U.S. Fixed Income Markets

Inflation Part II

- Rising inflation and the U.S. Federal Reserve's efforts to control it have dominated financial markets since 2022.
- With inflation cooling, the HilltopSecurities analysts and strategists collaborated to explore the next level of inflation's impact on financial markets and our respective sectors of coverage.
- Despite the decrease, many areas of the economy, including those we cover, have already suffered damage. The long-term effects may be even more challenging to adapt to in the coming months and years. "Inflation Part II" aims to describe these challenges.

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"Give me a one-handed economist," Truman said

What a difference a year makes. Economic weakness was expected to materialize by the end of 2023. Many economists predicted a U.S. recession as early as the end of last year. A Bloomberg Economics model even forecast a 100% chance of recession, and a survey of economists showed a 70% possibility. Now, a soft landing still remains possible. The U.S. Federal Reserve has three more scheduled meetings before the end of 2024. Recently, Fed Chair Jerome Powell stated at Jackson Hole, WY, "The time has come for policy to adjust."

Examples of Inflation Part II According to Hilltop's Analysts/Strategists

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Source: HilltopSecurities.

Please see disclosure starting on page 12.

U.S. President Harry Truman once said, "Give me a one-handed economist. All my economists say 'on the one hand ...' then counter with 'but on the other ...'" The current economic landscape reflects this sentiment. The economy is growing, with a 3.0% increase reported in the second quarter of 2024, though growth is not as strong as it was in 2021. However, or on the other hand, labor market weakness is evident. Inflation has dropped and is stabilizing near the Fed's target. Hilltop's Scott McIntyre and Greg Warner noted that while inflation is likely low enough to ease, the Fed's aggressiveness depends on the economy's stability. Upcoming data releases will be crucial for policy adjustments.

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Important Upcoming Financial and Political Dates

Date	Event	Note
Sept 6	Non-farm payrolls (Aug)	160k exp, 114k last
Sept 10	Presidential Debate in Philadelphia	Trump vs. Harris
Sept 11	Consumer Price Index	2.9%, 3.2% YoY last
Sept 17-18	U.S. FOMC Meeting	"The time has come…"
Sept 30	Federal Funding Deadline	Shutdown unlikely
Nov 5	Election Day in U.S.	WH is a toss-up
Nov 6-7	U.S. FOMC Meeting	Data, outlook, risks
Dec 17-18	U.S. FOMC Meeting	Data, outlook, risks

Source: Bloomberg and HilltopSecurities.

Now, two years later, it is no surprise that many sections in our report focused on inflationary pressures.

What Does, "Inflation Part II" Mean?

About two years ago we - the analysts and strategists at HilltopSecurities - published a collaboration titled, The Next Big Risk shortly after Russia invaded Europe. We aimed to anticipate the next event that could disrupt financial markets generally, or the respective sector that each analyst and strategist covered. Now, two years later, it is no surprise that many sections in our report focused on inflationary pressures. Additionally it should not come as a surprise that inflation remains "A Very Serious Problem," and this is according to nearly seven out of 10 polled in a survey conducted between August 7-10 and published by YouGov.

With inflation cooling, the HilltopSecurities analysts and strategists collaborated to explore the next level of inflation's impact on financial markets and our respective sectors of coverage. Despite the decrease, many areas of the economy, including those we cover, have already suffered damage. The long-term effects may be even more challenging to adapt to in the coming months and years. "Inflation Part II" aims to describe these challenges.

With inflation cooling, the HilltopSecurities analysts and strategists collaborated to explore the next level of inflation's impact on financial markets and our respective sectors of coverage.

The Case for Lingering Inflation

Author: **Scott McIntyre**, CFA, Senior Portfolio Manager in Asset Management

Investors choosing to focus on CPI numbers from May through July might conclude the consumer inflation battle is over.

Investors choosing to focus on CPI numbers from May through July might conclude the consumer inflation battle is over. In particular, the extremely soft three-month annualized +0.4% headline and +1.6% core are now well below the Fed's +2.0% inflation target. It's hard to dispute that the overnight target range at 5.25%-5.50% isn't overly restrictive at this point with annual core inflation around +3.0%, so a series of rate cuts has become a near certainty. The question is: How much can the Fed afford to ease given expected changes in underlying supply?

Goods have experienced outright deflation, but elevated shipping costs, broad tariff threats and deglobalization trends could reignite price pressure next year. In the service sector, where the majority of remaining consumer inflation is concentrated, the aging U.S. population will continue to pressure healthcare costs, while the price of shelter could remain stickier than recent data suggests. Housing is a (lack of) supply issue, whereas the Fed's ability to influence prices is on the demand side. The supply shortage in U.S. housing units is estimated at between four and seven million, whereas current household formation is approximately equal to the annual pace of housing starts. While recent progress in the inflation fight is encouraging, the mission is still far from accomplished. A cautious Fed is likely to be more patient than the market anticipates.

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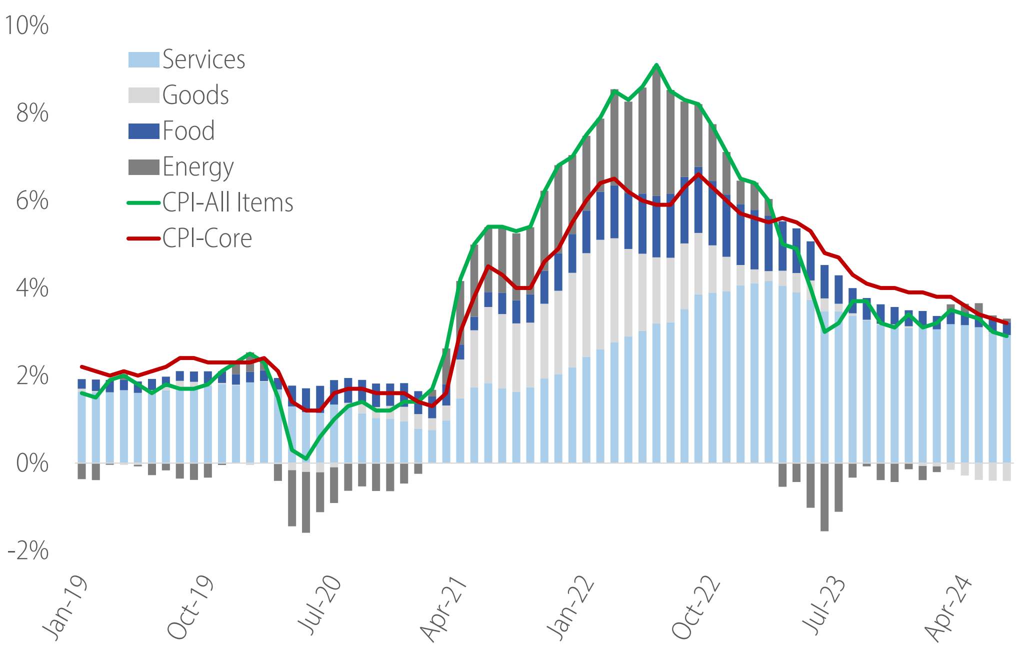
Consumer Price Index (year-over-year change)



Source: Bureau of Labor Statistics and HilltopSecurities.

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Inflation's Impact on Community Depositories

Authors: **Kris Johnson**, CFA, Head of Fixed Income Capital Markets (FICM) Strategies and **Matt Harris**, CFA, Senior Fixed Income Investment Strategist, Fixed Income Capital Markets

Inflation has been a significant challenge for the community banking industry.

Inflation has been a significant challenge for the community banking industry. To counter these pressures, banks are increasingly leveraging automation and digitization to enhance efficiency and optimize cost structures. However, inflationary pressures have led to aggressive interest rate hikes by the Federal Reserve and been a significant headwind on banks' profitability (especially community banks that rely more heavily on their net interest margin). These hikes have driven borrowing costs higher, curbed consumer spending, and helped to curtail overall prices.

Balancing profitability and customer experience is crucial for banks, as raising fees can lead to customer dissatisfaction. Consequently, depositories are diversifying revenue streams through wealth management, insurance products, fintech collaborations, and shoring up their core spread business. Inflation's impact extends to bank customers, who face rising costs for essential services. Rent and electricity bills have increased by over 10% in the past two years, and car insurance costs have surged nearly 40%. These rising costs strain household budgets. For example, families are downgrading insurance plans, reducing participation in youth sports leagues, and cutting back on dining out. Childcare costs have also risen significantly, with daycare expenses increasing over 6% over the past two years. These financial pressures highlight the broader economic impact of inflation on everyday life. Inflation has significantly impacted the banking industry by increasing operating costs, affecting net interest margins, and influencing fees. Banks are adapting through automation, digitization, and revenue diversification to navigate these challenges. Despite the hurdles, the outlook for deposits, loans, and the capital raising market remains cautiously optimistic.

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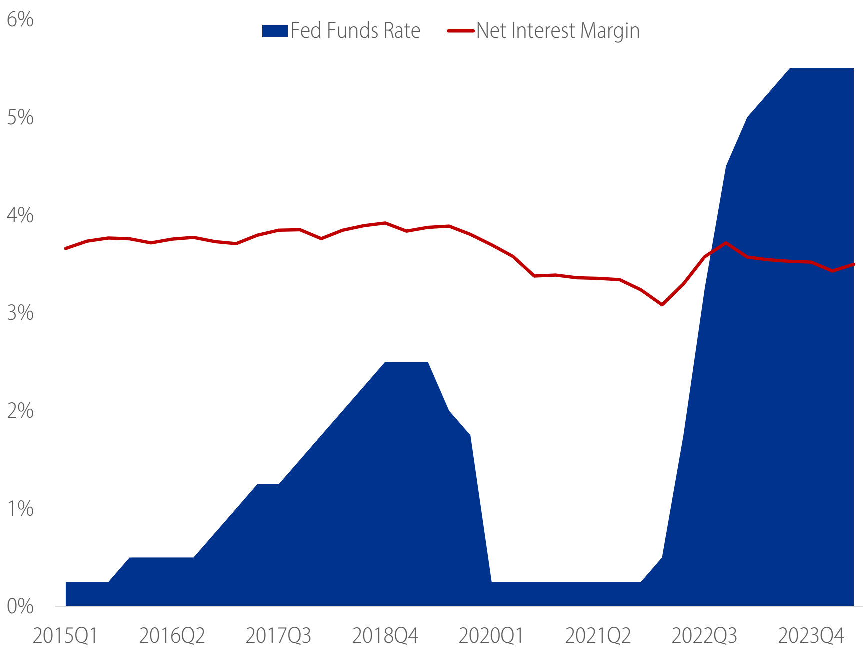
Bank Asset Yields, Cost of Funds and Net Interest Margin



Source: S&P Global and HilltopSecurities.

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The Effect of Inflation on Project Finance Construction Costs

Authors: **Yaffa Rattner**, Head of Municipal Credit, Debt Capital Markets
Walter Kunisch Jr., Senior Commodities Market Strategist, Structured Finance

Bond issues that depend on project revenues to fund debt service are particularly vulnerable to construction costs which have increased by over 40% since 2020. This is because these projects, including new buildings for hospitals, private schools, not for profit institutions or really any manufacturing facility, must rely on incremental operating income to fund debt service and provide some operating cushion while at the same time the escalating cost of insurance and a tight labor market have exacerbated these pressures. Furthermore, escalation in land prices and interest rates have generally served as an additional headwind in the project finance sector.

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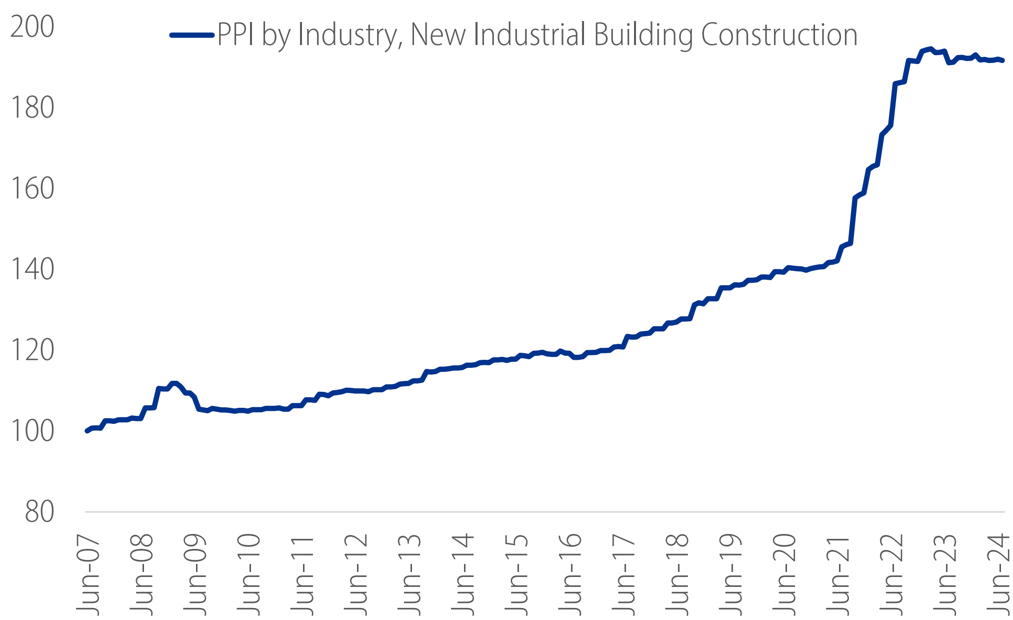
As a result, when debt service costs increase at a rate faster than operating income, debt service coverage will be tighter. This in turn could increase an analyst risk assessment of a project which could in-turn pressure cost of capital in an iterative cycle.

Costs of materials including aluminum, steel, concrete and lumber have begun to moderate. However, a backlog of project demand could result in elevated new construction prices. It is particularly noteworthy that for most of 2024, registered COMEX US copper stocks have been at a 15-year low. Tight supplies can limit the price depreciation of raw copper and copper dependent intermediary goods. Depending on the size and timing of any reductions to the Fed Funds rate, we see the potentially lower cost of debt helping to increase capital investment which can increase domestic copper demand and keep construction costs elevated. Investors in project finance will need to rely on seasoned management teams to navigate expense and construction pressures to ensure that securities are repaid on time and in full.

It is particularly noteworthy that for most of 2024, registered COMEX US copper stocks have been at a 15-year low.

Producer Price Index by Industry (New Industrial Building Construction, 2007=100)



Source: U.S. Bureau of Labor Statistics, FRED database and HilltopSecurities.

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Muted Commodity Inflation - Energy and Metals Reflect Economic Fragility

Author: **Walter Kunisch Jr.**, Commodities Market Strategist, Structured Finance

Year-to-date 2024 domestic commodity influenced inflationary pressures has been mostly muted.

Commodities have long served as a barometer of global economic health and a key measurement of country level price stability. Year-to-date 2024 domestic commodity influenced inflationary pressures has been mostly muted. Domestic food prices, particularly protein, remain stubbornly high and burdensome. Overall, global supply and demand driven prices trends of the economic and industrial sensitive commodities such as energy and base metals during 2024 reflects the muted post-pandemic steady state growth trajectories. Unlike the major domestic and global equity indices which have reached record levels, we believe that the price performance of the global energy and industrial metal commodity markets reflect the true economic outlook. The year-to-date performance of the Bloomberg Commodity Index (BOCM) is -1.6% the energy subindex is -6.9%, and the industrial metals subindex is +4.9%. The lack of a global upstream supply or downstream demand related shock combined with moderating Chinese and global growth is limiting raw material price appreciation which has helped suppress domestic inflationary tendencies.

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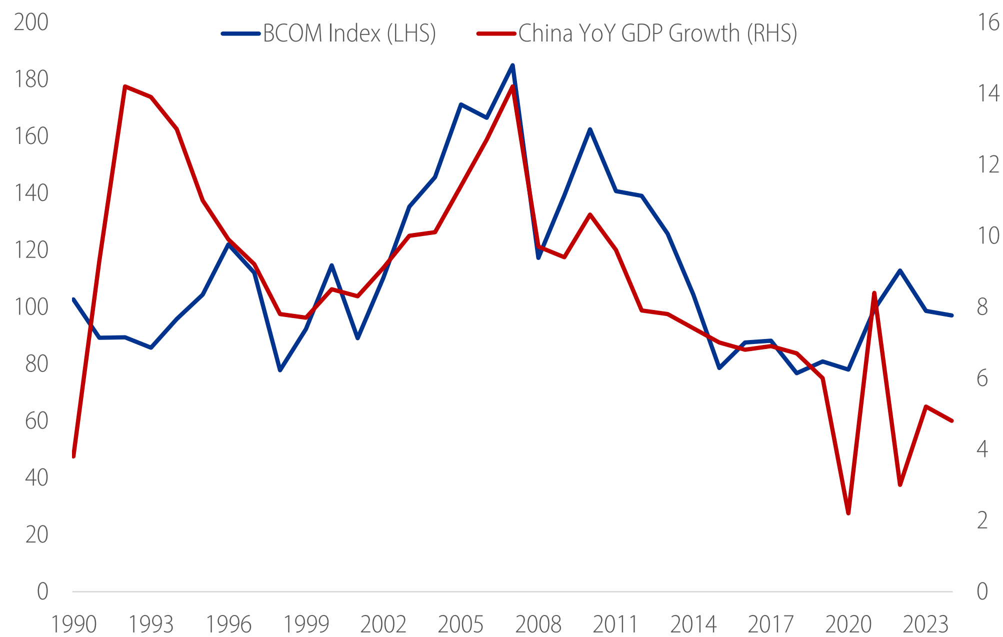
Looking into the first half of 2025 we maintain a cautious view of global and domestic commodity price driven domestic inflation pressures. This view is shaped by three key scenarios. First, we see China's pivot from speculative housing investment and large infrastructure projects to deliberate state sponsored growth policies helping to limit the demand and price appreciation crude oils, distillates, and metals. Second, the transition from late cycle to early cycle and the softening fed funds rate is not providing supporting broad price support to industrial growth sensitive commodities. The backward-dated slope of the WTI, brent crude oil futures curves illustrate this sentiment. Third, most growth sensitive commodities like crude oil, natural gas, steel, and aluminum are regionally well supplied.

China Year Over Year GDP Growth and Commodity Prices



Source: World Bank, Bloomberg and HilltopSecurities.

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U.S. Home Price Inflation Expected to Stabilize

Author: **Mahesh Swaminathan**, CFA, MBS/ABS Strategist

Following Fed's latest hiking cycle, high home prices combined with rising mortgage rates have sharply lowered home sales over the past year.

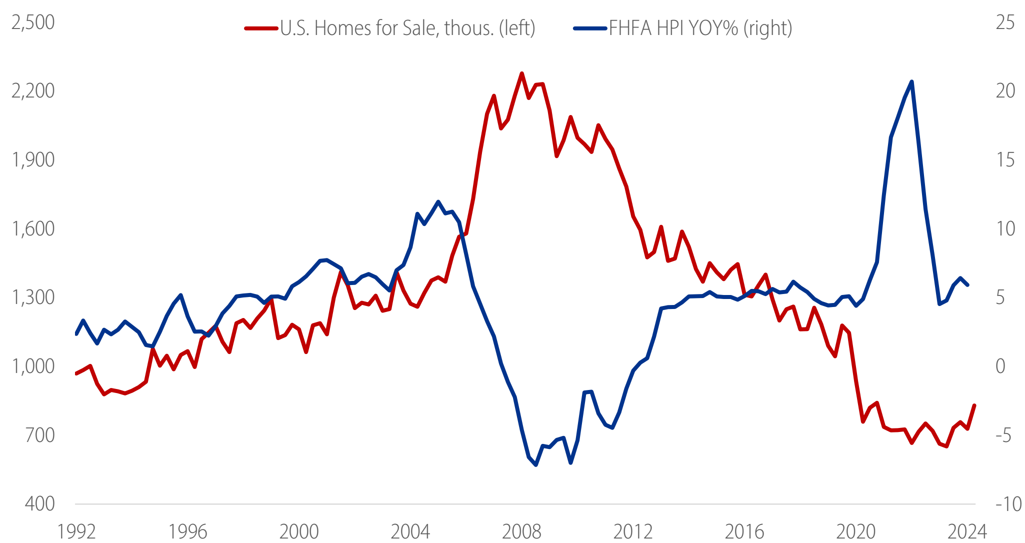
In the immediate aftermath of the COVID-19 pandemic, home prices spiked amidst record low mortgage rates and a relatively low supply of homes for sale. This spike has filtered through into broader inflation measures through the owner's equivalent rent (OER) component. Following the Fed's latest hiking cycle, high home prices combined with rising mortgage rates have sharply lowered home sales over the past year.

Both demand and supply factors have played a role in this slowdown, but we think supply was potentially the stronger contributor. A decline in mortgage rates accompanying an anticipated Fed easing cycle can increase supply of homes for sale as homeowners feel less locked-in to their below market mortgage rates. At the same time, this could increase demand by improving affordability. We think the increased supply should prevail, helping improve the supply/demand balance. In turn, this should help home price inflation continue at a moderate pace closer to historical averages, and much lower than the post-COVID highs.

There are both downside and upside risks to this outlook. The key downside is a meaningful recession scenario accompanied by steep job losses. An upside risk scenario is if the $25K first-time homebuyer downpayment assistance proposed by Kamala Harris becomes law without additional conditions. This figure represents roughly 6% of the median sales price compared to ~3.5% offered in the aftermath of the 2008 financial crisis. Back then, the overhang of high home supply absorbed the spike in home sales following the enactment of the credit. In today's supply constrained environment, the increased demand from such a credit could only push up home prices further.

We think the increased supply should prevail, helping improve the supply/demand balance.

U.S. Home Price Inflation Eases as Supply is Poised to Normalize



Source: St Louis Fed, Zillow, S&P, Bloomberg, Census Bureau, Hilltop Securities.

In today's supply constrained environment, the increased demand from such a credit could only push up home prices further.

What's Driving Utility Costs Higher? Providing These Services, Essentially.

Author: **Ted Chapman**, Managing Director, Public Finance

Regardless of whether municipal or investor owned, electric utilities and water & sewer utilities are extraordinarily capital intensive.

Regardless of whether municipal or investor owned, electric utilities and water & sewer utilities are extraordinarily capital intensive. In layperson terms, engineers build and operate really cool stuff. The concrete and steel central plants, as well as the fancy gadgets that go inside, and not least of all the above-ground and buried infrastructure, are all very expensive to construct and maintain. Even at utility scale. They also must be built in anticipation of what peak demand will be at some point in the next several years. Operating revenue patterns are generally highly predictable even when accounting for conservation. Demand is based largely on time of day, day of the year, and the temperature. But there are variables.

The variables include customer base growth and demographic shifts, water supply, and environmental regulations. Staying ahead of these to be able to serve peak demand means expensive investments. For example, whereas the Water and Sewerage Department of Detroit and the Pittsburgh Water and Sewer Authority were built for – and once served – much larger populations, southern and western cities and the regional grids that serve them like ERCOT are still seeing steady growth. Since 2020, the median surface area of the lower 48 states experiencing very dry conditions in any given month has been 8.8%. That's about a full percentage point above the median from 1980 to the present. For temperature it's even more pronounced: since 2020, in any given month 26.7% of the US was experiencing very warm conditions (in the 90th percentile versus historical norms), double the 1980-to-present median of 12.8%. That means even more homes using air conditioning and outdoor irrigation, pushing peak hourly and daily demand even higher. As a result, more investments in essential services utilities drive costs ever upward: the average July-to-July increase in residential electric bills since 2020 has been 5.6%, and 4.0% for water.

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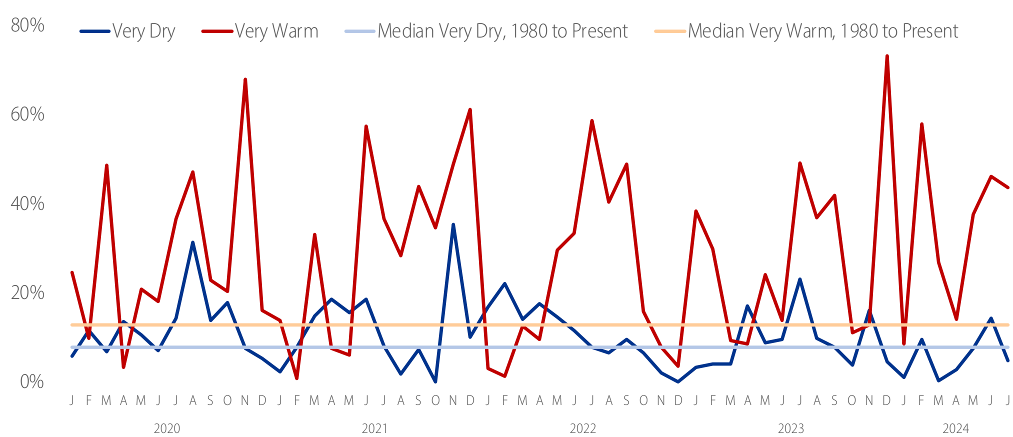
Percent of the Contiguous U.S. with Abnormally Warm or Dry Conditions, Last Five Years



Source: National Oceanic and Atmospheric Administration's Centers for Environmental Information; HilltopSecurities.

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We Expect Inflation to be Another Key Pressure Point on Higher Education

Author: **Tom Kozlik**, Head of Public Policy and Municipal Strategy

Our contention remains that enrollment and waning demand is going to be a leading driver of sector weakness.

We began 2024 with "Cautious" outlooks on the Public and Private sub-sectors of Higher Education, please see, "The Municipal Market in 2024, Hilltop's Municipal Sector Credit Outlooks." Our contention remains that enrollment and waning demand is going to be a leading driver of sector weakness. However, the negative implications of rising inflation have also added to the already weakening sector dynamic. It was going to be difficult enough for higher education institutions to balance revenues and expenditures in near-term landscape even before inflation began rising in 2021. The year-over-year change in the Commonfund's Higher Education Price Index (HEPI) fell to 4.0% in 2023 from 5.2% (in 2022), but these levels are well above the 2.2% average we saw between 2009 and 2021. Elevated inflation is going to take its toll on the sector in the near term as well.

Institutions are doing their best to "recover from the gut-punch of inflation," but reacting is proving difficult, especially for those without healthy endowments. Rating downgrades have plagued the higher education sector more than any other sector in public finance in 2024 through the end of July of 2024. Moody's downgraded 32 higher-ed institutions through the first seven months of the year and only upgraded five. Deferred capital requirements, described as a "hidden liability" that ranges in cost between $750 billion and $950 billion over the next 10 years, were highlighted in an August 20 Moody's higher-ed report titled "Pent-up capital needs: The hidden liability with a hefty price tag." The rating agency also highlighted, "The roughly 30% of rated [higher-education] entities with rising credit difficulties will face hard capital-strategy choices." We are adding that above-normal inflation levels will make this even more difficult for all institutions in the sector, adding another element of stress for entities to contend with in coming years which is central to our Inflation Part II theme.

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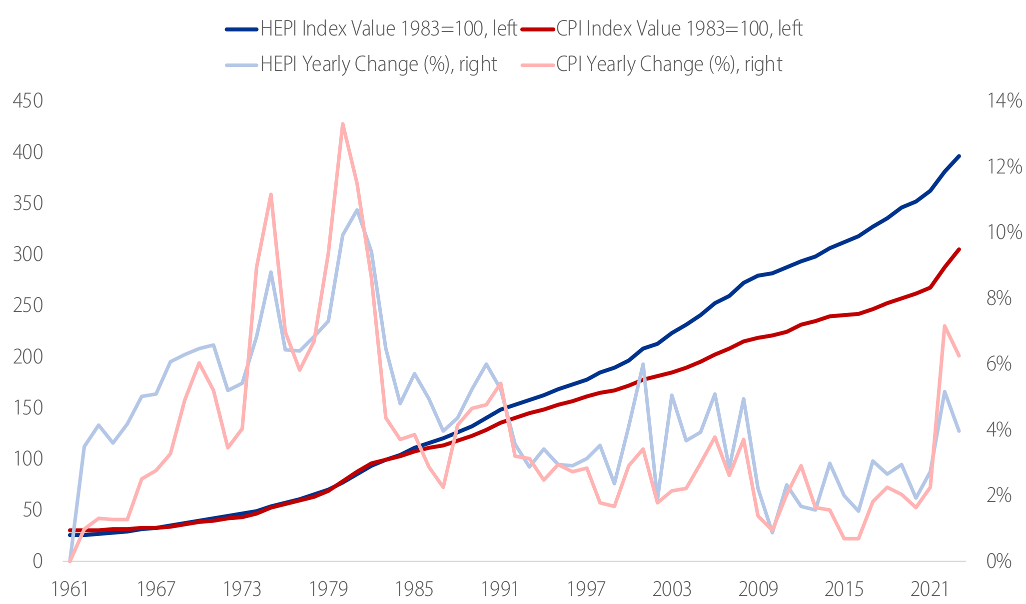
Higher Education Price Index



Source: Commonfund, U.S. Department of Labor and HilltopSecurities.

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California Health Care Facilities Feeling Inflation Pressure

Author: **Doug Nelson**, Municipal Credit Analyst, Wealth Management

In October of 2023, a law was passed in California to gradually raise the minimum wage for healthcare workers to $25 per hour through a series of annual increases ranging from $18 to $25 per hour, with health care facilities expected to reach a $25 per hour minimum wage by June 1, 2028, or, for some in rural locations, 2033. In May of this year, a new law was passed to delay the minimum wage increases from June 1, 2024 to July 1, 2024 due to state budget concerns. Subsequently, as part of the 2024 state budget, a new agreement has been reached where the new minimum wage would be delayed until at least Oct. 15, 2024. It is projected that approximately 426,000 California healthcare workers will see raises from the law.

In October of 2023, a law was passed in California to gradually raise the minimum wage for healthcare workers to $25 per hour through a series of annual increases.

Many healthcare facilities in California have already implemented wage increases ahead of the law taking effect. Labor composes the majority of health care expenses and, along with increased construction costs and other expenses, have put downward pressure on profit margins. The California Office of Health Care Affordability's board approved a health care price growth target of 3% that will be phased in over five years. The decrease of agency nursing, cutting of benefits, and other expense reduction measures will help to mitigate these inflationary pressures, but it will be up to management of these facilities to keep expense growth from outpacing revenue growth.

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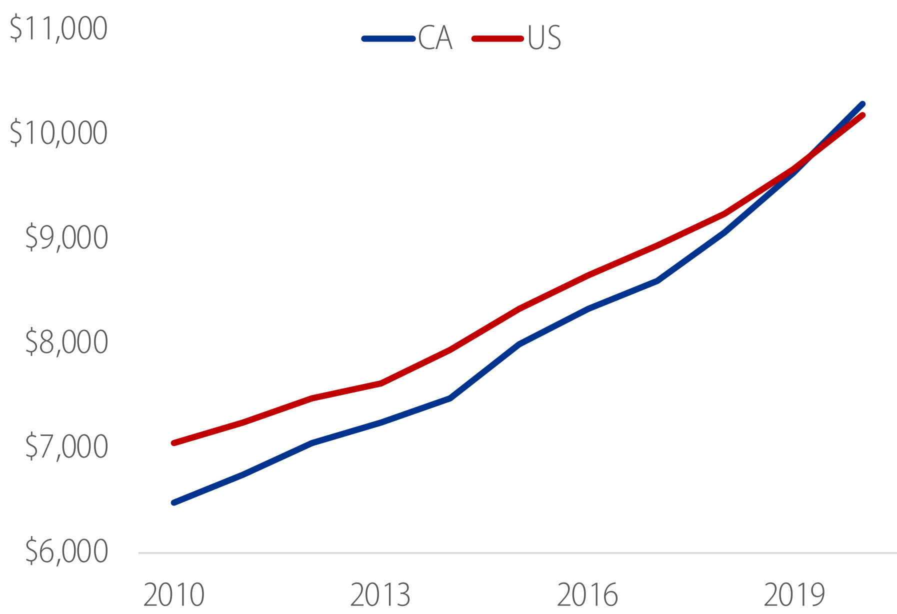
Health Care Spending Per Capita Comparison (U.S. vs. California)



Source: Centers for Medicare and Medicaid Services and HilltopSecurities.

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Inflation is a Two-Way Street for Toll Facilities

Author: **Phil Villaluz**, Municipal Credit Analyst, Fixed Income Capital Markets

Inflation presents both pressures and benefits to U.S. toll facilities.

Inflation presents both pressures and benefits to U.S. toll facilities. Since the 2020 COVID-19 pandemic, inflation has resulted in significantly higher costs of materials and labor for construction (new highways and expansion of existing assets), operation, and maintenance of these major transportation corridors. Consequently, these weighed upon credit metrics such as profitability and debt coverage. In addition, rising interest rates have boosted borrowing costs for toll road bond issuers who typically debt-finance large multi-year capital improvement programs.

On the other hand, many issuers have tolling policies that allow for rate increases linked to the Consumer Price Index or other inflation-linked measures that could produce higher revenue growth. It should be recognized that operators are faced with the need to carefully balance implementing rate increases with affordability, and public and political opposition. The economic recovery also led to increases in traffic volume that were largely spurred by robust commercial traffic associated with increased demand for goods. Increased revenues from toll-rate increases, steady commercial vehicle traffic volumes (highest rate payers), along with return-to-office passenger vehicle traffic volumes and commuting patterns (variable-demand pricing) have supported stable to strengthening credit metrics across the sector. Despite this period of historically high inflation, toll roads have been among the most resilient transportation infrastructure asset classes in recent years.

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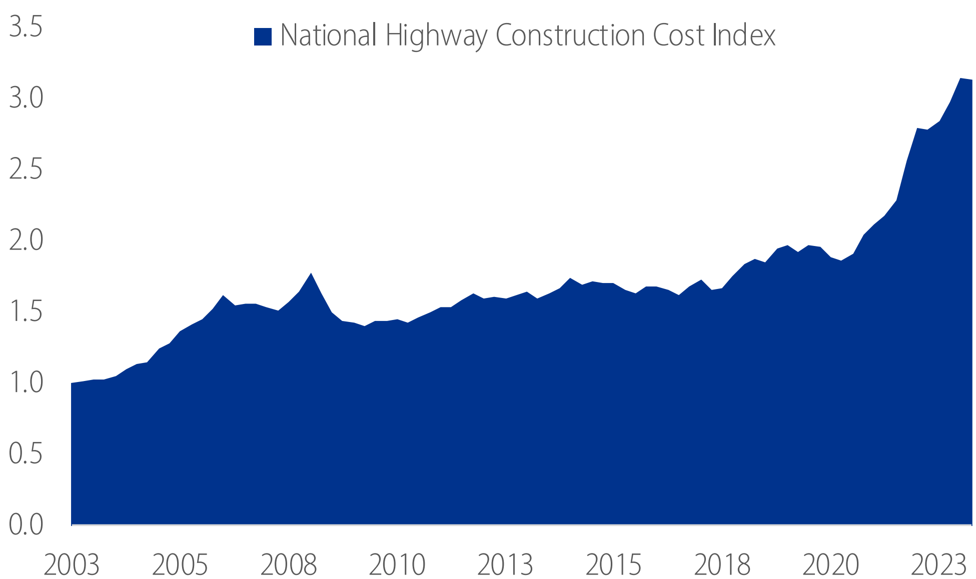
National Highway Construction Cost Index



Source: U.S. Department of Transportation, (2003 = 1).

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