BLUEROCK™

Mid-Year 2023 Economic and Markets Outlook

Inflation to subside, real estate repricing nearly complete, recession still looms

JUNE 2023

BLUEROCK™

What We Do:

We serve a **Growing Market Need** for alternative investments for individuals

We seek **Asymmetric Risk-Return/Alpha Creation** in favor of our investors

We seek **Up Escalators**, i.e. growing markets with long-term structural tailwinds

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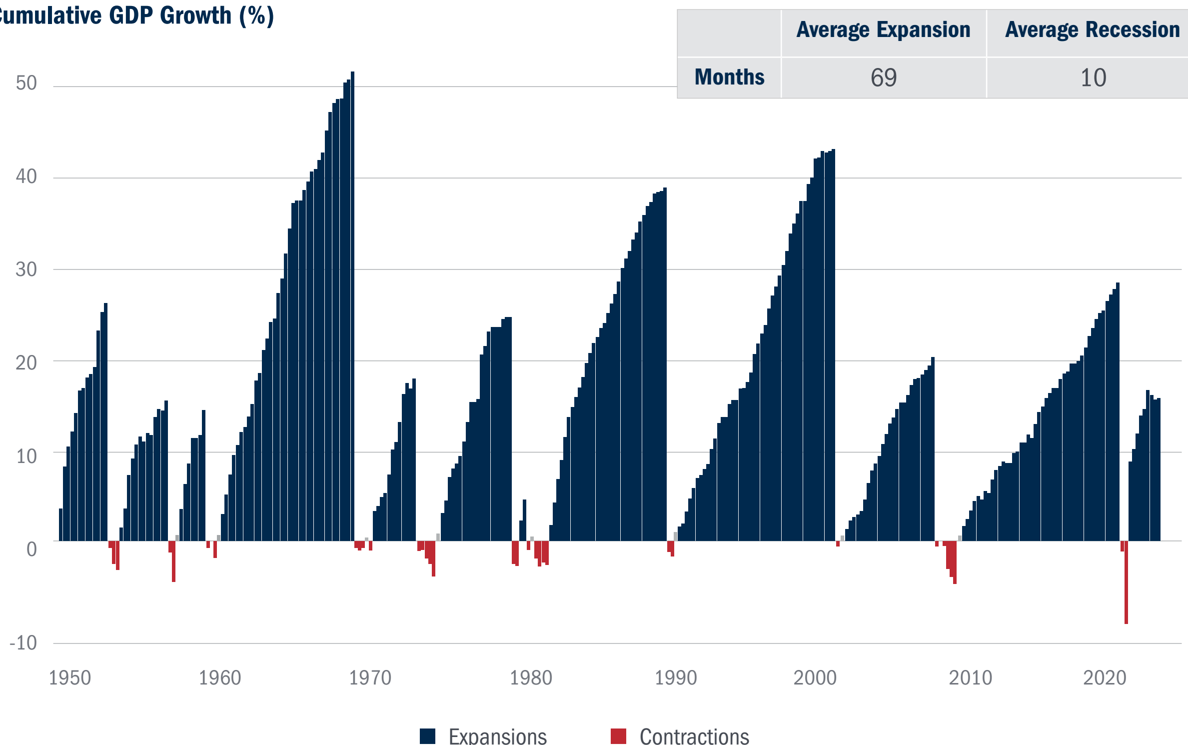
Introduction

In our 2023 Economic and Markets Outlook, we discussed how the Fed's fastest tightening cycle in 40 years would likely lead to a mild recession. While an official recession has not materialized, several indicators are signaling a downturn may be imminent. Inflation has subsided, the yield curve inversion has steepened, there have been multiple notable bank failures, and the M2 money supply has decreased year-over-year, a very rare phenomenon that typically signals the onset of a recession.

As equity and fixed income markets have stabilized from their 2022 declines, private real estate has also repriced primarily due to a higher cost of capital leading to higher cap rates. But, we are confident that strong supply/demand fundamentals in our high conviction real estate sectors of industrial, residential, and life sciences will propel a stronger rebound in those sectors compared to office and retail which will continue to face structural headwinds.

For the remainder of 2023, we see inflation continuing its decline as occupancy costs stabilize and services inflation subsides. We believe the Federal Reserve may pause its series of interest rate increases in H2 2023, but is not likely to cut rates until inflation is lower and there are notable signs of a recession. We are skeptical of high stock market valuations, which we believe have not yet fully priced in lower corporate earnings and sustained higher interest rates, and see prolonged higher volatility in the bond markets.

Above all, we understand that recessions are simply part of the natural economic cycle. U.S. recessions have always rebounded with considerably longer expansions. There have been 10 recessions since 1950 averaging 10 months in length with an average GDP decline of -2.5%. The subsequent expansions averaged 69 months with an average GDP growth of nearly 25%. We expect if a recession does occur, it will be followed by another powerful economic expansion.



Source: MUFG, Transition Period, May 2023

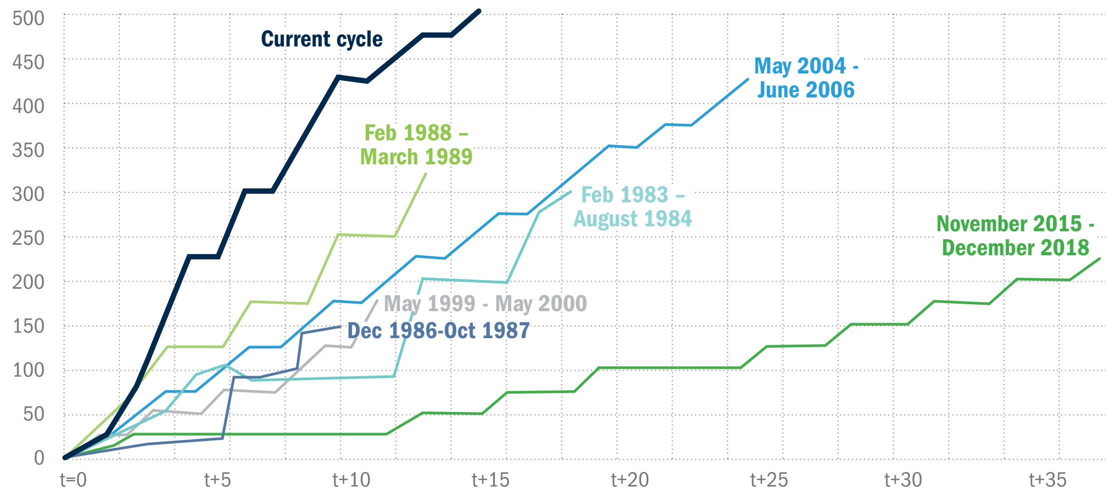
The capitalization rate (cap rate) is used in the world of commercial real estate to indicate the rate of return that is expected to be generated on a real estate investment property. This measure is computed based on the net operating income which the property is expected to generate divided by property asset value and is expressed as a percentage.

Macro Outlook

The most aggressive Fed tightening cycle in the last 40 Years is likely to prompt a recession.

The 15th post-war Federal Reserve rate increase cycle is more than likely to prompt a recession as 11 of the previous 14 have.

United States: Cumulative Change in Federal Funds Rate Since First Hike (Previous 40 Years)

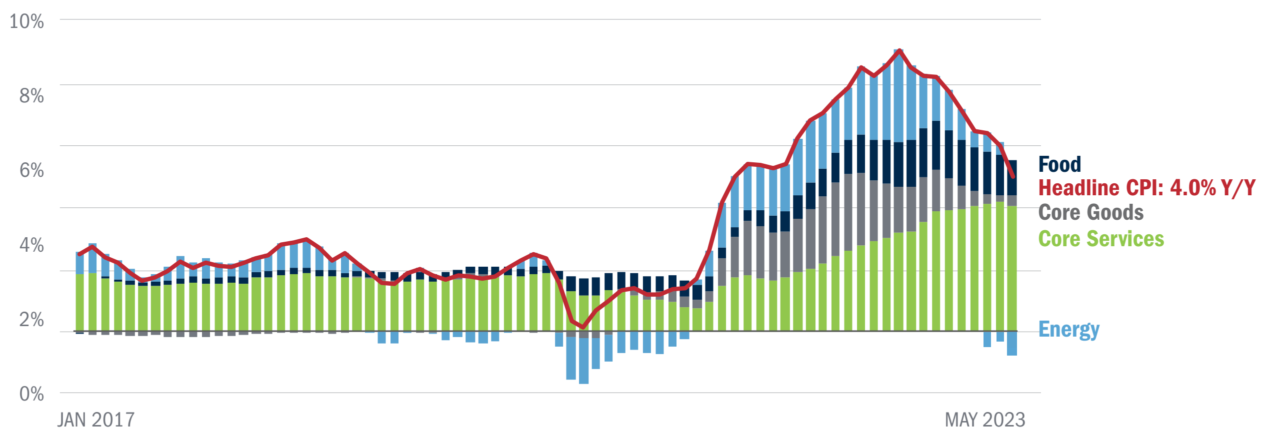


Source: Haver Analytics, Rosenburg Research

Inflation is moderating with goods inflation down sharply and services inflation still high, but we believe, lagging. We expect inflation to be close to long term averages by year-end.

With the headline Consumer Price Index (CPI) sliding to 4% year-over-year, the index seems primed to return to 2%-3% as the component breakdown indicates that core services have maintained high levels as other components have subsided. Services inflation is historically sticky, partly due to methodology, and we expect that portion to subside as labor markets weaken and bring overall inflation to manageable levels.

Breakdown of CPI by Components



Source: MUFG, Transition Period, May 2023

We are carefully monitoring the bond market as the steepest yield curve inversion in decades signals a near-term recession.

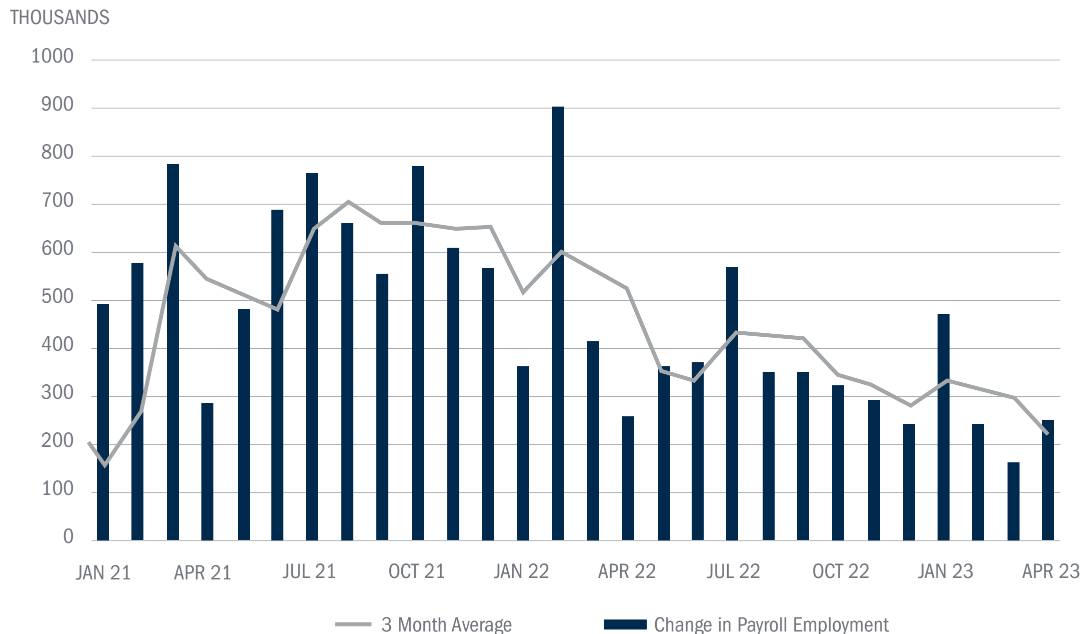
Although the Federal Reserve's influence over the short end of the yield curve has driven up short term rates over 5%, the 10-year US Treasury yield remains near 3.7% indicating that bond investors expect lower inflation associated with a weaker economy.

3 Months T-Bill - 10 Year U.S. Treasury Yield

Source: MUFG, Transition Period, May 2023

Employment continues to be strong, but is a lagging indicator

A 3.7% unemployment rate and strong payrolls don't scream recession, but it's important to remember that unemployment is a lagging indicator and higher measures aren't always evident until the economy is already in a recession. We expect an uptick in the unemployment rate.



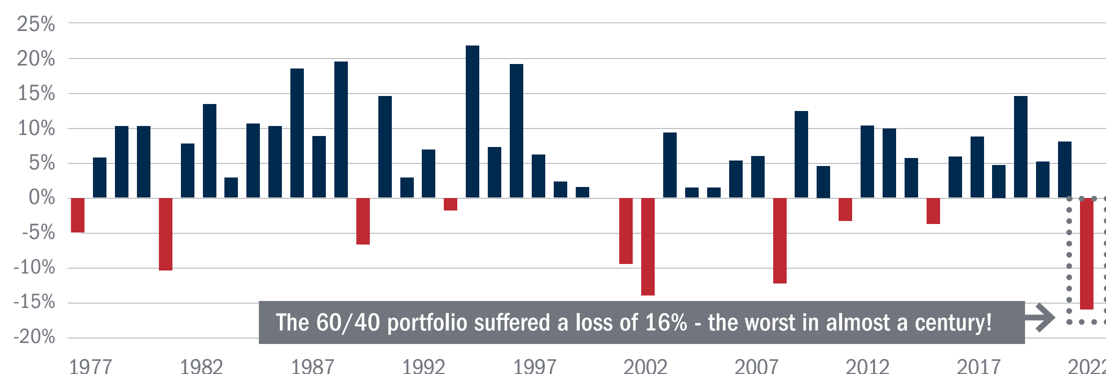
Source: Capital Economics

Capital Markets Outlook

A tough 2022 exposed the challenges of the traditional 60/40 Portfolio, highlighting the need for alternative investments

The conventional 60/40 stock/bond portfolio is coming under more scrutiny, for good reason. After years of very low rates, higher rates created bond market losses just as stocks corrected in 2022. We believe this highlights the need for income generating, non-correlated investment alternatives and that investors will continue to seek them out in place of traditional equities and bonds.

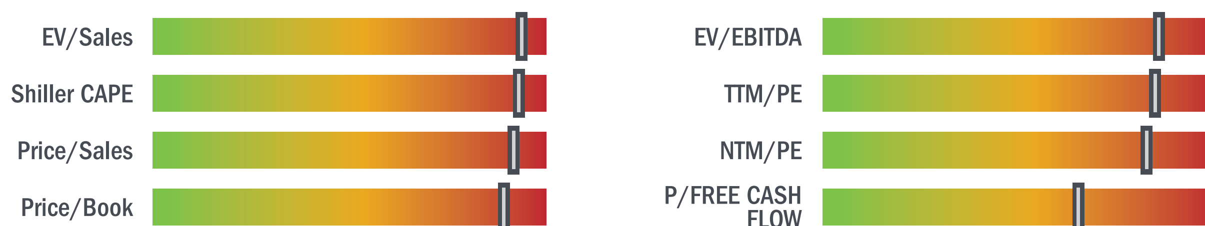
Traditional 60/40 Stock/Bond Portfolio Annual Returns



Source: Morningstar Direct

Stocks are overvalued by almost all of the major historical valuation measures dampening the return outlook

U.S. equities are expensive by most major valuation measures and history suggests that recession lows for stocks average approximately six months after the first Fed rate cut, which has not occurred yet. Thus, we are skeptical of the sustainability of the recent equity rally and believe drawdowns are likely.



Enterprise Value (EV)/Sales: A a financial valuation measure that compares the enterprise value (EV) of a company to its annual sales. The EV/sales multiple gives investors a quantifiable metric of how to value a company based on its sales while taking account of both the company's equity and debt.

Enterprise Value / Earnings Before Interest Taxes Depreciation Amortization (EV/EBITDA): Compares the value of a company—debt included—to the company's cash earnings less non-cash expenses. The EV/EBITDA metric is a popular valuation tool that helps investors compare companies in order to make an investment decision. EV calculates a company's total value or assessed worth, while EBITDA measures a company's overall financial performance and profitability.

Shiller Cyclically Adjusted Price / Earnings (CAPE): Ratio based on average inflation-adjusted earnings from the previous 10 years, known as the Cyclically Adjusted PE Ratio

Trailing Twelve Months / Price/Earnings (TTM/PE): A relative valuation multiple that is based on the last 12 months of actual earnings, and is calculated by taking the current stock price and dividing it by the TTM earnings per share (EPS).

Price/Sales: Calculated by taking a company's market capitalization (the number of outstanding shares multiplied by the share price) and divide it by the company's total sales or revenue over the past 12 months.

Next Twelve Months / Price/Earnings (NTM/PE): A ratio based on the next 12 months of forecasted earnings, and is calculated by taking the current stock price and dividing it by the next twelve months earnings per share (EPS).

Price/Book: This ratio is calculated by dividing the company's current stock price per share by its book value per share.

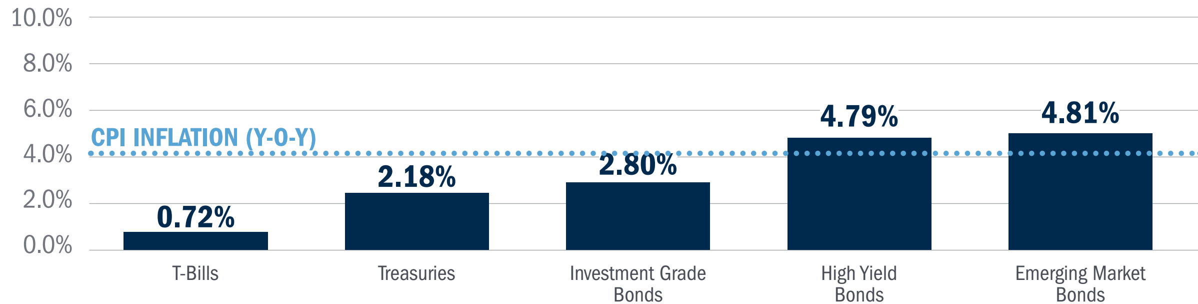
Price/Free Cash Flow (P/FCF): An equity valuation metric that compares a company's per-share market price to its free cash flow (FCF). This metric is very similar to the valuation metric of price to cash flow but is considered a more exact measure because it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available to fund non-asset-related growth.

Source: Morgan Stanley Monthly Investment Perspectives, April 2023

Inflation beating income is still hard to find, highlighting the need for higher yielding private alternatives

Bond yields increased significantly from 2020-2022, however 10-year averages indicate that most bond yields don't even match today's annual inflation rate. We do not see meaningful real yields being available in the bond market in the foreseeable future.

Select Income Investments
(10-Year Average Yields / Rates as of 3.31.2023)



Sources: finance.yahoo.com, FRED.stlouisfed.org. T-Bills: 3-month Treasury Bills; Treasuries: 10-year US Treasury Bond; Investment Grade Bonds: ICE BofA AAA US Corporate Bond Index; High Yield Bonds: ICE BofA BB US High Yield Corporate Bond Index; Emerging Market Debt: ICE BofA Emerging Markets Corporate Plus. Yield: The amount of income an investment generates. Often expressed as a percentage, yield is calculated by dividing income by market value or purchase price. It is not possible to invest in an index. You cannot invest directly in an index and unmanaged indices do not reflect fees, expenses or sale charges. Does not represent total return experienced by investor. Past Performance is not a guaranty of future results.

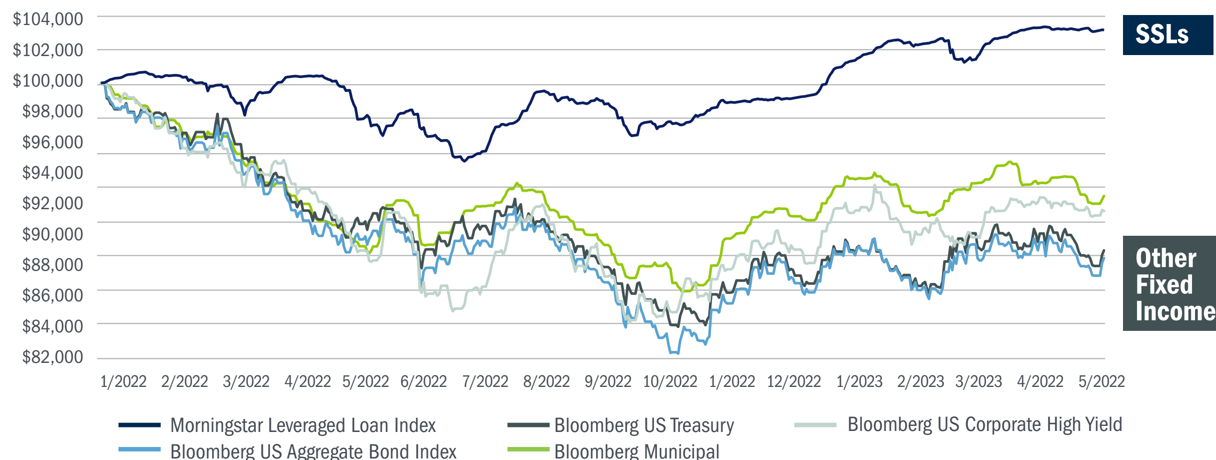
Alternative Credit Outlook

Increased interest rates and commensurate increases in fixed income volatility have accelerated the growth and need for alternative credit. One category of alternative credit is senior secured loans, which are broadly syndicated, floating-rate corporate loans issued by corporations seeking to finance business operations and long-term growth. The majority of funding for senior secured loans is from collateralized loan obligations (CLOs), which are actively managed special purpose vehicles. Increased rate volatility has increased the opportunity to purchase CLOs at attractive discounts, generating potentially double-digit yields, above long-term averages.

Senior secured loans (SSLs) have outperformed other fixed income in the last year+ and we believe is a better fixed income for all interest rate environments

Senior secured loans are floating rate loans and thus buffer against rising interest rates while fixed rate loans are vulnerable to significant drawdowns during rising rate periods.

Growth of $100,000 - Various Fixed Income Indexes
January 2022 - May 2023

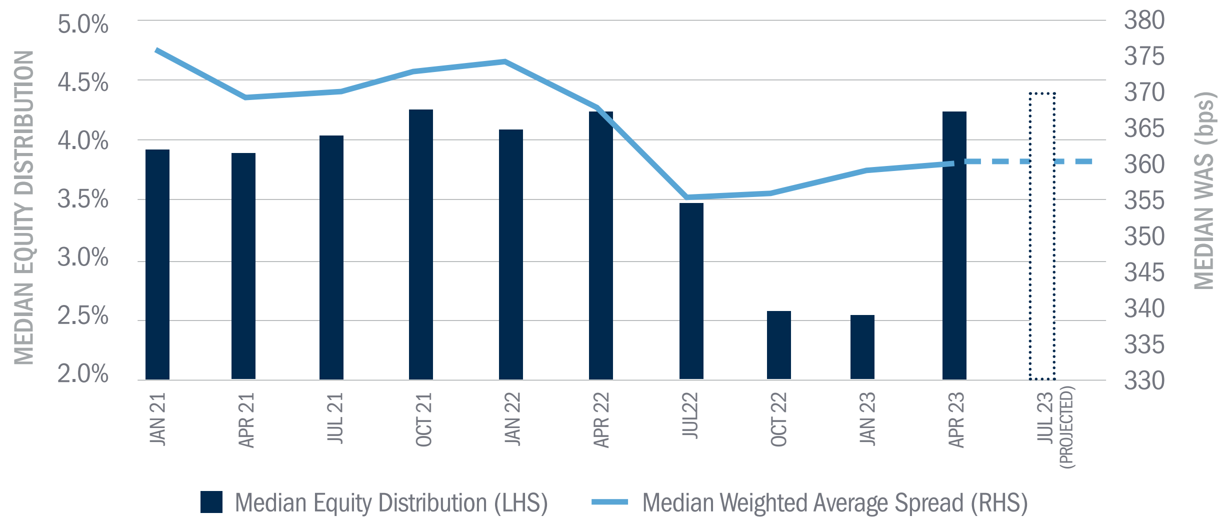


Source: Morningstar Direct

A stabilized interest rate environment should boost Collateralized Loan Obligation (CLO) equity distributions as spreads increase

The temporary inversion of the 1 month and 3-month LIBOR in late 2022 and early 2023 created a market dislocation which reduced CLO spreads. However, as conditions normalize, we expect CLO equity distributions to be very attractive in the last half of 2023.

Historical and Projected CLO Equity Distributions and Weighted Average Spreads

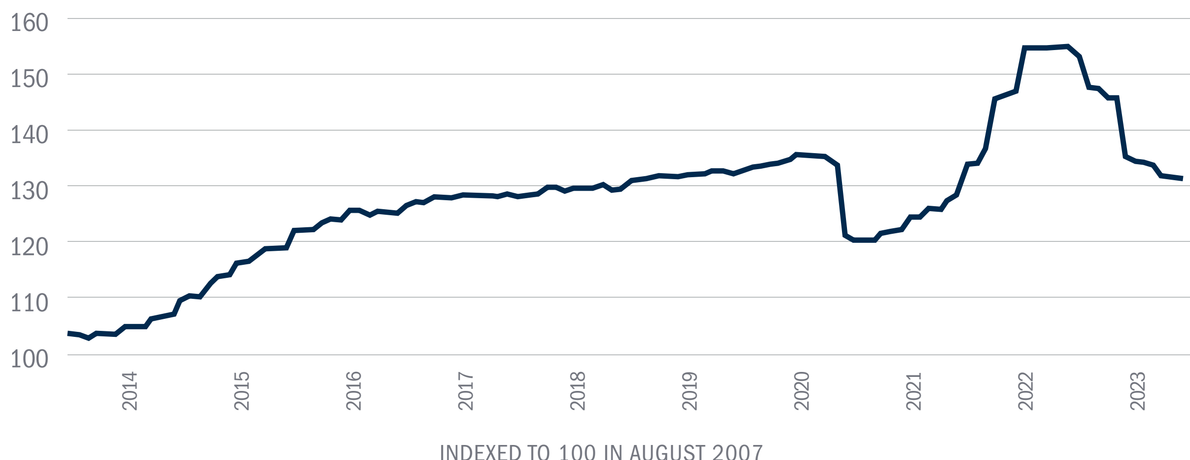


Institutional Real Estate Outlook

Commercial real estate pricing has declined due to higher capital costs, but we believe pricing is flattening out, consistent with the stabilization of interest rates

After an approximate 15% decline from April 2022 to April 2023, the commercial property price index leveled off and rose (0.1%) for the first time in more than a year. This may be indicating that market pricing is stabilizing and our long-term outlook for the asset class is positive. Sector differences were significant with our highest conviction sector (industrial) posting a 3% monthly price gain, a trend we believe will continue.

Green Street CPPI, Trailing 10 Years

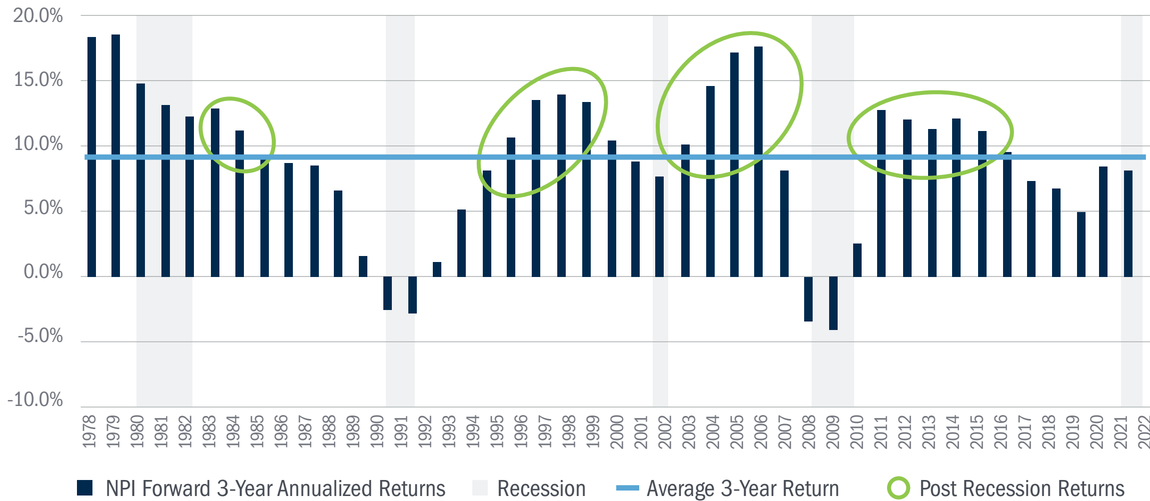


Source: Green Street Commercial Property Price Index, June 2023

We are optimistic about institutional real estate returns as they have generally been strong post recession

When analyzing forward 3 year institutional real estate returns, we find that post-recession returns are the strongest in the cycle and we expect that if and when a recession occurs, institutional real estate will outperform its long terms average in the subsequent years.

NPI Rolling 3-Year Forward Returns | 1978 - 2022



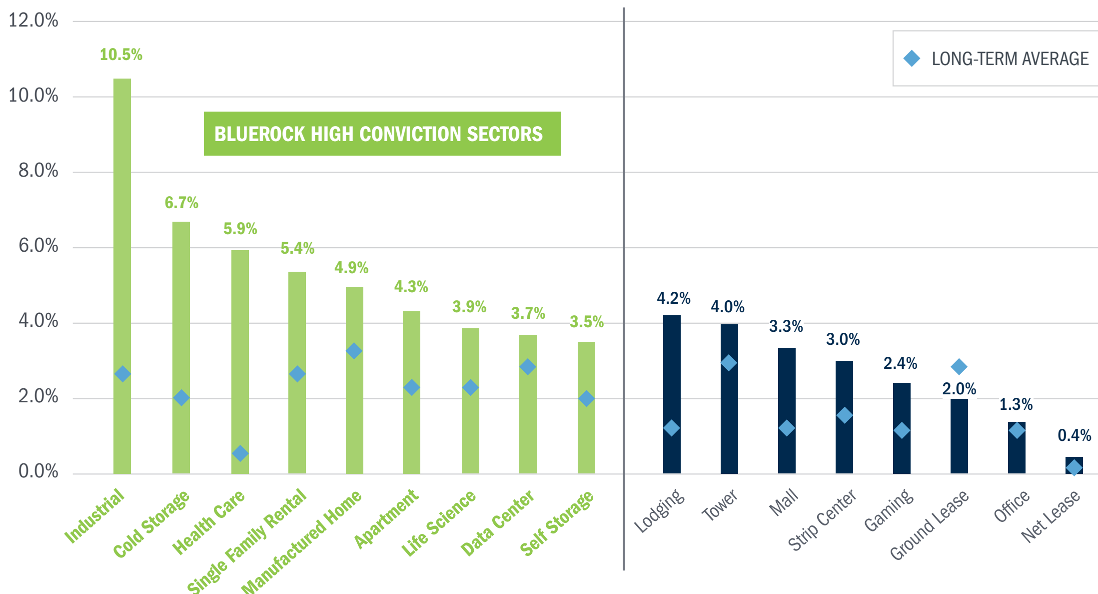
Source: Morningstar Direct

Bluerock High Conviction Sectors Outlook: Industrial, Residential, and Life Sciences

We have high conviction in investments in the industrial, residential, and life sciences sectors, all of which have a high growth outlook

Real estate net operating income (NOI) is akin to earnings in the corporate world. In the long term, NOI growth drives values and with high projected NOIs for the next five years, we are confident that our high conviction sectors will outperform the lower growth sectors.

5-Year Annualized NOI Growth Rate Projection by Sector

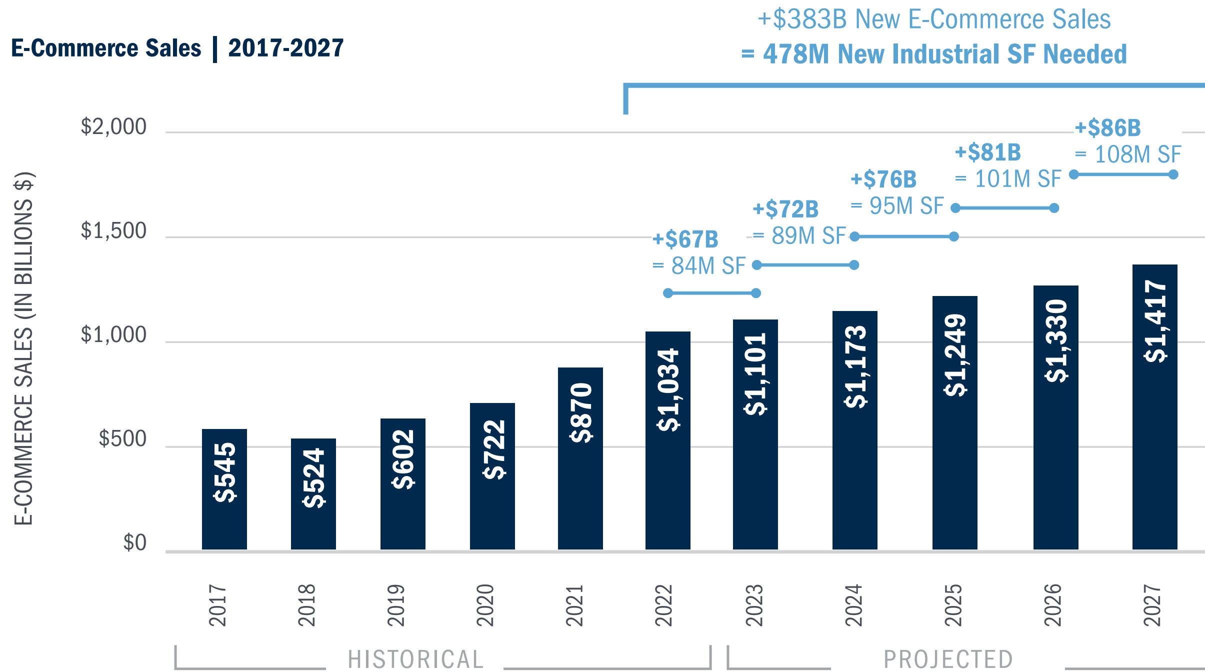


Source: Green Street, A Great Year Ahead for Commercial Real Estate? March 2023

Industrial

We believe the strength of the industrial market drivers will weather any possible recession, driven by e-commerce growth, extremely low vacancy rate, moderated new supply, and relatively low rent costs for logistics providers.

Independent estimates call for approximately 2 billion square feet of total new industrial demand in the next five years. We believe E-commerce will be a major component of this and continue to gain market share and drive industrial rents higher, consistent with optimistic forecasts.



STRUCTURAL DEMAND

3X WAREHOUSE SPACE

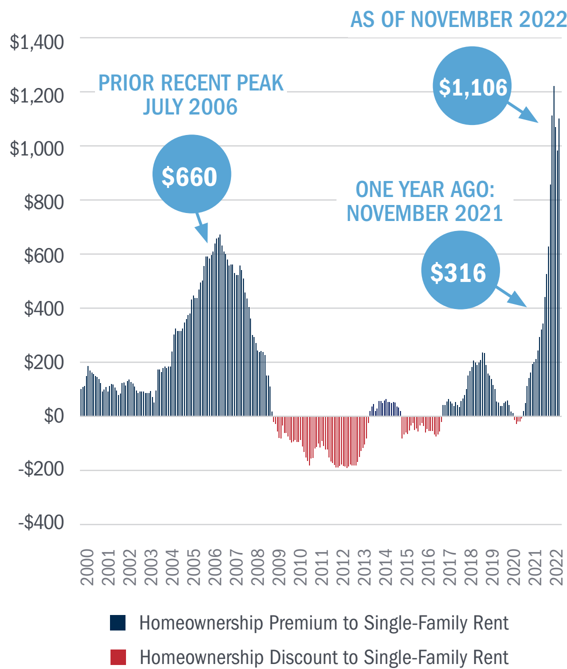
Generally required by e-commerce tenants compared to traditional retail

Source: Source: US Census Bureau, February 2023. Based on near term E-commerce projections from Green Street Industrial Outlook, January 2023. $1 billion of e-commerce sales requires approximately 1.25 million square feet of industrial space. Total industrial demand calculated using Green Street projection of e-commerce accounting for approximately 25% of total industrial demand. (Green Street U.S. Industrial Outlook January 2023).

Residential

A housing supply shortfall combined with an extraordinary homeownership premium should drive apartment and single-family rents higher.

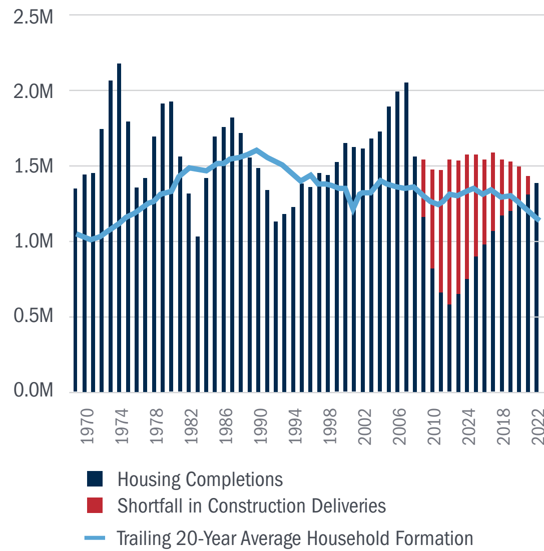
A record low percentage of the U.S. population can afford a house, per standard affordability requirements, and the ownership premium is over $1,000 per month. We believe that a closer equilibrium will be found in the marketplace including materially higher apartment and single-family rental rates.



Housing Units Delivered Annually

From 1968-2007, U.S. built 1.17 housing units per unit of long-term demand

Since 2007, U.S. has built 0.81 housing units per unit of long-term demand. 6.8 million unit shortfall since 2007.

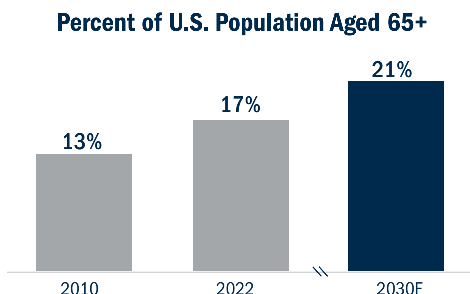


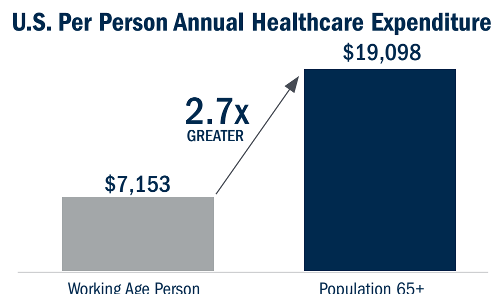
Source: Census Bureau, CBRE Investment Management, 2022. Housing construction figures are annualized through August 2022 (right)
Source: John Burns Real Estate Consulting (left)

Life Science

An aging population, growing health care spending, and increasing demand for novel therapies form robust drivers for life sciences real estate which we believe will perform well during recessionary periods.

As demand for medical treatments and life science space grow, supply can be difficult to match. Life sciences real estate is very specialized, not likely to be converted from other spaces, and it suffers from faster obsolescence. Thus, we have high conviction in the sector's outperformance.





Source: HIS Markit, as of February 2023. Centers for Medicate & Medicaid Services, as of December 2022. Working age reflects those between the ages of 15 to 64.

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