true cost is still unknown, in part because the IRA did not place caps on firms' tax credits, which are now adding up to hundreds of billions of dollars higher than originally envisioned. The fiscal deficit for the 11-month period that ended in August was $1.5 trillion (5.7% of GDP, up from 3.7% in 2022), the highest outside a recession or war, partly because of a sharp decline in revenues (down 10%), and partly due to an increase in spending (up 4%). To be sure, some of the public spending, such as funds from the CHIPS Act, have propped up private business investments in semiconductors and manufacturing: Investment in non-residential structures rose by a staggering 30.3% in Q1 2023 and an additional 16.6% in the second quarter. Real spending in manufacturing is up nearly 60% compared to the same period last year. And while a boost to investment is certainly welcome, the interest paid on the federal debt just hit an all-time high: $652 billion in the first nine months of this fiscal year.

Underneath the hood, fragilities are building, and risks abound. Growth has defied expectations in part because of unprecedented government support, not just during the dark days of the pandemic, but ever since.

FIGURE 6
A Resilient Economy...but Lots of Help: Government Spending Through the Roof (y-o-y percent change)

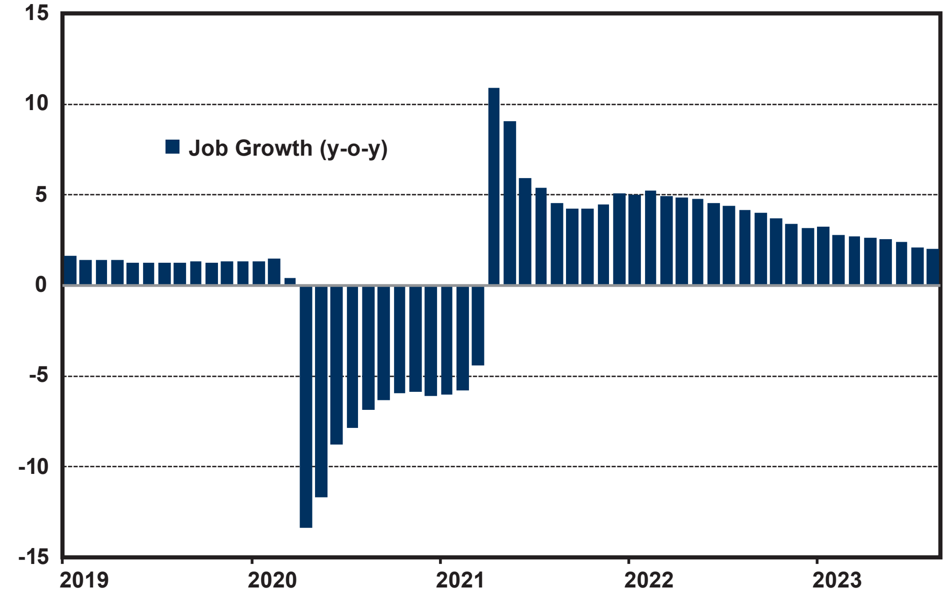


Importantly, if there is a single unifying principle that bridges the gulf between soft-landers and hard-crashers, is that growth is set to slow. On all sides, everyone seems to agree that third-quarter real GDP will likely be the last bright figure for quite a while as the Fed attempts to bring inflation to heel by cooling off the economy. Signs of slowing are everywhere. The pace of job formation has downshifted from a blistering 4.3% (year-over-year) in 2022, to 2.7% in the first half of 2023, down to a current 2% (Figure 7). Job openings have edged down from 12 million in March 2022, when rate hikes began, to a current 9.6 million. Data revisions have been on the downside: The August employment report shaved off a total of 100,000 jobs from the previous two months. The recent revision of BEA statistics showed that consumer spending in the second quarter rose by a measly 0.8%, less than half the 1.7% pace reported originally.

On all sides, everyone seems to agree that third-quarter real GDP will likely be the last bright figure for quite a while as the Fed attempts to bring inflation to heel by cooling off the economy.

Despite lavish government support, manufacturing activity contracted for the 10th consecutive month in August, though the pace of decline has moderated in recent months. The ISM new orders index and real capital expenditure spending — two of the most reliable manufacturing forward-looking indicators — point to further weakness ahead.

FIGURE 7
A Goldilocks-ish Fairy Tale: Job Growth is Gently Easing
(y-o-y percent change)



The news elsewhere in the world is equally disheartening. Having defied expectations of an energy-crunch induced recession — thanks in part to a warm winter and generous government subsidies — European fortunes appear to have taken a turn for the worse. Inflation remains high at a current 5.7% and fears are reemerging that the continent is headed for stagflation — slow growth combined with entrenched inflation. Retail energy prices are currently running higher than before last year's crisis and activity in the service sector stumbled in August, according to the PMI survey. The German economy has shrunk for three straight quarters, bestowing on the country the ignoble distinction of being the first to succumb to a (shallow) recession. Other countries are faring better, but growth has come from unexpected (and likely unsustainable) places: Italy and Spain are propped primarily by the tourism industry. Denmark has avoided an economic slump, thanks in large part to the wonder drug Wegovy (Ozempic), a weight loss treatment that has boosted overseas sales of its producer Novo Nordisk, spiking the value of the currency and allowing the Danish central bank to keep interest rate lower than it otherwise would.

The German economy has shrunk for three straight quarters, bestowing on the country the ignoble distinction of being the first to succumb to a (shallow) recession.

China's much anticipated reopening from the pandemic fizzled out before it even truly began. Its real GDP grew by a pitiful 0.8% in the second quarter, even though year-over-year figures seem a healthier 6.3%, thanks to low-base effects. Its real estate sector, worth around 20% of GDP, continues to struggle, and property developers are buckling under debt burdens amounting to roughly 16% of GDP. Unlike the rest of the world, the country is grappling with a bout of deflation as consumer prices fall in the face of weak demand. Uncomfortable figures — such as high youth unemployment (north of 20%) and rock-bottom confidence — have prompted the National Bureau of Statistics to stop releasing them altogether rather than face embarrassing headlines. The activity for the balance of the year is expected to stabilize and pick up modestly, but even so, the final result may end up somewhat short of the 5% growth rate target set by the government.

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Of course, some of the slowing is by design as central banks across the world grapple with inflation at four-decade highs. The issue is that a slowing economy is far more vulnerable and less resilient, which means that even moderate shocks may deliver punches deadly enough to derail it. And the most worrisome punches continue to remain those administered by the Fed because, though progress has been made in the battle against inflation, the fight is not quite over. In fact, there are good reasons to believe that squeezing the last ounce of inflation from inflationary pressures may prove, unfortunately, harder and more complicated.

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Start with a simple concept — base effects — the distortion embedded in the data when inflation measures, which are given in year-over-year figures, are compared to values 12 months ago when inflation averaged 8.3%. Even if prices had been stable in the first half of 2023, the dramatic rise over the same period last year would see a year-over-year decrease. But base-year comparisons are less flattering going forward, given that inflation was materially lower in the second half of 2022 compared to the first.

More concerning is the fact that even a small amount of sticky inflation may be hard to dislodge. Service inflation has fallen from 7.6% early this year to a current 5.4%, but this is still nearly double its historical average (Figure 8). Some of this reflects shelter costs, which are expected to come down as rent appreciation cools off. The problem is that rent figures appear in inflation statistics with substantial lags (of roughly one year), which means that recent large decelerations will only show up in mid-2024. The process may not even be as smooth as hoped, in part because home prices are on the mend again, adding additional strains to inflationary measures. Service inflation may also prove sticky also because of stubbornly high wages, a side effect of historically tight labor markets. Though some progress has been made — wage growth has decelerated from 6.7% to 5.3% according to the Atlanta Fed wage growth tracker and from 5.6% to 4.6% according to the Employment Cost Index compiled by the Bureau of Labor Statistics (BLS)— both measures are a ways off from the 3.5% rate that is consistent with 2% inflation.

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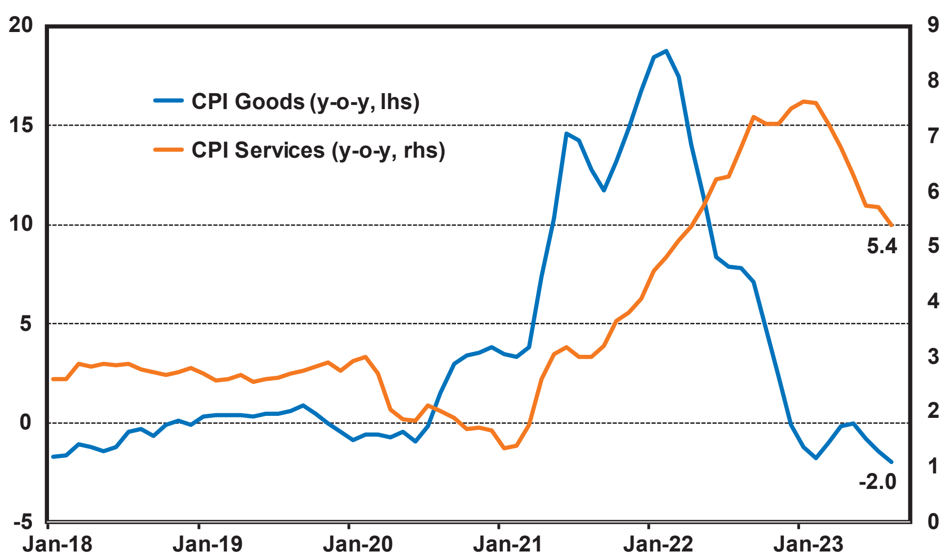
FIGURE 8
Service Inflation Will Be a Bit Harder to Dislodge
(y-o-y percent change)



The bigger worry is that inflationary pressures are mounting again. Headline inflation rose by 3.1% in June but has ticked up since then to 3.3% in July and 3.7% in August. The biggest culprits are oil prices which have risen by 30% over the last three months and are projected to remain high due to OPEC production cuts. Deflation in the goods market — a big part of this year's disinflation story — has stalled. Used vehicle prices have ticked up again after declining by double-digits early this year. The United Auto Workers' (UAW) strike, which is currently entering its third week, will undoubtedly add more fuel to the smoldering embers of the inflation fire.

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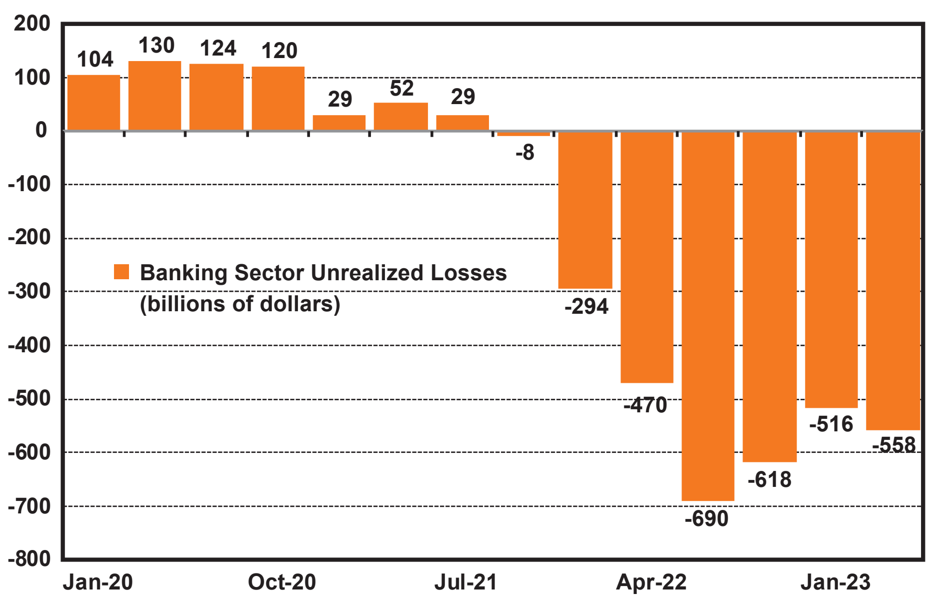
All this means that high interest rates are here for the long haul, a realization that is only now starting to sink in with financial markets. "Higher for longer" is the new mantra zealously embraced by policymakers at the Fed, who, like loyal members of Fight Club, appear to have a penchant for catchy, easily chantable creeds. But perhaps the most creative visual for where interest rates are headed was offered by Bank of England's chief economist, Huw Pill, who likened the path to Table Mountain — a flat, two-mile-wide expanse behind Cape Town — in contrast to the Matterhorn, the vertigo-inducing peak in the Swiss Alps. The implied message is that while rates don't have to rise as high, they will need to remain at an elevated plateau for an extended period.

The problem is that the "higher for longer" chant is playing against a darker stage of slower growth and the drumroll of rising risks. First, as we argue below, while the acute phase of the March banking crisis seems to be behind us, U.S. banks, particularly regional mid-sized and small banks, continue to remain under pressure. In August, Moody's and S&P Global downgraded the outlook for 15 U.S. regional banks, citing growing financial risks and erosion of profitability. High interest rates have reduced the value of Treasury portfolios in banks' books: The value of unrealized losses was $558 billion in the second quarter, up $42.9 billion (8.3%) from the prior quarter. This is less than the $690 billion recorded in Q3 2022, but persistent losses, even if unrealized, will make banks even more reluctant to lend (Figure 9).

The problem is that the "higher for longer" chant is playing against a darker stage of slower growth and the drumroll of rising risks.

FIGURE 9
Banking Sector's Paper Losses Continue to Remain High
(billions of dollars)

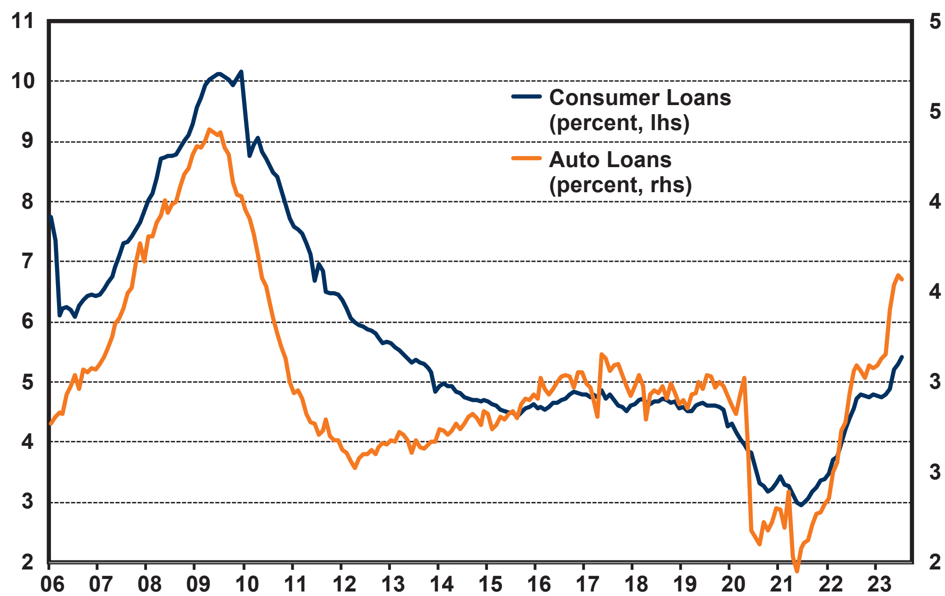


Which brings us to the second main risk to the outlook: the coming credit squeeze. The number of banks that have tightened lending standards has remained at recession levels for three straight quarters. Credit costs have skyrocketed. Loan demand has declined to values last seen during the financial crisis of 2007-2009 for all types of business loans: commercial, industrial, and real estate. The commercial real estate sector is a particularly troubled spot, with retail and multifamily segments down 8.3% and 12.2%, respectively from year-ago-levels. Office vacancy rates have reached 16.4%, above the previous highs set after the financial crisis, and valuations have collapsed by as much as 44% in main metro areas. Around $1 trillion in commercial real estate debt matures between now and the end of 2024, which will need to be financed at higher rates and under strained valuations. Troubles in commercial real estate will undoubtedly further strain small/regional banks balance sheets as these banks account for a mind-boggling 80% of commercial real estate (CRE) lending. It is not too far-fetched to see a self-perpetuating vicious loop where tighter credit starves CRE developments prompting defaults on CRE loans which further sours banks' balance sheets.

Office vacancy rates have reached 16.4%, above the previous highs set after the financial crisis, and valuations have collapsed by as much as 44% in main metro areas.

Signs of strain are also appearing in consumer balance sheets. Defaults are on the rise with auto loan delinquencies reaching their highest level since the Great Recession (Figure 10). Housing wealth is at an all-time high of $30 trillion, but that is small solace when it is virtually impossible to tap given the high cost of mortgage refinancing or a HELOC loan. After a three-year hiatus, student loan debt is set to resume this month with roughly 27 million borrowers making payments of close to $275 per month, on average, amounting to $87 billion annually. This will chip away at consumers' firepower.

FIGURE 10
Delinquencies on the Rise
(percent delinquent, Equifax)



An assortment of other risks clouds the outlook. A government shutdown was averted at the last minute, but the reprieve is short as the 45-day stopgap bill funds the government only until mid-November. The risk of a shutdown has thus been postponed (rather than extinguished) to a future when the economy will likely be even more vulnerable. The removal of the House Speaker— a first in U.S. history — has thrown even more uncertainty into the mix. A rise in long-term rates is posing additional challenges to an already challenged outlook, as the bond market comes to grips with the Fed's "higher for longer" pivot, quantitative tightening, and higher costs associated with large fiscal deficits. The rapid climb in long yields has already snuffed this year's spectacular rally in equities: since their sharp upward march in late July, the market has shed 6.5% of its value.

The risk of a shutdown has thus been postponed (rather than extinguished) to a future when the economy will likely be even more vulnerable.

None of these factors alone is, at present, menacing enough to deliver a knockout punch a la Fight Club, to derail the economy. But taken together, against a backdrop of slowing growth and higher rates, they combine for a toxic mix of jabs and hooks that might just weaken the recovery enough to bring it to its knees. In the immortal words of *Fight Club*: "One a long enough timeline, the survival rate for everyone drops to zero." Here is to hoping that that timeline is as infinitely long as possible.

None of these factors alone is, at present, menacing enough to deliver a knockout punch a la Fight Club, to derail the economy. But taken together, against a backdrop of slowing growth and higher rates, they combine for a toxic mix of jabs and hooks that might just weaken the recovery enough to bring about a recession.

Not an Acute Banking Crisis, but a Slow Rolling One

"We're the middle children of history. No purpose or place. We have no Great War. No Great Depression. Our Great War's a spiritual war... our Great Depression is our lives."
– Tyler Durden, Fight Club

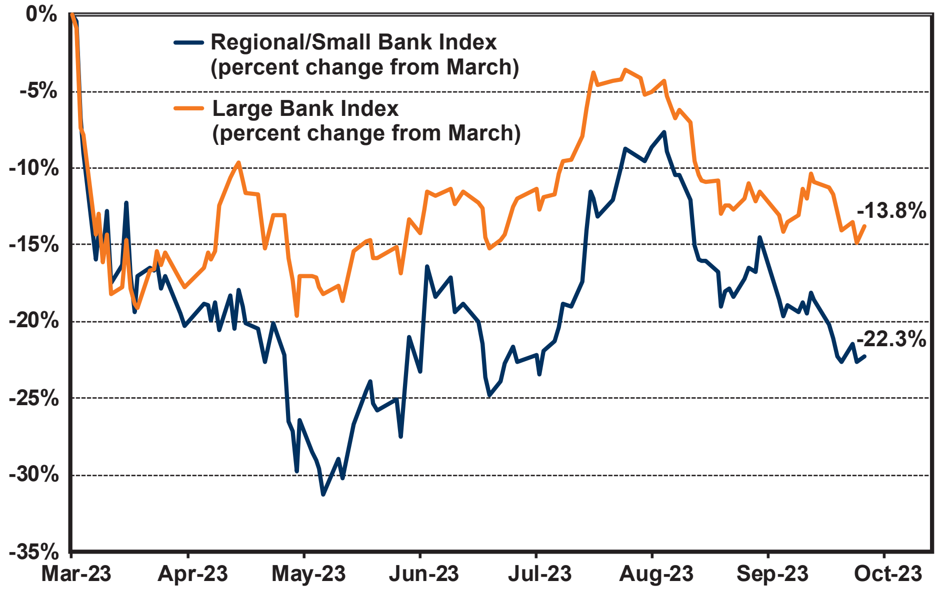
Lamenting the absence of "a Great War or a Great Depression" is an odd way to stab at the heart of modern life, especially when mourning the tragic lack of a higher purpose, as Fight Club does. But then you realize that the spiritual war may be just as daunting, perhaps even more so, in part because there are no headline-grabbing moments, no great flashes of crisis or glory. Just the drudgery of daily existence with its hopes and failures, which may end up being just as difficult as a Great War or a Great Depression.

The banking sector was spared its Great Crisis this year, thanks in large part to swift action by the U.S. authorities, drenching the system with enough liquidity to stem the panic and soothe frayed nerves. Calm has returned in the market. Policymakers are no longer dousing fires but issuing reports about lessons learned. Yet, while a full-blown headline-grabbing crisis was averted, as we cautioned in these pages in the past, a low-grade simmering corrosion may be brewing. The banking sector's Great War is now a spiritual one, especially for many small/regional ones, who must spend the next several quarters cleansing and repairing their balance sheets.

That's because the troubles in the banking system are far from over. Financial institutions, large and small, will likely remain under pressure to maintain net interest margins and profitability as long as interest rates remain high, and the yield curve is inverted (Figure 11). To be sure, large banks will fare better than smaller ones: Three of the largest four U.S. banks by assets (JPMorgan, Bank of America, and Citibank) made a combined $22.3 billion in the second quarter of this year, far more than a year ago, even as they set aside a jaw-dropping $9.9 billion in provisions for loan losses, the largest since the pandemic. But large banks are also under duress. With the exception of JPMorgan, whose market cap is now flat relative to its March valuation (before the banking hiccup), the rest of the top banks have shed anywhere from 12.8% (Wells Fargo) to 21% (Citibank). Despite these woes, losses from regional banks are far worse ranging between 30% to 70% over the past six months.

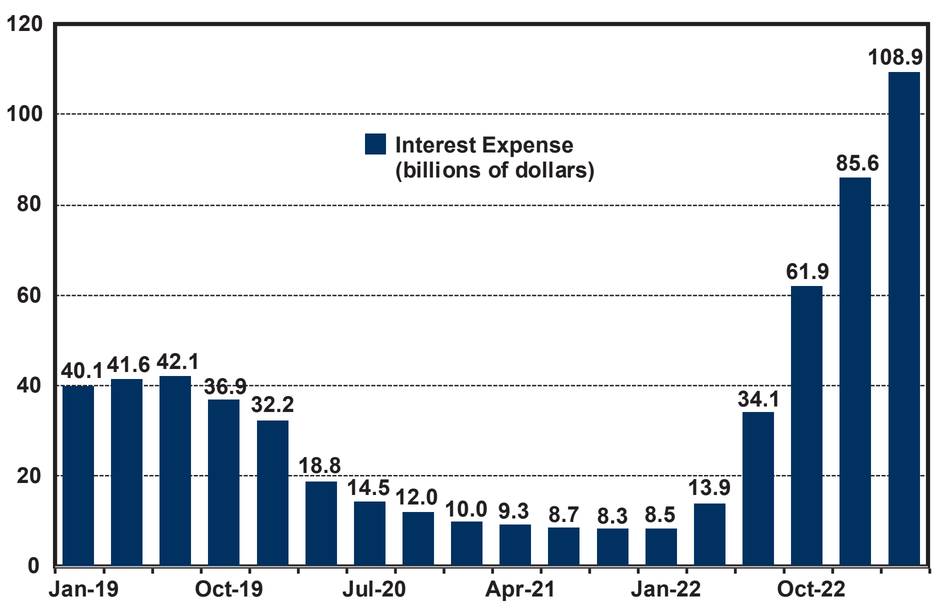
Financial institutions, large and small, will likely remain under pressure to maintain net interest margins and profitability as long as interest rates remain high, and the yield curve is inverted.

FIGURE 11
Banking Sector Troubles: Market Values Have Declined for Large and Small Banks (percent change from March 2023)



In theory, banks should perform well when interest rates rise because their interest expenses increase but the rate earned on loans rises even more. This benign cycle has not quite played out this time around because the yield curve is inverted, which means that interest income earned on loans has not kept up with short-term rates paid on deposits. Besides, the rate on deposits has risen substantially to stamp out the stampede of flighty depositors. For the banking sector as a whole, total interest income nearly doubled from the first quarter of 2022 (when the Fed began raising rates) to Q2 2023, while interest expenses have shot up by a dizzying 800% during this period, from $14 billion to $108 billion (Figure 12). Not surprisingly, net interest income — the difference between income and expenses — has edged down from a high of $180 billion at the end of 2022 to a current $174 billion.

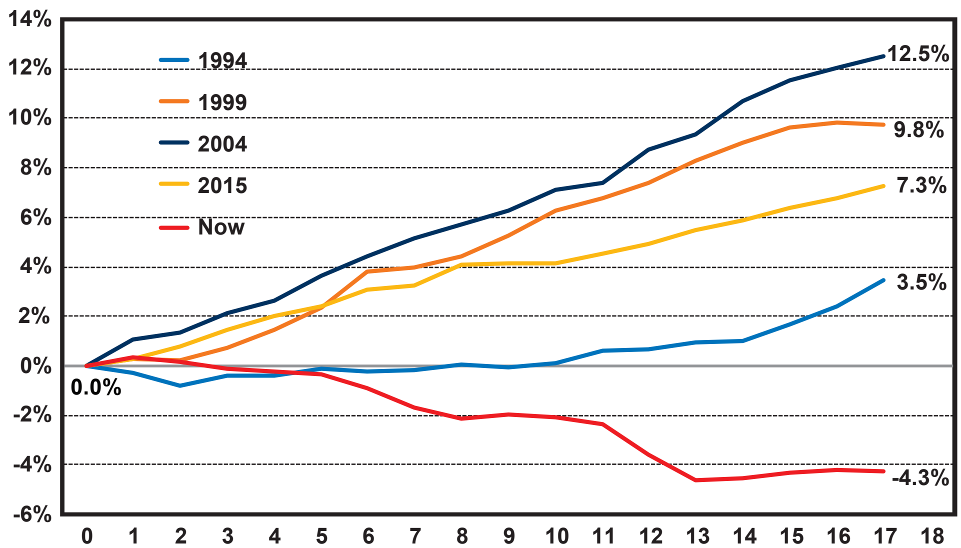
FIGURE 12
A Hefty Price to Pay: Banks are Paying High Interest to Hold on to Deposits (billions of dollars)



The banking sector has leaked a total of $800 billion in deposits since the start of the rate hiking cycle. During that same period, inflows into money market funds rose dramatically, by $900 billion. While money market funds tend to benefit in times of rising rates, the influx this time around is much higher than in all hiking cycles over the past 30 years. More concerning is the drop in deposits. In the previous hiking cycles, deposits actually grew — at a more tepid pace than usual but they expanded, nonetheless. This is in sharp contrast to the current environment when total bank deposits shrunk by 4.3% (Figure 13). Much of this has to do with the swift pace of rate hikes, the fastest in over four decades. The deposit hemorrhage has stopped over the past four months, but only because banks are paying hefty rates to hold on to them.

In the previous hiking cycles, deposits actually grew — at a more tepid pace than usual but they expanded, nonetheless. This is in sharp contrast to the current environment when total bank deposits shrunk by 4.3%.

FIGURE 13
Bank Deposits During a Tightening Cycle
(cumulative percent change, months since start of tightening cycle)



Banks are also hamstrung by sizable losses on their securities portfolios as interest rates have marched upwards. As of the second quarter of 2023 (latest available data), unrealized losses have tallied up to $558 billion, up 8.3% from the previous quarter. Unrealized losses on held-to-maturity securities totaled $309.6 billion, while losses on available-for-sale securities were $248.9 billion. If banks were forced to account for these losses, roughly half would fall below the minimum levels of capital cushion required by regulators. Of course, banks do not need to mark the value of their assets to market, but these unrealized losses, even if they remain just that, unrealized, place further strain on banks and dry up liquidity.

The cost of capital for the banking sector is also on the rise. Investment grade credit spreads have risen by 50 basis points for diversified banks and by 150 basis points for regional banks since SVB's collapse.

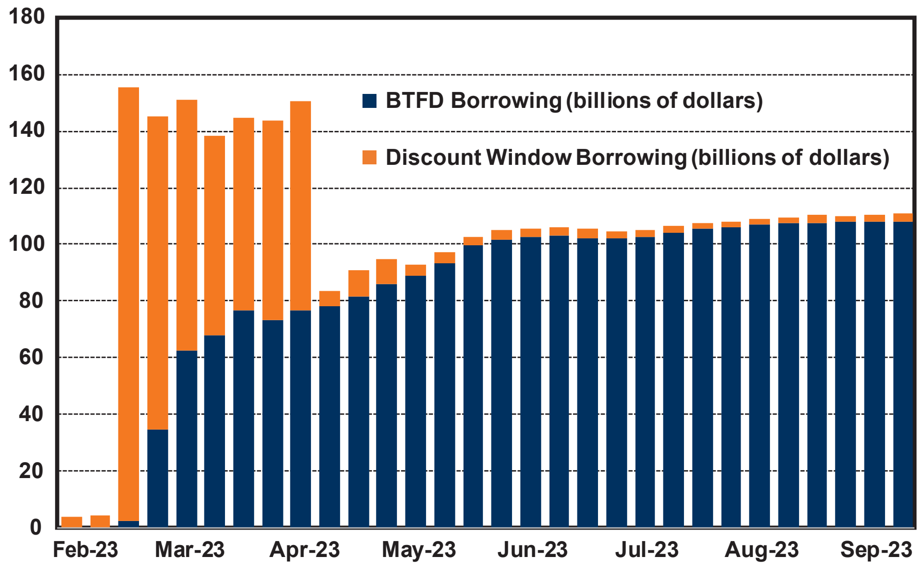
The cost of capital for the banking sector is also on the rise. Investment grade credit spreads have risen by 50 basis points for diversified banks and by 150 basis points for regional banks since SVB's collapse. This is equivalent to a 150-basis point federal funds rate hike for regional banks and 50 basis points for large banks. Weighing these costs by banks' share of loans/leases, this amounts to an equivalent of 80 basis point rate hike for the banking system as a whole.

Growing financial risks and a darker overall outlook prompted Moody's and S&P to downgrade a total of 15 banks in August. The downgrade swept not just some beleaguered small and mid-sized banks, but also a few large lenders. Several others were placed on watch list for potential downgrades including a few banks that, based on their size, are almost-systemically important, such as U.S. Bank ($680 billion), Truist Financial ($540 billion), Bank of New York Mellon ($348 billion), State Street ($290 billion), and Northern Trust ($157). The risks vary, with some banks holding low capital buffers (U.S. Bank and Truist Financial), and others experiencing dangerously large deposit outflows (State Street and BNY Mellon).

Borrowing from the credit facilities has subsided somewhat but remains elevated. Borrowing from the newly minted Bank Term Funding Program (BTFD) rose to $107 billion in June and has remained at that level ever since (Figure 14). Discount window lending has declined as the more favorable BTFD program has taken over, but the Federal Home Loan Bank, a lender of next-to-last resort, issued a total of $790 billion loans this year, almost double what it offers over the entire year in normal times. While borrowing from these facilities may not necessarily mean that banks are experiencing acute stress, it does point to liquidity challenges that some financial institutions are facing. Importantly, while buckets of liquidity and generous terms have undoubtedly helped in preventing bank vulnerabilities from becoming a full-blown financial crisis, they may not be a panacea for all banks. Guarantees of a full deposit bailout, charitable terms, and $93 billion of unusually generous emergency loans, were ultimately not enough to keep First Republic alive.

While borrowing from these facilities may not necessarily mean that banks are experiencing acute stress, it does point to liquidity challenges that some financial institutions are facing.

FIGURE 14
Borrowing from Emergency Funds: Still Elevated
(billions of dollars)

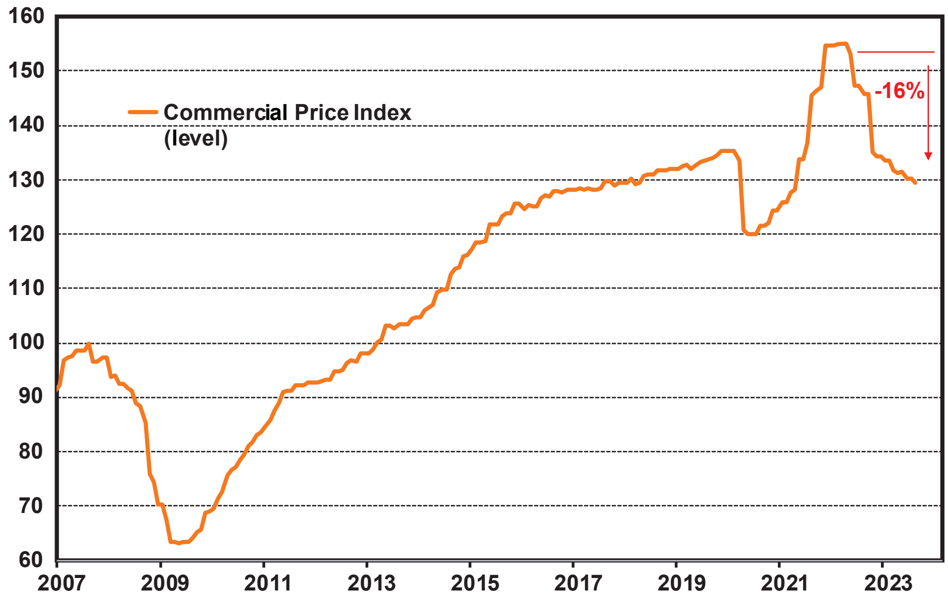


The list of banking sector woes is daunting enough without having to look at the other side of the ledger: the potential for souring loans should the economy weaken and defaults mount. Bank charge-offs have edged higher from their recent historic low levels, but they are still below average rates. Nonetheless, cracks are appearing: According to Equifax data, consumer delinquencies on auto loans and credit cards have risen to levels last seen in 2011, when the economy had just begun to recover from the financial crisis and consumers were repairing their balance sheets. Auto loan delinquencies have risen across the board for all credit scores, with all groups posting jumps of 20% or more (compared to 2019). For some, the rise in delinquencies is as large as 45%.

The list of banking sector woes is daunting enough without having to look at the other side of the ledger: the potential for souring loans should the economy weaken and defaults mount.

By far, the weakest spot and the one most closely watched is commercial real estate (CRE). By all accounts, the rout here has barely begun, in part because depressed activity and a lack of transaction volume, especially in the office market, makes valuation difficult (Figure 15). According to MCI RCA data, the volume of commercial property sales in July had collapsed by 74% compared to year-ago levels. Sales in downtown office buildings have hit the lowest levels in at least two decades. The doom and gloom has yet to be reflected in figures: According to Moody's Analytics, so far, the bulk of commercial real estate correction has occurred in the multifamily space, which declined by 16% relative to its all-time high set in mid-2022. Valuations in the office markets have only declined by 5%. Other segments of the CRE market are holding up better, with valuations in industrials and retail having fallen by 4.5% and 1.9%, respectively.

FIGURE 15
Correction in the CRE Market Will Continue
(Green Street CRE Price Index, level)



The banking sector's exposure to CRE debt is concerning, though given the more modest size of the CRE market, less alarming than its exposure to toxic home mortgages a decade and a half ago, at the onset of the financial crisis.

The banking sector's exposure to CRE debt is concerning, though given the more modest size of the CRE market, less alarming than its exposure to toxic home mortgages a decade and a half ago, at the onset of the financial crisis. The total debt in the CRE market is around $4.5 trillion backed by income-producing properties and an additional $490 billion of construction loans. Banks hold around 40% ($1.8 trillion) of income-producing loans and around 45% of all CRE mortgages ($2.3 trillion). Adding up all trading portfolios and other assets linked to commercial properties brings banks' total exposure to CRE at $3.6 trillion, roughly 20% of bank deposits.

The issue is that the exposure, and subsequent pain, is not evenly spread. Banks with less than $250 billion in assets hold about three-quarters of all commercial real estate. They accounted for nearly $758 billion of commercial real-estate lending since 2015, or about 74% of the total increase during that period. In fact, CRE loans accounted for a mere 4.5% of total assets of the 25 largest banks, but for a heftier 16.2% for banks with assets between $10 billion and $160 billion, for 24.3% for banks with assets between $1 billion and $10 billion, and for 18.2% for banks between $100 million and $1 billion in assets (Figure 16). Should conditions deteriorate further in the commercial real estate space, as it is widely expected, small and regional banks will bear the brunt of the correction. Signs of stress are already emerging: The delinquent CRE loan balance totaled $18.2 billion in the second quarter, up 35% from a year earlier, according to the S&P Global Market Intelligence data.

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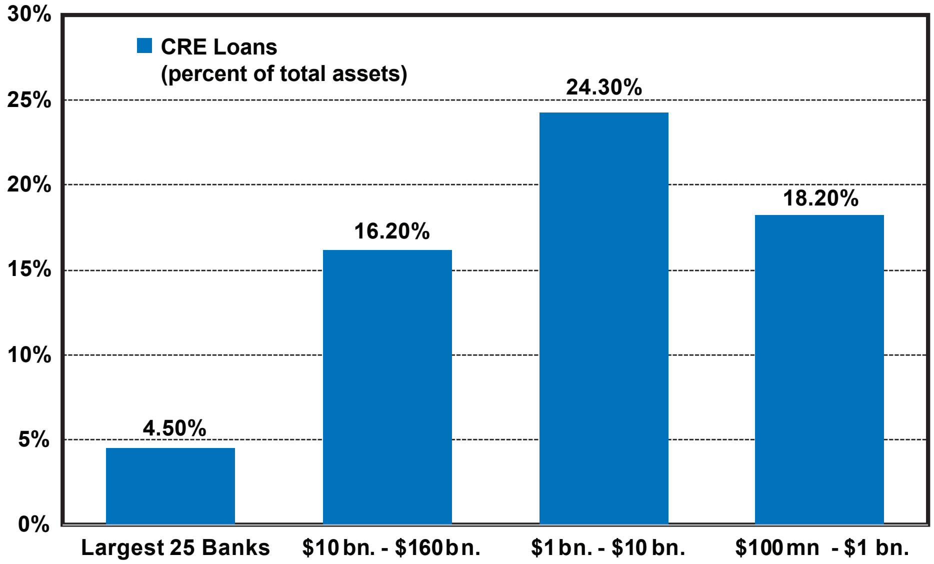
FIGURE 16
CRE Loans Make up a Hefty Portion of Midsize Banks' Assets
(CRE loans, percent of total assets)



The good news is that troubles in the CRE market alone are unlikely to plunge the economy in a deep recession. To start with, the market size of CRE debt is only a bit more than a third of single-family mortgage debt. And banks have reduced exposure to both in the intervening decade since the financial crisis: CRE debt as percent of GDP stood at 17% in Q4 2007, while single-family mortgage debt accounted for 76% of GDP. Those figures had fallen to 13% and 51%, respectively, as of the second quarter of 2023. More heartening is the fact that the most troubled spot, the office market, accounts for only 17% of the total CRE market (or $833 billion). Of the $728 billion of maturing CRE debt in 2023 and $659 billion in 2024, office accounts for 25% ($182 billion) this year, and 15% ($100 billion) next year. By itself, this amount is too small to present a serious systemic risk, and while some banks will suffer, the fact that CRE debt is spread among the many smaller financial institutions helps mitigate the overall risk to the economy.

This means that unlike the heart-stopping crisis of 2008, this will resemble more to a slow-moving credit squeeze, which will play out over many months and years. A long slog rather than a dramatic seizing up of liquidity, which is likely to worsen as the economy slows and the credit cycle turns. Signs of a credit squeeze are everywhere: A full 50% of banks have tightened standards for commercial and industrial loans to firms large and small, with nearly 70% doing so for CRE loans (Figure 17). This is the highest number recorded outside of a recession, and only a hair below the Great Recession. Loan demand has collapsed. Loans and leases from the banking sector grew by a pitiful 1.8% so far this year, far below the 8.8% pace recorded over the same period in 2022. According to the Fed's Senior Loan Officer's Survey, half of commercial banks reported weaker demand for commercial and industrial loans in the third quarter of this year, with two-thirds of banks reporting weaker demand for CRE loans. Both figures far surpass the troughs of the pandemic and are close to levels last seen during the financial crisis.

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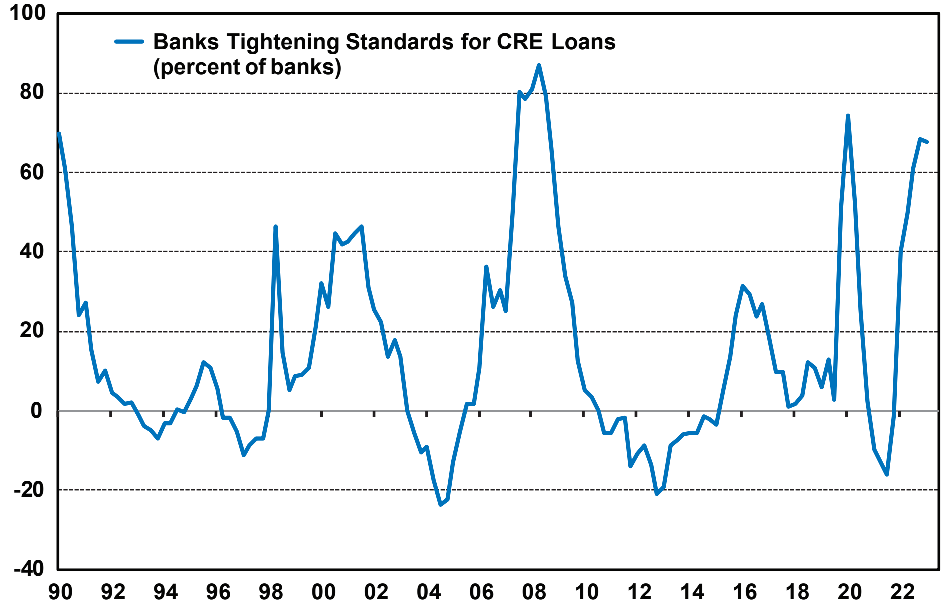
FIGURE 17
Financing CRE Loans has Become as Hard as During Recessions (percent of banks tightening standards for CRE loans)



This matters. The Senior Officer Loan Survey is a reliable predictor of business cycles, leading credit growth and employment with a time-lead of around 6-12 months. The turning of the credit cycle has thus, just begun. But unlike the sharp, violent, and brutal crunch of the 2008 financial crisis, this one will likely unfold more slowly and less urgently, where tighter credit erodes growth and prompts defaults which further sour banks' balance sheets. Welcome to the banks' Great War of attrition and endurance!

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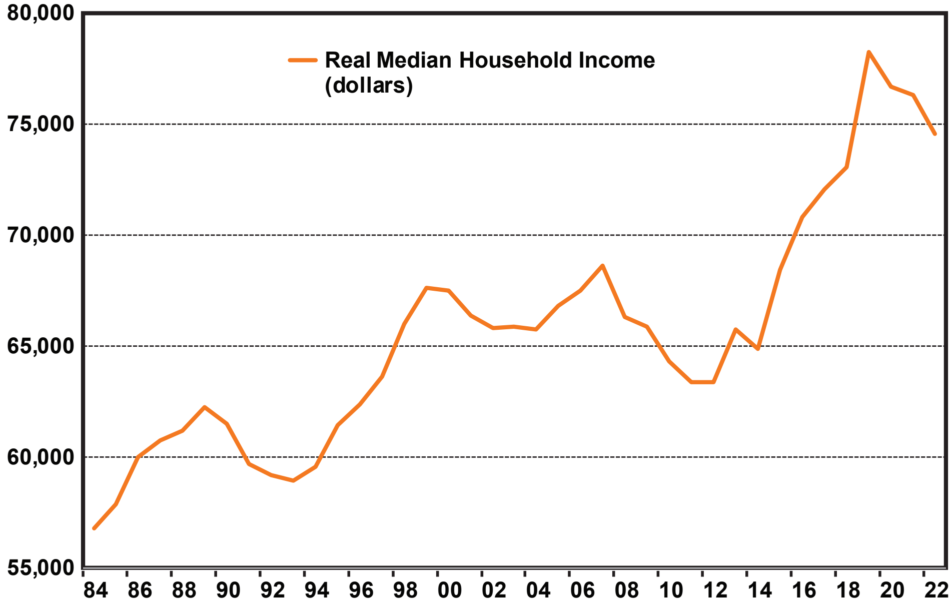
In the Basement of Flight Club: Battling the Last "Inflation Mile"

"The things you own end up owning you."
– Tyler Durden, Fight Club

Nothing captures the American zeitgeist over the past two years better than this Durden reflection, likely his most pithy and scathing indictment on the drudgery of modern life. The cost of owning things is so sky-high that even if things don't truly own you, they have blown a sizable hole in your standard of living. Americans surely feel this way: Real median income fell from a high of $78,250 in 2019 to $74,580 in 2022, a 4.7% decline, the fastest in over four decades (when records began) (Figure 18). The pace of inflation has come down from a high of 9.1% to a current 3.7%, but slowing inflation does not mean that the price level has come down. In fact, the overall consumer price index (CPI) has risen by a mind-boggling 18.4% compared to pre-pandemic, more than two and a half times the rate that would have prevailed had the bout of inflation never happened. By some estimates, it now costs a family earning the median income an additional $750 per month to purchase the same basket of goods and services as two years ago. In every corner, you can feel the palpable discontent. In the words of Fed Chairman Jerome Powell: "…People just hate inflation. Hate it. That causes them to say the economy is terrible, but at the same time, they're spending money."

FIGURE 18
Eating Away: Real Median Income Has Fallen Due to Inflation (dollars, level)



And therein lies the rub. By all types of metrics, inflation has come down, but it is still not quite tamed, in part because the economy has proven to be extraordinarily resilient. The barrage of rate hikes that has been administered so far has not plunged the economy into a recession because economic drivers are different today when compared to 40 years ago when the Fed last embarked on its great inflation battle. The economy is more service-oriented now than back then. In fact, the Fed's rate hike campaign has worked as intended: Housing, autos, manufacturing, and durable goods have slowed considerably over the past year and a half. The problem is that combined, these sectors currently account for only around 20% of the U.S. economy, far lower than they did back in early 1980s. The bulk of the economy, which tends to be more service oriented, is slowing down but at a more gingerly pace because services tend to be less interest-rate sensitive. This means that wringing out the last bit of excess inflation, tackling the last "inflation mile," so to speak, will prove to be a harder lift and a slower grind.

Start with the causes of disinflation over the past year. Inflation has moderated due to a handful of factors, chiefly energy prices, which went from growing at an annual rate of 40% last summer to -16% during this year. Core goods have also moderated, deflating at an annualized rate of -2% in September, a reversal from the nearly 20% growth posted last year (Figure 19). Used vehicle prices have also decreased by a total of 7.5% relative to last year's peak values, after growing at an astounding 27% rate in the first half of 2022. The largest drag on prices has likely come from the tightening of the money supply: For the first time since World War II, the money supply decreased after the unwinding of unprecedented pandemic-related fiscal and monetary policy support.

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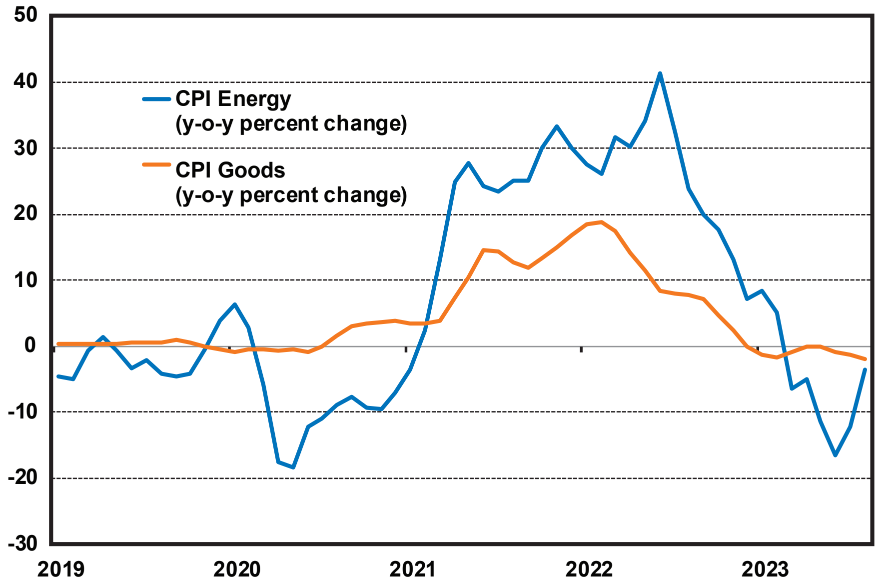
FIGURE 19
Inflation Has Fallen Because of Energy and Goods Prices
(y-o-y percent change)



The worry is that some of the drop in inflation so far has depended too much on the reversal of one-off factors and painless changes that are unlikely to be repeated. The untangling of supply chains and the correction of COVID distortions eased pressures on goods inflation. Shipping container rates have declined near levels last seen before the pandemic. The early phase of the Russia/Ukraine conflict choked off energy and commodity supply lines, driving oil prices sky-high, but most of these issues were resolved by the end of last year. Oil prices slumped by 38% from June of last year to May of this year.

This reprieve might even go in reverse, at least in the short term. Headline inflation rose from an annualized pace of 3% in June to 3.3% in July and 3.7% in August. Oil prices are on an upswing again thanks to OPEC production cuts announced by Russia and Saudi Arabia this summer which were subsequently extended until the end of the year. Oil prices have rallied by 30% since then. Nationwide average gas prices breached the $4 per gallon mark at the end of September, the highest since August 2022 when inflation was raging. They have edged down a bit since then, but at a current level of $3.94 per gallon, they will continue to put additional strains on consumers. Gas prices in California, always higher than the national average, have jumped to $6 per gallon and are within striking distance of the $6.30 per gallon set last year. Some of the rise will likely be reversed over the next few weeks after the state ordered a quicker transition to the winter-blend gasoline from the summer-blend to ease the pressure and increase fuel supplies, but that will take a while. Similar worrisome trends can be seen in other markets: The disinflation in used car prices has plateaued while commodity prices are on the march again. The CRB Thompson Reuters Commodity Price Index has risen by 11% over the past three months.

Optimists once thought that inflation was transitory; pessimists these days fret that the current disinflation may be fleeting. Our view is more sanguine, though as we have maintained since the onset of this bout of inflation, the battle to bring it to heel will be long and not always smooth. Aside from the volatile food and energy prices, the underlying core service inflation will be harder to wring out, in part because it is driven by slow-moving trends: shelter costs and wage pressure.

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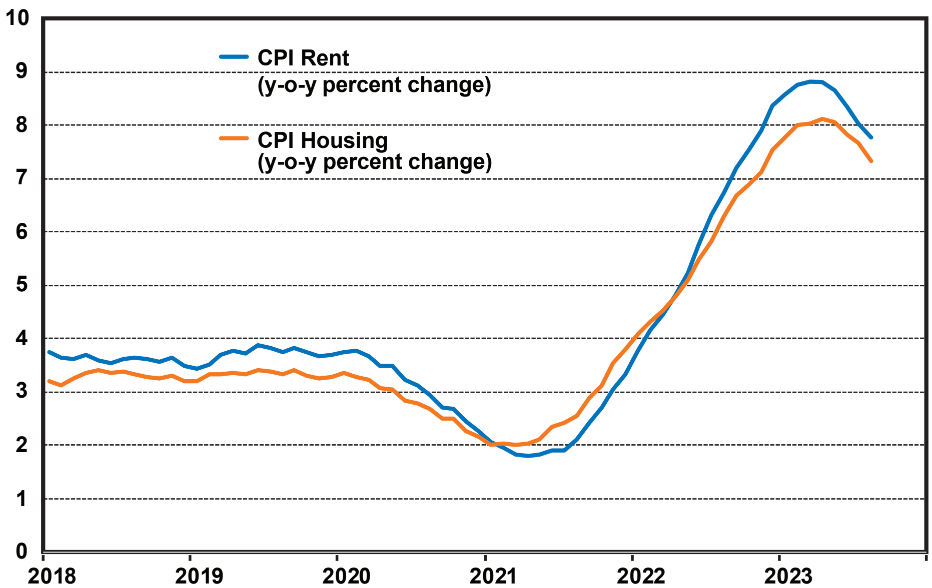
Take shelter costs first, which hold the most promise. Shelter accounts for 41% of CPI inflation and indicators have been softening recently. The CPI rent component has eased from a forty-year high of 8.8% to a current 7.8%, while the CPI owner's equivalent rent dropped from 8.1% to 7.3%. Both are still considerably above their historical averages of around 2.6%-3% (Figure 20). While we expect disinflation in these measures over the next few quarters, the pace won't be as swift as hoped for two reasons.

FIGURE 20
Shelter Inflation Will Come Down...But at a Slower Pace
(y-o-y percent change)



First, there is a dichotomy between rents and home prices. Rent growth has finally normalized around its long-run average, rising by around 3.5% per year as of August (latest available data) after jumping by as high as 17% earlier in 2022. Construction of multifamily residential units picked up dramatically during the pandemic and has remained elevated ever since with around one million sq ft to be completed over the next few months. The surge in new units will significantly increase supply, putting downward pressure on rents in the coming year. Nonetheless, a dearth of housing supply, due to a dramatic decrease in existing home sales, has severely restrained the supply of homes for sale, reversing a drop in home prices that commenced last year. After an initial wobble due to higher rates, home prices, as measured by the Case-Shiller National Price Index, are back to their pre-hike peak. Ultimately, we expect some correction in home prices, but not until next year.

The second reason for a slower reversal of shelter inflation is related to the quirks in its methodology. The Bureau of Labor Statistics (BLS) method of calculating rent inflation lags market conditions significantly because it measures contract rents rather than spot rents (i.e., the rents tenants would pay if they signed a new lease today). In addition, leases are generally re-signed once a year and the BLS surveys units only every six months, adding additional lags to the overall process. This means that any disinflation today will show up in inflation statistics with lags. A couple of new measures — the New Tenant Repeat Rent (NTRR) index, and the All Tenant Repeat Rent (ATRR) index — are more timely. NTRR tends to lead the official CPI data by around one year and ATRR by around one quarter. As of the third quarter, the growth in NTTR is zero while ATRR has just started to edge down. This means that rent disinflation will seep into CPI statistics towards the end of the year and continue into 2024. Our analysis shows that CPI shelter will edge down slowly next year, reaching 3% by mid-2025.

Wage inflation, the second factor for stubbornly sticky inflation, is also hard to dislodge, in part, because labor contracts are set for a period of time. A historically tight labor market, particularly in the service sector, led to unprecedented wage growth which further stoked inflationary pressures. Wages in the labor and hospitality sector, generally, and in the accommodations and food services subsector, in particular, have risen by nearly 20%, far above the rate of inflation, as unprecedented labor shortages have plagued the sector ever since the lifting of pandemic restrictions.

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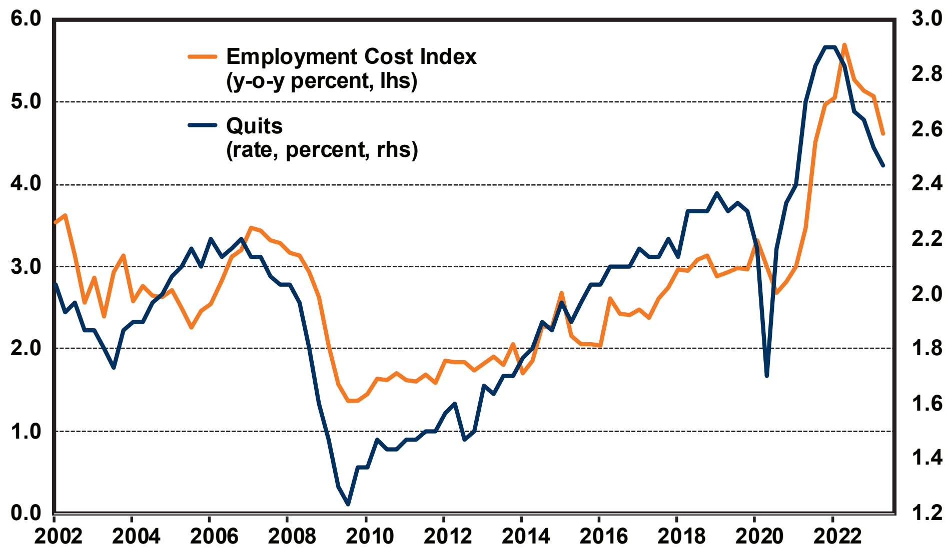
The good news is that wage pressure has started to ease. The BLS Employment Cost index, is running at a 4.6% annualized pace, a full percentage below Q2 2022 values. The Atlanta Fed Wage Tracker Index has moderated to 5.3% from a high of 6.7% recorded last year. Wage growth for job switchers, who generally command a higher premium, has also ebbed from a high of 8.1% to a current 5.6%. The labor market appears to be in a Goldilocks-ish place, running not too hot, not too cold: The pace of job formation has ebbed to 2% annualized pace, a full percentage point below figures posted earlier in the year. More encouragingly, the quits rate — the rate at which people leave their jobs (commonly for better positions) and a great predictor of wage pressure — is only a hair above normal levels after remaining elevated for nearly two years (Figure 21).

FIGURE 21
Quits Rate Is Normalizing...Wages Will Too...But It Will Take a Bit
(rate and y-o-y percent change)



The more disheartening news is that this progress is occurring in fits and starts, with advancements in one area outstripped by reversals in others. The same survey that showed a normalization in quits rate, also reported an unexpected surge in job openings, from 8.9 million to 9.6 million. Wage pressures are also picking up due to demands from unions, which have successfully organized a number of nationwide strikes this year, from Hollywood writers to the Teamsters union negotiations with UPS. Both yielded hefty gains in wages. As of this writing, the UAW has expanded its strike against all three automakers — a first in history — demanding pay raises as high as 46%.

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Labor supply continues to remain scarce adding to the tightness in the labor market. After slowing to a trickle during the pandemic, a historic and unexpected rise in immigration boosted labor supply over the past year (Figure 22). Though robust immigration rates may continue to prevail given the current administration's friendlier attitude towards immigration, the outsized increase is unlikely to be repeated since it reflected a catch-up on a backlog of visa applications that were not fulfilled during the pandemic. There also does not appear to be much slack in the labor market currently to boost labor supply. Except for the elderly (those older than 65), the labor force participation rate and the employment-to-population ratio for all age groups are above pre-pandemic levels.

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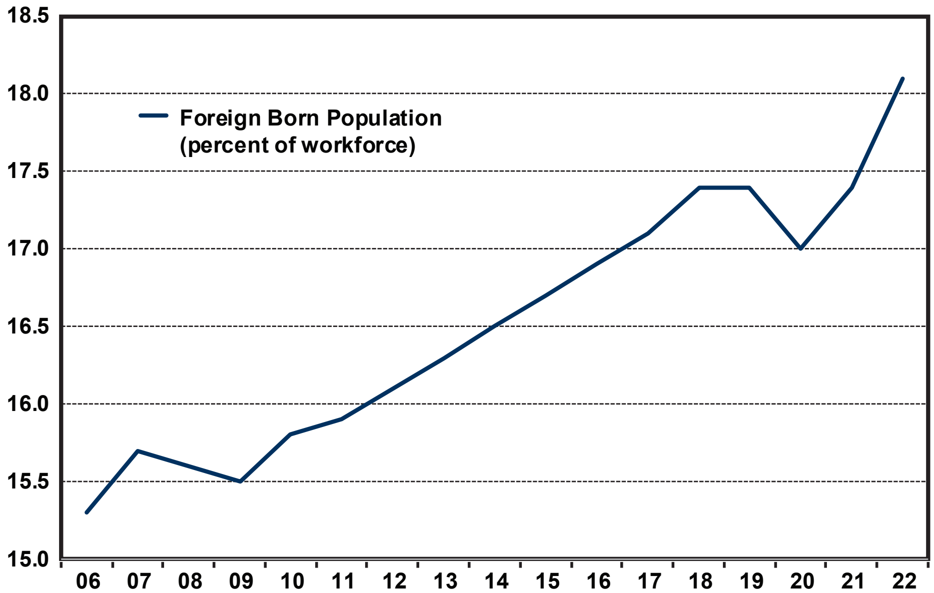
FIGURE 22
A Reprieve in the Labor Market: Foreign-Born Population Boosts Labor Supply (percent of labor force)



Wage pressures will ease up as the labor market softens and ultimately buckles. The issue is that this process will take a while longer — likely until early to mid-next year — when we expect recessionary pressures to take a more obvious toll on employment levels. Until then, the battle against inflation will continue.

In the words of *Fight Club*: "You created me! I didn't create some loser alter-ego to make myself feel better. Take some responsibility!" The Fed may not be entirely to blame for birthing the highest inflation in four decades, but it did pour endless buckets of liquidity in a world already awash with fiscal cash and entangled in supply chain snags and pandemic distortions. It also failed to act sooner to prevent inflation from getting out of hand. It is now taking responsibility for some of its mistakes by sticking to its "higher for longer" newfound mantra. Whether it will have the steely resolve to do so, remains to be seen. Our view is that, when all is said and done, it will likely buckle under pressure and settle for a "two-point something inflation" rather than a "two-point zero rate," as Mr. Clarida, an ex-Fed vice chair somberly put it.

Project Mayhem: Where is that Promised Recession?

Tyler Durden: "You know why they put oxygen masks on planes?"

Narrator: "So you can breathe."

Tyler Durden: "Oxygen gets you high. In a catastrophic emergency, you're taking giant panicked breaths. Suddenly you become euphoric, docile. You accept your fate. It's all right here. Emergency water landing - 600 miles an hour. Blank faces, calm as Hindu cows."

– *Fight Club*

The U.S. economy has been on the brink of a catastrophic emergency landing and has received giant helpings of oxygen a few times since the Fed embarked on its rate hike campaign. By our count, there have been six times in the past 15 months when the conventional wisdom has shifted between the two extremes of either an imminent disaster or a pillow-soft landing, with the switch oftentimes happening at lightning speed. Even the Fed has had its own moments of doubt, first forecasting an ongoing expansion, then a shallow recession, only to ultimately land on a soft-land-ish scenario as reflected on its latest "dot plot." But the (dot) "plot" has thickened since then and, as of this writing, fears have returned that maybe, just maybe, the U.S. economy may no longer stick the landing. Time for some panicked breaths of oxygen! Then, predictably, another round of euphoria!

By our count, there have been six times in the past 15 months when the conventional wisdom has shifted between the two extremes of either an imminent disaster or a pillow-soft landing, with the switch oftentimes happening at lightning speed.

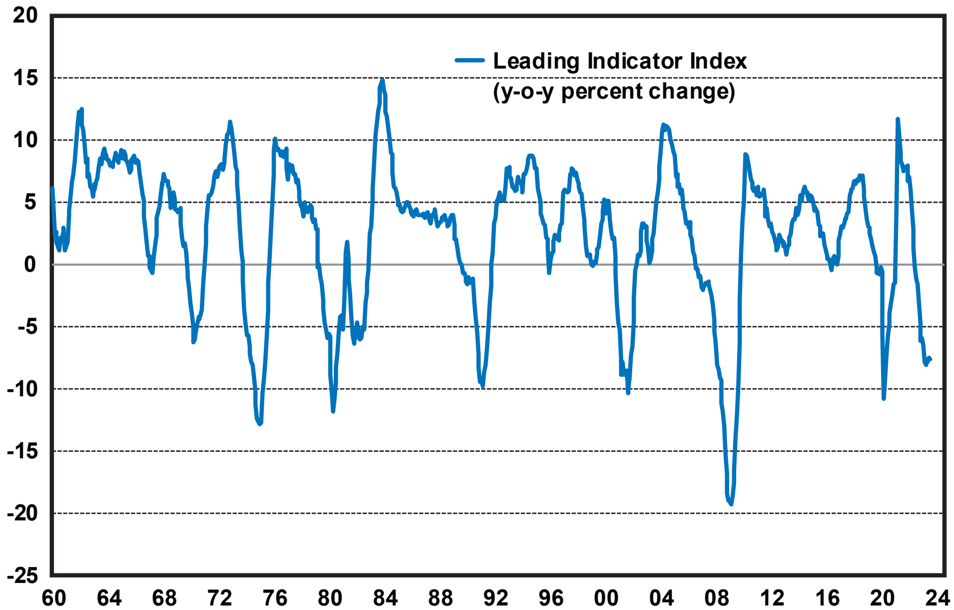
There are two reasons why the economic outlook appears less clear cut now than in normal times. First, the turning points of the business cycle are always characterized by conflicting signals, particularly in times when the Fed tries to deflate an overheating economy. At this stage, the economy is usually strong, but slowing, with some sectors humming along and others falling behind. This makes for a hazy picture. But the fog is even more pronounced now than in prior cycles because the world economy has run on low interest rates for over a decade and a half. That era seems to be over. And the new paradigm — one where interest rates are higher — is a bigger seismic shock than what most anticipate. As the world adjusts to this shift, the signal-to-noise ratio will remain higher than usual.

The turning points of the business cycle are always characterized by conflicting signals, particularly in times when the Fed tries to deflate an overheating economy.

The second reason for a more opaque outlook has to do with the very nature of the recent recession and recovery. Pandemic-related traumas — lavish government support, once-in-a-generation labor shortages, and lopsided patterns of consumption spending — have distorted traditional signals and delayed the pain of monetary tightening. Historically reliable recession indicators — such as an inverted yield curve, the ISM manufacturing index, or the Conference Board Leading Indicator Index — have been ringing alarm bells for over a year, with no recession in sight (Figure 23). Predictions for a hard landing have fallen short and leading indicators have failed to indicate. On top of it, the task of forecasting has been further complicated by unusually large and sometimes trend-reversing data revisions.

Pandemic-related traumas — lavish government support, once-in-a-generation labor shortages, and lopsided patterns of consumption spending — have distorted traditional signals and delayed the pain of monetary tightening.

FIGURE 23
Leading Indicator Index Has Signalled a Recession for a Year
(Conference Board Leading Indicator, y-o-y percent change)

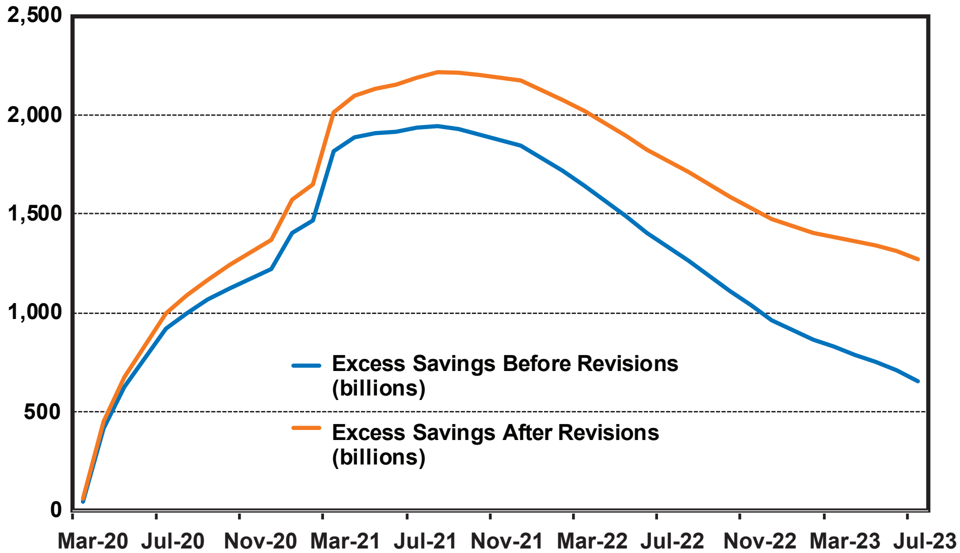


Take unprecedented government support first. A full $4 trillion of fiscal support was doled out during the pandemic, fattening bank accounts and plumping up consumers' coffers. Excess savings reached a peak of $2.6 trillion dollars in the last quarter of 2021. Since then, some extra cash had been spent, but the left-over amount is a matter of debate, with estimates ranging from $300 billion (according to the San Francisco Fed) to $1.3 trillion (according to Moody's). Our own estimates put this number around $600 billion. With this much liquidity sloshing around in the system, it is no surprise that consumer spending has held up and the economy has sidestepped a bull-blown recession.

It turns out that even our lofty estimates fell far short of reality. The latest revision of data from the Bureau of Economic Analysis shows that excess savings were much higher than originally thought: Our estimates now peg it at around $1.2 trillion, twice as large as the old figures (Figure 24). Notably, the revision was not due to consumers saving more since the pandemic, but rather due to them saving less prior to the pandemic. In other words, the pre-pandemic baseline has shifted from a 9.1% saving rate down to 7.2%. Since the baseline comparison is now lower, excess savings today look much higher. But whatever the reason, finding an extra $600 billion of cash you did not know existed in your sofa cushion is no small feat. At the very least, it may buy an additional 12 more months in the life of this expansion while simultaneously throwing a wrench at existing forecasting models.

The latest revision of data from the Bureau of Economic Analysis shows that excess savings were much higher than originally thought: Our estimates now peg it at around $1.2 trillion, twice as large as the old figures.

FIGURE 24
More Excess Savings Than Previously Believed (billions of dollars)



Other pandemic-related distortions abound: The ISM manufacturing index has been in recession territory for the better part of the year even as manufacturing construction across the U.S. has boomed thanks in large part to large dollops of fiscal support from the infrastructure bill, the CHIPS Act, and the Inflation Reduction Act. A reorientation away from a pandemic-induced frenzied demand for goods towards services has also weakened manufacturing outlook and the depressed ISM index may capture, in part, these adjustments. The housing market is exhibiting pathologies of the strangest sort: An acute shortage of existing homes for sale (as homeowners have locked in rock-bottom rates) and sustained demand have caused a surge in prices and new constructions even as mortgage rates inch closer to 7.5%, the highest in more than 23 years. Traumas related to severe worker shortages have prompted firms to hold on to their labor force, even as the economic outlook weakens and demand softens.

Our view is that these distortions have temporarily delayed rather than permanently defeated the ominous specter of recession. The ISM manufacturing survey is likely reflecting some reshuffling from goods to services, but global trade volumes — a reliable bellwether for manufacturing activity — remain depressed as outlook across key economies like Germany and China turns gloomy. The yield curve is known for its mercurial time lags between when an inverted curve emerges and when a recession begins, which can be as long as 22 months and as short as six months. The Conference Board Leading Indicator Index has correctly predicted all post-war recessions whenever the index has fallen below the -4% mark on an annualized basis (it is currently at -7.2%). Our take is that these leading indicators will ultimately prove to be correct, but the distortions unleashed by the unusual recession/recovery pandemic cycle have likely lengthened the time lag between their signals and the turning points of the business cycle.

Our take is that these leading indicators will ultimately prove to be correct, but the distortions unleashed by the unusual recession/recovery pandemic cycle have likely lengthened the time lag between their signals and the turning points of the business cycle.

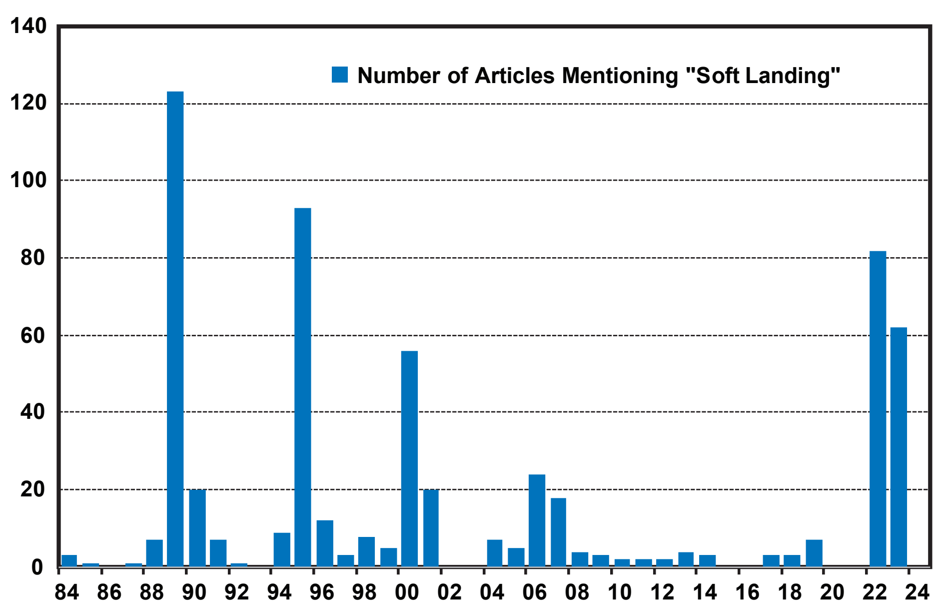
Of course, we are acutely cognizant of the fact that the case against an impending recession has strengthened considerably over the past few months. In fact, it appears somewhat outlandish to predict a recession when economic growth is humming along, consumers continue to spend, and the labor market remains strong. Far from a soft landing, the latest employment report showed that the U.S. economy added a blistering 336,000 jobs in September, double the figure anticipated by the consensus. The figures were a lot less flattering according to the (more volatile) household survey, which penciled in a loss of 7,000 jobs. Given the sizable data revisions which have now become routine, we would not be surprised if the establishment survey number were to be revised downward and the household survey upward in the coming months. But these discrepancies aside, the labor market is clearly not at the edge of the abyss. More encouragingly, wage growth also softened, which is a welcoming news in the battle against inflation.

In fact, the narrative that seems to be unfolding has, at first brush, quite a bit of a Goldilocks fairy tale in it. Inflation has declined without afflicting pain in the labor market. The quits rate has normalized to historical levels, which means wage growth should moderate going forward. Excess savings can easily last consumers another year. There are no glaring imbalances on consumers' balance sheets: Household debt as percent of GDP has edged down from a high of 100% before the financial crisis to a current 72%. Household financial obligations as percent of disposable income have inched higher from the record lows of the pandemic but are still below historical norms. Even the troubled corner of the market, commercial real estate, accounts for a much smaller portion of the economy than the mortgage market did right before the financial crisis, which means this sector alone won't be enough to drag the economy into a recession.

The trouble with this argument is that soft landings and recessions are quite indistinguishable in the early stages. On the eve of every recession over the past 30 years, the consensus was convinced that the economy would experience a soft landing (Figure 25). In fact, soft landing calls have predictably surged right before the economy stumbled into a recession. "The most likely outcome is that the economy will move forward toward a soft landing," said then-San Francisco Fed president Yellen in October 2007, precisely two months before the onset of the Great Recession.

Soft landings and recessions are quite indistinguishable in the early stages. On the eve of every recession over the past 30 years, the consensus was convinced that the economy would experience a soft landing.

FIGURE 25
A Soft Landing is Always Expected Right Before a Recession
(number of articles mentioning soft landing)



Despite all the well wishes (and hopeful predictions), soft landings are rare because they are notoriously difficult to pull off. They are recessions that did not materialize (or recessions in the making) because something broke fortuitously right. Over the past 70 years, the Fed has managed to deliver them precisely three times: in 1966, 1984 and 1995. In all three cases, macrodynamics were dramatically different from today: inflation rates were much lower (around 2.8%) and the labor market not nearly as tight. In fact, in all three episodes, the Fed acted to preemptively tamper inflationary pressures from building up rather than extinguishing an alarmingly high inflation as it is the case today. Most importantly, all three hiking cycles were immediately succeeded by rate cuts (within a few months), as soon as price pressures were brought to heel.

Despite all the well wishes (and hopeful predictions), soft landings are rare because they are notoriously difficult to pull off.

This is a luxury the Fed cannot afford today. As we argue above, squeezing out the last ounce of inflation will prove a bit more challenging than the buckets of juice we've gotten so far. The economy is not rolling over. The labor market continues to expand at a blistering pace and job openings remain ominously high, adding more fuel to the fire. Hence, the "higher for longer" routine. The problem with this is that all ten post-war recessions were preceded by a rate hiking cycle which, unlike those three propitious soft-landing events, could not have been reversed sooner precisely because inflation had already gotten out of hand. To be sure, rate cuts will follow in this cycle as well, likely in mid-2024, but they will come too late. In all previous post-war recessions, the Fed had begun reducing rates anywhere from three to 13 months before the start of a downturn.

All ten post-war recessions were preceded by a rate hiking cycle which, unlike those three propitious soft-landing events, could not have been reversed sooner precisely because inflation had already gotten out of hand.

In fact, an argument can be made that instead of one big engulfing recession, the economy has so far experienced a series of mini, sector-by-sector "rolling recessions". Early in the tightening cycle, the housing and tech sectors— two of the most rate-sensitive industries — slumped. Then, the manufacturing sector rolled over. In March of this year, the banking sector wobbled. According to conventional wisdom, the commercial real estate market will be the next shoe to drop.

An argument can be made that instead of one big engulfing recession, the economy has so far experienced a series of mini, sector-by-sector "rolling recessions".

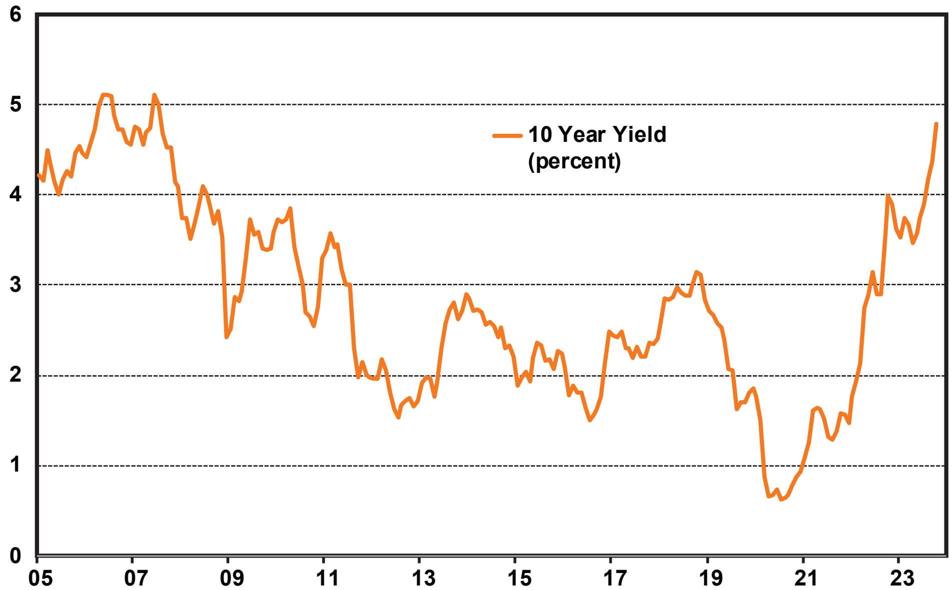
All this means that the economy is more vulnerable than what originally meets the eye. The resumption of student debt payments, after a three-year hiatus, will undoubtedly be a drag, though perhaps a smaller one than some fear. There are around 43 million borrowers with an average monthly payment of around $275, which adds up to a total monthly payment of nearly $12 billion. But not everyone will resume payments as some — those in school, in the armed forces, or earning less than $32,800 — are exempt. This cuts our estimate to around $7.5 billion per month (around $90 billion per year), shaving off around 0.4% from GDP growth.

And imbalances are building. Real personal consumption has run above trend for more than two years, in part because of an outsized jump in durable goods spending (services are just catching up). Consumers are relying more on credit card use even as interest rates on this type of debt skyrocket to over 20%. As of the second quarter (latest available data), credit card debt rose by 16% compared to a year earlier, just a tad below the nearly 18% rate recorded in the first quarter. Delinquencies are rising across the board and corporate bankruptcies have jumped to levels last seen during the Great Recession.

Add to this a credit crunch in the making, and the outlook turns sour quickly. But perhaps the most menacing threat is the surge in bond yields: The ten-year Treasury yield is inching closer to 5%, the highest level since 2007, having risen by half a percentage point over the past week (Figure 26). Part of this is due to higher rates expected to prevail over the next few quarters as the Fed keeps to its "higher for longer" pledge. But by far, the vast majority of the move in yields is explained by a sizable shift in the term premium, which is driven by a yawning imbalance between the supply and demand for Treasuries.

Perhaps the most menacing threat is the surge in bond yields: The ten-year Treasury yield is inching closer to 5%, the highest level since 2007, having risen by half a percentage point over the past week.

FIGURE 26
Long Term Yields Have Shot Up
(percent)



On the supply side, the Treasury has been on a borrowing binge having issued a jaw-dropping $1.7 trillion in Treasuries from January to September of this year (7.5% of GDP), up by almost 80% over the same period a year before. And this is occurring at a time when unemployment is low, and the economy is humming. At the same time, its biggest investor, the Fed, is no longer purchasing Treasuries. On the contrary, the Fed has been shrinking its balance sheet to a tune of around $100 billion per month, reducing its holding of Treasuries by around $1 trillion over the past 15 months. China has also sold around $300 billion in U.S. Treasuries since 2021, including $40 billion since April of this year. Suddenly, there is a supply glut of Treasuries, outstripping demand. Yields have shot up. And just as suddenly, fiscal deficits matter.

In fact, the path of U.S. debt is so worrisome that talk of "fiscal dominance" — the idea that interest rates are set not to control inflation but rather costs related to government debt — has now resurfaced. This is the Fed's nightmarish scenario, when monetary policy ceases to be an effective tool and is forced to support excessive government largesse rather than target growth and inflation. Clearly, we are not at that point. The U.S. is the world's reserve currency which means it has significantly more flexibility than any other country in the world to address domestic concerns. If anything, fiscal dominance issues will likely surface in the Eurozone and the U.K. first before they even hit these shores. Last year's rout of the British bond market was a stark reminder of this. But the immediate concern for the U.S. remains: Buyers of Treasuries will continue to demand higher yields as long as gaps between demand and supply persist.

Higher yields, a coming credit crunch, a still-too-high inflation, and higher-for-longer short-term rates combine for a toxic mix in an economy that is becoming more vulnerable as time goes on and imbalances build. "This is your life, and it is ending one minute at a time," the Narrator laments in *Fight Club*. That's true for every expansion, and it is, alas, even more true for the current one. Our fervent wish is that there be an infinite amount of minutes between now and when the time of reckoning ultimately comes.

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Clearly, we are not at that point. But the immediate concern for the U.S. remains: Buyers of Treasuries will continue to demand higher yields as long as gaps between demand and supply persist.

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ORANGE COUNTY, SOUTHERN CALIFORNIA AND CALIFORNIA

The transition of the national economy from the pandemic-induced excess spending, supply shortages, and global shocks from the Russia-Ukraine war to a somewhat more normal status was never expected to be smooth but rather fitful and unpredictable. Add to this the tardiness of the Fed to anticipate and respond to inflationary pressures and we are left with a tale of high uncertainty and conflicting signals which will take a while to clear. The dizzying rate at which interest rates have risen over the last 16 months has finally begun to show, chipping away at growth, even as inflation has not been fully slayed. We are finally at a turning point wherein the Fed policy is in search of a neutral space, hoping to tame the economy without a hard landing. The strength of consumer spending and robust hiring by businesses have bolstered the overall economic outlook over the past year, but signs of weakness are proliferating, as described in our macro review. Trends in the national economy are reflected in many ways in our local economies, those of the state and Southern California.

The transition of the national economy from the pandemic-induced excess spending, and supply shortages, and global shocks from the Russia-Ukraine war to a somewhat more normal status was never expected to be smooth but rather fitful and unpredictable.

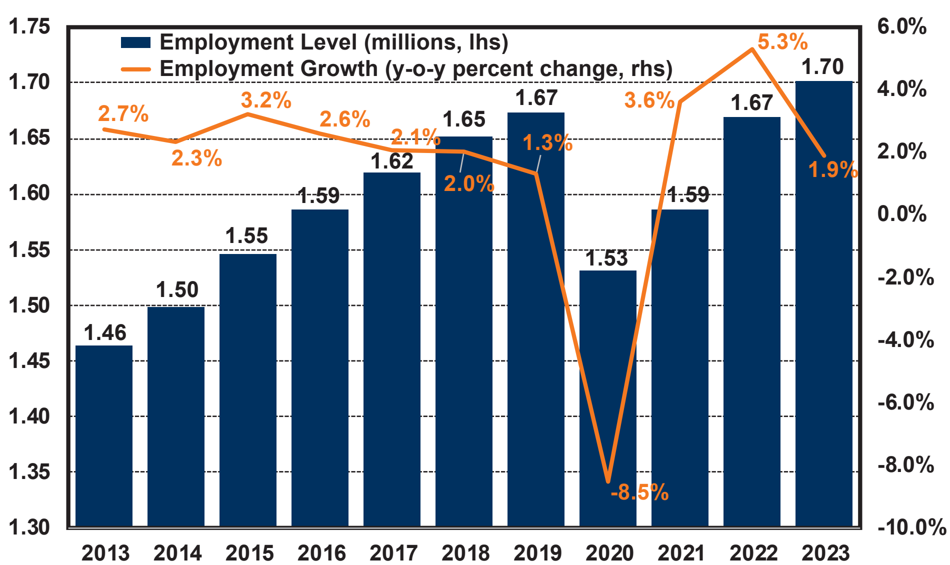
Employment and Demographics

Employment has continued to swell at a better-than-expected pace so far this year in the state of California and in all four major counties of Southern California (Orange, Los Angeles, Riverside and San Bernardino), mimicking national trends. After two years of extraordinary gains — 55,500 (3.6%) in 2021 and 84,000 (5.3%) in 2022 — payroll employment growth in Orange County has slowed to 31,800 (1.9%) this year (on an annualized basis) (Figure 27). This is still more than twice the 20-year average of 0.91%. The comparable numbers for Los Angeles County are 137,00 (3.3%) in 2021, 234,200 (5.4%) in 2022 and 74,400 (1.6%) for 2023 (through August), against a 20-year average of 0.55%. In contrast, the Inland Empire's payroll employment slowed down sharply in 2023 to 7,000 (0.4%) in 2023 (through August), after gaining 79,300 (5.3%) in 2021 and 85,200 (5.4%) in 2022.

We are finally at a turning point wherein the Fed policy is in search of a neutral space, hoping to tame the economy without a hard landing.

After two years of extraordinary gains — 55,500 (3.6%) in 2021 and 84,000 (5.3%) in 2022 — payroll employment growth in Orange County has slowed to 31,800 (1.9%) this year (on an annualized basis). This is still more than twice the 20-year average of 0.91%.

FIGURE 27
OC Employment Has Held Steady...Slowing to Trend
(level and y-o-y percent change)



The 0.4% growth is far below its two-decade average of 2.26%, representing one of the slowest rates outside a recession. The state of California, much like Orange County and Los Angeles, posted solid gains in payroll growth: 2.1% against a backdrop of 1% average annual rate for the last 20 years. As a result of hefty growth in the last three years, all regions and the state are now above their 2019 employment levels, having fully recovered on the basis of this measure.

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The top sectors driving Orange County's employment growth this year are Leisure and Hospitality, with a gain of 10,642 jobs, Health Care and Social Assistance (6,658), Professional and Business Services (4,038), Educational Services (1,363), and Construction (1,308) (Table 1). Among the subsectors, Warehousing and Storage, Professional, Scientific and Technical Services, and Social Assistance stand out with better-than-average growth. Financial Services, Administrative and Support Services, and Local Government Education were the laggards. Los Angeles County gained jobs in Private Education and Health Services, Professional and Business Services, and Leisure and Hospitality but lost employment in Motion Pictures and Sound Recording, Construction, and Wholesale Trade. The Inland Empire was hit with losses in the Trade, Transportation and Utilities sector, usually its stalwart industry, and a slowdown in Construction. Offsetting gains for the two-county region took place in Private Education and Health Services and Professional and Business Services.

TABLE 1
2023 Payroll Employment Change (Major Sectors, Annualized) through August 2023

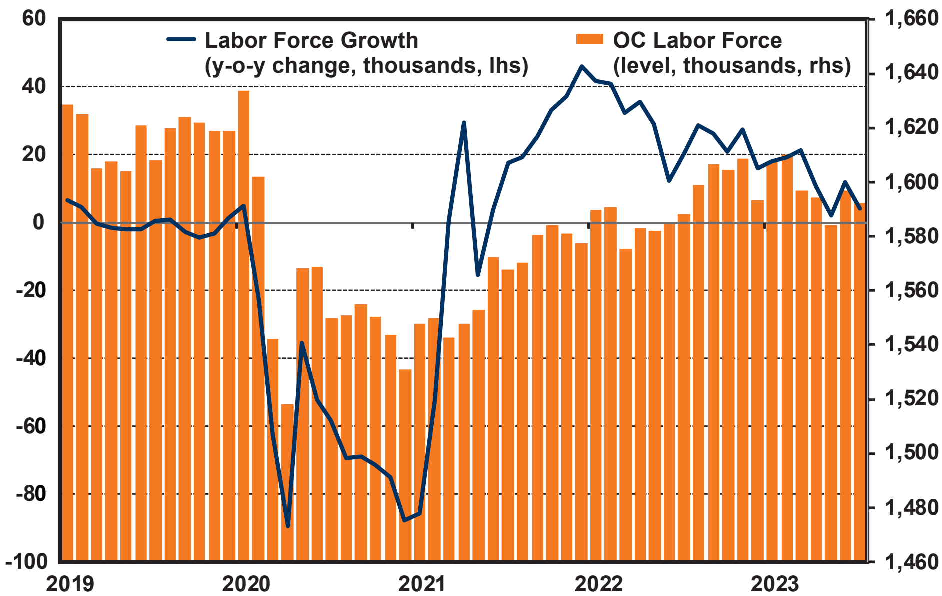
	OC		LA		IE		CA	
Total Nonfarm	31,829	1.9%	74,375	1.6%	6,658	0.4%	285,621	1.6%
Construction	1,308	1.2%	(3,667)	-2.4%	892	0.8%	2,033	0.2%
Manufacturing	1,721	1.1%	(2,071)	-0.6%	(2,088)	-2.1%	1,742	0.1%
Trade, Transportation and Utilities	3,654	1.4%	3,179	0.4%	(10,633)	-2.3%	(10,767)	-0.3%
Information	558	2.3%	(14,308)	-6.1%	(183)	-1.8%	(15,579)	-2.6%
Financial Activities	(933)	-0.8%	250	0.1%	(446)	-1.0%	2,771	0.3%
Professional and Business Services	4,038	1.2%	7,763	1.2%	1,954	1.1%	21,300	0.7%
Educational and Health Services	8,021	3.2%	43,100	4.9%	9,858	3.7%	125,429	4.3%
Leisure and Hospitality	10,642	4.9%	32,121	6.3%	4	0.0%	102,771	5.3%
Government	992	1.9%	4,188	0.7%	5,758	2.3%	36,917	1.5%

Another measure of the employment situation comes from the household survey. The two data sources — payroll employment and household employment — often provide slightly different perspectives on the state of the economy. Unemployment rates are calculated from household responses in that survey. The unemployment rate in Orange County has risen from 3.2% in August 2022 to 3.9% in August 2023, but this is due to a positive development — an increase in the labor force — rather than to job losses (as noted above, employment has increased consistently over the past year). Similarly, the unemployment rate in Los Angeles County has jumped from 4.7% to 5.8% over the past 12 months, while that of Inland Empire rose from 4.3% to 5.3% over the same period.

The labor force in some counties has yet to fully recover from the pandemic-related disruptions. In Orange County, the labor force is still 1.2% below its 2019 level (on an annualized basis) (Figure 28). Los Angeles County fares even worse, with a shortfall of 2.8%. In contrast, the labor force in the Inland Empire grew by 3.6% over the same period. The labor force, which is the sum of people working and those looking for work, is affected by a multitude of factors. There is a normal turnover because of retirements, deaths, and new entrants as the young start to work. However, this process was severely disrupted by the cataclysmic changes unleashed by the pandemic. There was a significant jump in normal-age retirements and early retirements, while at the same time fiscal support likely kept a lot of people out of the workforce. As we argue in the national report, excess savings are slowly being depleted and will likely run out by the end of 2024, but our view is that even then, those who chose to retire early are unlikely to return to work in droves.

The labor force in some counties has yet to fully recover from the pandemic-related disruptions. In Orange County, the labor force is still 1.2% below its 2019 level.

FIGURE 28
Demographic Challenges: OC Labor Force Still Below Pre-Pandemic Level (level, thousands, and y-o-y percent change)

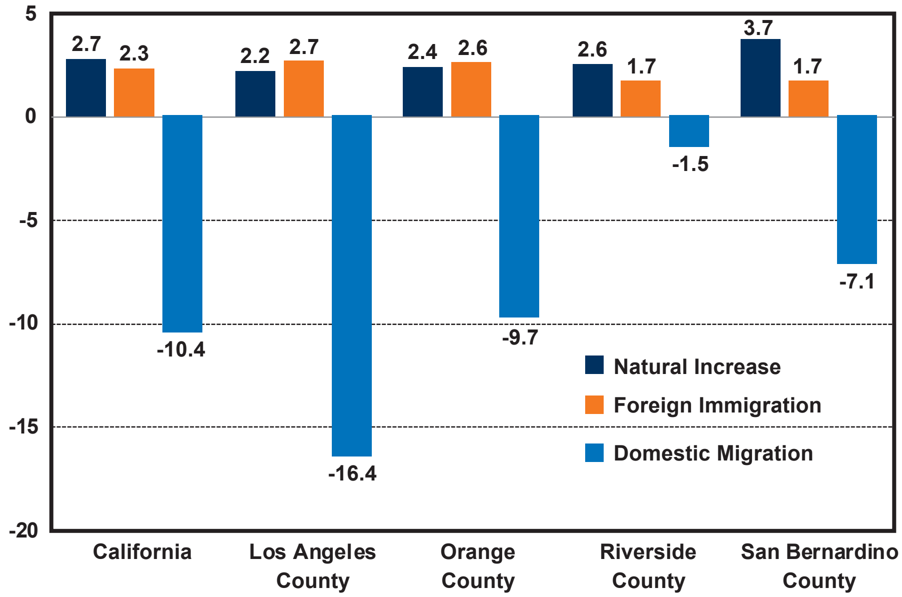


In addition to the internal dynamics of the workforce, there are demographic changes, including natural increase, immigration, and domestic migration, that affect the labor force. California's population has been on a downtrend for a few years and fell by 0.35% in 2022, or roughly by 138,400 persons. Total births remain low due to declines in fertility rates. Deaths have eased gradually from their pandemic peak but remain elevated. After two years of slow growth, foreign immigration in the state soared in 2022 compared to the prior year, with a net gain of 90,300 persons, nearly triple the 31,300 figure in 2021. Orange County gained 8,135 immigrants in 2022 compared to a loss of 624 the previous year. While foreign immigration has nearly returned to pre-pandemic levels, the biggest reason for the adverse population trends is net domestic migration: The state simply continues to lose residents to other domestic regions. Adjusting for population size, as shown in Figure 29, California lost an average of 10.4 persons per one thousand to other states. Los Angeles County lost 16.4 (per one thousand) residents, while Orange County lost 9.7 (per one thousand). While domestic migration is an ongoing phenomenon, high housing costs and high taxes in the state are often cited as the top two reasons.

California's population has been on a downtrend for a few years and fell by 0.35% in 2022, or roughly by 138,400 persons.

Adjusting for population size, California lost an average of 10.13 persons per one thousand to other states. Los Angeles County lost 16.42 (per one thousand) residents, while Orange County lost 9.7 (per one thousand).

FIGURE 29
Population Exodus: Net Domestic Migration - A Net Negative for the Region (sources of population growth, per 1,000 of population, 2022)

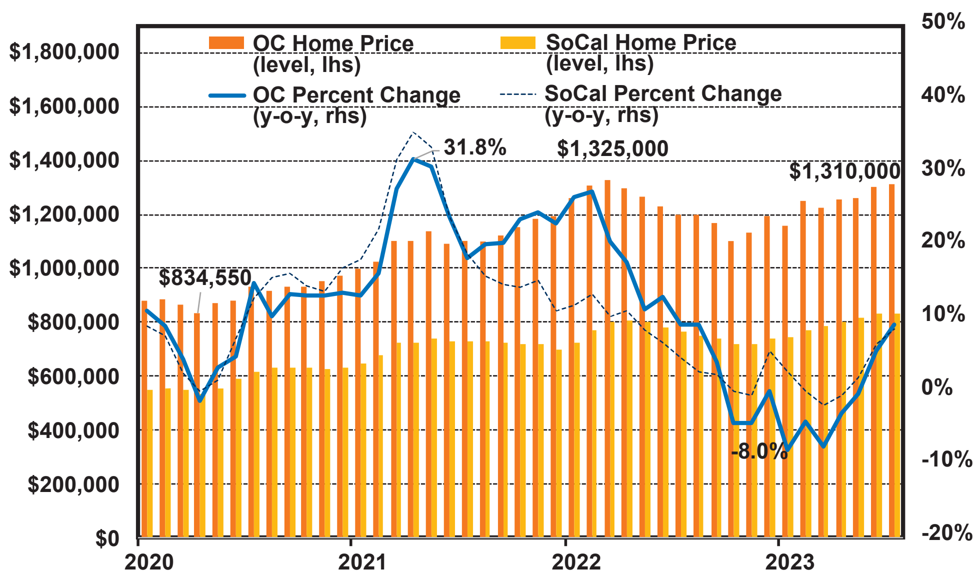


Housing

The housing sector has suffered both a downswing and an upswing in a span of one year, after posting spectacular gains over the previous two years. From August 2020 to July 2022, the median price of a single-family home in the Southern California region skyrocketed at unprecedented double-digit rates every month (Figure 30). The average monthly increase during this period was 19.5% for Orange County, 16% for Los Angeles County, 18.5% for Riverside County and 19.9% for San Bernardino County. The equity gain for an owner of a median-priced single-family home in these 24 months was $430,000 in Orange County, $301,300 in Los Angeles County, $190,000 in Riverside County and $166,000 in San Bernardino County.

The housing sector has suffered both a downswing and an upswing in a span of one year, after posting spectacular gains over the previous two years.

FIGURE 30
Home Prices Have Rebounded Strongly After Faltering in 2022 (median housing price, level and y-o-y percent change)



Home prices began to moderate in mid-year 2022, as interest rates marched upwards, but reversed trend towards the end of the year and began rising again. While Orange County hit its recent peak early in 2022, other counties followed over the next three months, with Los Angeles being the last. By the latest data (August 2023), Orange, Los Angeles and San Bernardino counties are back to their 2022 highs, while Riverside County is only 7% below that level (Figure 31). The current median prices (August 2023) based on California Association of Realtors data are $1,131,000 in Orange County, $882,000 in Los Angeles County, $618,000 in Riverside County and $495,000 in San Bernardino County. Time on the market is an important indicator of activity in the housing market. That time for Orange County and the Southern California region has fallen from an average of 30 days and 32 days, respectively, in December 2022 to 18 days now (Figure 32).

Home prices began to moderate in mid-year 2022, as interest rates marched upwards, but reversed trend towards the end of the year and began rising again.

Orange, Los Angeles and San Bernardino counties are back to their 2022 highs, while Riverside County is only 7% below that level.

FIGURE 31
On the Upswing: Home Prices Have Recovered Prior Peaks (median home price, index, Jan 2021=100)

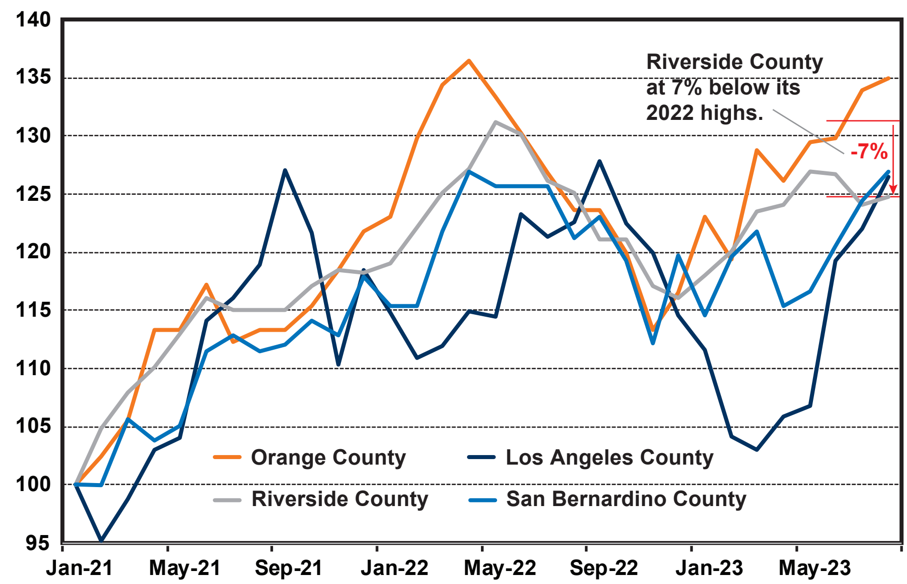
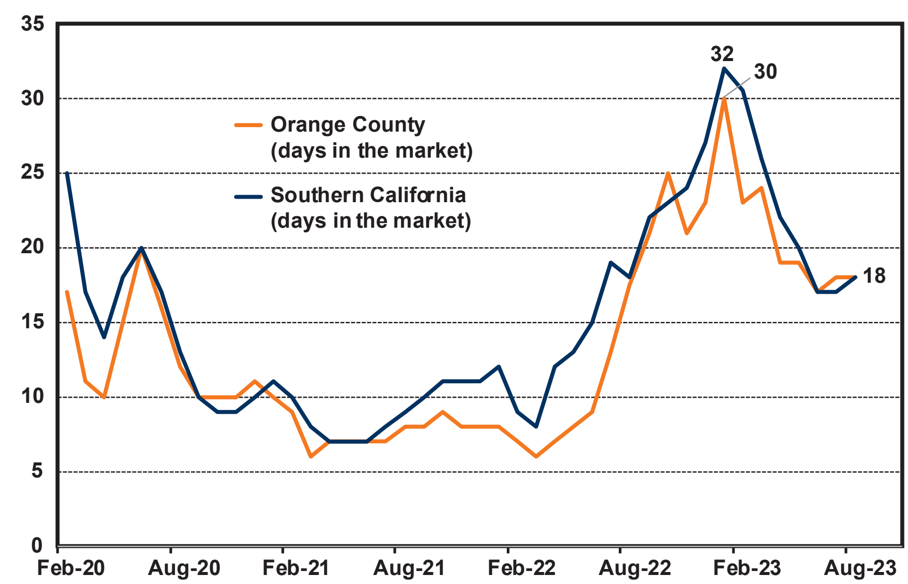


FIGURE 32
Housing Market Heats Up Again: Homes Are Snatched Up Quickly (median days in the market)



As we have noted previously, pent-up housing demand following the pandemic is only part of the story for a blistering housing market. As people began working from home, their need for more space drove the initial rise. Low interest rates during the past several years and excess cash generated by pandemic-induced government support further fueled an already white-hot market. But this is only part of the story.

The other part, and perhaps the most important one in the current market, has to do with the supply side. Simply put: The housing market in the region is severely constrained. Existing homeowners with low mortgage rates are reluctant to forego that financial advantage and would rather stay put than move up. A main pillar of the Fed's battle against inflation is the cooling of the housing market since housing costs account for 41% of the personal consumption expenditure (PCE) basket. Shelter costs, rents in particular, have been steadily rising for the past few years, and even though rent inflation has finally normalized, as we argue in the national report, this process occurs with sizable lags.

We expect housing prices to also bend to the weight of twin forces of high interest rates and slower economic growth over the next two years and commence a downtrend beginning next year.

Even the relentless rise in mortgage rates have had no effect in cooling the housing market because this is not a demand-side story but a supply-shortage one. The current 30-year fixed average mortgage rate of 7.3% is the highest since December 2000. But this situation, as the economy slows, is unsustainable. As with the overall economy, we expect housing prices to also bend to the weight of twin forces of high interest rates and slower economic growth over the next two years and commence a downtrend beginning next year. Assuming the Fed follows through on its stated policy of higher-for-longer and our view of a downshift in economic activity, we expect median home prices in Southern California to fall by approximately 10% over the next two years.

We expect median home prices in Southern California to fall by approximately 10% over the next two years.

There is some hope that the acute housing shortage in the state may ameliorate a bit. According to the latest Department of Finance report, in 2022, statewide housing grew by 0.8%, with the stock of housing reaching its highest level since 2008. On net, California added 123,350 housing units last year, bringing the total housing units in the state to 14,707,698. New construction represents 116,683 housing units, with 63,423 single-family housing units, 51,787 multi-family housing units, and 1,473 mobile homes. Accessory dwelling unit (ADU) production increased by 60.6 percent, with the state adding 20,638 ADUs in 2022. Ranked by net housing gains, the City of Los Angeles (with 19,556 housing units), San Diego (7,034), Oakland (4,005), San Francisco (2,823), and unincorporated Riverside County (2,160) added the most housing units in 2022. Larger densely populated urban areas built most of the multi-family housing throughout the state. Los Angeles led the state with 12,074 multi-family units, comprising 61.7% of their net housing growth, followed by San Diego (4,568 for 64.9%), Oakland (3,880 for 96.9%), and San Francisco (2,573 for 91.1%).

Statewide housing grew by 0.8%, with the stock of housing reaching its highest level since 2008. On net, California added 123,350 housing units last year, bringing the total housing units in the state to 14,707,698.

The California legislature has passed a flurry of bills in the last three years to reduce barriers to building residential units in the state, especially for low-income housing. SB 9, a law passed in 2020 allowing existing homeowners to add second units, has started to show results. Last year, two other bills were passed: One that allows developers to build housing on some commercial land without the permission of local governments (as long as a certain percentage of the housing is affordable), and a second bill, which allowed developers to build all market-rate housing on some commercial land (the projects would still have to go through an environmental review process). These laws are beginning to take effect. This year, several housing bills were passed by the legislature and await the governor's signature. Three of these bills are designed to streamline housing construction on small lots, enhance the construction of ADUs, and expedite the approval process for climate-smart housing. SCA 2, a measure approved to appear on the 2024 ballot, will abolish Article 34 of the state constitution that allows cities to reject low-rent housing from being built without a public vote.

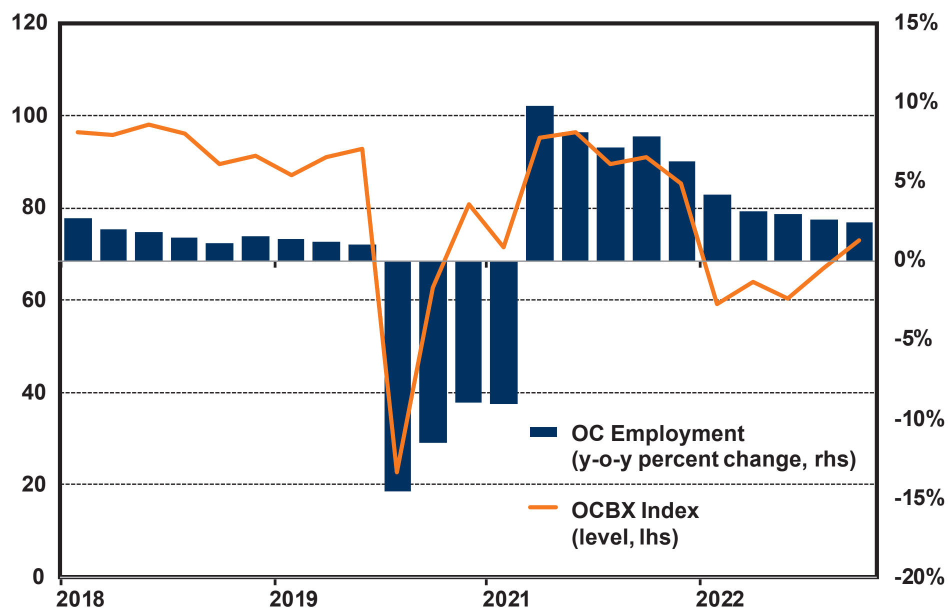
To cope with the housing shortage, some estimates indicate that California, with a population of 39 million, needs to build over 300,000 homes a year over the next eight years — 2.5 times faster than the current rate. These bills will make a dent but will not solve the state's acute housing shortage. Affordable housing (or more precisely, lack thereof) is cited as one of the most important issues for outmigration from the state.

To cope with the housing shortage, some estimates indicate that California, with a population of 39 million, needs to build over 300,000 homes a year over the next eight years — 2.5 times faster than the current rate.

Orange County Business Sentiment

The Woods Center has developed and regularly conducts a quarterly survey of expectations of Orange County business executives to assess business sentiment and supplement our economic forecasts. This survey provides us with timely and diverse points of view and is a rich source of information regarding business leaders' expectations regarding their business plans and the local economy over the upcoming quarter. Based on survey responses, we construct an overall index, OCBX, with values ranging from 0 to 100. A value of over 50 indicates expectations of the continued growth of the local economy. The index has had a good track record in predicting changes in quarterly employment and is a useful tool for pinpointing turning points in the business cycle (Figure 33).

FIGURE 33
OCBX Sentiment Index Has Improved, but Still Below Average (OCBX Index, Woods Center Survey, Q4 2023)



Our latest survey was conducted at the end of September 2023. The overall OCBX index has now increased every quarter since the second quarter of 2022, though it remains below historical average values. The index value improved from 68.4 in the third quarter to 73.1 in the fourth quarter of this year. It is important to observe that despite a historic spike in the federal funds rate, businesses in Orange County have maintained their generally positive outlook. This reaffirms our earlier view that this tilt is due to a more optimistic view regarding their own businesses and the county's economy rather than the outlook for the national economy. Moreover, it should be noted that, despite these improvements, the index is still below average values, indicating that Orange County business executives remain more cautious about the outlook than normal.

The overall OCBX index has now increased every quarter since the second quarter of 2022, though it remains below historical average values.

More than four in 10 Orange County business respondents rated inflation as their most important concern, mirroring the national sentiment. The percentage of respondents ranking inflation as the top concern went up to 44.4% compared to 33.3% in the last quarter. Interestingly, however, labor and supply shortages were pushed to fourth place behind cyber security and government deficits as the main concerns this quarter relative to the third quarter of 2023. It appears that the labor shortages are on the mend, albeit slowly. In response to another question, two-thirds of businesses expect to hold on to their hiring plans despite rising labor costs.

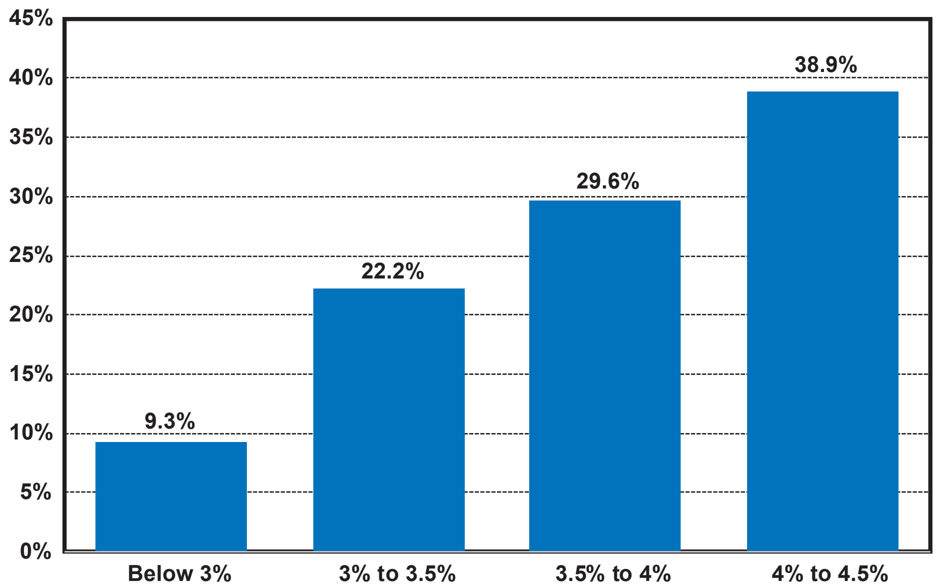
More than four in 10 Orange County business respondents rated inflation as their most important concern, mirroring the national sentiment.

For the second quarter in a row, the survey asked about their expectations on *future* inflation. Along with current inflation, expectations of future inflation play an important role in determining the future path of inflation itself. 31.5% expect inflation to come down to 3% or below by the end of 2023, 29.6% think it will be between 3% and 3.5% and 38.9% think inflation will stay above 4% by December 2023 (Figure 34). It appears that Orange County businesses hold quite diverse views on inflation for the rest of this year, being almost equally split among the three choices. Nonetheless, a large number of respondents (almost 70%) expect inflation to be higher than 3% by the end of the year, a full one percentage point above the Fed target rate. When asked how high the federal funds rate will go, 40.8% think it will reach 6% or higher, 31.5% think it will go to 5.75%, while 25.8% expect it to move to 5.5% (i.e., one more 0.25% hike).

Labor and supply shortages were pushed to fourth place behind cyber security and government deficits as the main concerns.

A large number of respondents (almost 70%) expect inflation to be higher than 3% by the end of the year, a full one percentage point above the Fed target rate.

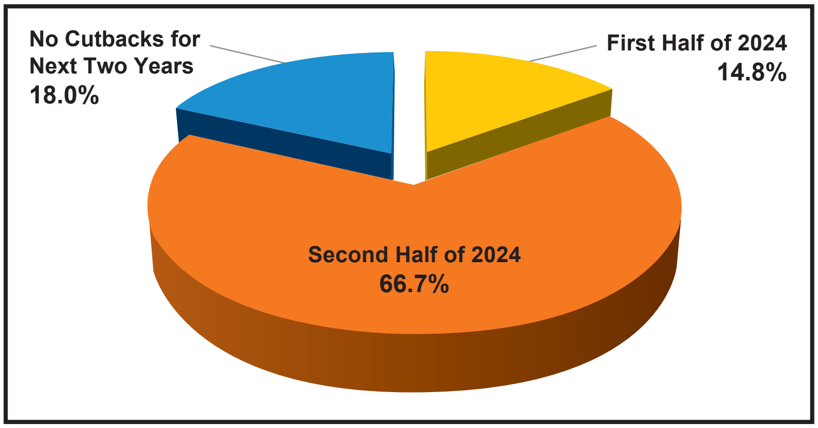
FIGURE 34
Most Orange County Businesses Expect Inflation Above 3.5% by the End of 2023 (Woods Center Survey, percent of respondents, Q4 2023)



However, when asked when the Fed expected to first cut interest rates, two-thirds of respondents expect it to be in the second half of 2024, with 14.8% expecting it in the first half (Figure 35). One-sixth of respondents expect no cuts over the next two years. It appears that Orange County business leaders generally believe in the fed's pronouncements of higher-for-longer.

When asked when the Fed expected to first cut interest rates, two-thirds of respondents expect it to be in the second half of 2024, with 14.8% expecting it in the first half.

FIGURE 35
Taking the Fed at its Word: Most Expect First Rate Cuts in Second Half of 2024
(Woods Center Survey, percent of respondents, Q4 2023)

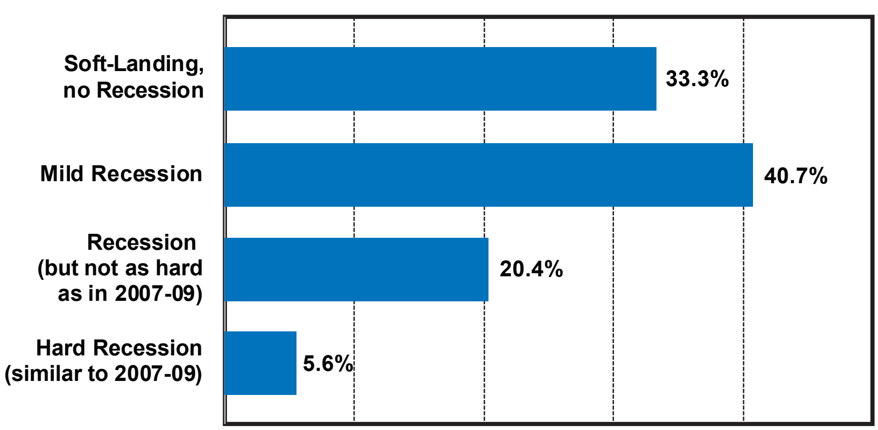


Opinions on an impending recession and its implications for the interest rate policy have been a topic of discussion for over a year, and these keep evolving. The number of people who think we are in a recession has not changed much, 22.8% last quarter versus 20.4% this quarter. The share of those who think the recession will begin in the current fourth quarter of 2023 has dropped to 13% from 35.1% last quarter. 25.9% think it will begin in the first quarter of 2024 and 9.3% think it will start in the second quarter of 2024. A full 31.5% (compared to 19.3% last quarter) believe we will not have a recession during the next two years.

Predicting a recession, even by professional economists, has been challenging, especially during this cycle, given the pandemic and post-pandemic distortions. And, it is only after the fact, in fact, several quarters later, that we know whether the economy was in recession or not. When asked how severe a recession would be if we were to have one, most think it would be either a mild recession (40.7%) or a soft landing (33.3%) (Figure 36). If a recession were to occur, it is very likely that the Fed will have to change its interest rate posture. When asked when the Fed will start lowering rates, two-thirds (66.7%) think it will happen in the second quarter of 2024. (The complete survey report is available on the Woods Center website).

When asked how severe a recession would be if we were to have one, most think it would be either a mild recession (40.7%) or a soft landing (33.3%).

FIGURE 36
A Split Verdict But Two Thirds of OC Businesses Still Expect a Recession
(Woods Center Survey, percent of respondents, Q4 2023)



Forecasts

Resilient consumer spending and easing supply constraints have kept the economy humming in the face of a historic increase in interest rates over the past year and a half. As a result, much of the anticipated slowdown has been pushed back, but our baseline scenario, for the reasons explained in our macro analysis, remains one of a garden-variety recession sometimes in the second half of 2024. Signs of weakening of economic momentum are becoming more prevalent and the history of economic fluctuations indicates that soft landings are rare phenomena.

We expect the Southern California economy to experience a downturn similar to the national economy. The Orange County unemployment rate is expected to average 3.5% in 2023, 4.5% in 2024, and 4.2% in 2025. The trough of unemployment will occur towards the end of 2024 and the beginning of 2025, when we expect the rate to reach 5% or higher. Similarly, we expect the Los Angeles County unemployment rate to rise to 5% in 2023, 5.8% in 2024 and 5.5% in 2025. The Inland Empire economy is already slowing, and we expect the unemployment rate to rise to 4.4% in 2023, 5.4% in 2024 and then ease to 5.1% in 2025.

Payroll employment growth is also expected to experience a similar downswing. We expect Orange County's payroll employment growth to slow to 1.9% in 2023 and 0.3% in 2024 and decline by -0.15% in 2025 (Figure 37). Growth in Los Angeles County payroll jobs is expected to decline to 1.6% in 2023, -0.1% in 2024 and -0.5% in 2025. The Inland Empire is expected to slow to a growth rate of 0.7% in 2023, -1.5% in 2024 and then recover to 0.9% in 2025. Detailed tables are provided at the end of this report.

We expect the Southern California economy to experience a downturn similar to the national economy. The Orange County unemployment rate, is expected to average 3.5% in 2023, 4.5% in 2024 and 4.2% in 2025.

Payroll employment growth is also expected to experience a similar downswing. We expect Orange County's payroll employment growth to slow to 1.9% in 2023 and 0.3% in 2024 and decline by -0.15% in 2025.

FIGURE 37
Employment Forecasts for the Region (y-o-y average percent change)

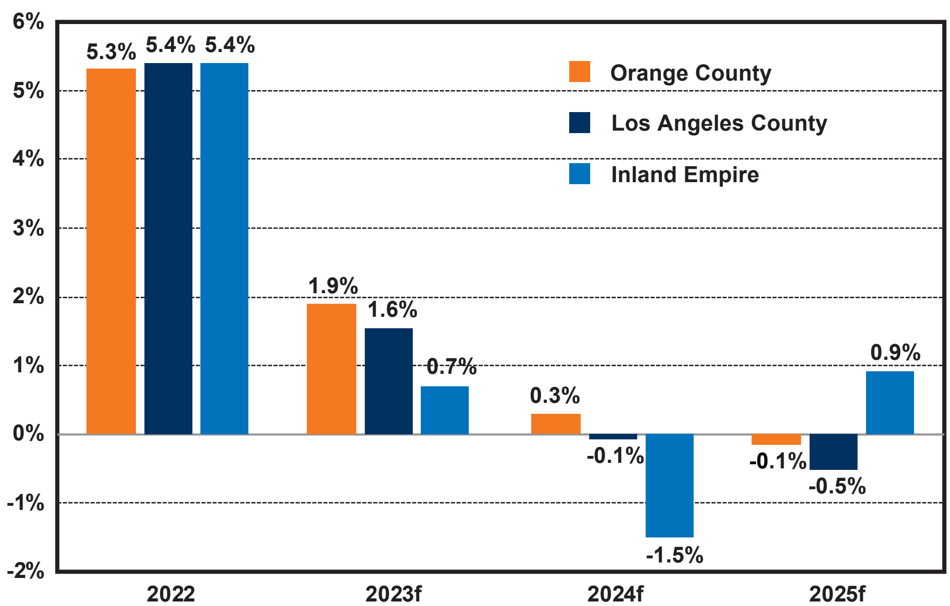


TABLE 1 - NATIONAL

	2018	2019	2020	2021	2022	2023f	2024f	2025f	3-Year Average 2021-2024
GDP									
Real GDP (Bil. $)	20,194	20,692	20,234	21,408	21,822	22,302	22,436	22,795	22,511
% change RGDP	3.0	2.5	-2.2	5.8	1.9	2.2	0.6	1.6	1.5
Nominal GDP (Bil. $)	20,657	21,521	21,323	23,594	25,744	27,289	28,135	29,204	28,209
% change Nominal GDP	5.3	4.2	-0.9	10.7	9.1	6.0	3.1	3.8	4.3
RGDP Components									
Personal Consumption (% change)	2.7	2	-2.5	8.4	2.5	2.2	0.3	1.4	1.3
Business Fixed Investments (% change)	5.1	2.7	-2.1	7.1	1.3	3.1	-2.8	3.1	1.1
Residential Investments (% change)	-0.7	-0.9	7.2	10.7	-9.0	-8.7	-0.3	3.8	-1.7
Exports (% change)	2.9	0.5	-13.1	6.3	7.0	-1.3	-2.3	5.0	0.5
Imports (% change)	4.0	1.2	-9.0	14.5	8.6	-2.7	3.2	4.2	1.6
Net Exports (Bil. $)	-594	-618	-663	-934	-1051	-988	-1153	-1182	-1,108
Federal Deficit (Bil. $)	-779	-984	-3,132	-2,775	-1,300	-1,700	-1,850	-1,680	-1,743
Labor Sector									
Unemployment Rate (%)	3.9	3.7	8.1	5.4	3.6	3.6	4.1	4.5	4.1
Payroll Employment (% change)	1.6	1.3	-5.8	2.9	4.3	2.3	0.2	-0.3	0.7
Average Weekly Hours (saar)	33.7	33.6	33.9	34.3	34.0	33.8	33.5	33.6	33.6
Labor Productivity (%, saar)	1.5	1.9	4.5	2.3	-1.7	0.7	2.4	2.6	1.9
Prices and Wages									
CPI (% change)	2.4	1.8	1.3	4.7	8.0	4.2	2.5	2.2	3.0
Core CPI (% change)	2.1	2.2	1.7	3.6	6.1	4.8	3.0	2.4	3.4
PCE Deflator (% change)	2.0	1.4	1.1	4.2	6.5	3.9	2.3	2.0	2.7
Core PCE Deflator (% change)	1.9	1.6	1.3	3.6	5.2	4.3	2.7	2.2	3.1
Employment Cost Index (% change)	3.0	2.9	2.9	4.0	5.3	4.5	3.7	3.3	3.8
Income/Profits									
Personal Income (% change)	5.2	4.7	6.9	9.1	2.0	5.2	3.3	2.9	3.8
Real Disposable Income (% change)	3.6	3.1	6.4	3.1	-5.9	3.7	1.5	1.7	2.3
Savings Rate (% of disp. income)	6.4	7.4	15.4	11.4	3.3	4.6	3.5	3.2	3.8
After-Tax Profits (% change)	1.1	2.8	5.3	30.0	4.8	-4.2	-2.1	6.8	0.2
Financial Markets (year-end)									
Federal Funds Rate (Upper range) (%)	2.50	1.75	0.25	0.25	4.50	5.50	4.50	2.75	4.25
3-Month T-bill rate (%)	2.40	1.52	0.09	0.06	4.30	5.38	4.23	2.55	4.05
10-Year Treasury Note (%)	2.69	1.92	0.93	1.52	3.88	4.50	4.32	4.68	4.50
30-Year Fixed Mortgage Rate (%)	4.55	3.74	2.67	3.11	6.42	7.58	6.26	5.55	6.46
Exchange Rate, Major Trading Partners (% change)	5.0	-0.8	-2.9	3.6	5.3	2.3	-1.2	-1.5	-0.13
Other Key Measures									
Crude Oil - Brent ($ per Barrel)	71.3	64.3	42.0	70.9	100.9	84.5	75.6	78.3	79.5
Industrial Production (% change)	3.2	-0.7	-7.2	4.4	3.4	-0.3	-2.7	2.8	-0.1
Housing Starts (Mill. Units, saar)	1.25	1.29	1.40	1.61	1.55	1.39	1.37	1.42	1.4
Light Vehicle Sales (Mill. Units, saar)	17.2	17.0	14.5	14.9	13.8	15.5	14.9	16.5	15.6

TABLE 2 - ORANGE COUNTY

	2021	2022	2023f	2024f	2025f	3-Year Average 2023-2025
Levels in Thousands						
Household Employment						
Labor Force	1560.7	1590.9	1599.8	1604.0	1609.4	1,604.4
Total Employment	1467.3	1540.6	1540.7	1531.8	1541.8	1,538.1
Total Unemployment	93.4	50.3	55.7	72.2	67.6	65.2
Unemployment Rate	6.0%	3.2%	3.5%	4.5%	4.2%	4.1%
Wage and Salary Employment						
Total Nonfarm	1,585.9	1,670.0	1,701.6	1,706.9	1,704.3	1,704.3
Goods Producing	252.3	261.9	265.8	263.8	242.4	257.4
Mining and Logging	0.4	0.3	0.3	0.3	0.2	0.3
Construction	102.2	106.2	109.1	107.2	87.8	101.4
Manufacturing	149.8	155.4	156.5	156.4	154.4	155.7
Durable Goods	111.4	116.1	117.1	116.6	112.4	115.4
Nondurable Goods	38.3	39.2	39.4	39.8	41.9	40.4
Service Providing	1,333.6	1,408.1	1,435.7	1,443.1	1,461.9	1,446.9
Trade, Transportation and Utilities	250.1	256.7	260.6	260.5	251.4	257.5
Wholesale Trade	75.6	76.9	77.1	75.1	68.3	73.5
Retail Trade	143.4	146.0	148.8	149.7	146.6	148.4
Transportation, Warehousing and Utilities	31.1	33.7	34.6	35.8	36.4	35.6
Information	24.0	24.8	25.1	25.8	27.2	26.0
Financial Activities	117.1	114.1	113.4	113.1	113.9	113.5
Professional and Business Services	321.7	332.5	336.1	337.7	327.1	333.6
Educational and Health Services	237.3	249.5	256.2	255.2	241.6	251.0
Leisure and Hospitality	180.4	217.7	228.4	234.2	280.7	247.8
Other Services	47.5	52.7	53.6	53.6	54.7	54.0
Government	155.7	160.2	162.3	163.0	165.3	163.6
Percentage change						
Total Nonfarm	3.6%	5.3%	1.9%	0.3%	-0.2%	0.7%
Goods Producing	0.2%	3.8%	1.5%	-0.8%	-8.1%	-2.5%
Mining and Logging	7.0%	-15.2%	-4.0%	-7.7%	-23.8%	-11.8%
Construction	0.8%	3.9%	2.7%	-1.8%	-18.0%	-5.7%
Manufacturing	-0.2%	3.7%	0.7%	0.0%	-1.3%	-0.2%
Durable Goods	-0.8%	4.2%	0.8%	-0.4%	-3.6%	-1.1%
Nondurable Goods	1.6%	2.3%	0.4%	1.0%	5.4%	2.3%
Service Providing	4.3%	5.6%	2.0%	0.5%	1.3%	1.3%
Trade, Transportation and Utilities	3.3%	2.6%	1.5%	0.0%	-3.5%	-0.7%
Wholesale Trade	1.0%	1.7%	0.3%	-2.7%	-9.0%	-3.8%
Retail Trade	4.2%	1.9%	1.9%	0.6%	-2.0%	0.1%
Transportation, Warehousing and Utilities	4.9%	8.5%	2.7%	3.4%	1.8%	2.6%
Information	-0.3%	3.1%	1.1%	2.8%	5.6%	3.2%
Financial Activities	1.0%	-2.5%	-0.6%	-0.3%	0.7%	-0.1%
Professional and Business Services	4.0%	3.4%	1.1%	0.5%	-3.1%	-0.5%
Educational and Health Services	5.1%	5.1%	2.7%	-0.4%	-5.3%	-1.0%
Leisure and Hospitality	11.5%	20.7%	4.9%	2.5%	19.9%	9.1%
Other Services	7.5%	11.1%	1.7%	0.1%	1.9%	1.2%
Government	-0.3%	2.9%	1.4%	0.4%	1.4%	1.1%

TABLE 3 - SOUTHERN CALIFORNIA

	2021	2022	2023f	2024f	2025f	3-Year Average 2023-2025
Levels in Thousands						
Household Employment						
Labor Force	9086.9	9149.9	9041.0	8942.2	8987.9	8,990.4
Total Employment	8365.9	8750.1	8741.3	8482.7	8563.7	8,595.9
Total Unemployment	721.1	399.9	410.3	457.1	435.6	434.3
Unemployment Rate	7.9%	4.4%	4.5%	5.1%	4.8%	4.8%
Wage and Salary Employment						
Total Nonfarm	7,764.4	8,180.3	8,300.9	8,280.4	8,269.4	8,283.6
Goods Producing	968.3	998.4	997.0	995.6	976.7	989.8
Mining and Logging	4.3	4.5	4.5	4.4	4.3	4.4
Construction	378.4	390.0	392.5	384.2	365.0	380.5
Manufacturing	585.5	603.9	600.0	607.1	607.4	604.8
Durable Goods	375.7	385.7	385.0	384.0	381.0	383.3
Nondurable Goods	209.8	218.2	215.0	223.1	226.4	221.5
Service Providing	6,796.1	7,181.9	7,303.9	7,284.8	7,292.7	7,293.8
Trade, Transportation and Utilities	1,562.9	1,616.0	1,623.6	1,609.5	1,599.3	1,610.8
Wholesale Trade	358.0	363.9	359.1	353.4	348.7	353.7
Retail Trade	752.9	770.6	781.4	785.3	777.7	781.5
Transportation, Warehousing and Utilities	452.1	481.5	483.1	470.8	473.0	475.7
Information	246.5	274.3	266.5	257.6	267.4	263.8
Financial Activities	391.0	392.0	392.2	388.9	388.4	389.9
Professional and Business Services	1,164.7	1,224.9	1,236.5	1,260.6	1,238.2	1,245.1
Educational and Health Services	1,385.6	1,441.3	1,496.8	1,457.1	1,447.5	1,467.2
Leisure and Hospitality	807.5	945.6	985.0	1,005.9	1,052.8	1,014.6
Other Services	235.6	263.6	268.6	269.3	269.4	269.1
Government	1,002.4	1,024.1	1,034.6	1,035.8	1,029.6	1,033.4
Percentage change						
Total Nonfarm	3.7%	5.4%	1.5%	-0.2%	-0.1%	0.4%
Goods Producing	0.7%	3.1%	-0.1%	-0.1%	-1.9%	-0.7%
Mining and Logging	0.2%	5.2%	0.0%	-3.3%	-1.7%	-1.7%
Construction	2.4%	3.1%	0.6%	-2.1%	-5.0%	-2.2%
Manufacturing	-0.3%	3.1%	-0.6%	1.2%	0.1%	0.2%
Durable Goods	-1.7%	2.6%	-0.2%	-0.3%	-0.8%	-0.4%
Nondurable Goods	2.3%	4.0%	-1.5%	3.7%	1.5%	1.3%
Service Providing	4.2%	5.7%	1.7%	-0.3%	0.1%	0.5%
Trade, Transportation and Utilities	5.1%	3.4%	0.5%	-0.9%	-0.6%	-0.3%
Wholesale Trade	1.3%	1.7%	-1.3%	-1.6%	-1.3%	-1.4%
Retail Trade	5.0%	2.4%	1.4%	0.5%	-1.0%	0.3%
Transportation, Warehousing and Utilities	8.6%	6.5%	0.3%	-2.6%	0.5%	-0.6%
Information	7.8%	11.2%	-2.8%	-3.3%	3.8%	-0.8%
Financial Activities	0.6%	0.3%	0.1%	-0.8%	-0.1%	-0.3%
Professional and Business Services	5.2%	5.2%	0.9%	1.9%	-1.8%	0.4%
Educational and Health Services	3.0%	4.0%	3.9%	-2.7%	-0.7%	0.2%
Leisure and Hospitality	11.1%	17.1%	4.2%	2.1%	4.7%	3.6%
Other Services	6.4%	11.9%	1.9%	0.3%	0.0%	0.7%
Government	-1.6%	2.2%	1.0%	0.1%	-0.6%	0.2%

TABLE 4 - LOS ANGELES COUNTY

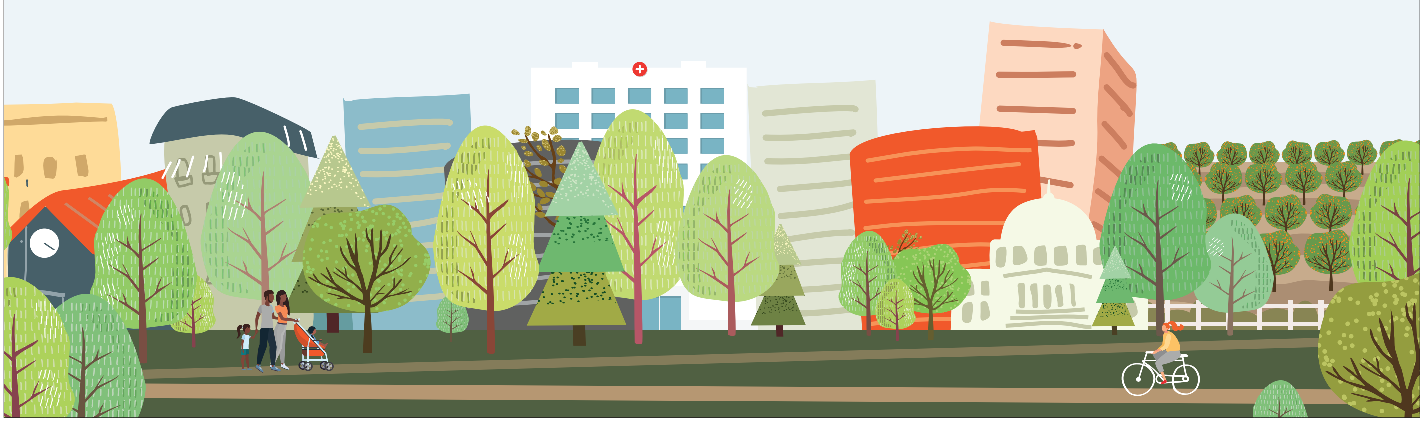
	2021	2022	2023f	2024f	2025f	3-Year Average 2023-2025
Levels in Thousands						
Household Employment						
Labor Force	4993.5	4984.8	4867.8	4729.6	4731.0	4,776.1
Total Employment	4547.6	4739.9	4750.4	4455.3	4470.8	4,558.8
Total Unemployment	445.9	244.9	241.2	274.3	260.2	258.6
Unemployment Rate	8.9%	4.9%	5.0%	5.8%	5.5%	5.4%
Wage and Salary Employment						
Total Nonfarm	4,304.3	4,538.5	4,609.4	4,606.8	4,583.2	4,599.8
Goods Producing	463.8	474.3	468.3	473.5	474.2	472.0
Mining and Logging	1.6	1.6	1.6	1.4	1.4	1.5
Construction	149.0	150.9	148.6	144.8	143.3	145.6
Manufacturing	313.1	321.8	318.1	327.3	329.5	325.0
Durable Goods	186.0	189.6	189.2	190.3	191.6	190.4
Nondurable Goods	127.1	132.2	129.0	137.0	137.9	134.6
Service Providing	3,840.5	4,064.2	4,141.1	4,133.3	4,108.9	4,127.8
Trade, Transportation and Utilities	814.0	837.4	844.9	844.8	842.8	844.2
Wholesale Trade	202.6	204.8	201.5	199.8	201.4	200.9
Retail Trade	396.1	407.3	413.6	417.5	410.9	414.0
Transportation, Warehousing and Utilities	215.2	225.3	229.8	227.6	230.5	229.3
Information	208.8	235.2	227.3	217.6	226.0	223.6
Financial Activities	213.2	215.9	216.6	214.2	212.6	214.5
Professional and Business Services	630.1	668.9	674.7	699.8	686.9	687.2
Educational and Health Services	844.4	873.6	912.9	875.8	875.8	888.2
Leisure and Hospitality	434.2	511.3	536.6	551.3	545.8	544.6
Other Services	135.7	153.5	156.2	156.7	155.7	156.2
Government	560.2	568.5	571.8	573.1	563.2	569.4
Percentage change						
Total Nonfarm	3.3%	5.4%	1.6%	-0.1%	-0.5%	0.3%
Goods Producing	0.0%	2.3%	-1.3%	1.1%	0.1%	0.0%
Mining and Logging	-6.7%	1.0%	-0.8%	-11.7%	-1.9%	-4.8%
Construction	1.7%	1.3%	-1.6%	-2.5%	-1.1%	-1.7%
Manufacturing	-0.7%	2.8%	-1.1%	2.9%	0.7%	0.8%
Durable Goods	-2.2%	1.9%	-0.2%	0.6%	0.7%	0.4%
Nondurable Goods	1.6%	4.0%	-2.4%	6.2%	0.7%	1.5%
Service Providing	3.7%	5.8%	1.9%	-0.2%	-0.6%	0.4%
Trade, Transportation and Utilities	3.7%	2.9%	0.9%	0.0%	-0.2%	0.2%
Wholesale Trade	0.8%	1.1%	-1.6%	-0.9%	0.8%	-0.6%
Retail Trade	5.4%	2.8%	1.5%	0.9%	-1.6%	0.3%
Transportation, Warehousing and Utilities	3.5%	4.7%	2.0%	-1.0%	1.3%	0.8%
Information	9.3%	12.6%	-3.4%	-4.3%	3.9%	-1.3%
Financial Activities	0.0%	1.3%	0.3%	-1.1%	-0.7%	-0.5%
Professional and Business Services	5.0%	6.2%	0.9%	3.7%	-1.8%	0.9%
Educational and Health Services	2.8%	3.5%	4.5%	-4.1%	0.0%	0.1%
Leisure and Hospitality	10.3%	17.8%	5.0%	2.7%	-1.0%	2.2%
Other Services	5.4%	13.1%	1.8%	0.3%	-0.6%	0.5%
Government	-1.8%	1.5%	0.6%	0.2%	-1.7%	-0.3%

TABLE 5 - RIVERSIDE /SAN BERNARDINO COUNTIES

	2021	2022	2023f	2024f	2025f	3-Year Average 2023-2025
Levels in Thousands						
Household Employment						
Labor Force	2125.3	2160.6	2157.8	2194.4	2234.1	2,195.4
Total Employment	1968.7	2071.2	2053.9	2101.7	2156.7	2,104.1
Total Unemployment	156.6	89.4	95.6	90.4	88.7	91.6
Unemployment Rate	7.4%	4.1%	4.4%	5.4%	5.1%	5.0%
Wage and Salary Employment						
Total Nonfarm	1,575.1	1,660.3	1,672.3	1,647.1	1,662.2	1,660.5
Goods Producing	207.7	216.4	216.8	211.4	212.4	213.5
Mining and Logging	1.4	1.6	1.6	1.6	1.6	1.6
Construction	110.1	115.2	116.8	113.6	114.7	115.0
Manufacturing	96.1	99.6	98.3	96.1	96.1	96.9
Durable Goods	60.0	61.1	59.7	57.9	57.7	58.4
Nondurable Goods	36.2	38.5	38.7	38.2	38.4	38.4
Service Providing	1,367.4	1,443.9	1,455.6	1,435.8	1,449.8	1,447.0
Trade, Transportation and Utilities	443.2	464.5	460.8	446.3	446.6	451.3
Wholesale Trade	67.4	69.7	68.3	66.4	66.8	67.2
Retail Trade	177.0	180.6	181.9	180.4	181.5	181.3
Transportation, Warehousing and Utilities	198.8	214.2	210.6	199.5	198.3	202.8
Information	9.7	10.2	10.1	10.1	10.1	10.1
Financial Activities	45.2	46.8	46.8	46.5	47.2	46.8
Professional and Business Services	169.4	179.1	181.5	179.1	180.2	180.2
Educational and Health Services	254.3	266.4	273.5	270.6	274.0	272.7
Leisure and Hospitality	160.2	179.6	180.6	181.1	188.1	183.3
Other Services	43.6	47.9	48.9	49.2	49.3	49.1
Government	242.0	249.4	253.3	252.8	254.3	253.5
Percentage change						
Total Nonfarm	5.3%	5.4%	0.7%	-1.5%	0.9%	0.0%
Goods Producing	2.7%	4.2%	0.2%	-2.5%	0.5%	-0.6%
Mining and Logging	10.4%	12.9%	-0.4%	1.9%	-0.5%	0.3%
Construction	5.0%	4.6%	1.4%	-2.8%	0.9%	-0.1%
Manufacturing	0.2%	3.6%	-1.2%	-2.2%	0.0%	-1.2%
Durable Goods	-2.1%	1.8%	-2.3%	-3.0%	-0.4%	-1.9%
Nondurable Goods	4.1%	6.4%	0.4%	-1.1%	0.4%	-0.1%
Service Providing	5.7%	5.6%	0.8%	-1.4%	1.0%	0.1%
Trade, Transportation and Utilities	8.9%	4.8%	-0.8%	-3.2%	0.1%	-1.3%
Wholesale Trade	2.8%	3.3%	-2.0%	-2.8%	0.7%	-1.4%
Retail Trade	4.9%	2.0%	0.7%	-0.8%	0.6%	0.2%
Transportation, Warehousing and Utilities	15.2%	7.7%	-1.7%	-5.3%	-0.6%	-2.5%
Information	1.6%	5.2%	-1.4%	0.5%	-0.3%	-0.4%
Financial Activities	2.5%	3.7%	-0.1%	-0.6%	1.6%	0.3%
Professional and Business Services	9.4%	5.8%	1.3%	-1.3%	0.6%	0.2%
Educational and Health Services	2.2%	4.8%	2.7%	-1.1%	1.2%	1.0%
Leisure and Hospitality	13.3%	12.1%	0.6%	0.3%	3.9%	1.6%
Other Services	8.4%	9.9%	2.0%	0.6%	0.1%	0.9%
Government	-2.4%	3.1%	1.6%	-0.2%	0.6%	0.7%

TABLE 6 - VENTURA COUNTY

	2021	2022	2023f	2024f	2025f	3-Year Average 2023-2025
Levels in Thousands						
Household Employment						
Labor Force	407.5	413.6	415.6	414.2	413.4	414.4
Total Employment	382.3	398.4	396.3	393.9	394.4	394.9
Total Unemployment	25.2	15.2	17.8	20.3	19.0	19.0
Unemployment Rate	6.2%	3.7%	4.3%	4.9%	4.6%	4.6%
Wage and Salary Employment						
Total Nonfarm	299.0	311.5	317.6	319.5	319.7	319.0
Goods Producing	44.5	45.9	46.1	46.9	47.7	46.9
Mining and Logging	0.9	1.0	1.0	1.0	1.1	1.0
Construction	17.1	17.7	18.1	18.6	19.2	18.6
Manufacturing	26.5	27.2	27.1	27.3	27.4	27.3
Durable Goods	18.3	18.9	19.1	19.2	19.2	19.2
Nondurable Goods	8.2	8.3	8.0	8.1	8.2	8.1
Service Providing	254.5	265.7	271.5	272.6	272.1	272.1
Trade, Transportation and Utilities	55.7	57.5	57.3	57.8	58.5	57.9
Wholesale Trade	12.3	12.5	12.2	12.1	12.1	12.1
Retail Trade	36.4	36.7	37.0	37.8	38.6	37.8
Transportation, Warehousing and Utilities	7.0	8.3	8.1	7.9	7.8	8.0
Information	3.9	4.0	4.0	4.1	4.0	4.0
Financial Activities	15.6	15.2	15.4	15.1	14.6	15.0
Professional and Business Services	43.6	44.4	44.2	44.1	44.0	44.1
Educational and Health Services	49.6	51.8	54.2	55.5	56.2	55.3
Leisure and Hospitality	32.8	37.1	39.3	39.3	38.1	38.9
Other Services	8.9	9.6	9.9	9.8	9.8	9.8
Government	44.5	46.1	47.1	46.9	46.8	46.9
Percentage change						
Total Nonfarm	3.0%	4.2%	2.0%	0.6%	0.1%	0.9%
Goods Producing	2.3%	3.0%	0.6%	1.6%	1.6%	1.3%
Mining and Logging	-3.6%	9.3%	3.2%	3.5%	2.6%	3.1%
Construction	2.3%	3.3%	1.9%	3.0%	3.1%	2.7%
Manufacturing	2.6%	2.6%	-0.3%	0.7%	0.6%	0.3%
Durable Goods	-0.7%	3.0%	1.0%	0.6%	0.2%	0.6%
Nondurable Goods	10.8%	1.7%	-3.5%	1.0%	1.4%	-0.4%
Service Providing	3.1%	4.4%	2.2%	0.4%	-0.2%	0.8%
Trade, Transportation and Utilities	5.0%	3.2%	-0.2%	0.9%	1.2%	0.6%
Wholesale Trade	2.6%	1.4%	-2.6%	-0.5%	-0.2%	-1.1%
Retail Trade	4.3%	0.8%	1.0%	2.1%	2.2%	1.8%
Transportation, Warehousing and Utilities	14.0%	18.9%	-2.0%	-2.4%	-1.6%	-2.0%
Information	-1.5%	2.8%	0.3%	0.6%	-0.5%	0.1%
Financial Activities	-0.4%	-2.4%	1.1%	-2.1%	-2.8%	-1.3%
Professional and Business Services	2.4%	1.6%	-0.3%	-0.3%	-0.2%	-0.3%
Educational and Health Services	2.6%	4.5%	4.6%	2.4%	1.2%	2.7%
Leisure and Hospitality	8.6%	13.1%	6.1%	0.0%	-3.1%	1.0%
Other Services	7.2%	7.8%	3.0%	-0.3%	-0.3%	0.8%
Government	-0.6%	3.7%	2.2%	-0.5%	-0.3%	0.5%

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